

# POWER CABLES PRODUCT CATALOGUE





OVER 140 COUNTRIES CARRY  
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HES HACILAR ELEKTRİK SANAYİ VE TİCARET A.Ş.

Established in 1974 to produce energy cables, HES Cable has made a very rapid development and has a wide range of products that appeal to the entire cable and conductor sector by producing copper communication cable, fiber optic cable, energy cable, aluminum conductor, enamel coil wire, solar cable and weak current cables.

Acting with the slogan of "Reliable Technology", HES Cable has become a well-known and respected brand in the international arena with its "know-how" and high quality products with nearly 50 years of experience.

Production in integrated facilities with a total area of 250,000 m<sup>2</sup>, 120,000 m<sup>2</sup> of which is closed, is carried out in accordance with ISO 9001 standards and considering the requirements of ISO 10002, ISO 14001, ISO 45001, ISO 27001 and ISO 50001, by a team of approximately 1000 experts with knowledge and experience in the field, using machines and methods suitable for modern and technological developments. Quality certificates such as ISO, TSE, VDE, BASEC, SII, GOST, ETL, UKRSEPRO and KEMA given as a result of the periodic inspections carried out by national and international surveillance companies are an expression of trust in HES Cable brand and products. HES Cable, which ensures that high quality products are delivered to the customer by using modern test devices and control methods at every stage of production, develops products according to special customer specifications and requests as well as products manufactured according to international and domestic standards.

According to 2021 data, HES, which ranks 107st in the "Turkey's Top 500 Industrial Enterprises" ranking determined by Istanbul Chamber of Industry every year, continues to lead the sector and reaches more than 140 countries.





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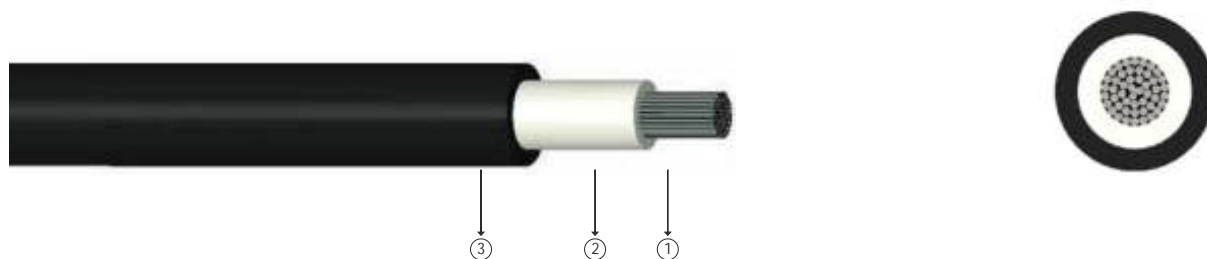


# THE FUTURE INFRASTRUCTURE IS ALREADY DONE





# AC: 1,0/1,0 kV , DC: 1,5 kV HX Insulated Single Core Solar Cables



Code: H1Z2Z2-K

Standards: EN 50618, TS EN 50618

Technical Data		Electrical Properties	
Operating temperature for 20.000 hours up to 120°C	: -40°C to +90°C	Nominal voltage	: DC: 1,5 kV AC: 1,0/1,0 kV
Max storage temperature	: +40°C	Max. AC Operating Voltage	: 1,2/1,2 kV
Min. temperature for installation and handling (20 ± 10) °C' ta Min. bending radius D<12	: -25°C	Max. DC Operating Voltage	: 1,8 kV
(20 ± 10) °C' ta Min. bending radius D>12	: 3 x D (Cable diameter)		
	: 4 x D (Cable diameter)		

### Construction

1. Flexible tinned copper conductor / Class 5 (EN 60228, IEC 60228, DIN VDE 0295)
2. Halogen-free and cross-linked insulating material EN 50618, TS EN 50618
3. Halogen-free, flame retardant and cross-linked sheath material EN 50618, TS EN 50618

### Fire Performance Tests

Vertical Flame Propagation / EN 60332-1-2, IEC 60332-1-2, DIN EN 60332-1-2 (VDE 0482-332-1-2)  
Smoke Emission Test ( Light Transmittance) / EN 61034-2, IEC 61034-2, DIN EN 61034-2, VDE 0482-1034-2,  
Assessment of halogen for all non-metallic materials EN 50525-1, EN 60754-2, EN 50267-2-1

### Resistance to Different Environmental Conditions

Weathering / UV Resistance on sheath / EN 50289-4-17, VDE 0819-289-4-17  
Ozone Resistance Test / EN 60811-403, VDE 0473-811-403  
Sheaths resistance against acid and alkaline solution / EN 60811-404, VDE 0473-811-404  
Dynamic Penetration Test / TS EN 50618

### Applications

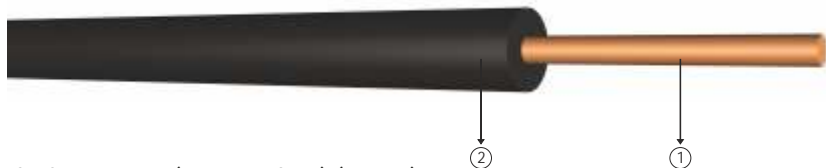
Designed for connections between various system elements such as solar panels and inverters in photovoltaic applications. Used within cable canals or similar closed systems without protection in indoor or outdoor facilities.

### MECHANICAL AND ELECTRICAL PROPERTIES

Nominal Cross Section	Conductor Resistance at 20°C	Net Weight (approx)	Overall Diameter (approx)	Current Carrying Capacity in Air (60°C)	Current Carrying Capacity on Surface (60°C)	Short Circuit Current (1s/250°C)
mm <sup>2</sup>	/km	kg/km	mm	A	A	kA
1x1,5	13,7	29,8	4,6	30	29	0,2
1x2,5	8,21	40,7	5,1	41	39	0,4
1x4	5,09	56,4	5,6	55	52	0,6
1x6	3,39	76,8	6,2	70	67	0,9
1x10	1,95	121,0	7,6	98	93	1,4
1x16	1,24	179,5	9,1	132	125	2,3
1x25	0,795	275,8	11,1	176	167	3,6
1x35	0,565	378,1	12,7	218	207	5,0
1x50	0,393	531,3	14,8	276	262	7,2
1x70	0,277	728,1	16,9	347	330	10,0
1x95	0,21	942,2	19,1	416	395	13,6
1x120	0,164	1197,7	21,1	488	464	17,2
1x150	0,132	1508,4	23,6	566	538	21,5
1x185	0,108	1797,0	26,4	644	612	26,5
1x240	0,0817	2377,6	29,5	775	736	34,3







Code: H05V-U (60227 IEC 05) (6491X)  
 H07V-U (60227 IEC 01) (6491X)  
 H07V-R (60227 IEC 01) (6491X)

U: Solid Conductor  
 R: Stranded Conductor

Standards: EN 50525-2-31, DIN EN 50525-2-31(VDE 0285-525-2-31),  
 IEC 60227, BS EN 50525-2-31, SI 60227 Part 3

#### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : 160°C (max. 5 sec.)  
 Rated voltage : 300/500 V  
 450/750 V

#### Application

In dry rooms, switch and distribution boards, for laying in conduit on and under plaster and on insulating supports above plaster.

RE : Single conductor wire  
 RM : Stranded Conductor

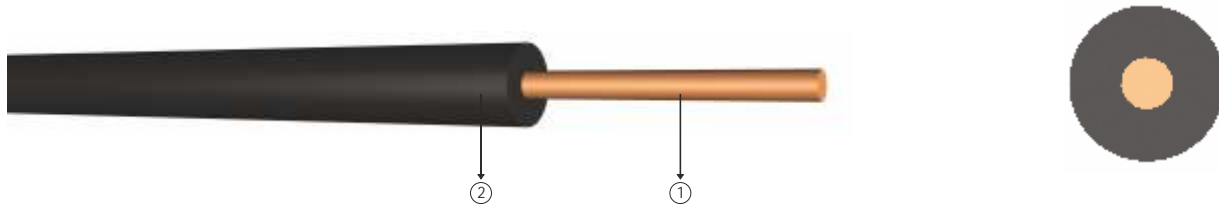
\* : 300/500 V (H05V - U, 60227 IEC 05, 6491x) \*\* : RM or RE

#### Construction

- ① Solid or stranded copper conductor    ② PVC insulation

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
* 0,5 RE	2,1	8	100	36,0	-	9
* 0,75 RE	2,3	11	100	24,5	-	15
* 1 RE	2,5	14	100	18,1	11	19
**1,5RE	2,8	20	100	12,1	15	24
**2,5RE	3,3	31	100	7,41	20	32
**4RE	3,8	46	100	4,61	25	42
**6RE	4,3	65	100	3,08	33	54
10RM	6,0	111	100	1,83	45	73
16RM	7,0	170	1000	1,15	61	98
25RM	8,5	260	1000	0,727	83	129
35RM	9,5	355	1000	0,524	103	158
50RM	11,0	490	1000	0,387	132	198
70RM	13,0	694	1000	0,268	165	245
95RM	15,0	938	1000	0,193	197	292
120RM	16,5	1172	1000	0,153	235	344
150RM	18,0	1465	1000	0,124	-	391
185RM	20,0	1808	1000	0,0991	-	448
240RM	23,0	2343	1000	0,0754	-	528

# PVC insulated, single core cables, with copper conductor



Code: H05V2-U (60227 IEC 07), H07V2-U, H07V2-R

U: Solid Conductor  
R: Stranded Conductor

Standards: EN 50525-2-31, DIN EN 50525-2-31(VDE 0285-525-2-31), IEC 60227, BS EN 50525-2-31, SI 60227 Part 3

### Technical Data

Max. operating temperature : 90°C  
Max. short circuit temperature : 160°C (max. 5 sec.)  
Rated voltage : 300/500 V  
450/750 V

### Application

In dry rooms, switch and distribution boards, for laying in conduit on and under plaster and on insulating supports above plaster.

RE : Single conductor wire  
RM : Stranded Conductor

\* : 300/500 V (H05V2 - U, 60227 IEC 07) \*\* : RM or RE

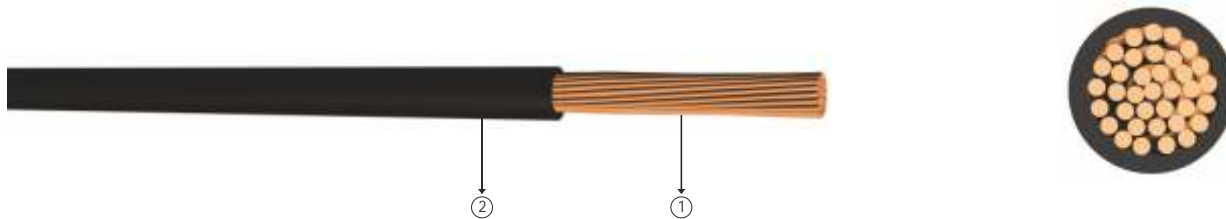
### Construction

- ① Solid or stranded copper conductor    ② PVC insulation (90°C)

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
*0,5 RE	2,1	8	100	36,0	-	12
*0,75 RE	2,3	11	100	24,5	-	18
*1 RE	2,5	14	100	18,1	12	22
**1,5RE	2,8	20	100	12,1	17	26
**2,5RE	3,3	31	100	7,41	22	35
**4RE	3,8	46	100	4,61	28	46
**6RE	4,3	65	100	3,08	36	59
10RE	5,6	108	100	1,83	50	80
10RM	6,0	111	100	1,83	50	80
16RM	7,0	170	1000	1,15	67	108
25RM	8,5	260	1000	0,727	91	142
35RM	9,5	355	1000	0,524	113	174
50RM	11,0	490	1000	0,387	145	218
70RM	13,0	694	1000	0,268	182	270
95RM	15,0	938	1000	0,193	217	321
120RM	16,5	1172	1000	0,153	259	378
150RM	18,0	1465	1000	0,124	-	430
185RM	20,0	1808	1000	0,0991	-	493
240RM	23,0	2343	1000	0,0754	-	581



## PVC insulated, single core cables, with flexible copper conductor



Code: H05V-K (60227 IEC 06) (2491X)  
H07V-K (60227 IEC 02) (2491X)

K: Flexible Conductor

Standards: EN 50525-2-31, VDE 0281, IEC 60227, BS 6004,  
HD 21.3 S3, SI 60227 Part 3

### Technical Data

Max. operating temperature : 70°C  
Max. short circuit temperature : 160°C (max. 5 sec.)  
Rated voltage : 300/500 V  
450/750 V

### Application

For protected installation and light fitting. Also for in conduit,  
on and under plaster.

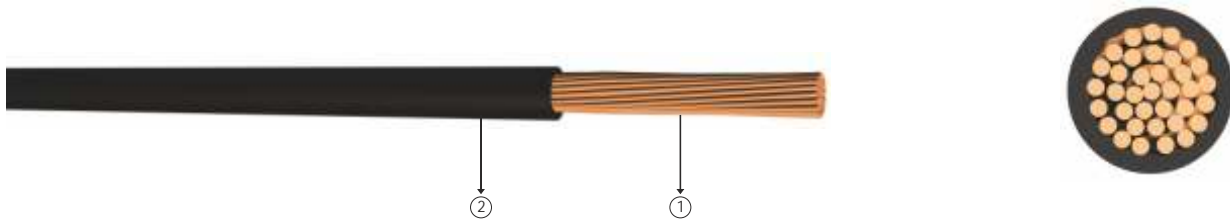
\* : 300/500 V (H05V - K, 60227 IEC 06, 2491x)

### Construction

- ① Flexible copper conductors      ② PVC insulation

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
0,5 *	2,1	9	100	39,0	-	11
0,75 *	2,3	11	100	26,0	-	16
1 *	2,5	14	100	19,5	11	20
1,5	3,0	20	100	13,3	15	24
2,5	3,6	32	100	7,98	20	32
4	4,2	46	100	4,95	25	42
6	4,8	65	100	3,30	33	54
10	6,5	115	100	1,91	45	73
16	8,0	175	100	1,21	61	98
25	10,0	270	1000	0,780	83	129
35	11,0	350	1000	0,554	103	158
50	13,5	525	1000	0,386	132	198
70	15,0	700	1000	0,272	165	245
95	17,5	900	1000	0,206	197	292
120	19,5	1200	1000	0,161	235	344
150	22,0	1500	1000	0,129	-	391
185	24,0	1860	1000	0,106	-	448
240	27,5	2400	1000	0,0801	-	528

# PVC insulated, single core cables, with flexible copper conductor



Code: H05V2-K (60227 IEC 08), H07V2-K

K: Flexible Conductor

Standards: EN 50525-2-31, VDE 0281, IEC 60227, BS 6004, HD 21.3 S3, SI 60227 Part 3

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 160°C (max. 5 sec.)  
 Rated voltage : 300/500 V  
 450/750 V

### Application

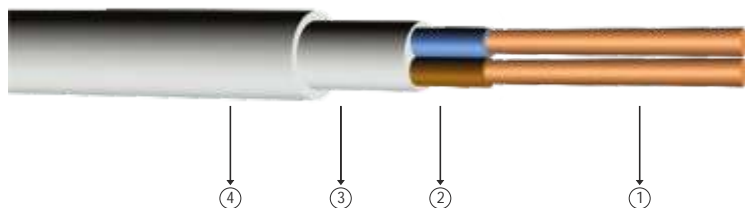
For protected installation and light fitting. Also for in conduit, on and under plaster.

\* : 300/500 V (H05V2 - K, 60227 IEC 08)

### Construction

- ① Flexible copper conductors
- ② PVC insulation (90°C)

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
0,5 *	2,1	9	100	39,0	-	12
0,75 *	2,3	11	100	26,0	-	18
1 *	2,5	14	100	19,5	12	22
1,5	3,0	20	100	13,3	17	26
2,5	3,6	32	100	7,98	22	35
4	4,2	46	100	4,95	28	46
6	4,8	65	100	3,30	36	59
10	6,5	115	100	1,91	50	80
16	8,0	175	100	1,21	50	80
25	10,0	270	1000	0,780	67	108
35	11,0	350	1000	0,554	91	142
50	13,5	525	1000	0,386	113	174
70	15,0	700	1000	0,272	145	218
95	17,5	900	1000	0,206	182	270
120	19,5	1200	1000	0,161	217	321
150	22,0	1500	1000	0,129	259	378
185	24,0	1860	1000	0,106	-	430
240	27,5	2400	1000	0,0801	-	493



Code: NYM, CU/PVC/PVC, NVV

Standards: HD 21.4 S2, DIN VDE 0250-204 (VDE 0250-204)

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : 160°C (max. 5 sec.)  
 Rated voltage : 300/500 V

### Application

For household appliances (refrigerators, spin dryers, etc.)  
 under medium mechanical stresses, also in damp and wet spaces.

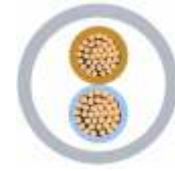
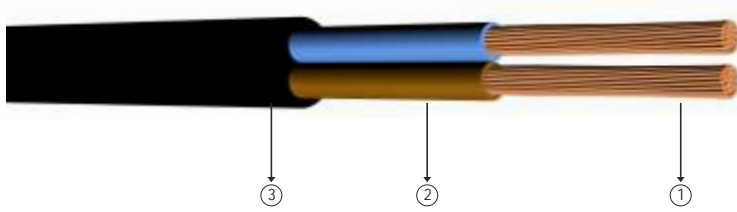
RE : Single conductor wire  
 RM : Stranded Conductor

### Construction

- ① Solid or stranded copper conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES	
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity
mm <sup>2</sup>	mm	kg/km	m	/km	A
2 x 1,5 RE	8,8	125	100	12,1	18
2 x 2,5 RE	10,0	165	100	7,41	26
2 x 4 RE	11,0	200	100	4,61	34
2 x 6 RE	12,0	250	100	3,08	44
2 x 10 RM	15,0	470	1000	1,83	61
2 x 16 RM	17,5	650	1000	1,15	82
2 x 25 RM	21,5	930	1000	0,727	108
2 x 35 RM	24,5	1240	1000	0,524	135
3 x 1,5 RE	9,2	130	100	12,1	18
3 x 2,5 RE	10,5	180	100	7,41	26
3 x 4 RE	11,5	250	100	4,61	34
3 x 6 RE	13,0	330	100	3,08	44
3 x 10 RM	16,5	520	1000	1,83	61
3 x 16 RM	18,5	750	1000	1,15	82
3 x 25 RM	23,5	1180	1000	0,727	108
3 x 35 RM	26,5	1550	1000	0,524	135
4 x 1,5 RE	10,0	160	100	12,1	18
4 x 2,5 RE	11,5	220	100	7,41	26
4 x 4 RE	13,0	320	100	4,61	34
4 x 6 RE	14,5	430	100	3,08	44
4 x 10 RM	17,5	650	1000	1,83	61
4 x 16 RM	20,0	950	1000	1,15	82
4 x 25 RM	26,0	1500	1000	0,727	108
4 x 35 RM	29,0	2000	1000	0,524	135
5 x 1,5 RE	11,0	190	100	12,1	14
5 x 2,5 RE	12,5	270	100	7,41	20
5 x 4 RE	14,5	400	100	4,61	26
5 x 6 RE	16,0	520	100	3,08	33
5 x 10 RM	20,0	800	1000	1,83	46
5 x 16 RM	22,5	1180	1000	1,15	62
5 x 25 RM	28,5	1850	1000	0,727	81
5 x 35 RM	32,0	2450	1000	0,524	101

# PVC insulated, building cables, with flexible copper conductor



Code: H03VV-F, H05VV-F, 2182Y, 2183Y, 2184Y, 3182Y, 3183Y, 3184Y, 3185Y

F: Flexible Conductor

Standards: EN 50525-2-11, BS EN 50525-2-11,  
DIN EN 50525-2-11 (VDE 0285-525-2-11)

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : 160°C (max. 5 sec.)  
 Rated voltage : 300/300 V  
 300/500 V

### Application

For household appliances (refrigerators, spin dryers, etc.)  
 under medium mechanical stresses, also in damp and wet  
 spaces.

\* : 300/300 V (H03VV - F 2182Y, 2183Y, 2184Y)

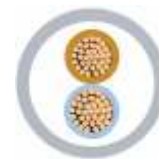
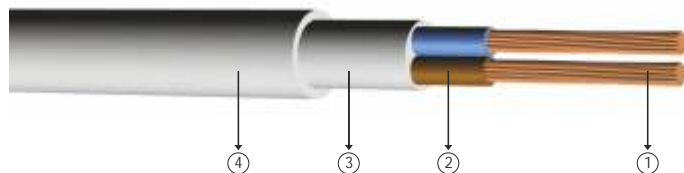
### Construction

- 1 Flexible copper conductor
- 2 PVC insulation
- 3 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES	
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity
mm <sup>2</sup>	mm	kg/km	m	/km	A
2x0,5*	5,5	48	100	39,0	8
2x0,75	6,2	55	100	26,0	13
2x1	6,6	80	100	19,5	16
2x1,5	7,6	105	100	13,3	20
2x2,5	9,8	160	100	7,98	27
2x4	11,0	210	100	4,95	34
3x0,5*	5,4	55	100	39,0	8
3x0,75	6,5	65	100	26,0	13
3x1	7,2	80	100	19,5	16
3x1,5	8,5	110	100	13,3	20
3x2,5	10,0	165	100	7,98	27
3x4	11,4	230	100	4,95	34
4x0,5*	6,4	65	100	39,0	8
4x0,75	7,1	75	100	26,0	13
4x1	7,8	95	100	19,5	16
4x1,5	9,5	140	100	13,3	20
4x2,5	11,0	200	100	7,98	27
4x4	12,5	290	100	4,95	34
5x0,75	8,0	100	100	26,0	13
5x1	8,5	115	100	19,5	16
5x1,5	10,5	170	100	13,3	20
5x2,5	12,5	260	100	7,98	27
5x4	14,5	370	100	4,95	34



# PVC insulated, building cables, with flexible copper conductor



Code: 60227 IEC 71 c (07VV-F)

F: Flexible Conductor

Standards: IEC 60227-6

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : 160°C (max. 5 sec.)  
 Rated voltage : 450/750 V

### Application

For household appliances (refrigerators, spin dryers, etc.) under medium mechanical stresses, also in damp and wet spaces.

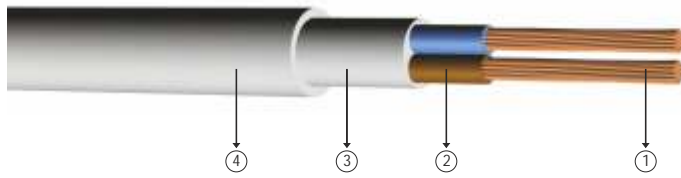
### Construction

- ① Flexible copper conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20 °C	In air at 30 °C
2x6	11,89	252	1000	3,30	68	48
2x10	16,03	445	1000	1,91	90	66
2x16	18,16	615	1000	1,21	116	89
2x25	21,18	886	1000	0,780	150	118
3x6	13,24	321	1000	3,30	56	43
3x10	17,07	534	1000	1,91	75	60
3x16	19,94	776	1000	1,21	98	80
3x25	22,56	1095	1000	0,780	128	106
4x6	14,46	399	1000	3,30	56	43
4x10	19,05	682	1000	1,91	75	60
4x16	21,86	972	1000	1,21	98	80
4x25	25,59	1426	1000	0,780	128	106
5x6	15,78	482	1000	3,30	56	43
5x10	21,46	855	1000	1,91	75	60
5x16	23,92	1180	1000	1,21	98	80
5x25	28	1735	1000	0,780	128	106
7x1,5	11,42	226	1000	13,3	16	12
7x2,5	13,99	347	1000	7,98	20	16
7x4	15,51	468	1000	4,95	26	22
7x6	17,49	639	1000	3,30	34	28
8x1,5	13,98	317	1000	13,3	13	13
9x1,5	14,4	341	1000	13,3	13	13



# PVC insulated, building cables, with flexible copper conductor



Code: 60227 IEC 71 c (07VV-F)

F: Flexible Conductor

Standards: IEC 60227-6

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : 160°C (max. 5 sec.)  
 Rated voltage : 450/750 V

### Application

For household appliances (refrigerators, spin dryers, etc.)  
 under medium mechanical stresses, also in damp and wet spaces.

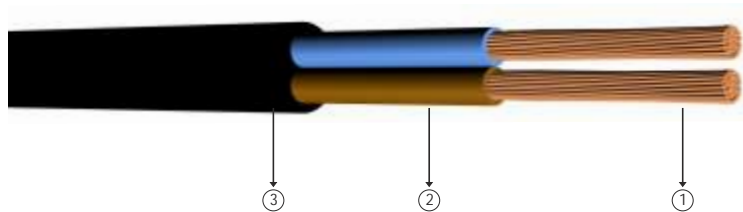
### Construction

- ① Flexible copper conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20 °C	In air at 30 °C
10x1,5	14,99	372	1000	13,3	13	13
10x2,5	17,92	555	1000	7,98	17	17
11x1,5	14,99	380	1000	13,3	12	9
12x1,5	15,47	408	1000	13,3	12	9
12x2,5	19,1	635	1000	7,98	15	12
14x1,5	16,21	456	1000	13,3	12	9
15x1,5	17,07	499	1000	13,3	11	9
16x1,5	17,07	508	1000	13,3	10	9
16x2,5	21,06	791	1000	7,98	14	12
18x1,5	18,27	583	1000	13,3	10	8
19x1,5	18,27	591	1000	13,3	10	8
19x2,5	22,15	898	1000	7,98	14	11
20x1,5	19,85	675	1000	13,3	9	7
20x2,5	24,15	1027	1000	7,98	12	10
21x1,5	19,85	683	1000	13,3	9	7
24x1,5	21,84	818	1000	13,3	9	7
24x2,5	26,58	1246	1000	7,98	12	10
25x1,5	21,84	826	1000	13,3	8	6
25x2,5	26,58	1260	1000	7,98	10	9
30x1,5	23,06	941	1000	13,3	8	6
30x2,5	28,07	1436	1000	7,98	10	9



# PVC insulated, building cables, with flexible copper conductor



Code: H03V2V2-F, H05V2V2-F

F: Flexible Conductor

Standards: EN 50525-2-11, BS EN 50525-2-11, DIN EN 50525-2-11 (VDE 0285-525-2-11)

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 160°C (max. 5 sec.)  
 Rated voltage : 300/300 V  
 300/500 V

### Application

For household appliances (refrigerators, spin dryers, etc.) under medium mechanical stresses, also in damp and wet spaces.

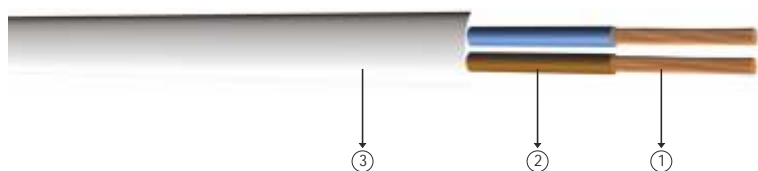
\* : 300/300 V (H03VV - F)

### Construction

- ① Flexible copper conductor
- ② PVC insulation (90°C)
- ③ PVC outer sheath (90°C)

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES	
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity
mm <sup>2</sup>	mm	kg/km	m	/km	A
2x0,5*	5,5	48	100	39,0	10
2x0,75	6,2	55	100	26,0	16
2x1	6,6	80	100	19,5	20
2x1,5	7,6	105	100	13,3	24
2x2,5	9,8	160	100	7,98	32
2x4	11,0	210	100	4,95	42
3x0,5*	5,4	55	100	39,0	10
3x0,75	6,5	65	100	26,0	16
3x1	7,2	80	100	19,5	20
3x1,5	8,5	110	100	13,3	24
3x2,5	10,0	165	100	7,98	32
3x4	11,4	230	100	4,95	42
4x0,5*	6,4	65	100	39,0	10
4x0,75	7,1	75	100	26,0	16
4x1	7,8	95	100	19,5	20
4x1,5	9,5	140	100	13,3	24
4x2,5	11,0	200	100	7,98	32
4x4	12,5	290	100	4,95	42
5x0,75	8,0	100	100	26,0	16
5x1	8,5	115	100	19,5	20
5x1,5	10,5	170	100	13,3	24
5x2,5	12,5	260	100	7,98	32
5x4	14,5	370	100	4,95	42

# PVC insulated, flat cables, with flexible copper conductor



Code: H03VVH2-F, H05VVH2-F, 2192Y, 3192Y

F: Flexible Conductor

Standards: EN 50525-2-11, BS EN 50525-2-11  
DIN EN 50525-2-11 (VDE 0285-525-2-11)

### Technical Data

Max. operating temperature : 70°C  
Max. short circuit temperature : 160°C (max. 5 sec.)  
Rated voltage : 300/300 V  
300/500 V

### Application

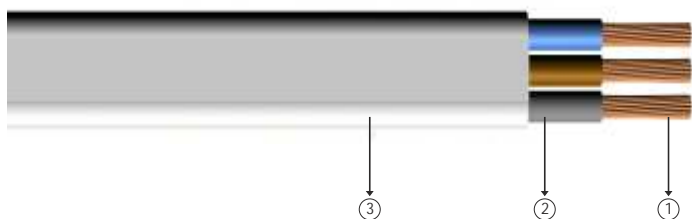
For use in passenger and goods lifts and special applications like hoists and travelling cranes.

\*\* : 300/300 V (H03VVH2-F, 2192Y)

### Construction

- ① Flexible copper conductor
- ② PVC insulation
- ③ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES	
Nominal Cross Section	Outer Dimension (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity
mm <sup>2</sup>	mm (H x W)	kg/km	m	/km	A
2x0,5*	3,4x5,4	33	100	39,00	3
2x0,75*	3,4x5,8	39	100	26,00	6
2x0,75	4,1x6,6	49	100	26,00	6
2x1	4,3x6,9	55	100	19,50	10



Code: H07VVH6-F

F: Flexible Conductor

Standards: EN 50214, IEC 60227-6

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : 160°C (max. 5 sec.)  
 Rated voltage : 450/750 V

### Application

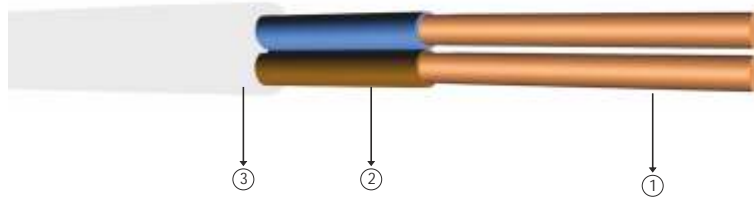
For use in passenger and goods lifts and special applications like hoists and travelling cranes.

### Construction

- 1 Flexible copper conductor
- 2 PVC insulation
- 3 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES	
Nominal Cross Section	Outer Dimensions (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity
mm <sup>2</sup>	mm (H x W)	kg/km	m	/km	A
3x1,5	4,9x11,7	120	1000	13,3	20
3x2,5	5,6x14,4	170	1000	7,98	27
3x4	6,6x16,2	240	1000	4,95	34
3x6	7,1x17,7	300	1000	3,30	44
3x10	9,1x22,5	500	1000	1,91	61
3x16	10,3x25,9	720	1000	1,21	82
3x25	12,3x31,3	1070	1000	0,78	108
4x1,5	4,9x14,6	150	1000	13,3	20
4x2,5	5,6x18,0	220	1000	7,98	27
4x4	6,6x20,4	300	1000	4,95	34
4x6	7,1x22,4	390	1000	3,30	44
4x10	9,1x28,8	640	1000	1,91	61
4x16	10,3x33,2	940	1000	1,21	82
4x25	12,3x40,4	1400	1000	0,78	108

# PVC insulated, building cables, with copper conductor



Code: 6181Y, 6192Y, 6193Y

Standards: BS 6004

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : 160°C (max. 5 sec.)  
 Rated voltage : 300/500 V

### Application

Fixed installation in dry or damp areas for domestic and light industrial wiring. Also used in connection to (smart)meters.

RE : Solid conductor  
 RM : Stranded Conductor

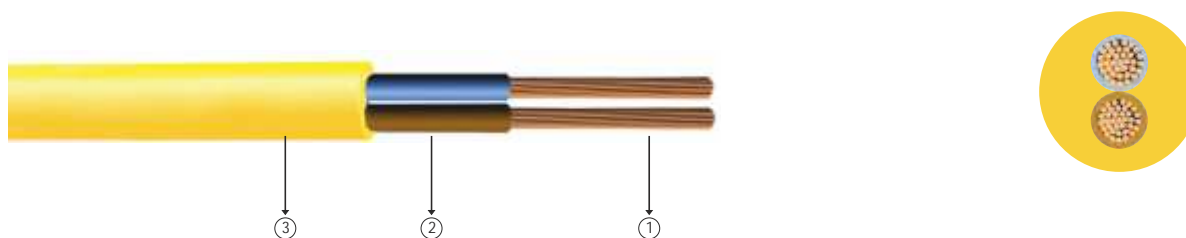
### Construction

- ① Copper conductors
- ② PVC insulation
- ③ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES	
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity
mm <sup>2</sup>	mm	kg/km	m	/km	A
1x1 RE	3,9	26	1000	18,1	16
1x1,5 RE	4,4	34	1000	12,1	20
1x2,5 RE	4,9	47	1000	7,41	27
1x4 RM	5,9	70	1000	4,61	34
1x6 RM	6,4	92	1000	3,08	44
1x10 RM	7,7	140	1000	1,83	61
1x16 RM	8,9	206	1000	1,15	82
1x25 RM	10,7	313	1000	0,727	120
1x35 RM	11,7	406	1000	0,524	150
2x1 RE	6,5x4,1	51	1000	18,1	16
2x1,5 RE	7,3x4,6	67	1000	12,1	20
2x2,5 RE	8,7x5,3	99	1000	7,41	27
2x4 RM	10,1x6,1	140	1000	4,61	34
2x6 RM	11,5x6,8	191	1000	3,08	44
2x10 RM	14,2x8,3	300	1000	1,83	61
2x16 RM	16,3x9,5	436	1000	1,15	82
2x1,5 RM	7,7x4,7	71	1000	12,1	20
2x2,5 RM	9,1x5,6	104	1000	7,41	27
3x1 RE	8,8x4,1	74	1000	18,1	16
3x1,5 RE	10,1x4,6	98	1000	12,1	20
3x2,5 RE	12x5,3	145	1000	7,41	27
3x4 RM	14,2x6,1	213	1000	4,61	34
3x6 RM	16,1x6,8	283	1000	3,08	44
3x10 RM	20,1x8,3	446	1000	1,83	61
3x16 RM	23,2x9,5	650	1000	1,15	82



## Arctic grade PVC insulated, building cables, with flexible copper conductor



Code: 3182A, 3183A, 3184A, 3185A, Arctic PVC Cables

Standards: BS 6004

### Technical Data

Max. operating temperature : 70°C  
 Min. operating temperature : -40°C  
 Max. short circuit temperature : 160°C (max. 5 sec.)  
 Rated voltage : 300/500 V

### Application

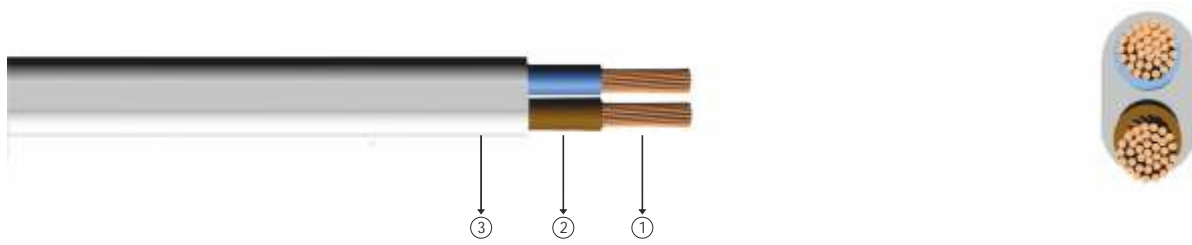
Cables are designed to withstand severe external temperatures and will remain flexible at temperatures down to -40°C. Making them particularly suitable for outdoor applications and for use where flexibility is required at sub zero temperatures. At normal temperatures the cable is very flexible, offering some of the characteristics usually found in elastomeric cables.

### Construction

- ① Flexible copper conductors
- ② Arctic grade PVC insulation
- ③ Arctic grade PVC sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES	
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity
mm <sup>2</sup>	mm	kg/km	m	/km	A
2x0,5	6,3	57	1000	39	8
2x0,75	6,7	67	1000	26	13
2x1	7,1	76	1000	19,5	16
2x1,5	8,0	100	1000	13,3	20
2x2,5	9,8	150	1000	7,98	27
2x4	11,0	200	1000	4,95	34
3x0,75	6,6	65	1000	26	13
3x1	7,0	76	1000	19,5	16
3x1,5	8,2	106	1000	13,3	20
3x2,5	10,0	162	1000	7,98	27
3x4	11,3	222	1000	4,95	34
4x0,75	7,2	80	1000	26	13
4x1	7,9	97	1000	19,5	16
4x1,5	9,2	135	1000	13,3	20
4x2,5	11,0	201	1000	7,98	27
4x4	12,4	276	1000	4,95	34
5x0,75	8,1	108	1000	26	13
5x1	8,6	127	1000	19,5	16
5x1,5	10,2	182	1000	13,3	20
5x2,5	12,2	270	1000	7,98	27
5x4	14,0	377	1000	4,95	34

# Arctic grade PVC insulated, flat type building cables, with flexible copper conductor



Code: 3192A, Arctic PVC Cables

Standards: BS 6004

### Technical Data

Max. operating temperature : 70°C  
 Min. operating temperature : -40°C  
 Max. short circuit temperature : 160°C (max. 5 sec.)  
 Rated voltage : 300/500 V

### Application

Cables are designed to withstand severe external temperatures and will remain flexible at temperatures down to -40°C. Making them particularly suitable for outdoor applications and for use where flexibility is required at sub zero temperatures. At normal temperatures the cable is very flexible, offering some of the characteristics usually found in elastomeric cables.

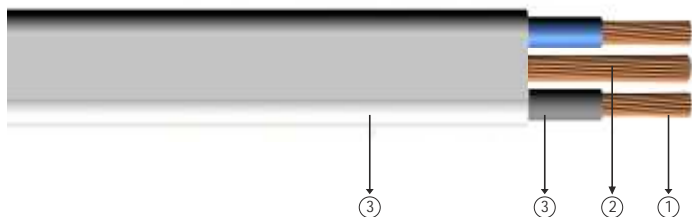
### Construction

- 1 Flexible copper conductors
- 2 Arctic grade PVC insulation
- 3 Arctic grade PVC sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES	
Nominal Cross Section	Outer Dimensions (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity
mm <sup>2</sup>	mm (H x W)	kg/km	m	/km	A
2x0,75	6,25 x 3,92	42	1000	26	13
2x1	6,6 x 4,1	48	1000	19,5	16



## PVC insulated, flat type twin and earth cables, with circuit protective conductor



Code: 6241Y, 6242Y, 6243Y

Standards: BS 6004

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : 160°C (max. 5 sec.)  
 Rated voltage : 300/500 V

### Application

Domestic wiring cable. Can be installed in fixed installations in dry or damp premises clipped to surface, on trays or in free air where the risk of mechanical damage would not be an issue. Suitable for laying in conduit or trunking where mechanical protection is required.

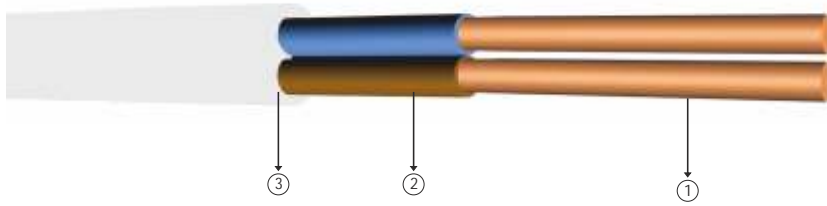
### Construction

- ① Copper conductors
- ② Circuit Protective Conductor (CPC)
- ③ PVC insulation
- ④ PVC sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES	
Nominal Cross Section	Outer Dimensions (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity
mm <sup>2</sup>	mm (H x W)	kg/km	m	/km	A
1x1+1	5,3x4,1	47	1000	18,1	16
1x1,5+1	5,7x4,6	58	1000	12,1	20
1x1,5+1	5,9x4,7	60	1000	12,1	20
2x1+1	7,6x4,1	63	1000	18,1	16
2x1,5+1	8,4x4,6	80	1000	12,1	20
2x2,5+1,5	10x5,3	117	1000	7,41	27
2x4+1,5	11,5x6,1	159	1000	4,61	34
2x6+2,5	13,2x6,8	221	1000	3,08	44
2x10+4	16,7x8,3	351	1000	1,83	61
2x16+6	19,3x9,5	510	1000	1,15	82
2x1,5+1	8,8x4,7	83	1000	12,1	20
2x2,5+1,5	10,5x5,6	122	1000	7,41	27
3x1+1	9,9x4,1	89	1000	18,1	16
3x1,5+1	11,2x4,6	115	1000	12,1	20
3x2,5+1,5	13,4x5,3	171	1000	7,41	27
3x4+1,5	15,6x6,1	244	1000	4,61	34
3x6+2,5	17,8x6,8	330	1000	3,08	44
3x10+4	22,5x8,3	530	1000	1,83	61
3x16+6	26,2x9,5	772	1000	1,15	82



# XLPE insulated, building cables, with copper conductor



Code: 6181B, 6182B, 6183B, 6184B, 6185B

Standards: BS 7211

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 450/750 V

### Application

Fixed installation in walls, on boards and in channels or embedded in plaster. Low smoke emission and corrosive gasses in case of fire.

*RE* : Single conductor wire  
*RM* : Stranded Conductor

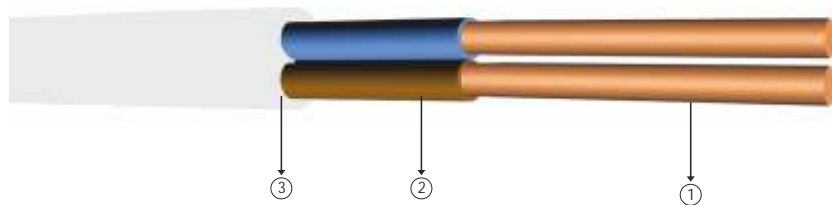
### Construction

- ① Copper conductors
- ② XLPE insulation
- ③ HFFR sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES	
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity
mm <sup>2</sup>	mm	kg/km	m	/km	A
1x1	4,1	26	1000	18,1	23
1x1,5	4,4	32	1000	12,1	32
1x2,5	4,7	42	1000	7,41	42
1x4	5,4	61	1000	4,61	56
1x6	5,9	80	1000	3,08	71
1x10	6,7	122	1000	1,83	96
2x1	8,3	98	1000	18,1	23
2x1,5	8,7	115	1000	12,1	32
2x2,5	9,5	146	1000	7,41	42
2x4	10,4	192	1000	4,61	56
2x6	11,4	244	1000	3,08	71
3x1	8,7	110	1000	18,1	17
3x1,5	9,2	130	1000	12,1	24
3x2,5	10,0	169	1000	7,41	32
3x4	11,0	228	1000	4,61	42
3x6	12,0	296	1000	3,08	53



# XLPE insulated, building cables, with copper conductor



Code: 6181B, 6182B, 6183B, 6184B, 6185B

Standards: BS 7211

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 450/750 V

### Application

Fixed installation in walls, on boards and in channels or embedded in plaster. Low smoke emission and corrosive gasses in case of fire.

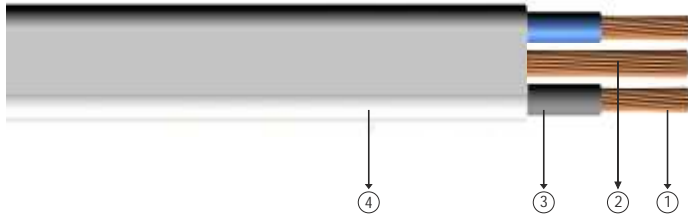
*RE* : Single conductor wire  
*RM* : Stranded Conductor

### Construction

- ① Copper conductors
- ② XLPE insulation
- ③ HFFR sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES	
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity
mm <sup>2</sup>	mm	kg/km	m	/km	A
4x1	9,3	129	1000	18,1	17
4x1,5	9,9	155	1000	12,1	24
4x2,5	10,8	204	1000	7,41	32
4x4	12,0	280	1000	4,61	42
4x6	13,5	380	1000	3,08	53
5x1	10,0	151	1000	18,1	13
5x1,5	10,7	182	1000	12,1	24
5x2,5	11,7	242	1000	7,41	32
5x4	13,4	348	1000	4,61	42
5x6	15,0	472	1000	3,08	53
2x10	13,4	369	1000	1,83	96
3x10	14,6	471	1000	1,83	73
4x10	15,9	586	1000	1,83	73
5x10	17,3	707	1000	1,83	73

# XLPE insulated, flat type twin and earth cables, with circuit protective conductor



Code: 6241B, 6242B, 6243B

Standards: BS 7211

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 300/500 V

### Application

Installation in walls, on boards and in channels or embedded in plaster. For installations where fire, smoke emissions and toxic fumes create a potential risk to life and equipment.

### Construction

- 1 Copper conductors
- 2 Circuit Protective Conductor (CPC)
- 3 XLPE insulation
- 4 HFFR Sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES	
Nominal Cross Section	Outer Dimensions (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity
mm <sup>2</sup>	mm (H x W)	kg/km	m	/km	A
1x1+1	5,5x4,3	48	1000	18,1	16
1x1,5+1	5,7x4,6	55	1000	12,1	28
2x1+1	8,0x4,3	63	1000	18,1	16
2x1,5+1	8,4x4,6	75	1000	12,1	28
2x2,5+1,5	9,6x5,1	106	1000	7,41	38
2x1+1	8,3x4,5	66	1000	18,1	16
2x1,5+1	8,8x4,7	78	1000	12,1	28
2x2,5+1,5	10,1x5,4	110	1000	7,41	38
2x4+1,5	11,1x5,9	145	1000	4,61	52
2x6+2,5	12,8x6,6	205	1000	3,08	65
2x10+4	15,2x7,7	315	1000	1,83	86
2x16+6	17,8x8,9	463	1000	1,15	96
3x1+1	10,5x4,3	85	1000	18,1	16
3x1,5+1	11,2x4,6	102	1000	12,1	28
3x2,5+1,5	12,8x5,1	145	1000	7,41	38
3x4+1,5	15,0x5,9	203	1000	4,61	52
3x6+2,5	17,2x6,6	286	1000	3,08	65
3x10+4	20,5x7,7	438	1000	1,83	86
3x16+6	24,0x8,9	656	1000	1,15	96



# 0,6/1 kV PVC insulated, single core cables, with copper conductor



Code: YVV-U, YVV-R, CU/PVC/PVC, NYY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

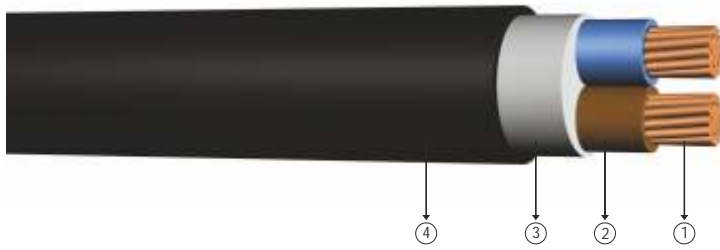
### Construction

- ① Solid or stranded copper conductor
- ② PVC insulation
- ③ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)			
					In ground at 20°C		In air at 30°C	
mm <sup>2</sup>	mm	kg/km	m	/km	***	**	***	**
1x1,5	5,8	50	1000	12,1	-	30	25	20
1x2,5	6,2	60	1000	7,41	-	39	34	27
1x4	7,0	85	1000	4,61	-	50	45	37
1x6	7,5	105	1000	3,08	-	62	57	48
1x10	9,0	160	1000	1,83	-	83	78	66
1x16	10,0	215	1000	1,15	127	107	103	89
1x25	11,5	320	1000	0,727	163	137	137	118
1x35	12,5	420	1000	0,524	195	165	169	145
1x50	14,0	570	1000	0,387	230	195	206	176
1x70	15,5	780	1000	0,268	282	239	261	224
1x95	18,0	1050	1000	0,193	336	287	321	271
1x120	19,5	1300	1000	0,153	382	326	374	314
1x150	21,0	1600	1000	0,124	428	366	428	361
1x185	23,5	1950	1000	0,0991	483	414	494	412
1x240	27,0	2550	1000	0,0754	561	481	590	484
1x300	30,5	3150	1000	0,0601	632	542	678	549
1x400	34,0	4200	1000	0,0470	730	624	817	657
1x500	37,0	5200	1000	0,0366	823	698	940	749
1x630	42,0	6450	500	0,0283	866	775	1042	858

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20 °C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30 °C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 0,6/1 kV PVC insulated, multi-core cables, with copper conductor



Code: YVV-U, YVV-R, CU/PVC/PVC, NYY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.) 160°C  
 Cross section  $\leq 300 \text{ mm}^2$  : 140°C  
 Cross section  $> 300 \text{ mm}^2$  : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

### Construction

- 1 Solid or stranded copper conductor
- 2 PVC insulation
- 3 Thermoplastic filler
- 4 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
2x1,5	10,5	165	1000	12,1	32	20
2x2,5	11,2	215	1000	7,41	42	27
2x4	13,0	300	1000	4,61	54	37
2x6	14,0	350	1000	3,08	68	48
2x10	15,5	500	1000	1,83	90	66
2x16	18,5	675	1000	1,15	116	89
2x25	22,5	1000	1000	0,727	150	118
2x35	24,5	1250	1000	0,524	181	145
2x50	27,5	1650	1000	0,387	215	176
2x70	31,0	2200	1000	0,268	264	224
2x95	35,5	2950	1000	0,193	317	271
2x120	39,0	3650	1000	0,153	360	314
2x150	43,0	4450	1000	0,124	406	361
2x185	48,0	5550	500	0,0991	458	412
2x240	54,0	7150	500	0,0754	537	484
2x300	61,5	9000	500	0,0601	604	556

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV PVC insulated, multi-core cables, with copper conductor



Code: YVV-U, YVV-R, CU/PVC/PVC, NYY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

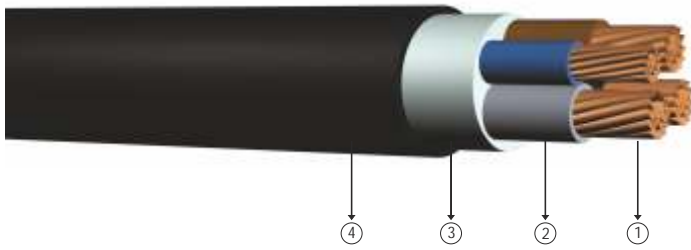
### Construction

- ① Solid or stranded copper conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x1,5	11,0	200	1000	12,1	26	18.5
3x2,5	11,8	230	1000	7,41	34	25
3x4	13,6	340	1000	4,61	44	34
3x6	15,5	425	1000	3,08	56	43
3x10	17,5	620	1000	1,83	75	60
3x16	19,5	835	1000	1,15	98	80
3x25	24,0	1250	1000	0,727	128	106
3x35	26,0	1600	1000	0,524	157	131
3x50	29,5	2100	1000	0,387	185	159
3x70	33,5	2900	1000	0,268	228	202
3x95	38,0	3900	1000	0,193	275	244
3x120	42,0	4800	1000	0,153	313	282
3x150	46,0	5900	500	0,124	353	324
3x185	51,0	7300	500	0,0991	399	371
3x240	58,0	9450	500	0,0754	464	436
3x300	65,0	11800	250	0,0601	524	481
3x400	71,0	15500	250	0,0470	600	560

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV PVC insulated, multi-core cables, with copper conductor



Code: YVV-R, CU/PVC/PVC, NYY

R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section  $300 \text{ mm}^2$  : 160°C  
 Cross section  $> 300 \text{ mm}^2$  : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

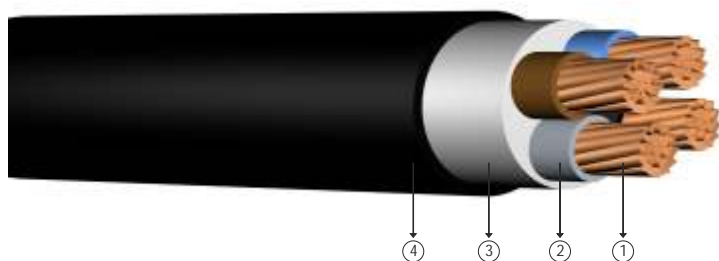
Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

### Construction

- ① Stranded copper conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x16+10	21,5	970	1000	1,15	98	80
3x25+16	25,0	1400	1000	0,727	128	106
3x35+16	27,0	1750	1000	0,524	157	131
3x50+25	31,0	2400	1000	0,387	185	159
3x70+35	35,0	3300	1000	0,268	228	202
3x95+50	40,0	4400	1000	0,193	275	244
3x120+70	44,5	5550	500	0,153	313	282
3x150+70	48,0	6550	500	0,124	353	324
3x185+95	53,0	8200	500	0,0991	399	371
3x240+120	60,5	10600	500	0,0754	464	436
3x300+150	68,0	13100	250	0,0601	524	481
3x400+185	76,0	17000	250	0,0470	600	560

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



Code: YVV-U, YVV-R, CU/PVC/PVC, NYY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

#### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

#### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

#### Construction

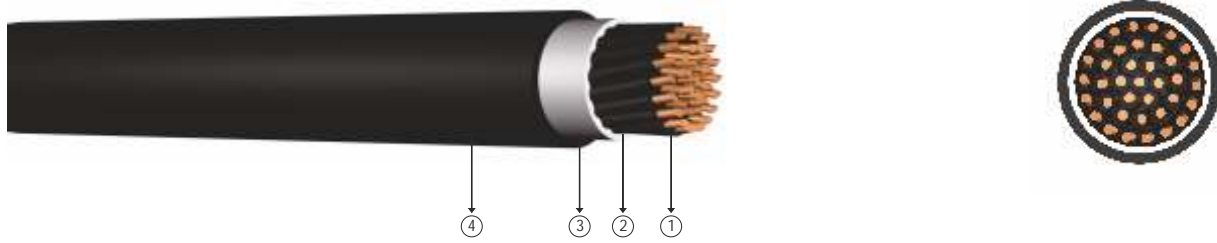
- ① Solid or stranded copper conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
4x1,5	11,6	235	1000	12,1	26	18.5
4x2,5	12,6	270	1000	7,41	34	25
4x4	14,8	400	1000	4,61	44	34
4x6	16,0	520	1000	3,08	56	43
4x10	18,0	690	1000	1,83	75	60
4x16	21,5	1050	1000	1,15	98	80
4x25	26,0	1550	1000	0,727	128	106
4x35	28,5	2000	1000	0,524	157	131
4x50	33,0	2750	1000	0,387	185	159
4x70	37,5	3750	1000	0,268	228	202
4x95	42,5	5000	1000	0,193	275	244
4x120	46,5	6200	500	0,153	313	282
4x150	51,5	7600	500	0,124	353	324
4x185	57,0	9450	500	0,0991	399	371
4x240	65,0	12200	500	0,0754	464	436
4x300	73,0	15200	250	0,0601	524	481
4x400	79,0	19500	250	0,0470	600	560

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



# 0,6/1 kV PVC Insulated, multi-core cables, control cables with copper conductor



Code: YVV-U, YVV-R, CU/PVC/PVC, NYY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-627

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section  $\leq 300 \text{ mm}^2$  : 160°C  
 Cross section  $> 300 \text{ mm}^2$  : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

### Construction

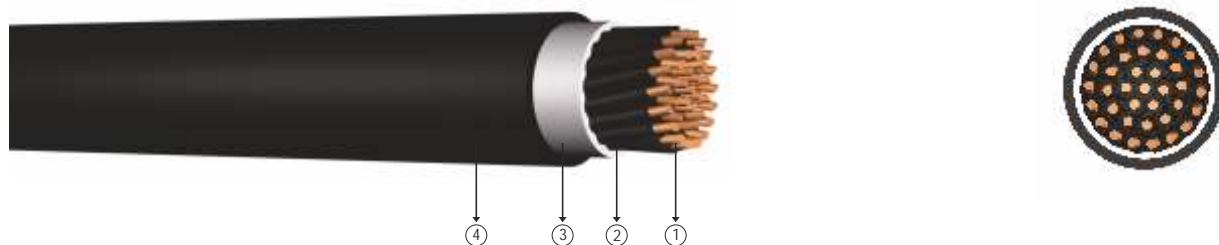
- 1 Solid or stranded copper conductor
- 2 PVC insulation
- 3 Thermoplastic filler
- 4 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
5x1,5	12,0	270	1000	12,1	18,2	14,0
6x1,5	13,5	290	1000	12,1	16,9	13,0
7x1,5	13,5	325	1000	12,1	15,6	12,0
8x1,5	16,0	385	1000	12,1	14,3	11,1
10x1,5	16,5	475	1000	12,1	13,0	10,2
12x1,5	17,0	515	1000	12,1	12,3	9,7
14x1,5	18,0	565	1000	12,1	11,7	9,3
16x1,5	18,5	630	1000	12,1	11,1	8,8
19x1,5	19,5	700	1000	12,1	10,4	8,3
21x1,5	20,5	775	1000	12,1	9,9	8,0
24x1,5	22,5	920	1000	12,1	9,1	7,4
27x1,5	23,0	975	1000	12,1	8,8	7,2
30x1,5	24,5	1050	1000	12,1	8,6	7,0
37x1,5	26,5	1230	1000	12,1	8,1	6,7
40x1,5	27,5	1330	1000	12,1	7,8	6,5
48x1,5	30,0	1600	1000	12,1	7,3	6,1
52x1,5	31,0	1730	1000	12,1	6,7	5,8
61x1,5	33,0	1975	1000	12,1	6,5	5,6

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV PVC Insulated, multi-core cables, control cables with copper conductor



Code: YVV-U, YVV-R, CU/PVC/PVC, NYY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-627

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

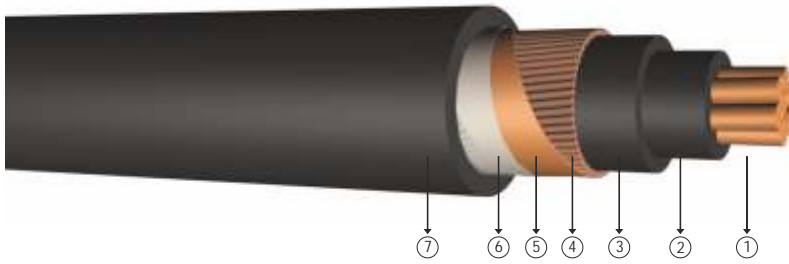
### Construction

- ① Solid or stranded copper conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
5x2,5	13,5	320	1000	7,41	23,8	18,8
6x2,5	14,5	375	1000	7,41	22,1	17,5
7x2,5	14,5	415	1000	7,41	20,4	16,3
8x2,5	17,0	500	1000	7,41	18,7	15,0
10x2,5	18,0	595	1000	7,41	17,0	13,8
12x2,5	18,5	650	1000	7,41	16,2	13,1
14x2,5	19,5	730	1000	7,41	15,3	12,5
16x2,5	20,5	825	1000	7,41	14,5	11,9
19x2,5	21,5	920	1000	7,41	13,6	11,3
21x2,5	22,5	1010	1000	7,41	12,9	10,8
24x2,5	24,8	1190	1000	7,41	11,9	10,0
27x2,5	25,3	1280	1000	7,41	11,6	9,7
30x2,5	27,0	1380	1000	7,41	11,2	9,4
37x2,5	29,5	1660	1000	7,41	10,6	9,1
40x2,5	30,5	1800	1000	7,41	10,2	8,8
48x2,5	32,5	2135	1000	7,41	9,5	8,3
52x2,5	34,5	2320	1000	7,41	8,9	7,8
61x2,5	37,0	2630	1000	7,41	8,5	7,5

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV PVC Insulated, concentric wire screen, single core cables with copper conductor



Code: YVCV-U, YVCV-R, CU/PVC/SC/PVC, NYCY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.) 160°C  
 Cross section 300 mm<sup>2</sup> : 140°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Indoor installations, in cable ducts, outdoor and underground for power stations, industrial plants and switching stations as well as local supply systems if increased protection is necessary. In case of mechanical damage the screen prevents any damage due to power leak to the surrounding area.

### Construction

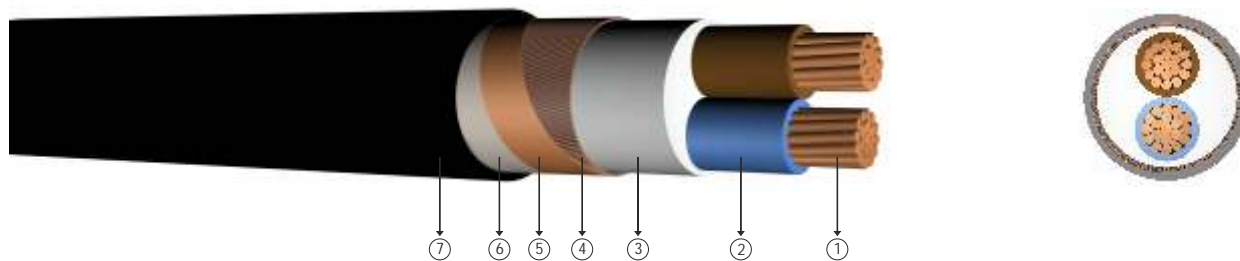
- ① Solid or stranded copper conductor    ③ PVC inner sheath    ⑤ Copper tape as binder    ⑦ PVC outer sheath
- ② PVC insulation    ④ Concentric copper wire    ⑥ PP tape

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C		In air at 30°C	
					***	***	***	***
1x1,5/1,5	10,5	145	1000	12,1	-	30	25	20
1x2,5/2,5	11,0	150	1000	7,41	-	39	34	27
1x4/4	12,0	200	1000	4,61	-	50	45	37
1x6/6	12,5	250	1000	3,08	-	62	57	48
1x10/10	13,5	350	1000	1,83	-	83	78	66
1x16/16	15,0	450	1000	1,15	127	107	103	89
1x25/16	16,5	600	1000	0,727	163	137	137	118
1x35/16	17,5	700	1000	0,524	195	165	169	145
1x50/25	19,0	950	1000	0,387	230	195	206	176
1x70/35	21,0	1250	1000	0,268	282	239	261	224
1x95/50	23,5	1650	1000	0,193	336	287	321	271
1x120/70	25,5	2100	1000	0,153	382	326	374	314
1x150/70	27,0	2400	1000	0,124	428	366	428	361
1x185/95	30,0	3000	1000	0,0991	483	414	494	412
1x240/120	33,5	3850	1000	0,0754	561	481	590	484

Note  
 In ground : Current carrying capacities are valid under the following conditions;  
 : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\*\* : Trefoil formation  
 Number of system : 1



## 0,6/1 kV PVC Insulated, concentric wire screen, multi-core cables with copper conductor



Code: YVCV-U, YVCV-R, CU/PVC/SC/PVC, NYCY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Indoor installations, in cable ducts, outdoor and underground for power stations, industrial plants and switching stations as well as local supply systems if increased protection is necessary. In case of mechanical damage the screen prevents any damage due to power leak to the surrounding area.

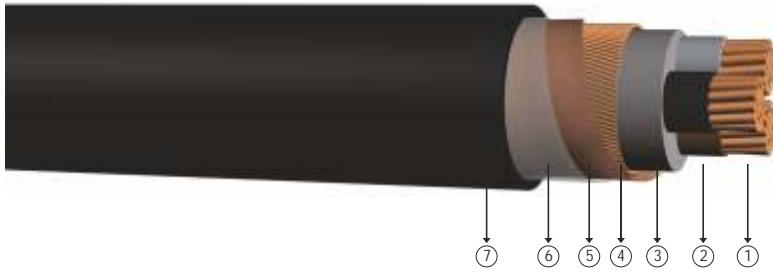
### Construction

- ① Solid or stranded copper conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ Concentric copper wire
- ⑤ Copper tape as binder
- ⑥ PP tape
- ⑦ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
2x1,5/1,5	13,0	240	1000	12,1	32	20
2x2,5/2,5	13,5	250	1000	7,41	42	27
2x4/4	15,5	280	1000	4,61	54	37
2x6/6	16,5	420	1000	3,08	68	48
2x10/10	19,0	600	1000	1,83	90	66
2x16/16	21,0	850	1000	1,15	116	89
2x25/16	24,0	1150	1000	0,727	150	118
2x35/16	26,0	1400	1000	0,524	181	145
2x50/25	29,0	1900	1000	0,3870	215	176
2x70/35	32,5	2550	1000	0,268	264	224
2x95/50	37,5	3450	1000	0,193	317	271
2x120/70	41,5	4300	1000	0,153	360	314
2x150/70	45,0	5100	500	0,124	406	361
2x185/95	50,5	6450	500	0,0991	458	412
2x240/120	57,0	8300	500	0,0754	537	484

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV PVC Insulated, concentric wire screen, multi-core cables with copper conductor



Code: YVCV-U, YVCV-R, CU/PVC/SC/PVC/, NYCY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section  $300 \text{ mm}^2$  : 160°C  
 Cross section  $> 300 \text{ mm}^2$  : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Indoor installations, in cable ducts, outdoor and underground for power stations, industrial plants and switching stations as well as local supply systems if increased protection is necessary. In case of mechanical damage the screen prevents any damage due to power leak to the surrounding area.

### Construction

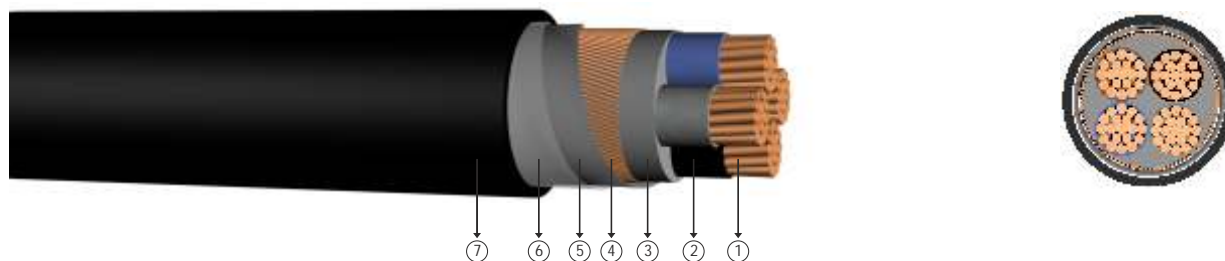
- ① Solid or stranded copper conductor    ③ Thermoplastic filler    ⑤ Copper tape as binder    ⑦ PVC outer sheath
- ② PVC insulation    ④ Concentric copper wire    ⑥ PP tape

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x1,5/1,5	14,0	240	1000	12,1	26	18,5
3x2,5/2,5	15,0	300	1000	7,410	34	25
3x4/4	17,0	420	1000	4,610	44	34
3x6/6	17,5	530	1000	3,080	56	43
3x10/10	20,0	730	1000	1,830	75	60
3x16/16	22,0	1000	1000	1,150	98	80
3x25/16	25,5	1400	1000	0,727	128	106
3x35/16	27,5	1750	1000	0,524	157	131
3x50/25	31,0	2350	1000	0,387	185	159
3x70/35	35,0	3200	1000	0,268	228	202
3x95/50	39,5	4300	1000	0,193	275	244
3x120/70	43,5	5350	500	0,153	313	282
3x150/70	47,5	6450	500	0,124	353	324
3x185/95	52,0	8000	500	0,0991	399	371
3x240/120	59,5	10350	250	0,0754	464	436
3x300/150	66,5	12850	250	0,0601	524	481
3x400/185	78,0	17300	250	0,0470	600	560

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV PVC Insulated, concentric wire screen, multi-core cables with copper conductor



Code: YVCV-U, YVCV-R, CU/PVC/SC/PVC/, NYCY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Indoor installations, in cable ducts, outdoor and underground for power stations, industrial plants and switching stations as well as local supply systems if increased protection is necessary. In case of mechanical damage the screen prevents any damage due to power leak to the surrounding area.

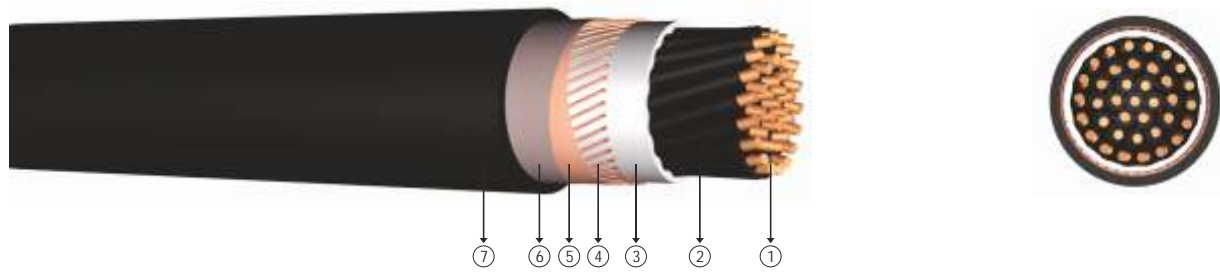
### Construction

- ① Solid or stranded copper conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ Concentric copper wire
- ⑤ Copper tape as binder
- ⑥ PP tape
- ⑦ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
4x1,5/1,5	14,5	290	1000	12,1	26	18.5
4x2,5/2,5	15,5	350	1000	7,41	34	25
4x4/4	17,5	490	1000	4,61	44	34
4x6/6	18,5	600	1000	3,08	56	43
4x10/10	22,0	890	1000	1,83	75	60
4x16/10	24,0	1200	1000	1,15	98	80
4x25/16	28,0	1750	1000	0,727	128	106
4x35/16	30,0	2200	1000	0,524	157	131
4x50/25	34,0	3000	1000	0,387	185	159
4x70/35	39,0	4050	1000	0,268	228	202
4x95/50	46,0	5500	500	0,193	275	244
4x120/70	50,0	6900	500	0,153	313	282
4x150/70	54,0	8300	500	0,124	353	324
4x185/95	61,0	10400	250	0,0991	399	371
4x240/120	69,0	13300	250	0,0754	464	436
4x300/150	74,0	16300	250	0,0601	524	481
4x400/185	83,0	20500	250	0,0470	600	560

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV PVC Insulated, concentric wire screen, control cables with copper conductor



Code: YVCV-U, YVCV-R, CU/PVC/SC/PVC, NYCY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-627

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.) : 160°C  
 Cross section  $300 \text{ mm}^2$  : 140°C  
 Cross section  $> 300 \text{ mm}^2$  : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

Application Used as control cables, indoor installations, in cable ducts, outdoor and underground for power stations, industrial plants and switching stations as well as local supply systems if increased protection is necessary. In case of mechanical damage the screen prevents any damage due to power leak to the surrounding area.

### Construction

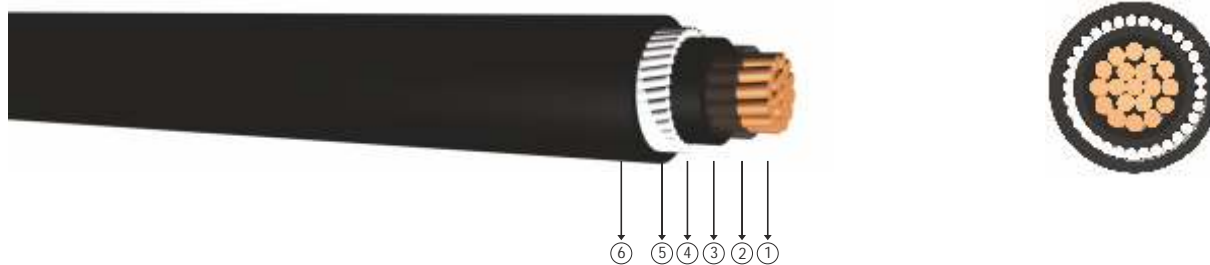
- ① Solid or stranded copper conductor    ③ Thermoplastic filler    ⑤ Copper tape as binder    ⑦ PVC outer sheath
- ② PVC insulation    ④ Concentric copper wire    ⑥ PP tape

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
7x1,5/2,5	16,0	350	1000	12,1	15,6	12,0
8x1,5/2,5	18,2	400	1000	12,1	14,3	11,1
10x1,5/2,5	19,0	500	1000	12,1	13,0	10,2
12x1,5/2,5	19,5	550	1000	12,1	12,3	9,7
14x1,5/2,5	20,0	600	1000	12,1	11,7	9,3
19x1,5/4	22,0	750	1000	12,1	10,4	8,3
24x1,5/6	25,0	1000	1000	12,1	9,1	7,4
27x1,5/6	26,0	1000	1000	12,1	8,8	7,2
30x1,5/6	26,5	1100	1000	12,1	8,6	7,0
37x1,5/10	28,0	1350	1000	12,1	8,1	6,7
7x2,5/2,5	17,5	450	1000	7,41	20,4	16,3
8x2,5/2,5	20,5	550	1000	7,41	18,7	15,0
10x2,5/4	21,0	650	1000	7,41	17,0	13,8
12x2,5/4	22,0	700	1000	7,41	16,2	13,1
14x2,5/2,5	22,3	800	1000	7,41	15,3	12,5
19x2,5/6	24,3	1000	1000	7,41	13,6	11,3
24x2,5/10	28,5	1350	1000	7,41	11,9	10,0
27x2,5/10	28,0	1470	1000	7,41	11,5	9,8
30x2,5/10	29,0	1550	1000	7,41	11,2	9,4
37x2,5/10	31,0	1800	1000	7,41	10,6	9,1
7x4/4	20,0	650	1000	4,61	26,4	22,1
8x4/6	23,0	800	1000	4,61	24,2	20,4
10x4/6	24,5	950	1000	4,61	22,0	18,7
12x4/6	25,0	1050	1000	4,61	20,9	17,9
14x4/6	25,5	1200	1000	4,61	19,8	17,0
19x4/10	28,0	1500	1000	4,61	17,6	15,3

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV PVC insulated, round aluminium wire armoured, single core cables with copper conductor



Code: YVY2V-R, CU/PVC/AWA/PVC , NYR(A)Y

R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature	: 70°C
Max. short circuit temperature	: (max. 5 sec.)
Cross section 300 mm <sup>2</sup>	: 160°C
Cross section > 300 mm <sup>2</sup>	: 140°C
Rated voltage	: 0,6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

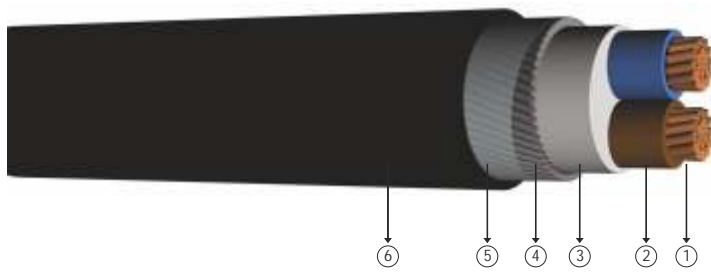
- ① Stranded copper conductors
- ② PVC insulation
- ③ Inner sheath
- ④ Round aluminium wire
- ⑤ PP tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C		In air at 30°C	
					***	**	***	**
1x25	17,5	550	1000	0,727	163	137	137	118
1x35	18,5	650	1000	0,524	195	165	169	145
1x50	20,0	800	1000	0,387	230	195	206	176
1x70	21,5	1050	1000	0,268	282	239	261	224
1x95	24,5	1400	1000	0,193	336	287	321	271
1x120	26,0	1650	1000	0,153	382	326	374	314
1x150	27,5	2000	1000	0,124	428	366	428	361
1x185	30,0	2400	1000	0,0991	483	414	494	412
1x240	33,0	3050	1000	0,0754	561	481	590	484
1x300	37,5	3750	1000	0,0601	632	542	678	549
1x400	41,5	4750	500	0,0470	730	624	817	657
1x500	46,0	5850	500	0,0366	823	698	940	749
1x630	50,0	7450	500	0,0283	866	775	1108	920

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 0,6 / 1 kV PVC insulated, round steel wire armoured, multi-core cables with copper conductor



Code: YVZ2V-U, YVZ2V-R, CU/PVC/SWA/PVC, NYRY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.) : 160°C  
 Cross section  $\leq 300 \text{ mm}^2$  : 140°C  
 Cross section  $> 300 \text{ mm}^2$  : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

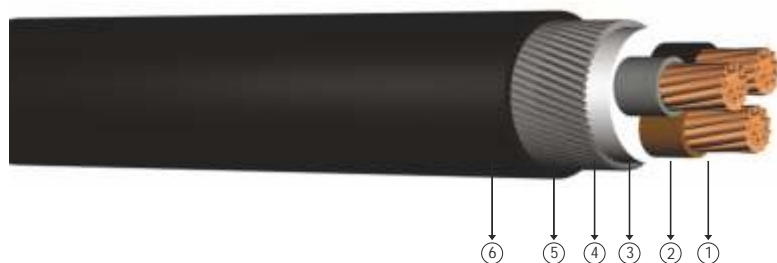
- 1 Solid or stranded copper conductor
- 2 PVC insulation
- 3 Thermoplastic filler
- 4 Galvanized round steel wire
- 5 PP tape
- 6 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
2x1,5	13,5	370	1000	12,1	32	20
2x2,5	14,5	420	1000	7,41	42	27
2x4	16,0	500	1000	4,61	54	37
2x6	18,0	700	1000	3,08	68	48
2x10	20,5	900	1000	1,83	90	66
2x16	22,5	1100	1000	1,15	116	89
2x25	26,0	1650	1000	0,727	150	118
2x35	28,0	1950	1000	0,524	181	145
2x50	31,5	2500	1000	0,387	215	176
2x70	35,5	3400	1000	0,268	264	224
2x95	40,5	4350	1000	0,193	317	271
2x120	44,0	5150	500	0,153	360	314
2x150	48,5	6500	500	0,124	406	361
2x185	53,5	7850	500	0,0991	458	412
2x240	60,0	9750	500	0,0754	537	484
2x300	67,0	11900	250	0,0601	604	556

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6 / 1 kV PVC insulated, round steel wire armoured, multi-core cables with copper conductor



Code: YVY2V-U, YVZ2V-R, CU/PVC/SWA/PVC, NYRY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

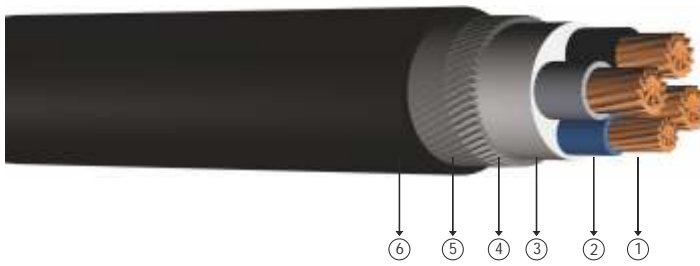
### Construction

- ① Solid or stranded copper conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ Galvanized round steel wire
- ⑤ PP tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x1,5	14,0	400	1000	12,1	26	18.5
3x2,5	15,0	420	1000	7,41	34	25
3x4	17,5	670	1000	4,61	44	34
3x6	18,5	780	1000	3,08	56	43
3x10	21,5	1050	1000	1,83	75	60
3x16	23,5	1300	1000	1,15	98	80
3x25	27,5	1950	1000	0,727	128	106
3x35	29,5	2350	1000	0,524	157	131
3x50	33,5	3050	1000	0,387	185	159
3x70	38,0	4200	1000	0,268	228	202
3x95	43,0	5350	500	0,193	275	244
3x120	46,5	6400	500	0,153	313	282
3x150	52,0	8150	500	0,124	353	324
3x185	57,0	9750	500	0,0991	399	371
3x240	64,0	12250	250	0,0754	464	436
3x300	72,0	15000	250	0,0601	524	481
3x400	82,0	20000	250	0,0470	600	560

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV PVC insulated, round steel wire armoured, multi-core cables with copper conductor



Code: YVZ2V-R, CU/PVC/SWA/PVC, NYRY

R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

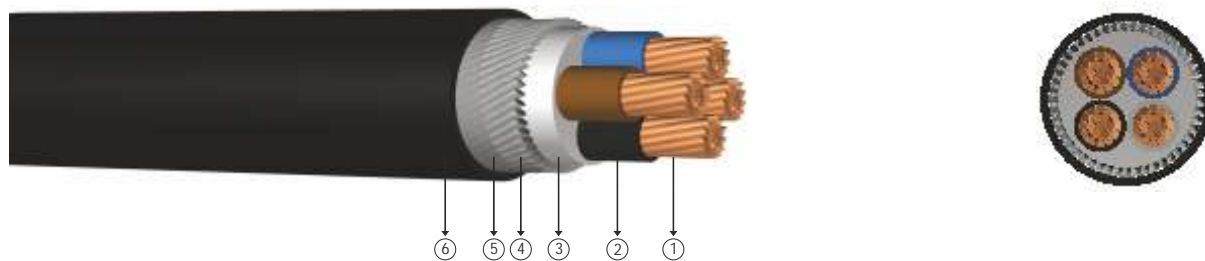
- 1 Stranded copper conductor
- 2 PVC insulation
- 3 Thermoplastic filler
- 4 Galvanized round steel wire
- 5 PP tape
- 6 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x16+10	25,5	1600	1000	1,15	98	80
3x25+16	28,5	2150	1000	0,727	128	106
3x35+16	30,5	2550	1000	0,524	157	131
3x50+25	35,5	3600	1000	0,387	185	159
3x70+35	39,5	4650	500	0,268	228	202
3x95+50	44,5	5950	500	0,193	275	244
3x120+70	50,5	7700	250	0,153	313	282
3x150+70	53,5	8900	250	0,124	353	324
3x185+95	59,0	10800	250	0,0991	399	371
3x240+120	66,5	13500	250	0,0754	464	436
3x300+150	73,5	16500	250	0,0601	524	481
3x400+185	84,0	21800	250	0,0470	600	560

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV PVC insulated, round steel wire armoured, multi-core cables with copper conductor



Code: YVZ2V-U, YVZ2V-R, CU/PVC/SWA/PVC, NYRY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

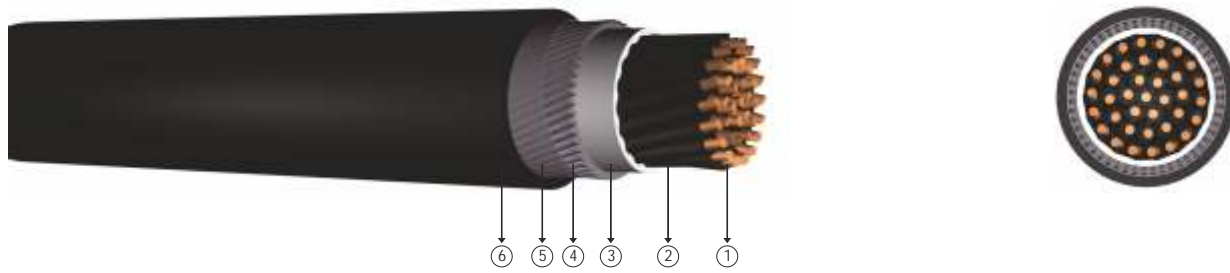
### Construction

- ① Solid or stranded copper conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ Galvanized round steel wire
- ⑤ PP tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
4x1,5	15,0	400	1000	12,1	26	18.5
4x2,5	15,5	480	1000	7,41	34	25
4x4	18,5	770	1000	4,61	44	34
4x6	20,0	900	1000	3,08	56	43
4x10	23,0	1200	1000	1,83	75	60
4x16	26,0	1700	1000	1,15	98	80
4x25	29,5	2300	1000	0,727	128	106
4x35	32,5	2870	1000	0,524	157	131
4x50	37,5	4000	1000	0,387	185	159
4x70	41,5	5150	1000	0,268	228	202
4x95	48,0	7050	1000	0,193	275	244
4x120	52,5	8450	500	0,153	313	282
4x150	57,0	10050	500	0,124	353	324
4x185	63,0	12150	500	0,0991	399	371
4x240	70,5	15300	500	0,0754	464	436
4x300	79,0	18700	250	0,0601	524	481
4x400	90,0	25000	250	0,0470	600	560

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV PVC Insulated, round steel wire armoured, control cables with copper conductor



Code: YVZ2V-U, YVZ2V-R, CU/PVC/SWA/PVC, NYRY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.) : 160°C  
 Cross section  $300 \text{ mm}^2$  : 140°C  
 Cross section  $> 300 \text{ mm}^2$  : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

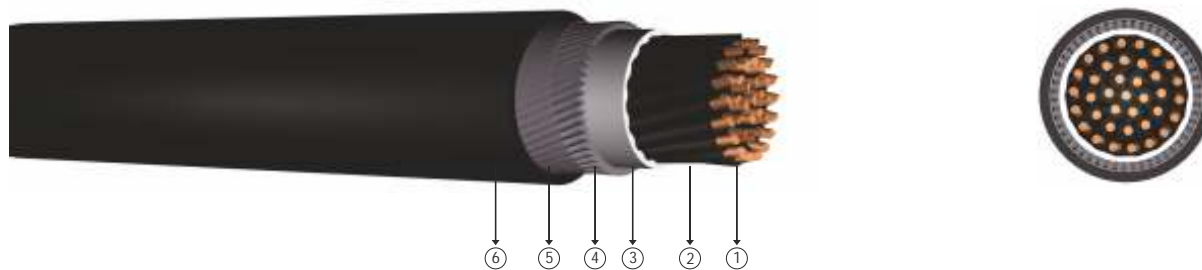
- ① Solid or stranded copper conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ Galvanized round steel wire
- ⑤ PP tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
5x1,5	15,5	460	1000	12,1	18,2	14,0
6x1,5	16,5	520	1000	12,1	16,9	13,0
7x1,5	16,5	530	1000	12,1	15,6	12,0
8x1,5	18,5	820	1000	12,1	14,3	11,1
10x1,5	20,5	870	1000	12,1	13,0	10,2
12x1,5	21,0	920	1000	12,1	12,3	9,7
14x1,5	21,5	1000	1000	12,1	11,7	9,3
16x1,5	22,5	1100	1000	12,1	11,1	8,8
19x1,5	24,0	1300	1000	12,1	10,4	8,3
21x1,5	25,0	1400	1000	12,1	9,9	8,0
24x1,5	27,0	1600	1000	12,1	9,1	7,4
27x1,5	27,5	1700	1000	12,1	8,8	7,2
30x1,5	28,0	1800	1000	12,1	8,6	7,0
37x1,5	30,0	2050	1000	12,1	8,1	6,7
40x1,5	31,0	2150	1000	12,1	7,8	6,5
48x1,5	34,5	2750	1000	12,1	7,3	6,1
52x1,5	36,0	2950	1000	12,1	6,7	5,8
61x1,5	37,5	3250	1000	12,1	6,5	5,6

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV PVC Insulated, round steel wire armoured, control cables with copper conductor



Code: YVZ2V-U, YVZ2V-R, CU/PVC/SWA/PVC, NYRY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section  $\leq 300 \text{ mm}^2$  : 160°C  
 Cross section  $> 300 \text{ mm}^2$  : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

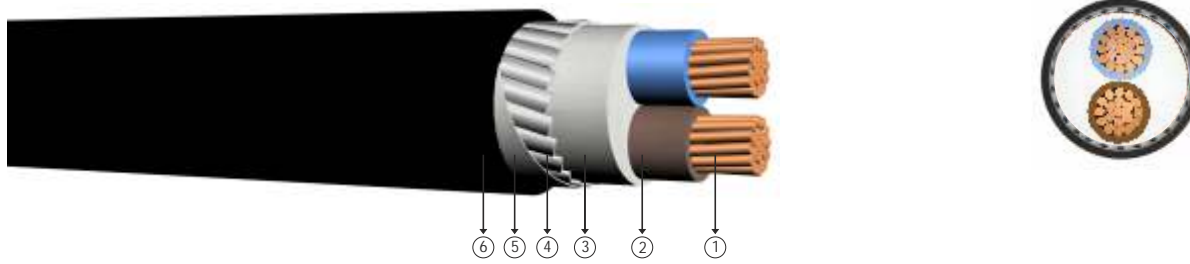
### Construction

- ① Solid or stranded copper conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ Galvanized round steel wire
- ⑤ PP tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
5x2,5	16,5	550	1000	7,41	23,8	18,8
6x2,5	18,5	750	1000	7,41	22,1	17,5
7x2,5	18,0	760	1000	7,41	20,4	16,3
8x2,5	20,0	880	1000	7,41	18,7	15,0
10x2,5	22,0	1050	1000	7,41	17,0	13,8
12x2,5	22,5	1100	1000	7,41	16,2	13,1
14x2,5	24,0	1350	1000	7,41	15,3	12,5
16x2,5	25,0	1500	1000	7,41	14,5	11,9
19x2,5	26,0	1600	1000	7,41	13,6	11,3
21x2,5	27,0	1750	1000	7,41	12,9	10,8
24x2,5	29,5	2000	1000	7,41	11,9	10,0
27x2,5	30,0	2100	1000	7,41	11,6	9,7
30x2,5	31,0	2250	1000	7,41	11,2	9,4
37x2,5	33,0	2600	1000	7,41	10,6	9,1
40x2,5	35,0	3800	1000	7,41	10,2	8,8
48x2,5	38,5	3550	1000	7,41	9,5	8,3
52x2,5	39,5	3700	1000	7,41	8,9	7,8
61x2,5	41,5	4150	1000	7,41	8,5	7,5

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV PVC Insulated, flat steel wire armoured, multi-core cables with copper conductor



Code: YVZ3V-R, NYFGY

R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

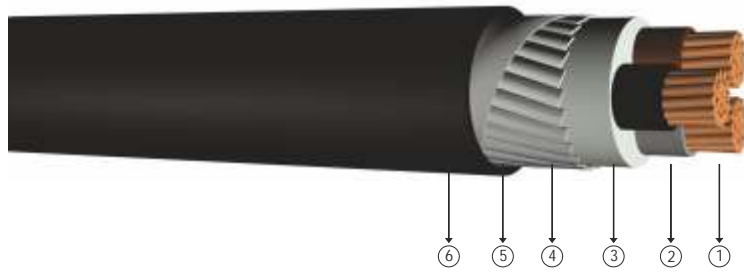
- ① Stranded copper conductors
- ② PVC insulation
- ③ Thermoplastic filler
- ④ Galvanized flat steel wire
- ⑤ Galvanized steel binding tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
2x16	21,5	1180	1000	1,15	116	89
2x25	24,5	1450	1000	0,727	150	118
2x35	26,5	1750	1000	0,524	181	145
2x50	30,0	2200	1000	0,387	215	176
2x70	34,0	2850	1000	0,268	264	224
2x95	38,0	3700	1000	0,193	317	271
2x120	41,5	4450	1000	0,153	360	314
2x150	45,0	5350	1000	0,124	406	361
2x185	50,0	6500	500	0,0991	458	412
2x240	56,5	8200	500	0,0754	537	484
2x300	64,0	10300	500	0,0601	604	556

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV PVC Insulated, flat steel wire armoured, multi-core cables with copper conductor



Code: YVZ3V-R, NYFGY

R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

- 1 Stranded copper conductor
- 3 Thermoplastic filler
- 5 Galvanized steel binding tape
- 2 PVC insulation
- 4 Galvanized flat steel wire
- 6 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x16	23,0	1250	1000	1,15	98	80
3x25	26,0	1700	1000	0,727	128	106
3x35	28,0	2100	1000	0,524	157	131
3x50	32,0	2750	1000	0,387	185	159
3x70	36,0	3600	1000	0,268	228	202
3x95	41,0	4700	1000	0,193	275	244
3x120	44,5	5650	500	0,153	313	282
3x150	49,0	6900	500	0,124	353	324
3x185	54,0	8350	500	0,0991	399	371
3x240	61,0	10700	250	0,0754	464	436
3x300	69,0	13200	250	0,0601	524	481
3x400	77,0	17150	250	0,0470	600	560

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



# 0,6/1 kV PVC Insulated, flat steel wire armoured, multi-core cables with copper conductor



Code: YVZ3V-R, NYFGY

R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

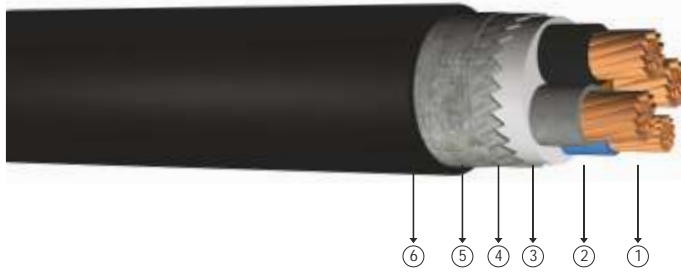
- ① Stranded copper conductors
- ② PVC insulation
- ③ Thermoplastic filler
- ④ Galvanized flat steel wire
- ⑤ Galvanized steel binding tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x16+10	24,0	1450	1000	1,15	98	80
3x25+16	27,5	2000	1000	0,727	128	106
3x35+16	29,5	2300	1000	0,524	157	131
3x50+25	33,5	3050	1000	0,387	185	159
3x70+35	37,5	4000	1000	0,268	228	202
3x95+50	43,0	5250	1000	0,193	275	244
3x120+70	47,5	6500	500	0,153	313	282
3x150+70	50,5	7600	500	0,124	353	324
3x185+95	56,0	9400	500	0,0991	399	371
3x240+120	63,0	11900	250	0,0754	464	436
3x300+150	70,0	14600	250	0,0601	524	481
3x400+185	79,0	18900	250	0,0470	600	560

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV PVC Insulated, flat steel wire armoured, multi-core cables with copper conductor



Code: YVZ3V-R, NYFGY

R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

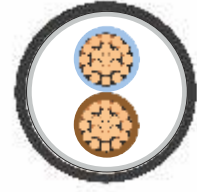
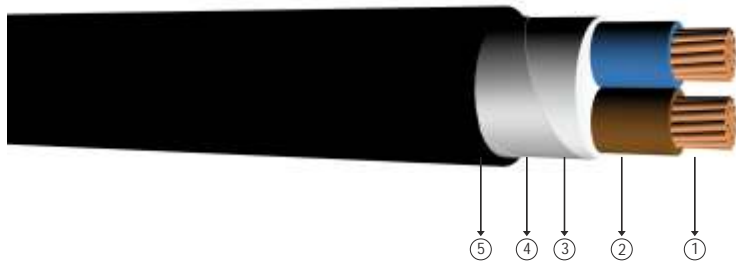
### Construction

- ① Stranded copper conductors
- ② PVC insulation
- ③ Thermoplastic filler
- ④ Galvanized flat steel wire
- ⑤ Galvanized steel binding tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
4x10	22,0	1150	1000	1,83	75	60
4x16	24,5	1500	1000	1,15	98	80
4x25	28,0	2050	1000	0,727	128	106
4x35	31,0	2600	1000	0,524	157	131
4x50	35,0	3450	1000	0,387	185	159
4x70	39,5	4500	1000	0,268	228	202
4x95	45,0	5850	500	0,193	275	244
4x120	49,0	7150	500	0,153	313	282
4x150	54,0	8700	500	0,124	353	324
4x185	59,5	10650	500	0,0991	399	371
4x240	67,0	13550	250	0,0754	464	436
4x300	76,0	16750	250	0,0601	524	481
4x400	85,5	21850	250	0,0470	600	560

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV PVC Insulated, double steel tape armoured, multi-core cables with copper conductor



Code: YVZ4V-U, YVZ4V-R, NYBY

U: Solid Conductor R: Stranded Conductor	Standards: IEC 60502-1, VDE 0276-603
<b>Technical Data</b> Max. operating temperature : 70°C Max. short circuit temperature : (max. 5 sec.) Cross section 300 mm <sup>2</sup> : 160°C Cross section > 300 mm <sup>2</sup> : 140°C Rated voltage : 0,6/1 kV Min. bending radius : 15 x D D : Cable outer diameter	<b>Application</b> Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

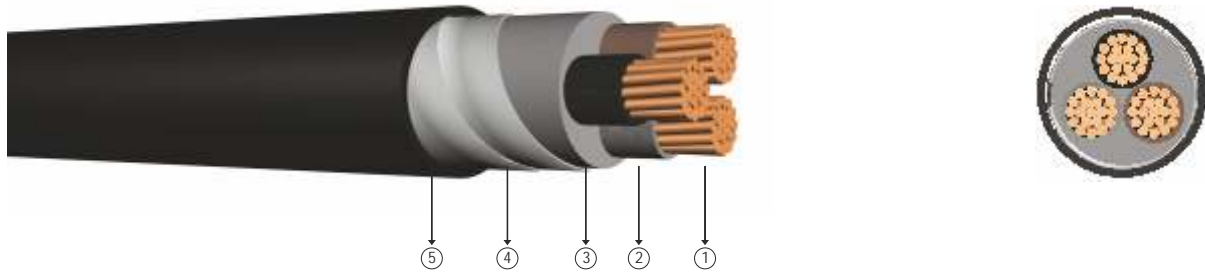
- 1 Solid or stranded copper conductor
- 2 PVC insulation
- 3 Thermoplastic filler
- 4 Galvanized double steel tape
- 5 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
2x1,5	12,5	290	1000	12,1	32	20
2x2,5	13,5	340	1000	7,41	42	27
2x4	15,5	440	1000	4,61	54	37
2x6	16,0	500	1000	3,08	68	48
2x10	18,5	700	1000	1,83	90	66
2x16	20,5	900	1000	1,15	116	89
2x25	24,3	1200	1000	0,727	150	118
2x35	25,5	1500	1000	0,524	181	145
2x50	29,0	1950	1000	0,387	215	176
2x70	32,0	2550	1000	0,268	264	224
2x95	37,0	3400	500	0,193	317	271
2x120	41,5	4400	500	0,153	360	314
2x150	45,0	5300	500	0,124	406	361
2x185	50,0	6450	500	0,0991	458	412

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV PVC Insulated, double steel tape armoured, multi-core cables with copper conductor



Code: YVZ4V-R, YVZ4V-U, NYBY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

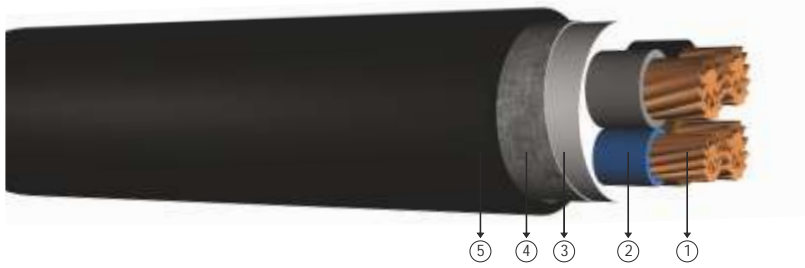
### Construction

- ① Solid or stranded copper conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ Galvanized double steel tape
- ⑤ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x1,5	13,0	320	1000	12,1	26	18.5
3x2,5	14,0	380	1000	7,41	34	25
3x4	16,0	500	1000	4,61	44	34
3x6	17,0	600	1000	3,08	56	43
3x10	19,5	800	1000	1,83	75	60
3x16	21,5	1050	1000	1,15	98	80
3x25	25,0	1500	1000	0,727	128	106
3x35	27,0	1850	1000	0,524	157	131
3x50	31,0	2450	1000	0,387	185	159
3x70	35,0	3300	1000	0,268	228	202
3x95	40,5	4650	1000	0,193	275	244
3x120	44,0	5600	500	0,153	313	282
3x150	48,5	6800	500	0,124	353	324
3x185	53,5	8300	500	0,0991	399	371
3x240	60,5	10600	250	0,0754	464	436
3x300	68,0	13000	250	0,0601	524	481
3x400	77,0	17000	250	0,0470	600	560

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV PVC Insulated, double steel tape armoured, multi-core cables with copper conductor



Code: YVZ4V-R, NYBY

R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

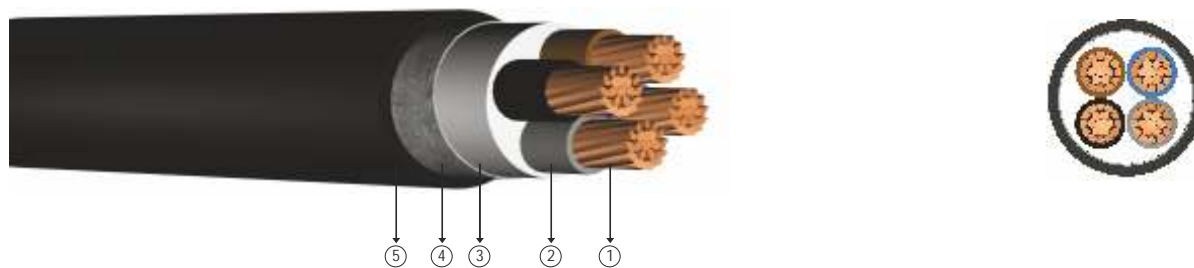
- ① Stranded copper conductors
- ② PVC insulation
- ③ Thermoplastic filler
- ④ Galvanized double steel tape
- ⑤ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x16+10	23,0	1200	1000	1,15	98	80
3x25+16	26,5	1700	1000	0,727	128	106
3x35+16	28,0	2050	1000	0,524	157	131
3x50+25	32,0	2750	1000	0,387	185	159
3x70+35	36,5	3700	1000	0,268	228	202
3x95+50	42,0	5200	500	0,193	275	244
3x120+70	46,5	6400	500	0,153	313	282
3x150+70	50,0	7500	500	0,124	353	324
3x185+95	55,5	9250	500	0,0991	399	371
3x240+120	62,5	11800	250	0,0754	464	436
3x300+150	70,0	14500	250	0,0601	524	481
3x400+185	79,0	18700	250	0,0470	600	560

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV PVC Insulated, double steel tape armoured, multi-core cables with copper conductor



Code: YVZ4V-U, YVZ4V-R, NYBY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

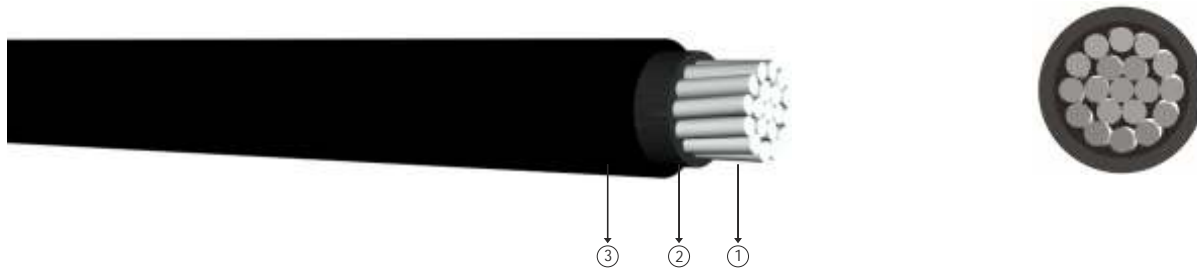
### Construction

- ① Solid or stranded copper conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ Galvanized double steel tape
- ⑤ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
4x1,5	14,0	360	1000	12,1	26	18,5
4x2,5	15,0	440	1000	7,41	34	25
4x4	17,0	580	1000	4,61	44	34
4x6	18,0	700	1000	3,08	56	43
4x10	21,0	980	1000	1,83	75	60
4x16	23,5	1300	1000	1,15	98	80
4x25	27,0	1850	1000	0,727	128	106
4x35	29,5	2350	1000	0,524	157	131
4x50	34,0	3100	1000	0,387	185	159
4x70	39,0	4450	1000	0,268	228	202
4x95	44,5	5800	500	0,193	275	244
4x120	49,0	7100	500	0,153	313	282
4x150	53,5	8600	500	0,124	353	324
4x185	59,0	10500	250	0,0991	399	371
4x240	67,0	13400	250	0,0754	464	436
4x300	75,5	16600	250	0,0601	524	481
4x400	85,5	21650	250	0,0470	600	560

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV PVC insulated single core, aluminium conductor cables



Code: YAVV-U, YAVV-R, AL/PVC/PVC, NAYY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

**Technical Data**  
 Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

**Application**  
 Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

\*\* : RM or RE

### Construction

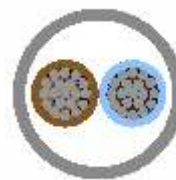
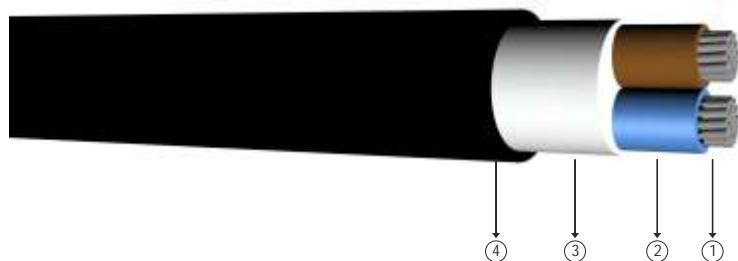
- ① Stranded aluminium conductor
- ② PVC insulation
- ③ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C		In air at 30°C	
					***	**	***	**
1x10**	8,5	100	1000	3,08	-	-	-	-
1x16**	9,5	130	1000	1,91	75	84	80	66
1x25	11,0	160	1000	1,20	125	105	87	75
1x35	11,9	200	1000	0,868	151	127	131	113
1x50	13,6	280	1000	0,641	179	151	160	138
1x70	15,2	350	1000	0,443	218	186	202	174
1x95	17,5	450	1000	0,320	261	223	249	210
1x120	19,0	550	1000	0,253	297	254	291	244
1x150	20,9	700	1000	0,206	332	285	333	281
1x185	23,3	800	1000	0,164	376	323	384	320
1x240	26,3	1050	1000	0,125	437	378	460	378
1x300	29,1	1300	1000	0,100	494	427	530	433
1x400	32,6	1700	1000	0,0778	572	496	642	523
1x500	36,1	2050	1000	0,0605	649	562	744	603
1x630	40,4	2600	500	0,0469	736	642	980	844
1x800	44,5	3200	500	0,0367	-	-	-	-

Note  
 In ground : Current carrying capacities are valid under the following conditions;  
 : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



## 0,6/1 kV PVC insulated multi-core, aluminium conductor cables



Code: YAVV-U, YAVV-R, AL/PVC/PVC, NAYY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

\*\* : RM or RE

### Construction

- ① Stranded aluminium conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
2x10**	22,0	350	1000	3,08	62	66
2x16**	24,0	450	1000	1,91	84	90
2x25	21,0	650	1000	1,20	110	115
2x35	23,1	800	1000	0,868	130	140
2x50	26,2	1000	1000	0,641	155	175
2x70	29,6	1300	1000	0,443	195	220
2x95	34,1	1700	1000	0,320	235	270
2x120	37,3	2100	1000	0,253	266	270
2x150	40,9	2500	1000	0,206	299	308
2x185	46,0	3100	1000	0,164	340	357
2x240	52,0	4000	1000	0,125	401	435
2x300	57,5	4900	1000	0,100	455	501
2x400	64,8	6300	1000	0,0778	526	592

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



# 0,6/1 kV PVC insulated multi-core, aluminium conductor cables



Code: YAVV-R, AL/PVC/PVC, NAYY

R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

### Construction

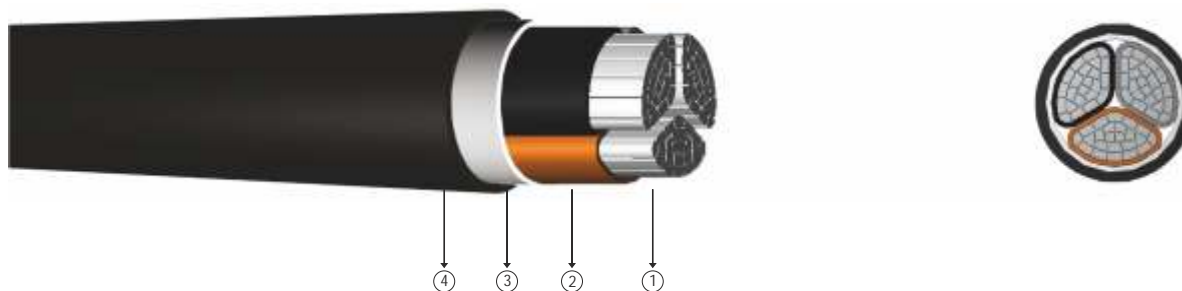
- ① Stranded aluminium conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x16	20,0	500	1000	1,91	70	65
3x25	24,0	800	1000	1,20	99	83
3x35	26,0	950	1000	0,868	118	102
3x50	29,5	1220	1000	0,641	142	124
3x70	33,5	1640	1000	0,443	176	158
3x95	38,0	2140	1000	0,320	211	190
3x120	47,0	2500	1000	0,253	242	221
3x150	46,0	3100	1000	0,206	270	252
3x185	51,0	3800	500	0,164	308	289
3x240	58,0	4900	500	0,125	363	339
3x300	64,0	5900	500	0,100	412	377
3x400	71,0	7600	500	0,0778	475	444

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV PVC insulated multi-core, aluminium, sector shaped conductor cables



Code: YAVV-R, AL/PVC/PVC, NAYY

SM: Sector Shaped Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature	: 70°C
Max. short circuit temperature	: (max. 5 sec.)
Cross section 300 mm <sup>2</sup>	: 160°C
Cross section > 300 mm <sup>2</sup>	: 140°C
Rated voltage	: 0,6/1 kV
Min. bending radius	: 12 x D
D	: Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

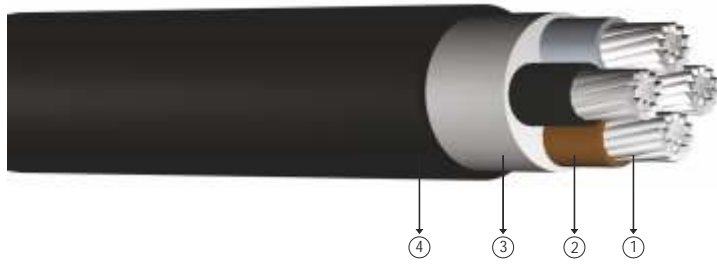
### Construction

- 1 Stranded, sector shaped aluminium conductor
- 2 PVC insulation
- 3 PP Tape or Extruded filler
- 4 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x35	21,3	607	1000	0,868	118	102
3x50	24,2	787	1000	0,641	142	124
3x70	27,7	1043	1000	0,443	176	158
3x95	31,5	1387	1000	0,320	211	190
3x120	34,2	1668	1000	0,253	242	221
3x150	38	2033	1000	0,206	270	252
3x185	42,1	2519	500	0,164	308	289
3x240	47,4	3241	500	0,125	363	339

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV PVC insulated multi-core, aluminium conductor cables



Code: YAVV-R, AL/PVC/PVC, NAYY

R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature	: 70°C
Max. short circuit temperature	: (max. 5 sec.)
Cross section 300 mm <sup>2</sup>	: 160°C
Cross section > 300 mm <sup>2</sup>	: 140°C
Rated voltage	: 0,6/1 kV
Min. bending radius	: 12 x D
D	: Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

### Construction

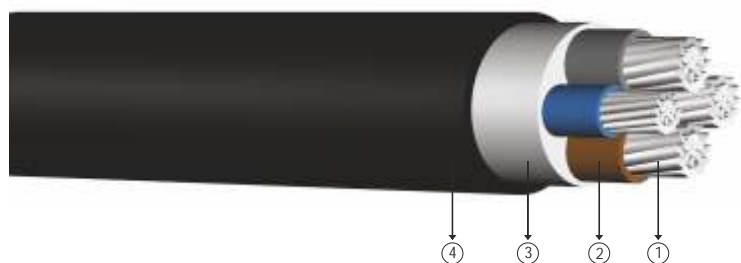
- ① Stranded aluminium conductor      ③ Thermoplastic filler
- ② PVC insulation                              ④ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
4x16	22,0	600	1000	1,91	70	65
4x25	26,0	950	1000	1,20	99	83
4x35	29,0	1150	1000	0,868	118	102
4x50	34,0	1600	1000	0,641	142	124
4x70	38,5	2050	1000	0,443	176	158
4x95	43,5	2650	1000	0,320	211	190
4x120	48,0	3200	1000	0,253	242	221
4x150	53,0	3950	1000	0,206	270	252
4x185	59,0	4900	500	0,164	308	289
4x240	66,0	6150	500	0,125	363	339
4x300	72,5	7500	500	0,100	412	377
4x400	82,5	9750	500	0,0778	475	444

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV PVC insulated multi-core, aluminium conductor cables



Code: YAVV-R, AL/PVC/PVC, NAYY

R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section  $300 \text{ mm}^2$  : 160°C  
 Cross section  $> 300 \text{ mm}^2$  : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

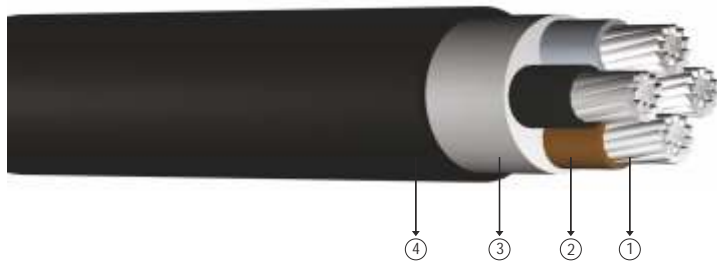
### Construction

- ① Stranded aluminium conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x16+10	21,0	550	1000	1,91	70	65
3x25+16	25,0	900	1000	1,20	99	83
3x35+16	27,0	1000	1000	0,868	118	102
3x50+25	32,0	1400	1000	0,641	142	124
3x70+35	36,0	1800	1000	0,443	176	158
3x95+50	41,0	2400	1000	0,320	211	190
3x120+70	45,5	2900	1000	0,253	242	221
3x150+70	49,5	3450	1000	0,206	270	252
3x185+95	55,0	4250	500	0,164	308	289
3x240+120	61,5	5500	500	0,125	363	339
3x300+150	68,0	6550	500	0,100	412	377
3x400+185	76,5	8500	500	0,0778	475	444

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV PVC insulated multi-core, aluminium, sector shaped conductor cables



Code: YAVV-R, AL/PVC/PVC, NAYY

SM: Sector Shaped Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

### Construction

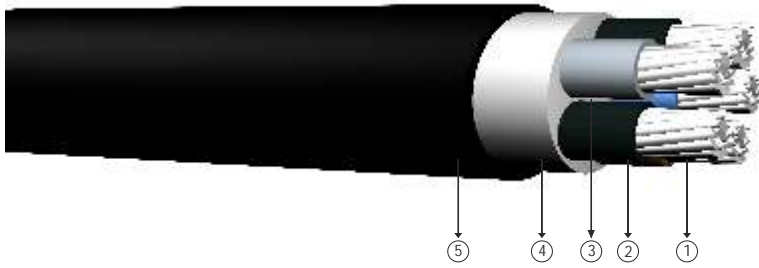
- ① Stranded, sector shaped aluminium conductor
- ② PVC insulation
- ③ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
4x35	25,4	786	1000	0,868	118	102
4x50	28,7	1035	1000	0,641	142	124
4x70	32,7	1370	1000	0,443	176	158
4x95	37,4	1823	1000	0,320	211	190
4x120	40,8	2197	1000	0,253	242	221
4x150	45,0	2692	1000	0,206	270	252
4x185	49,6	3330	500	0,164	308	289
4x240	56,0	4285	500	0,125	363	339

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV PVC insulated multi-core, aluminium conductor cables



Code: YAVV-R, AL/PVC/PVC, NAYY

R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature	: 70°C
Max. short circuit temperature	: (max. 5 sec.)
Cross section $\leq 300 \text{ mm}^2$	: 160°C
Cross section $> 300 \text{ mm}^2$	: 140°C
Rated voltage	: 0,6/1 kV
Min. bending radius	: 12 x D
D	: Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

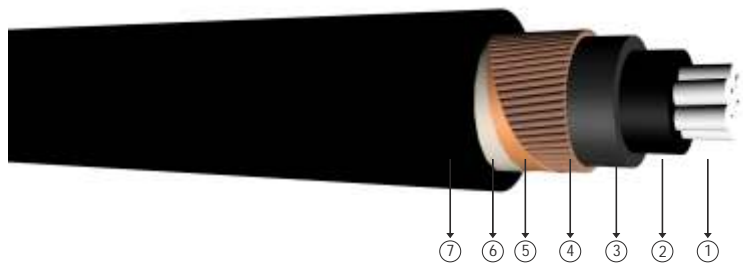
### Construction

- ① Stranded aluminium conductor
- ② PVC insulation
- ③ Central Filler
- ④ Thermoplastic filler
- ⑤ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
5x10	21,0	550	1000	3,08	-	-
5x16	24,0	700	1000	1,91	70	65
5x25	29,0	1100	1000	1,20	99	83
5x35	31,0	1350	1000	0,868	118	102
5x50	36,0	1800	1000	0,641	142	124
5x70	41,0	2400	1000	0,443	176	158
5x95	48,0	3250	1000	0,320	211	190
5x120	52,0	3850	1000	0,253	242	221
5x150	57,0	4750	1000	0,206	270	252
5x185	63,0	5850	500	0,164	308	289
5x240	71,0	7400	500	0,125	363	339
5x300	78,0	9100	500	0,100	412	377
5x400	89,0	11550	500	0,0778	475	444

Note  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV PVC Insulated, concentric wire screen, single core cables with aluminium conductor



Code: YAVCV-R, AL/PVC/SC/PVC, NAYCY

R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

In door installations, in cable ducts, outdoor and underground for power stations, industrial plants and switching stations as well as local supply systems if increased protection is necessary. In case of mechanical damage the screen prevents any damage due to power leak to the surrounding area.

### Construction

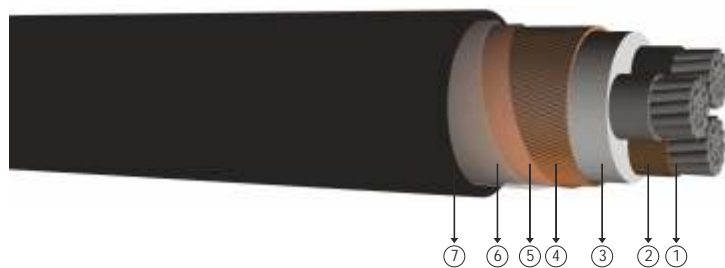
- ① Stranded aluminium conductor    ③ PVC inner sheath    ⑤ Copper tape as binder    ⑦ PVC outer sheath
- ② PVC insulation    ④ Concentric copper wire    ⑥ PP tape

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C		In air at 30°C	
					***	**	***	**
1x25/16	16,0	400	1000	1,20	125	105	87	75
1x35/16	17,0	450	1000	0,868	151	127	131	113
1x50/25	19,5	630	1000	0,641	179	151	160	138
1x70/35	20,5	800	1000	0,443	218	186	202	174
1x95/50	24,0	1050	1000	0,320	261	223	249	210
1x120/70	26,0	1350	1000	0,253	297	254	291	244
1x150/70	27,5	1500	1000	0,206	332	285	333	281
1x185/95	30,0	1850	1000	0,164	376	323	384	320
1x240/120	33,5	2350	1000	0,125	437	378	460	378

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



## 0,6/1 kV PVC Insulated, concentric wire screen, multi-core cables with aluminium conductor



Code: YAVCV-R, AL/PVC/SC/PVC, NAYCY

R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

In door installations, in cable ducts, outdoor and underground for power stations, industrial plants and switching stations as well as local supply systems if increased protection is necessary. In case of mechanical damage the screen prevents any damage due to power leak to the surrounding area.

### Construction

- ① Stranded aluminium conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ Concentric copper wire
- ⑤ Copper tape as binder
- ⑥ PP tape
- ⑦ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x25/16	25,0	950	1000	1,20	99	83
3x35/16	27,5	1100	1000	0,868	118	102
3x50/25	32,0	1500	1000	0,641	142	124
3x70/35	36,0	2000	1000	0,443	176	158
3x95/50	41,5	2650	1000	0,320	211	190
3x120/70	45,0	3250	1000	0,253	242	221
3x150/70	50,0	3850	1000	0,206	270	252
3x185/95	55,0	4900	1000	0,164	308	289
3x240/120	61,5	6100	500	0,125	363	339
3x300/150	68,0	7450	500	0,100	412	377
3x400/185	77,5	9600	500	0,0778	475	444

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



# 0,6/1 kV PVC Insulated, round aluminium wire armoured, single-core cables with aluminium conductor



Code: YAVY2V-R, AL/PVC/AWA/PVC, NAYR(A)Y

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

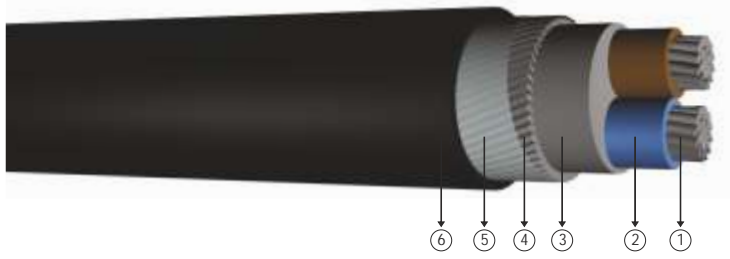
- ① Stranded aluminium conductor
- ② PVC insulation
- ③ PVC inner sheath
- ④ Round aluminium wire
- ⑤ PP tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C		In air at 30°C	
					***	**	***	**
1x25	17,0	400	1000	1,20	125	105	87	75
1x35	18,0	450	1000	0,868	151	127	131	113
1x50	20,0	500	1000	0,641	179	151	160	138
1x70	21,5	650	1000	0,443	218	186	202	174
1x95	24,5	850	1000	0,320	261	223	249	210
1x120	26,0	950	1000	0,253	297	254	291	244
1x150	28,0	1100	1000	0,206	332	285	333	281
1x185	30,0	1300	1000	0,164	376	323	384	320
1x240	33,0	1550	1000	0,125	437	378	460	378
1x300	36,5	1950	1000	0,100	494	427	530	433
1x400	40,5	2350	1000	0,0778	572	496	642	523
1x500	44,0	2850	1000	0,0605	649	562	744	603

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



## 0,6/1 kV PVC insulated, round steel wire armoured, multi-core cables with aluminium conductor



Code: YAVZ2V-R, AL/PVC/SWA/PVC, NAYRY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

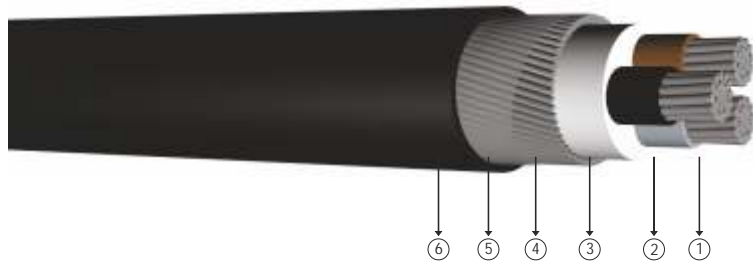
### Construction

- ① Stranded aluminium conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ Galvanized round steel wire
- ⑤ PP tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES	
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20 °C
2x25	25,5	1350	1000	1,20	91
2x35	28,0	1550	1000	0,868	113
2x50	32,0	1950	1000	0,641	138
2x70	36,0	2600	1000	0,443	174
2x95	41,0	3250	1000	0,320	210
2x120	44,5	3700	1000	0,253	244
2x150	49,5	4800	1000	0,206	281
2x185	54,5	5650	500	0,164	320
2x240	60,5	6800	500	0,125	378

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV PVC insulated, round steel wire armoured, multi-core cables with aluminium conductor



Code: YAVZ2V-R, AL/PVC/SWA/PVC, NAYRY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

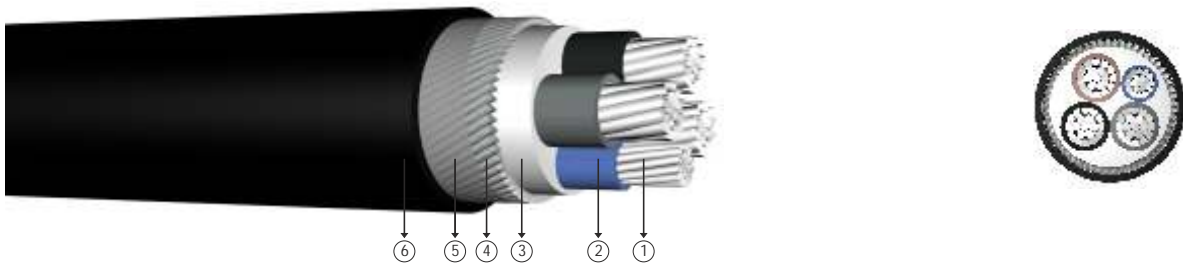
- ① Stranded aluminium conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ Galvanized round steel wire
- ⑤ PP tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x25	27,0	1450	1000	1,20	99	83
3x35	29,5	1700	1000	0,868	118	102
3x50	34,0	2200	1000	0,641	142	124
3x70	39,0	2950	1000	0,443	176	158
3x95	44,0	3650	1000	0,320	211	190
3x120	47,5	4200	1000	0,253	242	221
3x150	53,0	5500	500	0,206	270	252
3x185	58,0	6350	500	0,164	308	289
3x240	64,5	7750	500	0,125	363	339
3x300	71,0	9150	500	0,100	412	377
3x400	81,5	12300	250	0,0778	475	444

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV PVC insulated, round steel wire armoured, multi-core cables with aluminium conductor



Code: YAVZ2V-R, AL/PVC/SWA/PVC, NAYRY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature	: 70°C
Max. short circuit temperature	: (max. 5 sec.)
Cross section $\leq 300 \text{ mm}^2$	: 160°C
Cross section $> 300 \text{ mm}^2$	: 140°C
Rated voltage	: 0,6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

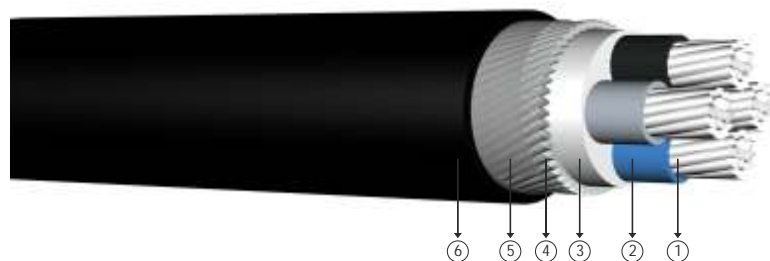
### Construction

- ① Stranded aluminium conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ Galvanized round steel wire
- ⑤ PP tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x25+16	28,5	1600	1000	1,20	99	83
3x35+16	31,0	1800	1000	0,868	118	102
3x50+25	36,5	2600	1000	0,641	142	124
3x70+35	40,5	3150	1000	0,443	176	158
3x95+50	46,0	3950	1000	0,320	211	190
3x120+70	51,5	5100	1000	0,253	242	221
3x150+70	55,0	5800	500	0,206	270	252
3x185+95	60,5	6850	500	0,164	308	289
3x240+120	67,0	8250	500	0,125	363	339
3x300+150	73,5	9750	500	0,100	412	377
3x400+185	84,0	13050	250	0,0778	475	444

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV PVC insulated, round steel wire armoured, multi-core cables with aluminium conductor



Code: YAVZ2V-R, AL/PVC/SWA/PVC, NAYRY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

- ① Stranded aluminium conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ Galvanized round steel wire
- ⑤ PP tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
4x25	29,5	1650	1000	1,20	99	83
4x35	32,0	2000	1000	0,868	118	102
4x50	38,5	2900	1000	0,641	142	124
4x70	42,5	3450	1000	0,443	176	158
4x95	49,0	4700	1000	0,320	211	190
4x120	53,0	5500	1000	0,253	242	221
4x150	58,5	6500	500	0,206	270	252
4x185	64,0	7650	500	0,164	308	289
4x240	71,0	9250	500	0,125	363	339
4x300	78,0	10950	250	0,100	412	377
4x400	89,5	14700	250	0,0778	475	444

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV PVC Insulated, flat steel wire armoured, multi-core cables with aluminium conductor



Code: YAVZ3V-R, NAYFGY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature	: 70°C
Max. short circuit temperature	: (max. 5 sec.)
Cross section $300 \text{ mm}^2$	: 160°C
Cross section $> 300 \text{ mm}^2$	: 140°C
Rated voltage	: 0,6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

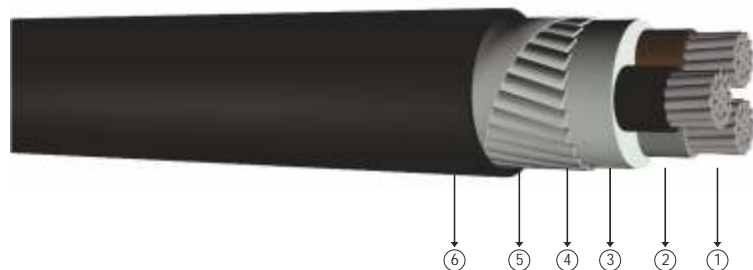
### Construction

- ① Stranded aluminium conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ Galvanized flat steel wire
- ⑤ Galvanized steel binding tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES	
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)
mm <sup>2</sup>	mm	kg/km	m	/km	In air at 30°C
2x25	24,5	1100	1000	1,20	91
2x35	27,0	1300	1000	0,868	113
2x50	31,0	1700	1000	0,641	138
2x70	34,5	2050	1000	0,443	174
2x95	39,0	2600	1000	0,320	210
2x120	42,5	3050	1000	0,253	244
2x150	46,5	3600	1000	0,206	281
2x185	51,5	4350	1000	0,164	320
2x240	57,5	5350	500	0,125	378

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV PVC Insulated, flat steel wire armoured, multi-core cables with aluminium conductor



Code: YAVZ3V-R, NAYFGY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

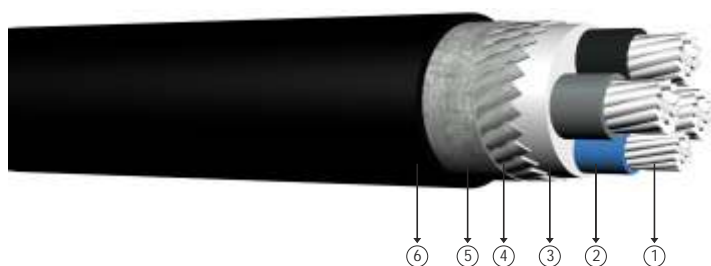
- ① Stranded aluminium conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ Galvanized flat steel wire
- ⑤ Galvanized steel binding tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x25	26,0	1250	1000	1,20	99	83
3x35	28,5	1500	1000	0,868	118	102
3x50	33,0	1900	1000	0,641	142	124
3x70	37,0	2350	1000	0,443	176	158
3x95	42,0	2950	1000	0,320	211	190
3x120	45,5	3500	1000	0,253	242	221
3x150	50,0	4200	1000	0,206	270	252
3x185	55,0	5000	500	0,164	308	289
3x240	61,5	6200	500	0,125	363	339
3x300	68,0	7450	500	0,100	412	377
3x400	76,5	9500	500	0,0778	475	444

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV PVC Insulated, flat steel wire armoured, multi-core cables with aluminium conductor



Code: YAVZ3V-R, NAYFGY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

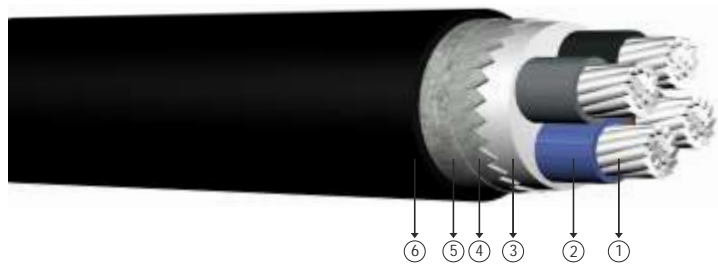
- ① Stranded aluminium conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ Galvanized flat steel wire
- ⑤ Galvanized steel binding tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x25+16	27,5	1500	1000	1,20	99	83
3x35+16	29,5	1550	1000	0,868	118	102
3x50+25	34,0	2050	1000	0,641	142	124
3x70+35	38,5	2550	1000	0,443	176	158
3x95+50	43,5	3250	1000	0,320	211	190
3x120+70	48,0	3900	1000	0,253	242	221
3x150+70	52,0	4500	1000	0,206	270	252
3x185+95	57,0	5400	500	0,164	308	289
3x240+120	63,5	6650	500	0,125	363	339
3x300+150	70,0	8000	500	0,100	412	377
3x400+185	79,0	10100	250	0,0778	475	444

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



# 0,6/1 kV PVC Insulated, flat steel wire armoured, multi-core cables with aluminium conductor



Code: YAVZ3V-R, NAYFGY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

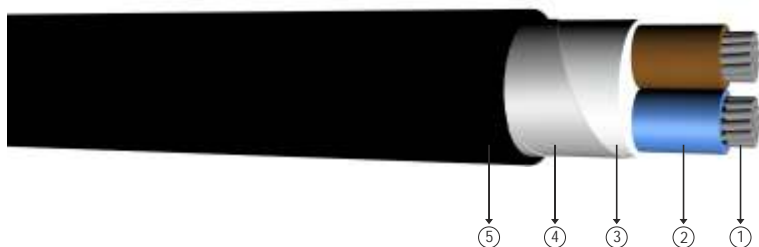
- ① Stranded aluminium conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ Galvanized flat steel wire
- ⑤ Galvanized steel binding tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
4x25	28,5	1500	1000	1,20	99	83
4x35	31,0	1750	1000	0,868	118	102
4x50	36,5	2300	1000	0,641	142	124
4x70	40,5	2850	1000	0,443	176	158
4x95	46,0	3550	1000	0,320	211	190
4x120	50,0	4250	1000	0,253	242	221
4x150	55,5	5100	500	0,206	270	252
4x185	61,0	6100	500	0,164	308	289
4x240	68,0	7550	500	0,125	363	339
4x300	75,0	9100	500	0,100	412	377
4x400	85,0	11500	250	0,0778	475	444

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV PVC insulated, double steel tape armoured, multi-core cables with aluminium conductor



Code: YAVZ4V-R, AL/PVC/DSTA/PVC, NAYBY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

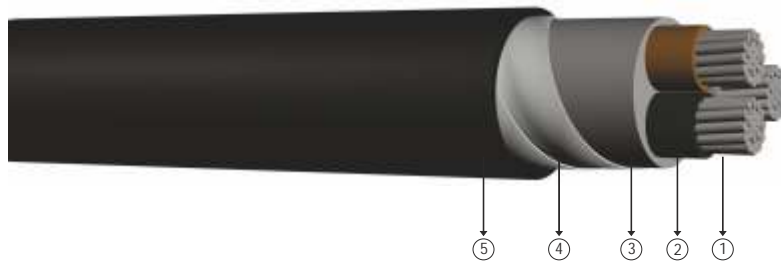
### Construction

- ① Stranded aluminium conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ Galvanized double steel tape
- ⑤ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES	
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)
mm <sup>2</sup>	mm	kg/km	m	/km	In air at 30°C
2x25	24,0	900	1000	1,20	91
2x35	26,0	1100	1000	0,868	113
2x50	30,0	1400	1000	0,641	138
2x70	33,5	1750	1000	0,443	174
2x95	38,0	2250	1000	0,320	210
2x120	42,5	2950	1000	0,253	244
2x150	46,5	3550	1000	0,206	281
2x185	51,0	4250	1000	0,164	320
2x240	57,0	5200	500	0,125	378

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV PVC insulated, double steel tape armoured, multi-core cables with aluminium conductor



Code: YAVZ4V-R, AL/PVC/DSTA/PVC, NAYBY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

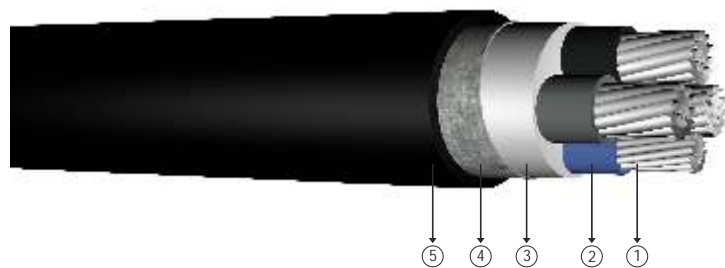
- ① Stranded aluminium conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ Galvanized double steel tape
- ⑤ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x25	25,0	1050	1000	1,20	99	83
3x35	27,5	1250	1000	0,868	118	102
3x50	32,0	1600	1000	0,641	142	124
3x70	36,0	2050	1000	0,443	176	158
3x95	42,0	2900	1000	0,320	211	190
3x120	45,0	3400	1000	0,253	242	221
3x150	50,0	4150	1000	0,206	270	252
3x185	55,0	4900	500	0,164	308	289
3x240	61,5	6100	500	0,125	363	339
3x300	67,5	7300	500	0,100	412	377
3x400	76,5	9300	500	0,0778	475	444

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV PVC insulated, double steel tape armoured, multi-core cables with aluminium conductor



Code: YAVZ4V-R, AL/PVC/DSTA/PVC, NAYBY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

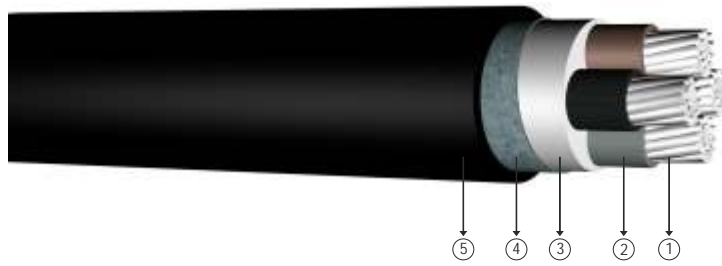
### Construction

- ① Stranded aluminium conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ Galvanized double steel tape
- ⑤ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x25+16	26,5	1150	1000	1,20	99	83
3x35+16	28,5	1300	1000	0,868	118	102
3x50+25	33,0	1750	1000	0,641	142	124
3x70+35	37,5	2200	1000	0,443	176	158
3x95+50	43,5	3150	1000	0,320	211	190
3x120+70	47,5	3800	1000	0,253	242	221
3x150+70	51,5	4400	500	0,206	270	252
3x185+95	57,0	5300	500	0,164	308	289
3x240+120	63,5	6550	500	0,125	363	339
3x300+150	70,0	7900	500	0,100	412	377
3x400+185	79,0	9900	500	0,0778	475	444

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV PVC insulated, double steel tape armoured, multi-core cables with aluminium conductor



Code: YAVZ4V-R, AL/PVC/DSTA/PVC, NAYBY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : (max. 5 sec.)  
 Cross section 300 mm<sup>2</sup> : 160°C  
 Cross section > 300 mm<sup>2</sup> : 140°C  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

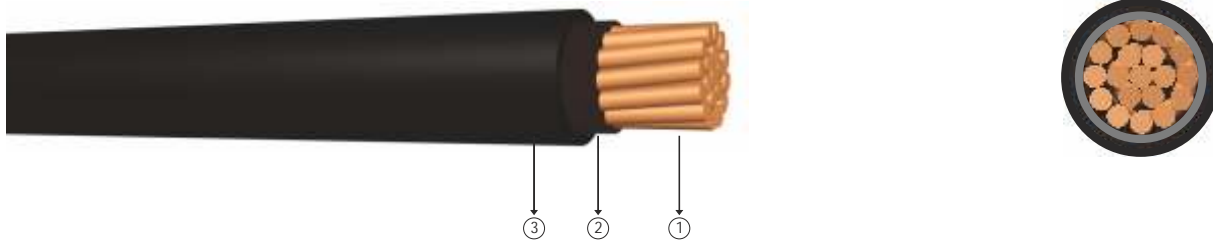
- ① Stranded aluminium conductor
- ② PVC insulation
- ③ Thermoplastic filler
- ④ Galvanized double steel tape
- ⑤ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
4x25	27,5	1200	1000	1,20	99	83
4x35	30,0	1450	1000	0,868	118	102
4x50	35,5	2000	1000	0,641	142	124
4x70	40,5	2750	1000	0,443	176	158
4x95	46,0	3500	1000	0,320	211	190
4x120	50,0	4150	1000	0,253	242	221
4x150	55,5	5000	500	0,206	270	252
4x185	61,0	6000	500	0,164	308	289
4x240	68,0	7450	500	0,125	363	339
4x300	75,0	8950	500	0,100	412	377
4x400	85,0	11400	250	0,0778	475	444

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV XLPE Insulated, single-core cables with copper conductor



Code: YXV-U, YXV-R, CU/XLPE/PVC, N2XY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

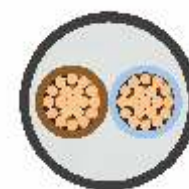
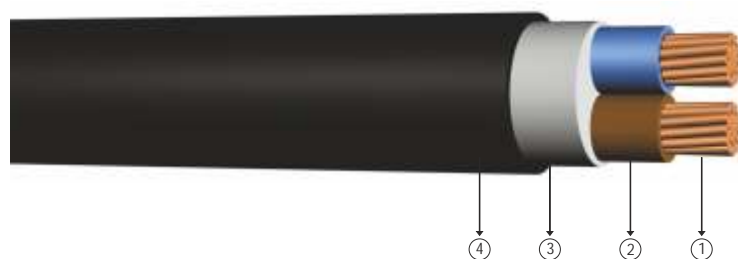
### Construction

- ① Solid or stranded copper conductor
- ② XLPE insulation
- ③ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C		In air at 30°C	
					***	** *	***	** *
1x1,5	5,5	45	1000	12,1	39	32	32	25
1x2,5	6,0	55	1000	7,41	51	43	42	34
1x4	6,5	75	1000	4,61	66	55	56	44
1x6	7,0	90	1000	3,08	82	68	71	57
1x10	8,0	140	1000	1,83	109	90	96	77
1x16	9,0	200	1000	1,15	139	115	128	102
1x25	10,5	300	1000	0,727	179	149	173	139
1x35	11,5	400	1000	0,524	213	178	212	170
1x50	13,0	530	1000	0,387	251	211	258	208
1x70	15,0	750	1000	0,268	307	259	328	265
1x95	17,0	1000	1000	0,193	366	310	404	326
1x120	18,5	1250	1000	0,153	416	352	471	381
1x150	20,5	1550	1000	0,124	465	396	541	438
1x185	22,5	1900	1000	0,0991	526	449	626	507
1x240	25,5	2450	1000	0,0754	610	521	749	606
1x300	29,0	3000	1000	0,0601	689	587	864	697
1x400	32,0	4000	1000	0,0470	788	669	1018	816
1x500	35,5	5000	1000	0,0366	889	748	1173	933
1x630	39,0	6100	1000	0,0283	980	843	1315	1083

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* \* : Trefoil formation  
 Number of system : 1

# 0,6/1 kV XLPE insulated, multi-core cables with copper conductor



Code: YXV-U, YXV-R, CU/XLPE/PVC, N2XY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

### Construction

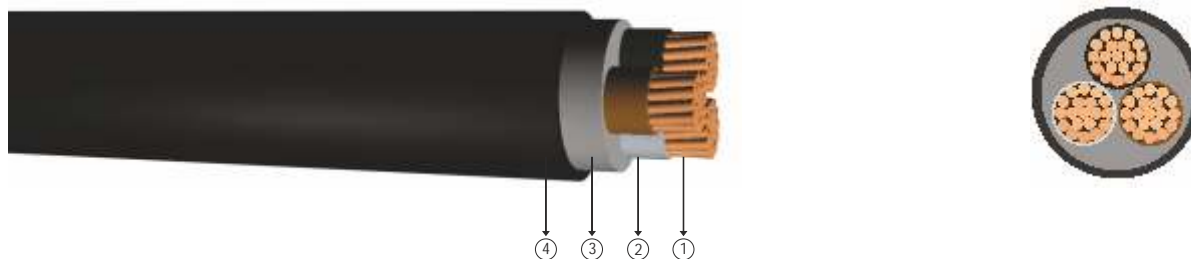
- ① Solid or stranded copper conductor
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
2x1,5	10,5	155	1000	12,1	39	32
2x2,5	11,3	200	1000	7,41	51	42
2x4	12,3	260	1000	4,61	66	56
2x6	13,5	320	1000	3,08	82	71
2x10	15,2	460	1000	1,83	109	96
2x16	17,3	630	1000	1,15	115	125
2x25	21,5	920	1000	0,727	145	155
2x35	23,3	1150	1000	0,524	175	195
2x50	25,8	1490	1000	0,387	210	235
2x70	29,7	2050	1000	0,268	255	300
2x95	33,9	2760	1000	0,193	310	370
2x120	37,4	3400	1000	0,153	355	430
2x150	41,1	4150	1000	0,124	400	490
2x185	45,9	5200	1000	0,0991	455	570
2x240	51,5	6700	500	0,0754	530	680
2x300	56,6	8200	500	0,0601	605	785
2x400	64,0	10600	500	0,0470	690	860

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV XLPE insulated, multi-core cables with copper conductor



Code: YXV-U, YXV-R, CU/XLPE/PVC, N2XY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

### Construction

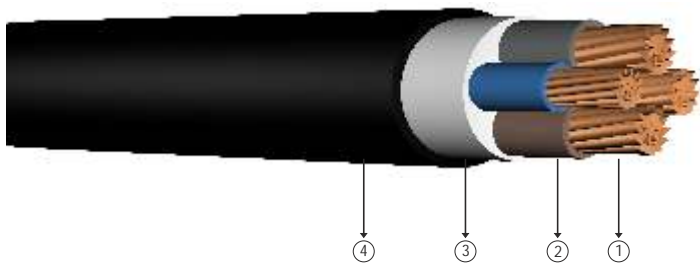
- 1 Solid or stranded copper conductor
- 2 XLPE insulation
- 3 Thermoplastic filler
- 4 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x1,5	11,0	180	1000	12,1	30	24
3x2,5	12,0	230	1000	7,41	40	32
3x4	13,0	300	1000	4,61	52	42
3x6	14,5	370	1000	3,08	64	53
3x10	16,0	550	1000	1,83	86	73
3x16	19,0	700	1000	1,15	111	96
3x25	22,5	1150	1000	0,727	143	130
3x35	24,5	1500	1000	0,524	173	160
3x50	27,5	1950	1000	0,387	205	195
3x70	32,0	2750	1000	0,268	252	247
3x95	36,0	3600	1000	0,193	303	305
3x120	40,0	4500	1000	0,153	346	355
3x150	44,5	5600	500	0,124	390	407
3x185	49,0	6950	500	0,0991	441	469
3x240	56,0	9000	500	0,0754	511	551
3x300	63,0	11200	250	0,0601	580	638
3x400	72,0	14750	250	0,0470	663	746

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



# 0,6/1 kV XLPE insulated, multi-core cables with copper conductor



Code: YXV-R, CU/XLPE/PVC, N2XY

R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

### Construction

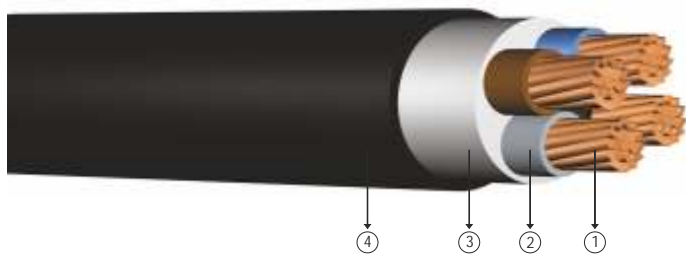
- ① Stranded copper conductors
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x16+10	20,0	850	1000	1,15	111	96
3x25+16	23,5	1300	1000	0,727	143	130
3x35+16	25,5	1650	1000	0,524	173	160
3x50+25	29,0	2200	1000	0,387	205	195
3x70+35	33,5	3100	1000	0,268	252	247
3x95+50	37,5	4100	1000	0,193	303	305
3x120+70	42,0	5200	500	0,153	346	355
3x150+70	45,5	6250	500	0,124	390	407
3x185+95	51,0	7800	500	0,0991	441	469
3x240+120	58,0	10100	500	0,0754	511	551
3x300+150	65,0	12500	250	0,0601	580	638
3x400+185	73,5	16300	250	0,0470	663	746

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV XLPE insulated, multi-core cables with copper conductor



Code: YXV-U, YXV-R, CU/XLPE/PVC, N2XY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

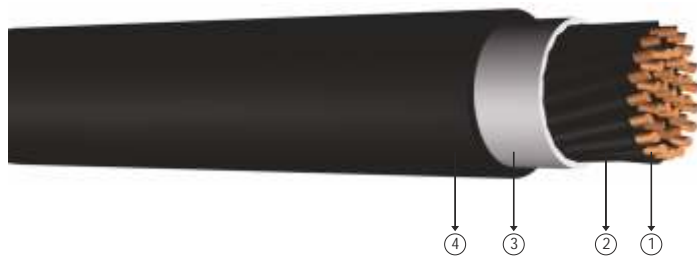
### Construction

- ① Solid or stranded copper conductor
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
4x1.5	12,0	200	1000	12,1	30	24
4x2.5	13,0	250	1000	7,41	40	32
4x4	14,0	350	1000	4,61	52	42
4x6	15,5	450	1000	3,08	64	53
4x10	17,5	630	1000	1,83	86	73
4x16	20,5	905	1000	1,15	111	96
4x25	24,5	1400	1000	0,727	143	130
4x35	27,0	1850	1000	0,524	173	160
4x50	30,5	2500	1000	0,387	205	195
4x70	35,5	3500	1000	0,268	252	247
4x95	39,5	4650	1000	0,193	303	305
4x120	44,5	5900	500	0,153	346	355
4x150	49,0	7200	500	0,124	390	407
4x185	54,5	8950	500	0,0991	441	469
4x240	62,0	11600	250	0,0754	511	551
4x300	70,0	14400	250	0,0601	580	638
4x400	80,0	19000	250	0,0470	663	746

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV XLPE Insulated, control cables with copper conductor



Code: YXV-U, YXV-R, CU/XLPE/PVC, N2XY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-627

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used as control cables, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

### Construction

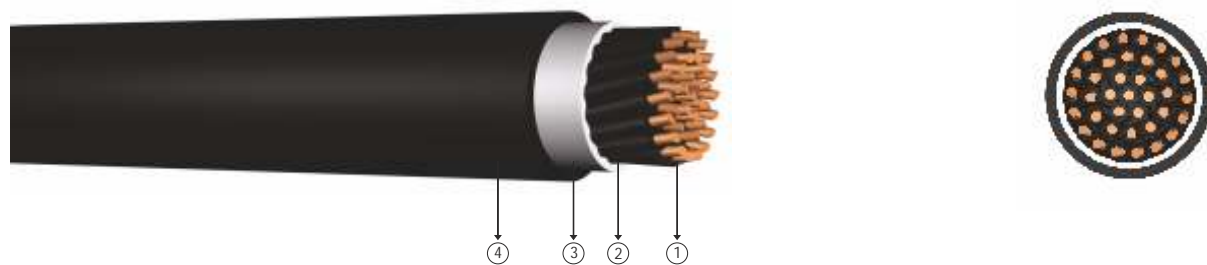
- ① Solid copper conductor
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
5x1,5	12,0	240	1000	12,1	21,0	18,0
6x1,5	13,0	250	1000	12,1	19,5	16,8
7x1,5	13,0	270	1000	12,1	18,0	15,6
8x1,5	15,0	340	1000	12,1	16,5	14,4
10x1,5	15,7	420	1000	12,1	15,0	13,2
12x1,5	15,7	450	1000	12,1	14,3	12,6
14x1,5	17,0	500	1000	12,1	13,5	12,0
16x1,5	17,5	550	1000	12,1	12,8	11,4
19x1,5	18,5	620	1000	12,1	12,0	10,8
21x1,5	20,5	680	1000	12,1	11,3	10,2
24x1,5	22,0	800	1000	12,1	10,5	9,6
27x1,5	22,5	850	1000	12,1	10,2	9,4
30x1,5	22,5	900	1000	12,1	9,9	9,1
37x1,5	25,0	1050	1000	12,1	9,3	8,6
40x1,5	26,0	1150	1000	12,1	9,0	8,4
48x1,5	28,0	1400	1000	12,1	8,4	7,9
52x1,5	29,0	1450	1000	12,1	7,8	7,4
61x1,5	31,0	1700	1000	12,1	7,5	7,2

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV XLPE Insulated, control cables with copper conductor



Code: YXV-U, YXV-R, CU/XLPE/PVC, N2XY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-627

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used as control cables, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

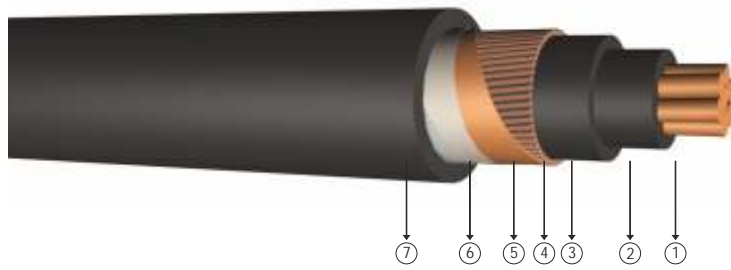
### Construction

- ① Solid or stranded copper conductor
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
5x2,5	13,0	280	1000	7,41	28	24,0
6x2,5	14,0	330	1000	7,41	26	22,0
7x2,5	14,0	350	1000	7,41	24	21,0
8x2,5	15,0	450	1000	7,41	22	19,0
10x2,5	17,0	510	1000	7,41	20	17,5
12x2,5	17,5	570	1000	7,41	19	16,5
14x2,5	18,0	640	1000	7,41	18	16,0
16x2,5	19,0	720	1000	7,41	16,5	15,0
19x2,5	20,0	800	1000	7,41	16	14,5
21x2,5	20,5	870	1000	7,41	15	13,5
24x2,5	23,0	1040	1000	7,41	14	13,0
27x2,5	24,0	1100	1000	7,41	13,5	12,5
30x2,5	25,0	1200	1000	7,41	13,0	12,0
37x2,5	27,0	1450	1000	7,41	12,5	11,5
40x2,5	28,0	1550	1000	7,41	12,0	11,0
48x2,5	30,0	1900	1000	7,41	11,0	10,5
52x2,5	32,0	2050	1000	7,41	10,5	10,0
61x2,5	34,0	2300	1000	7,41	10,0	9,5

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV XLPE insulated, concentric wire screen, single core cables with copper conductor



Code: YXCV-U, YXCV-R, CU/XLPE/SC/PVC, N2XCY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

Application These cables have a low dielectric loss, Indoor installations, in cable ducts, outdoor and underground for power stations, industrial plants and switching stations as well as local supply systems if increased protection is necessary. In case of mechanical damage the screen prevents any damage due to power leak to the surrounding area.

### Construction

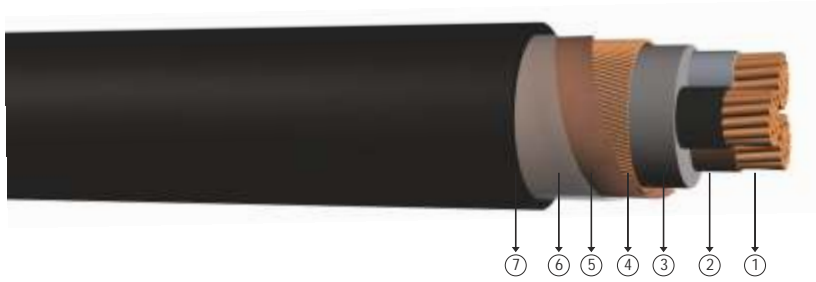
- ① Solid or stranded copper conductor
- ② XLPE insulation
- ③ Inner sheath
- ④ Concentric copper wire
- ⑤ Copper tape as binder
- ⑥ PP tape
- ⑦ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C		In air at 30°C	
					***	**	***	**
1x1,5/1,5	10,5	140	1000	12,1	39	32	32	25
1x2,5/2,5	11,0	160	1000	7,41	51	43	42	34
1x4/4	11,3	200	1000	4,61	66	55	56	44
1x6/6	11,5	220	1000	3,08	82	68	71	57
1x10/10	12,5	390	1000	1,83	109	90	96	77
1x16/16	14,0	430	1000	1,15	139	115	128	102
1x25/16	15,5	550	1000	0,727	179	149	173	139
1x35/16	16,5	650	1000	0,524	213	178	212	170
1x50/25	18,0	850	1000	0,387	251	211	258	208
1x70/35	20,0	1200	1000	0,268	307	259	328	265
1x95/50	22,5	1600	1000	0,193	366	310	404	326
1x120/70	25,0	2000	1000	0,153	416	352	471	381
1x150/70	26,5	2300	1000	0,124	465	396	541	438
1x185/95	29,0	2900	1000	0,0991	526	449	626	507
1x240/120	32,0	3700	1000	0,0754	610	521	749	606

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\*\* : Trefoil formation  
 Number of system : 1



## 0,6/1 kV XLPE insulated, concentric wire screen, multi-core cables with copper conductor



Code: YXCV-R, CU/XLPE/SC/PVC, N2XCY

R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-603

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

Application These cables have a low dielectric loss, Indoor installations, in cable ducts, outdoor and underground for power stations, industrial plants and switching stations as well as local supply systems if increased protection is necessary. In case of mechanical damage the screen prevents any damage due to power leak to the surrounding area.

### Construction

- ① Stranded copper conductors
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ Concentric copper wire
- ⑤ Copper tape as binder
- ⑥ PP tape
- ⑦ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x25/16	24,5	1300	1000	0,727	143	130
3x35/16	26,5	1600	1000	0,524	173	160
3x50/25	29,0	2100	1000	0,387	205	195
3x70/35	34,0	3000	1000	0,268	252	247
3x95/50	39,0	4100	1000	0,193	303	305
3x120/70	43,0	5100	500	0,153	346	355
3x150/70	47,5	6200	500	0,124	390	407
3x185/95	53,0	7700	500	0,0991	441	469
3x240/120	59,5	10000	250	0,0754	511	551
3x300/150	65,0	12300	250	0,0601	580	638
3x400/185	73,0	15800	250	0,0470	663	746

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV XLPE Insulated, concentric wire screen, control cables with copper conductor



Code: YXCV-U, YXCV-R, CU/XLPE/SC/PVC, N2XCY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1, VDE 0276-627

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

Application These cables have a low dielectric loss, used as control cables, indoor installations, in cable ducts, outdoor and underground for power stations, industrial plants and switching stations as well as local supply systems if increased protection is necessary. In case of mechanical damage the screen prevents any damage due to power leak to the surrounding area.

### Construction

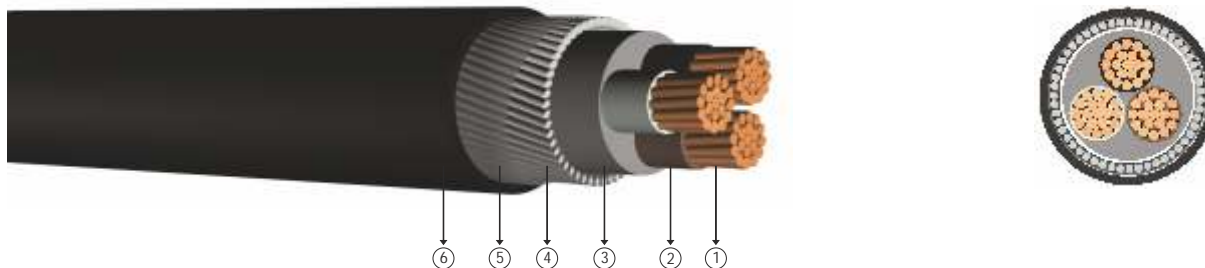
- ① Solid or Stranded copper conductor
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ Concentric copper wire
- ⑤ Copper tape as binder
- ⑥ PP tape
- ⑦ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
7x1,5/2,5	16,2	360	1000	12,1	18,0	15,6
8x1,5/2,5	18,0	430	1000	12,1	16,5	14,4
10x1,5/2,5	19,0	500	1000	12,1	15,0	13,2
12x1,5/2,5	18,5	510	1000	12,1	14,3	12,6
14x1,5/2,5	20,3	550	1000	12,1	13,5	12,0
19x1,5/4	21,0	740	1000	12,1	12,0	10,8
24x1,5/6	25,0	950	1000	12,1	10,5	9,6
30x1,5/6	26,2	1000	1000	12,1	9,9	9,1
37x1,5/10	26,5	1200	1000	12,1	9,3	8,6
7x2,5/2,5	16,5	460	1000	7,41	24,0	20,8
8x2,5/2,5	19,7	500	1000	7,41	22,0	19,2
10x2,5/4	20,8	600	1000	7,41	20,0	17,6
12x2,5/4	21,3	730	1000	7,41	19,0	16,8
14x2,5/6	21,0	820	1000	7,41	18,0	16,0
19x2,5/6	24,2	900	1000	7,41	16,0	14,4
24x2,5/10	27,5	1200	1000	7,41	14,0	12,8
30x2,5/10	28,8	1400	1000	7,41	13,2	12,2
37x2,5/10	30,8	1600	1000	7,41	12,4	11,5
7x4/4	18,0	550	1000	4,61	31,2	27,3
8x4/6	21,5	760	1000	4,61	28,6	25,2
10x4/6	23,0	800	1000	4,61	26,0	23,1
12x4/6	23,5	900	1000	4,61	24,7	22,1
14x4/6	24,5	1000	1000	4,61	23,4	21,0
19x4/10	27,0	1300	1000	4,61	20,8	18,9

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV XLPE Insulated, round steel wire armoured, multi-core cables with copper conductor



Code: YXZ2V-U, YXZ2V-R, CU/XLPE/SWA/PVC, N2XR1

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

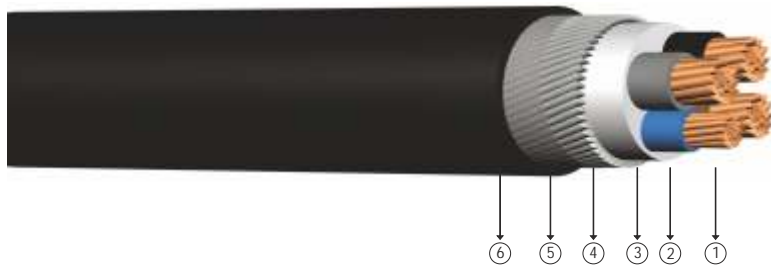
- ① Solid or stranded copper conductor
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ Galvanized round steel wire
- ⑤ PP tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x1,5	14,5	395	1000	12,1	30	24
3x2,5	15,5	460	1000	7,41	40	32
3x4	16,5	540	1000	4,61	52	42
3x6	17,8	640	1000	3,08	64	53
3x10	20,0	950	1000	1,83	86	73
3x16	22,0	1200	1000	1,15	111	96
3x25	26,0	1800	1000	0,727	143	130
3x35	28,0	2200	1000	0,524	173	160
3x50	31,0	2800	1000	0,387	205	195
3x70	36,5	4000	1000	0,268	252	247
3x95	40,5	5000	500	0,193	303	305
3x120	44,5	6050	500	0,153	346	355
3x150	50,0	7750	500	0,124	390	407
3x185	55,0	9300	500	0,0991	441	469
3x240	61,5	11650	250	0,0754	511	551
3x300	69,0	14000	250	0,0601	580	638
3x400	77,0	18000	250	0,0470	663	746

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



# 0,6/1 kV XLPE Insulated, round steel wire armoured, multi-core cables with copper conductor



Code: YXZ2V-R, CU/XLPE/SWA/PVC, N2XRY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

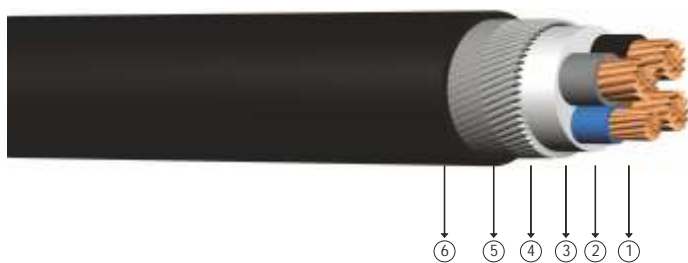
- 1 Stranded copper conductors
- 2 XLPE insulation
- 3 Thermoplastic filler
- 4 Galvanized round steel wire
- 5 PP tape
- 6 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x16+10	23,0	1300	1000	1,15	111	96
3x25+16	27,0	2000	1000	0,727	143	130
3x35+16	29,0	2350	1000	0,524	173	160
3x50+25	32,5	3100	1000	0,387	205	195
3x70+35	38,0	4400	1000	0,268	252	247
3x95+50	42,0	5500	500	0,193	303	305
3x120+70	46,5	6850	500	0,153	346	355
3x150+70	51,5	8450	500	0,124	390	407
3x185+95	56,5	10300	250	0,0991	441	469
3x240+120	63,5	12850	250	0,0754	511	551
3x300+150	70,5	15600	250	0,0601	580	638
3x400+185	80,0	20750	250	0,0470	663	746

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV XLPE Insulated, round steel wire armoured, multi-core cables with copper conductor



Code: YXZ2V-U, YXZ2V-R, CU/XLPE/SWA/PVC, N2XRY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

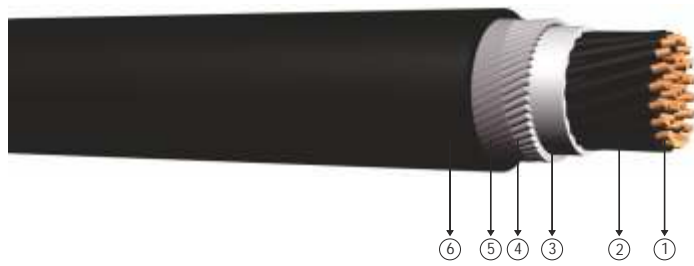
### Construction

- ① Solid or stranded copper conductor
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ Galvanized round steel wire
- ⑤ PP tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
4x1,5	15,3	430	1000	12,1	30	24
4x2,5	16,4	510	1000	7,41	40	32
4x4	17,6	615	1000	4,61	52	42
4x6	20,0	800	1000	3,08	64	53
4x10	21,0	1100	1000	1,83	86	73
4x16	24,0	1550	1000	1,15	111	96
4x25	28,0	2150	1000	0,727	143	130
4x35	30,5	2700	1000	0,524	173	160
4x50	34,0	3400	1000	0,387	205	195
4x70	40,0	4850	1000	0,268	252	247
4x95	44,0	6150	1000	0,193	303	305
4x120	50,5	8000	500	0,153	346	355
4x150	55,0	9600	500	0,124	390	407
4x185	60,5	11570	250	0,0991	441	469
4x240	68,0	14550	250	0,0754	511	551
4x300	76,0	17750	250	0,0601	580	638
4x400	87,0	23800	250	0,0470	663	746

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV XLPE Insulated, round steel wire armoured, control cables with copper conductor



Code: YXZ2V-U, YXZ2V-R, CU/XLPE/SWA/PVC, N2XRY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

- ① Solid or stranded copper conductor
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ Galvanized round steel wire
- ⑤ PP tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
5x1,5	15,0	420	1000	12,1	21,0	18,0
6x1,5	16,5	470	1000	12,1	19,5	16,8
7x1,5	16,5	480	1000	12,1	18,0	15,6
8x1,5	18,0	670	1000	12,1	16,5	14,4
10x1,5	19,5	800	1000	12,1	15,0	13,2
12x1,5	20,0	850	1000	12,1	14,3	12,6
14x1,5	20,5	900	1000	12,1	13,5	12,0
16x1,5	21,5	950	1000	12,1	12,8	11,4
19x1,5	22,0	1050	1000	12,1	12,0	10,8
21x1,5	24,0	1300	1000	12,1	11,3	10,2
24x1,5	25,5	1450	1000	12,1	10,5	9,6
27x1,5	26,0	1500	1000	12,1	10,2	9,4
30x1,5	27,0	1600	1000	12,1	9,9	9,1
37x1,5	28,5	1800	1000	12,1	9,3	8,6
40x1,5	29,5	1950	1000	12,1	9,0	8,4
48x1,5	32,0	2250	1000	12,1	8,4	7,9
52x1,5	32,5	2350	1000	12,1	7,8	7,4
61x1,5	35,5	2900	1000	12,1	7,5	7,2

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV XLPE Insulated, round steel wire armoured, control cables with copper conductor



Code: YXZ2V-U, YXZ2V-R, CU/XLPE/SWA/PVC, N2XR Y

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

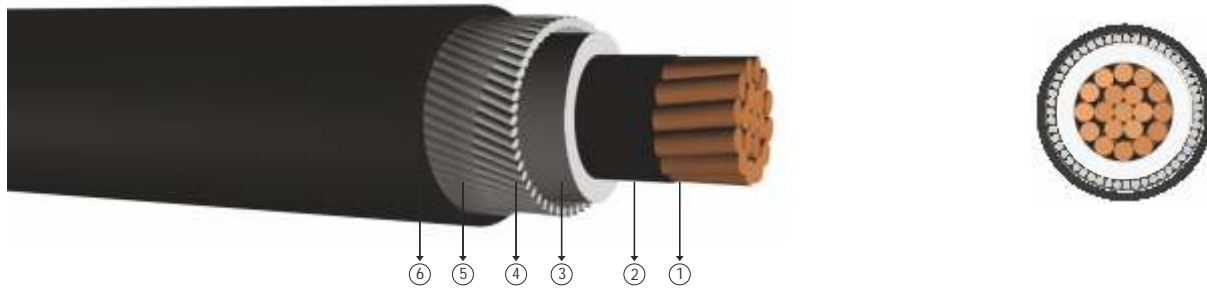
### Construction

- ① Solid or stranded copper conductor
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ Galvanized round steel wire
- ⑤ PP tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
5x2,5	16,0	500	1000	7,41	28,0	24,0
6x2,5	17,5	700	1000	7,41	26,0	22,4
7x2,5	18,0	700	1000	7,41	24,0	20,8
8x2,5	19,0	800	1000	7,41	22,0	19,2
10x2,5	21,0	950	1000	7,41	20,0	17,6
12x2,5	21,5	1050	1000	7,41	19,0	16,8
14x2,5	22,0	1100	1000	7,41	18,0	16,0
16x2,5	24,0	1350	1000	7,41	16,5	15,2
19x2,5	25,0	1450	1000	7,41	16,0	14,4
21x2,5	26,0	1600	1000	7,41	15,0	13,6
24x2,5	28,0	1850	1000	7,41	14,0	12,8
27x2,5	28,5	1900	1000	7,41	13,6	12,5
30x2,5	29,5	2050	1000	7,41	13,2	12,2
37x2,5	31,5	2300	1000	7,41	12,5	11,5
40x2,5	32,5	2500	1000	7,41	12,0	11,2
48x2,5	36,5	3200	1000	7,41	11,0	10,6
52x2,5	37,5	3400	1000	7,41	10,5	9,9
61x2,5	39,5	3750	1000	7,41	10,0	9,6

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV XLPE Insulated, round aluminium wire armoured, single core cables with copper conductor



Code: 6941X, YXVY2V-R, CU/XLPE/PVC/AWA/PVC, N2XYR(A)Y

R: Stranded Conductor

Standards: IEC 60502-1, BS 5467

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

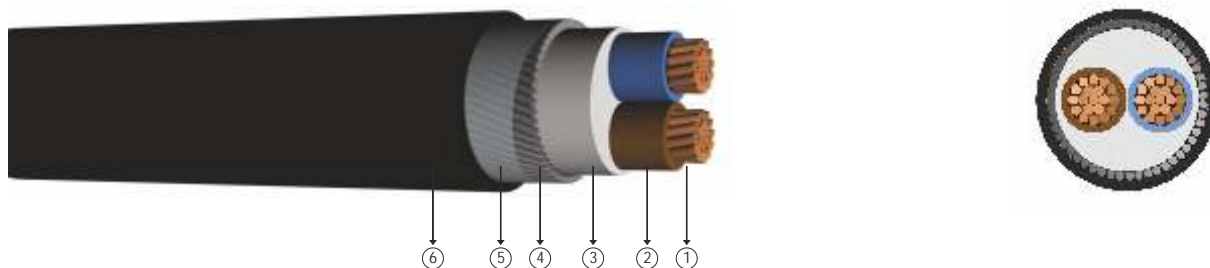
- 1 Stranded copper conductor
- 2 XLPE insulation
- 3 Thermoplastic inner sheath
- 4 Round aluminium wire
- 5 PP tape
- 6 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
1x50	16,1	632	100	0,387	251	258
1x70	18,5	881	1000	0,268	307	328
1x95	20,3	1151	1000	0,193	366	404
1x120	22,1	1408	1000	0,153	416	471
1x150	25,0	1774	1000	0,124	465	541
1x185	27,2	2165	1000	0,0991	526	626
1x240	30,0	2744	1000	0,0754	610	749
1x300	32,4	3367	1000	0,0601	689	864
1x400	37,0	4357	1000	0,0470	788	1018
1x500	40,6	5430	500	0,0366	889	1173
1x630	44,9	6818	500	0,0283	980	1315
1x800	51,9	8762	500	0,0221	1160	1520
1x1000	55,8	10615	250	0,0176	1160	1520

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV XLPE Insulated, round steel wire armoured, multi-core cables with copper conductor



Code: 6942X, YXVZ2V-R, CU/XLPE/PVC/SWA/PVC, N2XYRY

R: Stranded Conductor

Standards: IEC 60502-1, BS 5467

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

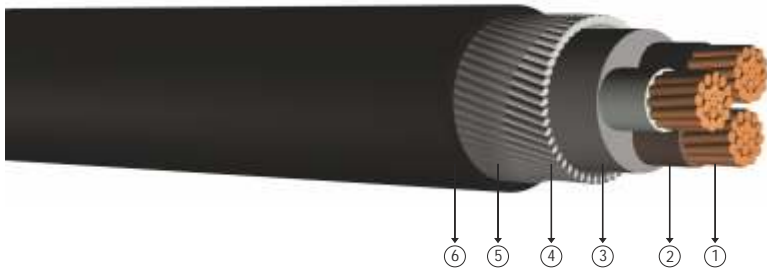
### Construction

- ① Stranded copper conductor
- ② XLPE insulation
- ③ Thermoplastic inner sheath
- ④ Galvanized round steel wire
- ⑤ PP tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
2x16	19,1	883	1000	1,15	115	125
2x25	22,5	1233	1000	0,727	145	155
2x35	25,8	1689	1000	0,524	175	195
2x50	28,8	2114	1000	0,387	210	235
2x70	33,6	3003	1000	0,268	255	300
2x95	37,1	3762	1000	0,193	310	370
2x120	40,7	4541	1000	0,153	355	430

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV XLPE Insulated, round steel wire armoured, multi-core cables with copper conductor



Code: 6943X, YXVZ2V-R, CU/XLPE/PVC/SWA/PVC, N2XYRY

R: Stranded Conductor

Standards: IEC 60502-1, BS 5467

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

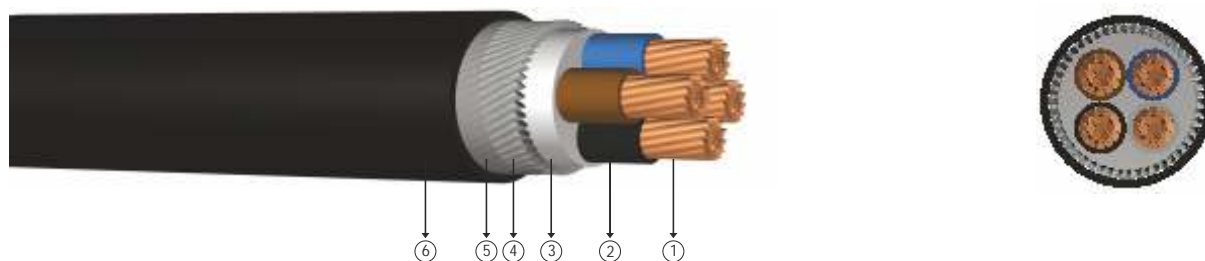
- 1 Stranded copper conductor
- 2 XLPE insulation
- 3 Thermoplastic inner sheath
- 4 Galvanized round steel wire
- 5 PP tape
- 6 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x16	20,3	1044	1000	1,15	111	96
3x25	25,0	1639	1000	0,727	143	130
3x35	27,4	2018	1000	0,524	173	160
3x50	30,4	2550	1000	0,387	205	195
3x70	35,5	3612	1000	0,268	252	247
3x95	39,8	4664	1000	0,193	303	305
3x120	44,9	6002	500	0,153	346	355

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV XLPE Insulated, round steel wire armoured, multi-core cables with copper conductor



Code: 6944X, YXVZ2V-R, CU/XLPE/PVC/SWA/PVC, N2XYRY

R: Stranded Conductor

Standards: IEC 60502-1, BS 5467

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

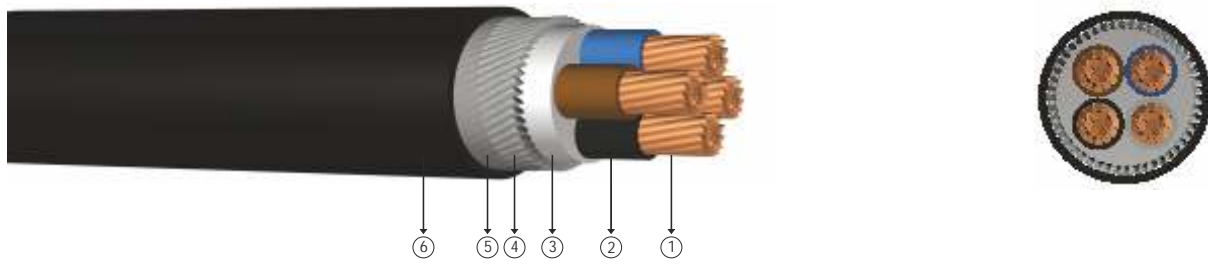
- 1 Stranded copper conductor
- 2 XLPE insulation
- 3 Thermoplastic inner sheath
- 4 Galvanized round steel wire
- 5 PP tape
- 6 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
4x16	21,9	1260	1000	1,15	111	96
4x25	27,1	1964	1000	0,727	143	130
4x35	29,7	2453	1000	0,524	173	160
4x50	34,4	3383	1000	0,387	205	195
4x70	38,9	4456	1000	0,268	252	247
4x95	44,5	6117	500	0,193	303	305
4x120	49,0	7398	500	0,153	346	355

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



# 0,6/1 kV XLPE Insulated, round steel wire armoured, multi-core cables with copper conductor



Code: 6945X, YXVZ2V-R, CU/XLPE/PVC/SWA/PVC, N2XYRY

R: Stranded Conductor

Standards: IEC 60502-1, BS 5467

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

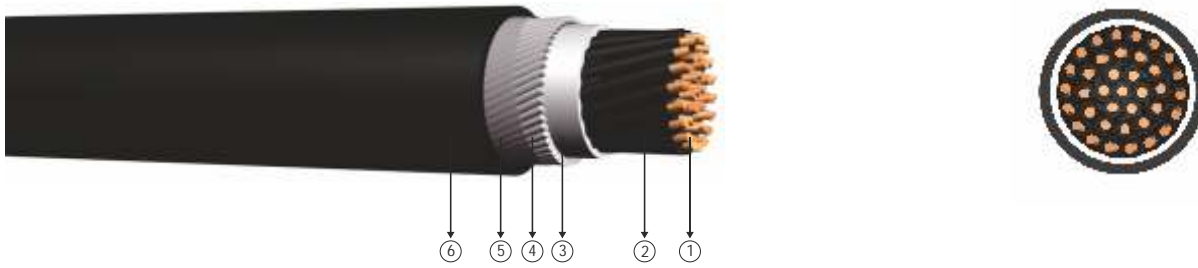
- 1 Stranded copper conductor
- 2 XLPE insulation
- 3 Thermoplastic inner sheath
- 4 Galvanized round steel wire
- 5 PP tape
- 6 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
5x16	24,9	1654	1000	1,15	111	96
5x25	29,5	2333	1000	0,727	143	130
5x35	32,4	2920	1000	0,524	173	160
5x50	37,3	4011	1000	0,387	205	195
5x70	42,3	5327	500	0,268	252	247

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV XLPE Insulated, round steel wire armoured, control cables with copper conductor



Code: 6947X, 6940/12X, 6940/19X, 6940/27X, 6940/37X, YXVZ2V-R, CU/XLPE/PVC/SWA/PVC AUX, N2XYRY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1, BS 5467

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

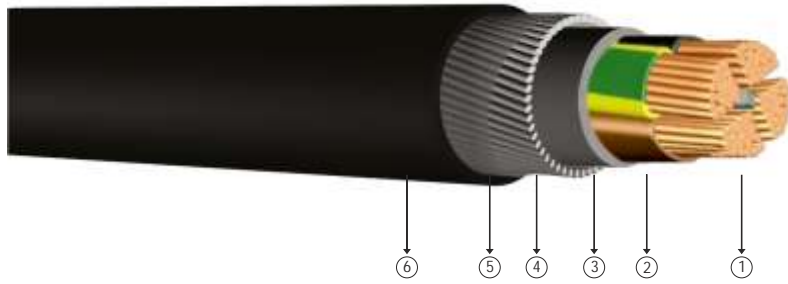
### Construction

- ① Solid or stranded copper conductor
- ② XLPE insulation
- ③ Thermoplastic inner sheath
- ④ Galvanized round steel wire
- ⑤ PP tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
7x1,5	14,0	408	1000	12,1	18	15,6
12x1,5	18,0	702	1000	12,1	13,5	12
19x1,5	20,5	911	1000	12,1	12	10,8
27x1,5	24,9	1340	1000	12,1	9	8,4
37x1,5	27,2	1631	1000	12,1	9	8,4
7x2,5	15,8	535	1000	7,41	24	20,8
12x2,5	20,7	936	1000	7,41	18	16
19x2,5	24,8	1391	1000	7,41	16	14,4
27x2,5	28,8	1836	1000	7,41	12	11,2
37x2,5	31,7	2251	1000	7,41	12	11,2
7x4	18,2	784	1000	4,61	31,2	27,3
12x4	24,0	1354	1000	4,61	23,4	21
19x4	27,4	1808	1000	4,61	20,8	18,9
27x4	32,2	2410	1000	4,61	15,6	14,7
37x4	36,9	3289	1000	4,61	15,6	14,7

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV XLPE Insulated, round steel wire armoured, sector shaped, multi-core cables with copper conductor



Code: 6942X, 6943X, 6944X, CU/XLPE/PVC/SWA/PVC

SM: Sector Shaped Conductor

Standards: BS 5467

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

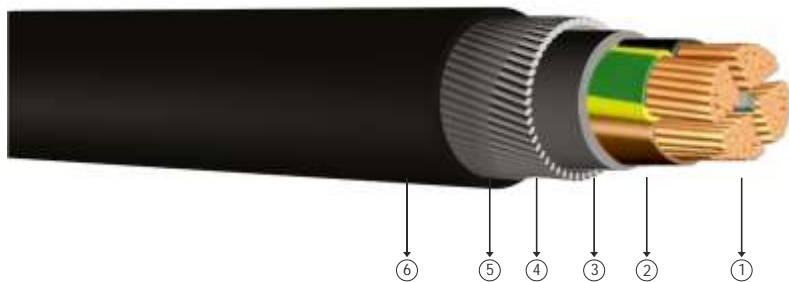
- 1 Stranded copper conductor
- 2 XLPE insulation
- 3 Thermoplastic inner sheath
- 4 Galvanized round steel wire
- 5 PP tape
- 6 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
2x25	18,8	953	1000	0,727	145	155
2x35	21,5	1320	1000	0,524	175	195
2x50	23,6	1641	1000	0,387	210	235
2x70	26,3	2133	1000	0,268	255	300
2x95	30,1	2939	1000	0,193	310	370
2x120	32,9	3544	1000	0,153	355	430
2x150	35,4	4192	1000	0,124	400	490
2x185	40,2	5391	500	0,0991	455	570
2x240	44,4	6719	500	0,0754	530	680
2x300	48,1	8145	500	0,0601	605	785
2x400	53,1	10119	250	0,0470	690	860
3x25	23,4	1459	1000	0,727	143	130
3x35	24,8	1772	1000	0,524	173	160
3x50	27,2	2222	1000	0,387	205	195
3x70	30,8	2954	1000	0,268	252	247
3x95	35,2	4069	1000	0,193	303	305
3x120	38,3	4893	1000	0,153	346	355

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV XLPE Insulated, round steel wire armoured, sector shaped, multi-core cables with copper conductor



Code: 6942X, 6943X, 6944X, CU/XLPE/PVC/SWA/PVC

SM: Sector Shaped Conductor

Standards: BS 5467

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

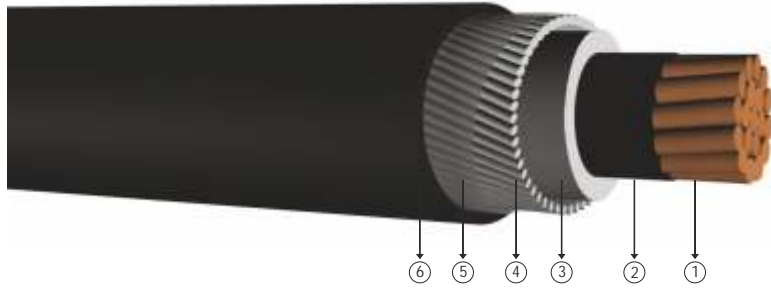
### Construction

- 1 Stranded copper conductor
- 2 XLPE insulation
- 3 Thermoplastic inner sheath
- 4 Galvanized round steel wire
- 5 PP tape
- 6 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x150	43,5	6264	500	0,124	390	407
3x185	47,3	7539	500	0,0991	441	469
3x240	52,2	9423	500	0,0754	511	551
3x300	56,8	11485	250	0,0601	580	638
3x400	63,5	14322	250	0,0470	663	746
4x25	27,0	1842	1000	0,727	143	130
4x35	28,7	2246	1000	0,524	173	160
4x50	31,7	2848	1000	0,387	205	195
4x70	37,2	4070	1000	0,268	252	247
4x95	41,0	5225	500	0,193	303	305
4x120	46,2	6716	500	0,153	346	356
4x150	50,1	7998	500	0,124	390	407
4x185	54,7	9696	500	0,0991	441	469
4x240	60,8	12258	250	0,0754	511	551
4x300	65,8	14884	250	0,0601	580	638
4x400	76,1	19554	250	0,0470	663	746

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

1,8/3 or 1,9/3,3 kV XLPE Insulated,  
round aluminium wire armoured,  
single core cables with copper conductor



Code: 61941X, YXVY2V-R, CU/XLPE/PVC/AWA/PVC, N2XYR(A)Y

R: Stranded Conductor

Standards: IEC 60502-1, BS 5467

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 1,8/3 kV  
 : 1,9/3,3 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

Construction

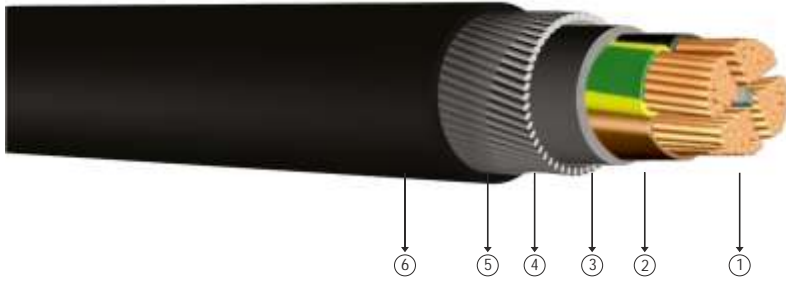
- ① Stranded copper conductor
- ② XLPE insulation
- ③ Thermoplastic inner sheath
- ④ Round aluminium wire
- ⑤ PP tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
1x50	19,0	739	1000	0,387	251	258
1x70	20,5	955	1000	0,268	307	328
1x95	22,2	1221	1000	0,193	366	404
1x120	25,0	1557	1000	0,153	416	471
1x150	26,2	1830	1000	0,124	465	541
1x185	28,1	2203	1000	0,0991	526	626
1x240	30,6	2777	1000	0,0754	610	749
1x300	32,9	3392	1000	0,0601	689	864
1x400	37,0	4358	1000	0,0470	788	1018
1x500	40,7	5431	500	0,0366	889	1173
1x630	44,9	6818	500	0,0283	980	1315

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



1,8/3 kV or 1,9/3,3 kV XLPE Insulated,  
round steel wire armoured,  
multi-core cables with copper conductor



Code: 61943X, YXVZ2V-R, CU/XLPE/PVC/SWA/PVC, N2XYRY

R: Stranded Conductor  
SM: Sector Shaped Conductor

Standards: IEC 60502-1, BS 5467

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 1,9/3,3 kV  
 : 1,8/3 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

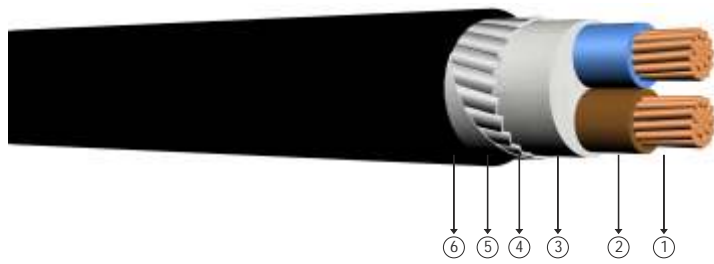
Construction

- 1 Stranded or sectorshaped copper conductor
- 2 XLPE insulation
- 3 Thermoplastic inner sheath
- 4 Galvanized round steel wire
- 5 PP tape
- 6 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x25	28,0	1733	1000	0,727	143	130
3x35	24,9	1882	1000	0,524	173	160
3x50	28,7	2565	1000	0,387	205	195
3x70	32,4	3312	1000	0,268	252	247
3x95	35,4	4203	1000	0,193	303	305
3x120	39,8	5383	500	0,153	346	355
3x150	43,7	6379	500	0,124	390	407
3x185	47,5	7630	500	0,0991	441	469
3x240	52,6	9574	500	0,0754	511	551
3x300	56,8	11529	250	0,0601	580	638
3x400	63,5	14322	250	0,0470	663	746

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV XLPE Insulated, flat steel wire armoured, multi-core cables with copper conductor



Code: YXZ3V-R, N2XFGY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

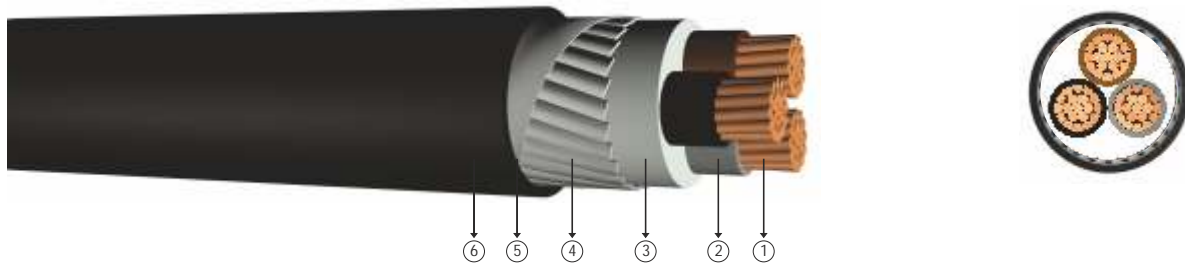
- ① Stranded copper conductors
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ Galvanized flat steel wire
- ⑤ Galvanized steel binding tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
2x25	24,5	1410	1000	0,727	145	155
2x35	26,3	1700	1000	0,524	175	195
2x50	28,8	2100	1000	0,387	210	235
2x70	32,9	2750	1000	0,268	255	300
2x95	36,9	3500	1000	0,193	310	370
2x120	40,4	4300	500	0,153	355	430
2x150	44,3	5150	500	0,124	400	490
2x185	49,1	6300	500	0,0991	455	570
2x240	54,7	7950	250	0,0754	530	680
2x300	59,6	9550	250	0,0601	605	785
2x400	67,2	12150	250	0,0470	690	860

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV XLPE Insulated, flat steel wire armoured, multi-core cables with copper conductor



Code: YXZ3V-R, N2XFGY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

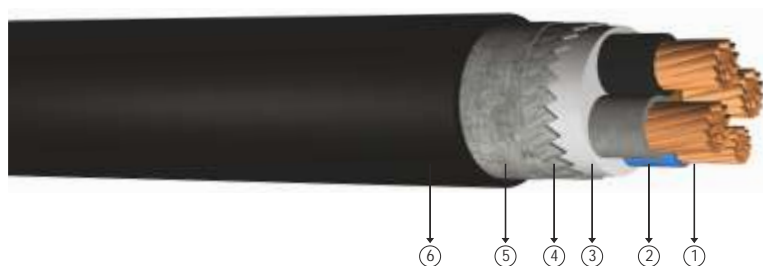
- ① Stranded copper conductors
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ Galvanized flat steel wire
- ⑤ Galvanized steel binding tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x25	25,0	1600	1000	0,727	143	130
3x35	27,0	1950	1000	0,524	173	160
3x50	30,0	2550	1000	0,387	205	195
3x70	34,5	3450	1000	0,268	252	247
3x95	38,5	4400	1000	0,193	303	305
3x120	42,5	5400	500	0,153	346	355
3x150	47,0	6600	500	0,124	390	407
3x185	51,5	8000	500	0,0991	441	469
3x240	58,5	10200	250	0,0754	511	551
3x300	65,5	12500	250	0,0601	580	638
3x400	74,0	16300	250	0,0470	663	746

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



# 0,6/1 kV XLPE Insulated, flat steel wire armoured, multi-core cables with copper conductor



Code: YXZ3V-R, N2XFGY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

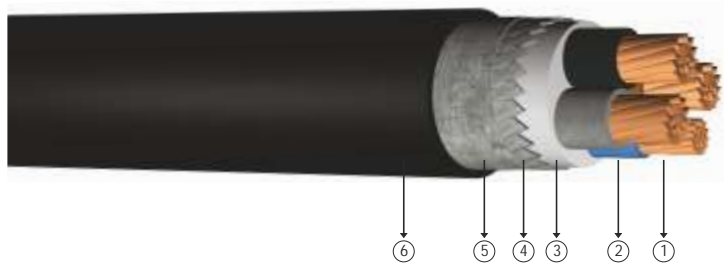
- ① Stranded copper conductors
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ Galvanized flat steel wire
- ⑤ Galvanized steel binding tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x25+16	26,0	1800	1000	0,727	143	130
3x35+16	27,5	2150	1000	0,524	173	160
3x50+25	31,5	2800	1000	0,387	205	195
3x70+35	35,5	3800	1000	0,268	252	247
3x95+50	40,0	4900	500	0,193	303	305
3x120+70	44,5	6100	500	0,153	346	355
3x150+70	48,5	7250	500	0,124	390	407
3x185+95	53,5	8900	500	0,0991	441	469
3x240+120	60,5	11350	250	0,0754	511	551
3x300+150	67,5	13900	250	0,0601	580	638
3x400+185	75,5	18000	250	0,0470	663	746

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV XLPE Insulated, flat steel wire armoured, multi-core cables with copper conductor



Code: YXZ3V-R, N2XFGY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

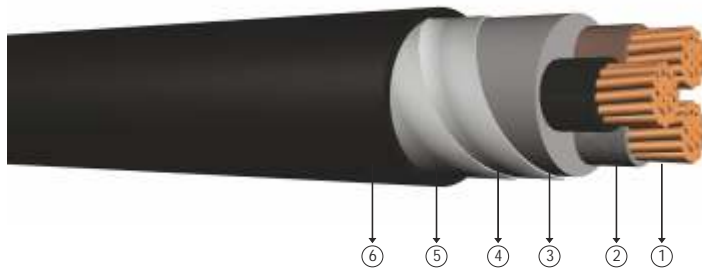
### Construction

- ① Stranded copper conductors
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ Galvanized flat steel wire
- ⑤ Galvanized steel binding tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
4x16	23,0	1350	1000	1,15	111	96
4x25	27,0	1900	1000	0,727	143	130
4x35	29,0	2400	1000	0,524	173	160
4x50	33,0	3150	1000	0,387	205	195
4x70	38,0	4300	1000	0,268	252	247
4x95	42,0	5500	500	0,193	303	305
4x120	47,0	6850	500	0,153	346	355
4x150	51,5	8250	500	0,124	390	407
4x185	57,0	10100	250	0,0991	441	469
4x240	64,5	12900	250	0,0754	511	551
4x300	72,5	15900	250	0,0601	580	638
4x400	82,5	20800	250	0,0470	663	746

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV XLPE insulated, double steel tape armoured, multi-core cables with copper conductor



Code: YXZ4V-U, YXZ4V-R, CU/XLPE/DSTA/PVC, N2XBY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

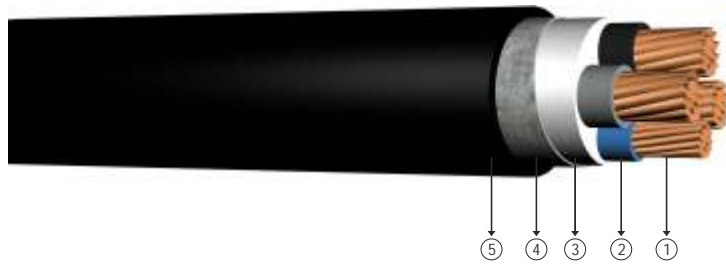
- ① Solid or stranded copper conductor
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ Galvanized double steel tape
- ⑤ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x1,5	14,0	300	1000	12,1	30	24
3x2,5	13,5	350	1000	7,41	40	32
3x4	14,5	430	1000	4,61	52	42
3x6	15,5	520	1000	3,08	64	53
3x10	18,5	730	1000	1,83	86	73
3x16	20,5	950	1000	1,15	111	96
3x25	24,0	1400	1000	0,727	143	130
3x35	26,0	1750	1000	0,524	173	160
3x50	29,0	2250	1000	0,387	205	195
3x70	33,5	3100	1000	0,268	252	247
3x95	37,5	4050	1000	0,193	303	305
3x120	42,0	5300	500	0,153	346	355
3x150	47,0	6500	500	1,124	390	407
3x185	51,5	7900	500	0,0991	441	469
3x240	58,0	10100	250	0,0754	511	551
3x300	65,5	12450	250	0,0601	580	638
3x400	73,5	16100	250	0,0470	663	746

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV XLPE insulated, double steel tape armoured, multi-core cables with copper conductor



Code: YXZ4V-R, CU/XLPE/DSTA/PVC, N2XBY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

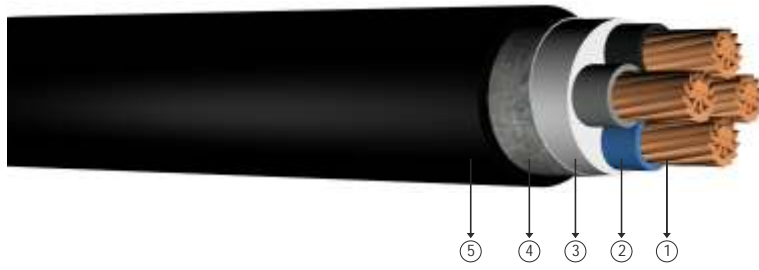
### Construction

- ① Stranded copper conductors
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ Galvanized double steel tape
- ⑤ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x16+10	21,5	1100	1000	1,15	111	96
3x25+16	25,0	1550	1000	0,727	143	130
3x35+16	26,5	1900	1000	0,524	173	160
3x50+25	30,5	2550	1000	0,387	205	195
3x70+35	34,5	3500	1000	0,268	252	247
3x95+50	39,5	4800	1000	0,193	303	305
3x120+70	44,5	6050	500	0,153	346	355
3x150+70	48,0	7150	500	0,124	390	407
3x185+95	53,5	8850	500	0,0991	441	469
3x240+120	60,0	11250	250	0,0754	511	551
3x300+150	67,0	13800	250	0,0601	580	638
3x400+185	75,0	17700	250	0,0470	663	746

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV XLPE insulated, double steel tape armoured, multi-core cables with copper conductor



Code: YXZ4V-U, YXZ4V-R, CU/XLPE/DSTA/PVC, N2XBY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

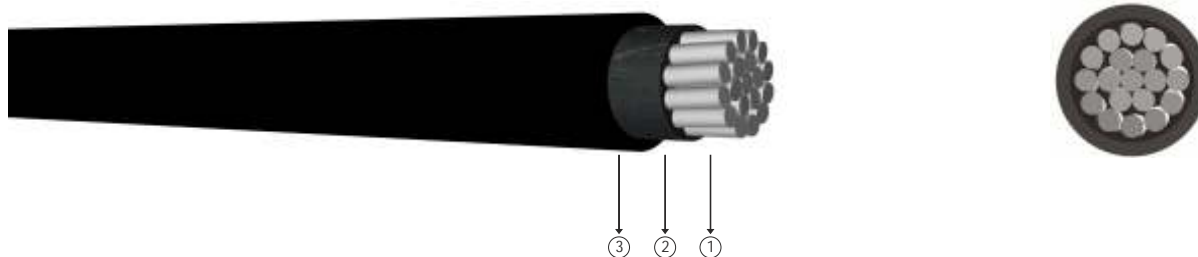
- ① Solid or stranded copper conductor
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ Galvanized double steel tape
- ⑤ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
4x1,5	13,5	330	1000	12,1	30	24
4x2,5	14,5	400	1000	7,41	40	32
4x4	15,5	500	1000	4,61	52	42
4x6	17,0	600	1000	3,08	64	53
4x10	19,5	900	1000	1,83	86	73
4x16	22,0	1150	1000	1,15	111	96
4x25	26,0	1700	1000	0,727	143	130
4x35	28,0	2150	1000	0,524	173	160
4x50	31,5	2850	1000	0,387	205	195
4x70	37,0	3950	1000	0,268	252	247
4x95	42,0	5400	500	0,193	303	305
4x120	47,0	6750	500	0,153	346	355
4x150	51,5	8200	500	1,124	390	407
4x185	57,0	10000	250	0,0991	441	469
4x240	64,5	12800	250	0,0754	511	551
4x300	72,5	15800	250	0,0601	580	638
4x400	82,0	20600	250	0,0470	663	746

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV XLPE insulated, single core cables, with aluminium conductor



Code: YAXV-U, YAXV-R, AL/XLPE/PVC, NA2XY

U: Solid Conductor  
R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

\*\*RM or RE

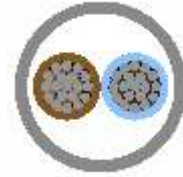
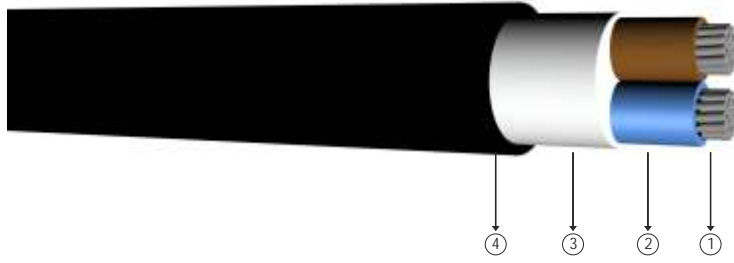
### Construction

- ① Stranded aluminium conductor
- ② XLPE insulation
- ③ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C		In air at 30°C	
					***	**	***	**
1x10**	8,5	95	1000	3,08	-	-	-	-
1x16**	9,5	125	1000	1,91	-	86	-	68
1x25	10,5	150	1000	1,20	-	114	-	106
1x35	11,5	180	1000	0,868	164	137	163	131
1x50	13,0	250	1000	0,641	195	163	200	161
1x70	14,6	300	1000	0,443	238	201	254	205
1x95	16,5	400	1000	0,320	284	240	313	253
1x120	18,2	500	1000	0,253	323	274	366	296
1x150	20,1	600	1000	0,206	361	308	420	341
1x185	22,3	750	1000	0,164	408	348	486	395
1x240	25,1	950	1000	0,125	476	408	585	475
1x300	27,7	1150	1000	0,100	537	462	675	548
1x400	31,2	1450	1000	0,0778	616	531	798	647
1x500	34,7	1800	1000	0,0605	699	601	926	749
1x630	39,6	2400	500	0,0469	736	642	980	844
1x800	42,0	2950	500	0,0367	-	-	-	-

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 0,6/1 kV XLPE insulated, multi-core cables with aluminium conductor



Code: YAXV-R, AL/XLPE/PVC, NA2XY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

### Construction

- ① Stranded aluminium conductor
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
2x25	21,5	600	1000	1,20	110	115
2x35	23,3	700	1000	0,868	130	140
2x50	25,8	900	1000	0,641	155	175
2x70	29,7	1200	1000	0,443	195	220
2x95	33,9	1550	1000	0,320	235	270
2x120	36,9	1950	1000	0,253	266	270
2x150	40,5	2350	1000	0,206	299	308
2x185	45,6	3000	1000	0,164	340	357
2x240	51,2	3800	1000	0,125	401	435
2x300	56,7	4700	1000	0,100	455	501
2x400	63,8	5950	1000	0,0778	526	592

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV XLPE insulated, multi-core cables, with aluminium conductor



Code: YAXV-R, AL/XLPE/PVC, NA2XY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

### Construction

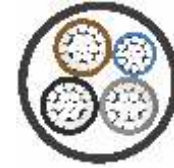
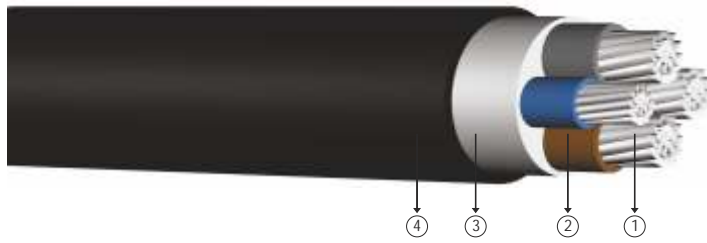
- ① Stranded aluminium conductor
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x25	22,5	650	1000	1,20	111	100
3x35	25,0	800	1000	0,868	132	122
3x50	28,5	1100	1000	0,641	157	147
3x70	33,0	1500	1000	0,443	195	189
3x95	37,0	1850	1000	0,320	233	232
3x120	41,0	2300	1000	0,253	266	270
3x150	46,0	2900	1000	0,206	299	308
3x185	50,5	3500	1000	0,164	340	357
3x240	57,0	4450	1000	0,125	401	435
3x300	62,5	5450	500	0,100	455	501
3x400	71,0	7100	500	0,0778	526	592

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



# 0,6/1 kV XLPE insulated, multi-core cables, with aluminium conductor



Code: YAXV-R, AL/XLPE/PVC, NA2XY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

### Construction

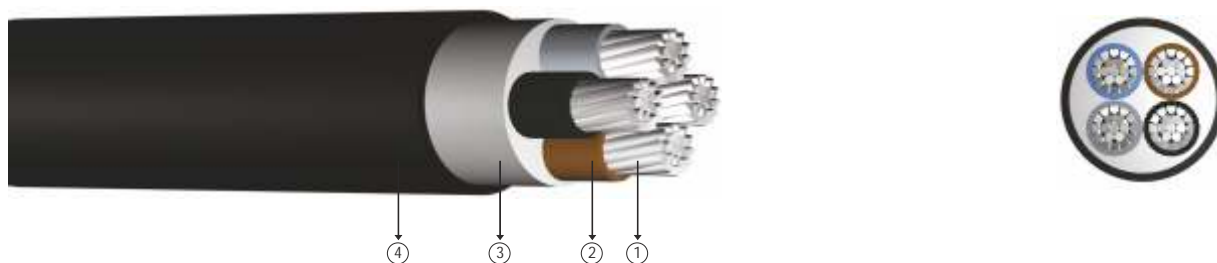
- ① Stranded aluminium conductor
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x25+16	23,5	750	1000	1,20	111	100
3x35+16	25,5	850	1000	0,868	132	122
3x50+25	30,0	1200	1000	0,641	157	147
3x70+35	34,5	1600	1000	0,443	195	189
3x95+50	39,0	2050	1000	0,320	233	232
3x120+70	43,0	2550	1000	0,253	266	270
3x150+70	47,5	3100	1000	0,206	299	308
3x185+95	52,5	3800	1000	0,164	340	357
3x240+120	59,0	4800	500	0,125	401	435
3x300+150	65,0	5900	500	0,100	455	501
3x400+185	73,5	7550	500	0,0778	526	592

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV XLPE insulated, multi-core cables, with aluminium conductor



Code: YAXV-R, AL/XLPE/PVC, NA2XY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

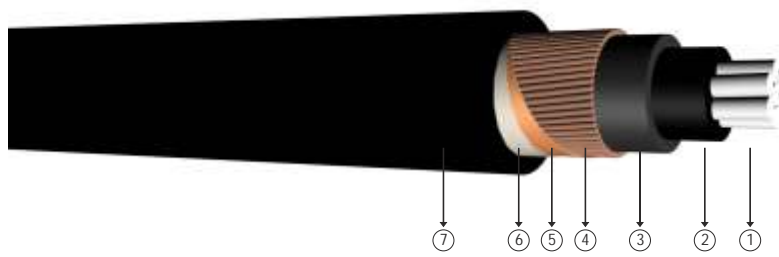
### Construction

- ① Stranded aluminium conductor
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
4x25	24,5	800	1000	1,20	111	100
4x35	27,5	1000	1000	0,868	132	122
4x50	31,5	1350	1000	0,641	157	147
4x70	36,5	1800	1000	0,443	195	189
4x95	41,0	2300	1000	0,320	233	232
4x120	46,0	2900	1000	0,253	266	270
4x150	51,0	3550	1000	0,206	299	308
4x185	56,5	4350	1000	0,164	340	357
4x240	63,0	5550	500	0,125	401	435
4x300	69,5	6750	500	0,100	455	501
4x400	79,5	8900	500	0,0778	526	592

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV XLPE insulated, concentric wire screen, single core cables with aluminium conductor



Code: YAXCV-R, AL/XLPE/SC/PVC, NA2XCY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

Application These cables have a low dielectric loss, Indoor installations, in cable ducts, outdoor and underground for power stations, industrial plants and switching stations as well as local supply systems if increased protection is necessary. In case of mechanical damage the screen prevents any damage due to power leak to the surrounding area.

### Construction

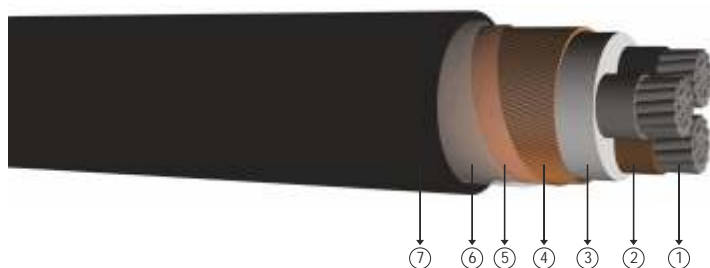
- ① Stranded aluminium conductor    ③ PVC inner sheath    ⑤ Copper tape as binder    ⑦ PVC outer sheath
- ② XLPE insulation    ④ Concentric copper wire    ⑥ PP tape

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C		In air at 30°C	
					***	**	***	**
1x25/16	15,5	400	1000	1,20	-	114	-	106
1x35/16	16,5	450	1000	0,868	164	137	163	131
1x50/25	18,5	600	1000	0,641	195	163	200	161
1x70/35	20,0	750	1000	0,443	238	201	254	205
1x95/50	23,0	1000	1000	0,320	284	240	313	253
1x120/70	25,0	1300	1000	0,253	323	274	366	296
1x150/70	27,0	1400	1000	0,206	361	308	420	341
1x185/95	29,5	1800	1000	0,164	408	350	486	395
1x240/120	33,0	2200	1000	0,125	476	408	585	475

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



## 0,6/1 kV XLPE Insulated, concentric wire screen, multi-core cables with aluminium conductor



Code: YAXCV-R, AL/XLPE/SC/PVC, NA2XCY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

Application These cables have a low dielectric loss, Indoor installations, in cable ducts, outdoor and underground for power stations, industrial plants and switching stations as well as local supply systems if increased protection is necessary. In case of mechanical damage the screen prevents any damage due to power leak to the surrounding area.

### Construction

- ① Stranded aluminium conductor    ③ Thermoplastic filler    ⑤ Copper tape as binder    ⑦ PVC outer sheath
- ② XLPE insulation    ④ Concentric copper wire    ⑥ PP tape

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x25/16	24,0	800	1000	1,20	111	100
3x35/16	26,5	1000	1000	0,868	132	122
3x50/25	30,5	1350	1000	0,641	157	147
3x70/35	35,0	1850	1000	0,443	195	189
3x95/50	39,5	2350	1000	0,320	233	232
3x120/70	43,0	2950	1000	0,253	266	270
3x150/70	48,5	3600	1000	0,206	299	308
3x185/95	53,0	4450	1000	0,164	340	357
3x240/120	59,5	5600	500	0,125	401	435
3x300/150	65,5	6850	500	0,100	455	501
3x400/185	74,5	8850	500	0,0778	526	592

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV XLPE Insulated, round aluminium wire armoured, single-core cables with aluminium conductor



Code: YAXY2V-R, AL/XLPE/PVC/AWA/PVC, NA2XR(A)Y

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

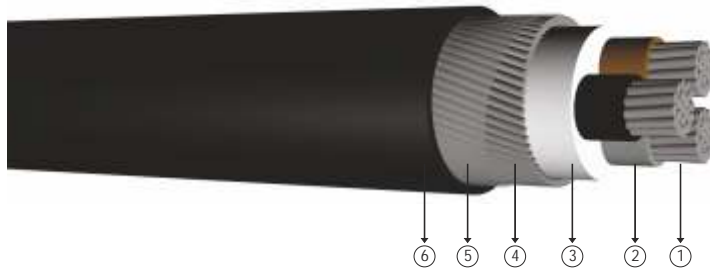
- ① Stranded aluminium conductor
- ② XLPE insulation
- ③ PVC inner sheath
- ④ Round aluminium wire
- ⑤ PP tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C		In air at 30°C	
					***	**	***	**
1x25	15,5	300	1000	1,20	-	114	-	106
1x35	17,5	400	1000	0,868	164	137	163	131
1x50	19,5	450	1000	0,641	195	163	200	161
1x70	21,0	600	1000	0,443	238	201	254	205
1x95	23,5	750	1000	0,320	284	240	313	253
1x120	25,0	850	1000	0,253	323	274	366	296
1x150	27,0	1000	1000	0,206	361	308	420	341
1x185	29,5	1150	1000	0,164	408	350	486	395
1x240	32,0	1400	1000	0,125	476	408	585	475
1x300	35,5	1750	1000	0,100	537	462	675	548
1x400	39,5	2150	1000	0,0778	616	531	798	647
1x500	43,0	2600	1000	0,0605	699	601	926	749

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



## 0,6/1 kV XLPE Insulated, round steel wire armoured, multi-core cables with aluminium conductor



Code: YAXZ2V-R, AL/XLPE/SWA/PVC, NA2XRY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

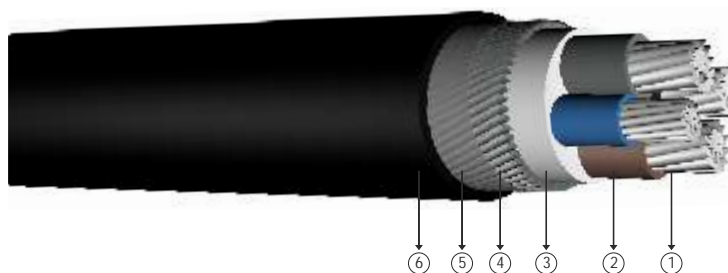
### Construction

- ① Stranded aluminium conductor
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ Galvanized round steel wire
- ⑤ PP tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x25	26,0	1300	1000	1,20	111	100
3x35	28,5	1550	1000	0,868	132	122
3x50	31,0	1800	1000	0,641	157	147
3x70	36,0	2600	1000	0,443	195	189
3x95	40,0	3300	1000	0,320	233	232
3x120	44,0	3850	1000	0,253	266	270
3x150	50,0	4900	500	0,206	299	308
3x185	55,0	5750	500	0,164	340	357
3x240	61,0	7150	500	0,125	401	435
3x300	66,0	8000	500	0,100	455	501
3x400	75,0	10000	250	0,0778	526	592

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV XLPE Insulated, round steel wire armoured, multi-core cables with aluminium conductor



Code: YAXZ2V-R, AL/XLPE/SWA/PVC, NA2XRY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

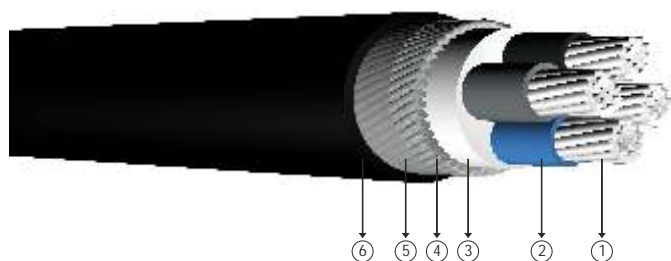
- ① Stranded aluminium conductor
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ Galvanized round steel wire
- ⑤ PP tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x25+16	27,0	1400	1000	1,20	111	100
3x35+16	29,0	1600	1000	0,868	132	122
3x50+25	32,0	1950	1000	0,641	157	147
3x70+35	37,5	2900	1000	0,443	195	189
3x95+50	41,5	3500	1000	0,320	233	232
3x120+70	45,5	4200	1000	0,253	266	270
3x150+70	51,5	5300	500	0,206	299	308
3x185+95	57,0	6200	500	0,164	340	357
3x240+120	64,0	7600	500	0,125	401	435
3x300+150	68,0	8450	500	0,100	455	501
3x400+185	76,5	10400	250	0,0778	526	592

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV XLPE Insulated, round steel wire armoured, multi-core cables with aluminium conductor



Code: YAXZ2V-R, AL/XLPE/SWA/PVC, NA2XRY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

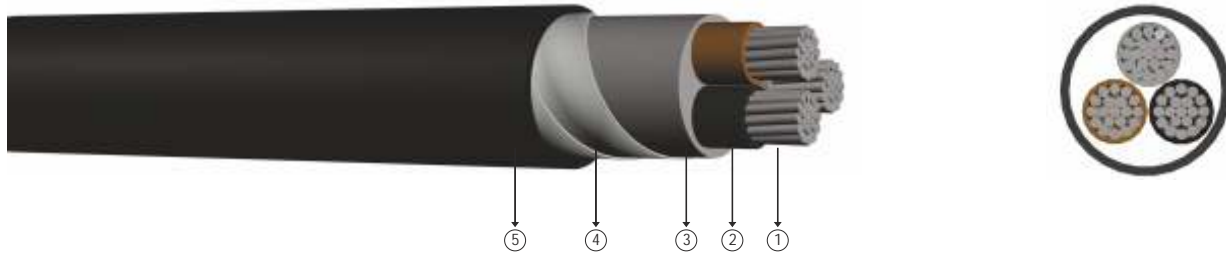
- ① Stranded aluminium conductor
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ Galvanized round steel wire
- ⑤ PP tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
4x25	28,0	1500	1000	1,20	111	100
4x35	31,0	1800	1000	0,868	132	122
4x50	35,0	2300	1000	0,641	157	147
4x70	41,0	3200	1000	0,443	195	189
4x95	45,5	3850	1000	0,320	233	232
4x120	51,5	5100	500	0,253	266	270
4x150	56,5	6000	500	0,206	299	308
4x185	62,0	7000	500	0,164	340	357
4x240	68,5	8500	500	0,125	401	435
4x300	75,0	10000	500	0,100	455	501
4x400	86,5	13650	250	0,0778	526	592

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



# 0,6/1 kV XLPE insulated, double steel tape armoured, multi-core cables with aluminium conductor



Code: YAXZ4V-R, AL/XLPE/DSTA/PVC, NA2XBY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

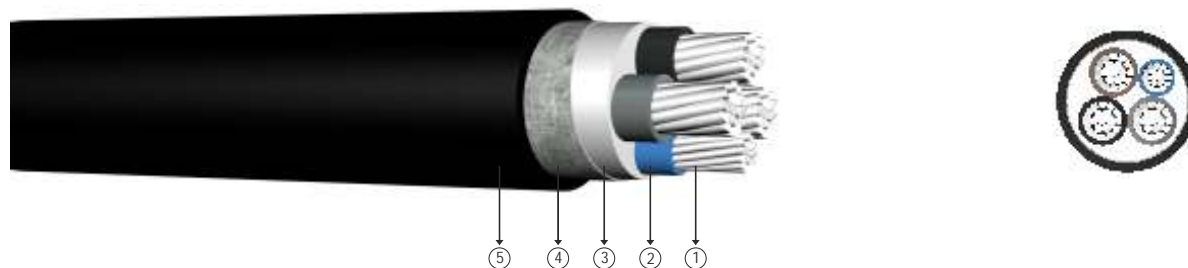
- ① Stranded aluminium conductor
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ Galvanized double steel tape
- ⑤ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x25	23,5	900	1000	1,20	111	100
3x35	26,0	1100	1000	0,868	132	122
3x50	30,0	1400	1000	0,641	157	147
3x70	34,5	1850	1000	0,443	195	189
3x95	38,5	2300	1000	0,320	233	232
3x120	43,0	3100	1000	0,253	266	270
3x150	48,5	3800	1000	0,206	299	308
3x185	53,0	4500	1000	0,164	340	357
3x240	59,0	5600	500	0,125	401	435
3x300	65,0	6700	500	0,100	455	501
3x400	73,5	8450	500	0,0778	526	592

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV XLPE insulated, double steel tape armoured, multi-core cables with aluminium conductor



Code: YAXZ4V-R, AL/XLPE/DSTA/PVC, NA2XBY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

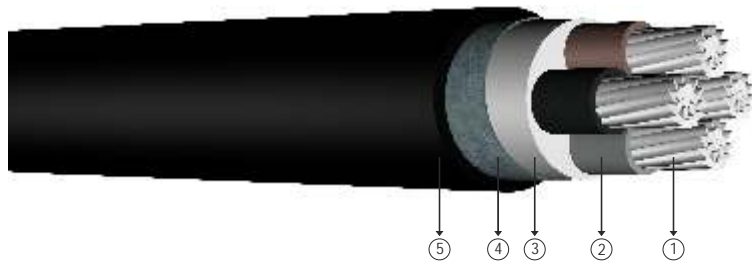
### Construction

- ① Stranded aluminium conductor
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ Galvanized double steel tape
- ⑤ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x25+16	25,0	1000	1000	1,20	111	100
3x35+16	27,0	1150	1000	0,868	132	122
3x50+25	31,0	1550	1000	0,641	157	147
3x70+35	35,5	2000	1000	0,443	195	189
3x95+50	41,0	2800	1000	0,320	233	232
3x120+70	45,5	3400	1000	0,253	266	270
3x150+70	49,5	4000	1000	0,206	299	308
3x185+95	55,0	4850	1000	0,164	340	357
3x240+120	61,0	6000	500	0,125	401	435
3x300+150	67,0	7150	500	0,100	455	501
3x400+185	76,0	9000	500	0,0778	526	592

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV XLPE insulated, double steel tape armoured, multi-core cables with aluminium conductor



Code: YAXZ4V-R, AL/XLPE/DSTA/PVC, NA2XBY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

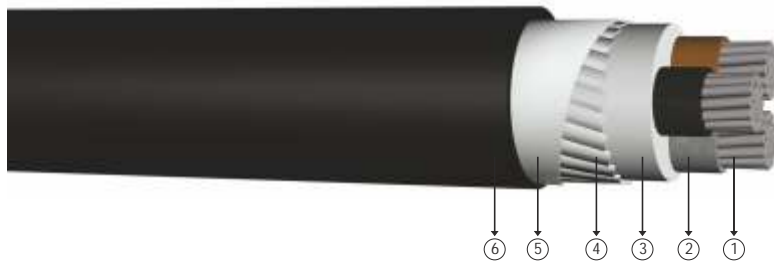
- ① Stranded aluminium conductor
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ Galvanized double steel tape
- ⑤ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
4x25	26,0	1050	1000	1,20	111	100
4x35	28,5	1300	1000	0,868	132	122
4x50	33,0	1550	1000	0,641	157	147
4x70	38,0	2250	1000	0,443	195	189
4x95	43,0	3100	1000	0,320	233	232
4x120	48,0	3800	1000	0,253	266	270
4x150	53,0	4550	1000	0,206	299	308
4x185	58,5	5450	500	0,164	340	357
4x240	65,5	6800	500	0,125	401	435
4x300	72,0	8100	500	0,100	455	501
4x400	82,0	10450	250	0,0778	526	592

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV XLPE Insulated, flat steel wire armoured, multi-core cables with aluminium conductor



Code: YAXZ3V-R, NA2XFGY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

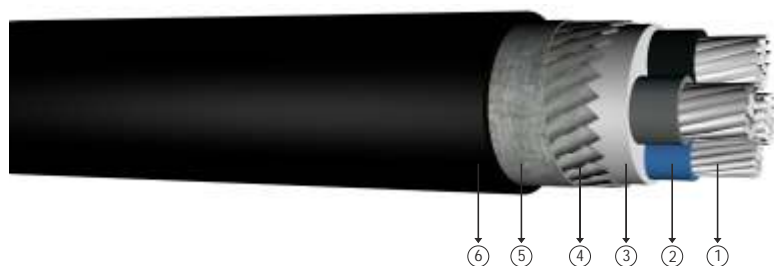
### Construction

- ① Stranded aluminium conductor
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ Galvanized flat steel wire
- ⑤ Galvanized steel binding tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x25	25,0	1150	1000	1,20	111	100
3x35	27,0	1350	1000	0,868	132	122
3x50	31,0	1700	1000	0,641	157	147
3x70	35,5	2200	1000	0,443	195	189
3x95	39,5	2700	1000	0,320	233	232
3x120	43,5	3200	1000	0,253	266	270
3x150	48,5	3900	1000	0,206	299	308
3x185	53,0	4650	1000	0,164	340	357
3x240	59,5	5700	500	0,125	401	435
3x300	65,0	6850	500	0,100	455	501
3x400	73,5	8650	500	0,0778	526	592

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV XLPE Insulated, flat steel wire armoured, multi-core cables with aluminium conductor



Code: YAXZ3V-R, NA2XFGY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

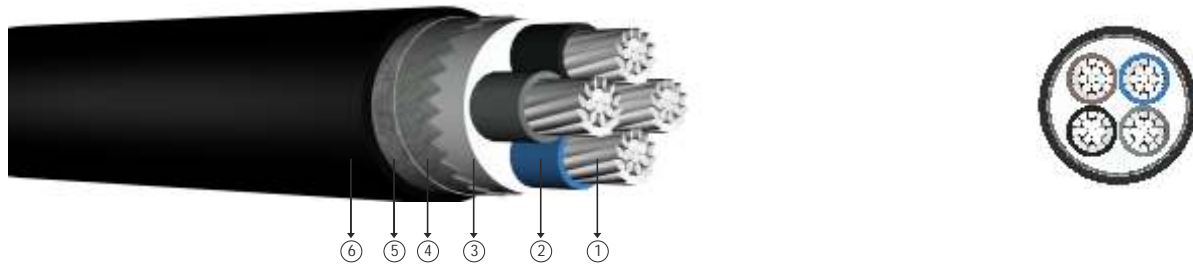
- 1 Stranded aluminium conductor
- 2 XLPE insulation
- 3 Thermoplastic filler
- 4 Galvanized flat steel wire
- 5 Galvanized steel binding tape
- 6 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x25+16	26,0	1250	1000	1,20	111	100
3x35+16	28,0	1400	1000	0,868	132	122
3x50+25	32,0	1850	1000	0,641	157	147
3x70+35	36,5	2350	1000	0,443	195	189
3x95+50	41,0	2900	1000	0,320	233	232
3x120+70	45,5	3500	1000	0,253	266	270
3x150+70	50,0	4150	1000	0,206	299	308
3x185+95	55,0	4950	1000	0,164	340	357
3x240+120	61,5	6100	500	0,125	401	435
3x300+150	67,5	7300	500	0,100	455	501
3x400+185	76,0	9200	500	0,0778	526	592

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV XLPE Insulated, flat steel wire armoured, multi-core cables with aluminium conductor



Code: YAXZ3V-R, NA2XFGY

R: Stranded Conductor

Standards: IEC 60502-1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

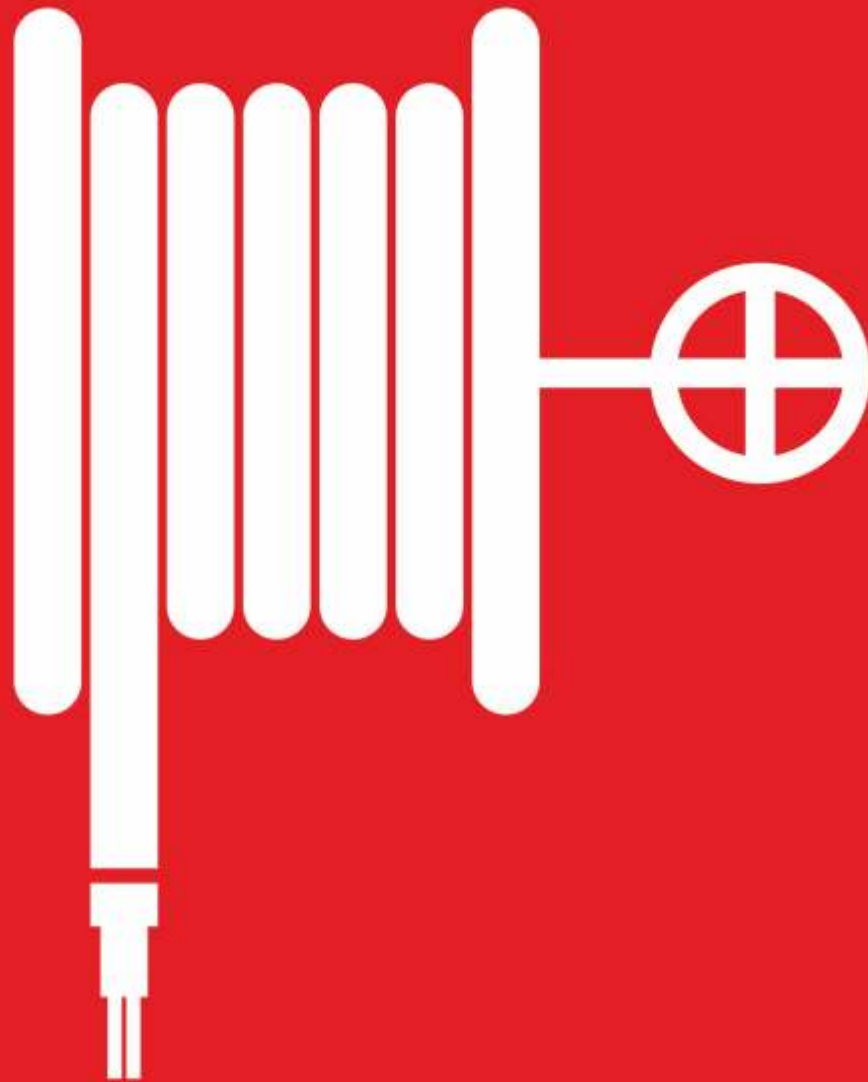
- ① Stranded aluminium conductor
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ Galvanized flat steel wire
- ⑤ Galvanized steel binding tape
- ⑥ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
4x25	27,0	1300	1000	1,20	111	100
4x35	29,5	1550	1000	0,868	132	122
4x50	34,0	2000	1000	0,641	157	147
4x70	39,0	2650	1000	0,443	195	189
4x95	43,5	3200	1000	0,320	233	232
4x120	48,5	3900	1000	0,253	266	270
4x150	53,5	4700	1000	0,206	299	308
4x185	58,5	5600	500	0,164	340	357
4x240	65,5	6900	500	0,125	401	435
4x300	72,0	8300	500	0,100	455	501
4x400	82,0	10650	250	0,0778	526	592

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



Did you take all your precautions against fire?





## 300/500 V and 450/750 V halogen free, flame retardant, single core cables with copper conductor



Code: H05Z1-U, H07Z1-U, H07Z1-R

U: Solid conductor  
R: Stranded Conductor

Standards: EN 50525-3-31

### Technical Data

Max. operating temperature : 70°C  
Max. short circuit temperature : 160°C (max. 5 sec.)  
Rated voltage : 300/500 V  
450/750 V

Application Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

RE : Solid conductor (H07Z1-U)

RM : Stranded conductor (H07Z1-R)

\* : 300/500 V (H05Z1 - U) \*\* : RM or RE

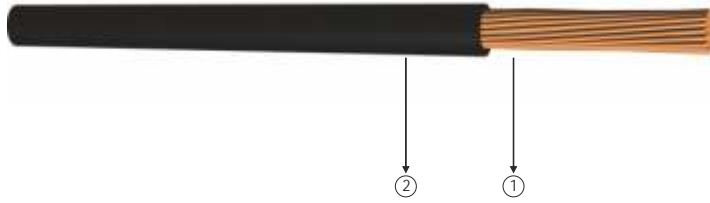
### Construction

- ① Solid or stranded copper conductor    ② HFFR insulation

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
* 0,5 RE	2,0	8	100	36,0	-	-
* 0,75 RE	2,2	11	100	24,5	-	15
* 1,0 RE	2,4	14	100	18,1	11	19
**1,5 RE	2,6	20	100	12,1	16	24
**2,5 RE	3,2	32	100	7,41	20	32
**4,0 RE	3,9	46	100	4,61	27	42
**6,0 RE	4,4	65	100	3,08	35	54
10 RM	6,1	115	100	1,83	48	73
16 RM	6,8	170	1000	1,15	65	98
25 RM	8,8	260	1000	0,727	88	129
35 RM	9,8	355	1000	0,524	110	158
50 RM	11,0	500	1000	0,387	140	198
70 RM	13,2	680	1000	0,268	175	245
95 RM	15,0	930	1000	0,193	210	292
120 RM	17,0	1170	1000	0,153	250	344
150 RM	18,0	1450	1000	0,124	-	391
185 RM	21,0	1850	1000	0,0991	-	448
240 RM	23,0	2350	1000	0,0754	-	528
300 RM	25,5	2950	1000	0,0601	-	608
400 RM	29,0	3900	1000	0,0470	-	726



300/500 V and 450/750 V halogen free, flame retardant, single core cables with flexible copper conductor



Code: H05Z1-K, H07Z1-K

K: Flexible Conductor

Standards: EN 50525-3-31

Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : 160°C (max. 5 sec.)  
 Rated voltage : 300/500 V  
 450/750 V

Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

\* : 300/500 V (H05Z1 - K)

Construction

- ① Flexible copper conductor
- ② HFFR insulation

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
* 0,5	2,2	9	100	39,0	-	-
* 0,75	2,4	12	100	26,0	-	16
* 1,0	2,6	15	100	19,5	12	20
1,5	3,0	22	100	13,3	15	24
2,5	3,6	34	100	7,98	20	32
4,0	4,2	50	100	4,95	25	42
6,0	4,8	70	100	3,30	33	54
10	6,7	120	100	1,91	45	73
16	8,0	179	100	1,21	61	98
25	9,7	277	1000	0,78	83	129
35	11,0	376	1000	0,554	103	158
50	13,5	535	1000	0,386	132	198
70	15,0	730	1000	0,272	165	245
95	17,5	900	1000	0,206	197	292
120	19,5	1230	1000	0,161	235	344
150	22,0	1500	1000	0,129	-	391
185	24,5	1900	1000	0,106	-	448
240	27,5	2450	1000	0,0801	-	528



## 300/500 V and 450/750 V halogen free, cross linked, flame retardant, single core cables with copper conductor



Code: H05Z-U, H07Z-U (6491B), H07Z-R (6491B)

U: Solid conductor  
R: Stranded Conductor

Standards: BS EN 50525-3-41, EN 50525-3-41

### Technical Data

Max. operating temperature : 90°C  
Max. short circuit temperature : 250°C (max. 5 sec.)  
Rated voltage : 300/500 V  
450/750 V

Application Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

RE : Solid conductor (H07Z-U)  
RM : Stranded conductor (H07Z-R)

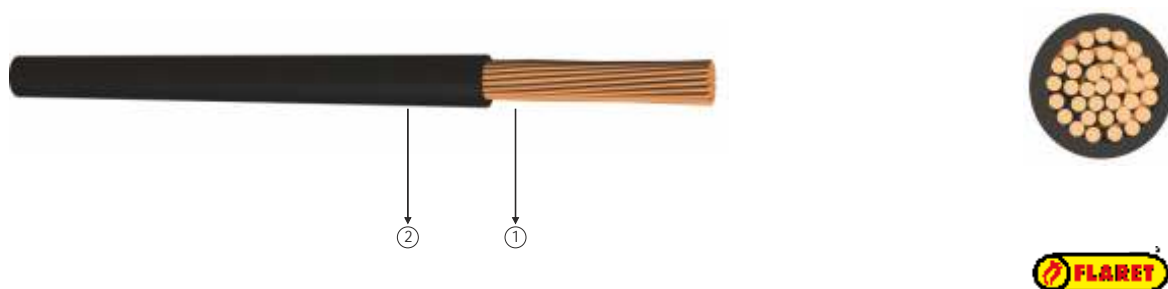
\* : 300/500 V (H05Z - U) \*\* RM or RE

### Construction

- ① Solid or stranded copper conductor    ② Cross-linked halogen free insulation

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
* 0,5 RE	2,0	8	100	36,0	-	9
* 0,75 RE	2,2	11	100	24,5	-	15
* 1,0 RE	2,4	14	100	18,1	11	19
**1,5 RE	2,6	20	100	12,1	15	24
**2,5 RE	3,2	32	100	7,41	20	32
**4,0 RE	3,9	46	100	4,61	25	42
**6,0 RE	4,4	65	100	3,08	33	54
10 RM	6,1	115	100	1,83	45	73
16 RM	6,8	170	1000	1,15	61	98
25 RM	8,8	260	1000	0,727	83	129
35 RM	9,8	355	1000	0,524	103	158
50 RM	11,0	500	1000	0,387	132	198
70 RM	13,2	680	1000	0,268	165	245
95 RM	15,0	930	1000	0,193	197	292
120 RM	17,0	1170	1000	0,153	235	344
150 RM	18,0	1450	1000	0,124	-	391
185 RM	21,0	1850	1000	0,0991	-	448
240 RM	23,0	2350	1000	0,0754	-	528

300/500 V and 450/750 V halogen free, cross linked, flame retardant, single core cables with flexible copper conductor



Code: H05Z-K (2491B), H07Z-K (6701B)

K: Flexible Conductor

Standards: BS EN 50525-3-41

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 300/500 V  
 450/750 V

Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

\* : 300/500 V (H05Z - K)

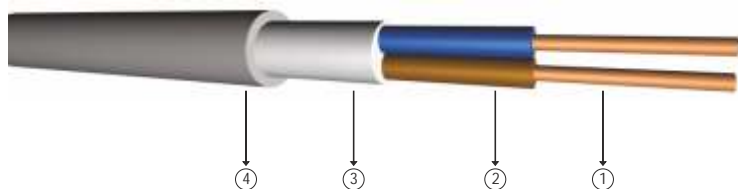
Construction

- ① Flexible copper conductor
- ② Cross-linked halogen free insulation

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
* 0,5	2,2	9	100	39,0	-	9
* 0,75	2,4	12	100	26,0	-	15
* 1,0	2,6	15	100	19,5	11	19
1,5	3,0	22	100	13,3	15	24
2,5	3,6	34	100	7,98	20	32
4,0	4,2	50	100	4,95	25	42
6,0	4,8	70	100	3,30	33	54
10	6,7	120	100	1,91	45	73
16	8,0	179	100	1,21	61	98
25	9,7	277	1000	0,78	83	129
35	11,0	376	1000	0,554	103	158
50	13,5	535	1000	0,386	132	198
70	15,0	730	1000	0,272	165	245
95	17,5	900	1000	0,206	197	292
120	19,5	1230	1000	0,161	235	344
150	22,0	1500	1000	0,129	-	391
185	24,5	1900	1000	0,106	-	448
240	27,5	2450	1000	0,0801	-	528



## 300/500 V halogen free, flame retardant, multi core cables with copper conductor



Code: NHXMH-O, NHXMH-J (052XZ1-U, 052XZ1-R)

U : Solid Conductor      O : Without yellow/green wire      Standards: VDE 0250 214, TSE K 328  
 R : Stranded Conductor      J : With yellow/green wire

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 300/500 V  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

RE : Solid conductor (052XZ1-U)

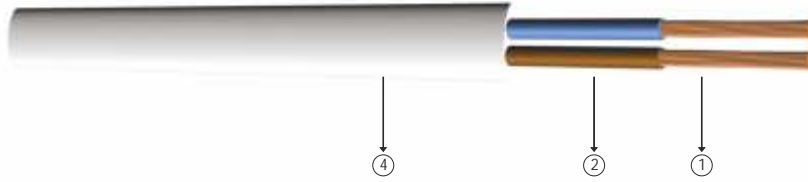
RM : Stranded conductor (052XZ1-R)

### Construction

① Solid or stranded copper conductor    ② XLPE insulation    ③ Thermoplastic filler    ④ HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES	
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)
mm <sup>2</sup>	mm	kg/km	m	/km	In air at 30°C
2x1,5 RE	8,5	110	100	12,1	28
2x2,5 RE	9,5	140	100	7,41	38
2x4 RE	10,5	200	100	4,61	52
2x6 RE	11,5	250	100	3,08	65
2x10 RM	15,0	430	1000	1,83	86
3x1,5 RE	9,0	125	100	12,1	24
3x2,5 RE	10,0	160	100	7,41	32
3x4 RE	11,0	230	100	4,61	42
3x6 RE	12,5	290	100	3,08	53
3x10 RM	15,0	520	1000	1,83	73
4x1,5 RE	9,5	150	100	12,1	24
4x2,5 RE	10,5	200	100	7,41	32
4x4 RE	12,5	270	100	4,61	42
4x6 RE	14,0	410	100	3,08	53
4x10 RM	18,0	640	1000	1,83	73
4x16 RM	20,0	940	1000	1,15	96
4x25 RM	25,0	1500	1000	0,727	130
4x35 RM	26,0	1900	1000	0,524	160
5x1,5 RE	10,5	165	100	12,1	18
5x2,5 RE	11,5	220	100	7,41	24
5x4 RE	14,0	370	100	4,61	31
5x6 RE	15,5	450	100	3,08	40
5x10 RM	18,0	770	1000	1,83	55
5x16 RM	23,0	1080	1000	1,15	72
5x25 RM	27,5	1680	1000	0,727	97

# 300/500 V halogen free, flame retardant, multi core cables with copper conductor



Code: H05Z1Z1-F, H03Z1Z1-F

F: Flexible Conductor

Standards: EN 50525-3-11

### Technical Data

Max. operating temperature : 70°C  
 Max. short circuit temperature : 160°C (max. 5 sec.)  
 Rated voltage : 300/500 V  
 D : Cable outer diameter

### Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

### Construction

- 1 Flexible copper conductor
- 2 HFFR insulation
- 3 HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES	
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)
mm <sup>2</sup>	mm	kg/km	m	/km	In air at 30°C
2x0,75	6,2	55	100	26,0	13
2x1,0	6,6	70	100	19,5	15
2x1,5	7,6	90	100	13,3	20
2x2,5	9,2	140	100	7,98	26
2x4	10,6	210	100	4,95	33
3x0,75	6,5	75	100	26,0	13
3x1,0	7,2	80	100	19,5	15
3x1,5	8,5	115	100	13,3	20
3x2,5	9,9	190	100	7,98	26
3x4	12,3	265	100	4,95	33
4x0,75	7,1	90	100	26,0	13
4x1,0	7,8	105	100	19,5	15
4x1,5	9,2	145	100	13,3	20
4x2,5	10,9	215	100	7,98	26
4x4	13,4	350	100	4,95	33
5x0,75	8,0	120	100	26,0	13
5x1,0	8,6	135	100	19,5	15
5x1,5	10,3	180	100	13,3	20
5x2,5	12,1	270	100	7,98	26
5x4	14,1	390	100	4,95	33



# 0,6/1 kV halogen free, flame retardant, XLPE insulated, single core cables with copper conductor



Code: YXZ1-U, YXZ1-R, N2XH-O, N2XH-J, CU/XLPE/LSZH

U : Solid Conductor      O : Without yellow/green wire      Standards: HD 604 S1, IEC 60502-1, VDE 0276-604  
 R : Stranded Conductor      J : With yellow/green wire

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

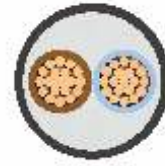
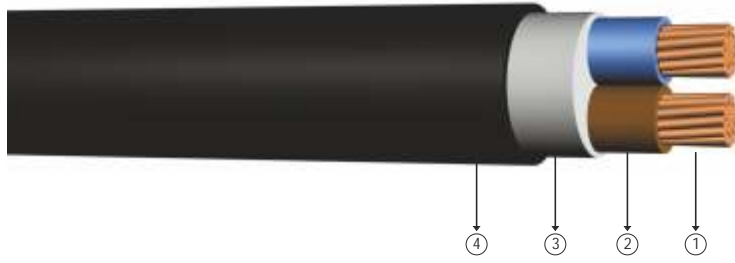
### Construction

- ① Solid or stranded copper conductor    ② XLPE insulation    ③ HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C		In air at 30°C	
					***	**	***	**
1x4	6,5	70	1000	4,61	66	55	56	44
1x6	7,0	95	1000	3,08	82	68	71	57
1x10	8,5	130	1000	1,83	109	90	96	77
1x16	9,5	200	1000	1,15	139	115	128	102
1x25	11,0	300	1000	0,727	179	149	173	139
1x35	12,0	400	1000	0,524	213	178	212	170
1x50	13,5	500	1000	0,387	251	211	258	208
1x70	15,5	750	1000	0,268	307	259	328	265
1x95	17,5	950	1000	0,193	366	310	404	326
1x120	19,5	1200	1000	0,153	416	352	471	381
1x150	20,5	1500	1000	0,124	465	396	541	438
1x185	23,5	1850	1000	0,0991	526	449	626	507
1x240	26,5	2350	1000	0,0754	610	521	749	606
1x300	28,5	3000	1000	0,0601	689	587	864	697
1x400	32,5	3900	1000	0,0470	788	669	1018	816
1x500	35,0	4900	1000	0,0366	889	748	1173	933

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 0,6/1 kV halogen free, flame retardant, XLPE insulated, multi core cables with copper conductor



Code: YXZ1-U, YXZ1-R, N2XH-O, N2XH-J, CU/XLPE/LSZH

U: Solid Conductor      O : Without yellow/green wire      Standards: HD 604 S1, IEC 60502-1, VDE 0276-604  
 R: Stranded Conductor      J : With yellow/green wire

**Technical Data**  
 Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

**Application**  
 Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

### Construction

- ① Solid or stranded copper conductor      ③ Thermoplastic filler
- ② XLPE insulation      ④ HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
2x1,5	10,0	150	1000	12,1	39	32
2x2,5	11,0	180	1000	7,41	51	42
2x4	12,0	230	1000	4,61	66	56
2x6	13,0	290	1000	3,08	82	71
2x10	15,0	430	1000	1,83	109	96
2x16	17,1	600	1000	1,15	115	125
2x25	21,5	950	1000	0,727	145	155
2x35	23,3	1200	1000	0,524	175	195
2x50	25,8	1500	1000	0,387	210	235
2x70	29,7	2100	1000	0,268	255	300
2x95	33,9	2800	1000	0,193	310	370
2x120	37,4	3500	1000	0,153	355	430
2x150	41,1	4300	1000	0,124	400	490
2x185	45,9	5350	1000	0,0991	455	570
2x240	51,5	6900	500	0,0754	530	680
2x300	56,6	8500	500	0,0601	605	785
2x400	64,0	10900	500	0,0470	690	860

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



# 0,6/1 kV halogen free, flame retardant, XLPE insulated, multi core cables with copper conductor



Code: YXZ1-U, YXZ1-R, N2XH-O, N2XH-J, CU/XLPE/LSZH

U : Solid Conductor      O : Without yellow/green wire      Standards: HD 604 S1, IEC 60502-1, VDE 0276-604  
 R : Stranded Conductor      J : With yellow/green wire

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plants, data processing centers, business centers where there is a risk of fire.

### Construction

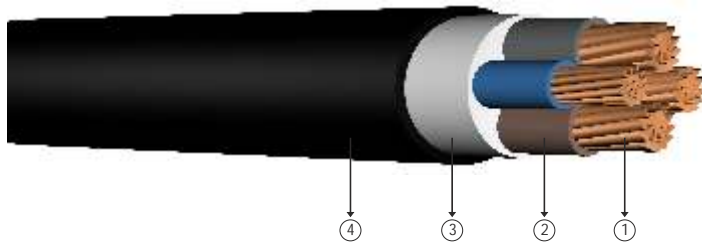
- ① Solid or stranded copper conductor    ② XLPE insulation    ③ Thermoplastic filler    ④ HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x1,5	11,0	150	1000	12,1	30	24
3x2,5	12,0	200	1000	7,41	40	32
3x4	13,0	250	1000	4,61	52	42
3x6	14,0	340	1000	3,08	64	53
3x10	15,5	500	1000	1,83	86	73
3x16	18,0	700	1000	1,15	111	96
3x25	22,0	1150	1000	0,727	143	130
3x35	25,0	1500	1000	0,524	173	160
3x50	27,0	1950	1000	0,387	205	195
3x70	31,5	2700	1000	0,268	252	247
3x95	35,5	3600	1000	0,193	303	305
3x120	39,5	4500	1000	0,153	346	355
3x150	43,5	5500	500	0,124	390	407
3x185	48,5	6800	500	0,0991	441	469
3x240	54,5	8900	500	0,0754	511	551
3x300	60,5	11000	250	0,0601	580	638
3x400	67,0	14100	250	0,0470	663	746

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



# 0,6/1 kV halogen free, flame retardant, XLPE insulated, multi core cables with copper conductor



Code: YXZ1-R, N2XH-O, N2XH-J, CU/XLPE/LSZH

R: Stranded Conductor  
 O : Without yellow/green wire  
 J : With yellow/green wire

Standards: HD 604 S1, IEC 60502-1, VDE 0276-604

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

### Construction

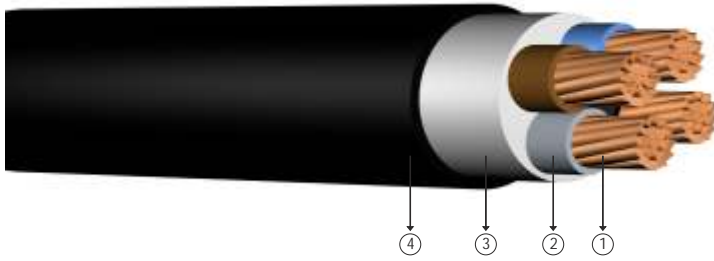
- 1 Stranded copper conductor
- 2 XLPE insulation
- 3 Thermoplastic filler
- 4 HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x16+10	19,0	850	1000	1,15	111	96
3x25+16	24,0	1350	1000	0,727	143	130
3x35+16	25,5	1650	1000	0,524	173	160
3x50+25	28,8	2200	1000	0,387	205	195
3x70+35	33,5	3100	1000	0,268	252	247
3x95+50	37,5	4100	1000	0,193	303	305
3x120+70	42,0	5200	500	0,153	346	355
3x150+70	45,9	6250	500	0,124	390	407
3x185+95	51,0	7800	500	0,0991	441	469
3x240+120	58,0	10100	500	0,0754	511	551
3x300+150	63,0	12500	250	0,0601	580	638
3x400+185	71,0	16000	250	0,0470	663	746

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



# 0,6/1 kV halogen free, flame retardant, XLPE insulated, multi core cables with copper conductor



Code: YXZ1-U, YXZ1-R, N2XH, CU/XLPE/LSZH

U: Solid Conductor      O : Without yellow/green wire      Standards: HD 604 S1, IEC 60502-1, VDE 0276-604  
 R: Stranded Conductor      J : With yellow/green wire

**Technical Data**  
 Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

**Application**  
 Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

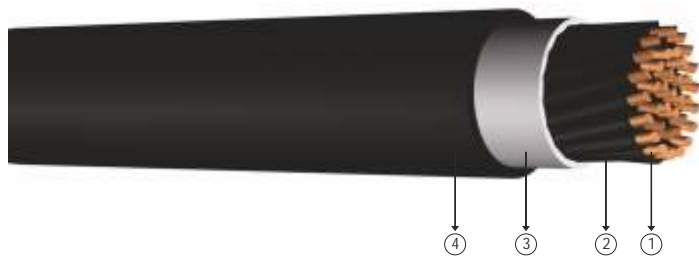
### Construction

- ① Solid or stranded copper conductor    ② XLPE insulation    ③ Thermoplastic filler    ④ HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
4x1,5	12,0	200	1000	12,1	30	24
4x2,5	13,0	250	1000	7,41	40	32
4x4	14,0	300	1000	4,61	52	42
4x6	15,5	400	1000	3,08	64	53
4x10	17,5	580	1000	1,83	86	73
4x16	20,0	850	1000	1,15	111	96
4x25	24,5	1300	1000	0,727	143	130
4x35	26,0	1700	1000	0,524	173	160
4x50	30,0	2300	1000	0,387	205	195
4x70	34,0	3200	1000	0,268	252	247
4x95	38,0	4250	1000	0,193	303	305
4x120	43,0	5400	500	0,153	346	355
4x150	48,0	7000	500	0,124	390	407
4x185	53,0	8800	500	0,0991	441	469
4x240	61,0	11400	250	0,0754	511	551
4x300	67,0	14000	250	0,0601	580	638
4x400	76,0	18200	250	0,0470	663	746

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV halogen free, flame retardant, XLPE insulated, control cable with copper conductor



Code: YXZ1-U, YXZ1-R, N2XH-O, N2XH-J, CU/XLPE/LSZH

U: Solid Conductor      O : Without yellow/green wire      Standards: HD 604 S1, IEC 60502-1  
 R: Stranded Conductor      J : With yellow/green wire

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage and fire.

### Construction

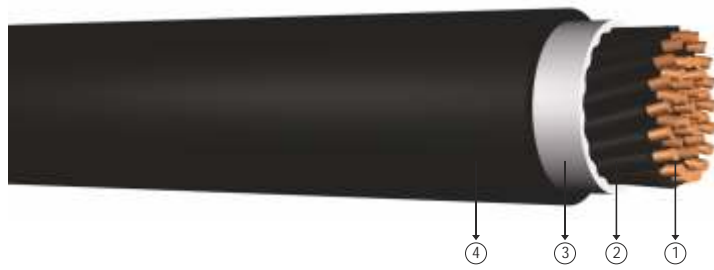
- ① Solid or stranded copper conductor    ② XLPE insulation    ③ Thermoplastic filler    ④ HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
5x1,5	12,0	220	1000	12,1	21,0	18,0
6x1,5	13,0	270	1000	12,1	19,5	16,8
7x1,5	13,2	290	1000	12,1	18,0	15,6
8x1,5	15,0	370	1000	12,1	16,5	14,4
10x1,5	15,5	390	1000	12,1	15,0	13,2
12x1,5	16,0	430	1000	12,1	14,3	12,6
14x1,5	17,0	480	1000	12,1	13,5	12,0
16x1,5	17,4	520	1000	12,1	12,8	11,4
19x1,5	18,0	590	1000	12,1	12,0	10,8
21x1,5	19,0	650	1000	12,1	11,3	10,2
24x1,5	21,0	770	1000	12,1	10,5	9,6
27x1,5	21,4	800	1000	12,1	10,2	9,4
30x1,5	22,0	900	1000	12,1	9,9	9,1
37x1,5	24,0	1050	1000	12,1	9,3	8,6
40x1,5	25,0	1150	1000	12,1	9,0	8,4
48x1,5	27,0	1350	1000	12,1	8,4	7,9
52x1,5	28,0	1450	1000	12,1	7,8	7,4
61x1,5	30,0	1650	1000	12,1	7,5	7,2

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



# 0,6/1 kV halogen free, flame retardant, XLPE insulated, control cable with copper conductor



Code: YXZ1-U, YXZ1-R, N2XH-O, N2XH-J, CU/XLPE/LSZH

U : Solid Conductor      O : Without yellow/green wire      Standards: TS HD 604 S1, TS IEC 60502-1, VDE 0276-627  
 R : Stranded Conductor      J : With yellow/green wire

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage and fire.

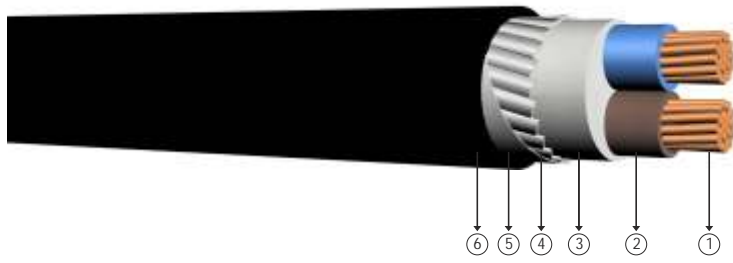
### Construction

- 1 Solid or stranded copper conductor
- 2 XLPE insulation
- 3 Thermoplastic filler
- 4 HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
5x2,5	13,0	270	1000	7,41	28,0	24,0
6x2,5	13,5	325	1000	7,41	26,0	22,4
7x2,5	14,0	340	1000	7,41	24,0	21,0
8x2,5	15,0	440	1000	7,41	22,0	19,0
10x2,5	16,5	500	1000	7,41	20,0	17,5
12x2,5	17,0	550	1000	7,41	19,0	16,5
14x2,5	17,5	630	1000	7,41	18,0	16,0
16x2,5	18,5	700	1000	7,41	16,5	15,0
19x2,5	19,5	790	1000	7,41	16,0	14,5
21x2,5	20,0	850	1000	7,41	15,0	13,5
24x2,5	23,0	1020	1000	7,41	14,0	13,0
27x2,5	24,0	1090	1000	7,41	13,5	12,5
30x2,5	25,0	1190	1000	7,41	13,0	12,0
37x2,5	26,0	1440	1000	7,41	12,5	11,5
40x2,5	28,0	1530	1000	7,41	12,0	11,0
48x2,5	30,0	1890	1000	7,41	11,0	10,5
52x2,5	32,0	2030	1000	7,41	10,5	10,0
61x2,5	33,0	2270	1000	7,41	10,0	9,5

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV halogen free, flame retardant, XLPE insulated, flat steel wire armoured multi core cables with copper conductor



Code: YXZ3Z1-R, N2XFGH-O, N2XFGH-J

R: Stranded Conductor      O : Without yellow/green wire      Standards: IEC 60502-1  
 J : With yellow/green wire

**Technical Data**  
 Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

**Application**  
 These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage and fire.

### Construction

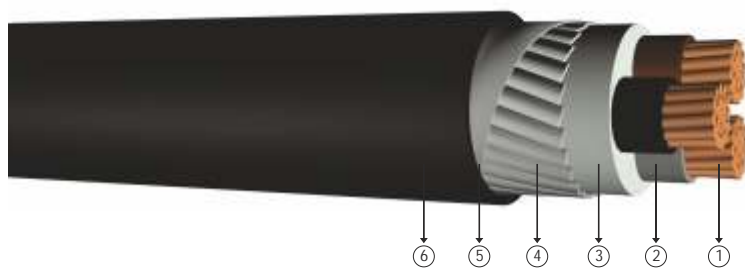
- 1 Stranded copper conductor
- 2 XLPE insulation
- 3 Thermoplastic filler
- 4 Galvanized flat steel wire
- 5 Galvanized steel binding tape
- 6 HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
2x25	24,5	1410	1000	0,727	145	155
2x35	26,3	1700	1000	0,524	175	195
2x50	28,8	2100	1000	0,387	210	235
2x70	32,9	2750	1000	0,268	255	300
2x95	36,9	3500	1000	0,193	310	370
2x120	40,4	4300	500	0,153	355	430
2x150	44,3	5150	500	0,124	400	490
2x185	49,1	6300	500	0,0991	455	570
2x240	54,7	7950	250	0,0754	530	680
2x300	59,6	9550	250	0,0601	605	785
2x400	67,2	12150	250	0,0470	690	860

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV halogen free, flame retardant, XLPE insulated, flat steel wire armoured multi core cables with copper conductor



Code: YXZ3Z1-R, N2XFGH-O, N2XFGH-J

R: Stranded Conductor

O : Without yellow/green wire

J : With yellow/green wire

Standards: IEC 60502-1

### Technical Data

Max. operating temperature	: 90°C
Max. short circuit temperature	: 250°C (max. 5 sec.)
Rated voltage	: 0,6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage and fire.

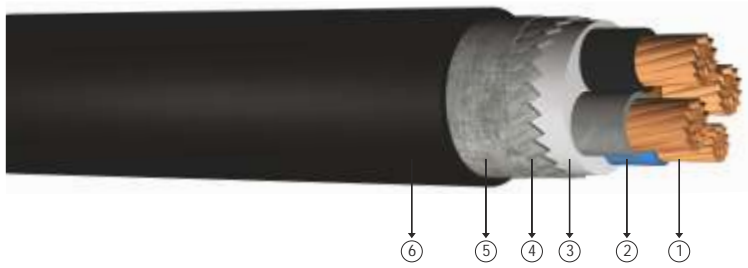
### Construction

- ① Stranded copper conductors
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ Galvanized flat steel wire
- ⑤ Galvanized steel binding tape
- ⑥ HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x25	25,0	1600	1000	0,727	143	130
3x35	27,0	1950	1000	0,524	173	160
3x50	30,0	2550	1000	0,387	205	195
3x70	34,5	3450	1000	0,268	252	247
3x95	38,5	4400	1000	0,193	303	305
3x120	42,5	5400	500	0,153	346	355
3x150	47,0	6600	500	0,124	390	407
3x185	51,5	8000	500	0,0991	441	469
3x240	58,5	10200	250	0,0754	511	551
3x300	65,5	12500	250	0,0601	580	638
3x400	74,0	16300	250	0,0470	663	746

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

0,6/1 kV halogen free, flame retardant, XLPE insulated,  
flat steel wire armoured multi core cables with copper conductor



Code: YXZ3Z1-R, N2XFGH-O, N2XFGH-J

R: Stranded Conductor      O : Without yellow/green wire      Standards: IEC 60502-1  
J : With yellow/green wire

**Technical Data**  
 Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

**Application**  
 These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage and fire.

**Construction**

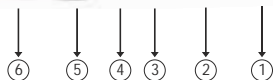
- 1 Stranded copper conductors
- 2 XLPE insulation
- 3 Thermoplastic filler
- 4 Galvanized flat steel wire
- 5 Galvanized steel binding tape
- 6 HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x25+16	26,0	1800	1000	0,727	143	130
3x35+16	27,5	2150	1000	0,524	173	160
3x50+25	31,5	2800	1000	0,387	205	195
3x70+35	35,5	3800	1000	0,268	252	247
3x95+50	40,0	4900	500	0,193	303	305
3x120+70	44,5	6100	500	0,153	346	355
3x150+70	48,5	7250	500	0,124	390	407
3x185+95	53,5	8900	500	0,0991	441	469
3x240+120	60,5	11350	250	0,0754	511	551
3x300+150	67,5	13900	250	0,0601	580	638
3x400+185	75,5	18000	250	0,0470	663	746

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV halogen free, flame retardant, XLPE insulated, flat steel wire armoured multi core cables with copper conductor



Code: YXZ3Z1-R, N2XFGH-O, N2XFGH-J

R: Stranded Conductor

O : Without yellow/green wire

J : With yellow/green wire

Standards: IEC 60502-1

### Technical Data

Max. operating temperature	: 90°C
Max. short circuit temperature	: 250°C (max. 5 sec.)
Rated voltage	: 0,6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage and fire.

### Construction

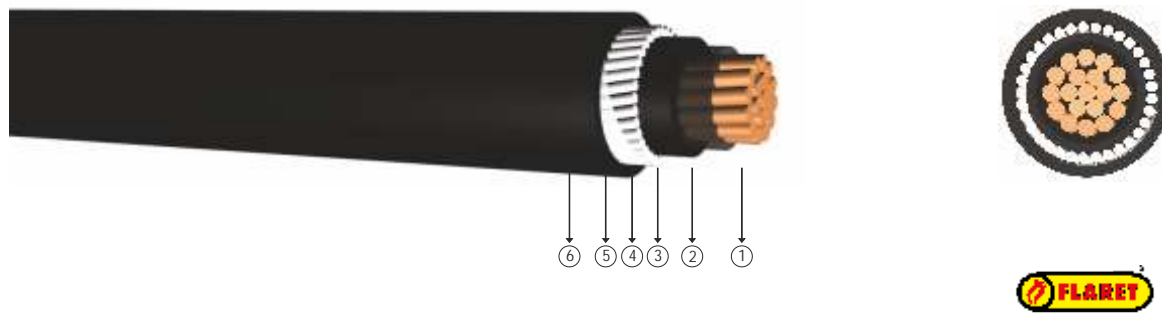
- ① Stranded copper conductors
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ Galvanized flat steel wire
- ⑤ Galvanized steel binding tape
- ⑥ HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
4x16	23,0	1350	1000	1,15	111	96
4x25	27,0	1900	1000	0,727	143	130
4x35	29,0	2400	1000	0,524	173	160
4x50	33,0	3150	1000	0,387	205	195
4x70	38,0	4300	1000	0,268	252	247
4x95	42,0	5500	500	0,193	303	305
4x120	47,0	6850	500	0,153	346	355
4x150	51,5	8250	500	0,124	390	407
4x185	57,0	10100	250	0,0991	441	469
4x240	64,5	12900	250	0,0754	511	551
4x300	72,5	15900	250	0,0601	580	638
4x400	82,5	20800	250	0,0470	663	746

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



0,6/1 kV halogen free, flame retardant, XLPE insulated round, aluminium wire armoured, single core cables with copper conductor



Code: YXYZ1-R, N2XR(A)H-O, N2XR(A)H-J, CU/XLPE/LSZH/AWA/LSZH

R: Stranded Conductor      O : Without yellow/green wire      Standards: IEC 60502-1  
 J : With yellow/green wire

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage and fire.

Construction

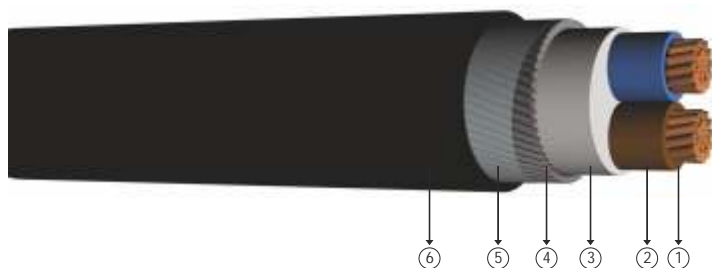
- ① Stranded copper conductors      ③ HFFR inner sheath      ⑤ PP tape
- ② XLPE insulation      ④ Round aluminium wire      ⑥ HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C		In air at 30°C	
					***	***	***	***
1x25	15,5	500	1000	0,727	179	149	173	139
1x35	17,5	700	1000	0,524	213	178	212	170
1x50	19,0	900	1000	0,387	251	211	258	208
1x70	20,5	1150	1000	0,268	307	259	328	265
1x95	23,0	1600	1000	0,193	366	310	404	326
1x120	25,0	1900	1000	0,153	416	352	471	381
1x150	26,5	2200	1000	0,124	465	396	541	438
1x185	28,5	2600	1000	0,0991	526	449	626	507
1x240	31,5	3200	1000	0,0754	610	521	749	606
1x300	36,0	4100	1000	0,0601	689	587	864	697
1x400	40,5	5100	500	0,0470	788	669	1018	816
1x500	45,5	6350	500	0,0366	889	748	1173	933
1x630	50,0	8800	500	0,0283	980	843	1315	1083

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\*\* : Trefoil formation  
 Number of system : 1



## 0,6/1 kV halogen free, flame retardant, XLPE insulated, round steel wire armoured, single core cables with copper conductor



Code: YXY2Z1-U, YXZ2Z1-R, N2XRH-O, N2XRH-J, CU/XLPE/SWA/LSZH

U : Solid Conductor      O : Without yellow/green wire      Standards: IEC 60502-1  
 R : Stranded Conductor      J : With yellow/green wire

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage and fire.

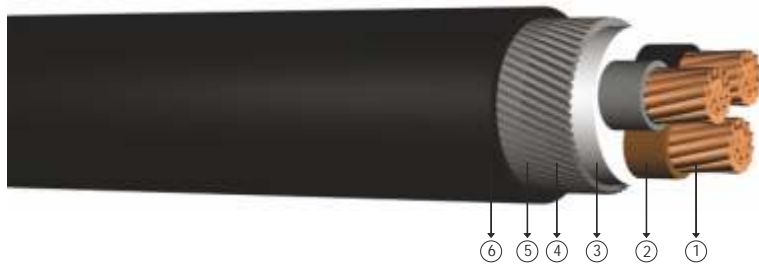
### Construction

- 1 Solid or stranded copper conductor
- 2 XLPE insulation
- 3 Thermoplastic filler
- 4 Galvanized round steel wire
- 5 PP tape
- 6 HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
2x1,5	14,0	350	1000	12,1	39	32
2x2,5	15,0	390	1000	7,41	51	42
2x4	16,0	450	1000	4,61	66	56
2x6	17,0	540	1000	3,08	82	71
2x10	20,0	850	1000	1,83	109	96
2x16	22,0	1070	1000	1,15	115	125
2x25	26,0	1600	1000	0,727	145	155
2x35	28,0	1900	1000	0,524	175	195
2x50	30,0	2300	1000	0,387	210	235
2x70	34,0	3000	1000	0,268	255	300
2x95	39,0	4000	1000	0,193	310	370
2x120	43,0	4750	500	0,153	355	430
2x150	46,0	5800	500	0,124	400	490
2x185	53,0	7500	500	0,0991	455	570
2x240	58,0	9000	500	0,0754	530	680
2x300	63,0	11000	250	0,0601	605	785

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

0,6/1 kV halogen free, flame retardant, XLPE insulated, round steel wire armoured, single core cables with copper conductor



Code: YXYZ1-U, YXZ21-R, N2XRH-O, N2XRH-J, CU/XLPE/SWA/LSZH

U: Solid Conductor      O : Without yellow/green wire      Standards: IEC 60502-1  
 R: Stranded Conductor      J : With yellow/green wire

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage and fire.

Construction

- ① Solid or stranded copper conductor      ③ Thermoplastic filler      ⑤ PP tape
- ② XLPE insulation      ④ Galvanized round steel wire      ⑥ HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x1,5	13,5	370	1000	12,1	30	24
3x2,5	14,0	430	1000	7,41	40	32
3x4	15,5	510	1000	4,61	52	42
3x6	16,5	600	1000	3,08	64	53
3x10	20,0	980	1000	1,83	86	73
3x16	22,0	1260	1000	1,15	111	96
3x25	26,0	1700	1000	0,727	143	130
3x35	28,0	2100	1000	0,524	173	160
3x50	31,0	2700	1000	0,387	205	195
3x70	36,5	3800	1000	0,268	252	247
3x95	40,5	4700	1000	0,193	303	305
3x120	44,5	5700	500	0,153	346	355
3x150	50,0	7300	500	0,124	390	407
3x185	55,0	8800	500	0,0991	441	469
3x240	61,5	11000	250	0,0754	511	551

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



# 0,6/1 kV halogen free, flame retardant, XLPE insulated, round steel wire armoured, single core cables with copper conductor



Code: YXY2Z1-R, N2XRH-O, N2XRH-J, CU/XLPE/SWA/LSZH

R: Stranded Conductor      O : Without yellow/green wire      Standards: IEC 60502-1  
 J : With yellow/green wire

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage and fire.

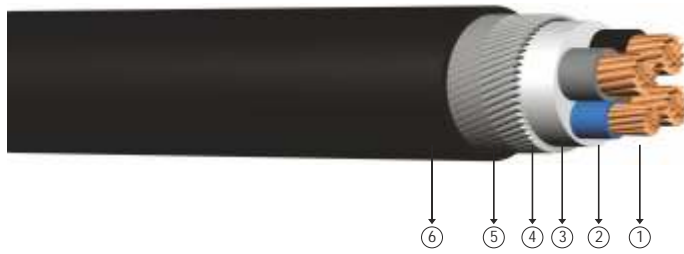
### Construction

- ① Stranded copper conductors      ③ Thermoplastic filler      ⑤ PP tape
- ② XLPE insulation      ④ Galvanized round steel wire      ⑥ HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x16+10	23,0	1400	1000	1,15	111	96
3x25+16	27,0	2100	1000	0,727	143	130
3x35+16	29,0	2400	1000	0,524	173	160
3x50+25	32,5	3100	1000	0,387	205	195
3x70+35	38,0	4400	1000	0,268	252	247
3x95+50	42,0	5600	500	0,193	303	305
3x120+70	46,5	6900	500	0,153	346	355
3x150+70	51,5	8500	500	0,124	390	407
3x185+95	56,5	10300	500	0,0991	441	469
3x240+120	63,5	13000	250	0,0754	511	551
3x300+150	70,5	15500	250	0,0601	580	638
3x400+185	80,0	19500	250	0,0470	663	746

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

0,6/1 kV halogen free, flame retardant, XLPE insulated, round steel wire armoured, single core cables with copper conductor



Code: YXZ2Z1-U, YXZ2Z1-R, N2XRH-O, N2XRH-J, CU/XLPE/SWA/LSZH

U: Solid Conductor      O : Without yellow/green wire      Standards: IEC 60502-1  
 R: Stranded Conductor      J : With yellow/green wire

**Technical Data**  
 Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

**Application**  
 These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage and fire.

**Construction**

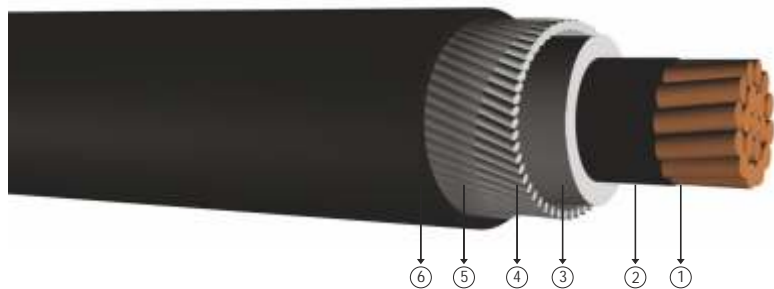
- 1 Solid or stranded copper conductor      3 Thermoplastic filler      5 PP tape
- 2 XLPE insulation      4 Galvanized round steel wire      6 HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
4x1,5	14,0	400	1000	12,1	30	24
4x2,5	15,0	470	1000	7,41	40	32
4x4	16,0	580	1000	4,61	52	42
4x6	18,5	830	1000	3,08	64	53
4x10	21,0	1100	1000	1,83	86	73
4x16	24,0	1600	1000	1,15	111	96
4x25	28,0	2200	1000	0,727	143	130
4x35	30,5	2700	1000	0,524	173	160
4x50	34,0	3350	1000	0,387	205	195
4x70	40,0	4800	1000	0,268	252	247
4x95	44,0	6100	1000	0,193	303	305
4x120	50,5	7800	500	0,153	346	355
4x150	55,0	9300	500	0,124	390	407
4x185	60,5	11000	250	0,0991	441	469
4x240	68,0	14000	250	0,0754	511	551
4x300	76,0	17000	250	0,0601	580	638
4x400	87,0	23000	250	0,0470	663	746

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV XLPE Insulated, round aluminium wire armoured, single core cables with copper conductor



Code: 6941B, YXZ1Y2Z1-R, CU/XLPE/LSZH/AWA/LSZH, N2XHR(A)H-O, N2XHR(A)H-J

R: Stranded Conductor      O : Without yellow/green wire      Standards: IEC 60502-1, BS 6724  
 J : With yellow/green wire

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

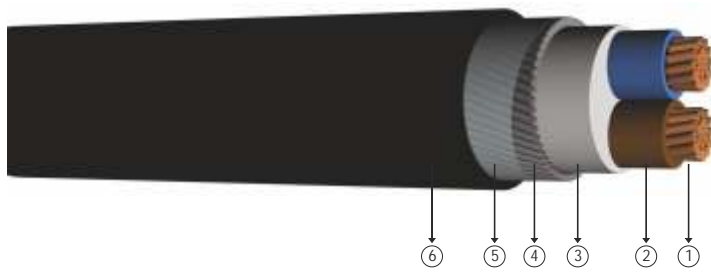
### Construction

- ① Stranded copper conductor
- ② XLPE insulation
- ③ Thermoplastic inner sheath
- ④ Round aluminium wire
- ⑤ PP tape
- ⑥ HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
1x50	16,1	632	1000	0,387	251	258
1x70	18,5	881	1000	0,268	307	328
1x95	20,3	1151	1000	0,193	366	404
1x120	22,1	1408	1000	0,153	416	471
1x150	25,0	1774	1000	0,124	465	541
1x185	27,2	2165	1000	0,0991	526	626
1x240	30,0	2744	1000	0,0754	610	749
1x300	32,4	3367	1000	0,0601	689	864
1x400	37,0	4357	1000	0,0470	788	1018
1x500	40,6	5430	500	0,0366	889	1173
1x630	44,9	6818	500	0,0283	980	1315

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV XLPE Insulated, round steel wire armoured, multi-core cables with copper conductor



Code: 6942B, YXZ1Z2Z1-R, CU/XLPE/LSZH/SWA/LSZH, N2XHRH-O, N2XHRH-J

R: Stranded Conductor      O : Without yellow/green wire      Standards: IEC 60502-1, BS 6724  
 J : With yellow/green wire

**Technical Data**  
 Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
    : Cable outer diameter

**Application**  
 These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

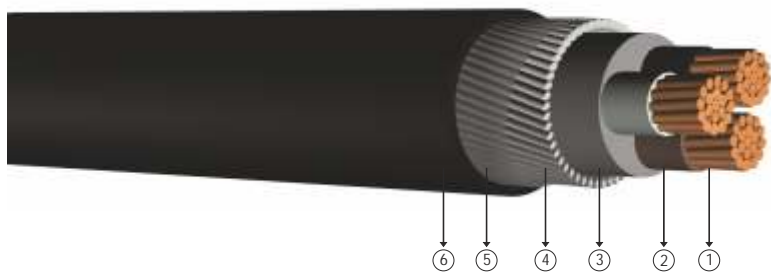
- 1 Stranded copper conductor
- 2 XLPE insulation
- 3 Thermoplastic inner sheath
- 4 Galvanized round steel wire
- 5 PP tape
- 6 HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
2x16	19,1	883	1000	1,15	115	125
2x25	22,5	1233	1000	0,727	145	155
2x35	25,8	1689	1000	0,524	175	195
2x50	28,8	2114	1000	0,387	210	235
2x70	33,6	3003	1000	0,268	255	300
2x95	37,1	3762	1000	0,193	310	370
2x120	40,7	4541	1000	0,153	355	430

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV XLPE Insulated, round steel wire armoured, multi-core cables with copper conductor



Code: 6943B, YXZ1Z2Z1-R, CU/XLPE/LSZH/SWA/LSZH, N2XHRH-O, N2XHRH-J

R: Stranded Conductor      O : Without yellow/green wire      Standards: IEC 60502-1, BS 6724  
 J : With yellow/green wire

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

- 1 Stranded copper conductor
- 2 XLPE insulation
- 3 Thermoplastic inner sheath
- 4 Galvanized round steel wire
- 5 PP tape
- 6 HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x16	20,3	1044	1000	1,15	111	96
3x25	25,0	1639	1000	0,727	143	130
3x35	27,4	2018	1000	0,524	173	160
3x50	30,4	2550	1000	0,387	205	195
3x70	35,5	3612	1000	0,268	252	247
3x95	39,8	4664	1000	0,193	303	305
3x120	44,9	6002	500	0,153	346	355

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



# 0,6/1 kV XLPE Insulated, round steel wire armoured, multi-core cables with copper conductor



Code: 6944B, YXZ1Z2Z1-R, CU/XLPE/LSZH/SWA/LSZH, N2XHRH-O, N2XHRH-J

R: Stranded Conductor      O : Without yellow/green wire      Standards: IEC 60502-1, BS 6724  
 J : With yellow/green wire

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

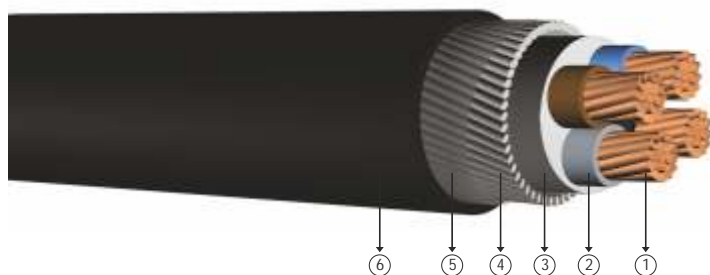
- 1 Stranded copper conductor
- 2 XLPE insulation
- 3 Thermoplastic inner sheath
- 4 Galvanized round steel wire
- 5 PP tape
- 6 HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
4x16	21,9	1260	1000	1,15	111	96
4x25	27,1	1964	1000	0,727	143	130
4x35	29,7	2453	1000	0,524	173	160
4x50	34,4	3383	1000	0,387	205	195
4x70	38,9	4456	1000	0,268	252	247
4x95	44,5	6117	500	0,193	303	305
4x120	49,0	7398	500	0,153	346	355

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV XLPE Insulated, round steel wire armoured, multi-core cables with copper conductor



Code: 6945B, YXZ1Z2Z1-R, CU/XLPE/LSZH/SWA/LSZH, N2XHRH-O, N2XHRH-J

R: Stranded Conductor      O : Without yellow/green wire      Standards: IEC 60502-1, BS 6724  
 J : With yellow/green wire

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

- ① Stranded copper conductor
- ② XLPE insulation
- ③ Thermoplastic inner sheath
- ④ Galvanized round steel wire
- ⑤ PP tape
- ⑥ HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
5x16	24,9	1654	1000	1,15	111	96
5x25	29,5	2333	1000	0,727	143	130
5x35	32,4	2920	1000	0,524	173	160
5x50	37,3	4011	1000	0,387	205	195
5x70	42,3	5327	500	0,268	252	247

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV XLPE Insulated, round steel wire armoured, control cables with copper conductor



Code: 6947B, 6940/12B, 6940/19B, 6940/27B, 6940/37B, YXZ1Z2Z1-R, CU/XLPE/LSZH/SWA/LSZH AUX, N2XHRH-O, N2XHRH-J

R: Stranded Conductor      O : Without yellow/green wire      Standards: IEC 60502-1, BS 6724  
 J : With yellow/green wire

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

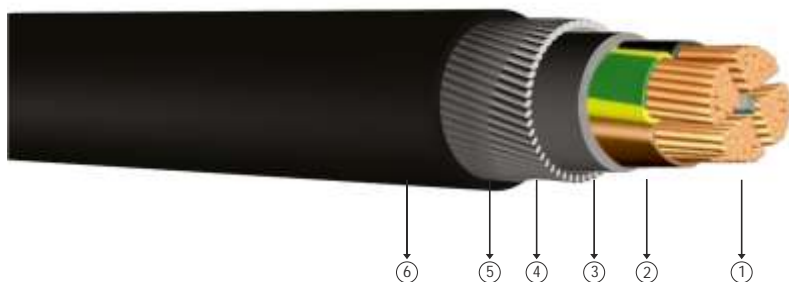
- 1 Stranded copper conductor
- 2 XLPE insulation
- 3 Thermoplastic inner sheath
- 4 Galvanized round steel wire
- 5 PP tape
- 6 HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
7x1,5	14,0	408	1000	12,1	18	15,6
12x1,5	18,0	702	1000	12,1	13,5	12
19x1,5	20,5	911	1000	12,1	12	10,8
27x1,5	24,9	1340	1000	12,1	9	8,4
37x1,5	27,2	1631	1000	12,1	9	8,4
7x2,5	15,8	535	1000	7,41	24	20,8
12x2,5	20,7	936	1000	7,41	18	16
19x2,5	24,8	1391	1000	7,41	16	14,4
27x2,5	28,8	1836	1000	7,41	12	11,2
37x2,5	31,7	2251	1000	7,41	12	11,2
7x4	18,2	784	1000	4,61	31,2	27,3
12x4	24,0	1354	1000	4,61	23,4	21
19x4	27,4	1808	1000	4,61	20,8	18,9
27x4	32,2	2410	1000	4,61	15,6	14,7
37x4	36,9	3289	1000	4,61	15,6	14,7

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV XLPE Insulated, round steel wire armoured, sector shaped, multi-core cables with copper conductor



Code: 6942B, 6943B, CU/XLPE/LSZH/SWA/LSZH, N2XHRH-O, N2XHRH-J

O : Without yellow/green wire

J : With yellow/green wire

Standards: IEC 60502-1, BS 6724

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

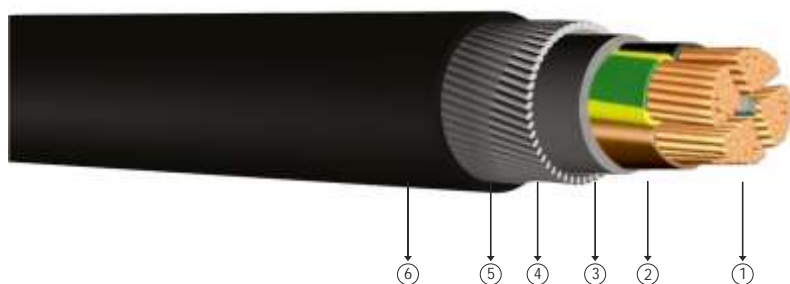
### Construction

- 1 Sector shaped copper conductor
- 2 XLPE insulation
- 3 Thermoplastic inner sheath
- 4 Galvanized round steel wire
- 5 PP tape
- 6 HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
2x25	18,8	953	1000	0,727	145	155
2x35	21,5	1320	1000	0,524	175	195
2x50	23,6	1641	1000	0,387	210	235
2x70	26,3	2133	1000	0,268	255	300
2x95	30,1	2939	1000	0,193	310	370
2x120	32,9	3544	1000	0,153	355	430
2x150	35,4	4192	1000	0,124	400	490
2x185	40,2	5391	500	0,0991	455	570
2x240	44,4	6719	500	0,0754	530	680
2x300	48,1	8145	500	0,0601	605	785
2x400	53,1	10119	250	0,0470	690	860
3x25	23,4	1459	1000	0,727	143	130
3x35	24,8	1772	1000	0,524	173	160
3x50	27,2	2222	1000	0,387	205	195
3x70	30,8	2954	1000	0,268	252	247
3x95	35,2	4069	1000	0,193	303	305
3x120	38,3	4893	1000	0,153	346	355

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV XLPE Insulated, round steel wire armoured, sector shaped, multi-core cables with copper conductor



Code: 6943B, 6944B, CU/XLPE/LSZH/SWA/LSZH, N2XHRH-O, N2XHRH-J

O : Without yellow/green wire  
J : With yellow/green wire

Standards: EC 60502-1, BS 6724

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

### Construction

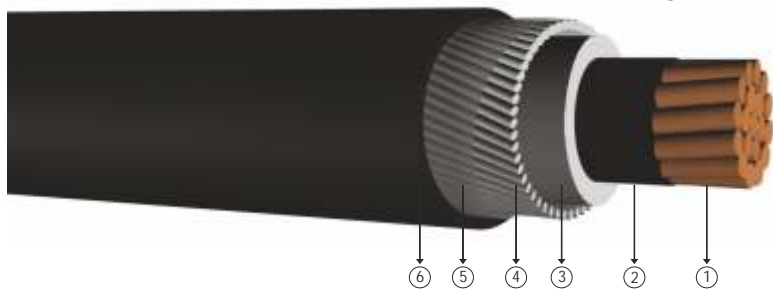
- 1 Sector Shaped copper conductor
- 2 XLPE insulation
- 3 Thermoplastic inner sheath
- 4 Galvanized round steel wire
- 5 PP tape
- 6 HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x150	43,5	6264	500	0,124	390	407
3x185	47,3	7539	500	0,0991	441	469
3x240	52,2	9423	500	0,0754	511	551
3x300	56,8	11485	250	0,0601	580	638
3x400	63,5	14322	250	0,0470	663	746
4x25	27,0	1842	1000	0,727	143	130
4x35	28,7	2246	1000	0,524	173	160
4x50	31,7	2848	1000	0,387	205	195
4x70	37,2	4070	1000	0,268	252	247
4x95	41,0	5225	500	0,193	303	305
4x120	46,2	6716	500	0,153	346	356
4x150	50,1	7998	500	0,124	390	407
4x185	54,7	9696	500	0,0991	441	469
4x240	60,8	12258	250	0,0754	511	551
4x300	65,8	14884	250	0,0601	580	638
4x400	76,1	19554	250	0,0470	663	746

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



1,8/3 kV or 1,9/3,3 kV XLPE Insulated,  
round aluminium wire armoured,  
single core cables with copper conductor



Code: 61941B, YXZ1Y2Z1-R, CU/XLPE/LSZH/AWA/LSZH

R: Stranded Conductor

Standards: IEC 60502-1, BS 6724

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 1,8/3 kV  
 : 1,9/3,3 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

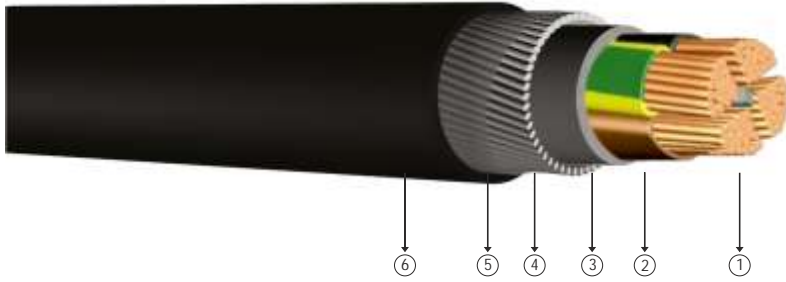
Construction

- 1 Stranded copper conductor
- 2 XLPE insulation
- 3 Thermoplastic inner sheath
- 4 Round aluminium wire
- 5 PP tape
- 6 HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
1x50	19,0	739	1000	0,387	251	258
1x70	20,5	955	1000	0,268	307	328
1x95	22,2	1221	1000	0,193	366	404
1x120	25,0	1557	1000	0,153	416	471
1x150	26,2	1830	1000	0,124	465	541
1x185	28,1	2203	1000	0,0991	526	626
1x240	30,6	2777	1000	0,0754	610	749
1x300	32,9	3392	1000	0,0601	689	864
1x400	37,0	4358	1000	0,0470	788	1018
1x500	40,7	5431	500	0,0366	889	1173
1x630	44,9	6818	500	0,0283	980	1315

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

1,8/3 kV or 1,9/3,3 kV XLPE Insulated,  
round steel wire armoured,  
multi-core cables with copper conductor



Code: 61943B, YXZ1Z2Z1-R, CU/XLPE/LSZH/SWA/LSZH, N2XHRH-O, N2XHRH-J

R: Stranded Conductor    O : Without yellow/green wire    Standards: IEC 60502-1, BS 6724  
SM: Sector Shaped Conductor    J : With yellow/green wire

**Technical Data**  
Max. operating temperature : 90°C  
Max. short circuit temperature : 250°C (max. 5 sec.)  
Rated voltage : 1,8/3 kV  
Rated voltage : 1,9/3,3 kV  
Min. bending radius : 15 x D  
D : Cable outer diameter

**Application**  
These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

**Construction**

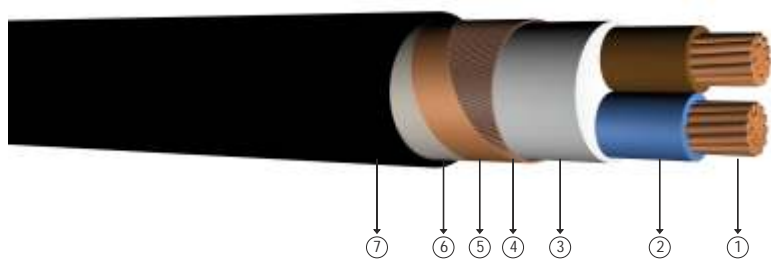
- ① Stranded or sectorshaped copper conductor
- ② XLPE insulation
- ③ Thermoplastic inner sheath
- ④ Galvanized round steel wire
- ⑤ PP tape
- ⑥ HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x25	28,0	1733	1000	0,727	143	130
3x35	24,9	1882	1000	0,524	173	160
3x50	28,7	2565	1000	0,387	205	195
3x70	32,4	3312	1000	0,268	252	247
3x95	35,4	4203	1000	0,193	303	305
3x120	39,8	5383	500	0,153	346	355
3x150	43,7	6379	500	0,124	390	407
3x185	47,5	7630	500	0,0991	441	469
3x240	52,6	9574	500	0,0754	511	551
3x300	56,8	11529	250	0,0601	580	638
3x400	63,5	14322	250	0,0470	663	746

Note : Current carrying capacities are valid under the following conditions:  
In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
In air : 30°C, load factor 1,0  
Number of system : 1



0,6/1 kV halogen free, flame retardant, XLPE insulated, concentric wire screened, multi core cables, with copper conductor



Code: YXCZ1-U, YXCZ1-R, N2XCH-O, N2XCH-J

U : Solid Conductor      O : Without yellow/green wire      Standards: HD 604 S1, VDE 0276-604, IEC 60502-1  
 R : Stranded Conductor      J : With yellow/green wire

**Technical Data**  
 Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

**Application**  
 These cables have a low dielectric loss, Indoor installations, in cable ducts, outdoor and underground for power stations, industrial plants and switching stations as well as local supply systems if increased protection is necessary. In case of mechanical damage the screen prevents any damage due to power leak to the surrounding area.

**Construction**

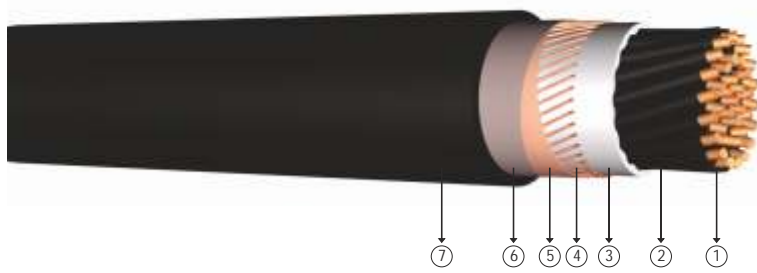
- ① Solid or stranded copper conductor    ③ Thermoplastic filler    ⑤ Copper tape as binder    ⑦ HFFR outer sheath
- ② XLPE insulation    ④ Concentric copper wire    ⑥ PP tape

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
2x1,5/1,5	12,5	240	1000	12,1	39	32
2x2,5/2,5	13,0	270	1000	7,41	51	42
2x4/4	14,5	300	1000	4,61	66	56
2x6/6	15,5	400	1000	3,08	82	71
2x10/10	17,0	500	1000	1,83	109	96
2x16/16	19,0	750	1000	1,15	115	125
3x1,5/1,5	13,0	200	1000	12,1	30	24
3x2,5/2,5	13,5	300	1000	7,41	40	32
3x4/4	15,0	390	1000	4,61	52	42
3x6/6	16,0	500	1000	3,08	64	53
3x10/10	18,5	750	1000	1,83	86	73
3x16/16	20,5	1000	1000	1,15	111	96
3x25/16	24,0	1350	1000	0,727	143	130
3x35/16	26,0	1670	1000	0,524	173	160
3x50/25	29,0	2200	1000	0,387	205	195

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



0,6/1 kV halogen free, flame retardant, XLPE insulated, concentric wire screened, control cables, with copper conductor



Code: YXCZ1-U, YXCZ1-R, N2XCH-O, N2XCH-J

U : Solid Conductor      O : Without yellow/green wire      Standards: HD 604 S1, IEC 60502-1, VDE 0276-627  
 R : Stranded Conductor      J : With yellow/green wire

**Technical Data**  
 Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

**Application**  
 These cables have a low dielectric loss, Indoor installations, in cable ducts, outdoor and underground for power stations, industrial plants and switching stations as well as local supply systems if increased protection is necessary. In case of mechanical damage the screen prevents any damage due to power leak to the surrounding area.

**Construction**

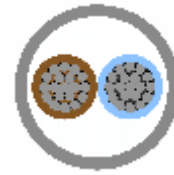
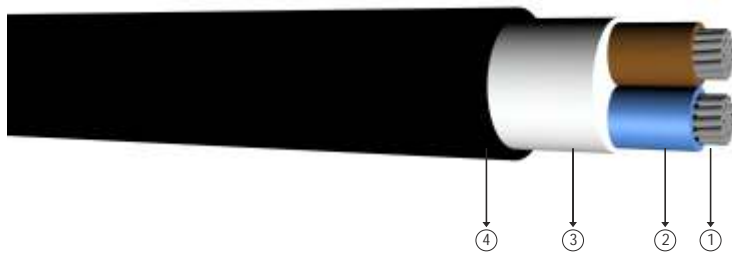
- ① Solid or stranded copper conductor    ③ Thermoplastic filler    ⑤ Copper tape as binder    ⑦ HFFR outer sheath
- ② XLPE insulation    ④ Concentric copper screen    ⑥ PP tape

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
7x1,5/2,5	15,0	350	1000	12,1	18,0	15,5
10x1,5/2,5	17,0	470	1000	12,1	15,0	13,0
12x1,5/2,5	19,0	520	1000	12,1	14,0	12,5
16x1,5/4	21,0	670	1000	12,1	12,8	11,4
21x1,5/6	22,0	750	1000	12,1	11,3	10,2
24x1,5/6	24,0	850	1000	12,1	10,5	9,5
27x1,5/6	24,5	950	1000	12,1	10,0	9,0
30x1,5/6	25,0	1000	1000	12,1	10,0	9,0
7x2,5/2,5	17,0	450	1000	7,41	24,0	21,0
10x2,5/2,5	19,0	600	1000	7,41	20,0	17,5
12x2,5/2,5	21,0	700	1000	7,41	19,0	17,0
16x2,5/4	23,0	850	1000	7,41	16,5	15,0
21x2,5/6	25,0	1080	1000	7,41	15,0	13,5
24x2,5/6	26,0	1170	1000	7,41	14,0	13,0
27x2,5/6	27,0	1250	1000	7,41	13,5	12,5
30x2,5/6	28,0	1380	1000	7,41	13,0	12,0

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



0,6/1 kV halogen free, flame retardant, XLPE insulated, multi core cables with aluminium conductor



Code: YAXZ1-R, NA2XH-O, NA2XH-J

R: Stranded Conductor      O : Without yellow/green wire      Standards: HD 604 S1, IEC 60502-1, VDE 0276-604  
 J : With yellow/green wire

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

Construction

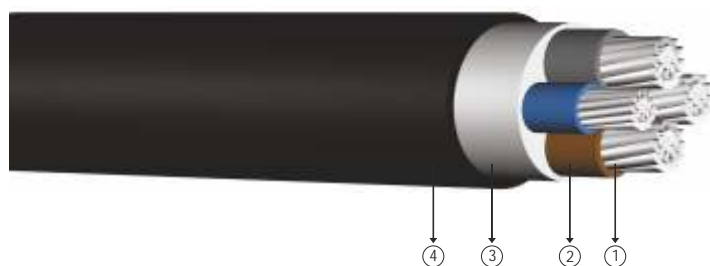
- ① Stranded aluminium conductor      ③ Thermoplastic filler
- ② XLPE insulation      ④ HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
2x25	21,5	600	1000	1,20	110	115
2x35	23,3	750	1000	0,868	130	140
2x50	25,8	950	1000	0,641	155	175
2x70	29,7	1250	1000	0,443	195	220
2x95	33,9	1650	1000	0,320	235	270

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



# 0,6/1 kV halogen free, flame retardant, XLPE insulated, multi core cables with aluminium conductor



Code: YAXZ1-R, NA2XH-O, NA2XH-J

R: Stranded Conductor      O : Without yellow/green wire      Standards: HD 604 S1, IEC 60502-1, VDE 0276-604  
 J : With yellow/green wire

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

### Construction

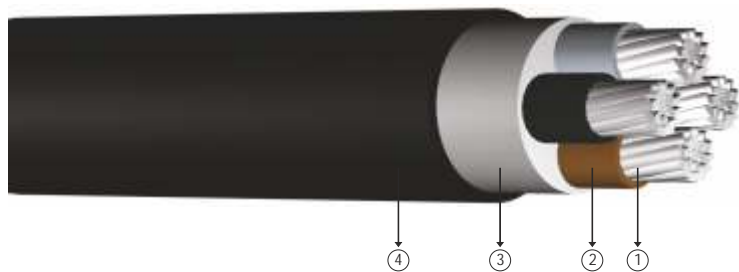
- ① Stranded aluminium conductor
- ② XLPE insulation
- ③ Thermoplastic filler
- ④ HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x25+16	24,0	750	1000	1,20	111	100
3x35+16	26,0	900	1000	0,868	132	122
3x50+25	29,0	1200	1000	0,641	157	147
3x70+35	33,0	1600	1000	0,443	195	189
3x95+50	38,0	2100	1000	0,320	233	232
3x120+70	42,0	2600	1000	0,253	266	270
3x150+70	46,0	3100	1000	0,206	299	308
3x185+95	51,0	3850	1000	0,164	340	357
3x240+120	58,0	4900	500	0,125	401	435
3x300+150	63,0	5950	500	0,100	455	501
3x400+185	71,0	7500	500	0,0778	526	592

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 0,6/1 kV halogen free, flame retardant, XLPE insulated, multi core cables with aluminium conductor



Code: YAXZ1-R, NA2XH-O, NA2XH-J

R: Stranded Conductor      O : Without yellow/green wire  
 J : With yellow/green wire      Standards: HD 604 S1, IEC 60502-1, VDE 0276-604

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

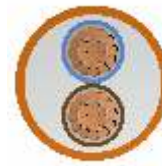
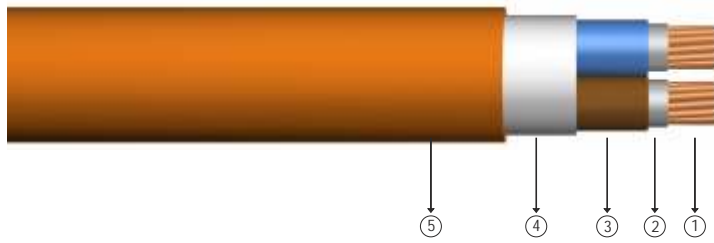
### Construction

- ① Stranded aluminium conductor      ③ Thermoplastic filler
- ② XLPE insulation      ④ HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
4x25	25,0	800	1000	1,20	111	100
4x35	27,0	1000	1000	0,868	132	122
4x50	30,0	1250	1000	0,641	157	147
4x70	36,0	1750	1000	0,443	195	189
4x95	40,0	2250	1000	0,320	233	232
4x120	45,0	2850	1000	0,253	266	270
4x150	49,0	3400	1000	0,206	299	308
4x185	55,0	4250	1000	0,164	340	357
4x240	62,0	5450	500	0,125	401	435
4x300	67,0	6600	500	0,100	455	501
4x400	77,0	8500	500	0,0778	526	592

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 300/500 V halogen free, fire resistant, XLPE insulated, multi core cables with copper conductor FE 180



Code: NHXMH-O FE 180, NHXMH-J FE 180 (052XZ1-U, 052XZ1-R)

U: Solid Conductor      O : Without yellow/green wire      Standards: VDE 0250 - 214, TSE K 328  
 R: Stranded Conductor      J : With yellow/green wire

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 300/500 V

### Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire. In case of fire, it is guaranteed circuit integrity at least 180 minutes.

### Construction

- ① Solid or stranded copper conductor
- ② Mica tape
- ③ XLPE insulation
- ④ Thermoplastic filler
- ⑤ HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES	
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)
mm <sup>2</sup>	mm	kg/km	m	/km	In air at 30°C
2x1,5 RE	10	150	1000	12,1	28
2x2,5 RE	11	180	1000	7,41	38
2x4 RE	12	240	1000	4,61	52
2x6 RE	13	300	1000	3,08	65
2x10 RM	16	470	1000	1,83	86
3x1,5 RE	11	170	1000	12,1	24
3x2,5 RE	12	220	1000	7,41	32
3x4 RE	13	270	1000	4,61	42
3x6 RE	14	360	1000	3,08	53
3x10 RM	17	550	1000	1,83	73
4x1,5 RE	12	200	1000	12,1	24
4x2,5 RE	13	250	1000	7,41	32
4x4 RE	14	350	1000	4,61	42
4x6 RE	16	460	1000	3,08	53
4x10 RM	19	700	1000	1,83	73
4x16 RM	21	1000	1000	1,15	96
4x25 RM	26	1500	1000	0,727	130
4x35 RM	28.5	1900	1000	0,524	160
5x1,5 RE	13	240	1000	12,1	18
5x2,5 RE	14	300	1000	7,41	24
5x4 RE	15	440	1000	4,61	31
5x6 RE	17	550	1000	3,08	40
5x10 RM	20	850	1000	1,83	55
5x16 RM	24	1250	1000	1,15	72
5x25 RM	29	1800	1000	0,727	97

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



# 0,6/1 kV halogen free, fire resistant, XLPE insulated, single core cables with copper conductor FE 180



Code: YXZ1-U FE 180, YXZ1-R FE 180, N2XH-O FE 180, N2XH-J FE 180

U: Solid Conductor      O : Without yellow/green wire      Standards: HD 604 S1, IEC 60502-1, VDE 0276-604  
 R: Stranded Conductor      J : With yellow/green wire

**Technical Data**  
 Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

**Application**  
 Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire. In case of fire, it is guaranteed circuit integrity at least 180 minutes.

### Construction

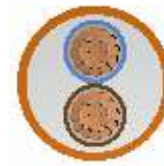
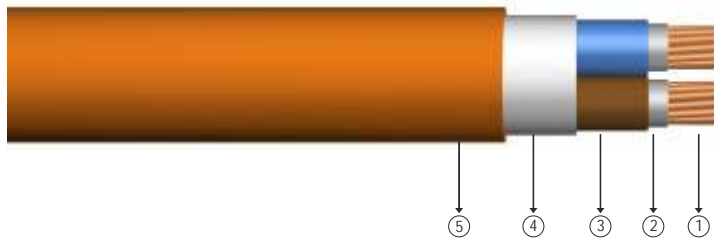
- 1 Solid or stranded copper conductor
- 2 Mica tape.
- 3 XLPE insulation
- 4 HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C		In air at 30°C	
					***	**	***	**
1x1,5	6,0	50	1000	12,1	39	32	32	25
1x2,5	6,5	65	1000	7,41	51	43	42	34
1x4	6,9	80	1000	4,61	66	55	56	44
1x6	7,4	100	1000	3,08	82	68	71	57
1x10	8,6	150	1000	1,83	109	90	96	77
1x16	9,7	200	1000	1,15	139	115	128	102
1x25	11,0	300	1000	0,727	179	149	173	139
1x35	12,0	400	1000	0,524	213	178	212	170
1x50	13,0	530	1000	0,387	251	211	258	208
1x70	15,0	750	1000	0,268	307	259	328	265
1x95	17,0	1000	1000	0,193	366	310	404	326
1x120	18,5	1250	1000	0,153	416	352	471	381
1x150	20,5	1500	1000	0,124	465	396	541	438
1x185	22,5	1900	1000	0,0991	526	449	626	507
1x240	25,5	2450	1000	0,0754	610	521	749	606
1x300	29,0	3000	1000	0,0601	689	587	864	697
1x400	33,0	3900	1000	0,0470	788	669	1018	816
1x500	37,5	4900	1000	0,0366	889	748	1173	933

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 0,6/1 kV halogen free, fire resistant, XLPE insulated, multi core cables with copper conductor FE 180



Code: YXZ1-U FE 180, YXZ1-R FE 180, N2XH-O FE 180, N2XH-J FE 180

U: Solid Conductor      O : Without yellow/green wire      Standards: HD 604 S1, IEC 60502-1, VDE 0276-604  
 R: Stranded Conductor      J : With yellow/green wire

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire. In case of fire, it is guaranteed circuit integrity at least 180 minutes.

### Construction

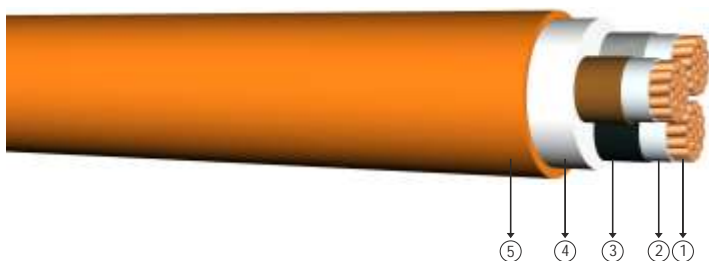
- 1 Solid or stranded copper conductor
- 2 Mica tape
- 3 XLPE insulation
- 4 Thermoplastic filler
- 5 HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
2x1,5	11,0	170	1000	12,1	39	32
2x2,5	12,0	200	1000	7,41	51	42
2x4	13,0	260	1000	4,61	66	56
2x6	14,0	320	1000	3,08	82	71
2x10	16,2	460	1000	1,83	109	96
2x16	18,3	630	1000	1,15	115	125
2x25	23,0	1000	1000	0,727	145	155
2x35	24,0	1250	1000	0,524	175	195
2x50	27,0	1600	1000	0,387	210	235
2x70	31,0	2200	1000	0,268	255	300
2x95	35,0	2900	1000	0,193	310	370
2x120	39,0	3600	1000	0,153	355	430
2x150	42,0	4400	1000	0,124	400	490
2x185	47,0	5500	1000	0,0991	455	570
2x240	53,0	7050	500	0,0754	530	680
2x300	58,0	8650	500	0,0601	605	785
2x400	65,0	11100	500	0,0470	690	860

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



# 0,6/1 kV halogen free, fire resistant, XLPE insulated, multi core cables with copper conductor FE 180



Code: YXZ1-U FE 180, YXZ1-R FE 180, N2XH-O FE 180, N2XH-J FE 180

U : Solid Conductor      O : Without yellow/green wire      Standards: HD 604 S1, IEC 60502-1, VDE 0276-604  
 R : Stranded Conductor      J : With yellow/green wire

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire. In case of fire, it is guaranteed circuit integrity at least 180 minutes.

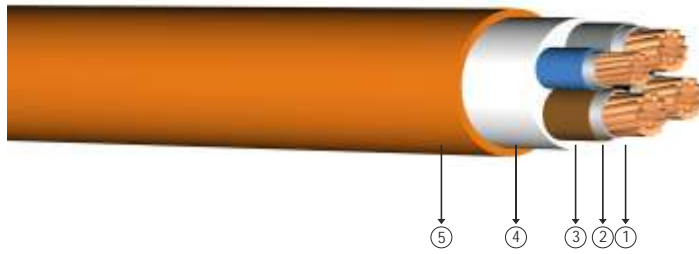
### Construction

- 1 Solid or stranded copper conductor
- 2 Mica tape
- 3 XLPE insulation
- 4 Thermoplastic filler
- 5 HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x1,5	11,5	190	1000	12,1	30	24
3x2,5	12,5	230	1000	7,41	40	32
3x4	13,5	300	1000	4,61	52	42
3x6	14,5	370	1000	3,08	64	53
3x10	17,0	550	1000	1,83	86	73
3x16	19,0	750	1000	1,15	111	96
3x25	24,0	1200	1000	0,727	143	130
3x35	26,0	1550	1000	0,524	173	160
3x50	29,0	2000	1000	0,387	205	195
3x70	33,0	2800	1000	0,268	252	247
3x95	37,0	3700	1000	0,193	303	305
3x120	41,0	4600	1000	0,153	346	355
3x150	46,0	5650	500	0,124	390	407
3x185	50,0	7000	500	0,0991	441	469
3x240	57,0	9100	500	0,0754	511	551
3x300	62,0	11100	250	0,0601	580	638
3x400	70,0	14300	250	0,0470	663	746

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 0,6/1 kV halogen free, fire resistant, XLPE insulated, multi core cables with copper conductor FE 180



Code: YXZ1-R FE 180, N2XH-O FE 180, N2XH-J FE 180

R: Stranded Conductor      O : Without yellow/green wire      Standards: HD 604 S1, IEC 60502-1, VDE 0276-604  
 J : With yellow/green wire

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

### Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire. In case of fire, it is guaranteed circuit integrity at least 180 minutes.

### Construction

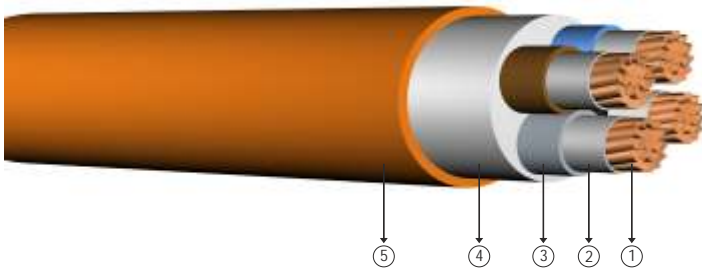
- ① Stranded copper conductors      ③ XLPE insulation      ⑤ HFFR outer sheath
- ② Mica tape      ④ Thermoplastic filler

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
3x16+10	21,0	900	1000	1,15	111	96
3x25+16	26,0	1450	1000	0,727	143	130
3x35+16	27,0	1800	1000	0,524	173	160
3x50+25	30,0	2350	1000	0,387	205	195
3x70+35	35,0	3200	1000	0,268	252	247
3x95+50	39,0	4300	1000	0,193	303	305
3x120+70	44,0	5400	500	0,153	346	355
3x150+70	48,0	6450	500	0,124	390	407
3x185+95	53,0	8100	500	0,0991	441	469
3x240+120	59,0	10400	500	0,0754	511	551
3x300+150	65,0	12800	250	0,0601	580	638
3x400+185	73,0	16300	250	0,0470	663	746

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



# 0,6/1 kV halogen free, fire resistant, XLPE insulated, multi core cables with copper conductor FE 180



Code: YXZ1-U FE 180, YXZ1-R FE 180, N2XH-O FE 180, N2XH-J FE 180

U : Solid Conductor      O : Without yellow/green wire      Standards: HD 604 S1, IEC 60502-1, VDE 0276-604  
 R : Stranded Conductor      J : With yellow/green wire

**Technical Data**  
 Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV  
 Min. bending radius : 12 x D  
 D : Cable outer diameter

**Application**  
 Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire. In case of fire, it is guaranteed circuit integrity at least 180 minutes.

### Construction

- ① Solid or stranded copper conductor      ③ XLPE insulation      ⑤ HFFR outer sheath
- ② Mica tape      ④ Thermoplastic filler

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES		
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C Max	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	In ground at 20°C	In air at 30°C
4x1,5	12,0	220	1000	12,1	30	24
4x2,5	13,0	250	1000	7,41	40	32
4x4	14,5	350	1000	4,61	52	42
4x6	15,5	450	1000	3,08	64	53
4x10	18,5	700	1000	1,83	86	73
4x16	20,5	950	1000	1,15	111	96
4x25	26,0	1500	1000	0,727	143	130
4x35	28,0	1900	1000	0,524	173	160
4x50	32,0	2500	1000	0,387	205	195
4x70	37,0	3500	1000	0,268	252	247
4x95	41,0	4700	1000	0,193	303	305
4x120	46,0	5900	500	0,153	346	355
4x150	51,0	7200	500	0,124	390	407
4x185	56,0	8950	500	0,0991	441	469
4x240	63,0	11600	250	0,0754	511	551
4x300	69,0	14200	250	0,0601	580	638
4x400	78,0	18400	250	0,0470	663	746

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

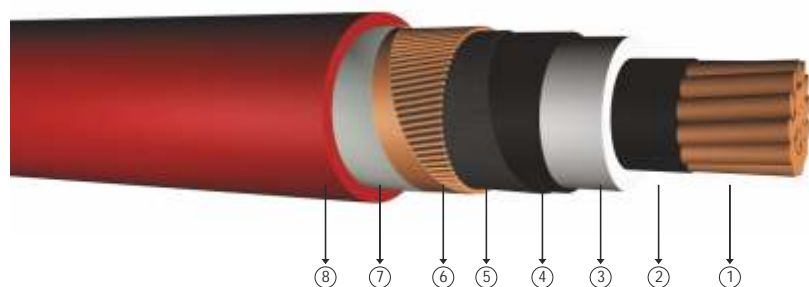


Reliable technology





## 3,6/6 kV XLPE insulated, single core, cables with copper conductor



Code: YXC7V-R, N2XSY, CU/XLPE/CWS/PVC

R: Stranded Conductor

Standards: IEC 60502-2

### Technical Data

(Max). operating temperature : 90°C  
 (Max). short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 3,6/6 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

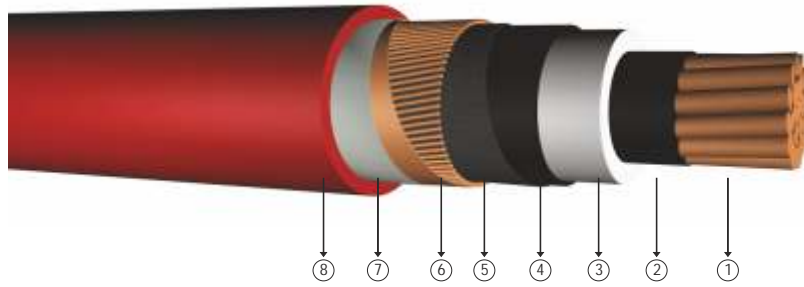
### Construction

- ① Stranded copper conductors
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive tape
- ⑥ Copper screen
- ⑦ PP tape
- ⑧ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operational Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	21,0	750	1000	0,524	0,6707	0,657	0,367	0,283	201	191	238	199	
1x50/16	22,0	900	1000	0,387	0,4954	0,632	0,351	0,318	241	227	285	241	
1x70/16	24,0	1100	1000	0,268	0,3430	0,601	0,332	0,368	301	277	356	301	
1x95/16	25,5	1400	1000	0,193	0,2470	0,577	0,318	0,414	364	331	435	365	
1x120/16	27,0	1650	1000	0,153	0,1958	0,558	0,308	0,455	424	379	496	419	
1x150/25	28,5	2000	1000	0,124	0,1587	0,541	0,299	0,499	479	422	554	479	
1x185/25	30,5	2400	1000	0,0991	0,1268	0,525	0,292	0,544	549	476	637	543	
1x240/25	33,5	2950	1000	0,0754	0,0965	0,506	0,284	0,587	640	550	746	640	
1x300/25	36,0	3550	1000	0,0601	0,0769	0,490	0,279	0,603	724	619	846	731	
1x400/35	40,0	4650	1000	0,0470	0,0602	0,471	0,275	0,642	795	695	941	840	
1x500/35	43,5	5700	500	0,0366	0,0468	0,456	0,270	0,667	883	773	1051	949	
1x630/35	47,0	6950	500	0,0283	0,0362	0,440	0,264	0,739	981	856	1180	1076	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 6/10 kV or 6,35/11 kV XLPE insulated, single core, cables with copper conductor



Code: YXC7V-R, N2XSY, CU/XLPE/CWS/PVC

R: Stranded Conductor

Standards: IEC 60502-2, BS 7870-4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 6/10 kV  
 : 6,35/11 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

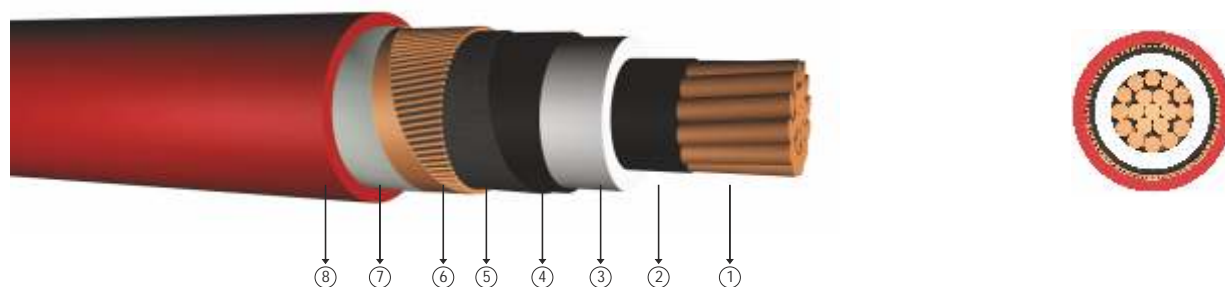
- ① Stranded copper conductors
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive tape
- ⑥ Copper screen
- ⑦ PP tape
- ⑧ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operational Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	23,5	870	1000	0,524	0,6707	0,661	0,383	0,223	212	187	231	195	
1x50/16	24,5	1000	1000	0,387	0,4954	0,636	0,366	0,248	249	220	277	234	
1x70/16	26,0	1211	1000	0,268	0,3430	0,606	0,349	0,285	303	269	345	292	
1x95/16	27,3	1468	1000	0,193	0,2470	0,582	0,334	0,320	358	321	418	354	
1x120/16	29,0	1733	1000	0,153	0,1958	0,563	0,323	0,350	404	364	481	407	
1x150/25	30,0	2075	1000	0,124	0,1587	0,546	0,313	0,382	441	405	537	460	
1x185/25	32,0	2449	1000	0,0991	0,1268	0,529	0,304	0,415	493	457	612	527	
1x240/25	34,3	3010	1000	0,0754	0,0965	0,509	0,294	0,462	563	528	716	621	
1x300/25	37,0	3641	1000	0,0601	0,0769	0,493	0,288	0,507	626	593	811	709	
1x400/35	39,5	4545	1000	0,0470	0,0602	0,473	0,278	0,573	676	665	901	815	
1x500/35	42,8	5570	500	0,0366	0,0468	0,457	0,271	0,631	743	739	1006	921	
1x630/35	46,8	6952	500	0,0283	0,0362	0,440	0,264	0,699	820	818	1130	1045	

Note  
 In ground : Current carrying capacities are valid under the following conditions:  
 : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\*\* : Trefoil formation  
 Number of system : 1



## 6/10 kV XLPE insulated, single core, cables with copper conductor



Code: N2XSY

R: Stranded Conductor

Standards: VDE 276-620

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 6/10 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

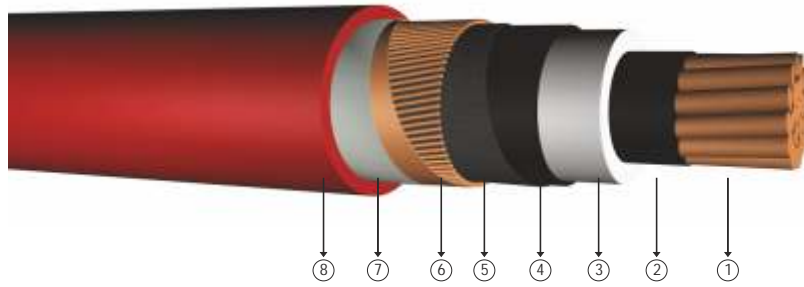
- ① Stranded copper conductors
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive tape
- ⑥ Copper screen
- ⑦ PP tape
- ⑧ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operational Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	23,5	870	1000	0,524	0,6707	0,661	0,383	0,223	212	187	231	195	
1x50/16	24,5	1000	1000	0,387	0,4954	0,636	0,366	0,248	249	220	277	234	
1x70/16	26,0	1211	1000	0,268	0,3430	0,606	0,349	0,285	303	269	345	292	
1x95/16	27,3	1468	1000	0,193	0,2470	0,582	0,334	0,320	358	321	418	354	
1x120/16	29,0	1733	1000	0,153	0,1958	0,563	0,323	0,350	404	364	481	407	
1x150/25	30,0	2075	1000	0,124	0,1587	0,546	0,313	0,382	441	405	537	460	
1x185/25	32,0	2449	1000	0,0991	0,1268	0,529	0,304	0,415	493	457	612	527	
1x240/25	34,3	3010	1000	0,0754	0,0965	0,509	0,294	0,462	563	528	716	621	
1x300/25	37,0	3641	1000	0,0601	0,0769	0,493	0,288	0,507	626	593	811	709	
1x400/35	39,5	4545	1000	0,0470	0,0602	0,473	0,278	0,573	676	665	901	815	
1x500/35	42,8	5570	500	0,0366	0,0468	0,457	0,271	0,631	743	739	1006	921	
1x630/35	46,8	6952	500	0,0283	0,0362	0,440	0,264	0,699	820	818	1130	1045	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 8,7/15 kV XLPE insulated, single core, cables with copper conductor



Code: YXC7V-R, N2XSY, CU/XLPE/CWS/PVC

R: Stranded Conductor

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 8,7/15 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

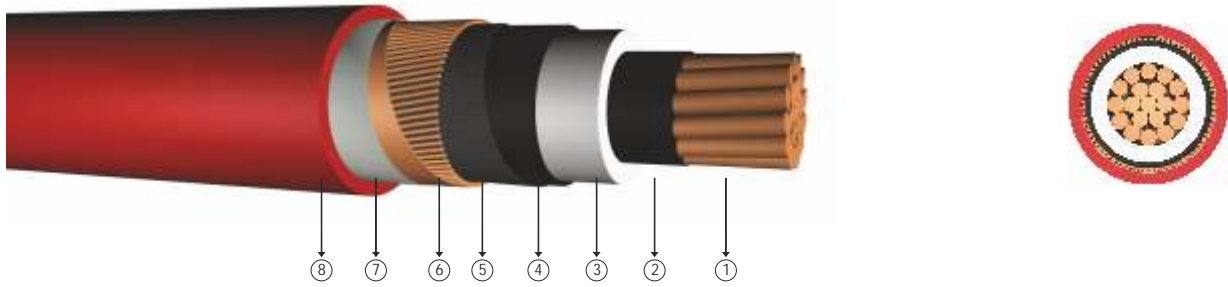
- ① Stranded copper conductors
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive tape
- ⑥ Copper screen
- ⑦ PP tape
- ⑧ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operational Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	25,0	900	1000	0,524	0,6707	0,666	0,401	0,181	212	187	231	195	
1x50/16	26,5	1050	1000	0,387	0,4954	0,640	0,383	0,201	249	220	277	234	
1x70/16	28,0	1300	1000	0,268	0,3430	0,609	0,362	0,229	303	269	345	292	
1x95/16	29,5	1550	1000	0,193	0,2470	0,585	0,346	0,255	358	321	418	354	
1x120/16	31,5	1850	1000	0,153	0,1958	0,567	0,336	0,278	404	364	481	407	
1x150/25	33,0	2200	1000	0,124	0,1587	0,549	0,325	0,302	441	405	537	460	
1x185/25	35,0	2600	1000	0,0991	0,1268	0,534	0,317	0,328	493	457	612	527	
1x240/25	37,5	3150	1000	0,0754	0,0965	0,514	0,307	0,363	563	528	716	621	
1x300/25	40,0	3750	1000	0,0601	0,0769	0,497	0,298	0,398	626	593	811	709	
1x400/35	43,5	4900	1000	0,0470	0,0602	0,477	0,289	0,447	676	665	901	815	
1x500/35	46,5	5900	500	0,0366	0,0468	0,461	0,282	0,491	743	739	1006	921	
1x630/35	50,0	7150	500	0,0283	0,0362	0,445	0,275	0,543	820	818	1130	1045	

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\*\* : Trefoil formation  
 Number of system : 1



# 12/20 kV or 12,7/22 kV XLPE insulated, single core, cables with copper conductor



Code: YXC7V-R, N2XSY, CU/XLPE/CWS/PVC

R: Stranded Conductor

Standards: IEC 60502-2, BS 7870-4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 : 12,7/22 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

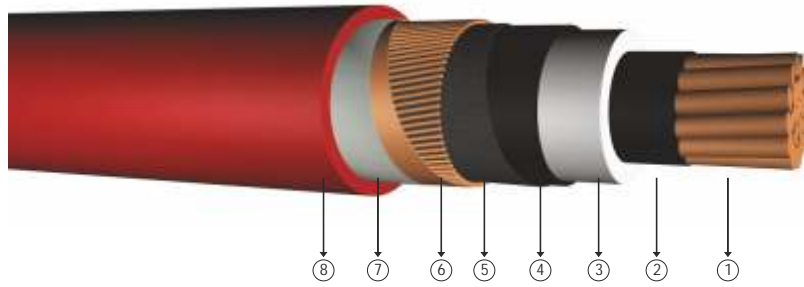
### Construction

- ① Stranded copper conductors
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive tape
- ⑥ Copper screen
- ⑦ PP tape
- ⑧ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES								
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operational Capacitance (approx)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C	
									***	**	***	**
1x35/16	27,0	950	1000	0,524	0,6707	0,670	0,416	0,157	213	189	233	199
1x50/16	28,5	1150	1000	0,387	0,4954	0,644	0,397	0,174	250	223	279	238
1x70/16	30,0	1400	1000	0,268	0,3430	0,614	0,377	0,197	304	273	347	296
1x95/16	32,0	1650	1000	0,193	0,2470	0,590	0,360	0,218	361	325	420	358
1x120/16	34,0	1950	1000	0,153	0,1958	0,571	0,349	0,238	407	368	483	412
1x150/25	35,0	2350	1000	0,124	0,1587	0,554	0,338	0,258	445	410	540	466
1x185/25	37,0	2700	1000	0,0991	0,1268	0,538	0,329	0,278	498	463	614	534
1x240/25	39,5	3300	1000	0,0754	0,0965	0,518	0,317	0,308	569	534	718	627
1x300/25	42,0	3900	1000	0,0601	0,0769	0,501	0,308	0,336	633	601	813	715
1x400/35	45,5	5000	1000	0,0470	0,0602	0,480	0,298	0,377	686	674	904	819
1x500/35	48,5	6000	500	0,0366	0,0468	0,464	0,290	0,413	756	750	1011	927
1x630/35	52,5	7300	500	0,0283	0,0362	0,448	0,282	0,455	842	836	1128	1041

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 12/20 kV XLPE insulated, single core, cables with copper conductor



Code: N2XSJ

R: Stranded Conductor

Standards: VDE 276-620

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

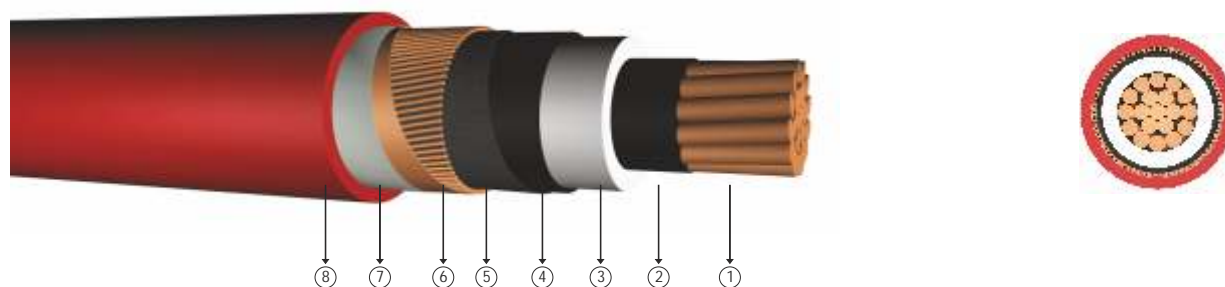
- ① Stranded copper conductors
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive tape
- ⑥ Copper screen
- ⑦ PP tape
- ⑧ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES								
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operational Capacitance (approx)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C	
									***	**	***	**
1x35/16	28,0	1059	1000	0,524	0,6707	0,670	0,416	0,157	213	189	233	199
1x50/16	29,0	1192	1000	0,387	0,4954	0,644	0,397	0,174	250	223	279	238
1x70/16	31,0	1450	1000	0,268	0,3430	0,614	0,377	0,197	304	273	347	296
1x95/16	32,0	1681	1000	0,193	0,2470	0,590	0,360	0,218	361	325	420	358
1x120/16	33,0	1915	1000	0,153	0,1958	0,571	0,349	0,238	407	368	483	412
1x150/25	34,2	2279	1000	0,124	0,1587	0,554	0,338	0,258	445	410	540	466
1x185/25	36,0	2649	1000	0,0991	0,1268	0,538	0,329	0,278	498	463	614	534
1x240/25	39,0	3288	1000	0,0754	0,0965	0,518	0,317	0,308	569	534	718	627
1x300/25	41,0	3874	1000	0,0601	0,0769	0,501	0,308	0,336	633	601	813	715
1x400/35	44,5	4901	1000	0,0470	0,0602	0,480	0,298	0,377	686	674	904	819
1x500/35	47,5	5910	500	0,0366	0,0468	0,464	0,290	0,413	756	750	1011	927
1x630/35	51,0	7259	500	0,0283	0,0362	0,448	0,282	0,455	842	836	1128	1041

Note  
 In ground : Current carrying capacities are valid under the following conditions:  
 : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 18/30 kV or 19/33 kV XLPE insulated, single core, cables with copper conductor



Code: YXC7V-R, N2XSY, CU/XLPE/CWS/PVC

R: Stranded Conductor

Standards: IEC 60502-2, BS 7870-4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
   : 19/33 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

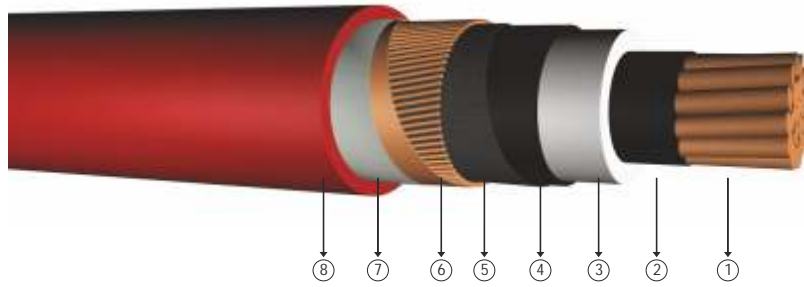
### Construction

- ① Stranded copper conductors      ③ XLPE insulation      ⑤ Semi conductive tape      ⑦ PP tape
- ② Inner semi conductive layer      ④ Outer semi conductive layer      ⑥ Copper screen      ⑧ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operational Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	32,0	1200	1000	0,524	0,6707	0,680	0,451	0,123	214	192	233	202	
1x50/16	33,5	1400	1000	0,387	0,4954	0,655	0,432	0,135	251	226	279	241	
1x70/16	35,0	1650	1000	0,268	0,3430	0,624	0,408	0,151	306	276	348	299	
1x95/16	37,0	1950	1000	0,193	0,2470	0,600	0,391	0,166	363	329	421	362	
1x120/16	39,0	2250	1000	0,153	0,1958	0,581	0,377	0,180	410	373	483	416	
1x150/25	40,5	2700	1000	0,124	0,1587	0,564	0,366	0,194	449	415	540	469	
1x185/25	42,5	3050	1000	0,0991	0,1268	0,547	0,355	0,208	503	468	615	536	
1x240/25	45,0	3650	1000	0,0754	0,0965	0,527	0,342	0,229	576	541	718	630	
1x300/25	47,5	4300	1000	0,0601	0,0769	0,510	0,332	0,248	641	608	812	717	
1x400/35	50,5	5450	500	0,0470	0,0602	0,489	0,320	0,276	697	684	904	823	
1x500/35	54,0	6500	500	0,0366	0,0468	0,473	0,310	0,301	768	762	1011	929	
1x630/35	57,5	7850	500	0,0283	0,0362	0,457	0,301	0,330	858	847	1128	1043	

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 18/30 kV XLPE insulated, single core, cables with copper conductor



Code: N2XSY

R: Stranded Conductor

Standards: VDE 276-620

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

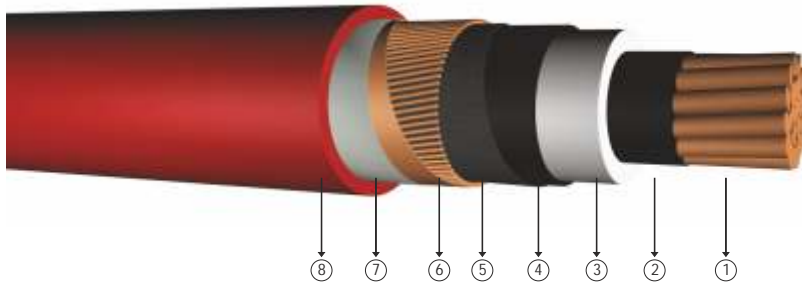
- ① Stranded copper conductors
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive tape
- ⑥ Copper screen
- ⑦ PP tape
- ⑧ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operational Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x50/16	33,2	1374	1000	0,387	0,4954	0,655	0,432	0,135	251	226	279	241	
1x70/16	35,0	1632	1000	0,268	0,3430	0,624	0,408	0,151	306	276	348	299	
1x95/16	36,5	1908	1000	0,193	0,2470	0,600	0,391	0,166	363	329	421	362	
1x120/16	38,0	2184	1000	0,153	0,1958	0,581	0,377	0,180	410	373	483	416	
1x150/25	39,2	2556	1000	0,124	0,1587	0,564	0,366	0,194	449	415	540	469	
1x185/25	41,0	2935	1000	0,0991	0,1268	0,547	0,355	0,208	503	468	615	536	
1x240/25	43,5	3545	1000	0,0754	0,0965	0,527	0,342	0,229	576	541	718	630	
1x300/25	46,5	4258	1000	0,0601	0,0769	0,510	0,332	0,248	641	608	812	717	
1x400/35	49,5	5258	500	0,0470	0,0602	0,489	0,320	0,276	697	684	904	823	
1x500/35	52,5	6287	500	0,0366	0,0468	0,473	0,310	0,301	768	762	1011	929	
1x630/35	56,0	7654	500	0,0283	0,0362	0,457	0,301	0,330	858	847	1128	1043	

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\*\* : Trefoil formation  
 Number of system : 1



# 3,6/6 kV halogen free, flame retardant, XLPE insulated, single core, cables with copper conductor



Code: YXC7Z1-R, N2XSH, CU/XLPE/CWS/LSZH

R: Stranded Conductor

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 3,6/6 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

### Construction

- ① Stranded copper conductors
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive tape
- ⑥ Copper screen
- ⑦ PP tape
- ⑧ HFFR outer sheath

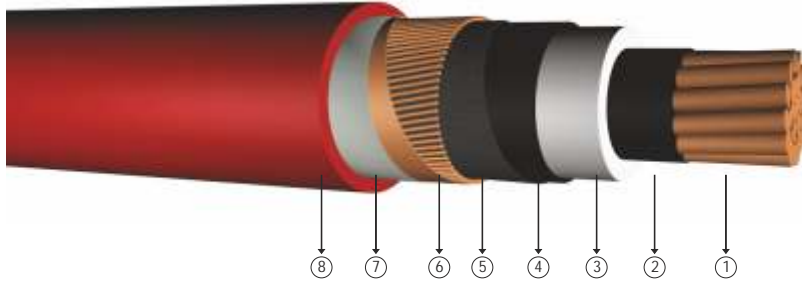
DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operational Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	21,0	750	1000	0,524	0,6707	0,657	0,367	0,283	201	191	238	199	
1x50/16	22,0	900	1000	0,387	0,4954	0,632	0,351	0,318	241	227	285	241	
1x70/16	24,0	1100	1000	0,268	0,3430	0,601	0,332	0,368	301	277	356	301	
1x95/16	25,5	1400	1000	0,193	0,2470	0,577	0,318	0,414	364	331	435	365	
1x120/16	27,0	1650	1000	0,153	0,1958	0,558	0,308	0,455	424	379	496	419	
1x150/25	28,5	2000	1000	0,124	0,1587	0,541	0,299	0,499	479	422	554	479	
1x185/25	30,5	2400	1000	0,0991	0,1268	0,525	0,292	0,544	549	476	637	543	
1x240/25	33,5	2950	1000	0,0754	0,0965	0,506	0,284	0,587	640	550	746	640	
1x300/25	36,0	3550	1000	0,0601	0,0769	0,490	0,279	0,603	724	619	846	731	
1x400/35	40,0	4650	1000	0,0470	0,0602	0,471	0,275	0,642	795	695	941	840	
1x500/35	43,5	5700	500	0,0366	0,0468	0,456	0,270	0,667	883	773	1051	949	
1x630/35	47,0	6950	500	0,0283	0,0362	0,440	0,264	0,739	981	856	1180	1076	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1





# 8,7/15 kV halogen free, flame retardant, XLPE insulated, single core, cables with copper conductor



Code: YXC7Z1-R, N2XSH, CU/XLPE/CWS/LSZH

R: Stranded Conductor

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 8,7/15 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

### Construction

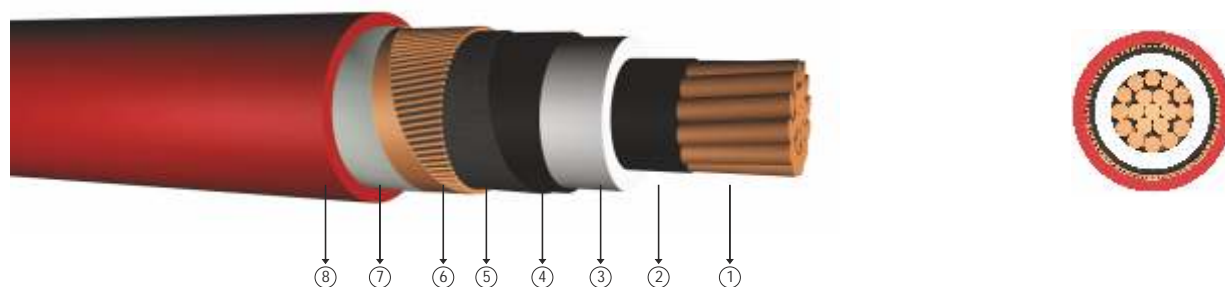
- ① Stranded copper conductors
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive tape
- ⑥ Copper screen
- ⑦ PP tape
- ⑧ HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operational Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	25,0	900	1000	0,524	0,6707	0,666	0,401	0,181	212	187	231	195	
1x50/16	26,5	1050	1000	0,387	0,4954	0,640	0,383	0,201	249	220	277	234	
1x70/16	28,0	1300	1000	0,268	0,3430	0,609	0,362	0,229	303	269	345	292	
1x95/16	29,5	1550	1000	0,193	0,2470	0,585	0,346	0,255	358	321	418	354	
1x120/16	31,5	1850	1000	0,153	0,1958	0,567	0,336	0,278	404	364	481	407	
1x150/25	33,0	2200	1000	0,124	0,1587	0,549	0,325	0,302	441	405	537	460	
1x185/25	35,0	2600	1000	0,0991	0,1268	0,534	0,317	0,328	493	457	612	527	
1x240/25	37,5	3150	1000	0,0754	0,0965	0,514	0,307	0,363	563	528	716	621	
1x300/25	40,0	3750	1000	0,0601	0,0769	0,497	0,298	0,398	626	593	811	709	
1x400/35	43,5	4900	1000	0,0470	0,0602	0,477	0,289	0,447	676	665	901	815	
1x500/35	46,5	5900	500	0,0366	0,0468	0,461	0,282	0,491	743	739	1006	921	
1x630/35	50,0	7150	500	0,0283	0,0362	0,445	0,275	0,543	820	818	1130	1045	

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\*\* : Trefoil formation  
 Number of system : 1



# 12/20 kV or 12,7/22 kV halogen free, flame retardant, XLPE insulated, single core, cables with copper conductor



Code: YXC7Z1-R, N2XSH, CU/XLPE/CWS/LSZH

R: Stranded Conductor

Standards: IEC 60502-2, BS 7870-4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 12,7/22 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

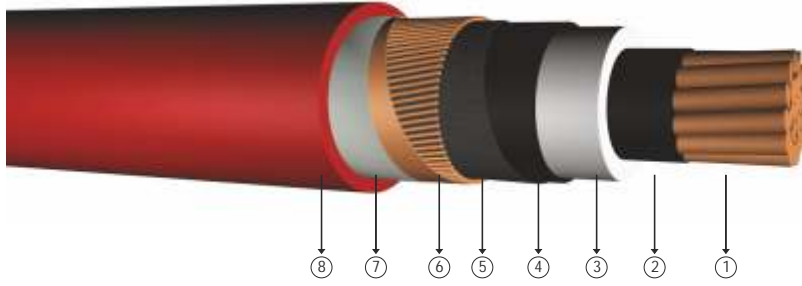
### Construction

- ① Stranded copper conductors      ③ XLPE insulation      ⑤ Semi conductive tape      ⑦ PP tape
- ② Inner semi conductive layer      ④ Outer semi conductive layer      ⑥ Copper screen      ⑧ HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operational Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	27,0	950	1000	0,524	0,6707	0,670	0,416	0,157	213	189	233	199	
1x50/16	28,5	1150	1000	0,387	0,4954	0,644	0,397	0,174	250	223	279	238	
1x70/16	30,0	1400	1000	0,268	0,3430	0,614	0,377	0,197	304	273	347	296	
1x95/16	32,0	1650	1000	0,193	0,2470	0,590	0,360	0,218	361	325	420	358	
1x120/16	34,0	1950	1000	0,153	0,1958	0,571	0,349	0,238	407	368	483	412	
1x150/25	35,0	2350	1000	0,124	0,1587	0,554	0,338	0,258	445	410	540	466	
1x185/25	37,0	2700	1000	0,0991	0,1268	0,538	0,329	0,278	498	463	614	534	
1x240/25	39,5	3300	1000	0,0754	0,0965	0,518	0,317	0,308	569	534	718	627	
1x300/25	42,0	3900	1000	0,0601	0,0769	0,501	0,308	0,336	633	601	813	715	
1x400/35	45,5	5000	1000	0,0470	0,0602	0,480	0,298	0,377	686	674	904	819	
1x500/35	48,5	6000	500	0,0366	0,0468	0,464	0,290	0,413	756	750	1011	927	
1x630/35	52,5	7300	500	0,0283	0,0362	0,448	0,282	0,455	842	836	1128	1041	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

18/30 kV or 19/33 kV halogen free, flame retardant, XLPE insulated, single core, cables with copper conductor



Code: YXC7Z1-R, N2XSH, CU/XLPE/CWS/LSZH

R: Stranded Conductor

Standards: IEC 60502-2, BS 7870-4.10

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
 : 19/33 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

Construction

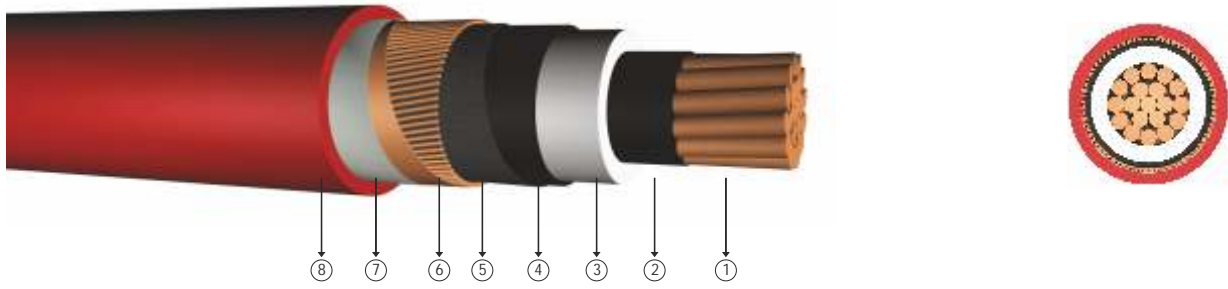
- ① Stranded copper conductors      ③ XLPE insulation      ⑤ Semi conductive tape      ⑦ PP tape
- ② Inner semi conductive layer      ④ Outer semi conductive layer      ⑥ Copper screen      ⑧ HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operational Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	μF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	32,0	1200	1000	0,524	0,6707	0,680	0,451	0,123	214	192	233	202	
1x50/16	33,5	1400	1000	0,387	0,4954	0,655	0,432	0,135	251	226	279	241	
1x70/16	35,0	1650	1000	0,268	0,3430	0,624	0,408	0,151	306	276	348	299	
1x95/16	37,0	1950	1000	0,193	0,2470	0,600	0,391	0,166	363	329	421	362	
1x120/16	39,0	2250	1000	0,153	0,1958	0,581	0,377	0,180	410	373	483	416	
1x150/25	40,5	2700	1000	0,124	0,1587	0,564	0,366	0,194	449	415	540	469	
1x185/25	42,5	3050	1000	0,0991	0,1268	0,547	0,355	0,208	503	468	615	536	
1x240/25	45,0	3650	1000	0,0754	0,0965	0,527	0,342	0,229	576	541	718	630	
1x300/25	47,5	4300	1000	0,0601	0,0769	0,510	0,332	0,248	641	608	812	717	
1x400/35	50,5	5450	500	0,0470	0,0602	0,489	0,320	0,276	697	684	904	823	
1x500/35	54,0	6500	500	0,0366	0,0468	0,473	0,310	0,301	768	762	1011	929	
1x630/35	57,5	7850	500	0,0283	0,0362	0,457	0,301	0,330	858	847	1128	1043	

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\*\* : Trefoil formation  
 Number of system : 1



## 20,3/35 kV or 20,8/36 kV halogen free, flame retardant, XLPE insulated, single core, cables with copper conductor



Code: YXC7Z1-R, N2XSH, CU/XLPE/CWS/LSZH

R: Stranded Conductor

Standards: HD 620 S3, TSE K 204

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 20,3/35 kV  
                                   20,8/36 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

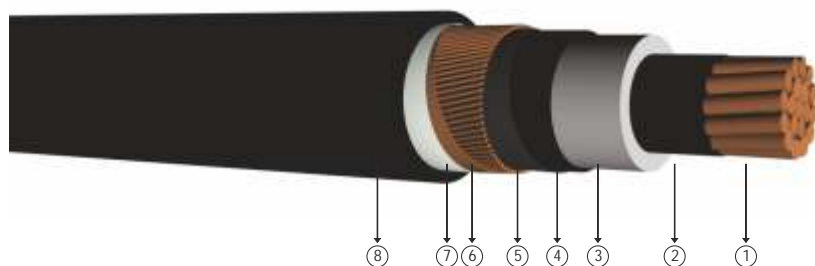
### Construction

- 1 Stranded copper conductors
- 3 XLPE insulation
- 5 Semi conductive tape
- 7 PP tape
- 2 Inner semi conductive layer
- 4 Outer semi conductive layer
- 6 Copper screen
- 8 HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES								
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operational Capacitance (approx)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	m	/km	/km	***		μF/km	In ground at 20°C		In air at 30°C	
						mH/km	**		***	**	***	**
1x35/16	34,5	1300	1000	0,524	0,6707	0,685	0,464	0,115	214	192	233	202
1x50/16	36,0	1550	1000	0,387	0,4954	0,659	0,444	0,125	251	226	279	241
1x70/16	37,5	1800	1000	0,268	0,3430	0,628	0,420	0,140	306	276	348	299
1x95/16	39,5	2100	1000	0,193	0,2470	0,604	0,402	0,153	363	329	421	362
1x120/16	41,5	2400	1000	0,153	0,1958	0,585	0,388	0,165	410	373	483	416
1x150/25	43,0	2850	1000	0,124	0,1587	0,567	0,376	0,178	449	415	540	469
1x185/25	44,5	3200	1000	0,0991	0,1268	0,551	0,365	0,191	503	468	615	536
1x240/25	47,5	3800	1000	0,0754	0,0965	0,531	0,351	0,209	576	541	718	630
1x300/25	49,5	4500	1000	0,0601	0,0769	0,514	0,341	0,226	641	608	812	717
1x400/35	53,0	5650	500	0,0470	0,0602	0,493	0,328	0,252	697	684	904	823
1x500/35	56,0	6700	500	0,0366	0,0468	0,477	0,318	0,274	768	762	1011	929
1x630/35	60,0	8000	500	0,0283	0,0362	0,460	0,308	0,300	858	847	1128	1043

Note  
 In ground : Current carrying capacities are valid under the following conditions:  
 : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 3,6/6 kV XLPE insulated, longitudinally sealed, single core cables with copper conductor



Code: N2XS(F)2Y, CU/XLPE/LW/CWS/LW/PE

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 3,6/6 kV  
 : 3,8/6,6 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. If the cable gets water inside due to the mechanical, swellable tapes prevent ingress and migration of moisture or water inside the cable.

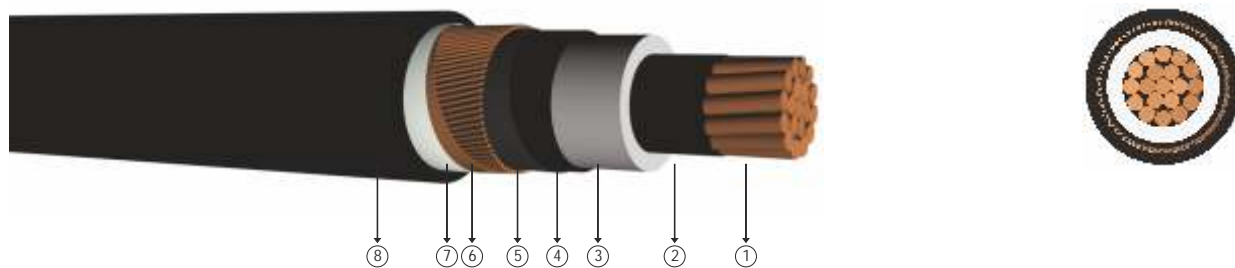
### Construction

- 1 Stranded copper conductors
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive swelling tape
- 6 Copper screen
- 7 Swellable tape
- 8 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operational Capacitance (approx)	Current Carrying Capacity (A)				
						***	**		In ground at 20°C		In air at 30°C		
mm <sup>2</sup>	mm	kg/km	m	/km	/km	mH/km	mH/km	µF/km	***	**	***	**	
1x35/16	24,0	700	1000	0,524	0,6707	0,663	0,391	0,283	201	191	238	199	
1x50/16	25,0	900	1000	0,387	0,4954	0,638	0,374	0,318	241	227	285	241	
1x70/16	26,5	1100	1000	0,268	0,3430	0,607	0,353	0,368	301	277	356	301	
1x95/16	28,5	1350	1000	0,193	0,2470	0,583	0,338	0,414	364	331	435	365	
1x120/16	30,0	1600	1000	0,153	0,1958	0,564	0,327	0,455	424	379	496	419	
1x150/25	31,5	1950	1000	0,124	0,1587	0,547	0,317	0,499	479	422	554	479	
1x185/25	33,5	2350	1000	0,0991	0,1268	0,531	0,309	0,544	549	476	637	543	
1x240/25	36,5	2850	1000	0,0754	0,0965	0,511	0,299	0,587	640	550	746	640	
1x300/25	39,0	3500	1000	0,0601	0,0769	0,496	0,294	0,603	724	619	846	731	
1x400/35	43,0	4600	1000	0,0470	0,0602	0,476	0,287	0,642	795	695	941	840	
1x500/35	46,5	5550	500	0,0366	0,0468	0,461	0,282	0,667	883	773	1051	949	
1x630/35	50,0	6800	500	0,0283	0,0362	0,445	0,275	0,739	981	856	1180	1076	

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 6/10 kV or 6,35/11 kV XLPE insulated, longitudinally sealed, single core cables with copper conductor



Code: N2XS(F)2Y, CU/XLPE/LW/CWS/LW/PE

Standards: IEC 60502-2, BS 7870-4.10

### Technical Data

Max. operating temperature	: 90°C
Max. short circuit temperature	: 250°C (max. 5 sec.)
Rated voltage	: 6/10 kV 6,35/11 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. If the cable gets water inside due to the mechanical, swellable tapes prevent ingress and migration of moisture or water inside the cable.

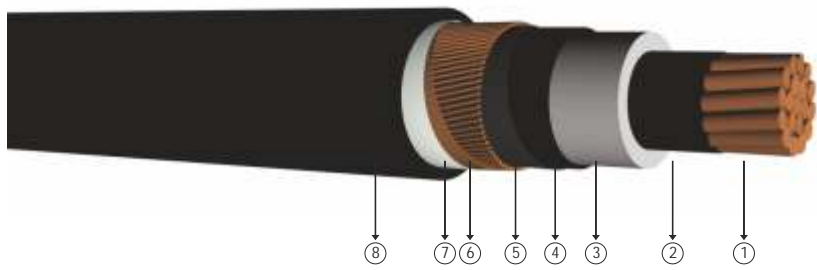
### Construction

- ① Stranded copper conductors      ③ XLPE insulation      ⑤ Semi conductive swelling tape      ⑦ Swellable tape
- ② Inner semi conductive layer      ④ Outer semi conductive layer      ⑥ Copper screen      ⑧ PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES								
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operational Capacitance (approx)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C	
									***	**	***	**
1x35/16	25,5	750	1000	0,524	0,6707	0,667	0,406	0,223	212	187	231	195
1x50/16	27,0	950	1000	0,387	0,4954	0,642	0,387	0,248	249	220	277	234
1x70/16	28,5	1150	1000	0,268	0,3430	0,611	0,366	0,285	303	269	345	292
1x95/16	30,0	1400	1000	0,193	0,2470	0,586	0,350	0,320	358	321	418	354
1x120/16	32,0	1650	1000	0,153	0,1958	0,568	0,338	0,350	404	364	481	407
1x150/25	33,5	2050	1000	0,124	0,1587	0,551	0,329	0,382	441	405	537	460
1x185/25	35,5	2400	1000	0,0991	0,1268	0,534	0,319	0,415	493	457	612	527
1x240/25	38,0	2950	1000	0,0754	0,0965	0,515	0,309	0,462	563	528	716	621
1x300/25	40,5	3550	1000	0,0601	0,0769	0,498	0,301	0,507	626	593	811	709
1x400/35	43,5	4650	1000	0,0470	0,0602	0,478	0,291	0,573	676	665	901	815
1x500/35	47,0	5600	500	0,0366	0,0468	0,462	0,284	0,631	743	739	1006	921
1x630/35	50,5	6850	500	0,0283	0,0362	0,446	0,276	0,699	820	818	1130	1045

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 6/10 kV XLPE insulated, longitudinally sealed, single core cables with copper conductor



Code: N2XS(F)2Y

Standards: VDE 276-620

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 6/10 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

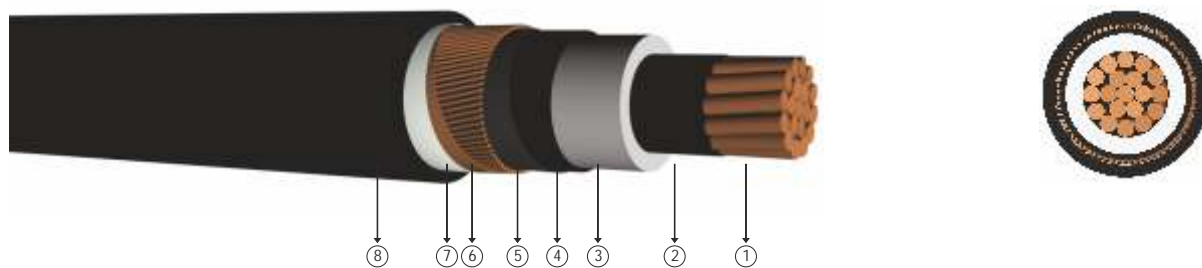
- ① Stranded copper conductors      ③ XLPE insulation      ⑤ Semi conductive swelling tape      ⑦ Swellable tape
- ② Inner semi conductive layer      ④ Outer semi conductive layer      ⑥ Copper screen      ⑧ PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES								
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operational Capacitance (approx)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C	
									***	**	***	**
1x35/16	24,1	772	1000	0,524	0,6707	0,667	0,406	0,223	212	187	231	195
1x50/16	25,3	909	1000	0,387	0,4954	0,642	0,387	0,248	249	220	277	234
1x70/16	27,0	1125	1000	0,268	0,3430	0,611	0,366	0,285	303	269	345	292
1x95/16	28,3	1372	1000	0,193	0,2470	0,586	0,350	0,320	358	321	418	354
1x120/16	29,7	1615	1000	0,153	0,1958	0,568	0,338	0,350	404	364	481	407
1x150/25	31,0	1972	1000	0,124	0,1587	0,551	0,329	0,382	441	405	537	460
1x185/25	32,8	2324	1000	0,0991	0,1268	0,534	0,319	0,415	493	457	612	527
1x240/25	35,3	2892	1000	0,0754	0,0965	0,515	0,309	0,462	563	528	716	621
1x300/25	37,7	3486	1000	0,0601	0,0769	0,498	0,301	0,507	626	593	811	709
1x400/35	40,5	4406	1000	0,0470	0,0602	0,478	0,291	0,573	676	665	901	815
1x500/35	43,8	5418	500	0,0366	0,0468	0,462	0,284	0,631	743	739	1006	921
1x630/35	47,8	6784	500	0,0283	0,0362	0,446	0,276	0,699	820	818	1130	1045

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 8,7/15 kV XLPE insulated, longitudinally sealed, single core cables with copper conductor



Code: N2XS(F)2Y, CU/XLPE/WBT/CWS/WBT/PE

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 8,7/15 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

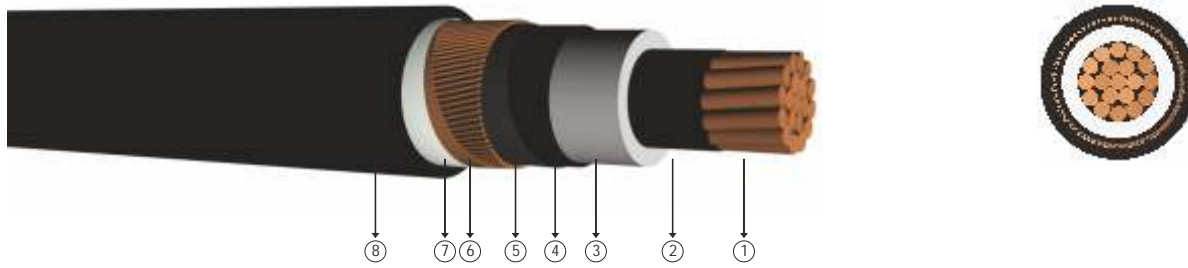
- 1 Stranded copper conductors
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive swelling tape
- 6 Copper screen
- 7 Swellable tape
- 8 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	28,0	850	1000	0,524	0,6707	0,672	0,422	0,181	212	187	231	195	
1x50/16	29,0	1000	1000	0,387	0,4954	0,646	0,403	0,201	249	220	277	234	
1x70/16	30,5	1250	1000	0,268	0,3430	0,615	0,381	0,229	303	269	345	292	
1x95/16	32,5	1500	1000	0,193	0,2470	0,591	0,364	0,255	358	321	418	354	
1x120/16	34,5	1750	1000	0,153	0,1958	0,572	0,353	0,278	404	364	481	407	
1x150/25	35,5	2150	1000	0,124	0,1587	0,555	0,341	0,302	441	405	537	460	
1x185/25	37,5	2500	1000	0,0991	0,1268	0,539	0,332	0,328	493	457	612	527	
1x240/25	40,5	3100	1000	0,0754	0,0965	0,519	0,321	0,363	563	528	716	621	
1x300/25	42,5	3700	1000	0,0601	0,0769	0,502	0,311	0,398	626	593	811	709	
1x400/35	46,0	4800	1000	0,0470	0,0602	0,482	0,301	0,447	676	665	901	815	
1x500/35	49,5	5750	500	0,0366	0,0468	0,466	0,293	0,491	743	739	1006	921	
1x630/35	53,0	7000	500	0,0283	0,0362	0,450	0,285	0,543	820	818	1130	1045	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 12/20 kV or 12,7/22 kV XLPE insulated, longitudinally sealed, single core cables with copper conductor



Code: N2XS(F)2Y, CU/XLPE/WBT/CWS/WBT/PE

Standards: IEC 60502-2, BS 7870-4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 : 12,7/22 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

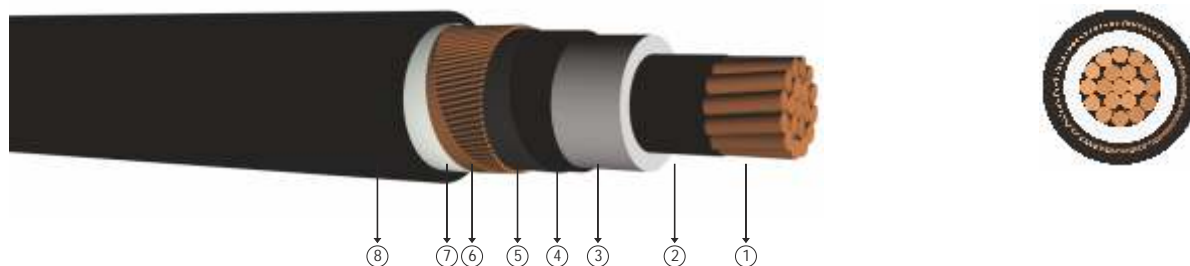
- ① Stranded copper conductors    ③ XLPE insulation    ⑤ Semi conductive swelling tape    ⑦ Swellable tape
- ② Inner semi conductive layer    ④ Outer semi conductive layer    ⑥ Copper screen    ⑧ PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	30,0	900	1000	0,524	0,6707	0,676	0,436	0,157	213	189	233	199	
1x50/16	31,0	1100	1000	0,387	0,4954	0,650	0,416	0,174	250	223	279	238	
1x70/16	33,0	1300	1000	0,268	0,3430	0,619	0,394	0,197	304	273	347	296	
1x95/16	34,5	1600	1000	0,193	0,2470	0,595	0,377	0,218	361	325	420	358	
1x120/16	36,5	1850	1000	0,153	0,1958	0,576	0,365	0,238	407	368	483	412	
1x150/25	38,0	2250	1000	0,124	0,1587	0,559	0,353	0,258	445	410	540	466	
1x185/25	40,0	2650	1000	0,0991	0,1268	0,543	0,343	0,278	498	463	614	534	
1x240/25	42,5	3200	1000	0,0754	0,0965	0,523	0,330	0,308	569	534	718	627	
1x300/25	44,5	3800	1000	0,0601	0,0769	0,506	0,321	0,336	633	601	813	715	
1x400/35	48,0	4900	1000	0,0470	0,0602	0,485	0,309	0,377	686	674	904	819	
1x500/35	51,0	5900	500	0,0366	0,0468	0,469	0,300	0,413	756	750	1011	927	
1x630/35	55,0	7150	500	0,0283	0,0362	0,452	0,292	0,455	842	836	1128	1041	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 12/20 kV XLPE insulated, longitudinally sealed, single core cables with copper conductor



Code: N2XS(F)2Y

Standards: VDE 0276-620

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

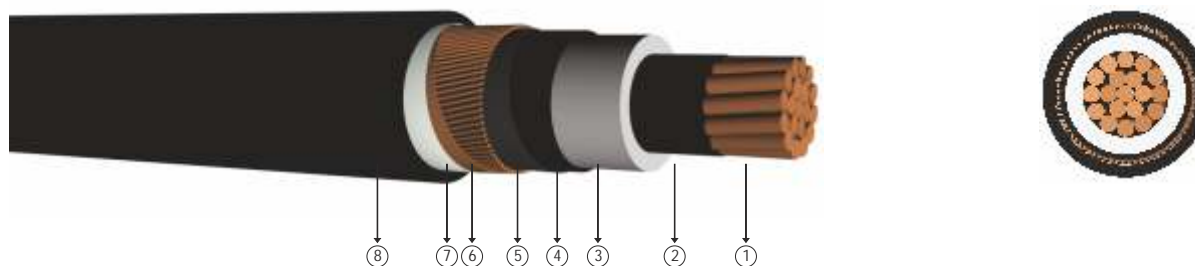
### Construction

- ① Stranded copper conductors    ③ XLPE insulation    ⑤ Semi conductive swelling tape    ⑦ Swellable tape
- ② Inner semi conductive layer    ④ Outer semi conductive layer    ⑥ Copper screen    ⑧ PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES								
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C	
									***	**	***	**
1x35/16	28,3	916	1000	0,524	0,6707	0,676	0,436	0,157	213	189	233	199
1x50/16	29,5	1061	1000	0,387	0,4954	0,650	0,416	0,174	250	223	279	238
1x70/16	31,2	1291	1000	0,268	0,3430	0,619	0,394	0,197	304	273	347	296
1x95/16	32,8	1556	1000	0,193	0,2470	0,595	0,377	0,218	361	325	420	358
1x120/16	33,9	1794	1000	0,153	0,1958	0,576	0,365	0,238	407	368	483	412
1x150/25	35,2	2161	1000	0,124	0,1587	0,559	0,353	0,258	445	410	540	466
1x185/25	37,0	2524	1000	0,0991	0,1268	0,543	0,343	0,278	498	463	614	534
1x240/25	39,5	3106	1000	0,0754	0,0965	0,523	0,330	0,308	569	534	718	627
1x300/25	41,6	3691	1000	0,0601	0,0769	0,506	0,321	0,336	633	601	813	715
1x400/35	44,5	4636	1000	0,0470	0,0602	0,485	0,309	0,377	686	674	904	819
1x500/35	48,0	5685	500	0,0366	0,0468	0,469	0,300	0,413	756	750	1011	927
1x630/35	52,0	7075	500	0,0283	0,0362	0,452	0,292	0,455	842	836	1128	1041

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 18/30 kV or 19/33 kV XLPE insulated, longitudinally sealed, single core cables with copper conductor



Code: N2XS(F)2Y

Standards: IEC 60502-2, BS 7870-4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
 : 19/33 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

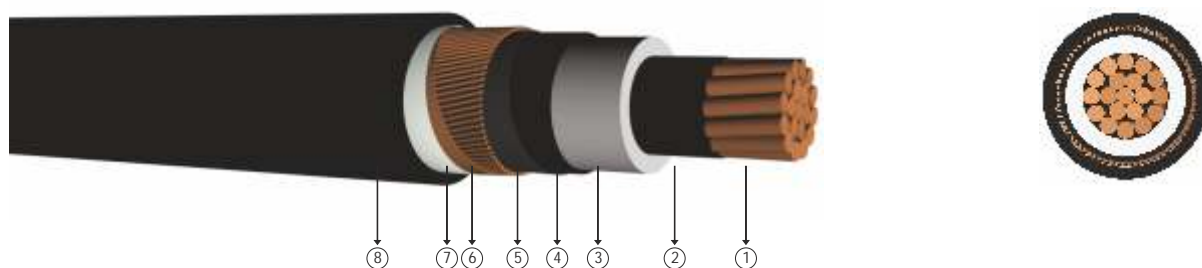
### Construction

- ① Stranded copper conductors
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer.
- ⑤ Semi conductive swelling tape
- ⑥ Copper screen
- ⑦ Swellable tape
- ⑧ PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	35,0	1150	1000	0,524	0,6707	0,686	0,467	0,123	214	192	233	202	
1x50/16	36,5	1300	1000	0,387	0,4954	0,660	0,448	0,135	251	226	279	241	
1x70/16	38,0	1550	1000	0,268	0,3430	0,629	0,423	0,151	306	276	348	299	
1x95/16	40,0	1850	1000	0,193	0,2470	0,605	0,405	0,166	363	329	421	362	
1x120/16	42,0	2150	1000	0,153	0,1958	0,586	0,391	0,180	410	373	483	416	
1x150/25	43,5	2550	1000	0,124	0,1587	0,568	0,379	0,194	449	415	540	469	
1x185/25	45,0	2950	1000	0,0991	0,1268	0,552	0,367	0,208	503	468	614	536	
1x240/25	48,0	3550	1000	0,0754	0,0965	0,532	0,354	0,229	576	541	718	630	
1x300/25	50,0	4150	1000	0,0601	0,0769	0,515	0,343	0,248	641	608	813	717	
1x400/35	53,5	5300	500	0,0470	0,0602	0,494	0,330	0,276	697	684	904	823	
1x500/35	56,5	6300	500	0,0366	0,0468	0,478	0,320	0,301	768	762	1011	929	
1x630/35	60,5	7600	500	0,0283	0,0362	0,461	0,310	0,330	858	847	1128	1043	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\*\* : Trefoil formation  
 Number of system : 1

# 18/30 kV XLPE insulated, longitudinally sealed, single core cables with copper conductor



Code: N2XS(F)2Y

Standards: VDE 0276-620

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. If the cable gets water inside due to the mechanical damages, swellable tapes prevent ingress and migration of moisture or water inside the cable.

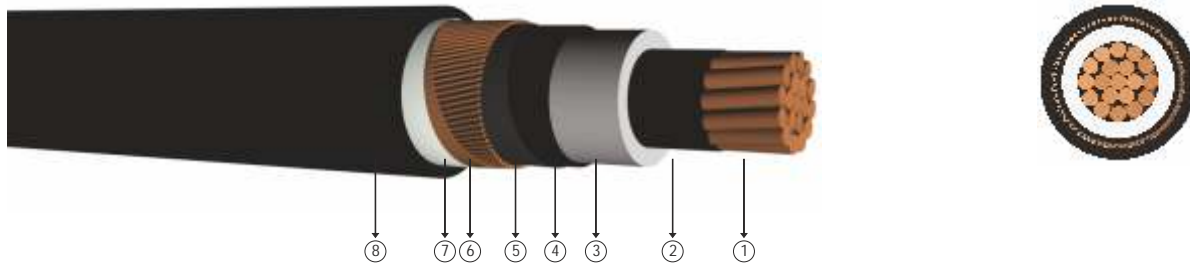
### Construction

- 1 Stranded copper conductors
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive swelling tape
- 6 Copper screen
- 7 Swellable tape
- 8 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x50/16	34,2	1260	1000	0,387	0,4954	0,660	0,448	0,135	251	226	279	241	
1x70/16	35,8	1494	1000	0,268	0,3430	0,629	0,423	0,151	306	276	348	299	
1x95/16	37,5	1781	1000	0,193	0,2470	0,605	0,405	0,166	363	329	421	362	
1x120/16	38,9	2042	1000	0,153	0,1958	0,586	0,391	0,180	410	373	483	416	
1x150/25	40,2	2418	1000	0,124	0,1587	0,568	0,379	0,194	449	415	540	469	
1x185/25	42,0	2790	1000	0,0991	0,1268	0,552	0,367	0,208	503	468	614	536	
1x240/25	44,5	3390	1000	0,0754	0,0965	0,532	0,354	0,229	576	541	718	630	
1x300/25	46,6	3995	1000	0,0601	0,0769	0,515	0,343	0,248	641	608	813	717	
1x400/35	49,5	4962	500	0,0470	0,0602	0,494	0,330	0,276	697	684	904	823	
1x500/35	53,0	6032	500	0,0366	0,0468	0,478	0,320	0,301	768	762	1011	929	
1x630/35	57,0	7451	500	0,0283	0,0362	0,461	0,310	0,330	858	847	1128	1043	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 20,3/35 kV or 20,8/36 kV XLPE insulated, longitudinally sealed, single core cables with copper conductor



Code: N2XS(F)2Y

Standards: HD 620 S3

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 20,3/35 kV  
 : 20,8/36 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

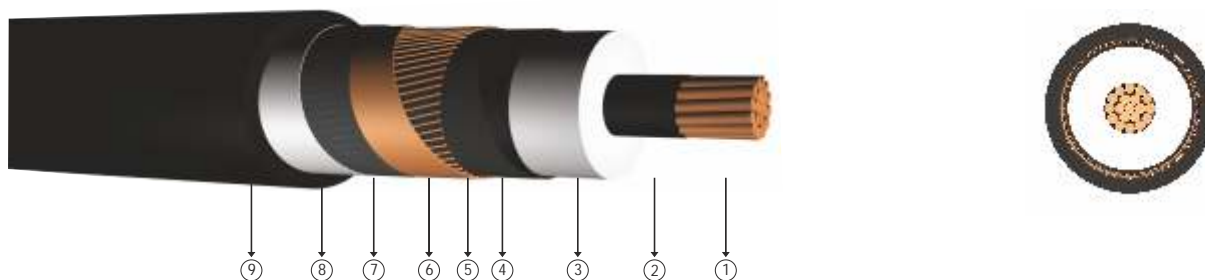
- ① Stranded copper conductors    ③ XLPE insulation    ⑤ Semi conductive swelling tape    ⑦ Swellable tape
- ② Inner semi conductive layer    ④ Outer semi conductive layer    ⑥ Copper screen    ⑧ PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	37,5	1250	1000	0,524	0,6707	0,690	0,480	0,115	214	192	233	202	
1x50/16	38,5	1450	1000	0,387	0,4954	0,664	0,459	0,125	251	226	279	241	
1x70/16	40,5	1700	1000	0,268	0,3430	0,633	0,434	0,140	306	276	348	299	
1x95/16	42,0	2000	1000	0,193	0,2470	0,609	0,416	0,153	363	329	421	362	
1x120/16	44,0	2250	1000	0,153	0,1958	0,590	0,401	0,165	410	373	483	416	
1x150/25	45,5	2700	1000	0,124	0,1587	0,572	0,389	0,178	449	415	540	469	
1x185/25	47,5	3050	1000	0,0991	0,1268	0,556	0,376	0,191	503	468	615	536	
1x240/25	50,0	3650	1000	0,0754	0,0965	0,535	0,363	0,209	576	541	718	630	
1x300/25	52,5	4300	1000	0,0601	0,0769	0,519	0,351	0,226	641	608	812	717	
1x400/35	55,5	5450	500	0,0470	0,0602	0,497	0,338	0,252	697	684	904	823	
1x500/35	59,0	6500	500	0,0366	0,0468	0,481	0,328	0,274	768	762	1011	929	
1x630/35	62,5	7800	500	0,0283	0,0362	0,464	0,317	0,300	858	847	1128	1043	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



## 3,6/6 kV XLPE insulated, radial and longitudinally sealed, single core cables with copper conductor



Code: N2XS(FL)2Y

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 3,6/6 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

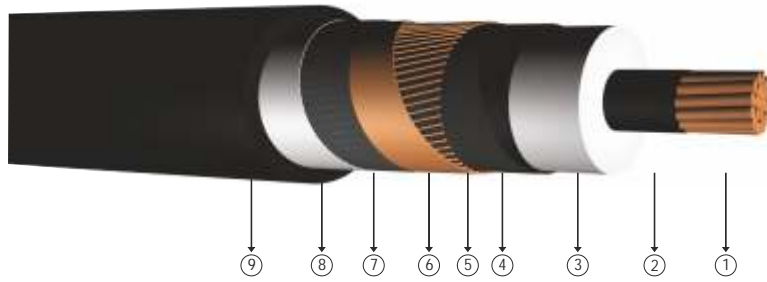
### Construction

- 1 Stranded copper conductors
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive swelling tape
- 6 Copper screen
- 7 Swellable tape
- 8 PE coated aluminium foil
- 9 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	25,0	800	1000	0,524	0,6707	0,665	0,395	0,283	201	191	238	199	
1x50/16	26,0	950	1000	0,387	0,4954	0,640	0,381	0,318	241	227	285	241	
1x70/16	27,5	1150	1000	0,268	0,3430	0,609	0,361	0,368	301	277	356	301	
1x95/16	29,5	1400	1000	0,193	0,2470	0,585	0,345	0,414	364	331	435	365	
1x120/16	31,0	1600	1000	0,153	0,1958	0,566	0,333	0,455	424	379	496	419	
1x150/25	32,5	2050	1000	0,124	0,1587	0,549	0,323	0,499	479	422	554	479	
1x185/25	34,5	2400	1000	0,0991	0,1268	0,533	0,315	0,544	549	476	637	543	
1x240/25	37,5	2950	1000	0,0754	0,0965	0,513	0,306	0,587	640	550	746	640	
1x300/25	40,0	3600	1000	0,0601	0,0769	0,498	0,300	0,603	724	619	846	731	
1x400/35	44,0	4700	1000	0,0470	0,0602	0,478	0,292	0,642	795	695	941	840	
1x500/35	47,5	5700	500	0,0366	0,0468	0,463	0,286	0,667	883	773	1051	949	
1x630/35	51,5	6950	500	0,0283	0,0362	0,947	0,278	0,739	981	856	1180	1076	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

6/10 kV or 6,35/11 kV XLPE insulated,  
radial and longitudinally sealed,  
single core cables with copper conductor



Code: N2XS(FL)2Y

Standards: IEC 60502-2, BS 7870-4.10

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 6/10 kV  
 : 6,35/11 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

Construction

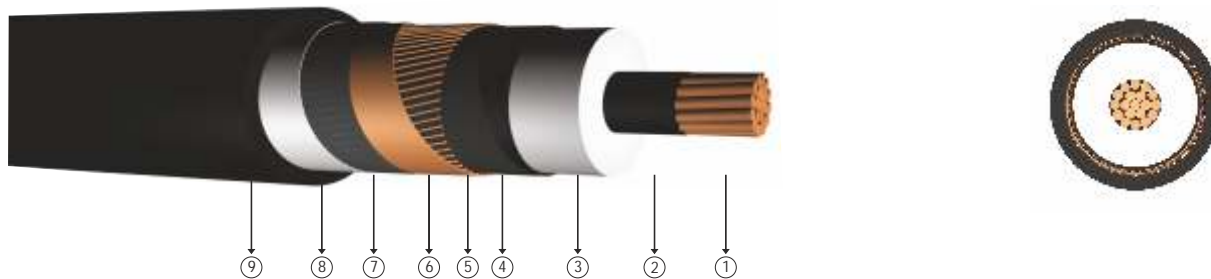
- ① Stranded copper conductors
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Copper screen
- ⑦ Swellable tape
- ⑧ PE coated aluminium foil
- ⑨ PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	25,0	850	1000	0,524	0,6707	0,669	0,413	0,223	212	187	231	195	
1x50/16	26,0	1000	1000	0,387	0,4954	0,644	0,395	0,248	249	220	277	234	
1x70/16	28,0	1200	1000	0,268	0,3430	0,613	0,373	0,285	303	269	345	292	
1x95/16	30,0	1500	1000	0,193	0,2470	0,588	0,357	0,320	358	321	418	354	
1x120/16	31,0	1750	1000	0,153	0,1958	0,570	0,346	0,350	404	364	481	407	
1x150/25	33,0	2150	1000	0,124	0,1587	0,552	0,335	0,382	441	405	537	460	
1x185/25	34,0	2500	1000	0,0991	0,1268	0,537	0,326	0,415	493	457	612	527	
1x240/25	37,0	3050	1000	0,0754	0,0965	0,516	0,314	0,462	563	528	716	621	
1x300/25	40,0	3650	1000	0,0601	0,0769	0,500	0,305	0,507	626	593	811	709	
1x400/35	43,0	4750	1000	0,0470	0,0602	0,479	0,295	0,573	676	665	901	815	
1x500/35	46,0	5700	500	0,0366	0,0468	0,463	0,288	0,631	743	739	1006	921	
1x630/35	50,0	7000	500	0,0283	0,0362	0,447	0,280	0,699	820	818	1130	1045	

Note  
 In ground : Current carrying capacities are valid under the following conditions:  
 : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



## 6/10 kV XLPE insulated, radial and longitudinally sealed, single core cables with copper conductor



Code: N2XS(FL)2Y

Standards: VDE 0276-620

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 6/10 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

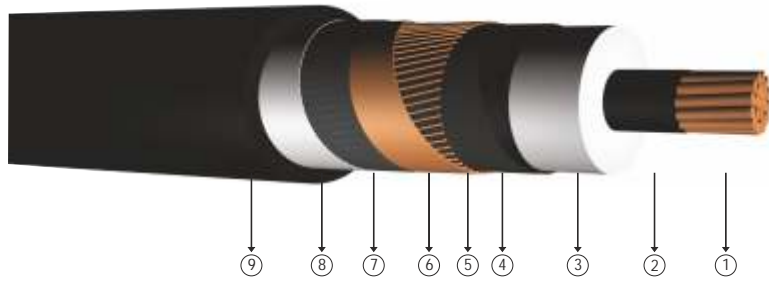
- ① Stranded copper conductors
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Copper screen
- ⑦ Swellable tape
- ⑧ PE coated aluminium foil
- ⑨ PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	24,7	819	1000	0,524	0,6707	0,669	0,413	0,223	212	187	231	195	
1x50/16	25,9	958	1000	0,387	0,4954	0,644	0,395	0,248	249	220	277	234	
1x70/16	27,6	1178	1000	0,268	0,3430	0,613	0,373	0,285	303	269	345	292	
1x95/16	28,9	1428	1000	0,193	0,2470	0,588	0,357	0,320	358	321	418	354	
1x120/16	30,3	1674	1000	0,153	0,1958	0,570	0,346	0,350	404	364	481	407	
1x150/25	31,6	2034	1000	0,124	0,1587	0,552	0,335	0,382	441	405	537	460	
1x185/25	33,4	2390	1000	0,0991	0,1268	0,537	0,326	0,415	493	457	612	527	
1x240/25	35,8	2963	1000	0,0754	0,0965	0,516	0,314	0,462	563	528	716	621	
1x300/25	38,3	3563	1000	0,0601	0,0769	0,500	0,305	0,507	626	593	811	709	
1x400/35	41,1	4488	1000	0,0470	0,0602	0,479	0,295	0,573	676	665	901	815	
1x500/35	44,4	5508	500	0,0366	0,0468	0,463	0,288	0,631	743	739	1006	921	
1x630/35	48,4	6883	500	0,0283	0,0362	0,447	0,280	0,699	820	818	1130	1045	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 8,7/15 kV XLPE insulated, radial and longitudinally sealed, single core cables with copper conductor



Code: N2XS(FL)2Y

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 8,7/15 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

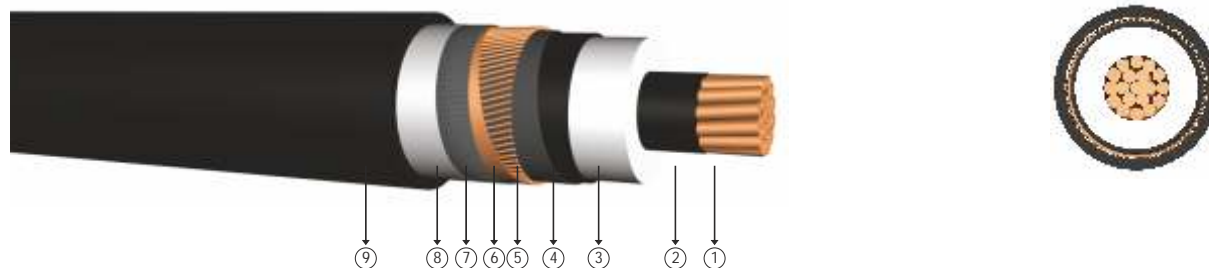
- 1 Stranded copper conductors
- 4 Outer semi conductive layer
- 7 Swellable tape
- 2 Inner semi conductive layer
- 5 Semi conductive swelling tape
- 8 PE coated aluminium foil
- 3 XLPE insulation
- 6 Copper screen
- 9 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	28,0	900	1000	0,524	0,6707	0,674	0,429	0,181	212	187	231	195	
1x50/16	29,0	1100	1000	0,387	0,4954	0,648	0,410	0,201	249	220	277	234	
1x70/16	30,0	1300	1000	0,268	0,3430	0,617	0,387	0,229	303	269	345	292	
1x95/16	32,0	1600	1000	0,193	0,2470	0,593	0,371	0,255	358	321	418	354	
1x120/16	34,0	1850	1000	0,153	0,1958	0,574	0,358	0,278	404	364	481	407	
1x150/25	36,0	2250	1000	0,124	0,1587	0,557	0,348	0,302	441	405	537	460	
1x185/25	37,0	2600	1000	0,0991	0,1268	0,541	0,337	0,328	493	457	612	527	
1x240/25	40,0	3200	1000	0,0754	0,0965	0,521	0,326	0,363	563	528	716	621	
1x300/25	42,0	3800	1000	0,0601	0,0769	0,504	0,316	0,398	626	593	811	709	
1x400/35	46,0	4900	1000	0,0470	0,0602	0,483	0,305	0,447	676	665	901	815	
1x500/35	48,0	5900	500	0,0366	0,0468	0,467	0,297	0,491	743	739	1006	921	
1x630/35	54,0	7150	500	0,0283	0,0362	0,451	0,289	0,543	820	818	1130	1045	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



12/20 kV or 12,7/22 kV XLPE insulated,  
radial and longitudinally sealed,  
single core cables with copper conductor



Code: N2XS(FL)2Y

Standards: IEC 60502-2, BS 7870-4.10

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 : 12,7/22 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

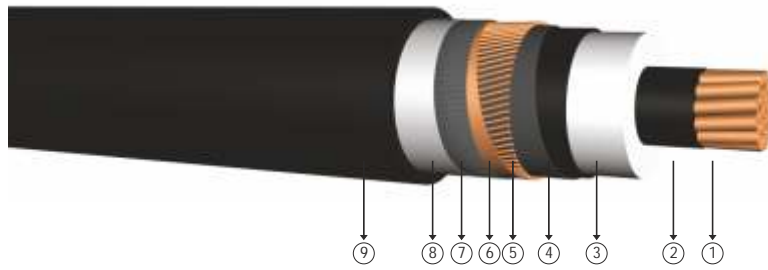
Construction

- 1 Stranded copper conductors
- 4 Outer semi conductive layer
- 7 Swellable tape
- 2 Inner semi conductive layer
- 5 Semi conductive swelling tape
- 8 PE coated aluminium foil
- 3 XLPE insulation
- 6 Copper screen
- 9 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES								
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C	
									***	**	***	**
1x35/16	31,0	950	1000	0,524	0,6707	0,678	0,442	0,157	213	189	233	199
1x50/16	32,0	1000	1000	0,387	0,4954	0,652	0,422	0,174	250	223	279	238
1x70/16	34,0	1400	1000	0,268	0,3430	0,621	0,400	0,197	304	273	348	296
1x95/16	35,5	1700	1000	0,193	0,2470	0,597	0,382	0,218	361	325	421	358
1x120/16	37,5	1950	1000	0,153	0,1958	0,578	0,370	0,238	407	368	483	412
1x150/25	34,0	2350	1000	0,124	0,1587	0,561	0,358	0,258	445	410	540	466
1x185/25	41,0	2750	1000	0,0991	0,1268	0,545	0,348	0,278	498	463	615	534
1x240/25	43,5	3300	1000	0,0754	0,0965	0,524	0,335	0,308	569	534	718	627
1x300/25	45,5	3900	1000	0,0601	0,0769	0,508	0,325	0,336	633	601	812	715
1x400/35	49,0	5000	1000	0,0470	0,0602	0,486	0,313	0,377	686	674	904	819
1x500/35	52,5	6000	500	0,0366	0,0468	0,470	0,304	0,413	756	750	1011	927
1x630/35	56,0	7300	500	0,0283	0,0362	0,454	0,295	0,455	842	836	1128	1041

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

12/20 kV XLPE insulated,  
radial and longitudinally sealed,  
single core cables with copper conductor



Code: N2XS(FL)2Y

Standards: VDE 0276-620

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

Construction

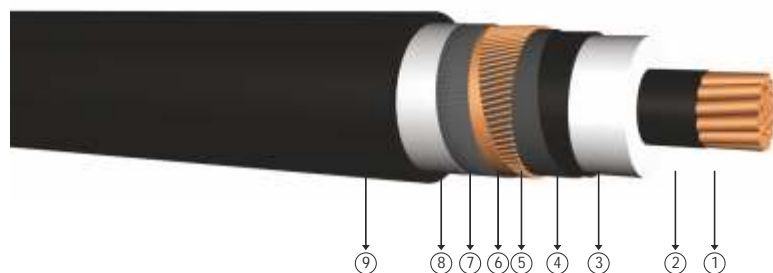
- 1 Stranded copper conductors
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive swelling tape
- 6 Copper screen
- 7 Swellable tape
- 8 PE coated aluminium foil
- 9 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	28,9	972	1000	0,524	0,6707	0,678	0,442	0,157	213	189	233	199	
1x50/16	30,1	1120	1000	0,387	0,4954	0,652	0,422	0,174	250	223	279	238	
1x70/16	31,8	1353	1000	0,268	0,3430	0,621	0,400	0,197	304	273	348	296	
1x95/16	33,4	1622	1000	0,193	0,2470	0,597	0,382	0,218	361	325	421	358	
1x120/16	34,5	1862	1000	0,153	0,1958	0,578	0,370	0,238	407	368	483	412	
1x150/25	35,8	2232	1000	0,124	0,1587	0,561	0,358	0,258	445	410	540	466	
1x185/25	37,6	2598	1000	0,0991	0,1268	0,545	0,348	0,278	498	463	615	534	
1x240/25	40,0	3186	1000	0,0754	0,0965	0,524	0,335	0,308	569	534	718	627	
1x300/25	42,2	3776	1000	0,0601	0,0769	0,508	0,325	0,336	633	601	812	715	
1x400/35	45,1	4728	1000	0,0470	0,0602	0,486	0,313	0,377	686	674	904	819	
1x500/35	48,6	5784	500	0,0366	0,0468	0,470	0,304	0,413	756	750	1011	927	
1x630/35	52,6	7183	500	0,0283	0,0362	0,454	0,295	0,455	842	836	1128	1041	

Note  
 In ground : Current carrying capacities are valid under the following conditions:  
 : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 18/30 kV or 19/33 kV XLPE insulated, radial and longitudinally sealed, single core cables with copper conductor



Code: N2XS(FL)2Y

Standards: IEC 60502-2, BS 7870-4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
   : 19/33 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

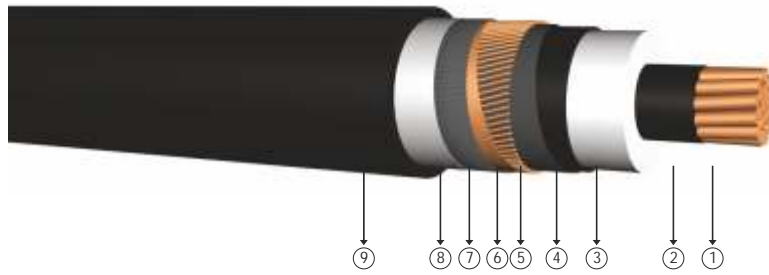
### Construction

- ① Stranded copper conductors
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Copper screen
- ⑦ Swellable tape
- ⑧ PE coated aluminium foil
- ⑨ PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	36,5	1250	1000	0,524	0,6707	0,688	0,474	0,123	214	192	233	202	
1x50/16	37,5	1400	1000	0,387	0,4954	0,662	0,453	0,135	251	226	279	241	
1x70/16	39,5	1650	1000	0,268	0,3430	0,631	0,429	0,151	306	276	348	299	
1x95/16	41,0	1950	1000	0,193	0,2470	0,607	0,410	0,166	363	329	421	362	
1x120/16	43,0	2250	1000	0,153	0,1958	0,588	0,397	0,180	410	373	483	416	
1x150/25	44,5	2650	1000	0,124	0,1587	0,570	0,363	0,194	449	415	540	469	
1x185/25	46,5	3050	1000	0,0991	0,1268	0,554	0,372	0,208	503	468	615	536	
1x240/25	49,5	3650	1000	0,0754	0,0965	0,534	0,359	0,229	576	541	718	630	
1x300/25	51,5	4300	1000	0,0601	0,0769	0,517	0,347	0,248	641	608	812	717	
1x400/35	55,0	5400	500	0,0470	0,0602	0,495	0,334	0,276	697	684	904	823	
1x500/35	58,0	6450	500	0,0366	0,0468	0,479	0,324	0,301	768	762	1011	929	
1x630/35	62,0	7750	500	0,0283	0,0362	0,463	0,314	0,330	858	847	1128	1043	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 18/30 kV XLPE insulated, radial and longitudinally sealed, single core cables with copper conductor



Code: N2XS(FL)2Y

Standards: VDE 0276-620

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

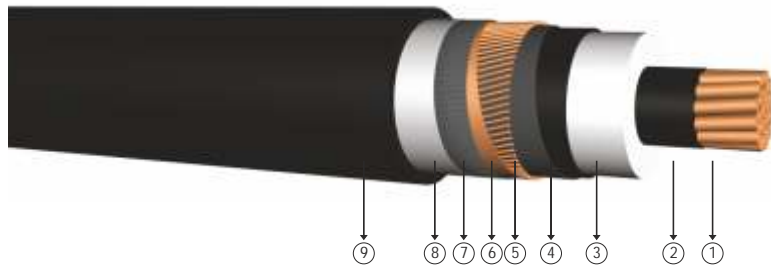
- 1** Stranded copper conductors
- 4** Outer semi conductive layer
- 7** Swellable tape
- 2** Inner semi conductive layer
- 5** Semi conductive swelling tape
- 8** PE coated aluminium foil
- 3** XLPE insulation
- 6** Copper screen
- 9** PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x50/16	34,8	1329	1000	0,387	0,4954	0,662	0,453	0,135	251	226	279	241	
1x70/16	36,4	1567	1000	0,268	0,3430	0,631	0,429	0,151	306	276	348	299	
1x95/16	38,1	1857	1000	0,193	0,2470	0,607	0,410	0,166	363	329	421	362	
1x120/16	39,5	2122	1000	0,153	0,1958	0,588	0,397	0,180	410	373	483	416	
1x150/25	40,8	2500	1000	0,124	0,1587	0,570	0,363	0,194	449	415	540	469	
1x185/25	42,6	2876	1000	0,0991	0,1268	0,554	0,372	0,208	503	468	615	536	
1x240/25	45,0	3482	1000	0,0754	0,0965	0,534	0,359	0,229	576	541	718	630	
1x300/25	47,2	4091	1000	0,0601	0,0769	0,517	0,347	0,248	641	608	812	717	
1x400/35	50,1	5064	500	0,0470	0,0602	0,495	0,334	0,276	697	684	904	823	
1x500/35	53,6	6142	500	0,0366	0,0468	0,479	0,324	0,301	768	762	1011	929	
1x630/35	57,6	7570	500	0,0283	0,0362	0,463	0,314	0,330	858	847	1128	1043	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



20,3/35 kV or 20,8/36 kV XLPE insulated, radial and longitudinally sealed, single core cables with copper conductor



Code: N2XS(FL)2Y

Standards: HD 620 S3, TSE K 204

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 20,3/35 kV  
   : 20,8/36 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

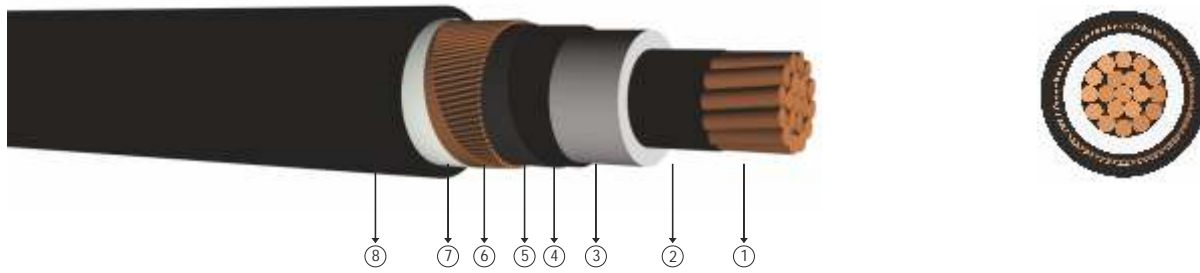
Construction

- ① Stranded copper conductors
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Copper screen
- ⑦ Swellable tape
- ⑧ PE coated aluminium foil
- ⑨ PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES								
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C	
									***	**	***	**
1x35/16	38,5	1350	1000	0,524	0,6707	0,692	0,485	0,115	214	192	233	202
1x50/16	39,5	1550	1000	0,387	0,4954	0,666	0,464	0,125	251	226	279	241
1x70/16	41,5	1800	1000	0,268	0,3430	0,635	0,439	0,140	306	276	348	299
1x95/16	43,0	2100	1000	0,193	0,2470	0,610	0,419	0,153	363	329	421	362
1x120/16	45,0	2400	1000	0,153	0,1958	0,591	0,405	0,165	410	373	483	416
1x150/25	46,5	2800	1000	0,124	0,1587	0,574	0,342	0,178	449	415	540	469
1x185/25	48,5	3200	1000	0,0991	0,1268	0,557	0,381	0,191	503	468	615	536
1x240/25	51,0	3800	1000	0,0754	0,0965	0,537	0,366	0,209	576	541	718	630
1x300/25	53,0	4450	1000	0,0601	0,0769	0,520	0,354	0,248	641	608	812	717
1x400/35	56,5	5550	500	0,0470	0,0602	0,499	0,341	0,226	697	684	904	823
1x500/35	60,0	6600	500	0,0366	0,0468	0,482	0,330	0,274	768	762	1011	929
1x630/35	63,5	7950	500	0,0283	0,0362	0,466	0,320	0,300	858	847	1128	1043

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 3,6/6 kV XLPE insulated single core cables with copper conductor



Code: N2XS2Y, CU/XLPE/CWS/PE

Standards: IEC 60502-2, BS 7870-4.10

## Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 3,6/6 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

## Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

## Construction

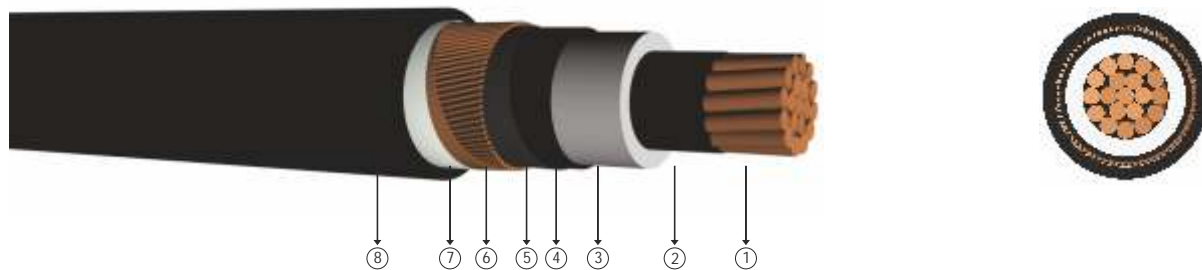
- 1 Stranded copper conductors
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 PP tape
- 8 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	25,0	800	1000	0,524	0,6707	0,665	0,395	0,283	201	191	238	199	
1x50/16	26,0	950	1000	0,387	0,4954	0,640	0,381	0,318	241	227	285	241	
1x70/16	27,5	1150	1000	0,268	0,3430	0,609	0,361	0,368	301	277	356	301	
1x95/16	29,5	1400	1000	0,193	0,2470	0,585	0,345	0,414	364	331	435	365	
1x120/16	31,0	1600	1000	0,153	0,1958	0,566	0,333	0,455	424	379	496	419	
1x150/25	32,5	2050	1000	0,124	0,1587	0,549	0,323	0,499	479	422	554	479	
1x185/25	34,5	2400	1000	0,0991	0,1268	0,533	0,315	0,544	549	476	637	543	
1x240/25	37,5	2950	1000	0,0754	0,0965	0,513	0,306	0,587	640	550	746	640	
1x300/25	40,0	3600	1000	0,0601	0,0769	0,498	0,300	0,603	724	619	846	731	
1x400/35	44,0	4700	1000	0,0470	0,0602	0,478	0,292	0,642	795	695	941	840	
1x500/35	47,5	5700	500	0,0366	0,0468	0,463	0,286	0,667	883	773	1051	949	
1x630/35	51,5	6950	500	0,0283	0,0362	0,947	0,278	0,739	981	856	1180	1076	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



## 6/10 kV or 6,35/11 kV XLPE insulated, single core cables with copper conductor



Code: N2XS2Y, CU/XLPE/CWS/PE

Standards: IEC 60502-2, BS 7870-4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 6/10 kV  
 : 6,35/11 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

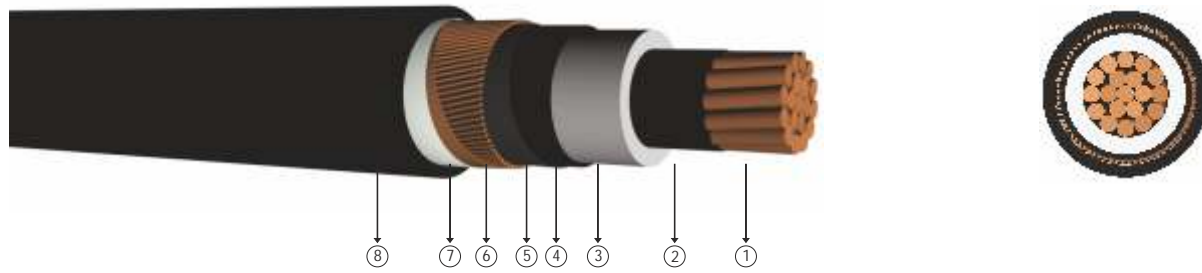
- ① Stranded copper conductors    ③ XLPE insulation    ⑤ Semi conductive tape    ⑦ PP tape  
 ② Inner semi conductive layer    ④ Outer semi conductive layer    ⑥ Copper screen    ⑧ PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES								
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C	
									***	**	***	**
1x35/16	25,0	850	1000	0,524	0,6707	0,669	0,413	0,223	212	187	231	195
1x50/16	26,0	1000	1000	0,387	0,4954	0,644	0,395	0,248	249	220	277	234
1x70/16	28,0	1200	1000	0,268	0,3430	0,613	0,373	0,285	303	269	345	292
1x95/16	30,0	1500	1000	0,193	0,2470	0,588	0,357	0,320	358	321	418	354
1x120/16	31,0	1750	1000	0,153	0,1958	0,570	0,346	0,350	404	364	481	407
1x150/25	33,0	2150	1000	0,124	0,1587	0,552	0,335	0,382	441	405	537	460
1x185/25	34,0	2500	1000	0,0991	0,1268	0,537	0,326	0,415	493	457	612	527
1x240/25	37,0	3050	1000	0,0754	0,0965	0,516	0,314	0,462	563	528	716	621
1x300/25	40,0	3650	1000	0,0601	0,0769	0,500	0,305	0,507	626	593	811	709
1x400/35	43,0	4750	1000	0,0470	0,0602	0,479	0,295	0,573	676	665	901	815
1x500/35	46,0	5700	500	0,0366	0,0468	0,463	0,288	0,631	743	739	1006	921
1x630/35	50,0	7000	500	0,0283	0,0362	0,447	0,280	0,699	820	818	1130	1045

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 6/10 kV XLPE insulated, single core cables with copper conductor



Code: N2XS2Y

Standards: VDE 0276-620

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 6/10 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

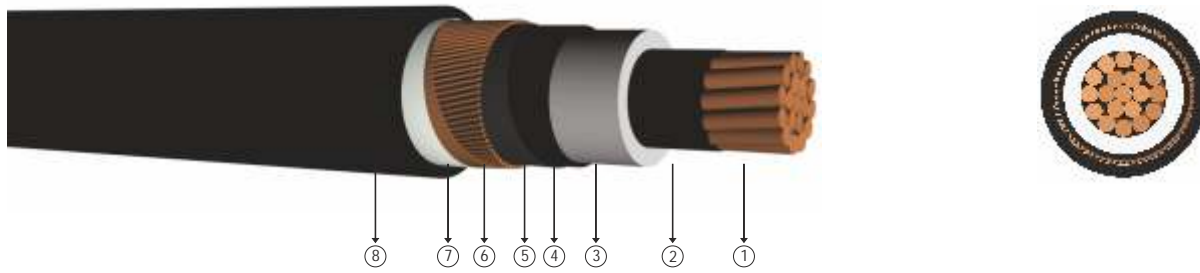
- 1 Stranded copper conductors
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 PP tape
- 8 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	23,5	768	1000	0,524	0,6707	0,669	0,413	0,223	212	187	231	195	
1x50/16	24,5	897	1000	0,387	0,4954	0,644	0,395	0,248	249	220	277	234	
1x70/16	26,0	1105	1000	0,268	0,3430	0,613	0,373	0,285	303	269	345	292	
1x95/16	27,3	1356	1000	0,193	0,2470	0,588	0,357	0,320	358	321	418	354	
1x120/16	29,0	1607	1000	0,153	0,1958	0,570	0,346	0,350	404	364	481	407	
1x150/25	30,0	1952	1000	0,124	0,1587	0,552	0,335	0,382	441	405	537	460	
1x185/25	32,0	2311	1000	0,0991	0,1268	0,537	0,326	0,415	493	457	612	527	
1x240/25	34,3	2867	1000	0,0754	0,0965	0,516	0,314	0,462	563	528	716	621	
1x300/25	37,0	3477	1000	0,0601	0,0769	0,500	0,305	0,507	626	593	811	709	
1x400/35	39,5	4378	1000	0,0470	0,0602	0,479	0,295	0,573	676	665	901	815	
1x500/35	42,8	5389	500	0,0366	0,0468	0,463	0,288	0,631	743	739	1006	921	
1x630/35	46,8	6753	500	0,0283	0,0362	0,447	0,280	0,699	820	818	1130	1045	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\*\* : Trefoil formation  
 Number of system : 1



# 8,7/15 kV XLPE insulated, single core cables with copper conductor



Code: N2XS2Y, CU/XLPE/CWS/PE

Standards: IEC 60502-2, BS 7870-4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 8,7/15 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

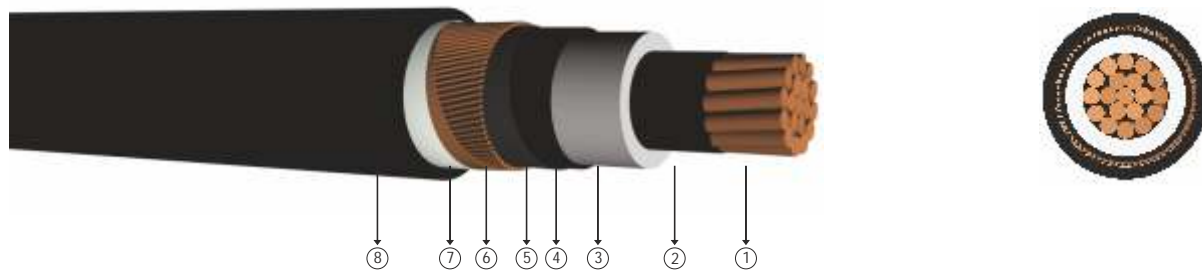
### Construction

- 1 Stranded copper conductors    3 XLPE insulation    5 Semi conductive tape    7 PP tape
- 2 Inner semi conductive layer    4 Outer semi conductive layer    6 Copper screen    8 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	28,0	900	1000	0,524	0,6707	0,674	0,429	0,181	212	187	231	195	
1x50/16	29,0	1100	1000	0,387	0,4954	0,648	0,410	0,201	249	220	277	234	
1x70/16	30,0	1300	1000	0,268	0,3430	0,617	0,387	0,229	303	269	345	292	
1x95/16	32,0	1600	1000	0,193	0,2470	0,593	0,371	0,255	358	321	418	354	
1x120/16	34,0	1850	1000	0,153	0,1958	0,574	0,358	0,278	404	364	481	407	
1x150/25	36,0	2250	1000	0,124	0,1587	0,557	0,348	0,302	441	405	537	460	
1x185/25	37,0	2600	1000	0,0991	0,1268	0,541	0,337	0,328	493	457	612	527	
1x240/25	40,0	3200	1000	0,0754	0,0965	0,521	0,326	0,363	563	528	716	621	
1x300/25	42,0	3800	1000	0,0601	0,0769	0,504	0,316	0,398	626	593	811	709	
1x400/35	46,0	4900	1000	0,0470	0,0602	0,483	0,305	0,447	676	665	901	815	
1x500/35	48,0	5900	500	0,0366	0,0468	0,467	0,297	0,491	743	739	1006	921	
1x630/35	54,0	7150	500	0,0283	0,0362	0,451	0,289	0,543	820	818	1130	1045	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 12/20 kV or 12,7/22 kV XLPE insulated, single core cables with copper conductor



Code: N2XS2Y, CU/XLPE/CWS/PE

Standards: IEC 60502-2, BS 7870-4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 12,7/22 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

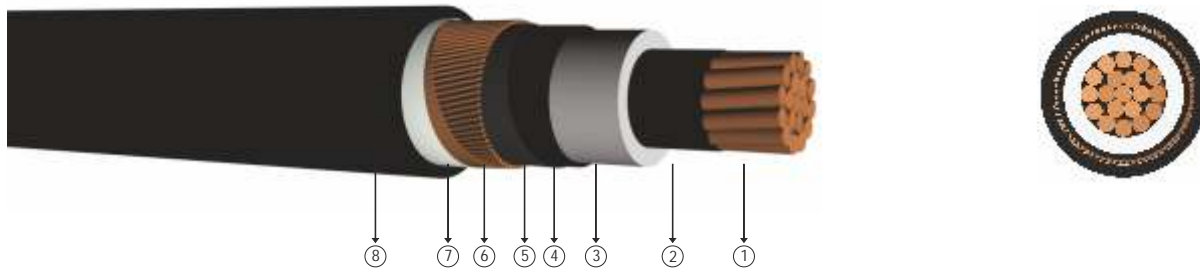
- ① Stranded copper conductors      ③ XLPE insulation      ⑤ Semi conductive tape      ⑦ PP tape
- ② Inner semi conductive layer      ④ Outer semi conductive layer      ⑥ Copper screen      ⑧ PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	31,0	950	1000	0,524	0,6707	0,678	0,442	0,157	213	189	233	199	
1x50/16	32,0	1000	1000	0,387	0,4954	0,652	0,422	0,174	250	223	279	238	
1x70/16	34,0	1400	1000	0,268	0,3430	0,621	0,400	0,197	304	273	348	296	
1x95/16	35,5	1700	1000	0,193	0,2470	0,597	0,382	0,218	361	325	421	358	
1x120/16	37,5	1950	1000	0,153	0,1958	0,578	0,370	0,238	407	368	483	412	
1x150/25	34,0	2350	1000	0,124	0,1587	0,561	0,358	0,258	445	410	540	466	
1x185/25	41,0	2750	1000	0,0991	0,1268	0,545	0,348	0,278	498	463	615	534	
1x240/25	43,5	3300	1000	0,0754	0,0965	0,524	0,335	0,308	569	534	718	627	
1x300/25	45,5	3900	1000	0,0601	0,0769	0,508	0,325	0,336	633	601	812	715	
1x400/35	49,0	5000	1000	0,0470	0,0602	0,486	0,313	0,377	686	674	904	819	
1x500/35	52,5	6000	500	0,0366	0,0468	0,470	0,304	0,413	756	750	1011	927	
1x630/35	56,0	7300	500	0,0283	0,0362	0,454	0,295	0,455	842	836	1128	1041	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 12/20 kV XLPE insulated, single core cables with copper conductor



Code: N2XS2Y

Standards: VDE 0276-620

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

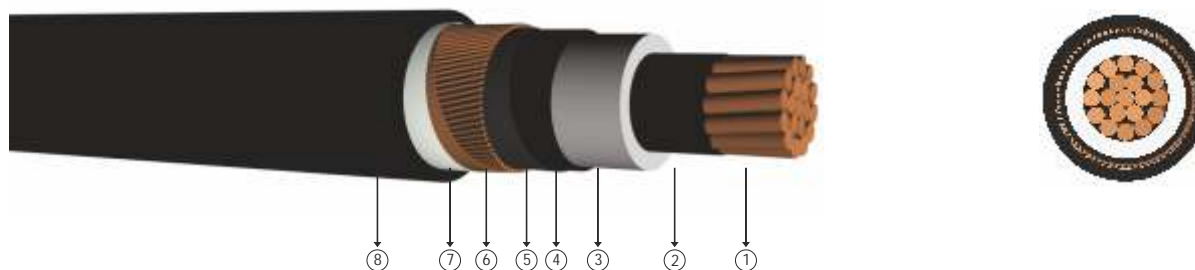
### Construction

- 1 Stranded copper conductors
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 PP tape
- 8 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	28,0	929	1000	0,524	0,6707	0,678	0,442	0,157	213	189	233	199	
1x50/16	29,0	1062	1000	0,387	0,4954	0,652	0,422	0,174	250	223	279	238	
1x70/16	31,0	1302	1000	0,268	0,3430	0,621	0,400	0,197	304	273	348	296	
1x95/16	32,0	1543	1000	0,193	0,2470	0,597	0,382	0,218	361	325	421	358	
1x120/16	33,0	1775	1000	0,153	0,1958	0,578	0,370	0,238	407	368	483	412	
1x150/25	34,2	2136	1000	0,124	0,1587	0,561	0,358	0,258	445	410	540	466	
1x185/25	36,0	2498	1000	0,0991	0,1268	0,545	0,348	0,278	498	463	615	534	
1x240/25	39,0	3108	1000	0,0754	0,0965	0,524	0,335	0,308	569	534	718	627	
1x300/25	41,0	3687	1000	0,0601	0,0769	0,508	0,325	0,336	633	601	812	715	
1x400/35	44,5	4672	1000	0,0470	0,0602	0,486	0,313	0,377	686	674	904	819	
1x500/35	47,5	5688	500	0,0366	0,0468	0,470	0,304	0,413	756	750	1011	927	
1x630/35	51,0	7041	500	0,0283	0,0362	0,454	0,295	0,455	842	836	1128	1041	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 18/30 kV or 19/33 kV XLPE insulated, single core cables with copper conductor



Code: N2XS2Y, CU/XLPE/CWS/PE

Standards: IEC 60502-2, BS 7870-4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
 : 19/33 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

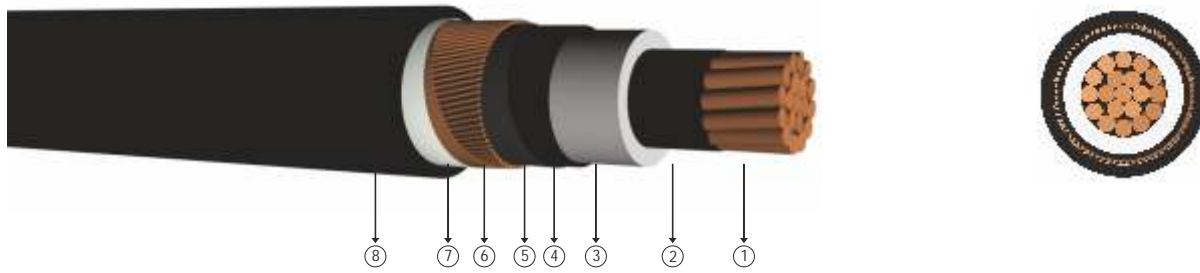
These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

- ① Stranded copper conductors      ③ XLPE insulation      ⑤ Semi conductive tape      ⑦ PP tape
- ② Inner semi conductive layer      ④ Outer semi conductive layer      ⑥ Copper screen      ⑧ PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	36,5	1250	1000	0,524	0,6707	0,688	0,474	0,123	214	192	233	202	
1x50/16	37,5	1400	1000	0,387	0,4954	0,662	0,453	0,135	251	226	279	241	
1x70/16	39,5	1650	1000	0,268	0,3430	0,631	0,429	0,151	306	276	348	299	
1x95/16	41,0	1950	1000	0,193	0,2470	0,607	0,410	0,166	363	329	421	362	
1x120/16	43,0	2250	1000	0,153	0,1958	0,588	0,397	0,180	410	373	483	416	
1x150/25	44,5	2650	1000	0,124	0,1587	0,570	0,363	0,194	449	415	540	469	
1x185/25	46,5	3050	1000	0,0991	0,1268	0,554	0,372	0,208	503	468	615	536	
1x240/25	49,5	3650	1000	0,0754	0,0965	0,534	0,359	0,229	576	541	718	630	
1x300/25	51,5	4300	1000	0,0601	0,0769	0,517	0,347	0,248	641	608	812	717	
1x400/35	55,0	5400	500	0,0470	0,0602	0,495	0,334	0,276	697	684	904	823	
1x500/35	58,0	6450	500	0,0366	0,0468	0,479	0,324	0,301	768	762	1011	929	
1x630/35	62,0	7750	500	0,0283	0,0362	0,463	0,314	0,330	858	847	1128	1043	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



Code: N2XS2Y

Standards: VDE 0276-620

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

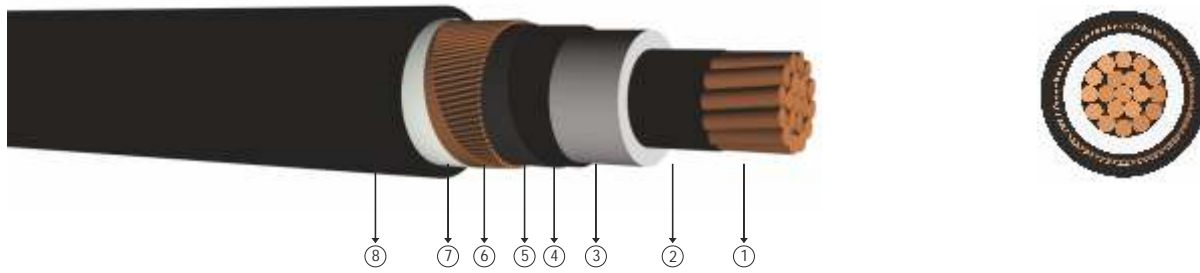
### Construction

- 1 Stranded copper conductors    3 XLPE insulation    5 Semi conductive tape    7 PP tape
- 2 Inner semi conductive layer    4 Outer semi conductive layer    6 Copper screen    8 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x50/16	33,2	1236	1000	0,387	0,4954	0,662	0,453	0,135	251	226	279	241	
1x70/16	35,0	1480	1000	0,268	0,3430	0,631	0,429	0,151	306	276	348	299	
1x95/16	36,5	1755	1000	0,193	0,2470	0,607	0,410	0,166	363	329	421	362	
1x120/16	38,0	2022	1000	0,153	0,1958	0,588	0,397	0,180	410	373	483	416	
1x150/25	39,2	2391	1000	0,124	0,1587	0,570	0,363	0,194	449	415	540	469	
1x185/25	41,0	2762	1000	0,0991	0,1268	0,554	0,372	0,208	503	468	615	536	
1x240/25	43,5	3360	1000	0,0754	0,0965	0,534	0,359	0,229	576	541	718	630	
1x300/25	46,5	4025	1000	0,0601	0,0769	0,517	0,347	0,248	641	608	812	717	
1x400/35	49,5	5001	500	0,0470	0,0602	0,495	0,334	0,276	697	684	904	823	
1x500/35	52,5	6040	500	0,0366	0,0468	0,479	0,324	0,301	768	762	1011	929	
1x630/35	56,0	7414	500	0,0283	0,0362	0,463	0,314	0,330	858	847	1128	1043	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 20,3/35 kV or 20,8/36 kV XLPE insulated, single core cables with copper conductor



Code: N2XS2Y, CU/XLPE/CWS/PE

Standards: HD 620 S3, TSE K 204

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 20,3/35 kV  
 : 20,8/36 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

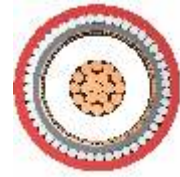
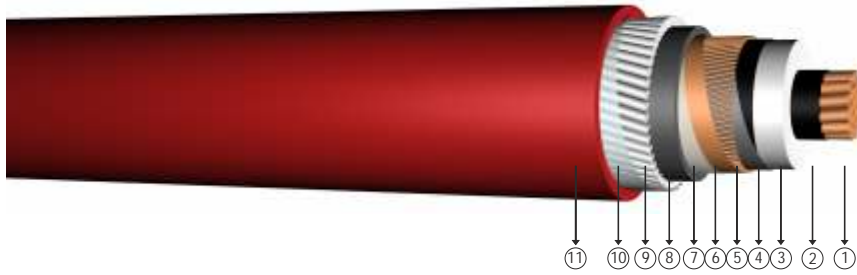
- 1 Stranded copper conductors
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 PP tape
- 8 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES								
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C	
									***	**	***	**
1x35/16	38,5	1350	1000	0,524	0,6707	0,692	0,485	0,115	214	192	233	202
1x50/16	39,5	1550	1000	0,387	0,4954	0,666	0,464	0,125	251	226	279	241
1x70/16	41,5	1800	1000	0,268	0,3430	0,635	0,439	0,140	306	276	348	299
1x95/16	43,0	2100	1000	0,193	0,2470	0,610	0,419	0,153	363	329	421	362
1x120/16	45,0	2400	1000	0,153	0,1958	0,591	0,405	0,165	410	373	483	416
1x150/25	46,5	2800	1000	0,124	0,1587	0,574	0,342	0,178	449	415	540	469
1x185/25	48,5	3200	1000	0,0991	0,1268	0,557	0,381	0,191	503	468	615	536
1x240/25	51,0	3800	1000	0,0754	0,0965	0,537	0,366	0,209	576	541	718	630
1x300/25	53,0	4450	1000	0,0601	0,0769	0,520	0,354	0,248	641	608	812	717
1x400/35	56,5	5550	500	0,0470	0,0602	0,499	0,341	0,226	697	684	904	823
1x500/35	60,0	6600	500	0,0366	0,0468	0,482	0,330	0,274	768	762	1011	929
1x630/35	63,5	7950	500	0,0283	0,0362	0,466	0,320	0,300	858	847	1128	1043

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



## 3,6/6 kV XLPE insulated, round aluminium wire armoured, single core cables with copper conductor



Code: N2XSYR(A)Y, CU/XLPE/CWS/PVC/AWA/PVC

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 3,6/6 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

- ① Stranded copper conductors      ④ Outer semi conductive layer      ⑦ PP tape      ⑩ PP tape
- ② Inner semi conductive layer      ⑤ Semi conductive tape      ⑧ PVC inner sheath      ⑪ PVC outer sheath
- ③ XLPE insulation      ⑥ Copper screen      ⑨ Round aluminium wire

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	26,2	1135	1000	0,524	0,6707	0,657	0,367	0,283	201	191	238	199	
1x50/16	27,3	1280	1000	0,387	0,4954	0,632	0,351	0,318	241	227	285	241	
1x70/16	29,0	1530	1000	0,268	0,3430	0,601	0,332	0,368	301	277	356	301	
1x95/16	31,0	1840	1000	0,193	0,2470	0,577	0,318	0,414	364	331	435	365	
1x120/16	32,3	2110	1000	0,153	0,1958	0,558	0,308	0,455	424	379	496	419	
1x150/25	34,7	2600	1000	0,124	0,1587	0,541	0,299	0,499	479	422	554	479	
1x185/25	36,6	3000	1000	0,0991	0,1268	0,525	0,292	0,544	549	476	637	543	
1x240/25	39,4	3640	1000	0,0754	0,0965	0,506	0,284	0,587	640	550	746	640	
1x300/25	41,8	4270	1000	0,0601	0,0769	0,490	0,279	0,603	724	619	846	731	
1x400/35	46,9	5535	500	0,0470	0,0602	0,471	0,275	0,642	795	695	941	840	
1x500/35	50,6	6670	500	0,0366	0,0468	0,456	0,270	0,667	883	773	1051	949	
1x630/35	54,5	8130	500	0,0283	0,0362	0,440	0,264	0,739	981	856	1180	1076	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 6/10 kV XLPE insulated, round aluminium wire armoured, single core cables with copper conductor



Code: N2XSYR(A)Y, CU/XLPE/CWS/PVC/AWA/PVC

Standards: IEC 60502-2, BS 6622

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 10 kV (6/10 kV)  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

- ① Stranded copper conductors      ④ Outer semi conductive layer      ⑦ PP tape      ⑩ PP tape
- ② Inner semi conductive layer      ⑤ Semi conductive tape      ⑧ PVC inner sheath      ⑪ PVC outer sheath
- ③ XLPE insulation      ⑥ Copper screen      ⑨ Round aluminium wire

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	28,0	1220	1000	0,524	0,6707	0,657	0,367	0,223	212	187	231	195	
1x50/16	29,3	1390	1000	0,387	0,4954	0,632	0,351	0,248	249	220	277	234	
1x70/16	31,0	1640	1000	0,268	0,3430	0,601	0,332	0,285	303	269	345	292	
1x95/16	32,9	1962	1000	0,193	0,2470	0,577	0,318	0,320	358	321	418	354	
1x120/16	35,1	2320	1000	0,153	0,1958	0,558	0,308	0,350	404	364	481	407	
1x150/25	36,7	2725	1000	0,124	0,1587	0,541	0,299	0,382	441	405	537	460	
1x185/25	38,4	3125	1000	0,0991	0,1268	0,525	0,292	0,415	493	457	612	527	
1x240/25	41,0	3750	1000	0,0754	0,0965	0,506	0,284	0,462	563	528	716	621	
1x300/25	43,2	4380	1000	0,0601	0,0769	0,490	0,279	0,507	626	593	811	709	
1x400/35	47,7	5600	500	0,0470	0,0602	0,471	0,275	0,573	676	665	901	815	
1x500/35	51,0	6620	500	0,0366	0,0468	0,456	0,270	0,631	743	739	1006	921	
1x630/35	55,0	8190	500	0,0283	0,0362	0,440	0,264	0,699	820	818	1130	1045	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 8,7/15 kV XLPE insulated, round aluminium wire armoured, single core cables with copper conductor



Code: N2XSYR(A)Y, CU/XLPE/CWS/PVC/AWA/PVC

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 8,7/15 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

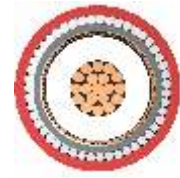
### Construction

- 1 Stranded copper conductors
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 PP tape
- 8 PVC inner sheath
- 9 Round aluminium wire
- 10 PP tape
- 11 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	30,4	1355	1000	0,524	0,6707	0,657	0,367	0,181	212	187	231	195	
1x50/16	31,5	1509	1000	0,387	0,4954	0,632	0,351	0,201	249	220	277	234	
1x70/16	33,4	1784	1000	0,268	0,3430	0,601	0,332	0,229	303	269	345	292	
1x95/16	36,1	2198	1000	0,193	0,2470	0,577	0,318	0,255	358	321	418	354	
1x120/16	37,6	2490	1000	0,153	0,1958	0,558	0,308	0,278	404	364	481	407	
1x150/25	39,1	2900	1000	0,124	0,1587	0,541	0,299	0,302	441	405	537	460	
1x185/25	40,8	3295	1000	0,0991	0,1268	0,525	0,292	0,328	493	457	612	527	
1x240/25	43,8	3945	1000	0,0754	0,0965	0,506	0,284	0,363	563	528	716	621	
1x300/25	46,8	4746	1000	0,0601	0,0769	0,490	0,279	0,398	626	593	811	709	
1x400/35	50,0	5820	500	0,0470	0,0602	0,471	0,275	0,447	676	665	901	815	
1x500/35	53,6	6971	500	0,0366	0,0468	0,456	0,270	0,491	743	739	1006	921	
1x630/35	57,3	8410	500	0,0283	0,0362	0,440	0,264	0,543	820	818	1130	1045	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

12/20 kV or 12,7/22 kV XLPE insulated,  
round aluminium wire armoured,  
single core cables with copper conductor



Code: N2XSYR(A)Y, CU/XLPE/CWS/PVC/AWA/PVC

Standards: IEC 60502-2, BS 6622

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 : 12,7/22 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

Construction

- ① Stranded copper conductors
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive tape
- ⑥ Copper screen
- ⑦ PP tape
- ⑧ PVC inner sheath
- ⑨ Round aluminium wire
- ⑩ PP tape
- ⑪ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES								
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C	
									***	**	***	**
1x35/16	32,6	1482	1000	0,524	0,6707	0,657	0,367	0,123	213	189	233	199
1x50/16	34,5	1730	1000	0,387	0,4954	0,632	0,351	0,135	250	223	279	238
1x70/16	36,4	2020	1000	0,268	0,3430	0,601	0,332	0,151	304	273	348	296
1x95/16	38,1	2330	1000	0,193	0,2470	0,577	0,318	0,166	361	325	421	358
1x120/16	39,8	2640	1000	0,153	0,1958	0,558	0,308	0,180	407	368	483	412
1x150/25	41,1	3040	1000	0,124	0,1587	0,541	0,299	0,194	445	410	540	466
1x185/25	43,0	3465	1000	0,0991	0,1268	0,525	0,292	0,208	498	463	615	534
1x240/25	46,8	4290	1000	0,0754	0,0965	0,506	0,284	0,229	569	534	718	627
1x300/25	48,9	4935	500	0,0601	0,0769	0,490	0,279	0,248	633	601	812	715
1x400/35	52,4	6045	500	0,0470	0,0602	0,471	0,275	0,276	686	674	904	819
1x500/35	55,8	7185	500	0,0366	0,0468	0,456	0,270	0,301	756	750	1011	927
1x630/35	56,0	8660	500	0,0283	0,0362	0,440	0,264	0,330	842	836	1128	1041

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



18/30 kV or 19/33 XLPE insulated, round aluminium wire armoured, single core cables with copper conductor



Code: N2XSYR(A)Y, CU/XLPE/CWS/PVC/AWA/PVC

Standards: IEC 60502-2, BS 6622

**Technical Data**

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
   : 19/33 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

**Application**

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

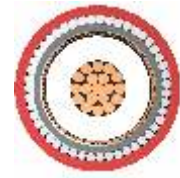
**Construction**

- 1 Stranded copper conductors      4 Outer semi conductive layer      7 PP tape      10 PP tape
- 2 Inner semi conductive layer      5 Semi conductive tape      8 PVC inner sheath      11 PVC outer sheath
- 3 XLPE insulation      6 Copper screen      9 Round aluminium wire

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	39,0	1927	1000	0,524	0,6707	0,657	0,367	0,123	214	192	233	202	
1x50/16	40,0	2100	1000	0,387	0,4954	0,632	0,351	0,135	251	226	279	241	
1x70/16	41,8	2400	1000	0,268	0,3430	0,601	0,332	0,151	306	276	348	299	
1x95/16	43,5	2735	1000	0,193	0,2470	0,577	0,318	0,166	363	329	421	362	
1x120/16	46,4	3220	1000	0,153	0,1958	0,558	0,308	0,180	410	373	483	416	
1x150/25	48,0	3660	1000	0,124	0,1587	0,541	0,299	0,194	449	415	540	469	
1x185/25	49,6	4090	1000	0,0991	0,1268	0,525	0,292	0,208	503	468	615	536	
1x240/25	52,4	4800	1000	0,0754	0,0965	0,506	0,284	0,229	576	541	718	630	
1x300/25	54,6	5465	500	0,0601	0,0769	0,490	0,279	0,248	641	608	812	717	
1x400/35	58,0	6610	500	0,0470	0,0602	0,471	0,275	0,276	697	684	904	823	
1x500/35	61,2	7686	500	0,0366	0,0468	0,456	0,270	0,301	768	762	1011	929	
1x630/35	66,0	9308	500	0,0283	0,0362	0,440	0,264	0,330	858	847	1128	1043	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

20,3/35 kV or 20,8/36 kV XLPE insulated,  
round aluminium wire armoured,  
single core cables with copper conductor



Code: N2XSYR(A)Y, CU/XLPE/CWS/PVC/AWA/PVC

Standards: HD 620 S3, TSE K 204

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 20,3/35 kV  
 : 20,8/36 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

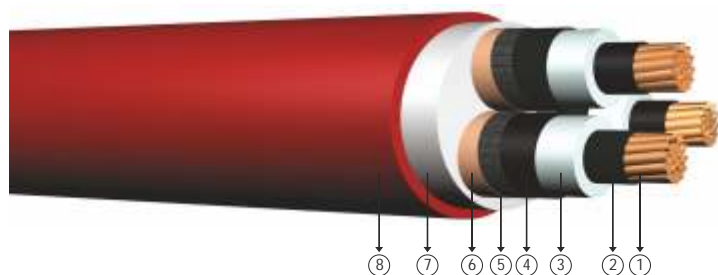
These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

Construction

- ① Stranded copper conductors      ④ Outer semi conductive layer      ⑦ PP tape      ⑩ PP tape
- ② Inner semi conductive layer      ⑤ Semi conductive tape      ⑧ PVC inner sheath      ⑪ PVC outer sheath
- ③ XLPE insulation      ⑥ Copper screen      ⑨ Round aluminium wire

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES								
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C	
									***	**	***	**
1x35/16	42,0	2070	1000	0,524	0,6707	0,657	0,367	0,115	214	192	233	202
1x50/16	44,1	2265	1000	0,387	0,4954	0,632	0,351	0,125	251	226	279	241
1x70/16	45,8	2550	1000	0,268	0,3430	0,601	0,332	0,140	306	276	348	299
1x95/16	48,2	3080	1000	0,193	0,2470	0,577	0,318	0,153	363	329	421	362
1x120/16	50,5	3420	1000	0,153	0,1958	0,558	0,308	0,165	410	373	483	416
1x150/25	52,1	3830	1000	0,124	0,1587	0,541	0,299	0,178	449	415	540	469
1x185/25	54,2	4325	1000	0,0991	0,1268	0,525	0,292	0,191	503	468	615	536
1x240/25	56,6	5025	1000	0,0754	0,0965	0,506	0,284	0,209	576	541	718	630
1x300/25	58,5	5670	500	0,0601	0,0769	0,490	0,279	0,226	641	608	812	717
1x400/35	62,3	6850	500	0,0470	0,0602	0,471	0,275	0,252	697	684	904	823
1x500/35	65,8	8065	500	0,0366	0,0468	0,456	0,270	0,274	768	762	1011	929
1x630/35	68,0	9565	500	0,0283	0,0362	0,440	0,264	0,300	858	847	1128	1043

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



Code: YXC8V-R, N2XSEY, CU/XLPE/CTS/PVC

R: Stranded Conductor

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 3,6/6 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

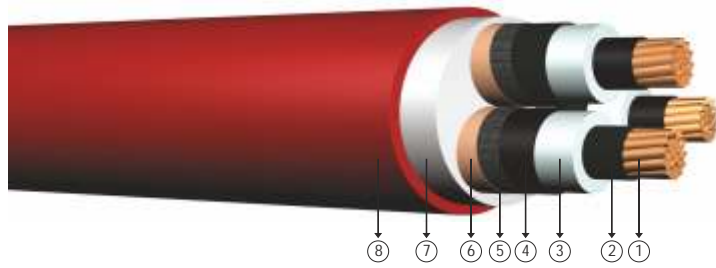
### Construction

- 1 Stranded copper conductors
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 Thermoplastic filler
- 8 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	42,0	2700	1000	0,524	0,352	0,229	176	171
3x50/16	45,0	3350	1000	0,387	0,336	0,255	208	196
3x70/16	48,5	4150	1000	0,268	0,318	0,288	255	249
3x95/16	53,0	5200	500	0,193	0,303	0,324	307	307
3x120/16	57,0	6250	500	0,153	0,292	0,359	353	353
3x150/25	60,5	7350	500	0,124	0,284	0,388	396	406
3x185/25	64,5	8650	500	0,0991	0,276	0,424	447	464
3x240/25	71,0	10850	250	0,0754	0,267	0,469	523	548
3x300/25	77,5	13200	250	0,0601	0,263	0,486	581	632
3x400/35	86,0	16900	250	0,0470	0,257	0,521	653	726

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 6/10 kV or 6,35/11 kV XLPE insulated, three core cables with copper conductor



Code: YXC8V-R, N2XSEY, CU/XLPE/CTS/PVC

R: Stranded Conductor

Standards: IEC 60502-2, BS 7870-4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 6/10 kV  
   6,35/11 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

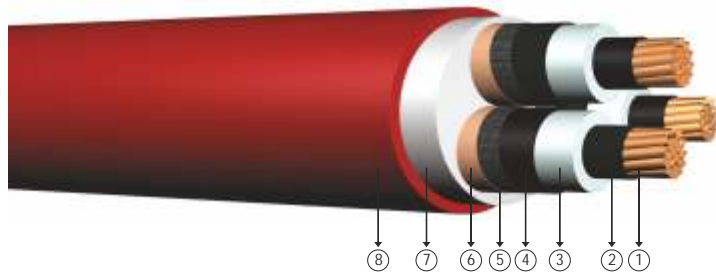
These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

- ① Stranded copper conductors      ③ XLPE insulation      ⑤ Semi conductive tape      ⑦ Thermoplastic filler
- ② Inner semi conductive layer      ④ Outer semi conductive layer      ⑥ Copper screen      ⑧ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	46,5	3100	1000	0,524	0,374	0,189	178	173
3x50/16	49,5	3750	1000	0,387	0,355	0,209	210	206
3x70/16	53,0	4600	1000	0,268	0,336	0,236	256	257
3x95/16	57,5	5700	500	0,193	0,320	0,263	307	313
3x120/16	61,5	6700	500	0,153	0,308	0,291	349	360
3x150/25	64,5	7850	500	0,124	0,299	0,314	392	410
3x185/25	68,5	9200	500	0,0991	0,290	0,341	443	469
3x240/25	75,0	11450	250	0,0754	0,278	0,387	513	553
3x300/25	80,5	13650	250	0,0601	0,270	0,422	576	635
3x400/35	88,0	17250	250	0,0470	0,261	0,475	650	731

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



Code: YXC8V-R, N2XSEY, CU/XLPE/CTS/PVC

R: Stranded Conductor

Standards: IEC 60502-2

**Technical Data**

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 8,7/15 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

**Application**

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

**Construction**

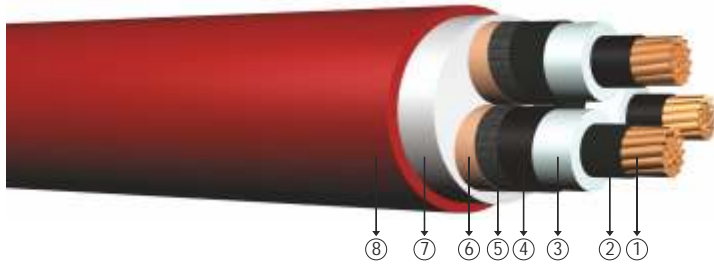
- 1 Stranded copper conductors
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 Thermoplastic filler
- 8 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	51,5	3600	1000	0,524	0,397	0,160	178	173
3x50/16	54,5	4300	1000	0,387	0,377	0,175	210	206
3x70/16	58,5	5200	500	0,268	0,356	0,196	256	257
3x95/16	62,5	6300	500	0,193	0,339	0,218	307	313
3x120/16	66,5	7350	500	0,153	0,325	0,240	349	360
3x150/25	69,5	8550	500	0,124	0,315	0,258	392	410
3x185/25	74,0	10000	500	0,0991	0,305	0,280	443	469
3x240/25	80,5	12200	250	0,0754	0,292	0,315	513	553
3x300/25	85,5	14450	250	0,0601	0,284	0,343	576	635
3x400/35	93,0	18150	250	0,0470	0,273	0,385	650	731

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



# 12/20 kV or 12,7/22 kV XLPE insulated, three core cables with copper conductor



Code: YXC8V-R, N2XSEY, CU/XLPE/CTS/PVC

R: Stranded Conductor

Standards: IEC 60502-2, BS 7870-4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 12,7/22 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

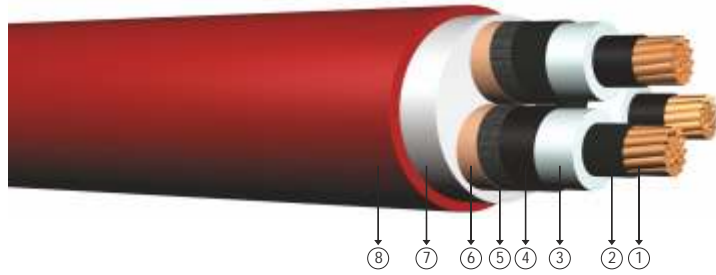
- ① Stranded copper conductors
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive tape
- ⑥ Copper screen
- ⑦ Thermoplastic filler
- ⑧ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	56,5	4150	1000	0,5240	0,416	0,141	183	182
3x50/16	59,5	4850	1000	0,3870	0,395	0,155	216	217
3x70/16	63,0	5800	500	0,2680	0,373	0,172	264	269
3x95/16	67,0	6900	500	0,1930	0,355	0,191	316	326
3x120/16	71,0	8000	500	0,1530	0,340	0,209	360	377
3x150/25	74,5	9250	500	0,1240	0,329	0,225	404	426
3x185/25	78,5	10650	250	0,0991	0,319	0,243	457	488
3x240/25	85,0	13000	250	0,0754	0,304	0,273	532	576
3x300/25	90,0	15250	250	0,0601	0,295	0,296	599	654
3x400/35	98,0	19100	250	0,0470	0,284	0,331	685	750

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 18/30 kV or 19/33 kV XLPE insulated, three core cables with copper conductor



Code: YXC8V-R, N2XSEY, CU/XLPE/CTS/PVC

R: Stranded Conductor

Standards: IEC 60502-2, BS 7870-4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
   : 19/33 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

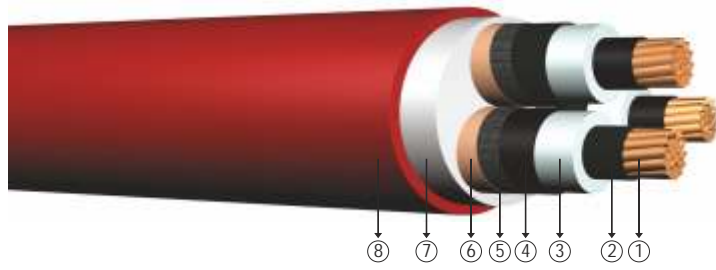
### Construction

- ① Stranded copper conductors      ③ XLPE insulation      ⑤ Semi conductive tape      ⑦ Thermoplastic filler
- ② Inner semi conductive layer      ④ Outer semi conductive layer      ⑥ Copper screen      ⑧ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	68,0	5650	500	0,5240	0,457	0,114	-	-
3x50/16	71,5	6500	500	0,3870	0,434	0,124	214	217
3x70/16	75,0	7500	500	0,2680	0,410	0,137	261	269
3x95/16	79,0	8700	500	0,1930	0,389	0,150	313	326
3x120/16	83,0	9900	500	0,1530	0,372	0,163	356	377
3x150/25	86,0	11150	250	0,1240	0,360	0,174	400	426
3x185/25	90,0	12650	250	0,0991	0,348	0,188	441	488
3x240/25	97,0	15200	250	0,0754	0,331	0,209	510	576
3x300/25	102,0	17650	250	0,0601	0,321	0,226	604	651
3x400/35	110,0	21550	200	0,0470	0,307	0,251	-	-

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

## 20,3/35 kV or 20,8/36 kV XLPE insulated, three core cables with copper conductor



Code: YXC8V-R, N2XSEY, CU/XLPE/CTS/PVC

R: Stranded Conductor

Standards: HD 620 S3, TSE K 204

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 20,3/35 kV  
   : 20,8/36 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

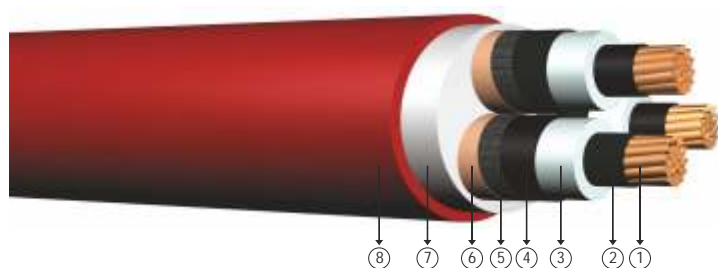
- ① Stranded copper conductors      ③ XLPE insulation                    ⑤ Semi conductive tape      ⑦ Thermoplastic filler
- ② Inner semi conductive layer      ④ Outer semi conductive layer      ⑥ Copper screen                    ⑧ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	μF/km	In ground at 20°C	In air at 30°C
3x35/16	73,0	6400	500	0,524	0,471	0,107	-	-
3x50/16	76,5	7150	500	0,387	0,448	0,116	214	210
3x70/16	79,5	8200	500	0,268	0,423	0,127	261	262
3x95/16	83,5	9400	500	0,193	0,401	0,140	313	319
3x120/16	87,5	10700	250	0,153	0,384	0,152	356	364
3x150/25	91,0	12000	250	0,124	0,372	0,161	400	418
3x185/25	95,0	13600	250	0,0991	0,359	0,173	441	478
3x240/25	101,5	16100	250	0,0754	0,341	0,193	510	562
3x300/25	106,5	18550	250	0,0601	0,330	0,208	-	-
3x400/35	114,0	22550	200	0,0470	0,316	0,231	-	-

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 6/10 kV or 6,35/11 kV halogen free, flame retardant, XLPE insulated, three core cables with copper conductor



Code: YXC8Z1-R, N2XSEH, CU/XLPE/CTS/LSZH

R: Stranded Conductor

Standards: IEC 60502-2, BS 7870-4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 6/10 kV  
   6,35/11 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

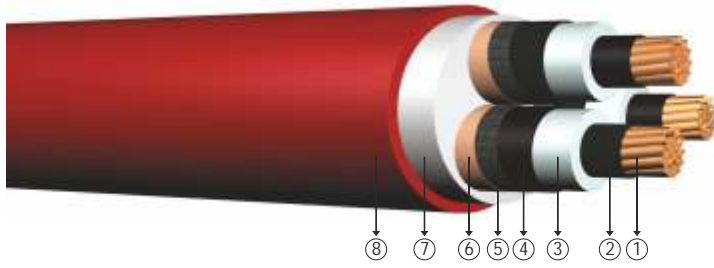
### Construction

- ① Stranded copper conductors      ③ XLPE insulation      ⑤ Semi conductive tape      ⑦ Thermoplastic filler
- ② Inner semi conductive layer      ④ Outer semi conductive layer      ⑥ Copper screen      ⑧ LSZH outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	46,5	3100	1000	0,524	0,374	0,189	178	173
3x50/16	49,5	3750	1000	0,387	0,355	0,209	210	206
3x70/16	53,0	4600	1000	0,268	0,336	0,236	256	257
3x95/16	57,5	5700	500	0,193	0,320	0,263	307	313
3x120/16	61,5	6700	500	0,153	0,308	0,291	349	360
3x150/25	64,5	7850	500	0,124	0,299	0,314	392	410
3x185/25	68,5	9200	500	0,0991	0,290	0,341	443	469
3x240/25	75,0	11450	250	0,0754	0,278	0,387	513	553
3x300/25	80,5	13650	250	0,0601	0,270	0,422	576	635
3x400/35	88,0	17250	250	0,0470	0,261	0,475	650	731

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

12/20 kV or 12,7/22 kV halogen free, flame retardant, XLPE insulated, three core cables with copper conductor



Code: YXC8Z1-R, N2XSEH, CU/XLPE/CTS/LSZH

R: Stranded Conductor

Standards: IEC 60502-2, BS 7870-4.10

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 12,7/22 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

Construction

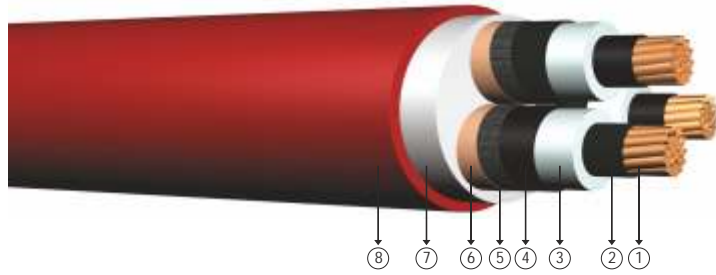
- ① Stranded copper conductors
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive tape
- ⑥ Copper screen
- ⑦ Thermoplastic filler
- ⑧ LSZH outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	56,5	4150	1000	0,5240	0,416	0,141	183	182
3x50/16	59,5	4850	1000	0,3870	0,395	0,155	216	217
3x70/16	63,0	5800	500	0,2680	0,373	0,172	264	269
3x95/16	67,0	6900	500	0,1930	0,355	0,191	316	326
3x120/16	71,0	8000	500	0,1530	0,340	0,209	360	377
3x150/25	74,5	9250	500	0,1240	0,329	0,225	404	426
3x185/25	78,5	10650	250	0,0991	0,319	0,243	457	488
3x240/25	85,0	13000	250	0,0754	0,304	0,273	532	576
3x300/25	90,0	15250	250	0,0601	0,295	0,296	599	654
3x400/35	98,0	19100	250	0,0470	0,284	0,331	685	750

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



# 18/30 kV or 19/33 kV halogen free, flame retardant, XLPE insulated, three core cables with copper conductor



Code: YXC8Z1-R, N2XSEH, CU/XLPE/CTS/LSZH

R: Stranded Conductor

Standards: IEC 60502-2, BS 7870-4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
   : 19/33 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

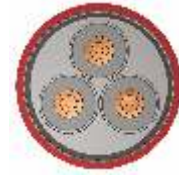
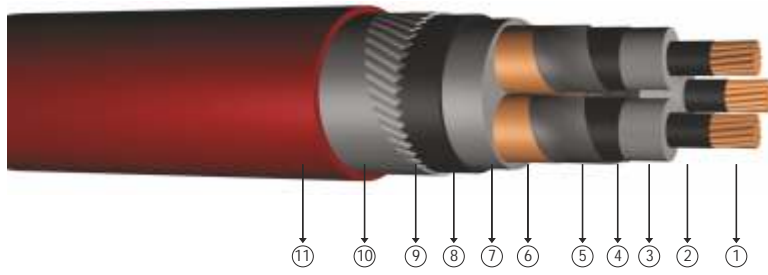
### Construction

- 1 Stranded copper conductors      3 XLPE insulation      5 Semi conductive tape      7 Thermoplastic filler
- 2 Inner semi conductive layer      4 Outer semi conductive layer      6 Copper screen      8 LSZH outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	68,0	5650	500	0,5240	0,457	0,114	-	-
3x50/16	71,5	6500	500	0,3870	0,434	0,124	214	217
3x70/16	75,0	7500	500	0,2680	0,410	0,137	261	269
3x95/16	79,0	8700	500	0,1930	0,389	0,150	313	326
3x120/16	83,0	9900	500	0,1530	0,372	0,163	356	377
3x150/25	86,0	11150	250	0,1240	0,360	0,174	400	426
3x185/25	90,0	12650	250	0,0991	0,348	0,188	441	488
3x240/25	97,0	15200	250	0,0754	0,331	0,209	510	576
3x300/25	102,0	17650	250	0,0601	0,321	0,226	604	651
3x400/35	110,0	21550	200	0,0470	0,307	0,251	-	-

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 3,6/6 kV XLPE insulated, flat steel wire armoured, three core cables with copper conductor



Code: YXC8VZ3V-R, N2XSEYFGY

R: Stranded Conductor

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 3,6/6 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

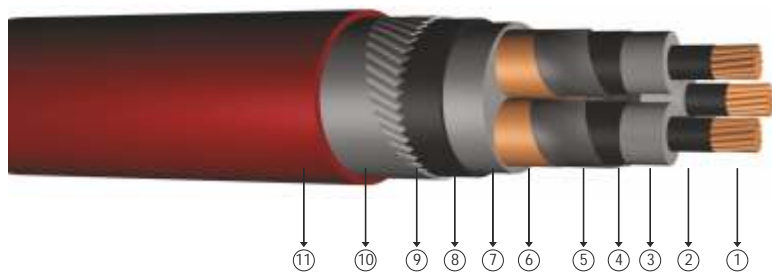
- 1 Stranded copper conductors
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 Thermoplastic filler
- 8 PVC inner sheath
- 9 Galvanized flat steel wire
- 10 Galvanized steel tape
- 11 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	47,0	3950	1000	0,524	0,352	0,229	176	171
3x50/16	50,5	4700	1000	0,387	0,336	0,255	208	196
3x70/16	54,5	5650	500	0,268	0,318	0,288	255	249
3x95/16	58,5	6750	500	0,193	0,303	0,324	307	307
3x120/16	63,0	8000	500	0,153	0,292	0,359	353	353
3x150/25	66,0	9200	500	0,124	0,284	0,388	396	406
3x185/25	70,0	10650	250	0,0991	0,276	0,424	447	464
3x240/25	77,5	13100	250	0,0754	0,267	0,469	523	548
3x300/25	84,0	15700	250	0,0601	0,263	0,486	581	632
3x400/35	93,0	19750	250	0,0470	0,257	0,521	653	726

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 6/10 kV XLPE insulated, flat steel wire armoured, three core cables with copper conductor



Code: YXC8VZ3V-R, N2XSEYFGY

R: Stranded Conductor

Standards: IEC 60502-2, BS 6622

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 6/10 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

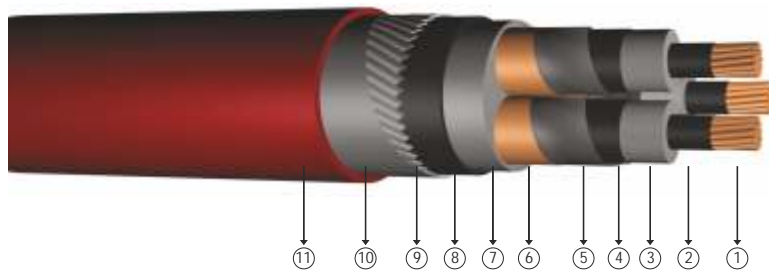
- ① Stranded copper conductors    ④ Outer semi conductive layer    ⑦ Thermoplastic filler    ⑩ Galvanized steel tape
- ② Inner semi conductive layer    ⑤ Semi conductive tape    ⑧ PVC inner sheath    ⑪ PVC outer sheath
- ③ XLPE insulation    ⑥ Copper screen    ⑨ Galvanized flat steel wire

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	52,0	4450	1000	0,524	0,374	0,189	178	217
3x50/16	54,5	5200	500	0,387	0,355	0,209	210	269
3x70/16	58,5	6200	500	0,268	0,336	0,236	256	326
3x95/16	63,0	7400	500	0,193	0,320	0,263	307	377
3x120/16	67,0	8600	500	0,153	0,308	0,291	349	426
3x150/25	70,5	9850	500	0,124	0,299	0,314	392	488
3x185/25	74,5	11350	250	0,0991	0,290	0,341	443	576
3x240/25	81,5	13850	250	0,0754	0,278	0,387	513	-
3x300/25	87,0	16250	250	0,0601	0,270	0,422	576	-
3x400/35	94,5	20150	250	0,0470	0,261	0,475	650	-

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



# 8,7/15 kV XLPE insulated, flat steel wire armoured, three core cables with copper conductor



Code: YXC8VZ3V-R, N2XSEYFGY

R: Stranded Conductor

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 8,7/15 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

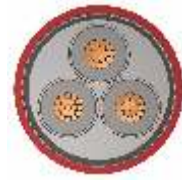
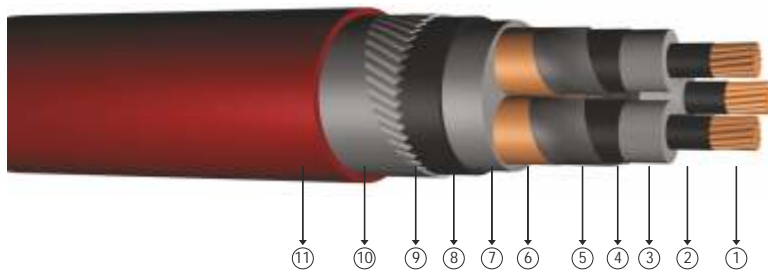
- 1 Stranded copper conductors
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 Thermoplastic filler
- 8 PVC inner sheath
- 9 Galvanized flat steel wire
- 10 Galvanized steel tape
- 11 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	57,0	5150	500	0,524	0,397	0,160	178	173
3x50/16	60,5	6000	500	0,387	0,377	0,175	210	206
3x70/16	64,5	7000	500	0,268	0,356	0,196	256	257
3x95/16	68,5	8250	500	0,193	0,339	0,218	307	313
3x120/16	72,5	9450	500	0,153	0,325	0,240	349	360
3x150/25	76,0	10750	250	0,124	0,315	0,258	392	410
3x185/25	80,0	12350	250	0,0991	0,305	0,280	443	469
3x240/25	87,0	14800	250	0,0754	0,292	0,315	513	553
3x300/25	92,0	17250	250	0,0601	0,284	0,343	576	635
3x400/35	100,0	21300	250	0,0470	0,273	0,385	650	731

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



12/20 kV or 12,7/22 kV XLPE insulated,  
flat steel wire armoured,  
three core cables with copper conductor



Code: YXC8VZ3V-R, N2XSEYFGY

R: Stranded Conductor

Standards: IEC 60502-2, BS 6622

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 : 12,7/22 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

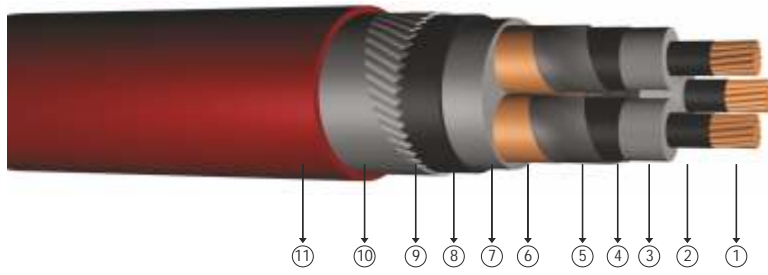
Construction

- ① Stranded copper conductors
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive tape
- ⑥ Copper screen
- ⑦ Thermoplastic filler
- ⑧ PVC inner sheath
- ⑨ Galvanized flat steel wire
- ⑩ Galvanized steel tape
- ⑪ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	62,5	5900	500	0,524	0,416	0,141	183	182
3x50/16	65,5	6700	500	0,387	0,395	0,155	216	217
3x70/16	69,0	7750	500	0,268	0,373	0,172	264	269
3x95/16	73,0	9000	500	0,193	0,355	0,191	316	326
3x120/16	77,0	10250	250	0,153	0,340	0,209	360	377
3x150/25	81,0	11650	250	0,124	0,329	0,225	404	426
3x185/25	85,0	13250	250	0,0991	0,319	0,243	457	488
3x240/25	91,5	15750	250	0,0754	0,304	0,273	532	576
3x300/25	97,0	18250	250	0,0601	0,295	0,296	599	654
3x400/35	105,0	22500	250	0,0470	0,284	0,331	685	750

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 19/33 kV XLPE insulated, flat steel wire armoured, three core cables with copper conductor



Code: YXC8VZ3V-R, N2XSEYFGY

R: Stranded Conductor

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
 : 19/33 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

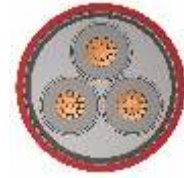
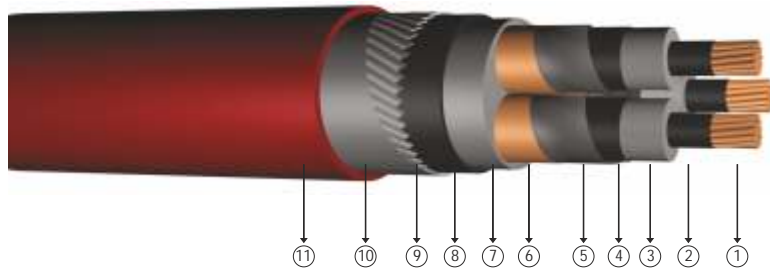
- 1 Stranded copper conductors
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 Thermoplastic filler
- 8 PVC inner sheath
- 9 Galvanized flat steel wire
- 10 Galvanized steel tape
- 11 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	74,5	7850	500	0,5240	0,457	0,114	-	-
3x50/16	78,0	8750	500	0,3870	0,434	0,124	214	217
3x70/16	81,5	9950	500	0,2680	0,410	0,137	261	269
3x95/16	85,5	11250	250	0,1930	0,389	0,150	313	326
3x120/16	89,5	12600	250	0,1530	0,372	0,163	356	377
3x150/25	93,0	14000	250	0,1240	0,360	0,174	400	426
3x185/25	97,0	15700	250	0,0991	0,348	0,188	441	488
3x240/25	104,0	18500	250	0,0754	0,331	0,209	510	576
3x300/25	109,5	21150	200	0,0601	0,321	0,226	-	-
3x400/35	117,5	25350	200	0,0470	0,307	0,251	-	-

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



20,3/35 kV or 20,8/36 kV XLPE insulated,  
flat steel wire armoured,  
three core cables with copper conductor



Code: YXC8VZ3V-R, N2XSEYFGY

R: Stranded Conductor

Standards: HD 620 S3, TSE K 204

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 20,3/35 kV  
   : 20,8/36 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

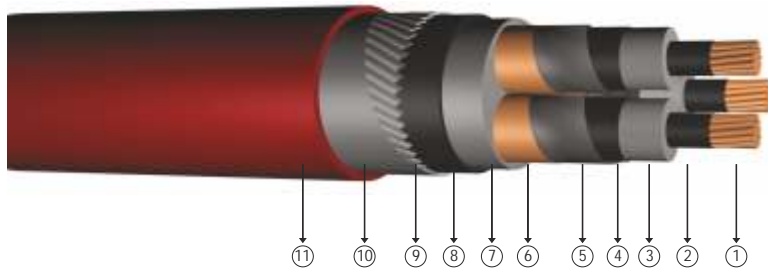
Construction

- ① Stranded copper conductors    ④ Outer semi conductive layer    ⑦ Thermoplastic filler    ⑩ Galvanized steel tape
- ② Inner semi conductive layer    ⑤ Semi conductive tape    ⑧ PVC inner sheath    ⑪ PVC outer sheath
- ③ XLPE insulation    ⑥ Copper screen    ⑨ Galvanized flat steel wire

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	80,0	8750	500	0,524	0,471	0,107	-	-
3x50/16	82,5	9600	500	0,387	0,448	0,116	214	210
3x70/16	86,5	10800	250	0,268	0,423	0,127	261	262
3x95/16	90,5	12200	250	0,193	0,401	0,140	313	319
3x120/16	94,5	13600	250	0,153	0,384	0,152	356	366
3x150/25	98,0	15000	250	0,124	0,372	0,161	400	418
3x185/25	102,5	16800	250	0,0991	0,359	0,173	441	478
3x240/25	109,5	19600	250	0,0754	0,341	0,193	510	562
3x300/25	114,5	22250	200	0,0601	0,330	0,208	-	-
3x400/35	122,0	26600	200	0,0470	0,316	0,231	-	-

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 3,6/6 kV XLPE insulated, round steel wire armoured, three core cables with copper conductor



Code: YXC8VZ2V-R, N2XSEYRY, CU/XLPE/CTS/PVC/SWA/PVC

R: Stranded Conductor

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 3,6/6 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

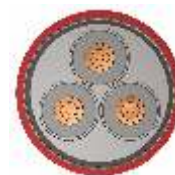
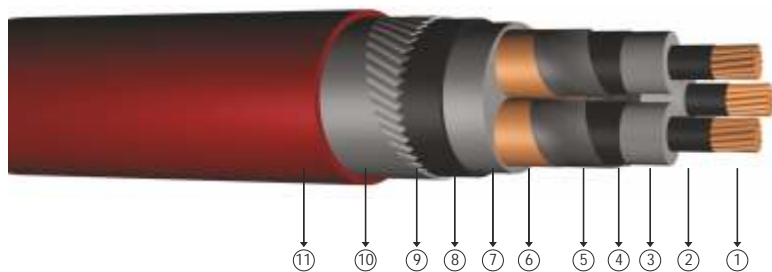
- 1 Stranded copper conductors
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 Thermoplastic filler
- 8 PVC inner sheath
- 9 Galvanized round steel wire
- 10 PP Tape
- 11 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	50,5	4400	1000	0,524	0,352	0,229	176	171
3x50/16	54,0	5900	500	0,387	0,336	0,255	208	196
3x70/16	58,0	7000	500	0,268	0,318	0,288	255	249
3x95/16	62,0	8300	500	0,193	0,303	0,324	307	307
3x120/16	66,5	9600	500	0,153	0,292	0,359	353	353
3x150/25	70,0	9900	500	0,124	0,284	0,388	396	406
3x185/25	74,0	11400	250	0,0991	0,276	0,424	447	464
3x240/25	82,0	15100	250	0,0754	0,267	0,469	523	548
3x300/25	89,0	17950	250	0,0601	0,263	0,486	581	632
3x400/35	98,0	22200	250	0,0470	0,257	0,521	653	726

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



6/10 kV or 6,35/11 kV XLPE insulated,  
round steel wire armoured,  
three core cables with copper conductor



Code: YXC8VZ2V-R, N2XSEYRY, CU/XLPE/CTS/PVC/SWA/PVC

R: Stranded Conductor

Standards: IEC 60502-2

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 6/10 kV  
 : 6,35/11 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

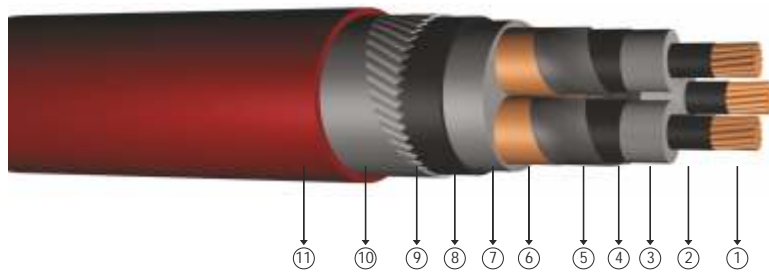
Construction

- ① Stranded copper conductors    ④ Outer semi conductive layer    ⑦ Thermoplastic filler    ⑩ PP Tape
- ② Inner semi conductive layer    ⑤ Semi conductive tape    ⑧ PVC inner sheath    ⑪ PVC outer sheath
- ③ XLPE insulation    ⑥ Copper screen    ⑨ Galvanized round steel wire

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	55,5	5850	500	0,524	0,374	0,189	178	173
3x50/16	58,5	6650	500	0,387	0,355	0,209	210	206
3x70/16	62,5	7750	500	0,268	0,336	0,236	256	257
3x95/16	67,0	9100	500	0,193	0,320	0,263	307	313
3x120/16	71,0	10400	250	0,153	0,308	0,291	349	360
3x150/25	74,0	11700	250	0,124	0,299	0,314	392	410
3x185/25	79,0	14200	250	0,0991	0,290	0,341	443	469
3x240/25	86,0	16950	250	0,0754	0,278	0,387	513	553
3x300/25	92,0	19500	250	0,0601	0,270	0,422	576	635
3x400/35	100,0	23850	250	0,0470	0,261	0,475	650	731

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 8,7/15 kV XLPE insulated, round steel wire armoured, three core cables with copper conductor



Code: YXC8VZ2V-R, N2XSEYRY, CU/XLPE/CTS/PVC/SWA/PVC

R: Stranded Conductor

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 8,7/15 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

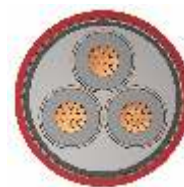
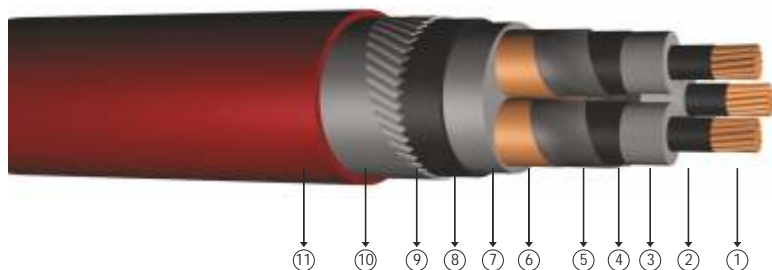
- 1 Stranded copper conductors
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 Thermoplastic filler
- 8 PVC inner sheath
- 9 Galvanized round steel wire
- 10 PP Tape
- 11 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	60,5	5750	500	0,524	0,397	0,160	178	173
3x50/16	64,0	7500	500	0,387	0,377	0,175	210	206
3x70/16	68,0	8800	500	0,268	0,356	0,196	256	257
3x95/16	72,0	10200	500	0,193	0,339	0,218	307	313
3x120/16	76,0	10200	500	0,153	0,325	0,240	349	360
3x150/25	81,0	12750	250	0,124	0,315	0,258	392	410
3x185/25	85,0	14500	250	0,0991	0,305	0,280	443	469
3x240/25	92,0	17150	250	0,0754	0,292	0,315	513	553
3x300/25	97,0	19750	250	0,0601	0,284	0,343	576	635
3x400/35	105,0	24000	200	0,0470	0,273	0,385	650	731

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



12/20 kV or 12,7/22 kV XLPE insulated,  
round steel wire armoured,  
three core cables with copper conductor



Code: YXC8VZ2V-R, N2XSEYRY, CU/XLPE/CTS/PVC/SWA/PVC

R: Stranded Conductor

Standards: IEC 60502-2, BS 6622

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 12,7/22 kV  
 Min. bending radius : 20x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

Construction

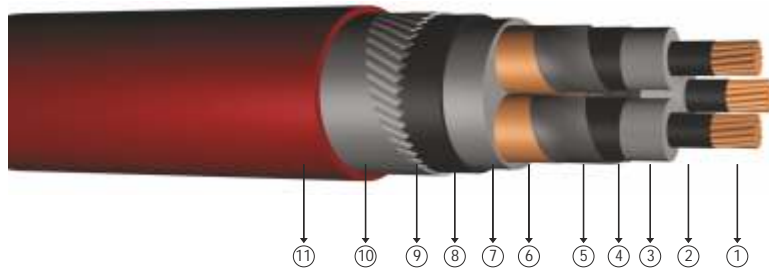
- ① Stranded copper conductors      ④ Outer semi conductive layer      ⑦ Thermoplastic filler      ⑩ PP Tape
- ② Inner semi conductive layer      ⑤ Semi conductive tape      ⑧ PVC inner sheath      ⑪ PVC outer sheath
- ③ XLPE insulation      ⑥ Copper screen      ⑨ Galvanized round steel wire

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	66,0	6550	500	0,524	0,416	0,141	183	182
3x50/16	69,0	7400	500	0,387	0,395	0,155	216	217
3x70/16	72,0	8500	500	0,268	0,373	0,172	264	269
3x95/16	78,0	10950	250	0,193	0,355	0,191	316	326
3x120/16	82,0	12300	250	0,153	0,340	0,209	360	377
3x150/25	86,0	13850	250	0,124	0,329	0,225	404	426
3x185/25	90,0	15500	250	0,0991	0,319	0,243	457	488
3x240/25	96,0	18250	250	0,0754	0,304	0,273	532	576
3x300/25	102,0	20850	200	0,0601	0,295	0,296	599	654
3x400/35	110,0	25300	200	0,0470	0,284	0,331	685	750

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



18/30 kV or 19/33 kV XLPE insulated,  
round steel wire armoured,  
three core cables with copper conductor



Code: YXC8VZ2V-R, N2XSEYRY, CU/XLPE/CTS/PVC/SWA/PVC

R: Stranded Conductor

Standards: IEC 60502-2, BS 6622

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
 : 19/33 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

Construction

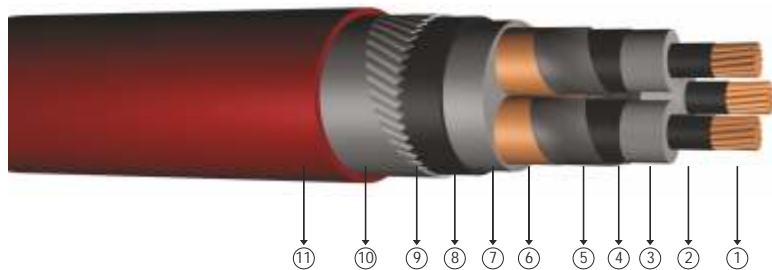
- ① Stranded copper conductors      ④ Outer semi conductive layer      ⑦ Thermoplastic filler      ⑩ PP Tape
- ② Inner semi conductive layer      ⑤ Semi conductive tape      ⑧ PVC inner sheath      ⑪ PVC outer sheath
- ③ XLPE insulation      ⑥ Copper screen      ⑨ Galvanized round steel wire

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	79,0	9750	500	0,5240	0,457	0,114	183	182
3x50/16	82,5	10750	250	0,3870	0,434	0,124	216	217
3x70/16	86,5	12000	250	0,2680	0,410	0,137	264	269
3x95/16	90,5	13500	250	0,1930	0,389	0,150	316	326
3x120/16	95,0	14950	250	0,1530	0,372	0,163	360	377
3x150/25	98,0	16400	250	0,1240	0,360	0,174	404	426
3x185/25	102,0	18200	250	0,0991	0,348	0,188	457	488
3x240/25	109,5	21250	200	0,0754	0,331	0,209	532	576

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



20,3/35 kV or 20,8/36 kV XLPE insulated,  
round steel wire armoured,  
three core cables with copper conductor



Code: YXC8VZ2V-R, N2XSEYRY, CU/XLPE/CTS/PVC/SWA/PVC

R: Stranded Conductor

Standards: HD 620 S3, TSE K 204

Technical Data

Max. operating temperature : 90°C  
Max. short circuit temperature : 250°C (max. 5 sec.)  
Rated voltage : 20,3/35 kV  
                                  20,8/36 kV  
Min. bending radius : 20 x D  
D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

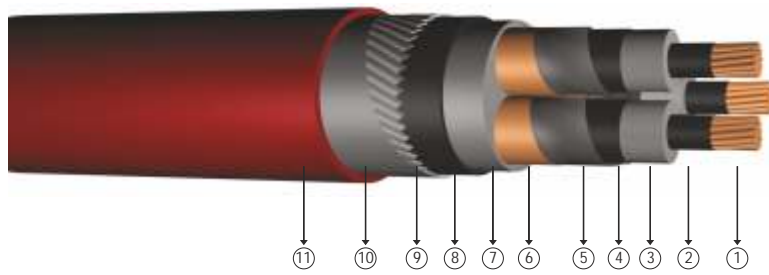
Construction

- 1 Stranded copper conductors    4 Outer semi conductive layer    7 Thermoplastic filler    10 PP Tape  
2 Inner semi conductive layer    5 Semi conductive tape    8 PVC inner sheath    11 PVC outer sheath  
3 XLPE insulation    6 Copper screen    9 Galvanized round steel wire

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	83,5	13000	500	0,524	0,457	0,114	183	176
3x50/16	86,0	12900	250	0,387	0,434	0,124	216	210
3x70/16	90,0	14000	250	0,268	0,410	0,137	264	262
3x95/16	94,0	16000	250	0,193	0,389	0,150	316	319
3x120/16	97,5	17800	250	0,153	0,372	0,163	360	364
3x150/25	101,0	19400	250	0,124	0,360	0,174	404	418
3x185/25	105,0	21400	250	0,0991	0,348	0,188	457	478
3x240/25	111,0	24400	200	0,0754	0,331	0,209	532	562

Note : Current carrying capacities are valid under the following conditions:  
In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
In air : 30°C, load factor 1,0  
Number of system : 1

# 3,6/6 kV XLPE insulated, round aluminium wire armoured, three core cables with copper conductor



Code: N2XSEYR(A)Y, CU/XLPE/CTS/PVC/AWA/PVC

R: Stranded Conductor

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 3,6/6 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

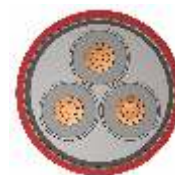
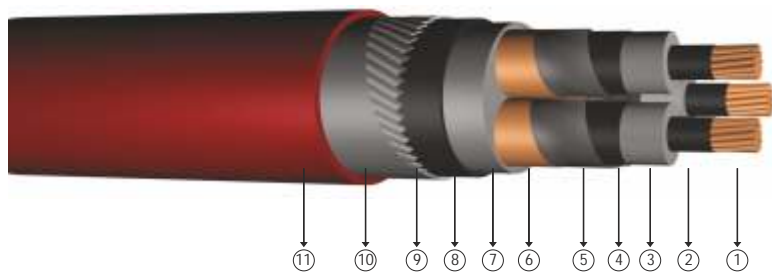
- ① Stranded copper conductors      ④ Outer semi conductive layer      ⑦ Thermoplastic filler      ⑩ PP Tape
- ② Inner semi conductive layer      ⑤ Semi conductive tape      ⑧ PVC inner sheath      ⑪ PVC outer sheath
- ③ XLPE insulation      ⑥ Copper screen      ⑨ Aluminium round wire

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	50,5	4400	1000	0,524	0,352	0,229	176	171
3x50/16	54,0	5900	500	0,387	0,336	0,255	208	196
3x70/16	58,0	7000	500	0,268	0,318	0,288	255	249
3x95/16	62,0	8300	500	0,193	0,303	0,324	307	307
3x120/16	66,5	9600	500	0,153	0,292	0,359	353	353
3x150/25	70,0	9900	500	0,124	0,284	0,388	396	406
3x185/25	74,0	11400	250	0,0991	0,276	0,424	447	464
3x240/25	82,0	15100	250	0,0754	0,267	0,469	523	548
3x300/25	89,0	17950	250	0,0601	0,263	0,486	581	632
3x400/35	98,0	22200	250	0,0470	0,257	0,521	653	726

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



6/10 kV or 6,35/11 kV XLPE insulated,  
round aluminium wire armoured,  
three core cables with copper conductor



Code: N2XSEYR(A)Y, CU/XLPE/CTS/PVC/AWA/PVC

R: Stranded Conductor

Standards: IEC 60502-2, BS 6622

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 6/10 kV  
   6,35/11 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

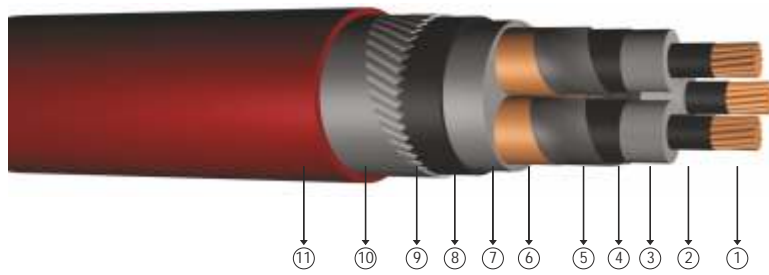
Construction

- ① Stranded copper conductors      ④ Outer semi conductive layer      ⑦ Thermoplastic filler      ⑩ PP Tape
- ② Inner semi conductive layer      ⑤ Semi conductive tape      ⑧ PVC inner sheath      ⑪ PVC outer sheath
- ③ XLPE insulation      ⑥ Copper screen      ⑨ Aluminium round wire

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	55,5	5850	500	0,524	0,374	0,189	178	173
3x50/16	58,5	6650	500	0,387	0,355	0,209	210	206
3x70/16	62,5	7750	500	0,268	0,336	0,236	256	257
3x95/16	67,0	9100	500	0,193	0,320	0,263	307	313
3x120/16	71,0	10400	250	0,153	0,308	0,291	349	360
3x150/25	74,0	11700	250	0,124	0,299	0,314	392	410
3x185/25	79,0	14200	250	0,0991	0,290	0,341	443	469
3x240/25	86,0	16950	250	0,0754	0,278	0,387	513	553
3x300/25	92,0	19500	250	0,0601	0,270	0,422	576	635
3x400/35	100,0	23850	250	0,0470	0,261	0,475	650	731

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 8,7/15 kV XLPE insulated, round aluminium wire armoured, three core cables with copper conductor



Code: N2XSEYR(A)Y, CU/XLPE/CTS/PVC/AWA/PVC

R: Stranded Conductor

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 8,7/15 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

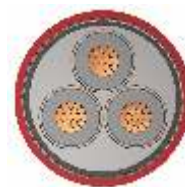
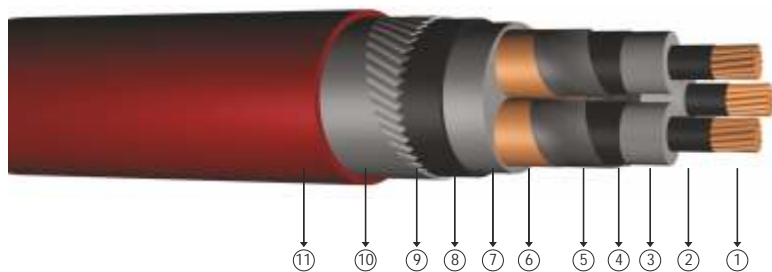
- 1 Stranded copper conductors
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 Thermoplastic filler
- 8 PVC inner sheath
- 9 Aluminium round wire
- 10 PP Tape
- 11 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	60,5	5750	500	0,524	0,397	0,160	178	173
3x50/16	64,0	7500	500	0,387	0,377	0,175	210	206
3x70/16	68,0	8800	500	0,268	0,356	0,196	256	257
3x95/16	72,0	10200	500	0,193	0,339	0,218	307	313
3x120/16	76,0	10200	500	0,153	0,325	0,240	349	360
3x150/25	81,0	12750	250	0,124	0,315	0,258	392	410
3x185/25	85,0	14500	250	0,0991	0,305	0,280	443	469
3x240/25	92,0	17150	250	0,0754	0,292	0,315	513	553
3x300/25	97,0	19750	250	0,0601	0,284	0,343	576	635
3x400/35	105,0	24000	200	0,0470	0,273	0,385	650	731

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



12/20 kV or 12,7/22 kV XLPE insulated,  
round aluminium wire armoured,  
three core cables with copper conductor



Code: N2XSEYR(A)Y, CU/XLPE/CTS/PVC/AWA/PVC

R: Stranded Conductor

Standards: IEC 60502-2, BS 6622

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 : 12,7/22 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

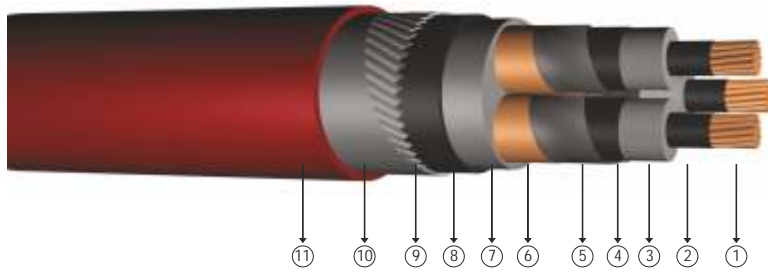
Construction

- ① Stranded copper conductors    ④ Outer semi conductive layer    ⑦ Thermoplastic filler    ⑩ PP Tape
- ② Inner semi conductive layer    ⑤ Semi conductive tape    ⑧ PVC inner sheath    ⑪ PVC outer sheath
- ③ XLPE insulation    ⑥ Copper screen    ⑨ Aluminium round wire

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	66,0	6550	500	0,524	0,416	0,141	183	182
3x50/16	69,0	7400	500	0,387	0,395	0,155	216	217
3x70/16	72,0	8500	500	0,268	0,373	0,172	264	269
3x95/16	78,0	10950	250	0,193	0,355	0,191	316	326
3x120/16	82,0	12300	250	0,153	0,340	0,209	360	377
3x150/25	86,0	13850	250	0,124	0,329	0,225	404	426
3x185/25	90,0	15500	250	0,0991	0,319	0,243	457	488
3x240/25	96,0	18250	250	0,0754	0,304	0,273	532	576
3x300/25	102,0	20850	200	0,0601	0,295	0,296	599	654
3x400/35	110,0	25300	200	0,0470	0,284	0,331	685	750

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

18/30 kV or 19/33 kV XLPE insulated,  
round aluminium wire armoured,  
three core cables with copper conductor



Code: N2XSEYR(A)Y, CU/XLPE/CTS/PVC/AWA/PVC

R: Stranded Conductor

Standards: IEC 60502-2, BS 6622

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
 : 19/33 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

Construction

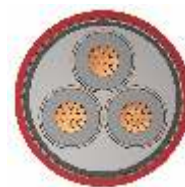
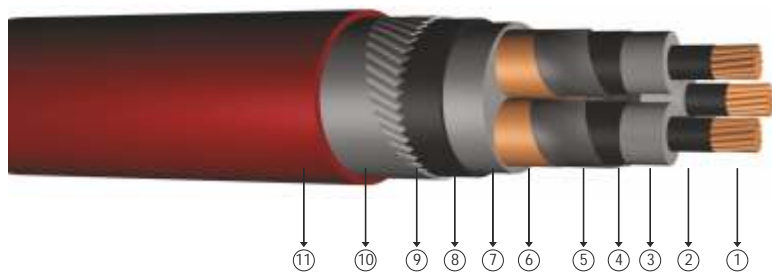
- ① Stranded copper conductors    ④ Outer semi conductive layer    ⑦ Thermoplastic filler    ⑩ PP Tape
- ② Inner semi conductive layer    ⑤ Semi conductive tape    ⑧ PVC inner sheath    ⑪ PVC outer sheath
- ③ XLPE insulation    ⑥ Copper screen    ⑨ Aluminium round wire

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	79,0	9750	500	0,5240	0,457	0,114	183	182
3x50/16	82,5	10750	250	0,3870	0,434	0,124	216	217
3x70/16	86,5	12000	250	0,2680	0,410	0,137	264	269
3x95/16	90,5	13500	250	0,1930	0,389	0,150	316	326
3x120/16	95,0	14950	250	0,1530	0,372	0,163	360	377
3x150/25	98,0	16400	250	0,1240	0,360	0,174	404	426
3x185/25	102,0	18200	250	0,0991	0,348	0,188	457	488
3x240/25	109,5	21250	200	0,0754	0,331	0,209	532	576

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



20,3/35 kV or 20,8/36 kV XLPE insulated,  
round aluminium wire armoured,  
three core cables with copper conductor



Code: N2XSEYR(A)Y, CU/XLPE/CTS/PVC/AWA/PVC

R: Stranded Conductor

Standards: HD 620 S3, TSE K 204

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 20,3/35 kV  
 : 20,8/36 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

Construction

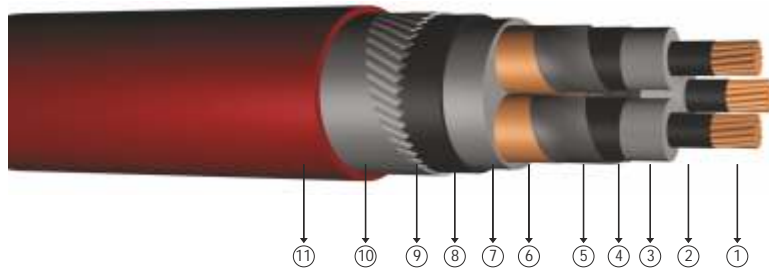
- ① Stranded copper conductors
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive tape
- ⑥ Copper screen
- ⑦ Thermoplastic filler
- ⑧ PVC inner sheath
- ⑨ Aluminium round wire
- ⑩ PP Tape
- ⑪ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	83,5	13000	500	0,524	0,457	0,114	183	176
3x50/16	86,0	12900	250	0,387	0,434	0,124	216	210
3x70/16	90,0	14000	250	0,268	0,410	0,137	264	262
3x95/16	94,0	16000	250	0,193	0,389	0,150	316	319
3x120/16	97,5	17800	250	0,153	0,372	0,163	360	364
3x150/25	101,0	19400	250	0,124	0,360	0,174	404	418
3x185/25	105,0	21400	250	0,0991	0,348	0,188	457	478
3x240/25	111,0	24400	200	0,0754	0,331	0,209	532	562

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



6/10 kV or 6,35/11 kV halogen free, flame retardant,  
XLPE insulated round steel wire armoured,  
three core cables with copper conductor



Code: YXC8Z1Z2Z1-R, N2XSEHRH, CU/XLPE/CTS/LSZH/SWA/LSZH

R: Stranded Conductor

Standards: IEC 60502-2, BS 7835

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 6/10 kV  
 : 6,35/11 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

Construction

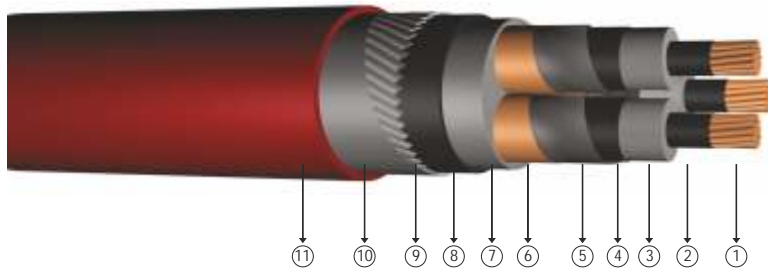
- ① Stranded copper conductors    ④ Outer semi conductive layer    ⑦ Thermoplastic filler    ⑩ PP Tape
- ② Inner semi conductive layer    ⑤ Semi conductive tape    ⑧ LSZH inner sheath    ⑪ LSZH outer sheath
- ③ XLPE insulation    ⑥ Copper screen    ⑨ Galvanized round steel wire

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	55,5	5850	500	0,524	0,374	0,189	178	173
3x50/16	58,5	6650	500	0,387	0,355	0,209	210	206
3x70/16	62,5	7750	500	0,268	0,336	0,236	256	257
3x95/16	67,0	9100	500	0,193	0,320	0,263	307	313
3x120/16	71,0	10400	250	0,153	0,308	0,291	349	360
3x150/25	74,0	11700	250	0,124	0,299	0,314	392	410
3x185/25	79,0	14200	250	0,0991	0,290	0,341	443	469
3x240/25	86,0	16950	250	0,0754	0,278	0,387	513	553
3x300/25	92,0	19500	250	0,0601	0,270	0,422	576	635
3x400/35	100,0	23850	250	0,0470	0,261	0,475	650	731

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



12/20 kV or 12,7/22 kV halogen free, flame retardant, XLPE insulated round steel wire armoured, three core cables with copper conductor



Code: YXC8Z1Z2Z1-R, N2XSEHRH, CU/XLPE/CTS/LSZH/SWA/LSZH

R: Stranded Conductor

Standards: IEC 60502-2, BS 7835

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 12,7/22 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

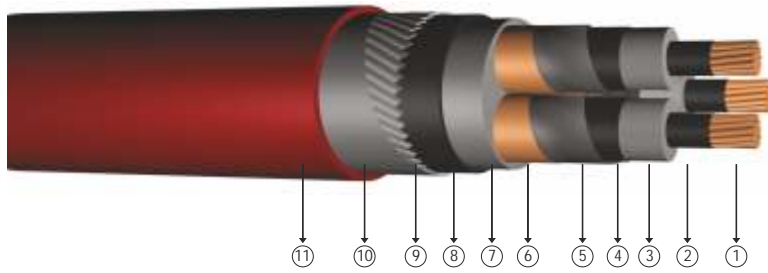
Construction

- ① Stranded copper conductors    ④ Outer semi conductive layer    ⑦ Thermoplastic filler    ⑩ PP Tape
- ② Inner semi conductive layer    ⑤ Semi conductive tape    ⑧ LSZH inner sheath    ⑪ LSZH outer sheath
- ③ XLPE insulation    ⑥ Copper screen    ⑨ Galvanized round steel wire

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	66,0	6550	500	0,524	0,416	0,141	183	182
3x50/16	69,0	7400	500	0,387	0,395	0,155	216	217
3x70/16	72,0	8500	500	0,268	0,373	0,172	264	269
3x95/16	78,0	10950	250	0,193	0,355	0,191	316	326
3x120/16	82,0	12300	250	0,153	0,340	0,209	360	377
3x150/25	86,0	13850	250	0,124	0,329	0,225	404	426
3x185/25	90,0	15500	250	0,0991	0,319	0,243	457	488
3x240/25	96,0	18250	250	0,0754	0,304	0,273	532	576
3x300/25	102,0	20850	200	0,0601	0,295	0,296	599	654
3x400/35	110,0	25300	200	0,0470	0,284	0,331	685	750

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

18/30 kV or 19/33 kV halogen free, flame retardant,  
XLPE insulated round steel wire armoured,  
three core cables with copper conductor



Code: YXC8Z1Z2Z1-R, N2XSEHRH, CU/XLPE/CTS/LSZH/SWA/LSZH

R: Stranded Conductor

Standards: IEC 60502-2, BS 7835

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
 : 19/33 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

Construction

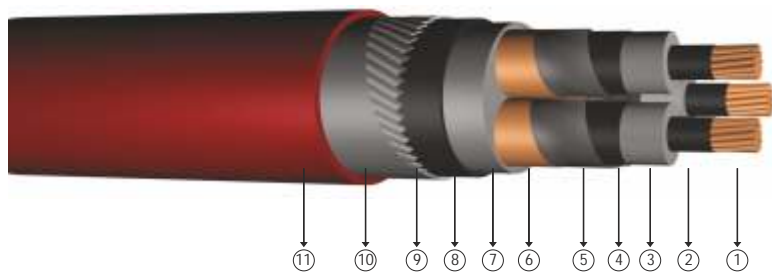
- ① Stranded copper conductors      ④ Outer semi conductive layer      ⑦ Thermoplastic filler      ⑩ PP Tape
- ② Inner semi conductive layer      ⑤ Semi conductive tape      ⑧ LSZH inner sheath      ⑪ LSZH outer sheath
- ③ XLPE insulation      ⑥ Copper screen      ⑨ Galvanized round steel wire

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	79,0	9750	500	0,5240	0,457	0,114	183	182
3x50/16	82,5	10750	250	0,3870	0,434	0,124	216	217
3x70/16	86,5	12000	250	0,2680	0,410	0,137	264	269
3x95/16	90,5	13500	250	0,1930	0,389	0,150	316	326
3x120/16	95,0	14950	250	0,1530	0,372	0,163	360	377
3x150/25	98,0	16400	250	0,1240	0,360	0,174	404	426
3x185/25	102,0	18200	250	0,0991	0,348	0,188	457	488
3x240/25	109,5	21250	200	0,0754	0,331	0,209	532	576

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



6/10 kV or 6,35/11 kV halogen free, flame retardant, XLPE insulated round aluminium armoured, three core cables with copper conductor



Code: N2XSEHR(A)H, CU/XLPE/CTS/LSZH/AWA/LSZH

R: Stranded Conductor

Standards: IEC 60502-2, BS 7835

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 6/10 kV  
 : 6,35/11 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

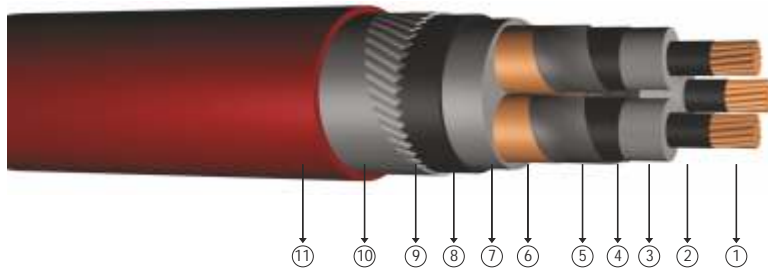
Construction

- ① Stranded copper conductors    ④ Outer semi conductive layer    ⑦ Thermoplastic filler    ⑩ PP Tape
- ② Inner semi conductive layer    ⑤ Semi conductive tape    ⑧ LSZH inner sheath    ⑪ LSZH outer sheath
- ③ XLPE insulation    ⑥ Copper screen    ⑨ Aluminium round wire

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	55,5	5850	500	0,524	0,374	0,189	178	173
3x50/16	58,5	6650	500	0,387	0,355	0,209	210	206
3x70/16	62,5	7750	500	0,268	0,336	0,236	256	257
3x95/16	67,0	9100	500	0,193	0,320	0,263	307	313
3x120/16	71,0	10400	250	0,153	0,308	0,291	349	360
3x150/25	74,0	11700	250	0,124	0,299	0,314	392	410
3x185/25	79,0	14200	250	0,0991	0,290	0,341	443	469
3x240/25	86,0	16950	250	0,0754	0,278	0,387	513	553
3x300/25	92,0	19500	250	0,0601	0,270	0,422	576	635
3x400/35	100,0	23850	250	0,0470	0,261	0,475	650	731

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

12/20 kV or 12,7/22 kV halogen free, flame retardant,  
XLPE insulated round aluminium armoured,  
three core cables with copper conductor



Code: N2XSEHR(A)H, CU/XLPE/CTS/LSZH/AWA/LSZH

R: Stranded Conductor

Standards: IEC 60502-2, BS 7835

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 12,7/22 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

Construction

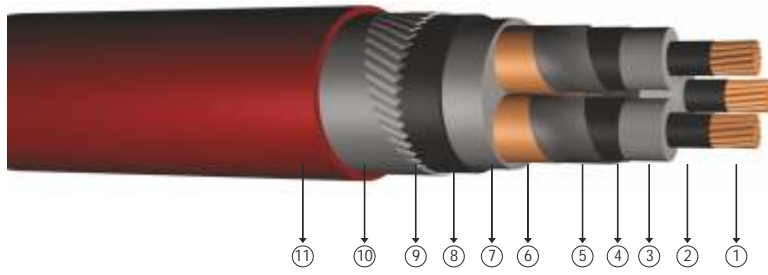
- ① Stranded copper conductors      ④ Outer semi conductive layer      ⑦ Thermoplastic filler      ⑩ PP Tape
- ② Inner semi conductive layer      ⑤ Semi conductive tape      ⑧ LSZH inner sheath      ⑪ LSZH outer sheath
- ③ XLPE insulation      ⑥ Copper screen      ⑨ Aluminium round wire

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	66,0	6550	500	0,524	0,416	0,141	183	182
3x50/16	69,0	7400	500	0,387	0,395	0,155	216	217
3x70/16	72,0	8500	500	0,268	0,373	0,172	264	269
3x95/16	78,0	10950	250	0,193	0,355	0,191	316	326
3x120/16	82,0	12300	250	0,153	0,340	0,209	360	377
3x150/25	86,0	13850	250	0,124	0,329	0,225	404	426
3x185/25	90,0	15500	250	0,0991	0,319	0,243	457	488
3x240/25	96,0	18250	250	0,0754	0,304	0,273	532	576
3x300/25	102,0	20850	200	0,0601	0,295	0,296	599	654
3x400/35	110,0	25300	200	0,0470	0,284	0,331	685	750

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



18/30 kV or 19/33 kV halogen free, flame retardant, XLPE insulated round aluminium armoured, three core cables with copper conductor



Code: N2XSEHR(A)H, CU/XLPE/CTS/LSZH/AWA/LSZH

R: Stranded Conductor

Standards: IEC 60502-2, BS 7835

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
 : 19/33 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

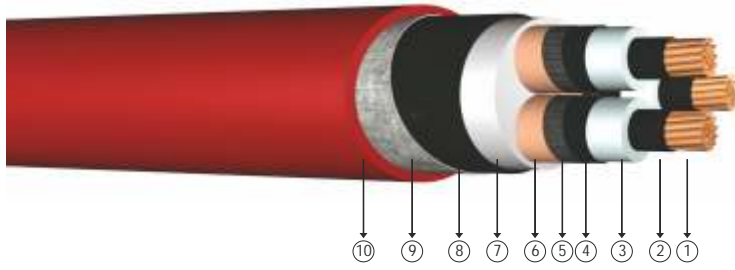
Construction

- 1 Stranded copper conductors
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 Thermoplastic filler
- 8 LSZH inner sheath
- 9 Aluminium round wire
- 10 PP Tape
- 11 LSZH outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	79,0	9750	500	0,5240	0,457	0,114	183	182
3x50/16	82,5	10750	250	0,3870	0,434	0,124	216	217
3x70/16	86,5	12000	250	0,2680	0,410	0,137	264	269
3x95/16	90,5	13500	250	0,1930	0,389	0,150	316	326
3x120/16	95,0	14950	250	0,1530	0,372	0,163	360	377
3x150/25	98,0	16400	250	0,1240	0,360	0,174	404	426
3x185/25	102,0	18200	250	0,0991	0,348	0,188	457	488
3x240/25	109,5	21250	200	0,0754	0,331	0,209	532	576

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 3,6/6 kV XLPE insulated, double steel tape armoured, three core cables with copper conductor



Code: YXC8VZ4V-R, N2XSEYBY, CU/XLPE/CTS/PVC/STA/PVC

R: Stranded Conductor

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 3,6/6 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

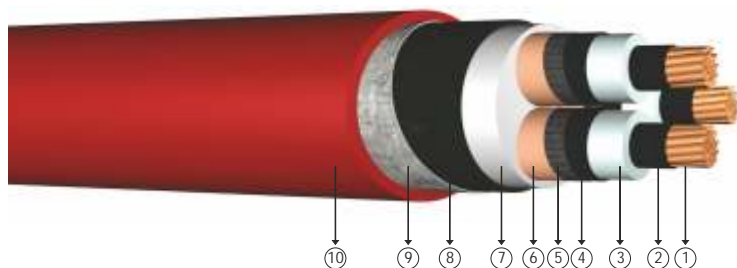
- 1 Stranded copper conductors    4 Outer semi conductive layer    7 Thermoplastic filler    10 PVC outer sheath
- 2 Inner semi conductive layer    5 Semi conductive tape    8 PVC inner sheath
- 3 XLPE insulation    6 Copper screen    9 Galvanized double steel tape

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	47,0	3900	1000	0,524	0,352	0,229	176	171
3x50/16	50,0	4600	1000	0,387	0,336	0,255	208	196
3x70/16	54,0	5600	500	0,268	0,318	0,288	255	249
3x95/16	58,0	6500	500	0,193	0,303	0,324	307	307
3x120/16	62,5	7500	500	0,153	0,292	0,359	353	353
3x150/25	66,0	8600	500	0,124	0,284	0,388	396	406
3x185/25	70,0	10000	250	0,0991	0,276	0,424	447	464
3x240/25	77,0	12350	250	0,0754	0,267	0,469	523	548
3x300/25	83,5	14900	250	0,0601	0,263	0,486	581	632
3x400/35	94,0	19550	250	0,0470	0,257	0,521	653	726

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



6/10 kV or 6,35/11 kV XLPE insulated,  
double steel tape armoured,  
three core cables with copper conductor



Code: YXC8VZ4V-R, N2XSEYBY, CU/XLPE/CTS/PVC/STA/PVC

R: Stranded Conductor

Standards: IEC 60502-2, BS 6622

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 6/10 kV  
   6,35/11 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

Construction

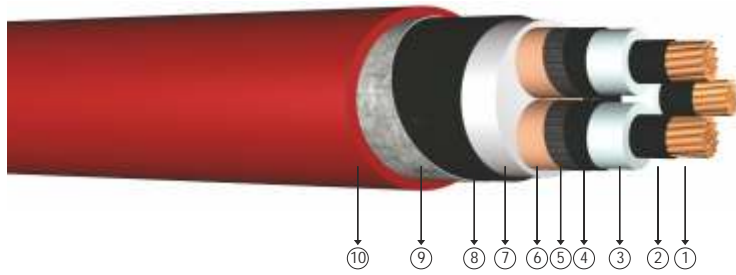
- ① Stranded copper conductors    ④ Outer semi conductive layer    ⑦ Thermoplastic filler    ⑩ PVC outer sheath
- ② Inner semi conductive layer    ⑤ Semi conductive tape    ⑧ PVC inner sheath
- ③ XLPE insulation    ⑥ Copper screen    ⑨ Galvanized double steel tape

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	51,5	3950	1000	0,524	0,374	0,189	178	173
3x50/16	54,5	4650	1000	0,387	0,355	0,209	210	206
3x70/16	58,5	5600	500	0,268	0,336	0,236	256	257
3x95/16	63,0	6800	500	0,193	0,320	0,263	307	313
3x120/16	67,0	7900	500	0,153	0,308	0,291	349	360
3x150/25	70,0	9100	500	0,124	0,299	0,314	392	410
3x185/25	74,5	10550	250	0,0991	0,290	0,341	443	469
3x240/25	81,5	13000	250	0,0754	0,278	0,387	513	553
3x300/25	88,0	15900	250	0,0601	0,270	0,422	576	635
3x400/35	96,0	19800	250	0,0470	0,261	0,475	650	731

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



# 8,7/15 kV XLPE insulated, double steel tape armoured, three core cables with copper conductor



Code: YXC8VZ4V-R, N2XSEYBY, CU/XLPE/CTS/PVC/STA/PVC

R: Stranded Conductor

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 8,7/15 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

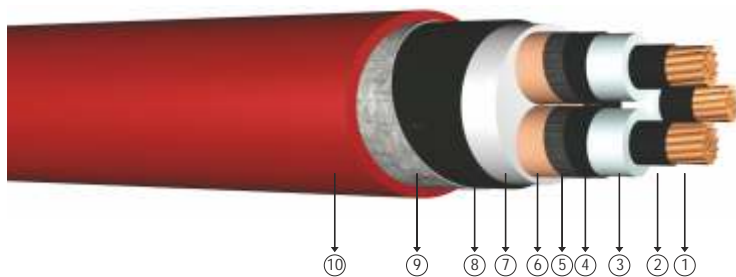
- 1 Stranded copper conductors    4 Outer semi conductive layer    7 Thermoplastic filler    10 PVC outer sheath
- 2 Inner semi conductive layer    5 Semi conductive tape    8 PVC inner sheath
- 3 XLPE insulation    6 Copper screen    9 Galvanized double steel tape

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	57,0	5200	1000	0,524	0,397	0,160	178	173
3x50/16	60,5	5500	500	0,387	0,377	0,175	210	206
3x70/16	64,0	6400	500	0,268	0,356	0,196	256	257
3x95/16	68,5	7600	500	0,193	0,339	0,218	307	313
3x120/16	72,5	8750	500	0,153	0,325	0,240	349	360
3x150/25	75,5	10000	250	0,124	0,315	0,258	392	410
3x185/25	80,0	11600	250	0,0991	0,305	0,280	443	469
3x240/25	88,0	14600	250	0,0754	0,292	0,315	513	553
3x300/25	93,0	17050	250	0,0601	0,284	0,343	576	635
3x400/35	101,0	21000	200	0,0470	0,273	0,385	650	731

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



12/20 kV or 12,7/22 kV XLPE insulated,  
double steel tape armoured,  
three core cables with copper conductor



Code: YXC8VZ4V-R, N2XSEYBY, CU/XLPE/CTS/PVC/STA/PVC

R: Stranded Conductor

Standards: IEC 60502-2, BS 6622

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 : 12,7/22 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

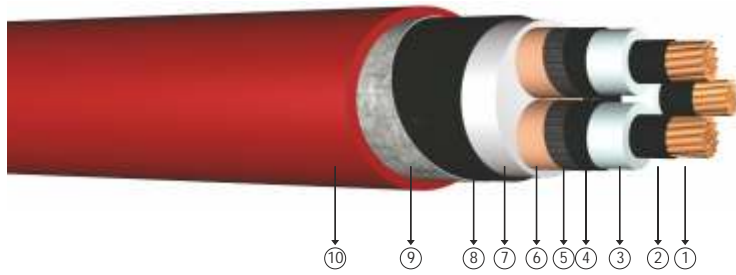
Construction

- ① Stranded copper conductors    ④ Outer semi conductive layer    ⑦ Thermoplastic filler    ⑩ PVC outer sheath
- ② Inner semi conductive layer    ⑤ Semi conductive tape    ⑧ PVC inner sheath
- ③ XLPE insulation    ⑥ Copper screen    ⑨ Galvanized double steel tape

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	62,0	5350	500	0,524	0,416	0,141	183	182
3x50/16	62,0	6100	500	0,387	0,395	0,155	216	217
3x70/16	69,0	7100	500	0,268	0,373	0,172	264	269
3x95/16	73,0	8300	500	0,193	0,355	0,191	316	326
3x120/16	77,0	9500	500	0,153	0,340	0,209	360	377
3x150/25	81,0	10900	250	0,124	0,329	0,225	404	426
3x185/25	86,0	13000	250	0,0991	0,319	0,243	457	488
3x240/25	92,5	15550	250	0,0754	0,304	0,273	532	576
3x300/25	98,0	18000	250	0,0601	0,295	0,296	599	654
3x400/35	106,5	22200	200	0,0470	0,284	0,331	685	750

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

18/30 kV or 19/33 kV XLPE insulated,  
double steel tape armoured,  
three core cables with copper conductor



Code: YXC8VZ4V-R, N2XSEYBY, CU/XLPE/CTS/PVC/STA/PVC

R: Stranded Conductor

Standards: IEC 60502-2, BS 6622

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
 : 19/33 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

Construction

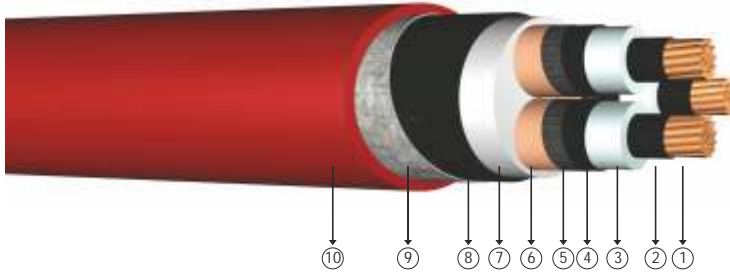
- ① Stranded copper conductors    ④ Outer semi conductive layer    ⑦ Thermoplastic filler    ⑩ PVC outer sheath
- ② Inner semi conductive layer    ⑤ Semi conductive tape    ⑧ PVC inner sheath
- ③ XLPE insulation    ⑥ Copper screen    ⑨ Galvanized double steel tape

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	74,5	7150	500	0,5240	0,457	0,114	-	-
3x50/16	77,5	8050	500	0,3870	0,434	0,124	214	217
3x70/16	81,5	9150	500	0,2680	0,410	0,137	261	269
3x95/16	86,5	11050	250	0,1930	0,389	0,150	313	326
3x120/16	91,0	12400	250	0,1530	0,372	0,163	356	377
3x150/25	94,0	13800	250	0,1240	0,360	0,174	400	426
3x185/25	98,0	15450	250	0,0991	0,348	0,188	441	488
3x240/25	105,5	18250	250	0,0754	0,331	0,209	510	576
3x300/25	110,5	20850	200	0,0601	0,321	0,226	-	-
3x400/35	118,5	25100	200	0,0470	0,307	0,251	-	-

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



20,3/35 kV or 20,8/36 kV XLPE insulated,  
double steel tape armoured,  
three core cables with copper conductor



Code: YXC8VZ4V-R, N2XSEYBY, CU/XLPE/CTS/PVC/STA/PVC

R: Stranded Conductor

Standards: HD 620 S2, TSE K 204

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 20,3/35 kV  
   : 20,8/36 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

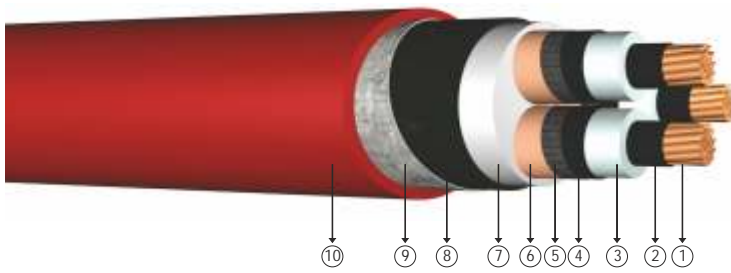
Construction

- ① Stranded copper conductors    ④ Outer semi conductive layer    ⑦ Thermoplastic filler    ⑩ PVC outer sheath
- ② Inner semi conductive layer    ⑤ Semi conductive tape    ⑧ PVC inner sheath
- ③ XLPE insulation    ⑥ Copper screen    ⑨ Galvanized double steel tape

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	78,0	8900	500	0,524	0,457	0,114	-	-
3x50/16	82,0	10500	500	0,387	0,434	0,124	214	210
3x70/16	87,0	12000	500	0,268	0,410	0,137	261	262
3x95/16	90,0	13500	250	0,193	0,389	0,150	313	319
3x120/16	93,0	15000	250	0,153	0,372	0,163	356	364
3x150/25	97,0	16500	250	0,124	0,360	0,174	400	418
3x185/25	101,0	18500	250	0,0991	0,348	0,188	441	478
3x240/25	105,5	21000	250	0,0754	0,331	0,209	510	562
3x300/25	110,5	24000	200	0,0601	0,321	0,226	-	-
3x400/35	118,5	28000	200	0,0470	0,307	0,251	-	-

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

6/10 kV or 6,35/11 kV XLPE insulated,  
aluminium tape armoured,  
three core cables with copper conductor



Code: N2XSEYB(A)Y, CU/XLPE/CTS/PVC/ATA/PVC

R: Stranded Conductor

Standards: IEC 60502-2, BS 6622

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 6/10 kV  
 : 6,35/11 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

Construction

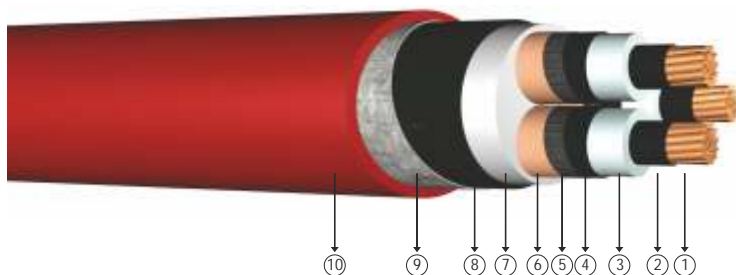
- ① Stranded copper conductors
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive tape
- ⑥ Copper screen
- ⑦ Thermoplastic filler
- ⑧ PVC inner sheath
- ⑨ Aluminium tape
- ⑩ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	51,5	3950	1000	0,524	0,374	0,189	178	173
3x50/16	54,5	4650	1000	0,387	0,355	0,209	210	206
3x70/16	58,5	5600	500	0,268	0,336	0,236	256	257
3x95/16	63,0	6800	500	0,193	0,320	0,263	307	313
3x120/16	67,0	7900	500	0,153	0,308	0,291	349	360
3x150/25	70,0	9100	500	0,124	0,299	0,314	392	410
3x185/25	74,5	10550	250	0,0991	0,290	0,341	443	469
3x240/25	81,5	13000	250	0,0754	0,278	0,387	513	553
3x300/25	88,0	15900	250	0,0601	0,270	0,422	576	635
3x400/35	96,0	19800	250	0,0470	0,261	0,475	650	731

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



12/20 kV or 12,7/22 kV XLPE insulated,  
aluminium tape armoured,  
three core cables with copper conductor



Code: N2XSEYB(A)Y, CU/XLPE/CTS/PVC/ATA/PVC

R: Stranded Conductor

Standards: IEC 60502-2, BS 6622

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
   : 12,7/22 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

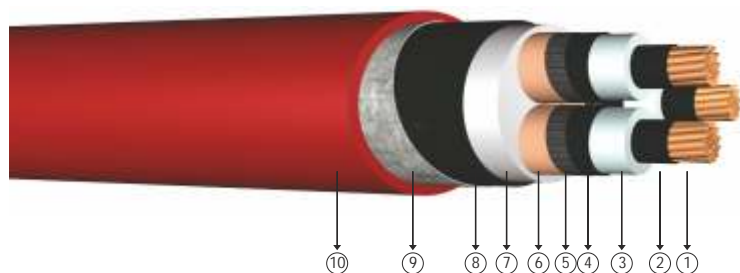
Construction

- ① Stranded copper conductors    ④ Outer semi conductive layer    ⑦ Thermoplastic filler    ⑩ PVC outer sheath
- ② Inner semi conductive layer    ⑤ Semi conductive tape    ⑧ PVC inner sheath
- ③ XLPE insulation    ⑥ Copper screen    ⑨ Aluminium tape

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	62,0	5350	500	0,524	0,416	0,141	183	182
3x50/16	62,0	6100	500	0,387	0,395	0,155	216	217
3x70/16	69,0	7100	500	0,268	0,373	0,172	264	269
3x95/16	73,0	8300	500	0,193	0,355	0,191	316	326
3x120/16	77,0	9500	500	0,153	0,340	0,209	360	377
3x150/25	81,0	10900	250	0,124	0,329	0,225	404	426
3x185/25	86,0	13000	250	0,0991	0,319	0,243	457	488
3x240/25	92,5	15550	250	0,0754	0,304	0,273	532	576
3x300/25	98,0	18000	250	0,0601	0,295	0,296	599	654
3x400/35	106,5	22200	200	0,0470	0,284	0,331	685	750

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

18/30 kV or 19/33 kV XLPE insulated,  
aluminium tape armoured,  
three core cables with copper conductor



Code: N2XSEYB(A)Y, CU/XLPE/CTS/PVC/ATA/PVC

R: Stranded Conductor

Standards: IEC 60502-2, BS 6622

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
 : 19/33 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

Construction

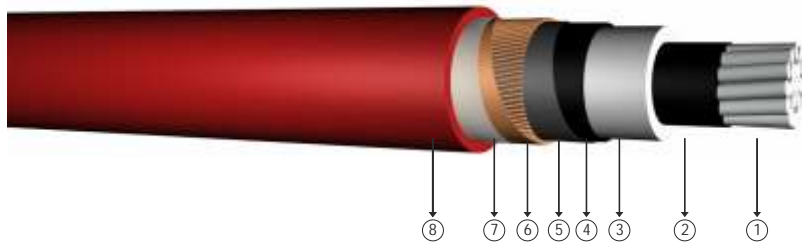
- ① Stranded copper conductors    ④ Outer semi conductive layer    ⑦ Thermoplastic filler    ⑩ PVC outer sheath
- ② Inner semi conductive layer    ⑤ Semi conductive tape    ⑧ PVC inner sheath
- ③ XLPE insulation    ⑥ Copper screen    ⑨ Aluminium tape

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	74,5	7150	500	0,5240	0,457	0,114	-	-
3x50/16	77,5	8050	500	0,3870	0,434	0,124	214	217
3x70/16	81,5	9150	500	0,2680	0,410	0,137	261	269
3x95/16	86,5	11050	250	0,1930	0,389	0,150	313	326
3x120/16	91,0	12400	250	0,1530	0,372	0,163	356	377
3x150/25	94,0	13800	250	0,1240	0,360	0,174	400	426
3x185/25	98,0	15450	250	0,0991	0,348	0,188	441	488
3x240/25	105,5	18250	250	0,0754	0,331	0,209	510	576
3x300/25	110,5	20850	200	0,0601	0,321	0,226	-	-
3x400/35	118,5	25100	200	0,0470	0,307	0,251	-	-

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



# 3,6/6 kV XLPE insulated, single core cables with aluminium conductor



Code: YAXC7V-R, NA2XSY, AL/XLPE/CWS/PVC

R: Stranded Conductor

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 3,6/6 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

### Construction

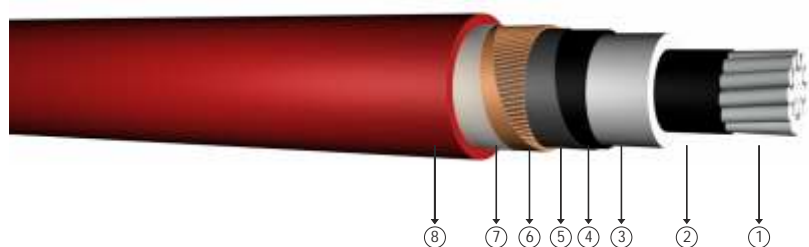
- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 PP tape
- 8 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	21,0	550	1000	0,868	1,1110	0,657	0,367	0,283	-	-	-	-	
1x50/16	22,0	600	1000	0,641	0,8205	0,632	0,351	0,318	186	178	233	188	
1x70/16	24,0	700	1000	0,443	0,5670	0,601	0,332	0,368	234	217	280	235	
1x95/16	25,5	800	1000	0,320	0,4096	0,577	0,318	0,414	287	259	344	286	
1x120/16	27,0	900	1000	0,253	0,3238	0,558	0,308	0,455	338	298	392	329	
1x150/25	28,5	1100	1000	0,206	0,2637	0,541	0,299	0,499	388	333	441	376	
1x185/25	30,5	1250	1000	0,164	0,2099	0,525	0,292	0,544	449	377	510	428	
1x240/25	33,5	1450	1000	0,125	0,1600	0,506	0,284	0,587	530	438	587	508	
1x300/25	36,0	1700	1000	0,100	0,1280	0,490	0,279	0,603	605	495	682	586	
1x400/35	40,0	2200	1000	0,0778	0,1009	0,471	0,275	0,642	678	562	781	676	
1x500/35	43,5	2600	1000	0,0605	0,0774	0,456	0,270	0,667	762	633	883	772	
1x630/35	47,0	3050	1000	0,0469	0,0600	0,440	0,264	0,739	858	712	1007	882	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



## 6/10 kV or 6,35/11 kV XLPE insulated, single core cables with aluminium conductor



Code: YAXC7V-R, NA2XSY, AL/XLPE/CWS/PVC

R: Stranded Conductor

Standards: IEC 60502-2, BS 7870-4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 6/10 kV  
 : 6,35/11 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

### Construction

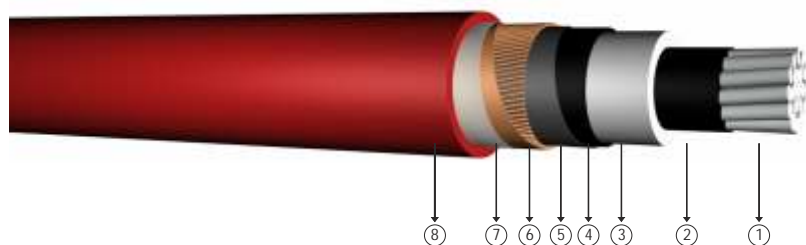
- 1 Stranded aluminium conductor      3 XLPE insulation                      5 Semi conductive tape      7 PP tape
- 2 Inner semi conductive layer      4 Outer semi conductive layer      6 Copper screen                8 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	22,5	600	1000	0,868	1,1110	0,657	0,367	0,223	-	-	-	-	
1x50/16	24,0	650	1000	0,641	0,8205	0,632	0,351	0,248	194	171	215	181	
1x70/16	26,0	750	1000	0,443	0,5670	0,601	0,332	0,285	236	209	269	226	
1x95/16	27,5	870	1000	0,320	0,4096	0,577	0,318	0,320	281	249	327	275	
1x120/16	29,5	970	1000	0,253	0,3238	0,558	0,308	0,350	318	283	377	317	
1x150/25	30,5	1200	1000	0,206	0,2637	0,541	0,299	0,382	350	316	424	359	
1x185/25	32,5	1300	1000	0,164	0,2099	0,525	0,292	0,415	393	358	485	412	
1x240/25	35,0	1550	1000	0,125	0,1600	0,506	0,284	0,462	453	416	573	489	
1x300/25	37,5	1800	1000	0,100	0,1280	0,490	0,279	0,507	507	469	652	559	
1x400/35	41,0	2250	1000	0,0778	0,1009	0,471	0,275	0,573	559	532	741	651	
1x500/35	44,0	2600	1000	0,0605	0,0774	0,456	0,270	0,631	622	599	838	744	
1x630/35	47,5	3050	1000	0,0469	0,0600	0,440	0,264	0,699	697	679	957	851	

Note  
 In ground : Current carrying capacities are valid under the following conditions:  
 : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 6/10 kV XLPE insulated, single core cables with aluminium conductor



Code: NA2XSY

R: Stranded Conductor

Standards: VDE 0276-620

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 6/10 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

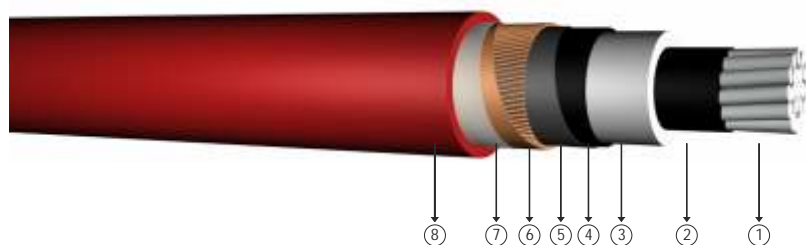
### Construction

- ① Stranded aluminium conductor      ③ XLPE insulation      ⑤ Semi conductive tape      ⑦ PP tape
- ② Inner semi conductive layer      ④ Outer semi conductive layer      ⑥ Copper screen      ⑧ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	23,5	663	1000	0,868	1,1110	0,657	0,367	0,223	-	-	-	-	
1x50/16	24,5	715	1000	0,641	0,8205	0,632	0,351	0,248	194	171	215	181	
1x70/16	26,0	806	1000	0,443	0,5670	0,601	0,332	0,285	236	209	269	226	
1x95/16	27,2	898	1000	0,320	0,4096	0,577	0,318	0,320	281	249	327	275	
1x120/16	29,0	1021	1000	0,253	0,3238	0,558	0,308	0,350	318	283	377	317	
1x150/25	30,0	1188	1000	0,206	0,2637	0,541	0,299	0,382	350	316	424	359	
1x185/25	32,0	1351	1000	0,164	0,2099	0,525	0,292	0,415	393	358	485	412	
1x240/25	34,3	1552	1000	0,125	0,1600	0,506	0,284	0,462	453	416	573	489	
1x300/25	37,0	1816	1000	0,100	0,1280	0,490	0,279	0,507	507	469	652	559	
1x400/35	39,5	2180	1000	0,0778	0,1009	0,471	0,275	0,573	559	532	741	651	
1x500/35	42,8	2553	1000	0,0605	0,0774	0,456	0,270	0,631	622	599	838	744	
1x630/35	46,8	3067	1000	0,0469	0,0600	0,440	0,264	0,699	697	679	957	851	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0.7  
 In air : 30°C, load factor 1.0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 8,7/15 kV XLPE insulated, single core cables with aluminium conductor



Code: YAXC7V-R, NA2XSY, AL/XLPE/CWS/PVC

R: Stranded Conductor

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 8,7/15 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

### Construction

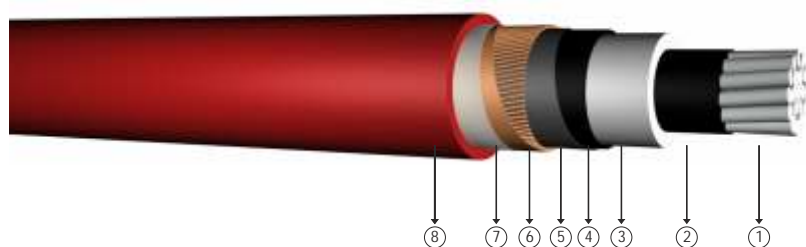
- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 PP tape
- 8 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	25,0	650	1000	0,868	1,1110	0,666	0,401	0,181	-	-	-	-	
1x50/16	26,5	750	1000	0,641	0,8205	0,640	0,383	0,201	194	171	215	181	
1x70/16	28,0	850	1000	0,443	0,5670	0,609	0,362	0,229	236	209	269	226	
1x95/16	29,5	950	1000	0,320	0,4096	0,585	0,346	0,255	281	249	327	275	
1x120/16	31,5	1.100	1000	0,253	0,3238	0,567	0,336	0,278	318	283	377	317	
1x150/25	33,0	1300	1000	0,206	0,2637	0,549	0,325	0,302	350	316	424	359	
1x185/25	35,0	1450	1000	0,164	0,2099	0,534	0,317	0,328	393	358	485	412	
1x240/25	37,5	1700	1000	0,125	0,1600	0,514	0,307	0,363	453	416	573	489	
1x300/25	40,0	1900	1000	0,100	0,1280	0,497	0,298	0,398	507	469	652	559	
1x400/35	43,5	2400	1000	0,0778	0,1009	0,477	0,289	0,447	559	532	741	651	
1x500/35	46,5	2800	1000	0,0605	0,0774	0,461	0,282	0,491	622	599	838	744	
1x630/35	50,0	3250	1000	0,0469	0,0600	0,455	0,275	0,543	697	679	957	851	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 12/20 kV or 12,7/22 kV XLPE insulated, single core cables with aluminium conductor



Code: YAXC7V-R, NA2XSY, AL/XLPE/CWS/PVC

R: Stranded Conductor

Standards: IEC 60502-2, BS 7870-4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 12,7/22 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

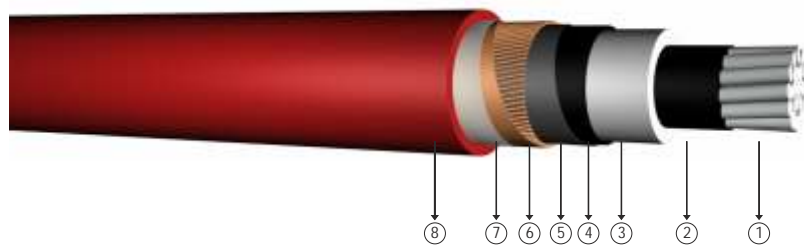
### Construction

- ① Stranded aluminium conductor      ③ XLPE insulation      ⑤ Semi conductive tape      ⑦ PP tape
- ② Inner semi conductive layer      ④ Outer semi conductive layer      ⑥ Copper screen      ⑧ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	27,0	750	1000	0,868	1,1110	0,670	0,416	0,157	-	-	-	-	
1x50/16	28,5	800	1000	0,641	0,8205	0,644	0,397	0,174	195	173	217	184	
1x70/16	30,0	950	1000	0,443	0,5670	0,614	0,377	0,197	237	211	270	229	
1x95/16	32,0	1050	1000	0,320	0,4096	0,590	0,360	0,218	282	252	328	278	
1x120/16	34,0	1200	1000	0,253	0,3238	0,571	0,349	0,238	320	287	378	320	
1x150/25	35,0	1400	1000	0,206	0,2637	0,554	0,338	0,258	353	320	425	363	
1x185/25	37,0	1550	1000	0,164	0,2099	0,538	0,329	0,278	396	362	485	415	
1x240/25	39,5	1800	1000	0,125	0,1600	0,518	0,317	0,308	457	421	573	493	
1x300/25	42,0	2050	1000	0,100	0,1280	0,501	0,308	0,336	511	474	652	563	
1x400/35	45,5	2550	1000	0,0778	0,1009	0,480	0,298	0,377	566	538	740	652	
1x500/35	48,5	2900	1000	0,0605	0,0774	0,464	0,290	0,413	630	606	838	746	
1x630/35	52,5	3400	1000	0,0469	0,0600	0,448	0,282	0,455	719	686	953	850	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 12/20 kV XLPE insulated, single core cables with aluminium conductor



Code: NA2XSY

R: Stranded Conductor

Standards: VDE 0276-620

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

### Construction

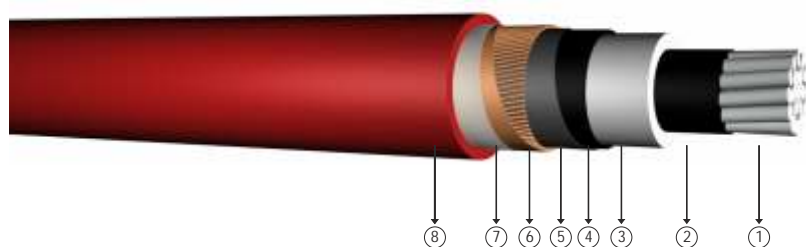
- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive tape
- ⑥ Copper screen
- ⑦ PP tape
- ⑧ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	28,0	851	1000	0,868	1,1110	0,670	0,416	0,157	-	-	-	-	
1x50/16	29,0	906	1000	0,641	0,8205	0,644	0,397	0,174	195	173	217	184	
1x70/16	31,0	1044	1000	0,443	0,5670	0,614	0,377	0,197	237	211	270	229	
1x95/16	32,0	1115	1000	0,320	0,4096	0,590	0,360	0,218	282	252	328	278	
1x120/16	33,0	1204	1000	0,253	0,3238	0,571	0,349	0,238	320	287	378	320	
1x150/25	34,2	1391	1000	0,206	0,2637	0,554	0,338	0,258	353	320	425	363	
1x185/25	36,0	1551	1000	0,164	0,2099	0,538	0,329	0,278	396	362	485	415	
1x240/25	39,0	1830	1000	0,125	0,1600	0,518	0,317	0,308	457	421	573	493	
1x300/25	41,0	2049	1000	0,100	0,1280	0,501	0,308	0,336	511	474	652	563	
1x400/35	44,5	2532	1000	0,0778	0,1009	0,480	0,298	0,377	566	538	740	652	
1x500/35	47,5	2894	1000	0,0605	0,0774	0,464	0,290	0,413	630	606	838	746	
1x630/35	51,0	3375	1000	0,0469	0,0600	0,448	0,282	0,455	719	686	953	850	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 18/30 kV or 19/33 kV XLPE insulated, single core cables with aluminium conductor



Code: YAXC7V-R, NA2XSY, AL/XLPE/CWS/PVC

R: Stranded Conductor

Standards: IEC 60502-2, BS 7870-4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
   : 19/33 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

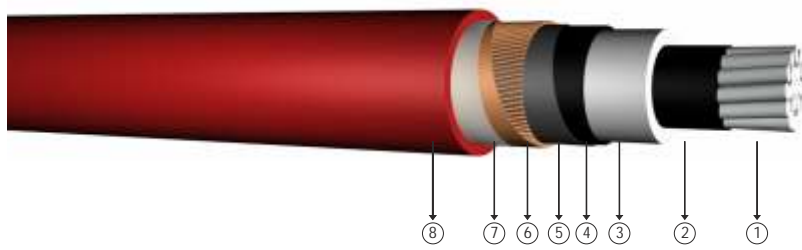
### Construction

- ① Stranded aluminium conductor      ③ XLPE insulation                      ⑤ Semi conductive tape      ⑦ PP tape
- ② Inner semi conductive layer      ④ Outer semi conductive layer      ⑥ Copper screen              ⑧ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	32,0	1000	1000	0,868	1,1110	0,680	0,451	0,123	-	-	-	-	
1x50/16	33,5	1100	1000	0,641	0,8205	0,655	0,432	0,135	196	175	217	187	
1x70/16	35,0	1200	1000	0,443	0,5670	0,624	0,408	0,151	238	214	270	232	
1x95/16	37,0	1400	1000	0,320	0,4096	0,600	0,391	0,166	284	256	328	281	
1x120/16	39,0	1500	1000	0,253	0,3238	0,581	0,377	0,180	322	290	378	323	
1x150/25	40,5	1750	1000	0,206	0,2637	0,564	0,366	0,194	355	324	425	365	
1x185/25	42,5	1900	1000	0,164	0,2099	0,547	0,355	0,208	400	366	485	418	
1x240/25	45,0	2200	1000	0,125	0,1600	0,527	0,342	0,229	461	426	572	494	
1x300/25	47,5	2450	1000	0,100	0,1280	0,510	0,332	0,248	516	479	649	564	
1x400/35	50,5	3000	1000	0,0778	0,1009	0,489	0,320	0,276	572	545	737	654	
1x500/35	54,0	3400	1000	0,0605	0,0774	0,473	0,310	0,301	638	614	835	747	
1x630/35	57,5	3900	1000	0,0469	0,0600	0,457	0,301	0,330	728	690	950	851	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 18/30 kV XLPE insulated, single core cables with aluminium conductor



Code: NA2XSX

R: Stranded Conductor

Standards: VDE 0276-620

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

### Construction

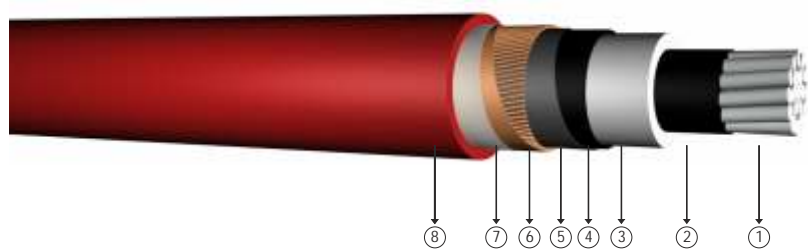
- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 PP tape
- 8 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x50/16	33,2	1088	1000	0,641	0,8205	0,655	0,432	0,135	196	175	217	187	
1x70/16	35,0	1225	1000	0,443	0,5670	0,624	0,408	0,151	238	214	270	232	
1x95/16	36,4	1337	1000	0,320	0,4096	0,600	0,391	0,166	284	256	328	281	
1x120/16	38,0	1473	1000	0,253	0,3238	0,581	0,377	0,180	322	290	378	323	
1x150/25	39,2	1668	1000	0,206	0,2637	0,564	0,366	0,194	355	324	425	365	
1x185/25	41,0	1838	1000	0,164	0,2099	0,547	0,355	0,208	400	366	485	418	
1x240/25	43,5	2087	1000	0,125	0,1600	0,527	0,342	0,229	461	426	572	494	
1x300/25	46,5	2433	1000	0,100	0,1280	0,510	0,332	0,248	516	479	649	564	
1x400/35	49,5	2889	1000	0,0778	0,1009	0,489	0,320	0,276	572	545	737	654	
1x500/35	52,5	3270	1000	0,0605	0,0774	0,473	0,310	0,301	638	614	835	747	
1x630/35	56,0	3770	1000	0,0469	0,0600	0,457	0,301	0,330	728	690	950	851	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\*\* : Trefoil formation  
 Number of system : 1



## 20,3/35 kV or 20,8/36 kV XLPE insulated, single core cables with aluminium conductor



Code: YAXC7V-R, NA2XSY, AL/XLPE/CWS/PVC

R: Stranded Conductor

Standards: HD 620 S2, TSE K 204

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 20,3/35 kV  
 : 20,8/36 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These cables have a low dielectric loss, used in indoor and outdoor applications, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

### Construction

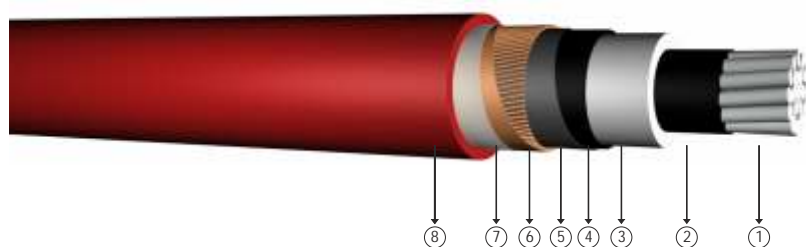
- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive tape
- ⑥ Copper screen
- ⑦ PP tape
- ⑧ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES								
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C	
									***	**	***	**
1x35/16	34,5	1100	1000	0,868	1,1110	0,657	0,464	0,115	-	-	-	-
1x50/16	36,0	1200	1000	0,641	0,8205	0,632	0,444	0,125	196	175	217	187
1x70/16	37,5	1350	1000	0,443	0,5670	0,601	0,420	0,140	238	214	270	232
1x95/16	39,5	1500	1000	0,320	0,4096	0,577	0,402	0,153	284	256	328	281
1x120/16	41,5	1650	1000	0,253	0,3238	0,558	0,388	0,165	322	290	378	323
1x150/25	43,0	1900	1000	0,206	0,2637	0,541	0,376	0,178	355	324	425	365
1x185/25	44,5	2050	1000	0,164	0,2099	0,525	0,365	0,191	400	366	485	418
1x240/25	47,5	2350	1000	0,125	0,1600	0,506	0,351	0,209	461	426	572	494
1x300/25	49,5	2600	1000	0,100	0,1280	0,490	0,341	0,226	516	479	649	564
1x400/35	53,0	3150	1000	0,0778	0,1009	0,471	0,328	0,252	572	545	737	654
1x500/35	56,0	3600	1000	0,0605	0,0774	0,456	0,318	0,274	638	614	835	747
1x630/35	60,0	4150	1000	0,0469	0,0600	0,440	0,308	0,300	728	690	950	851

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 3,6/6 kV halogen free, flame retardant, XLPE insulated, single core cables with aluminium conductor



Code: YAXC7Z1-R, NA2XSH, AL/XLPE/CWS/LSZH

R: Stranded Conductor

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 3,6/6 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

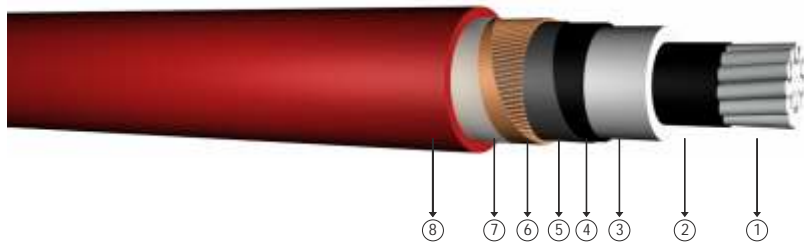
### Construction

- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 PP tape
- 8 LSZH outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	21,0	550	1000	0,868	1,1110	0,657	0,367	0,283	-	-	-	-	
1x50/16	22,0	600	1000	0,641	0,8205	0,632	0,351	0,318	186	178	233	188	
1x70/16	24,0	700	1000	0,443	0,5670	0,601	0,332	0,368	234	217	280	235	
1x95/16	25,5	800	1000	0,320	0,4096	0,577	0,318	0,414	287	259	344	286	
1x120/16	27,0	900	1000	0,253	0,3238	0,558	0,308	0,455	338	298	392	329	
1x150/25	28,5	1100	1000	0,206	0,2637	0,541	0,299	0,499	388	333	441	376	
1x185/25	30,5	1250	1000	0,164	0,2099	0,525	0,292	0,544	449	377	510	428	
1x240/25	33,5	1450	1000	0,125	0,1600	0,506	0,284	0,587	530	438	587	508	
1x300/25	36,0	1700	1000	0,100	0,1280	0,490	0,279	0,603	605	495	682	586	
1x400/35	40,0	2200	1000	0,0778	0,1009	0,471	0,275	0,642	678	562	781	676	
1x500/35	43,5	2600	1000	0,0605	0,0774	0,456	0,270	0,667	762	633	883	772	
1x630/35	47,0	3050	1000	0,0469	0,0600	0,440	0,264	0,739	858	712	1007	882	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

## 6/10 kV or 6,35/11 kV halogen free, flame retardant, XLPE insulated single core cables with aluminium conductor



Code: YAXC7Z1-R, NA2XSH, AL/XLPE/CWS/LSZH

<p>R: Stranded Conductor</p>	<p>Standards: IEC 60502-2, BS 7835</p>
<p><b>Technical Data</b></p> <p>Max. operating temperature : 90°C</p> <p>Max. short circuit temperature : 250°C (max. 5 sec.)</p> <p>Rated voltage : 6/10 kV 6,35/11 kV</p> <p>Min. bending radius : 15 x D</p> <p>D : Cable outer diameter</p>	<p><b>Application</b></p> <p>Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.</p>

### Construction

- ❶ Stranded aluminium conductor
- ❷ Inner semi conductive layer
- ❸ XLPE insulation
- ❹ Outer semi conductive layer
- ❺ Semi conductive tape
- ❻ Copper screen
- ❼ PP tape
- ❽ LSZH outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	22,5	600	1000	0,868	1,1110	0,657	0,367	0,223	-	-	-	-	
1x50/16	24,0	650	1000	0,641	0,8205	0,632	0,351	0,248	194	171	215	181	
1x70/16	26,0	750	1000	0,443	0,5670	0,601	0,332	0,285	236	209	269	226	
1x95/16	27,5	870	1000	0,320	0,4096	0,577	0,318	0,320	281	249	327	275	
1x120/16	29,5	970	1000	0,253	0,3238	0,558	0,308	0,350	318	283	377	317	
1x150/25	30,5	1200	1000	0,206	0,2637	0,541	0,299	0,382	350	316	424	359	
1x185/25	32,5	1300	1000	0,164	0,2099	0,525	0,292	0,415	393	358	485	412	
1x240/25	35,0	1550	1000	0,125	0,1600	0,506	0,284	0,462	453	416	573	489	
1x300/25	37,5	1800	1000	0,100	0,1280	0,490	0,279	0,507	507	469	652	559	
1x400/35	41,0	2250	1000	0,0778	0,1009	0,471	0,275	0,573	559	532	741	651	
1x500/35	44,0	2600	1000	0,0605	0,0774	0,456	0,270	0,631	622	599	838	744	
1x630/35	47,5	3050	1000	0,0469	0,0600	0,440	0,264	0,699	697	679	957	851	

Note : Current carrying capacities are valid under the following conditions:

In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7

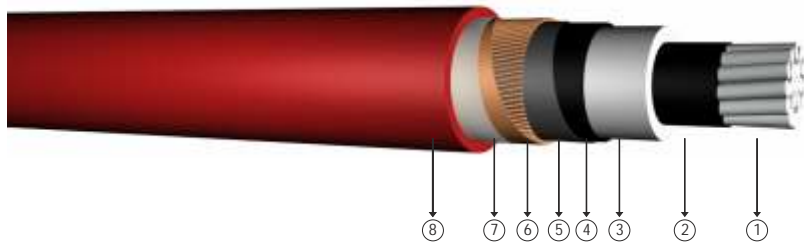
In air : 30°C, load factor 1,0

\*\*\* : Flat formation, gap between cables: in air = 1 x Cable outer diameter, in ground = 7 cm

\*\* : Trefoil formation

Number of system : 1

# 8,7/15 kV halogen free, flame retardant, XLPE insulated single core cables with aluminium conductor



Code: YAXC7Z1-R, NA2XSH, AL/XLPE/CWS/LSZH

R: Stranded Conductor

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 8,7/15 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

### Construction

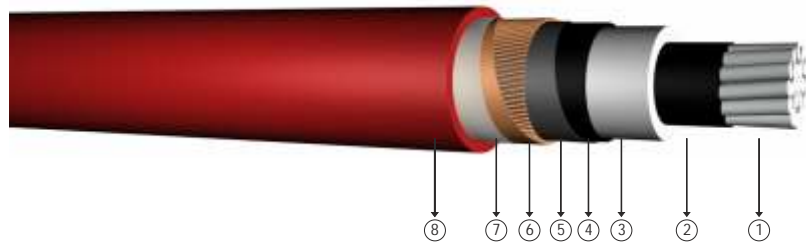
- 1 Stranded aluminium conductor      3 XLPE insulation      5 Semi conductive tape      7 PP tape
- 2 Inner semi conductive layer      4 Outer semi conductive layer      6 Copper screen      8 LSZH outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	25,0	650	1000	0,868	1,1110	0,666	0,401	0,181	-	-	-	-	
1x50/16	26,5	750	1000	0,641	0,8205	0,640	0,383	0,201	194	171	215	181	
1x70/16	28,0	850	1000	0,443	0,5670	0,609	0,362	0,229	236	209	269	226	
1x95/16	29,5	950	1000	0,320	0,4096	0,585	0,346	0,255	281	249	327	275	
1x120/16	31,5	1.100	1000	0,253	0,3238	0,567	0,336	0,278	318	283	377	317	
1x150/25	33,0	1300	1000	0,206	0,2637	0,549	0,325	0,302	350	316	424	359	
1x185/25	35,0	1450	1000	0,164	0,2099	0,534	0,317	0,328	393	358	485	412	
1x240/25	37,5	1700	1000	0,125	0,1600	0,514	0,307	0,363	453	416	573	489	
1x300/25	40,0	1900	1000	0,100	0,1280	0,497	0,298	0,398	507	469	652	559	
1x400/35	43,5	2400	1000	0,0778	0,1009	0,477	0,289	0,447	559	532	741	651	
1x500/35	46,5	2800	1000	0,0605	0,0774	0,461	0,282	0,491	622	599	838	744	
1x630/35	50,0	3250	1000	0,0469	0,0600	0,455	0,275	0,543	697	679	957	851	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\*\* : Trefoil formation  
 Number of system : 1



# 12/20 kV or 12,7/22 kV halogen free, flame retardant, XLPE insulated single core cables with aluminium conductor



Code: YAXC7Z1-R, NA2XSH, AL/XLPE/CWS/LSZH

R: Stranded Conductor

Standards: IEC 60502-2, BS 7835

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 12,7/22 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

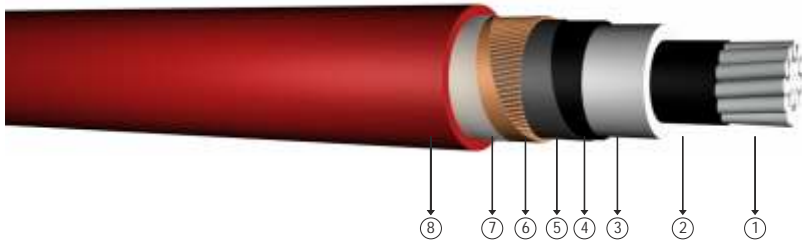
### Construction

- ① Stranded aluminium conductor      ③ XLPE insulation      ⑤ Semi conductive tape      ⑦ PP tape
- ② Inner semi conductive layer      ④ Outer semi conductive layer      ⑥ Copper screen      ⑧ LSZH outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	27,0	750	1000	0,868	1,1110	0,670	0,416	0,157	-	-	-	-	
1x50/16	28,5	800	1000	0,641	0,8205	0,644	0,397	0,174	195	173	217	184	
1x70/16	30,0	950	1000	0,443	0,5670	0,614	0,377	0,197	237	211	270	229	
1x95/16	32,0	1050	1000	0,320	0,4096	0,590	0,360	0,218	282	252	328	278	
1x120/16	34,0	1200	1000	0,253	0,3238	0,571	0,349	0,238	320	287	378	320	
1x150/25	35,0	1400	1000	0,206	0,2637	0,554	0,338	0,258	353	320	425	363	
1x185/25	37,0	1550	1000	0,164	0,2099	0,538	0,329	0,278	396	362	485	415	
1x240/25	39,5	1800	1000	0,125	0,1600	0,518	0,317	0,308	457	421	573	493	
1x300/25	42,0	2050	1000	0,100	0,1280	0,501	0,308	0,336	511	474	652	563	
1x400/35	45,5	2550	1000	0,0778	0,1009	0,480	0,298	0,377	566	538	740	652	
1x500/35	48,5	2900	1000	0,0605	0,0774	0,464	0,290	0,413	630	606	838	746	
1x630/35	52,5	3400	1000	0,0469	0,0600	0,448	0,282	0,455	719	686	953	850	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

18/30 kV or 19/33 kV halogen free, flame retardant, XLPE insulated single core cables with aluminium conductor



Code: YAXC7Z1-R, NA2XSH, AL/XLPE/CWS/LSZH

R: Stranded Conductor

Standards: IEC 60502-2, BS 7835

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
 : 19/33 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

Construction

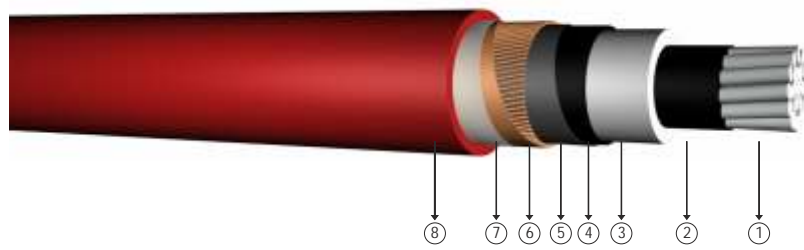
- ① Stranded aluminium conductor
- ③ XLPE insulation
- ⑤ Semi conductive tape
- ⑦ PP tape
- ② Inner semi conductive layer
- ④ Outer semi conductive layer
- ⑥ Copper screen
- ⑧ LSZH outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
						***	**		In ground at 20°C		In air at 30°C		
mm <sup>2</sup>	mm	kg/km	m	/km	/km	mH/km	mH/km	µF/km	***	**	***	**	
1x35/16	32,0	1000	1000	0,868	1,1110	0,680	0,451	0,123	-	-	-	-	
1x50/16	33,5	1100	1000	0,641	0,8205	0,655	0,432	0,135	196	175	217	187	
1x70/16	35,0	1200	1000	0,443	0,5670	0,624	0,408	0,151	238	214	270	232	
1x95/16	37,0	1400	1000	0,320	0,4096	0,600	0,391	0,166	284	256	328	281	
1x120/16	39,0	1500	1000	0,253	0,3238	0,581	0,377	0,180	322	290	378	323	
1x150/25	40,5	1750	1000	0,206	0,2637	0,564	0,366	0,194	355	324	425	365	
1x185/25	42,5	1900	1000	0,164	0,2099	0,547	0,355	0,208	400	366	485	418	
1x240/25	45,0	2200	1000	0,125	0,1600	0,527	0,342	0,229	461	426	572	494	
1x300/25	47,5	2450	1000	0,100	0,1280	0,510	0,332	0,248	516	479	649	564	
1x400/35	50,5	3000	1000	0,0778	0,1009	0,489	0,320	0,276	572	545	737	654	
1x500/35	54,0	3400	1000	0,0605	0,0774	0,473	0,310	0,301	638	614	835	747	
1x630/35	57,5	3900	1000	0,0469	0,0600	0,457	0,301	0,330	728	690	950	851	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\*\* : Trefoil formation  
 Number of system : 1



# 20,3/35 kV or 20,8/36 kV halogen free, flame retardant, XLPE insulated single core cables with aluminium conductor



Code: YAXC7Z1-R, NA2XSH, AL/XLPE/CWS/LSZH

R: Stranded Conductor

Standards: HD 620 S2, TSE K 204

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 20,3/35 kV  
 20,8/36 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire.

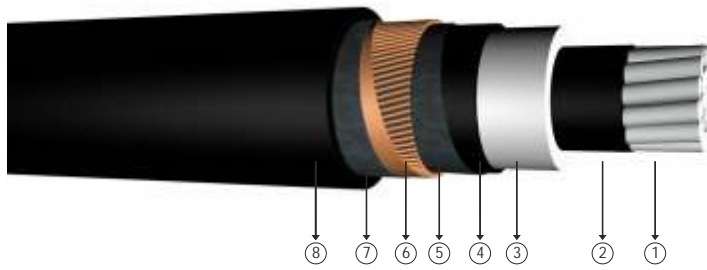
### Construction

- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive tape
- ⑥ Copper screen
- ⑦ PP tape
- ⑧ LSZH outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	34,5	1100	1000	0,868	1,1110	0,657	0,464	0,115	-	-	-	-	
1x50/16	36,0	1200	1000	0,641	0,8205	0,632	0,444	0,125	196	175	217	187	
1x70/16	37,5	1350	1000	0,443	0,5670	0,601	0,420	0,140	238	214	270	232	
1x95/16	39,5	1500	1000	0,320	0,4096	0,577	0,402	0,153	284	256	328	281	
1x120/16	41,5	1650	1000	0,253	0,3238	0,558	0,388	0,165	322	290	378	323	
1x150/25	43,0	1900	1000	0,206	0,2637	0,541	0,376	0,178	355	324	425	365	
1x185/25	44,5	2050	1000	0,164	0,2099	0,525	0,365	0,191	400	366	485	418	
1x240/25	47,5	2350	1000	0,125	0,1600	0,506	0,351	0,209	461	426	572	494	
1x300/25	49,5	2600	1000	0,100	0,1280	0,490	0,341	0,226	516	479	649	564	
1x400/35	53,0	3150	1000	0,0778	0,1009	0,471	0,328	0,252	572	545	737	654	
1x500/35	56,0	3600	1000	0,0605	0,0774	0,456	0,318	0,274	638	614	835	747	
1x630/35	60,0	4150	1000	0,0469	0,0600	0,440	0,308	0,300	728	690	950	851	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 3,6/6 kV XLPE insulated, longitudinally sealed, single core cables with aluminium conductor



Code: NA2XS(F)2Y, AL/XLPE/WBT/CWS/WBT/PE

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 3,6/6 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

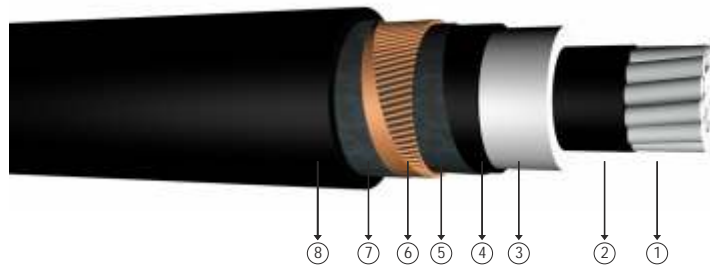
- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive swelling tape
- 6 Copper screen
- 7 Swellable tape
- 8 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	24,0	500	1000	0,868	1,1110	0,663	0,391	0,283	-	-	-	-	
1x50/16	25,0	550	1000	0,641	0,8205	0,638	0,374	0,318	186	178	233	188	
1x70/16	26,5	650	1000	0,443	0,5670	0,607	0,353	0,368	234	217	280	235	
1x95/16	28,5	750	1000	0,320	0,4096	0,583	0,338	0,414	287	259	344	286	
1x120/16	30,0	850	1000	0,253	0,3238	0,564	0,327	0,455	338	298	392	329	
1x150/25	31,5	1050	1000	0,206	0,2637	0,547	0,317	0,499	388	333	441	376	
1x185/25	33,5	1200	1000	0,164	0,2099	0,531	0,309	0,544	449	377	510	428	
1x240/25	36,5	1400	1000	0,125	0,1600	0,511	0,299	0,587	530	438	587	508	
1x300/25	39,0	1600	1000	0,100	0,1280	0,446	0,294	0,603	605	495	682	586	
1x400/35	43,0	2100	1000	0,0778	0,1009	0,476	0,287	0,642	678	562	781	676	
1x500/35	46,5	2450	500	0,0605	0,0774	0,461	0,282	0,667	762	633	883	772	
1x630/35	50,0	2900	500	0,0469	0,0600	0,445	0,275	0,739	858	712	1007	882	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



## 6/10 kV or 6,35/11 XLPE insulated, longitudinally sealed, single core cables with aluminium conductor



Code: NA2XS(F)2Y, AL/XLPE/WBT/CWS/WBT/PE

Standards: IEC 60502-2, BS 7870 - 4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 6/10 kV  
   6,35/11 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

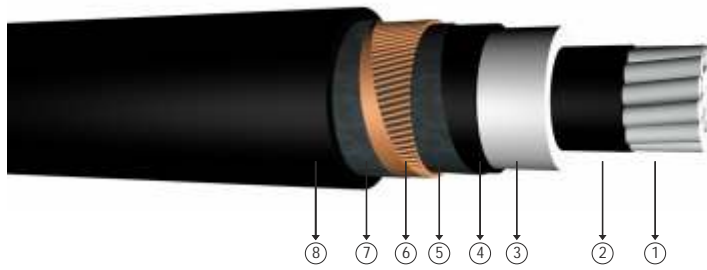
- ① Stranded aluminium conductor      ③ XLPE insulation      ⑤ Semi conductive swelling tape      ⑦ Swellable tape
- ② Inner semi conductive layer      ④ Outer semi conductive layer      ⑥ Copper screen      ⑧ PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	25,5	550	1000	0,868	1,1110	0,667	0,406	0,223	-	-	-	-	
1x50/16	27,0	600	1000	0,641	0,8205	0,642	0,387	0,248	194	171	215	181	
1x70/16	28,5	700	1000	0,443	0,5670	0,611	0,366	0,285	236	209	269	226	
1x95/16	30,0	800	1000	0,320	0,4096	0,586	0,350	0,320	281	249	327	275	
1x120/16	32,0	900	1000	0,253	0,3238	0,568	0,338	0,350	318	283	377	317	
1x150/25	33,5	1150	1000	0,206	0,2637	0,551	0,329	0,382	350	316	424	359	
1x185/25	35,5	1250	1000	0,164	0,2099	0,534	0,319	0,415	393	358	485	412	
1x240/25	38,0	1450	1000	0,125	0,1600	0,515	0,309	0,462	453	416	573	489	
1x300/25	40,5	1700	1000	0,100	0,1280	0,498	0,301	0,507	507	469	652	559	
1x400/35	43,5	2150	1000	0,0778	0,1009	0,478	0,291	0,573	559	532	741	651	
1x500/35	47,0	2500	1000	0,0605	0,0774	0,462	0,284	0,631	622	599	838	744	
1x630/35	50,5	2950	1000	0,0469	0,0600	0,446	0,276	0,699	697	679	957	851	

Note  
 In ground : Current carrying capacities are valid under the following conditions:  
 : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 6/10 kV XLPE insulated, longitudinally sealed, single core cables with aluminium conductor



Code: NA2XS(F)2Y

Standards: VDE 0276-620

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 6/10 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

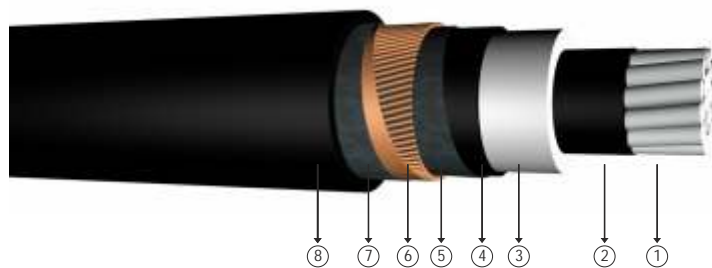
- ① Stranded aluminium conductor      ③ XLPE insulation      ⑤ Semi conductive swelling tape      ⑦ Swellable tape
- ② Inner semi conductive layer      ④ Outer semi conductive layer      ⑥ Copper screen      ⑧ PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	24,1	565	1000	0,868	1,1110	0,667	0,406	0,223	-	-	-	-	
1x50/16	25,3	623	1000	0,641	0,8205	0,642	0,387	0,248	194	171	215	181	
1x70/16	27,0	719	1000	0,443	0,5670	0,611	0,366	0,285	236	209	269	226	
1x95/16	28,2	803	1000	0,320	0,4096	0,586	0,350	0,320	281	249	327	275	
1x120/16	29,7	903	1000	0,253	0,3238	0,568	0,338	0,350	318	283	377	317	
1x150/25	31,0	1084	1000	0,206	0,2637	0,551	0,329	0,382	350	316	424	359	
1x185/25	32,8	1227	1000	0,164	0,2099	0,534	0,319	0,415	393	358	485	412	
1x240/25	35,3	1434	1000	0,125	0,1600	0,515	0,309	0,462	453	416	573	489	
1x300/25	37,7	1661	1000	0,100	0,1280	0,498	0,301	0,507	507	469	652	559	
1x400/35	40,5	2041	1000	0,0778	0,1009	0,478	0,291	0,573	559	532	741	651	
1x500/35	43,8	2402	1000	0,0605	0,0774	0,462	0,284	0,631	622	599	838	744	
1x630/35	47,8	2900	1000	0,0469	0,0600	0,446	0,276	0,699	697	679	957	851	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\*\* : Trefoil formation  
 Number of system : 1



# 8,7/15 kV XLPE insulated, longitudinally sealed, single core cables with aluminium conductor



Code: NA2XS(F)2Y, AL/XLPE/WBT/CWS/WBT/PE

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 8,7/15 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

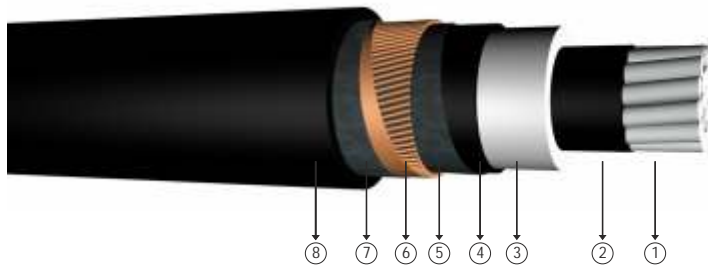
### Construction

- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive swelling tape
- 6 Copper screen
- 7 Swellable tape
- 8 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	28,0	650	1000	0,868	1,1110	0,672	0,422	0,181	-	-	-	-	
1x50/16	29,0	700	1000	0,641	0,8205	0,646	0,403	0,201	194	171	215	181	
1x70/16	30,5	800	1000	0,443	0,5670	0,615	0,381	0,229	236	209	269	226	
1x95/16	32,5	900	1000	0,320	0,4096	0,591	0,364	0,255	281	249	327	275	
1x120/16	34,5	1050	1000	0,253	0,3238	0,572	0,353	0,278	318	283	377	317	
1x150/25	35,5	1250	1000	0,206	0,2637	0,555	0,341	0,302	350	316	424	359	
1x185/25	37,5	1400	1000	0,164	0,2099	0,539	0,332	0,328	393	358	485	412	
1x240/25	40,5	1600	1000	0,125	0,1600	0,519	0,321	0,363	453	416	573	489	
1x300/25	42,5	1800	1000	0,100	0,1280	0,502	0,311	0,398	507	469	652	559	
1x400/35	46,0	2300	1000	0,0778	0,1009	0,482	0,301	0,447	559	532	741	651	
1x500/35	49,5	2650	1000	0,0605	0,0774	0,466	0,293	0,491	622	599	838	744	
1x630/35	53,0	3100	1000	0,0469	0,0600	0,450	0,285	0,543	697	679	957	851	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 12/20 kV or 12,7/22 kV XLPE insulated, longitudinally sealed, single core cables with aluminium conductor



Code: NA2XS(F)2Y, AL/XLPE/WBT/CWS/WBT/PE

Standards: IEC 60502-2, BS 7870 - 4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 12,7/22 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

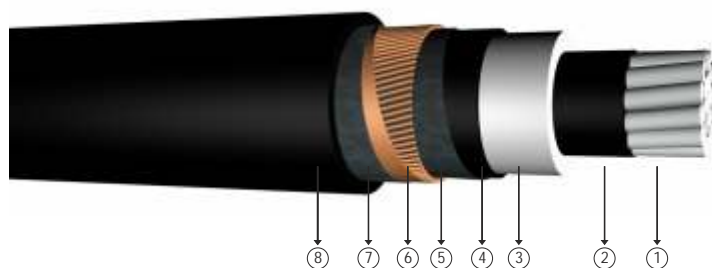
- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive swelling tape
- 6 Copper screen
- 7 Swellable tape
- 8 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	30,0	700	1000	0,868	1,1110	0,676	0,436	0,157	-	-	-	-	
1x50/16	31,0	800	1000	0,641	0,8205	0,650	0,416	0,174	195	173	217	184	
1x70/16	33,0	900	1000	0,443	0,5670	0,619	0,394	0,197	237	211	270	229	
1x95/16	34,5	1000	1000	0,320	0,4096	0,595	0,377	0,218	282	252	328	278	
1x120/16	36,5	1150	1000	0,253	0,3238	0,576	0,365	0,238	320	287	378	320	
1x150/25	38,0	1350	1000	0,206	0,2637	0,559	0,353	0,258	353	320	425	363	
1x185/25	40,0	1500	1000	0,164	0,2099	0,543	0,343	0,278	396	362	485	415	
1x240/25	42,5	1700	1000	0,125	0,1600	0,523	0,330	0,308	457	421	573	493	
1x300/25	44,5	1950	1000	0,100	0,1280	0,506	0,321	0,336	511	474	652	563	
1x400/35	48,0	2400	1000	0,0778	0,1009	0,485	0,309	0,377	566	538	740	652	
1x500/35	51,0	2800	1000	0,0605	0,0774	0,469	0,300	0,413	630	606	838	746	
1x630/35	55,0	3250	1000	0,0469	0,0600	0,452	0,292	0,455	719	686	953	850	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 12/20 kV XLPE insulated, longitudinally sealed, single core cables with aluminium conductor



Code: NA2XS(F)2Y

Standards: VDE 0276-620

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

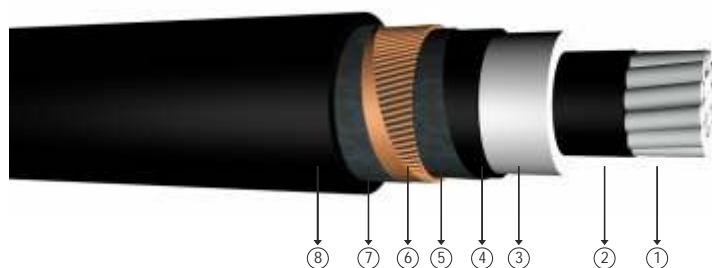
### Construction

- ① Stranded aluminium conductor      ③ XLPE insulation      ⑤ Semi conductive swelling tape      ⑦ Swellable tape
- ② Inner semi conductive layer      ④ Outer semi conductive layer      ⑥ Copper screen      ⑧ PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	28,3	709	1000	0,868	1,1110	0,676	0,436	0,157	-	-	-	-	
1x50/16	29,5	775	1000	0,641	0,8205	0,650	0,416	0,174	195	173	217	184	
1x70/16	31,2	885	1000	0,443	0,5670	0,619	0,394	0,197	237	211	270	229	
1x95/16	32,8	991	1000	0,320	0,4096	0,595	0,377	0,218	282	252	328	278	
1x120/16	33,9	1082	1000	0,253	0,3238	0,576	0,365	0,238	320	287	378	320	
1x150/25	35,2	1273	1000	0,206	0,2637	0,559	0,353	0,258	353	320	425	363	
1x185/25	37,0	1426	1000	0,164	0,2099	0,543	0,343	0,278	396	362	485	415	
1x240/25	39,5	1648	1000	0,125	0,1600	0,523	0,330	0,308	457	421	573	493	
1x300/25	41,6	1867	1000	0,100	0,1280	0,506	0,321	0,336	511	474	652	563	
1x400/35	44,5	2271	1000	0,0778	0,1009	0,485	0,309	0,377	566	538	740	652	
1x500/35	48,0	2668	1000	0,0605	0,0774	0,469	0,300	0,413	630	606	838	746	
1x630/35	52,0	3191	1000	0,0469	0,0600	0,452	0,292	0,455	719	686	953	850	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 18/30 kV or 19/33 kV XLPE insulated, longitudinally sealed, single core cables with aluminium conductor



Code: NA2XS(F)2Y, AL/XLPE/WBT/CWS/WBT/PE

Standards: IEC 60502-2, BS 7870 - 4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
   : 19/33 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

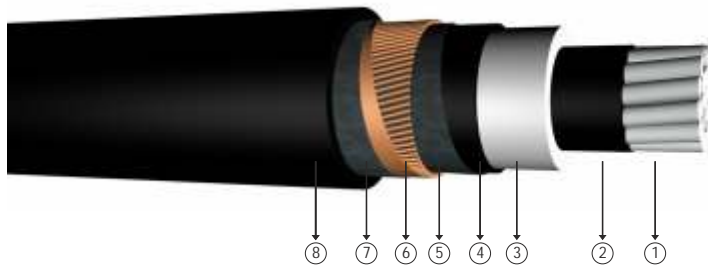
- ① Stranded aluminium conductor      ③ XLPE insulation                      ⑤ Semi conductive swelling tape      ⑦ Swellable tape
- ② Inner semi conductive layer      ④ Outer semi conductive layer      ⑥ Copper screen                      ⑧ PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	35,0	900	1000	0,868	1,1110	0,686	0,467	0,123	-	-	-	-	
1x50/16	36,5	1000	1000	0,641	0,8205	0,660	0,448	0,135	146	175	217	187	
1x70/16	38,0	1150	1000	0,443	0,5670	0,629	0,423	0,151	238	214	270	232	
1x95/16	40,0	1250	1000	0,320	0,4096	0,605	0,405	0,166	284	256	328	281	
1x120/16	42,0	1400	1000	0,253	0,3238	0,586	0,391	0,180	322	290	378	323	
1x150/25	43,5	1650	1000	0,206	0,2637	0,568	0,379	0,194	355	324	425	365	
1x185/25	45,0	1800	1000	0,164	0,2099	0,552	0,367	0,208	400	366	485	418	
1x240/25	48,0	2050	1000	0,125	0,1600	0,532	0,354	0,229	461	426	572	494	
1x300/25	50,0	2300	1000	0,100	0,1280	0,515	0,343	0,248	516	479	649	564	
1x400/35	53,5	2800	1000	0,0778	0,1009	0,494	0,330	0,276	572	545	737	654	
1x500/35	56,5	3200	1000	0,0605	0,0774	0,478	0,320	0,301	638	614	835	747	
1x630/35	60,5	3700	1000	0,0469	0,0600	0,461	0,310	0,330	728	690	950	851	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 18/30 kV XLPE insulated, longitudinally sealed, single core cables with aluminium conductor



Code: NA2XS(F)2Y

Standards: VDE 0276-620

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

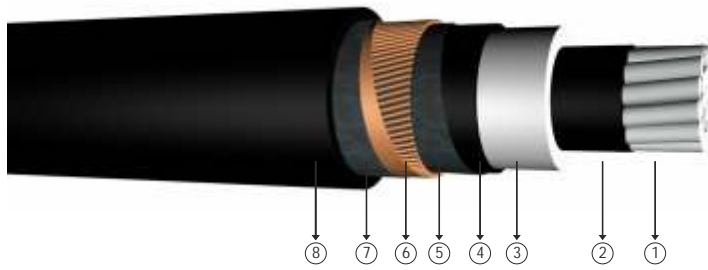
### Construction

- ① Stranded aluminium conductor      ③ XLPE insulation      ⑤ Semi conductive swelling tape      ⑦ Swellable tape
- ② Inner semi conductive layer      ④ Outer semi conductive layer      ⑥ Copper screen      ⑧ PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x50/16	34,2	974	1000	0,641	0,8205	0,660	0,448	0,135	146	175	217	187	
1x70/16	35,8	1088	1000	0,443	0,5670	0,629	0,423	0,151	238	214	270	232	
1x95/16	37,4	1210	1000	0,320	0,4096	0,605	0,405	0,166	284	256	328	281	
1x120/16	38,9	1331	1000	0,253	0,3238	0,586	0,391	0,180	322	290	378	323	
1x150/25	40,2	1530	1000	0,206	0,2637	0,568	0,379	0,194	355	324	425	365	
1x185/25	42,0	1693	1000	0,164	0,2099	0,552	0,367	0,208	400	366	485	418	
1x240/25	44,5	1932	1000	0,125	0,1600	0,532	0,354	0,229	461	426	572	494	
1x300/25	46,6	2170	1000	0,100	0,1280	0,515	0,343	0,248	516	479	649	564	
1x400/35	49,5	2597	1000	0,0778	0,1009	0,494	0,330	0,276	572	545	737	654	
1x500/35	53,0	3015	1000	0,0605	0,0774	0,478	0,320	0,301	638	614	835	747	
1x630/35	57,0	3567	1000	0,0469	0,0600	0,461	0,310	0,330	728	690	950	851	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 20,3/35 kV or 20,8/36 kV XLPE insulated, longitudinally sealed, single core cables with aluminium conductor



Code: NA2XS(F)2Y, AL/XLPE/WBT/CWS/WBT/PE

Standards: HD 620 S2, TSE K 204

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 20,3/35 kV  
 : 20,8/36 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

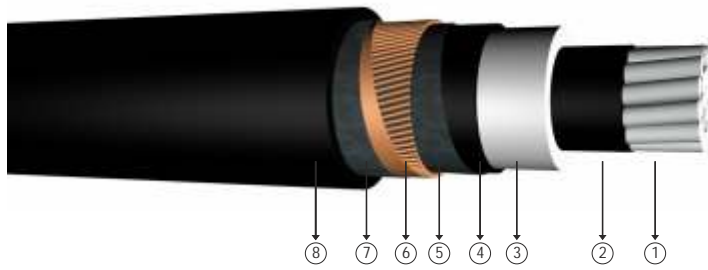
- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Copper screen
- ⑦ Swellable tape
- ⑧ PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	37,5	1000	1000	0,868	1,1110	0,690	0,480	0,115	-	-	-	-	
1x50/16	38,5	1100	1000	0,641	0,8205	0,664	0,459	0,125	196	175	217	187	
1x70/16	40,5	1250	1000	0,443	0,5670	0,633	0,434	0,140	238	214	270	232	
1x95/16	42,0	1400	1000	0,320	0,4096	0,609	0,416	0,153	284	256	328	281	
1x120/16	44,0	1500	1000	0,253	0,3238	0,590	0,401	0,165	322	290	378	323	
1x150/25	45,5	1750	1000	0,206	0,2637	0,572	0,389	0,178	355	324	425	365	
1x185/25	47,5	1950	1000	0,164	0,2099	0,556	0,376	0,191	400	366	485	418	
1x240/25	50,0	2200	1000	0,125	0,1600	0,535	0,363	0,209	461	426	572	494	
1x300/25	52,5	2450	1000	0,100	0,1280	0,519	0,351	0,226	516	479	649	564	
1x400/35	55,5	2950	1000	0,0778	0,1009	0,497	0,338	0,252	572	545	737	654	
1x500/35	59,0	3400	1000	0,0605	0,0774	0,481	0,328	0,274	638	614	835	747	
1x630/35	62,5	3900	1000	0,0469	0,0600	0,464	0,317	0,300	728	690	950	851	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 3,6/6 kV XLPE insulated, single core cables with, aluminium conductor



Code: NA2XS2Y, AL/XLPE/CWS/PE

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 3,6/6 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

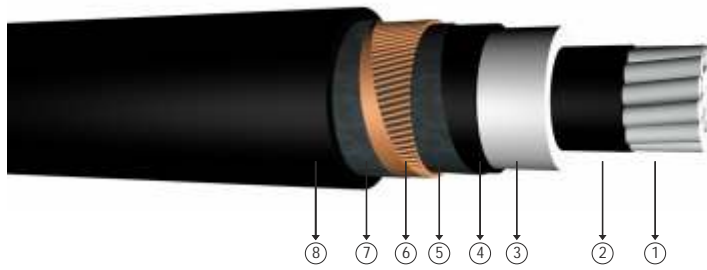
- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 PP tape
- 8 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	24,0	500	1000	0,868	1,1110	0,663	0,391	0,283	-	-	-	-	
1x50/16	25,0	550	1000	0,641	0,8205	0,638	0,374	0,318	186	178	233	188	
1x70/16	26,5	650	1000	0,443	0,5670	0,607	0,353	0,368	234	217	280	235	
1x95/16	28,5	750	1000	0,320	0,4096	0,583	0,338	0,414	287	259	344	286	
1x120/16	30,0	850	1000	0,253	0,3238	0,564	0,327	0,455	338	298	392	329	
1x150/25	31,5	1050	1000	0,206	0,2637	0,547	0,317	0,499	388	333	441	376	
1x185/25	33,5	1200	1000	0,164	0,2099	0,531	0,309	0,544	449	377	510	428	
1x240/25	36,5	1400	1000	0,125	0,1600	0,511	0,299	0,587	530	438	587	508	
1x300/25	39,0	1600	1000	0,100	0,1280	0,446	0,294	0,603	605	495	682	586	
1x400/35	43,0	2100	1000	0,0778	0,1009	0,476	0,287	0,642	678	562	781	676	
1x500/35	46,5	2450	500	0,0605	0,0774	0,461	0,282	0,667	762	633	883	772	
1x630/35	50,0	2900	500	0,0469	0,0600	0,445	0,275	0,739	858	712	1007	882	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 6/10 kV or 6,35/11 XLPE insulated, single core cables with aluminium conductor



Code: NA2XS2Y, AL/XLPE/CWS/PE

Standards: IEC 60502-2, BS 7870 - 4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 6/10 kV  
 : 6,35/11 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

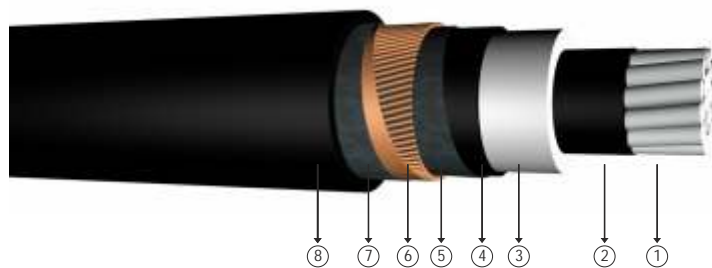
- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 PP tape
- 8 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	25,5	550	1000	0,868	1,1110	0,667	0,406	0,223	-	-	-	-	
1x50/16	27,0	600	1000	0,641	0,8205	0,642	0,387	0,248	194	171	215	181	
1x70/16	28,5	700	1000	0,443	0,5670	0,611	0,366	0,285	236	209	269	226	
1x95/16	30,0	800	1000	0,320	0,4096	0,586	0,350	0,320	281	249	327	275	
1x120/16	32,0	900	1000	0,253	0,3238	0,568	0,338	0,350	318	283	377	317	
1x150/25	33,5	1150	1000	0,206	0,2637	0,551	0,329	0,382	350	316	424	359	
1x185/25	35,5	1250	1000	0,164	0,2099	0,534	0,319	0,415	393	358	485	412	
1x240/25	38,0	1450	1000	0,125	0,1600	0,515	0,309	0,462	453	416	573	489	
1x300/25	40,5	1700	1000	0,100	0,1280	0,498	0,301	0,507	507	469	652	559	
1x400/35	43,5	2150	1000	0,0778	0,1009	0,478	0,291	0,573	559	532	741	651	
1x500/35	47,0	2500	1000	0,0605	0,0774	0,462	0,284	0,631	622	599	838	744	
1x630/35	50,5	2950	1000	0,0469	0,0600	0,446	0,276	0,699	697	679	957	851	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 6/10 kV XLPE insulated, single core cables with aluminium conductor



Code: NA2XS2Y

Standards: VDE 0276-620

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 6/10 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

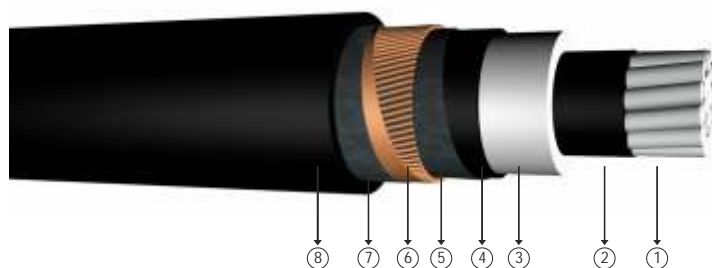
### Construction

- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 PP tape
- 8 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	23,5	561	1000	0,868	1,1110	0,667	0,406	0,223	-	-	-	-	
1x50/16	24,5	612	1000	0,641	0,8205	0,642	0,387	0,248	194	171	215	181	
1x70/16	26,0	700	1000	0,443	0,5670	0,611	0,366	0,285	236	209	269	226	
1x95/16	27,2	787	1000	0,320	0,4096	0,586	0,350	0,320	281	249	327	275	
1x120/16	29,0	895	1000	0,253	0,3238	0,568	0,338	0,350	318	283	377	317	
1x150/25	30,0	1064	1000	0,206	0,2637	0,551	0,329	0,382	350	316	424	359	
1x185/25	32,0	1213	1000	0,164	0,2099	0,534	0,319	0,415	393	358	485	412	
1x240/25	34,3	1409	1000	0,125	0,1600	0,515	0,309	0,462	453	416	573	489	
1x300/25	37,0	1652	1000	0,100	0,1280	0,498	0,301	0,507	507	469	652	559	
1x400/35	39,5	2014	1000	0,0778	0,1009	0,478	0,291	0,573	559	532	741	651	
1x500/35	42,8	2372	1000	0,0605	0,0774	0,462	0,284	0,631	622	599	838	744	
1x630/35	46,8	2868	1000	0,0469	0,0600	0,446	0,276	0,699	697	679	957	851	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 8,7/15 kV XLPE insulated, single core cables with aluminium conductor



Code: NA2XS2Y, AL/XLPE/CWS/PE

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 8,7/15 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

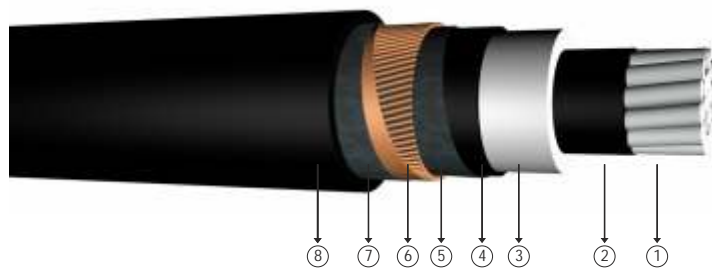
- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 PP tape
- 8 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	28,0	650	1000	0,868	1,1110	0,672	0,422	0,181	-	-	-	-	
1x50/16	29,0	700	1000	0,641	0,8205	0,646	0,403	0,201	194	171	215	181	
1x70/16	30,5	800	1000	0,443	0,5670	0,615	0,381	0,229	236	209	269	226	
1x95/16	32,5	900	1000	0,320	0,4096	0,591	0,364	0,255	281	249	327	275	
1x120/16	34,5	1050	1000	0,253	0,3238	0,572	0,353	0,278	318	283	377	317	
1x150/25	35,5	1250	1000	0,206	0,2637	0,555	0,341	0,302	350	316	424	359	
1x185/25	37,5	1400	1000	0,164	0,2099	0,539	0,332	0,328	393	358	485	412	
1x240/25	40,5	1600	1000	0,125	0,1600	0,519	0,321	0,363	453	416	573	489	
1x300/25	42,5	1800	1000	0,100	0,1280	0,502	0,311	0,398	507	469	652	559	
1x400/35	46,0	2300	1000	0,0778	0,1009	0,482	0,301	0,447	559	532	741	651	
1x500/35	49,5	2650	1000	0,0605	0,0774	0,466	0,293	0,491	622	599	838	744	
1x630/35	53,0	3100	1000	0,0469	0,0600	0,450	0,285	0,543	697	679	957	851	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 12/20 kV or 12,7/22 kV XLPE insulated, single core cables with aluminium conductor



Code: NA2XS2Y, AL/XLPE/CWS/PE

Standards: IEC 60502-2, BS 7870 - 4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 12,7/22 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

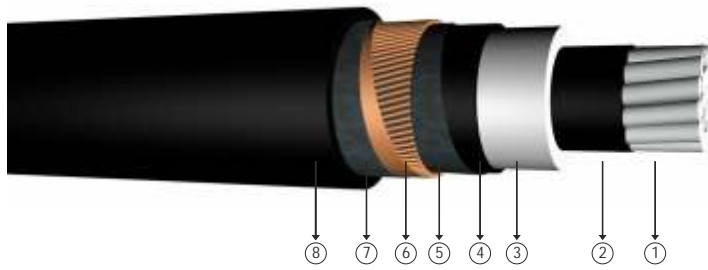
### Construction

- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 PP tape
- 8 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	30,0	700	1000	0,868	1,1110	0,676	0,436	0,157	-	-	-	-	
1x50/16	31,0	800	1000	0,641	0,8205	0,650	0,416	0,174	195	173	217	184	
1x70/16	33,0	900	1000	0,443	0,5670	0,619	0,394	0,197	237	211	270	229	
1x95/16	34,5	1000	1000	0,320	0,4096	0,595	0,377	0,218	282	252	328	278	
1x120/16	36,5	1150	1000	0,253	0,3238	0,576	0,365	0,238	320	287	378	320	
1x150/25	38,0	1350	1000	0,206	0,2637	0,559	0,353	0,258	353	320	425	363	
1x185/25	40,0	1500	1000	0,164	0,2099	0,543	0,343	0,278	396	362	485	415	
1x240/25	42,5	1700	1000	0,125	0,1600	0,523	0,330	0,308	457	421	573	493	
1x300/25	44,5	1950	1000	0,100	0,1280	0,506	0,321	0,336	511	474	652	563	
1x400/35	48,0	2400	1000	0,0778	0,1009	0,485	0,309	0,377	566	538	740	652	
1x500/35	51,0	2800	1000	0,0605	0,0774	0,469	0,300	0,413	630	606	838	746	
1x630/35	55,0	3250	1000	0,0469	0,0600	0,452	0,292	0,455	719	686	953	850	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 12/20 kV XLPE insulated, single core cables with aluminium conductor



Code: NA2XS2Y

Standards: VDE 0276-620

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

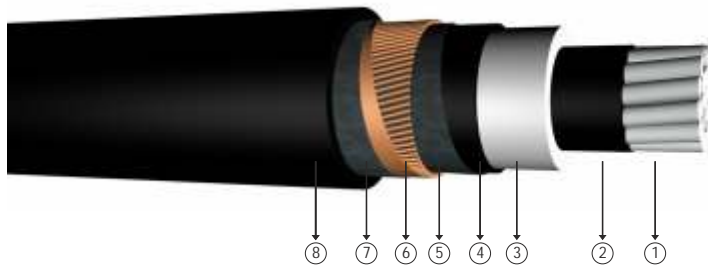
- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 PP tape
- 8 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	28,0	721	1000	0,868	1,1110	0,676	0,436	0,157	-	-	-	-	
1x50/16	29,0	776	1000	0,641	0,8205	0,650	0,416	0,174	195	173	217	184	
1x70/16	31,0	897	1000	0,443	0,5670	0,619	0,394	0,197	237	211	270	229	
1x95/16	32,0	977	1000	0,320	0,4096	0,595	0,377	0,218	282	252	328	278	
1x120/16	33,0	1064	1000	0,253	0,3238	0,576	0,365	0,238	320	287	378	320	
1x150/25	34,2	1248	1000	0,206	0,2637	0,559	0,353	0,258	353	320	425	363	
1x185/25	36,0	1401	1000	0,164	0,2099	0,543	0,343	0,278	396	362	485	415	
1x240/25	39,0	1650	1000	0,125	0,1600	0,523	0,330	0,308	457	421	573	493	
1x300/25	41,0	1863	1000	0,100	0,1280	0,506	0,321	0,336	511	474	652	563	
1x400/35	44,5	2307	1000	0,0778	0,1009	0,485	0,309	0,377	566	538	740	652	
1x500/35	47,5	2671	1000	0,0605	0,0774	0,469	0,300	0,413	630	606	838	746	
1x630/35	51,0	3157	1000	0,0469	0,0600	0,452	0,292	0,455	719	686	953	850	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 18/30 kV or 19/33 kV XLPE insulated, single core cables with aluminium conductor



Code: NA2XS2Y, AL/XLPE/CWS/PE

Standards: IEC 60502-2, BS 7870 - 4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
                                   : 19/33 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

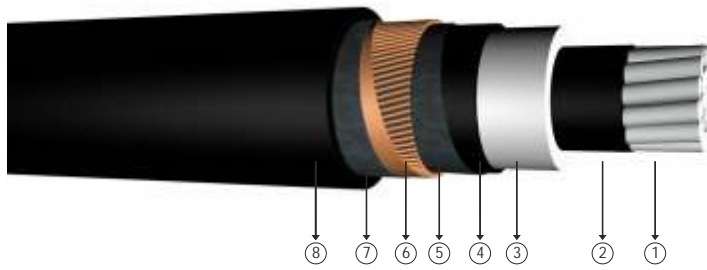
### Construction

- 1 Stranded aluminium conductor      3 XLPE insulation                      5 Semi conductive tape                      7 PP tape
- 2 Inner semi conductive layer      4 Outer semi conductive layer      6 Copper screen                      8 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	35,0	900	1000	0,868	1,1110	0,686	0,467	0,123	-	-	-	-	
1x50/16	36,5	1000	1000	0,641	0,8205	0,660	0,448	0,135	146	175	217	187	
1x70/16	38,0	1150	1000	0,443	0,5670	0,629	0,423	0,151	238	214	270	232	
1x95/16	40,0	1250	1000	0,320	0,4096	0,605	0,405	0,166	284	256	328	281	
1x120/16	42,0	1400	1000	0,253	0,3238	0,586	0,391	0,180	322	290	378	323	
1x150/25	43,5	1650	1000	0,206	0,2637	0,568	0,379	0,194	355	324	425	365	
1x185/25	45,0	1800	1000	0,164	0,2099	0,552	0,367	0,208	400	366	485	418	
1x240/25	48,0	2050	1000	0,125	0,1600	0,532	0,354	0,229	461	426	572	494	
1x300/25	50,0	2300	1000	0,100	0,1280	0,515	0,343	0,248	516	479	649	564	
1x400/35	53,5	2800	1000	0,0778	0,1009	0,494	0,330	0,276	572	545	737	654	
1x500/35	56,5	3200	1000	0,0605	0,0774	0,478	0,320	0,301	638	614	835	747	
1x630/35	60,5	3700	1000	0,0469	0,0600	0,461	0,310	0,330	728	690	950	851	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 18/30 kV XLPE insulated, single core cables with aluminium conductor



Code: NA2XS2Y

Standards: VDE 0276-620

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

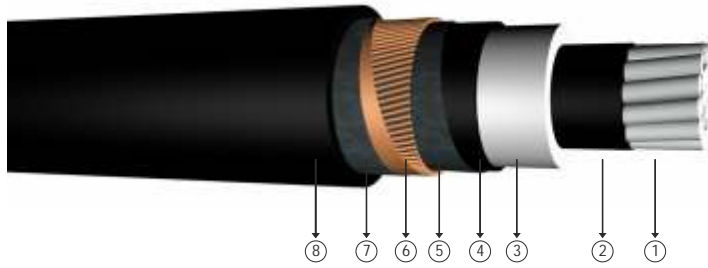
### Construction

- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 PP tape
- 8 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x50/16	33,2	950	1000	0,641	0,8205	0,660	0,448	0,135	146	175	217	187	
1x70/16	35,0	1073	1000	0,443	0,5670	0,629	0,423	0,151	238	214	270	232	
1x95/16	36,4	1185	1000	0,320	0,4096	0,605	0,405	0,166	284	256	328	281	
1x120/16	38,0	1310	1000	0,253	0,3238	0,586	0,391	0,180	322	290	378	323	
1x150/25	39,2	1503	1000	0,206	0,2637	0,568	0,379	0,194	355	324	425	365	
1x185/25	41,0	1664	1000	0,164	0,2099	0,552	0,367	0,208	400	366	485	418	
1x240/25	43,5	1902	1000	0,125	0,1600	0,532	0,354	0,229	461	426	572	494	
1x300/25	46,5	2201	1000	0,100	0,1280	0,515	0,343	0,248	516	479	649	564	
1x400/35	49,5	2636	1000	0,0778	0,1009	0,494	0,330	0,276	572	545	737	654	
1x500/35	52,5	3023	1000	0,0605	0,0774	0,478	0,320	0,301	638	614	835	747	
1x630/35	56,0	3529	1000	0,0469	0,0600	0,461	0,310	0,330	728	690	950	851	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 20,3/35 kV or 20,8/36 kV XLPE insulated, single core cables with aluminium conductor



Code: NA2XS2Y, AL/XLPE/CWS/PE

Standards: HD 620 S2, TSE K 204

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 20,3/35 kV  
 : 20,8/36 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

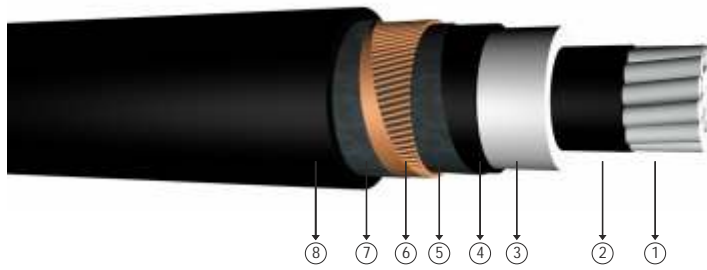
- ① Stranded aluminium conductor    ③ XLPE insulation    ⑤ Semi conductive tape    ⑦ PP tape
- ② Inner semi conductive layer    ④ Outer semi conductive layer    ⑥ Copper screen    ⑧ PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	37,5	1000	1000	0,868	1,1110	0,690	0,480	0,115	-	-	-	-	
1x50/16	38,5	1100	1000	0,641	0,8205	0,664	0,459	0,125	196	175	217	187	
1x70/16	40,5	1250	1000	0,443	0,5670	0,633	0,434	0,140	238	214	270	232	
1x95/16	42,0	1400	1000	0,320	0,4096	0,609	0,416	0,153	284	256	328	281	
1x120/16	44,0	1500	1000	0,253	0,3238	0,590	0,401	0,165	322	290	378	323	
1x150/25	45,5	1750	1000	0,206	0,2637	0,572	0,389	0,178	355	324	425	365	
1x185/25	47,5	1950	1000	0,164	0,2099	0,556	0,376	0,191	400	366	485	418	
1x240/25	50,0	2200	1000	0,125	0,1600	0,535	0,363	0,209	461	426	572	494	
1x300/25	52,5	2450	1000	0,100	0,1280	0,519	0,351	0,226	516	479	649	564	
1x400/35	55,5	2950	1000	0,0778	0,1009	0,497	0,338	0,252	572	545	737	654	
1x500/35	59,0	3400	1000	0,0605	0,0774	0,481	0,328	0,274	638	614	835	747	
1x630/35	62,5	3900	1000	0,0469	0,0600	0,464	0,317	0,300	728	690	950	851	

Note  
 In ground : Current carrying capacities are valid under the following conditions:  
 : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 3,6/6 kV XLPE insulated, radial and longitudinally sealed, single core cables with aluminium conductor



Code: NA2XS(FL)2Y

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 3,6/6 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

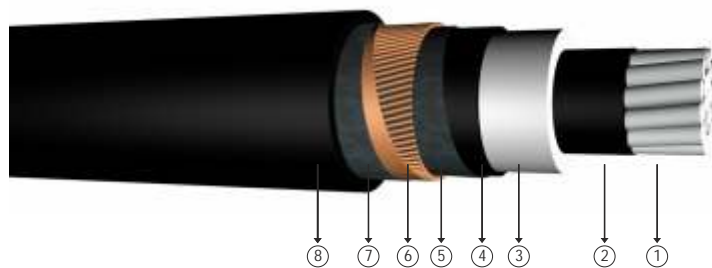
- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive swelling tape
- 6 Copper screen
- 7 Swellable tape
- 8 PE coated aluminium foil
- 9 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	25,0	550	1000	0,868	1,1110	0,665	0,399	0,283	-	-	-	-	
1x50/16	26,0	650	1000	0,641	0,8205	0,640	0,381	0,318	186	178	233	188	
1x70/16	27,5	700	1000	0,443	0,5670	0,609	0,361	0,368	234	217	280	235	
1x95/16	29,5	850	1000	0,320	0,4096	0,585	0,345	0,414	287	259	344	286	
1x120/16	31,0	950	1000	0,253	0,3238	0,566	0,333	0,455	338	298	392	329	
1x150/25	32,5	1100	1000	0,206	0,2637	0,549	0,323	0,499	388	333	441	376	
1x185/25	34,5	1250	1000	0,164	0,2099	0,533	0,315	0,544	449	377	510	428	
1x240/25	37,5	1500	1000	0,125	0,1600	0,513	0,306	0,587	530	438	587	508	
1x300/25	40,0	1750	1000	0,100	0,1280	0,498	0,300	0,603	605	495	682	586	
1x400/35	44,0	2200	1000	0,0778	0,1009	0,478	0,292	0,642	678	562	781	676	
1x500/35	47,5	2600	1000	0,0605	0,0774	0,463	0,286	0,667	762	633	883	772	
1x630/35	51,5	3050	1000	0,0469	0,0600	0,447	0,278	0,739	858	712	1007	882	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 6/10 kV or 6,35/11 kV XLPE insulated, radial and longitudinally sealed, single core cables with aluminium conductor



Code: NA2XS(FL)2Y

Standards: IEC 60502-2, BS 7870 - 4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 6/10 kV  
   6,35/11 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

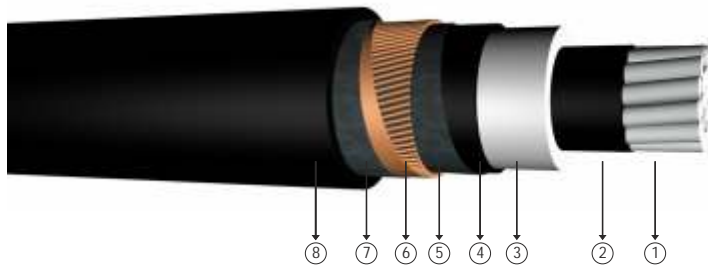
### Construction

- 1** Stranded aluminium conductor
- 4** Outer semi conductive layer
- 7** Swellable tape
- 2** Inner semi conductive layer
- 5** Semi conductive swelling tape
- 8** PE coated aluminium foil
- 3** XLPE insulation
- 6** Copper screen
- 9** PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	26,5	600	1000	0,868	1,1110	0,669	0,413	0,223	-	-	-	-	
1x50/16	28,0	700	1000	0,641	0,8205	0,644	0,395	0,248	194	171	215	181	
1x70/16	29,5	800	1000	0,443	0,5670	0,613	0,373	0,285	236	209	269	226	
1x95/16	31,0	900	1000	0,320	0,4096	0,588	0,357	0,320	281	249	327	275	
1x120/16	33,0	1000	1000	0,253	0,3238	0,570	0,346	0,350	318	283	377	317	
1x150/25	34,5	1200	1000	0,206	0,2637	0,552	0,335	0,382	350	316	424	359	
1x185/25	36,5	1350	1000	0,164	0,2099	0,537	0,326	0,415	393	358	485	412	
1x240/25	39,0	1550	1000	0,125	0,1600	0,516	0,314	0,462	453	416	573	489	
1x300/25	41,5	1800	1000	0,100	0,1280	0,500	0,305	0,507	507	469	652	559	
1x400/35	44,5	2250	1000	0,0778	0,1009	0,479	0,295	0,573	559	532	741	651	
1x500/35	48,0	2650	1000	0,0605	0,0774	0,463	0,288	0,631	622	599	838	744	
1x630/35	52,0	3100	1000	0,0469	0,0600	0,447	0,280	0,699	697	679	957	851	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

6/10 kV XLPE insulated,  
radial and longitudinally sealed,  
single core cables with aluminium conductor



Code: NA2XS(FL)2Y

Standards: VDE 0276-620

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 6/10 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

Construction

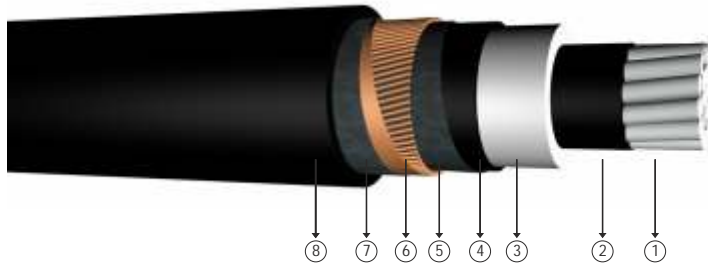
- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive swelling tape
- 6 Copper screen
- 7 Swellable tape
- 8 PE coated aluminium foil
- 9 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	24,7	612	1000	0,868	1,1110	0,669	0,413	0,223	-	-	-	-	
1x50/16	25,9	672	1000	0,641	0,8205	0,644	0,395	0,248	194	171	215	181	
1x70/16	27,6	772	1000	0,443	0,5670	0,613	0,373	0,285	236	209	269	226	
1x95/16	28,8	858	1000	0,320	0,4096	0,588	0,357	0,320	281	249	327	275	
1x120/16	30,3	962	1000	0,253	0,3238	0,570	0,346	0,350	318	283	377	317	
1x150/25	31,6	1146	1000	0,206	0,2637	0,552	0,335	0,382	350	316	424	359	
1x185/25	33,4	1292	1000	0,164	0,2099	0,537	0,326	0,415	393	358	485	412	
1x240/25	35,8	1505	1000	0,125	0,1600	0,516	0,314	0,462	453	416	573	489	
1x300/25	38,3	1738	1000	0,100	0,1280	0,500	0,305	0,507	507	469	652	559	
1x400/35	41,1	2124	1000	0,0778	0,1009	0,479	0,295	0,573	559	532	741	651	
1x500/35	44,4	2491	1000	0,0605	0,0774	0,463	0,288	0,631	622	599	838	744	
1x630/35	48,4	2999	1000	0,0469	0,0600	0,447	0,280	0,699	697	679	957	851	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 8,7/15 kV XLPE insulated, radial and longitudinally sealed, single core cables with aluminium conductor



Code: NA2XS(FL)2Y

Standards: IEC 60502-2, BS 7870 - 4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 8,7/15 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

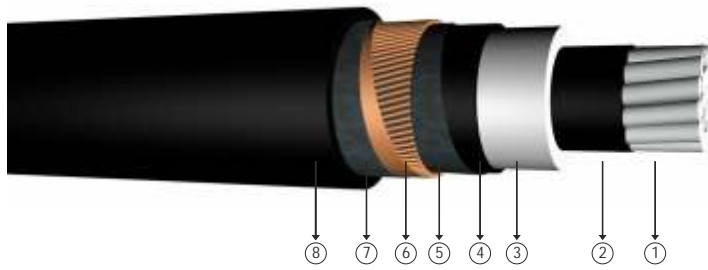
### Construction

- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive swelling tape
- 6 Copper screen
- 7 Swellable tape
- 8 PE coated aluminium foil
- 9 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	29,0	700	1000	0,868	1,1110	0,674	0,429	0,181	-	-	-	-	
1x50/16	30,0	750	1000	0,641	0,8205	0,648	0,410	0,201	194	171	215	181	
1x70/16	31,5	900	1000	0,443	0,5670	0,617	0,387	0,229	236	209	269	226	
1x95/16	33,5	1000	1000	0,320	0,4096	0,593	0,371	0,255	281	249	327	275	
1x120/16	35,5	1100	1000	0,253	0,3238	0,574	0,358	0,278	318	283	377	317	
1x150/25	37,0	1350	1000	0,206	0,2637	0,557	0,348	0,302	350	316	424	359	
1x185/25	39,0	1450	1000	0,164	0,2099	0,541	0,337	0,328	393	358	485	412	
1x240/25	41,5	1700	1000	0,125	0,1600	0,521	0,326	0,363	453	416	573	489	
1x300/25	44,0	1950	1000	0,100	0,1280	0,504	0,316	0,398	507	469	652	559	
1x400/35	47,0	2400	1000	0,0778	0,1009	0,483	0,305	0,447	559	532	741	651	
1x500/35	50,5	2800	1000	0,0605	0,0774	0,467	0,297	0,491	622	599	838	744	
1x630/35	54,0	3250	1000	0,0469	0,0600	0,451	0,289	0,543	697	679	957	851	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

12/20 kV or 12,7/22 kV XLPE insulated,  
radial and longitudinally sealed,  
single core cables with aluminium conductor



Code: NA2XS(FL)2Y

Standards: IEC 60502-2, BS 7870 - 4.10

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 : 12,7/22 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

Construction

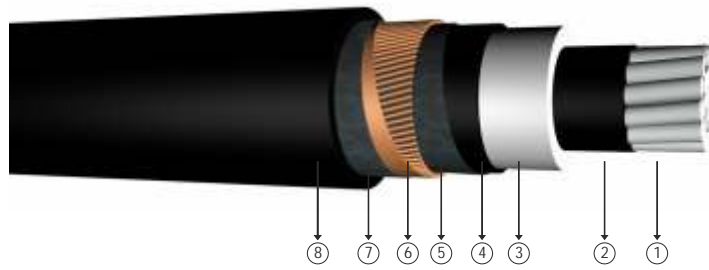
- 1 Stranded aluminium conductor
- 4 Outer semi conductive layer
- 7 Swellable tape
- 2 Inner semi conductive layer
- 5 Semi conductive swelling tape
- 8 PE coated aluminium foil
- 3 XLPE insulation
- 6 Copper screen
- 9 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	31,0	750	1000	0,868	1,1110	0,678	0,442	0,157	-	-	-	-	
1x50/16	32,0	850	1000	0,641	0,8205	0,652	0,424	0,174	194	173	217	184	
1x70/16	34,0	950	1000	0,443	0,5670	0,621	0,400	0,197	237	211	270	229	
1x95/16	35,5	1100	1000	0,320	0,4096	0,597	0,384	0,218	282	252	328	278	
1x120/16	37,5	1200	1000	0,253	0,3238	0,578	0,370	0,238	320	287	378	320	
1x150/25	39,0	1450	1000	0,206	0,2637	0,561	0,359	0,258	353	320	425	363	
1x185/25	41,0	1600	1000	0,164	0,2099	0,545	0,348	0,278	396	362	485	415	
1x240/25	43,5	1850	1000	0,125	0,1600	0,525	0,336	0,308	457	421	573	493	
1x300/25	45,5	2100	1000	0,100	0,1280	0,508	0,326	0,336	511	474	652	563	
1x400/35	49,0	2550	1000	0,0778	0,1009	0,487	0,313	0,377	566	538	740	652	
1x500/35	52,5	2950	1000	0,0605	0,0774	0,471	0,305	0,413	630	606	838	746	
1x630/35	56,0	3400	1000	0,0469	0,0600	0,454	0,296	0,455	719	686	953	850	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 12/20 kV XLPE insulated, radial and longitudinally sealed, single core cables with aluminium conductor



Code: NA2XS(FL)2Y

Standards: VDE 0276-620

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

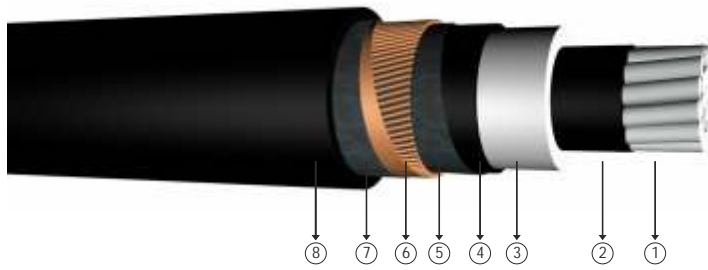
### Construction

- 1 Stranded aluminium conductor
- 4 Outer semi conductive layer
- 7 Swellable tape
- 2 Inner semi conductive layer
- 5 Semi conductive swelling tape
- 8 PE coated aluminium foil
- 3 XLPE insulation
- 6 Copper screen
- 9 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	28,9	765	1000	0,868	1,1110	0,678	0,442	0,157	-	-	-	-	
1x50/16	30,1	834	1000	0,641	0,8205	0,652	0,424	0,174	194	173	217	184	
1x70/16	31,8	947	1000	0,443	0,5670	0,621	0,400	0,197	237	211	270	229	
1x95/16	33,4	1056	1000	0,320	0,4096	0,597	0,384	0,218	282	252	328	278	
1x120/16	34,5	1151	1000	0,253	0,3238	0,578	0,370	0,238	320	287	378	320	
1x150/25	35,8	1344	1000	0,206	0,2637	0,561	0,359	0,258	353	320	425	363	
1x185/25	37,6	1501	1000	0,164	0,2099	0,545	0,348	0,278	396	362	485	415	
1x240/25	40,0	1728	1000	0,125	0,1600	0,525	0,336	0,308	457	421	573	493	
1x300/25	42,2	1951	1000	0,100	0,1280	0,508	0,326	0,336	511	474	652	563	
1x400/35	45,1	2363	1000	0,0778	0,1009	0,487	0,313	0,377	566	538	740	652	
1x500/35	48,6	2767	1000	0,0605	0,0774	0,471	0,305	0,413	630	606	838	746	
1x630/35	52,6	3299	1000	0,0469	0,0600	0,454	0,296	0,455	719	686	953	850	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

18/30 kV or 19/33 kV XLPE insulated,  
radial and longitudinally sealed,  
single core cables with aluminium conductor



Code: NA2XS(FL)2Y

Standards: IEC 60502-2, BS 7870 - 4.10

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
   : 19/33 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

Construction

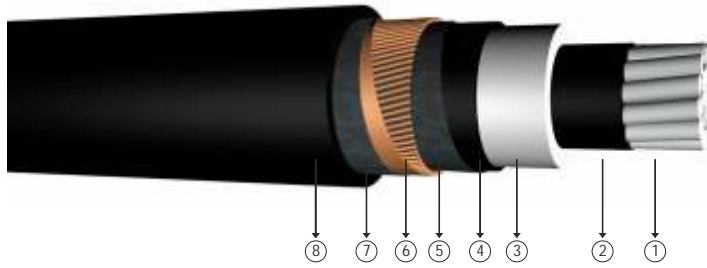
- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Copper screen
- ⑦ Swellable tape
- ⑧ PE coated aluminium foil
- ⑨ PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	36,5	950	1000	0,868	1,1110	0,688	0,474	0,123	-	-	-	-	
1x50/16	37,5	1100	1000	0,641	0,8205	0,662	0,453	0,135	196	175	217	187	
1x70/16	39,5	1250	1000	0,443	0,5670	0,631	0,429	0,151	238	214	270	232	
1x95/16	41,0	1350	1000	0,320	0,4096	0,607	0,410	0,166	284	256	328	281	
1x120/16	43,0	1500	1000	0,253	0,3238	0,588	0,397	0,180	322	290	378	323	
1x150/25	44,5	1750	1000	0,206	0,2637	0,570	0,383	0,194	355	324	425	365	
1x185/25	46,5	1900	1000	0,164	0,2099	0,554	0,372	0,208	400	366	485	418	
1x240/25	49,5	2150	1000	0,125	0,1600	0,534	0,359	0,229	461	426	572	494	
1x300/25	51,5	2450	1000	0,100	0,1280	0,517	0,347	0,248	516	478	649	564	
1x400/35	55,0	2950	1000	0,0778	0,1009	0,495	0,334	0,276	592	545	737	654	
1x500/35	58,0	3350	1000	0,0605	0,0774	0,479	0,324	0,301	638	614	835	747	
1x630/35	62,0	3850	1000	0,0469	0,0600	0,463	0,314	0,330	728	690	950	851	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 18/30 kV XLPE insulated, radial and longitudinally sealed, single core cables with aluminium conductor



Code: NA2XS(FL)2Y

Standards: VDE 0276-620

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

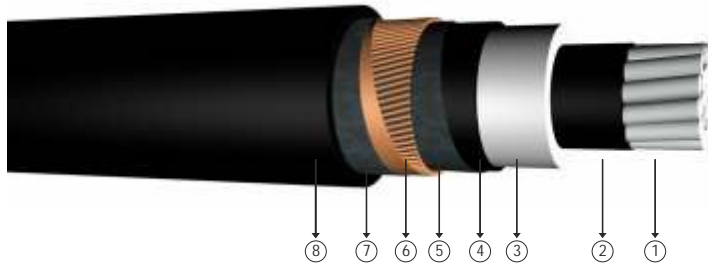
- 1** Stranded aluminium conductor
- 4** Outer semi conductive layer
- 7** Swellable tape
- 2** Inner semi conductive layer
- 5** Semi conductive swelling tape
- 8** PE coated aluminium foil
- 3** XLPE insulation
- 6** Copper screen
- 9** PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x50/16	34,7	1042	1000	0,641	0,8205	0,662	0,453	0,135	196	175	217	187	
1x70/16	36,4	1160	1000	0,443	0,5670	0,631	0,429	0,151	238	214	270	232	
1x95/16	38,0	1286	1000	0,320	0,4096	0,607	0,410	0,166	284	256	328	281	
1x120/16	39,5	1410	1000	0,253	0,3238	0,588	0,397	0,180	322	290	378	323	
1x150/25	40,8	1612	1000	0,206	0,2637	0,570	0,383	0,194	355	324	425	365	
1x185/25	42,6	1779	1000	0,164	0,2099	0,554	0,372	0,208	400	366	485	418	
1x240/25	45,0	2024	1000	0,125	0,1600	0,534	0,359	0,229	461	426	572	494	
1x300/25	47,2	2266	1000	0,100	0,1280	0,517	0,347	0,248	516	478	649	564	
1x400/35	50,1	2699	1000	0,0778	0,1009	0,495	0,334	0,276	592	545	737	654	
1x500/35	53,6	3125	1000	0,0605	0,0774	0,479	0,324	0,301	638	614	835	747	
1x630/35	57,6	3686	1000	0,0469	0,0600	0,463	0,314	0,330	728	690	950	851	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



20,3/35 kV or 20,8/36 kV XLPE insulated,  
radial and longitudinally sealed,  
single core cables with aluminium conductor



Code: NA2XS(FL)2Y

Standards: HD 620 S2, TSE K 204

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 20,3/35 kV  
 : 20,8/36 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

Construction

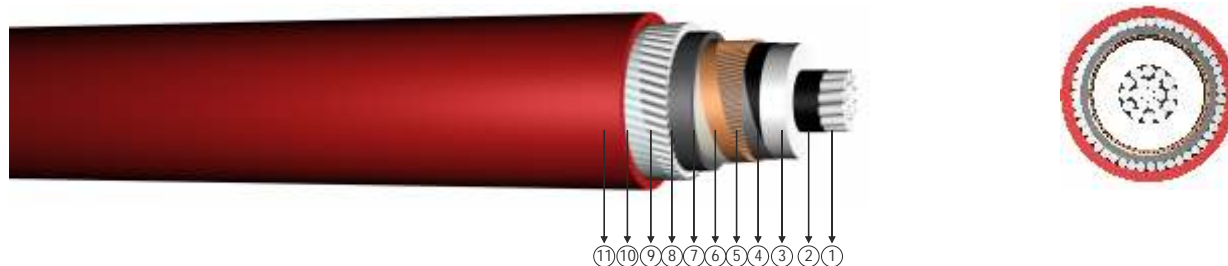
- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive swelling tape
- 6 Copper screen
- 7 Swellable tape
- 8 PE coated aluminium foil
- 9 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	38,5	1100	1000	0,868	1,1110	0.692	0,486	0,115	-	-	-	-	
1x50/16	39,5	1200	1000	0,641	0,8205	0.666	0,464	0,125	196	175	217	187	
1x70/16	41,5	1350	1000	0,443	0,5670	0.635	0,439	0,140	238	214	270	232	
1x95/16	43,0	1500	1000	0,320	0,4096	0.611	0,420	0,153	284	256	328	281	
1x120/16	45,0	1650	1000	0,253	0,3238	0.591	0,405	0,165	322	290	378	323	
1x150/25	46,5	1900	1000	0,206	0,2637	0.574	0,393	0,178	355	324	425	365	
1x185/25	48,5	2050	1000	0,164	0,2099	0.558	0,381	0,191	400	366	485	418	
1x240/25	51,0	2300	1000	0,125	0,1600	0.537	0,366	0,209	461	426	572	494	
1x300/25	53,0	2600	1000	0,100	0,1280	0.520	0,355	0,226	516	479	649	564	
1x400/35	56,5	3100	1000	0,0778	0,1009	0.499	0,341	0,252	572	545	737	654	
1x500/35	60,0	3550	1000	0,0605	0,0774	0.483	0,331	0,274	638	614	835	747	
1x630/35	63,5	4050	1000	0,0469	0,0600	0.466	0,320	0,300	728	690	950	851	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 3,6/6 kV XLPE insulated, round aluminium wire armoured, single core cables with aluminium conductor



Code: NA2XSYR(A)Y, AL/XLPE/CWS/PVC/AWA/PVC

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 3,6/6 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

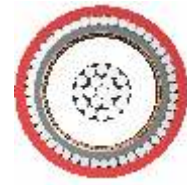
### Construction

- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 PP tape
- 8 PVC inner sheath
- 9 Round aluminium wire
- 10 PP tape
- 11 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	26,2	926	1000	0,868	1,1110	0,657	0,367	0,283	-	-	-	-	
1x50/16	27,3	1000	1000	0,641	0,8205	0,632	0,351	0,318	186	178	233	188	
1x70/16	29,0	1123	1000	0,443	0,5670	0,601	0,332	0,368	234	217	280	235	
1x95/16	31,0	1270	1000	0,320	0,4096	0,577	0,318	0,414	287	259	344	286	
1x120/16	32,3	1390	1000	0,253	0,3238	0,558	0,308	0,455	338	298	392	329	
1x150/25	34,7	1705	1000	0,206	0,2637	0,541	0,299	0,499	388	333	441	376	
1x185/25	36,6	1890	1000	0,164	0,2099	0,525	0,292	0,544	449	377	510	428	
1x240/25	39,4	2177	1000	0,125	0,1600	0,506	0,284	0,587	530	438	587	508	
1x300/25	41,8	2443	1000	0,100	0,1280	0,490	0,279	0,603	605	495	682	586	
1x400/35	46,9	3159	500	0,0778	0,1009	0,471	0,275	0,642	678	562	781	676	
1x500/35	50,6	3645	500	0,0605	0,0774	0,456	0,270	0,667	762	633	883	772	
1x630/35	54,5	4291	500	0,0469	0,0600	0,440	0,264	0,739	858	712	1007	882	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

6/10 kV XLPE insulated,  
round aluminium wire armoured,  
single core cables with aluminium conductor



Code: NA2XSYR(A)Y, AL/XLPE/CWS/PVC/AWA/PVC

Standards: IEC 60502-2, BS 6622

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 6/10 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

Construction

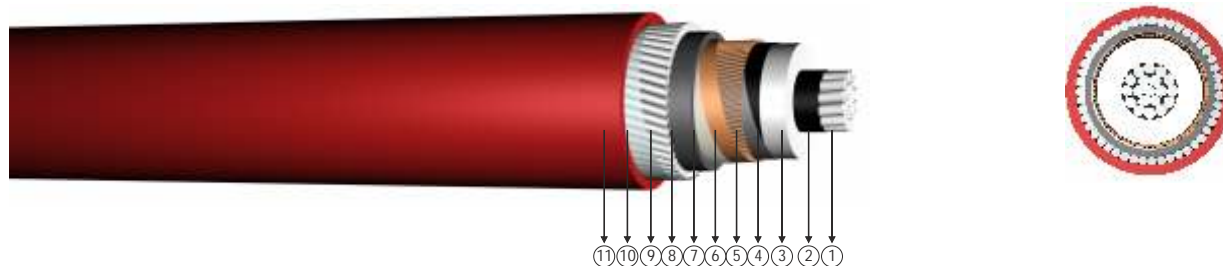
- ① Stranded aluminium conductor      ④ Outer semi conductive layer      ⑦ PP tape      ⑩ PP tape
- ② Inner semi conductive layer      ⑤ Semi conductive tape      ⑧ PVC inner sheath      ⑪ PVC outer sheath
- ③ XLPE insulation      ⑥ Copper screen      ⑨ Round aluminium wire

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	28,0	1015	1000	0,868	1,1110	0,657	0,367	0,223	-	-	-	-	
1x50/16	29,3	1106	1000	0,641	0,8205	0,632	0,351	0,248	194	171	215	181	
1x70/16	31,0	1230	1000	0,443	0,5670	0,601	0,332	0,285	236	209	269	226	
1x95/16	32,9	1392	1000	0,320	0,4096	0,577	0,318	0,320	281	249	327	275	
1x120/16	35,1	1600	1000	0,253	0,3238	0,558	0,308	0,350	318	283	377	317	
1x150/25	36,7	1835	1000	0,206	0,2637	0,541	0,299	0,382	350	316	424	359	
1x185/25	38,4	2013	1000	0,164	0,2099	0,525	0,292	0,415	393	358	485	412	
1x240/25	41,0	2286	1000	0,125	0,1600	0,506	0,284	0,462	453	416	573	489	
1x300/25	43,2	2556	1000	0,100	0,1280	0,490	0,279	0,507	507	469	652	559	
1x400/35	47,7	3227	500	0,0778	0,1009	0,471	0,275	0,573	559	532	741	651	
1x500/35	51,0	3674	500	0,0605	0,0774	0,456	0,270	0,631	622	599	838	744	
1x630/35	55,0	4365	500	0,0469	0,0600	0,440	0,264	0,699	697	679	957	851	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 8,7/15 kV XLPE insulated, round aluminium wire armoured, single core cables with aluminium conductor



Code: NA2XSYR(A)Y, AL/XLPE/CWS/PVC/AWA/PVC

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 8,7/15 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

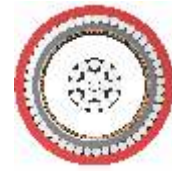
### Construction

- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 PP tape
- 8 PVC inner sheath
- 9 Round aluminium wire
- 10 PP tape
- 11 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	30,4	1145	1000	0,868	1,1110	0,657	0,367	0,181	-	-	-	-	
1x50/16	31,5	1224	1000	0,641	0,8205	0,632	0,351	0,201	194	171	215	181	
1x70/16	33,4	1374	1000	0,443	0,5670	0,601	0,332	0,229	236	209	269	226	
1x95/16	36,1	1628	1000	0,320	0,4096	0,577	0,318	0,255	281	249	327	275	
1x120/16	37,6	1766	1000	0,253	0,3238	0,558	0,308	0,278	318	283	377	317	
1x150/25	39,1	2008	1000	0,206	0,2637	0,541	0,299	0,302	350	316	424	359	
1x185/25	40,8	2183	1000	0,164	0,2099	0,525	0,292	0,328	393	358	485	412	
1x240/25	43,8	2477	1000	0,125	0,1600	0,506	0,284	0,363	453	416	573	489	
1x300/25	46,8	2922	1000	0,100	0,1280	0,490	0,279	0,398	507	469	652	559	
1x400/35	50,0	3446	500	0,0778	0,1009	0,471	0,275	0,447	559	532	741	651	
1x500/35	53,6	3931	500	0,0605	0,0774	0,456	0,270	0,491	622	599	838	744	
1x630/35	57,3	4588	500	0,0469	0,0600	0,440	0,264	0,543	697	679	957	851	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

12/20 kV or 12,7/22 kV XLPE insulated,  
round aluminium wire armoured,  
single core cables with aluminium conductor



Code: NA2XSYR(A)Y, AL/XLPE/CWS/PVC/AWA/PVC

Standards: IEC 60502-2, BS 6622

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 12,7/22 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

Construction

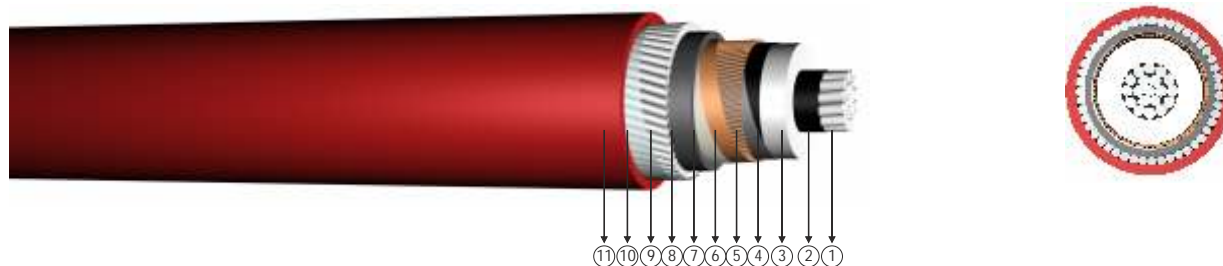
- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive tape
- ⑥ Copper screen
- ⑦ PP tape
- ⑧ PVC inner sheath
- ⑨ Round aluminium wire
- ⑩ PP tape
- ⑪ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	32,6	1275	1000	0,868	1,111	0,657	0,367	0,123	-	-	-	-	
1x50/16	34,5	1440	1000	0,641	0,8205	0,632	0,351	0,135	195	173	217	184	
1x70/16	36,4	1610	1000	0,443	0,5670	0,601	0,332	0,151	237	211	270	229	
1x95/16	38,1	1760	1000	0,320	0,4096	0,577	0,318	0,166	282	252	328	278	
1x120/16	39,8	1915	1000	0,253	0,3238	0,558	0,308	0,180	320	287	378	320	
1x150/25	41,1	2150	1000	0,206	0,2637	0,541	0,299	0,194	353	320	425	363	
1x185/25	43,0	2355	1000	0,164	0,2099	0,525	0,292	0,208	396	362	485	415	
1x240/25	46,8	2820	1000	0,125	0,1600	0,506	0,284	0,229	457	421	573	493	
1x300/25	48,9	3110	1000	0,100	0,1280	0,490	0,279	0,248	511	474	652	563	
1x400/35	52,4	3670	500	0,0778	0,1009	0,471	0,275	0,276	566	538	740	652	
1x500/35	55,8	4155	500	0,0605	0,0774	0,456	0,270	0,301	630	606	838	746	
1x630/35	56,0	4845	500	0,0469	0,0600	0,440	0,264	0,330	719	686	953	850	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 18/30 kV or 19/33 kV XLPE insulated, round aluminium wire armoured, single core cables with aluminium conductor



Code: NA2XSYR(A)Y, AL/XLPE/CWS/PVC/AWA/PVC

Standards: IEC 60502-2, BS 6622

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
   : 19/33 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

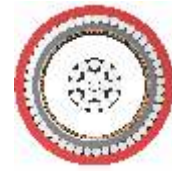
### Construction

- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 PP tape
- 8 PVC inner sheath
- 9 Round aluminium wire
- 10 PP tape
- 11 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x50/16	39,9	1815	1000	0,6410	0,8205	0,632	0,351	0,135	196	175	217	187	
1x70/16	41,8	1990	1000	0,4430	0,5670	0,601	0,332	0,151	238	214	270	202	
1x95/16	43,5	2165	1000	0,3200	0,4096	0,577	0,318	0,166	284	256	328	281	
1x120/16	46,4	2499	1000	0,2530	0,3238	0,558	0,308	0,180	322	290	378	323	
1x150/25	48,0	2769	1000	0,2060	0,2637	0,541	0,299	0,194	355	324	425	365	
1x185/25	49,6	2977	1000	0,1640	0,2099	0,525	0,292	0,208	400	366	485	418	
1x240/25	52,4	3332	1000	0,1250	0,1600	0,506	0,284	0,229	461	426	572	494	
1x300/25	54,6	3640	500	0,1000	0,1280	0,490	0,279	0,248	516	479	649	564	
1x400/35	58,0	4235	500	0,0778	0,1009	0,471	0,275	0,276	572	545	737	454	
1x500/35	61,2	4748	500	0,0605	0,0774	0,456	0,270	0,301	638	614	835	747	
1x630/35	66,0	5480	500	0,0469	0,0600	0,440	0,264	0,330	728	690	950	851	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

20,3/35 kV or 20,8/36 kV XLPE insulated,  
round aluminium wire armoured,  
single core cables with aluminium conductor



Code: NA2XSYR(A)Y, AL/XLPE/CWS/PVC/AWA/PVC

Standards: HD 620 S2, TSE K 204

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 20,3/35 kV  
 : 20,8/36 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

Construction

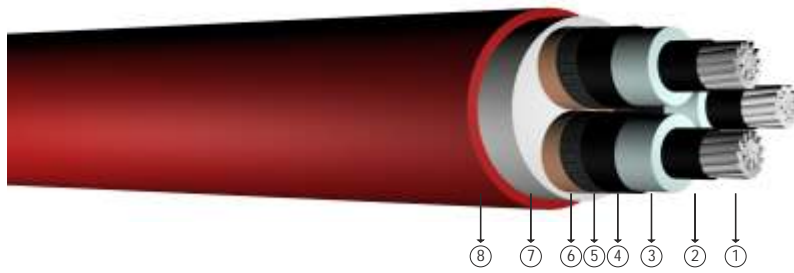
- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive tape
- ⑥ Copper screen
- ⑦ PP tape
- ⑧ PVC inner sheath
- ⑨ Round aluminium wire
- ⑩ PP tape
- ⑪ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	42,0	1860	1000	0,868	1,111	0,657	0,367	0,115	-	-	-	-	
1x50/16	44,1	1980	1000	0,641	0,8205	0,632	0,351	0,125	196	175	217	187	
1x70/16	45,8	2140	1000	0,443	0,5670	0,601	0,332	0,140	238	214	270	202	
1x95/16	48,2	2510	1000	0,320	0,4096	0,577	0,318	0,153	284	256	328	281	
1x120/16	50,5	2698	1000	0,253	0,3238	0,558	0,308	0,165	322	290	378	323	
1x150/25	52,1	2940	1000	0,206	0,2637	0,541	0,299	0,178	355	324	425	365	
1x185/25	54,2	3210	1000	0,164	0,2099	0,525	0,292	0,191	400	366	485	418	
1x240/25	56,6	3555	1000	0,125	0,1600	0,506	0,284	0,209	461	426	572	494	
1x300/25	58,5	3845	500	0,100	0,1280	0,490	0,279	0,226	516	479	649	564	
1x400/35	62,3	4475	500	0,0778	0,1009	0,471	0,275	0,252	572	545	737	654	
1x500/35	65,8	5035	500	0,0605	0,0774	0,456	0,270	0,274	638	614	835	747	
1x630/35	68,0	5755	500	0,0469	0,0600	0,440	0,264	0,300	728	690	950	851	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



## 3,6/6 kV XLPE insulated, three core cables with aluminium conductor



Code: YAXC8V-R, NA2XSEY, AL/XLPE/CTS/PVC

R: Stranded Conductor

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 3,6/6 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

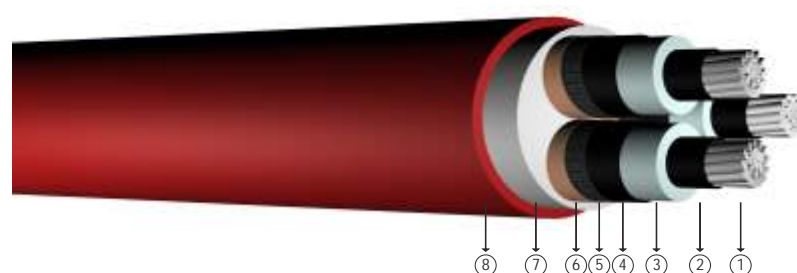
- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 Thermoplastic filler
- 8 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	42,0	2050	1000	0,868	0,352	0,229	-	-
3x50/16	45,0	2400	1000	0,641	0,336	0,255	160	150
3x70/16	48,5	2850	1000	0,443	0,318	0,288	199	191
3x95/16	53,0	3400	1000	0,320	0,303	0,324	238	236
3x120/16	57,0	4000	1000	0,253	0,292	0,359	275	273
3x150/25	60,5	4500	1000	0,206	0,284	0,388	307	313
3x185/25	64,5	5150	500	0,164	0,276	0,424	349	360
3x240/25	71,0	6300	500	0,125	0,267	0,469	410	426
3x300/25	77,5	7600	500	0,100	0,263	0,486	460	528
3x400/35	86,0	9400	500	0,0778	0,257	0,521	520	564

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 6/10 kV or 6,35/11 kV XLPE insulated, three core cables with aluminium conductor



Code: YAXC8V-R, NA2XSEY, AL/XLPE/CTS/PVC

R: Stranded Conductor	Standards: IEC 60502-2, BS 7870-4.10
<b>Technical Data</b> Max. operating temperature : 90°C Max. short circuit temperature : 250°C (max. 5 sec.) Rated voltage : 6/10 kV 6,35/11 kV Min. bending radius : 15 x D D : Cable outer diameter	<b>Application</b> These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

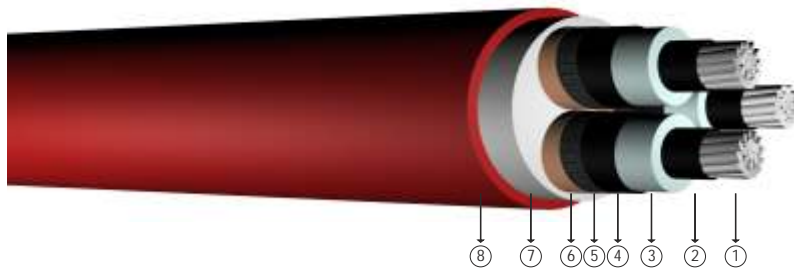
- 1 Stranded aluminium conductor    3 XLPE insulation    5 Semi conductive tape    7 Thermoplastic filler
- 2 Inner semi conductive layer    4 Outer semi conductive layer    6 Copper screen    8 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	46,5	2450	1000	0,868	0,374	0,189	-	-
3x50/16	49,5	2800	1000	0,641	0,355	0,209	162	160
3x70/16	53,0	3300	1000	0,443	0,336	0,236	199	199
3x95/16	57,5	3900	1000	0,320	0,320	0,263	238	242
3x120/16	61,5	4450	1000	0,253	0,308	0,291	271	280
3x150/25	64,5	5050	500	0,206	0,299	0,314	304	318
3x185/25	68,5	5700	500	0,164	0,290	0,341	345	365
3x240/25	75,0	6900	500	0,125	0,278	0,387	401	431
3x300/25	80,0	8000	500	0,100	0,270	0,422	453	494
3x400/35	88,0	9750	500	0,0778	0,261	0,475	517	569

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 8,7/15 kV XLPE insulated, three core cables with aluminium conductor



Code: YAXC8V-R, NA2XSEY, AL/XLPE/CTS/PVC

R: Stranded Conductor

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 8,7/15 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

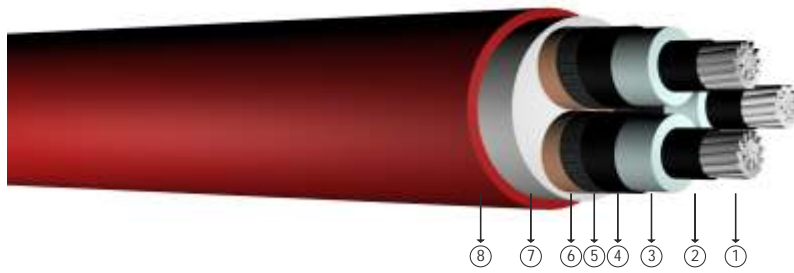
### Construction

- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 Thermoplastic filler
- 8 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	51,5	2950	1000	0,868	0,397	0,160	-	-
3x50/16	54,5	3400	1000	0,641	0,377	0,175	162	160
3x70/16	58,5	3900	1000	0,443	0,356	0,196	199	199
3x95/16	62,5	4500	1000	0,320	0,339	0,218	238	242
3x120/16	66,5	5100	500	0,253	0,325	0,240	271	280
3x150/25	69,5	5700	500	0,206	0,315	0,258	304	318
3x185/25	74,0	6500	500	0,164	0,305	0,280	345	365
3x240/25	80,0	7700	500	0,125	0,292	0,315	401	431
3x300/25	85,0	8800	500	0,100	0,284	0,343	453	494
3x400/35	93,0	10650	250	0,0778	0,273	0,385	517	569

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 12/20 kV or 12,7/22 kV XLPE insulated, three core cables with aluminium conductor



Code: YAXC8V-R, NA2XSEY, AL/XLPE/CTS/PVC

R: Stranded Conductor

Standards: IEC 60502-2, BS 7870-4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 12,7/22 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

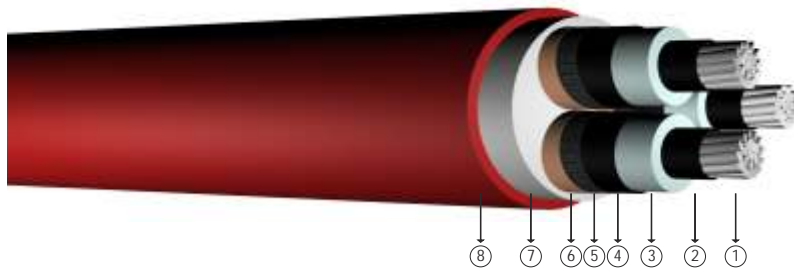
- ① Stranded aluminium conductor    ③ XLPE insulation    ⑤ Semi conductive tape    ⑦ Thermoplastic filler
- ② Inner semi conductive layer    ④ Outer semi conductive layer    ⑥ Copper screen    ⑧ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	56,5	3500	1000	0,868	0,416	0,141	-	-
3x50/16	59,5	3900	1000	0,641	0,395	0,155	168	171
3x70/16	63,0	4450	1000	0,443	0,373	0,172	207	211
3x95/16	67,0	5100	500	0,320	0,355	0,191	247	255
3x120/16	71,0	5750	500	0,253	0,340	0,209	282	297
3x150/25	74,0	6450	500	0,206	0,329	0,225	316	334
3x185/25	78,0	7200	500	0,164	0,319	0,243	359	384
3x240/25	85,0	8450	500	0,125	0,304	0,273	420	454
3x300/25	90,0	9650	500	0,100	0,295	0,296	476	513
3x400/35	98,0	11600	250	0,0778	0,284	0,331	552	593

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 18/30 kV or 19/33 kV XLPE insulated, three core cables with aluminium conductor



Code: YAXC8V-R, NA2XSEY, AL/XLPE/CTS/PVC

R: Stranded Conductor

Standards: IEC 60502-2, BS 7870-4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
   19/33 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

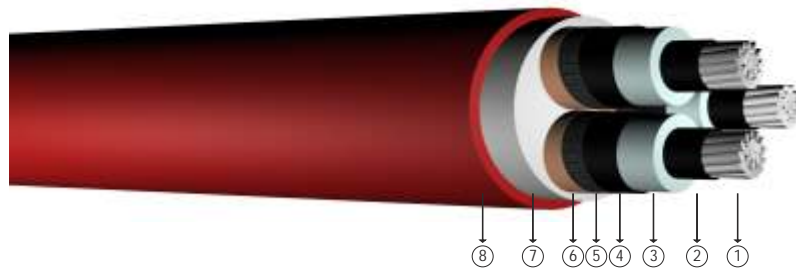
### Construction

- 1 Stranded aluminium conductor    3 XLPE insulation    5 Semi conductive tape    7 Thermoplastic filler
- 2 Inner semi conductive layer    4 Outer semi conductive layer    6 Copper screen    8 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	68,0	5000	1000	0,868	0,457	0,114	-	-
3x50/16	71,5	5550	500	0,641	0,434	0,124	166	171
3x70/16	75,0	6200	500	0,443	0,410	0,137	204	211
3x95/16	79,0	6900	500	0,320	0,389	0,150	244	255
3x120/16	83,0	7650	500	0,253	0,372	0,163	278	297
3x150/25	86,0	8350	500	0,206	0,360	0,174	312	334
3x185/25	90,0	9200	500	0,164	0,348	0,188	343	384
3x240/25	97,0	10700	250	0,125	0,331	0,209	398	454
3x300/25	102,0	12000	250	0,100	0,321	0,226	-	-
3x400/35	110,0	14060	250	0,0778	0,307	0,251	-	-

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 20,3/35 kV or 20,8/36 kV XLPE insulated, three core cables with aluminium conductor



Code: YAXC8V-R, NA2XSEY, AL/XLPE/CTS/PVC

R: Stranded Conductor

Standards: HD 620 S2, TSE K 204

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 20,3/35 kV  
 : 20,8/36 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

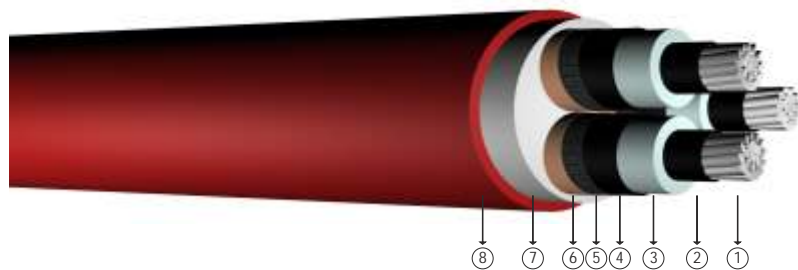
- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive tape
- ⑥ Copper screen
- ⑦ Thermoplastic filler
- ⑧ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	73,0	5700	500	0,868	0,471	0,107	-	-
3x50/16	76,0	6200	500	0,641	0,448	0,116	166	164
3x70/16	79,5	6900	500	0,443	0,423	0,127	204	204
3x95/16	83,5	7650	500	0,320	0,401	0,140	244	248
3x120/16	87,5	8450	500	0,253	0,384	0,152	278	284
3x150/25	91,0	9150	500	0,206	0,372	0,161	312	326
3x185/25	95,0	10150	250	0,164	0,359	0,173	343	374
3x240/25	101,5	11600	250	0,125	0,341	0,193	398	440
3x300/25	106,5	12900	250	0,100	0,330	0,207	-	-
3x400/35	114,0	15000	250	0,0778	0,316	0,231	-	-

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



6/10 kV or 6,35/11 kV halogen free,  
flame retardant XLPE insulated,  
three core cables with aluminium conductor



Code: YAXC8Z1-R, NA2XSEH, AL/XLPE/CTS/LSZH

R: Stranded Conductor

Standards: IEC 60502-2, BS 7835

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 6/10 kV  
 : 6,35/11 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire

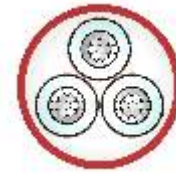
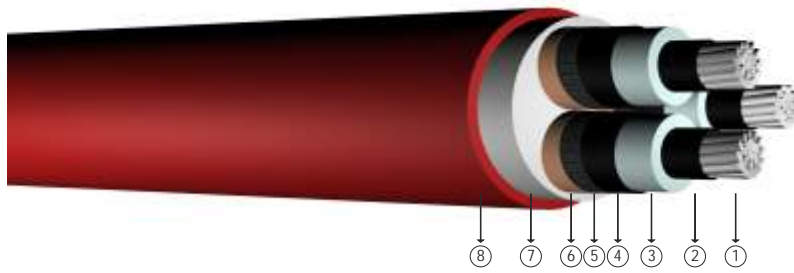
Construction

- ① Stranded aluminium conductor    ③ XLPE insulation    ⑤ Semi conductive tape    ⑦ Thermoplastic filler
- ② Inner semi conductive layer    ④ Outer semi conductive layer    ⑥ Copper screen    ⑧ HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	46,5	2450	1000	0,868	0,374	0,189	-	-
3x50/16	49,5	2800	1000	0,641	0,355	0,209	162	160
3x70/16	53,0	3300	1000	0,443	0,336	0,236	199	199
3x95/16	57,5	3900	1000	0,320	0,320	0,263	238	242
3x120/16	61,5	4450	1000	0,253	0,308	0,291	271	280
3x150/25	64,5	5050	500	0,206	0,299	0,314	304	318
3x185/25	68,5	5700	500	0,164	0,290	0,341	345	365
3x240/25	75,0	6900	500	0,125	0,278	0,387	401	431
3x300/25	80,0	8000	500	0,100	0,270	0,422	453	494
3x400/35	88,0	9750	500	0,0778	0,261	0,475	517	569

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

12/20 kV or 12,7/22 kV halogen free,  
 flame retardant XLPE insulated,  
 three core cables with aluminium conductor



Code: YAXC8Z1-R, NA2XSEH, AL/XLPE/CTS/LSZH

R: Stranded Conductor

Standards: IEC 60502-2, BS 7835

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 : 12,7/22 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire

Construction

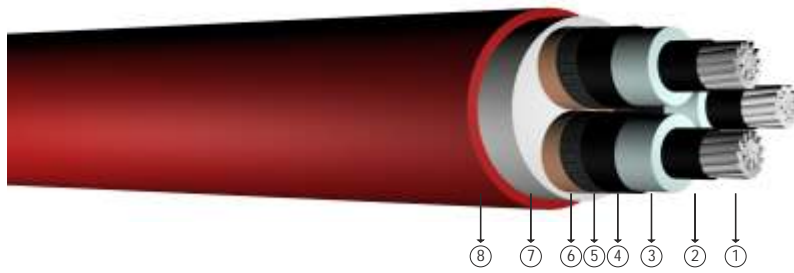
- ① Stranded aluminium conductor    ③ XLPE insulation    ⑤ Semi conductive tape    ⑦ Thermoplastic filler
- ② Inner semi conductive layer    ④ Outer semi conductive layer    ⑥ Copper screen    ⑧ HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	56,5	3500	1000	0,868	0,416	0,141	-	-
3x50/16	59,5	3900	1000	0,641	0,395	0,155	168	171
3x70/16	63,0	4450	1000	0,443	0,373	0,172	207	211
3x95/16	67,0	5100	500	0,320	0,355	0,191	247	255
3x120/16	71,0	5750	500	0,253	0,340	0,209	282	297
3x150/25	74,0	6450	500	0,206	0,329	0,225	316	334
3x185/25	78,0	7200	500	0,164	0,319	0,243	359	384
3x240/25	85,0	8450	500	0,125	0,304	0,273	420	454
3x300/25	90,0	9650	500	0,100	0,295	0,296	476	513
3x400/35	98,0	11600	250	0,0778	0,284	0,331	552	593

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



18/30 kV or 19/33 kV halogen free,  
flame retardant XLPE insulated,  
three core cables with aluminium conductor



Code: YAXC8Z1-R, NA2XSEH, AL/XLPE/CTS/LSZH

R: Stranded Conductor

Standards: IEC 60502-2, BS 7835

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
 : 19/33 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

Application

Used in energy networks in refineries, mines, hotels, schools, tunnels, high constructions, hospitals, power plant, data processing centers, business centers where there is a risk of fire

Construction

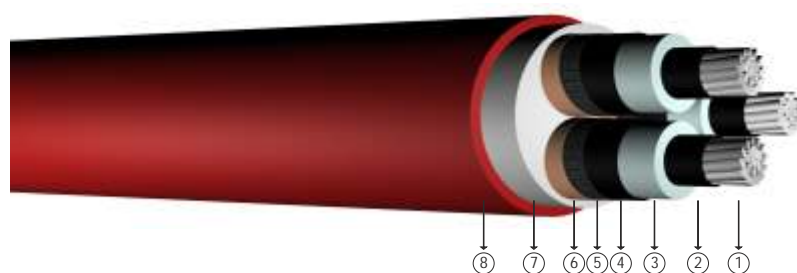
- ① Stranded aluminium conductor    ③ XLPE insulation    ⑤ Semi conductive tape    ⑦ Thermoplastic filler
- ② Inner semi conductive layer    ④ Outer semi conductive layer    ⑥ Copper screen    ⑧ HFFR outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	68,0	5000	1000	0,868	0,457	0,114	-	-
3x50/16	71,5	5550	500	0,641	0,434	0,124	166	171
3x70/16	75,0	6200	500	0,443	0,410	0,137	204	211
3x95/16	79,0	6900	500	0,320	0,389	0,150	244	255
3x120/16	83,0	7650	500	0,253	0,372	0,163	278	297
3x150/25	86,0	8350	500	0,206	0,360	0,174	312	334
3x185/25	90,0	9200	500	0,164	0,348	0,188	343	384
3x240/25	97,0	10700	250	0,125	0,331	0,209	398	454
3x300/25	102,0	12000	250	0,100	0,321	0,226	-	-
3x400/35	110,0	14060	250	0,0778	0,307	0,251	-	-

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 6/10 kV or 6,35/11 kV XLPE insulated, three core cables with aluminium conductor



Code: NA2XSE2Y, AL/XLPE/CTS/PE

R: Stranded Conductor

Standards: IEC 60502-2, BS 7870-4.10

### Technical Data

Max. operating temperature	: 90°C
Max. short circuit temperature	: 250°C (max. 5 sec.)
Rated voltage	: 6/10 kV 6,35/11 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

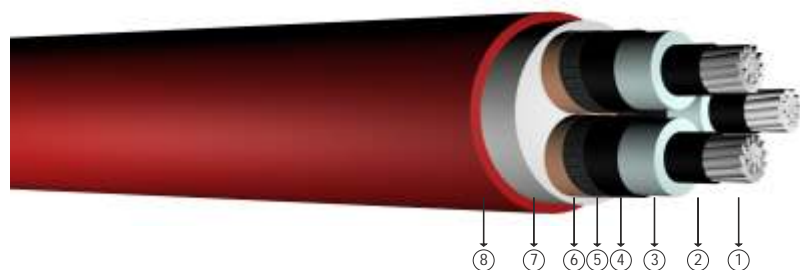
- ① Stranded aluminium conductor
- ③ XLPE insulation
- ⑤ Semi conductive tape
- ⑦ Thermoplastic filler
- ② Inner semi conductive layer
- ④ Outer semi conductive layer
- ⑥ Copper screen
- ⑧ PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	46,5	2450	1000	0,868	0,374	0,189	-	-
3x50/16	49,5	2800	1000	0,641	0,355	0,209	162	160
3x70/16	53,0	3300	1000	0,443	0,336	0,236	199	199
3x95/16	57,5	3900	1000	0,320	0,320	0,263	238	242
3x120/16	61,5	4450	1000	0,253	0,308	0,291	271	280
3x150/25	64,5	5050	500	0,206	0,299	0,314	304	318
3x185/25	68,5	5700	500	0,164	0,290	0,341	345	365
3x240/25	75,0	6900	500	0,125	0,278	0,387	401	431
3x300/25	80,0	8000	500	0,100	0,270	0,422	453	494
3x400/35	88,0	9750	500	0,0778	0,261	0,475	517	569

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



# 12/20 kV or 12,7/22 kV XLPE insulated, three core cables with aluminium conductor



Code: NA2XSE2Y, AL/XLPE/CTS/PE

R: Stranded Conductor

Standards: IEC 60502-2, BS 7870-4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 : 12,7/22 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

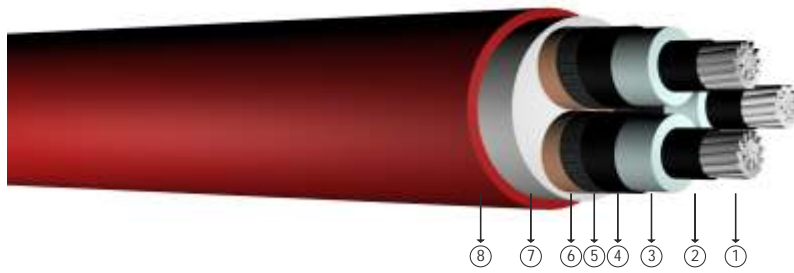
### Construction

- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 Thermoplastic filler
- 8 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	56,5	3500	1000	0,868	0,416	0,141	-	-
3x50/16	59,5	3900	1000	0,641	0,395	0,155	168	171
3x70/16	63,0	4450	1000	0,443	0,373	0,172	207	211
3x95/16	67,0	5100	500	0,320	0,355	0,191	247	255
3x120/16	71,0	5750	500	0,253	0,340	0,209	282	297
3x150/25	74,0	6450	500	0,206	0,329	0,225	316	334
3x185/25	78,0	7200	500	0,164	0,319	0,243	359	384
3x240/25	85,0	8450	500	0,125	0,304	0,273	420	454
3x300/25	90,0	9650	500	0,100	0,295	0,296	476	513
3x400/35	98,0	11600	250	0,0778	0,284	0,331	552	593

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 18/30 kV or 19/33 kV XLPE insulated, three core cables with aluminium conductor



Code: NA2XSE2Y, AL/XLPE/CTS/PE

R: Stranded Conductor

Standards: IEC 60502-2, BS 7870-4.10

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
 : 19/33 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

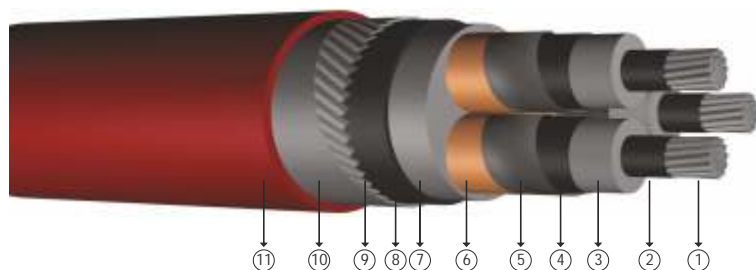
- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 Thermoplastic filler
- 8 PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	68,0	5000	1000	0,868	0,457	0,114	-	-
3x50/16	71,5	5550	500	0,641	0,434	0,124	166	171
3x70/16	75,0	6200	500	0,443	0,410	0,137	204	211
3x95/16	79,0	6900	500	0,320	0,389	0,150	244	255
3x120/16	83,0	7650	500	0,253	0,372	0,163	278	297
3x150/25	86,0	8350	500	0,206	0,360	0,174	312	334
3x185/25	90,0	9200	500	0,164	0,348	0,188	343	384
3x240/25	97,0	10700	250	0,125	0,331	0,209	398	454
3x300/25	102,0	12000	250	0,100	0,321	0,226	-	-
3x400/35	110,0	14060	250	0,0778	0,307	0,251	-	-

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 3,6/6 kV XLPE insulated, flat steel wire armoured, three core cables with aluminium conductor



Code: YAXC8VZ3V-R, NA2XSEYFGY

R: Stranded Conductor

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 3,6/6 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

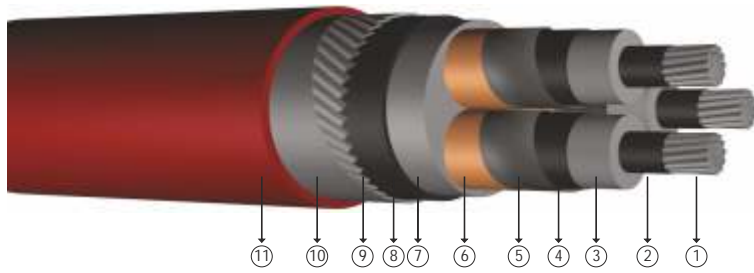
### Construction

- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive tape
- ⑥ Copper screen
- ⑦ Thermoplastic filler
- ⑧ PVC inner sheath
- ⑨ Galvanized flat steel wire
- ⑩ Galvanized steel tape
- ⑪ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	47,0	3250	1000	0,868	0,352	0,229	-	-
3x50/16	50,5	3750	1000	0,641	0,336	0,255	160	150
3x70/16	54,5	4300	1000	0,443	0,318	0,288	199	191
3x95/16	58,5	4950	1000	0,320	0,303	0,324	238	236
3x120/16	63,0	5700	500	0,253	0,292	0,359	275	273
3x150/25	66,0	6400	500	0,206	0,284	0,388	307	313
3x185/25	70,0	7200	500	0,164	0,276	0,424	349	360
3x240/25	74,5	8600	500	0,125	0,267	0,469	410	426
3x300/25	80,6	10000	500	0,100	0,263	0,486	460	528
3x400/35	93,0	12250	250	0,0778	0,257	0,521	520	564

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 6/10 kV XLPE insulated, flat steel wire armoured, three core cables with aluminium conductor



Code: YAXC8VZ3V-R, NA2XSEYFGY

R: Stranded Conductor

Standards: IEC 60502-2, BS 6622

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 6/10 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

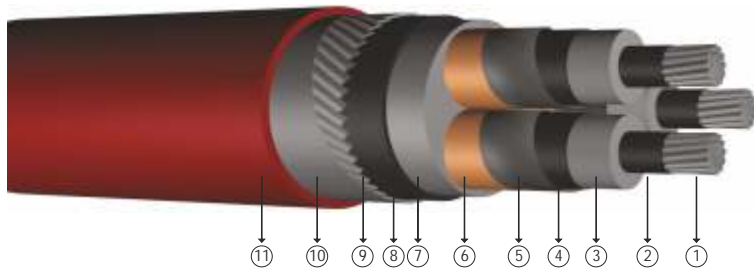
- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive tape
- ⑥ Copper screen
- ⑦ Thermoplastic filler
- ⑧ PVC inner sheath
- ⑨ Galvanized flat steel wire
- ⑩ Galvanized steel tape
- ⑪ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x25/16	49,5	3450	1000	1,20	0,392	0,173	-	-
3x35/16	52,0	3800	1000	0,868	0,374	0,189	-	-
3x50/16	54,5	4250	1000	0,641	0,355	0,209	162	160
3x70/16	58,5	4900	1000	0,443	0,336	0,236	199	199
3x95/16	63,0	5916	500	0,320	0,320	0,263	238	242
3x120/16	67,0	6552	500	0,253	0,308	0,291	271	280
3x150/25	70,0	7238	500	0,206	0,299	0,314	304	318
3x185/25	74,0	8134	500	0,164	0,290	0,341	345	365
3x240/25	81,0	9350	500	0,125	0,278	0,387	401	431
3x300/25	81,4	10600	250	0,100	0,270	0,422	453	494
3x400/35	90,08	12650	250	0,0778	0,261	0,475	517	569

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 8,7/15 kV XLPE insulated, flat steel wire armoured, three core cables with aluminium conductor



Code: YAXC8VZ3V-R, NA2XSEYFGY

R: Stranded Conductor

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 8,7/15 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

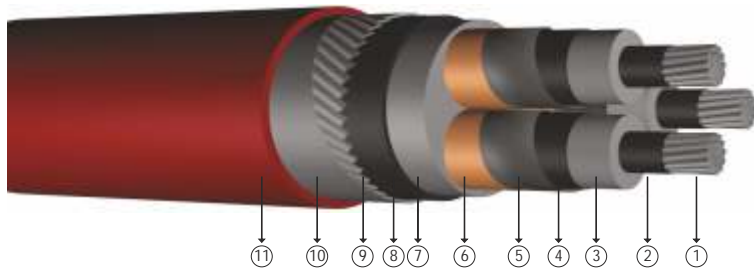
### Construction

- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive tape
- ⑥ Copper screen
- ⑦ Thermoplastic filler
- ⑧ PVC inner sheath
- ⑨ Galvanized flat steel wire
- ⑩ Galvanized steel tape
- ⑪ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	56,0	4700	500	0,868	0,397	0,160	-	-
3x50/16	59,0	5200	500	0,641	0,377	0,175	162	160
3x70/16	63,0	5900	500	0,443	0,356	0,196	199	199
3x95/16	67,0	6750	500	0,320	0,339	0,218	238	242
3x120/16	71,0	7400	500	0,253	0,325	0,240	271	280
3x150/25	74,0	8150	500	0,206	0,315	0,258	304	318
3x185/25	78,0	9150	250	0,164	0,305	0,280	345	365
3x240/25	84,0	10500	250	0,125	0,292	0,315	401	431
3x300/25	89,0	11500	250	0,100	0,284	0,343	453	494
3x400/35	96,0	13900	250	0,0778	0,273	0,385	517	569

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

12/20 kV or 12,7/22 kV XLPE insulated,  
flat steel wire armoured,  
three core cables with aluminium conductor



Code: YAXC8VZ3V-R, NA2XSEYFGY

R: Stranded Conductor

Standards: IEC 60502-2, BS 6622

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 12,7/22 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

Construction

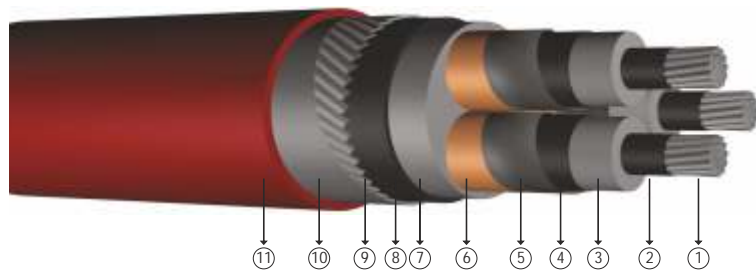
- ① Stranded aluminium conductor    ④ Outer semi conductive layer    ⑦ Thermoplastic filler    ⑩ Galvanized steel tape
- ② Inner semi conductive layer    ⑤ Semi conductive tape    ⑧ PVC inner sheath    ⑪ PVC outer sheath
- ③ XLPE insulation    ⑥ Copper screen    ⑨ Galvanized flat steel wire

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	61,0	5500	1000	0,868	0,471	0,107	-	-
3x50/16	64,0	6000	500	0,641	0,448	0,116	168	171
3x70/16	68,0	6750	500	0,443	0,423	0,127	207	211
3x95/16	72,0	7600	500	0,320	0,401	0,140	247	255
3x120/16	75,0	8300	500	0,253	0,384	0,152	282	297
3x150/25	79,0	9200	500	0,206	0,372	0,161	316	334
3x185/25	81,0	10200	500	0,164	0,359	0,173	359	384
3x240/25	89,0	11500	250	0,125	0,341	0,193	420	454
3x300/25	93,0	13000	250	0,100	0,330	0,207	476	513

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



18/30 kV or 19/33 kV XLPE insulated,  
flat steel wire armoured,  
three core cables with aluminium conductor



Code: YAXC8VZ3V-R, NA2XSEYFGY

R: Stranded Conductor

Standards: IEC 60502-2, BS 6622

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
 : 19/33 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

Construction

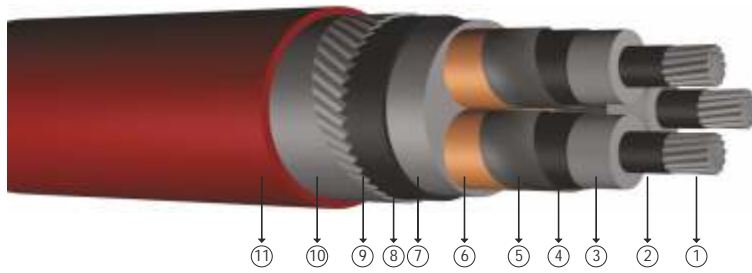
- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 Thermoplastic filler
- 8 PVC inner sheath
- 9 Galvanized flat steel wire
- 10 Galvanized steel tape
- 11 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	73,0	7500	500	0,868	0,397	0,160	-	-
3x50/16	76,0	8200	500	0,641	0,377	0,175	166	164
3x70/16	80,0	9000	500	0,443	0,356	0,196	204	204
3x95/16	84,0	10000	500	0,320	0,339	0,218	244	248
3x120/16	88,0	10800	500	0,253	0,325	0,240	278	284
3x150/25	91,0	11600	500	0,206	0,315	0,258	312	326
3x185/25	95,0	12800	250	0,164	0,305	0,280	343	374
3x240/25	101,0	14500	250	0,125	0,292	0,315	398	440
3x300/25	106,0	15900	250	0,100	0,284	0,343	476	513
3x400/35	113,0	18200	250	0,0778	0,273	0,385	542	583

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



20,3/35 kV or 20,8/36 kV XLPE insulated,  
flat steel wire armoured,  
three core cables with aluminium conductor



Code: YAXC8VZ3V-R, NA2XSEYFGY

R: Stranded Conductor

Standards: HD 620 S2

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 20,3/35 kV  
 : 20,8/36 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

Construction

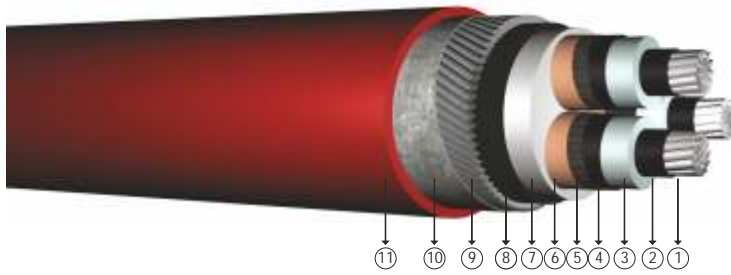
- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive tape
- ⑥ Copper screen
- ⑦ Thermoplastic filler
- ⑧ PVC inner sheath
- ⑨ Galvanized flat steel wire
- ⑩ Galvanized steel tape
- ⑪ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	78,0	8450	1000	0,868	0,471	0,107	-	-
3x50/16	81,0	9000	500	0,641	0,448	0,116	166	164
3x70/16	85,0	9900	500	0,443	0,423	0,127	204	204
3x95/16	89,0	10900	500	0,320	0,401	0,140	244	248
3x120/16	93,0	11800	500	0,253	0,384	0,152	278	284
3x150/25	96,0	12600	500	0,206	0,372	0,161	312	326
3x185/25	100,0	13800	500	0,164	0,359	0,173	343	374
3x240/25	106,0	15500	250	0,125	0,341	0,193	398	440
3x300/25	111,0	17000	250	0,100	0,330	0,207	476	513

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



## 3,6/6 kV XLPE insulated, round steel wire armoured, three core cables with aluminium conductor



Code: YAXC8VZ2V-R, NA2XSEYRY, AL/XLPE/CTS/PVC/SWA/PVC

R: Stranded Conductor

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 3,6/6 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

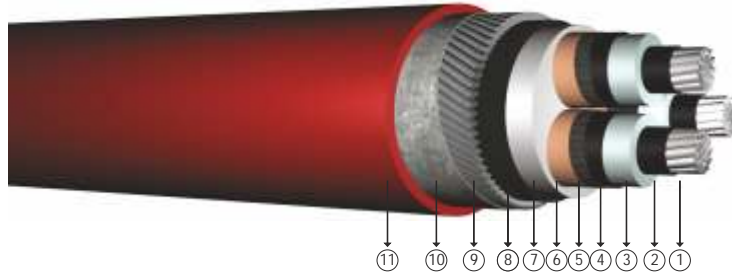
### Construction

- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 Thermoplastic filler
- 8 PVC inner sheath
- 9 Galvanized round steel wire
- 10 Galvanized steel tape
- 11 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	505	4500	1000	0,868	0,352	0,229	-	-
3x50/16	540	5000	1000	0,641	0,336	0,255	160	150
3x70/16	580	5700	1000	0,443	0,318	0,288	199	191
3x95/16	620	6600	500	0,320	0,303	0,324	238	236
3x120/16	665	7400	500	0,253	0,292	0,359	275	273
3x150/25	700	8100	500	0,206	0,284	0,388	307	313
3x185/25	740	9000	500	0,164	0,276	0,424	349	360
3x240/25	820	11500	250	0,125	0,267	0,469	410	426
3x300/25	890	13200	250	0,100	0,263	0,486	460	528
3x400/35	980	15600	250	0,0778	0,257	0,521	520	564

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

6/10 kV or 6,35/11 kV XLPE insulated,  
round steel wire armoured,  
three core cables with aluminium conductor



Code: YAXC8VZ2V-R, NA2XSEYRY, AL/XLPE/CTS/PVC/SWA/PVC

R: Stranded Conductor

Standards: IEC 60502-2, BS 6622

**Technical Data**

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 6/10 kV  
   6,35/11 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

**Application**

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

**Construction**

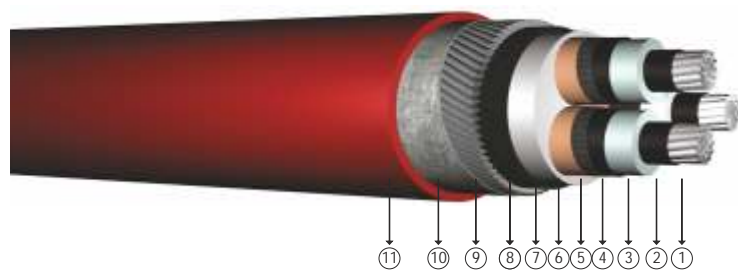
- ① Stranded aluminium conductor    ④ Outer semi conductive layer    ⑦ Thermoplastic filler    ⑩ Galvanized steel tape
- ② Inner semi conductive layer    ⑤ Semi conductive tape    ⑧ PVC inner sheath    ⑪ PVC outer sheath
- ③ XLPE insulation    ⑥ Copper screen    ⑨ Galvanized round steel wire

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	55,5	5200	1000	0,868	0,374	0,189	-	-
3x50/16	58,5	5700	1000	0,641	0,355	0,209	162	160
3x70/16	62,5	6450	1000	0,443	0,336	0,236	199	199
3x95/16	67,0	7300	500	0,320	0,320	0,263	238	242
3x120/16	71,0	8150	500	0,253	0,308	0,291	271	280
3x150/25	74,0	8900	500	0,206	0,299	0,314	304	318
3x185/25	79,0	10700	500	0,164	0,290	0,341	345	365
3x240/25	86,0	12450	500	0,125	0,278	0,387	401	431
3x300/25	92,0	13900	250	0,100	0,270	0,422	453	494
3x400/35	100,0	16300	250	0,0778	0,261	0,475	517	569

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



8,7/15 kV XLPE insulated,  
round steel wire armoured,  
three core cables with aluminium conductor



Code: YAXC8VZ2V-R, NA2XSEYRY, AL/XLPE/CTS/PVC/SWA/PVC

R: Stranded Conductor

Standards: IEC 60502-2

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 8,7/15 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

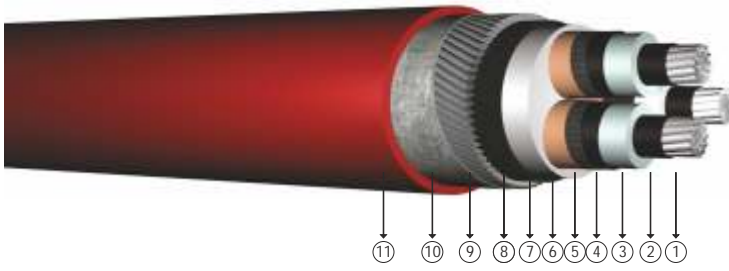
Construction

- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 Thermoplastic filler
- 8 PVC inner sheath
- 9 Galvanized round steel wire
- 10 Galvanized steel tape
- 11 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	60,5	6100	500	0,868	0,397	0,160	-	-
3x50/16	64,0	6600	500	0,641	0,377	0,175	162	160
3x70/16	68,0	7500	500	0,443	0,356	0,196	199	199
3x95/16	72,0	8400	500	0,320	0,339	0,218	238	242
3x120/16	76,0	9100	500	0,253	0,325	0,240	271	280
3x150/25	81,0	10900	500	0,206	0,315	0,258	304	318
3x185/25	85,0	12100	250	0,164	0,305	0,280	345	365
3x240/25	92,0	13700	250	0,125	0,292	0,315	401	431
3x300/25	97,0	15100	250	0,100	0,284	0,343	453	494
3x400/35	105,0	17500	250	0,0778	0,273	0,385	517	569

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

12/20 kV or 12,7/22 kV XLPE insulated,  
round steel wire armoured,  
three core cables with aluminium conductor



Code: YAXC8VZ2V-R, NA2XSEYRY, AL/XLPE/CTS/PVC/SWA/PVC

R: Stranded Conductor

Standards: IEC 60502-2, BS 6622

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 : 12,7/22 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

Construction

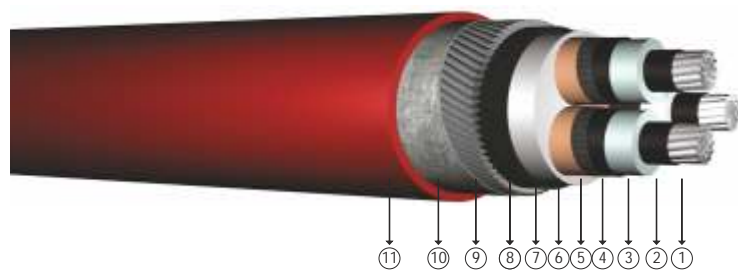
- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive tape
- ⑥ Copper screen
- ⑦ Thermoplastic filler
- ⑧ PVC inner sheath
- ⑨ Galvanized round steel wire
- ⑩ Galvanized steel tape
- ⑪ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	64,6	7040	500	0,868	0,397	0,160	-	-
3x50/16	67,1	7565	500	0,641	0,377	0,175	162	160
3x70/16	71,2	8420	500	0,443	0,356	0,196	199	199
3x95/16	76,8	10265	500	0,320	0,339	0,218	238	242
3x120/16	80,2	11101	500	0,253	0,325	0,240	271	280
3x150/25	84,0	12141	500	0,206	0,315	0,258	304	318
3x185/25	87,7	13190	250	0,164	0,305	0,280	345	365
3x240/25	93,5	14865	250	0,125	0,292	0,315	401	431
3x300/25	98,3	16452	250	0,100	0,284	0,343	453	494
3x400/35	106,2	19000	250	0,0778	0,273	0,385	517	569

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



18/30 kV or 19/33 kV XLPE insulated,  
round steel wire armoured,  
three core cables with aluminium conductor



Code: YAXC8VZ2V-R, NA2XSEYRY, AL/XLPE/CTS/PVC/SWA/PVC

R: Stranded Conductor

Standards: IEC 60502-2, BS 6622

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
   : 19/33 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

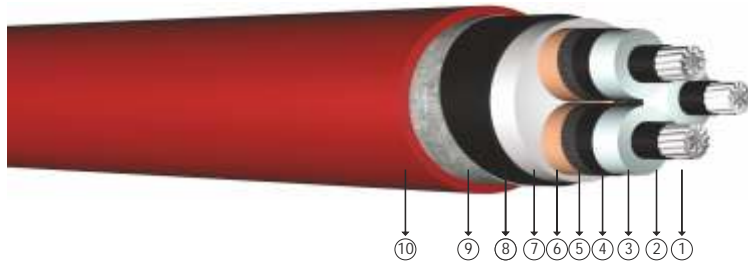
Construction

- ① Stranded aluminium conductor    ④ Outer semi conductive layer    ⑦ Thermoplastic filler    ⑩ Galvanized steel tape
- ② Inner semi conductive layer    ⑤ Semi conductive tape    ⑧ PVC inner sheath    ⑪ PVC outer sheath
- ③ XLPE insulation    ⑥ Copper screen    ⑨ Galvanized round steel wire

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	77,9	6100	500	0,868	0,397	0,160	-	-
3x50/16	80,8	6600	500	0,641	0,377	0,175	162	160
3x70/16	84,9	7500	500	0,443	0,356	0,196	199	199
3x95/16	89,2	8400	500	0,320	0,339	0,218	238	242
3x120/16	92,5	9100	500	0,253	0,325	0,240	271	280
3x150/25	95,9	10900	500	0,206	0,315	0,258	304	318
3x185/25	100,0	12100	250	0,164	0,305	0,280	345	365
3x240/25	106,0	13700	250	0,125	0,292	0,315	401	431

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

# 3,6/6 kV XLPE insulated, double steel tape armoured, three core cables with aluminium conductor



Code: YAXC8VZ4V-R, NA2XSEYBY, AL/XLPE/CTS/PVC/STA/PVC

R: Stranded Conductor

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 3,6/6 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

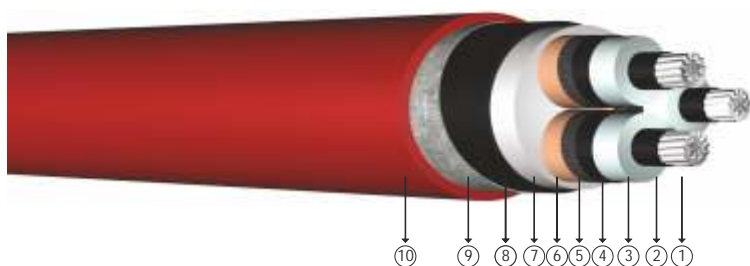
- ① Stranded aluminium conductor    ④ Outer semi conductive layer    ⑦ Thermoplastic filler    ⑩ PVC outer sheath
- ② Inner semi conductive layer    ⑤ Semi conductive tape    ⑧ PVC inner sheath
- ③ XLPE insulation    ⑥ Copper screen    ⑨ Galvanized steel tape

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	47,0	3200	1000	0,868	0,352	0,229	-	-
3x50/16	50,0	3700	1000	0,641	0,336	0,255	160	150
3x70/16	54,0	4300	1000	0,443	0,318	0,288	199	191
3x95/16	58,0	5000	1000	0,320	0,303	0,324	238	236
3x120/16	62,5	5700	500	0,253	0,292	0,359	275	273
3x150/25	66,0	6300	500	0,206	0,284	0,388	307	313
3x185/25	70,0	7200	500	0,164	0,276	0,424	349	360
3x240/25	77,0	8500	500	0,125	0,267	0,469	410	426
3x300/25	83,5	10000	500	0,100	0,263	0,486	460	528
3x400/35	94,0	13000	250	0,0778	0,257	0,521	520	564

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



6/10 kV or 6,35/11 kV XLPE insulated,  
double steel tape armoured,  
three core cables with aluminium conductor



Code: YAXC8VZ4V-R, NA2XSEYBY, AL/XLPE/CTS/PVC/STA/PVC

R: Stranded Conductor

Standards: IEC 60502-2, BS 6622

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 6/10 kV  
 : 6,35/11 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

Construction

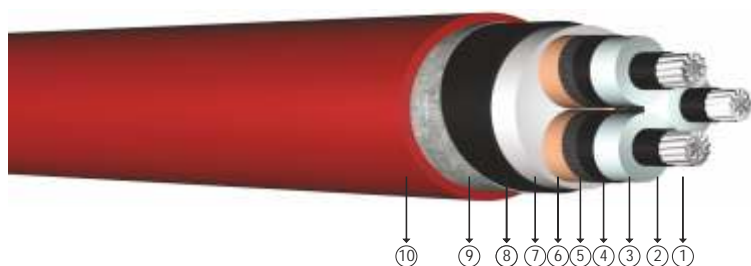
- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper screen
- 7 Thermoplastic filler
- 8 PVC inner sheath
- 9 Galvanized steel tape
- 10 PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	51,5	3800	1000	0,868	0,374	0,189	-	-
3x50/16	54,5	4200	1000	0,641	0,355	0,209	162	160
3x70/16	58,5	4900	1000	0,443	0,336	0,236	199	199
3x95/16	63,0	5700	1000	0,320	0,320	0,263	238	242
3x120/16	67,0	6400	500	0,253	0,308	0,291	271	280
3x150/25	70,0	7000	500	0,206	0,299	0,314	304	318
3x185/25	74,0	7900	500	0,164	0,290	0,341	345	365
3x240/25	81,0	9300	500	0,125	0,278	0,387	401	431
3x300/25	88,0	11500	250	0,100	0,270	0,422	453	494
3x400/35	96,0	13500	250	0,0778	0,261	0,475	517	569

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



# 8,7/15 kV XLPE insulated, double steel tape armoured, three core cables with aluminium conductor



Code: YAXC8VZ4V-R, NA2XSEYBY, AL/XLPE/CTS/PVC/STA/PVC

R: Stranded Conductor

Standards: IEC 60502-2

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 8,7/15 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

### Construction

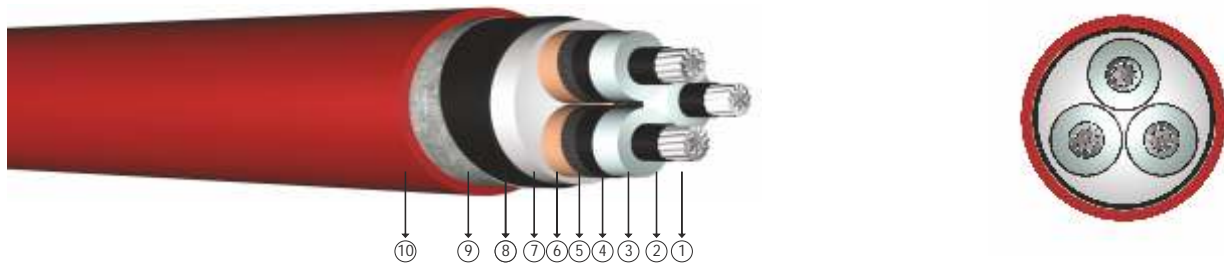
- ① Stranded aluminium conductor    ④ Outer semi conductive layer    ⑦ Thermoplastic filler    ⑩ PVC outer sheath
- ② Inner semi conductive layer    ⑤ Semi conductive tape    ⑧ PVC inner sheath
- ③ XLPE insulation    ⑥ Copper screen    ⑨ Galvanized steel tape

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	57,0	4500	1000	0,868	0,397	0,160	-	-
3x50/16	60,5	5000	1000	0,641	0,377	0,175	162	160
3x70/16	64,0	5700	500	0,443	0,356	0,196	199	199
3x95/16	68,5	6600	500	0,320	0,339	0,218	238	242
3x120/16	72,5	7200	500	0,253	0,325	0,240	271	280
3x150/25	75,5	8000	500	0,206	0,315	0,258	304	318
3x185/25	80,0	9000	500	0,164	0,305	0,280	345	365
3x240/25	88,0	11300	500	0,125	0,292	0,315	401	431
3x300/25	93,0	12700	250	0,100	0,284	0,343	453	494
3x400/35	101,0	14800	250	0,0778	0,273	0,385	517	569

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



12/20 kV or 12,7/22 kV XLPE insulated,  
double steel tape armoured,  
three core cables with aluminium conductor



Code: YAXC8VZ4V-R, NA2XSEYBY, AL/XLPE/CTS/PVC/STA/PVC

R: Stranded Conductor

Standards: IEC 60502-2, BS 6622

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 : 12,7/22 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

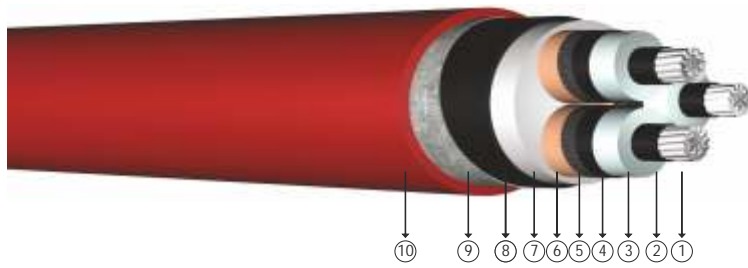
Construction

- ① Stranded aluminium conductor    ④ Outer semi conductive layer    ⑦ Thermoplastic filler    ⑩ PVC outer sheath
- ② Inner semi conductive layer    ⑤ Semi conductive tape    ⑧ PVC inner sheath
- ③ XLPE insulation    ⑥ Copper screen    ⑨ Galvanized steel tape

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	61,0	5366	1000	0,868	0,416	0,141	-	-
3x50/16	63,5	5816	500	0,641	0,395	0,155	168	171
3x70/16	67,6	6585	500	0,443	0,373	0,172	207	211
3x95/16	71,7	7409	500	0,320	0,355	0,191	247	255
3x120/16	75,0	8115	500	0,253	0,340	0,209	282	297
3x150/25	78,8	8966	500	0,206	0,329	0,225	316	334
3x185/25	84,0	10882	500	0,164	0,319	0,243	359	384
3x240/25	89,8	12409	250	0,125	0,304	0,273	420	454
3x300/25	94,4	13771	250	0,100	0,295	0,296	476	513
3x400/35	102,5	16162	250	0,0778	0,284	0,331	552	593

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

18/30 kV or 19/33 kV XLPE insulated,  
double steel tape armoured,  
three core cables with aluminium conductor



Code: YAXC8VZ4V-R, NA2XSEYBY, AL/XLPE/CTS/PVC/STA/PVC

R: Stranded Conductor

Standards: IEC 60502-2, BS 6622

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
   : 19/33 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

Construction

- ① Stranded aluminium conductor    ④ Outer semi conductive layer    ⑦ Thermoplastic filler    ⑩ PVC outer sheath
- ② Inner semi conductive layer    ⑤ Semi conductive tape    ⑧ PVC inner sheath
- ③ XLPE insulation    ⑥ Copper screen    ⑨ Galvanized steel tape

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	73,0	7334	500	0,8680	0,457	0,114	-	-
3x50/16	75,9	7941	500	0,6410	0,434	0,124	166	164
3x70/16	80,1	8819	500	0,4430	0,410	0,137	204	204
3x95/16	85,3	10719	500	0,3200	0,389	0,150	244	248
3x120/16	88,8	11597	250	0,2530	0,372	0,163	278	284
3x150/25	92,2	12481	250	0,2060	0,360	0,174	312	326
3x185/25	96,2	13600	250	0,1640	0,348	0,188	343	374
3x240/25	102,4	15406	250	0,1250	0,331	0,209	398	440
3x300/25	106,8	16833	250	0,1000	0,321	0,226	-	-
3x400/35	114,5	19304	250	0,0778	0,307	0,251	-	-

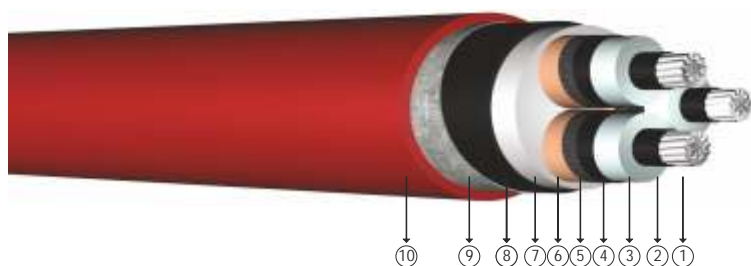
Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1







12/20 kV or 12,7/22 kV XLPE insulated,  
aluminium tape armoured,  
three core cables with aluminium conductor



Code: NA2XSEYB(A)Y, AL/XLPE/CTS/PVC/ATA/PVC

R: Stranded Conductor

Standards: IEC 60502-2, BS 6622

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 12/20 kV  
 : 12,7/22 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

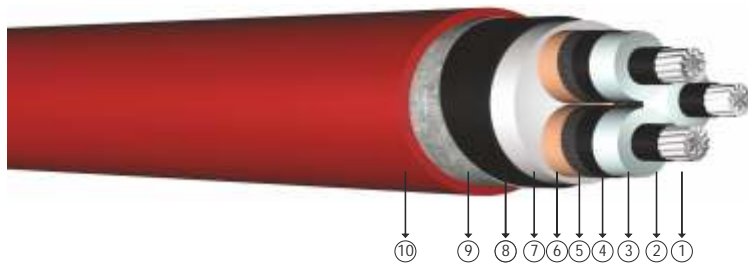
Construction

- ① Stranded aluminium conductor    ④ Outer semi conductive layer    ⑦ Thermoplastic filler    ⑩ PVC outer sheath
- ② Inner semi conductive layer    ⑤ Semi conductive tape    ⑧ PVC inner sheath
- ③ XLPE insulation    ⑥ Copper screen    ⑨ Aluminium tape

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	61,0	5366	1000	0,868	0,416	0,141	-	-
3x50/16	63,5	5816	500	0,641	0,395	0,155	168	171
3x70/16	67,6	6585	500	0,443	0,373	0,172	207	211
3x95/16	71,7	7409	500	0,320	0,355	0,191	247	255
3x120/16	75,0	8115	500	0,253	0,340	0,209	282	297
3x150/25	78,8	8966	500	0,206	0,329	0,225	316	334
3x185/25	84,0	10882	500	0,164	0,319	0,243	359	384
3x240/25	89,8	12409	250	0,125	0,304	0,273	420	454
3x300/25	94,4	13771	250	0,100	0,295	0,296	476	513
3x400/35	102,5	16162	250	0,0778	0,284	0,331	552	593

Note : Current carrying capacities are valid under the following conditions;  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1

18/30 kV or 19/33 kV XLPE insulated,  
aluminium tape armoured,  
three core cables with aluminium conductor



Code: NA2XSEYB(A)Y, AL/XLPE/CTS/PVC/ATA/PVC

R: Stranded Conductor

Standards: IEC 60502-2, BS 6622

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 18/30 kV  
 : 19/33 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

Construction

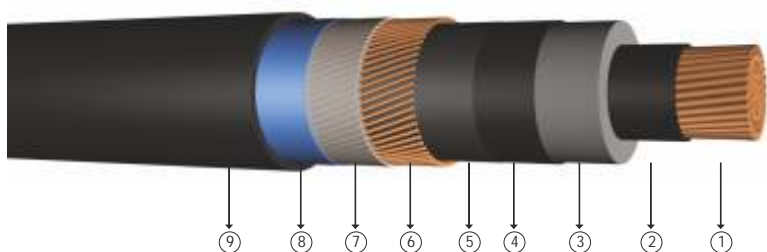
- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive tape
- ⑥ Copper screen
- ⑦ Thermoplastic filler
- ⑧ PVC inner sheath
- ⑨ Aluminium tape
- ⑩ PVC outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm <sup>2</sup>	mm	kg/km	m	/km	mH/km	µF/km	In ground at 20°C	In air at 30°C
3x35/16	73,0	7334	500	0,8680	0,457	0,114	-	-
3x50/16	75,9	7941	500	0,6410	0,434	0,124	166	164
3x70/16	80,1	8819	500	0,4430	0,410	0,137	204	204
3x95/16	85,3	10719	500	0,3200	0,389	0,150	244	248
3x120/16	88,8	11597	250	0,2530	0,372	0,163	278	284
3x150/25	92,2	12481	250	0,2060	0,360	0,174	312	326
3x185/25	96,2	13600	250	0,1640	0,348	0,188	343	374
3x240/25	102,4	15406	250	0,1250	0,331	0,209	398	440
3x300/25	106,8	16833	250	0,1000	0,321	0,226	-	-
3x400/35	114,5	19304	250	0,0778	0,307	0,251	-	-

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 Number of system : 1



# 26/45 kV XLPE insulated, radial and longitudinally sealed, single core cables with copper conductor



Code: N2XS(FL)2Y

Standards: VDE 0276-632, IEC 60840

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 26/45 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

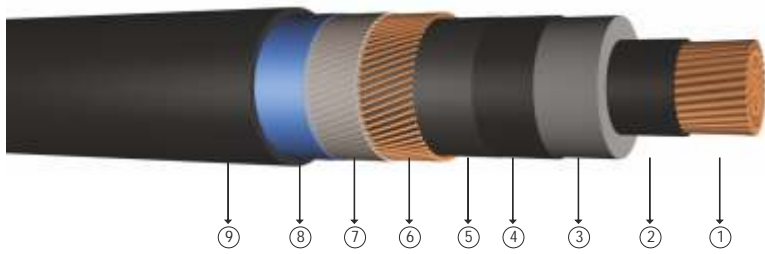
- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Copper screen
- ⑦ Semi conductor swelling tape
- ⑧ PE coated aluminium foil
- ⑨ PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x95/16	43,0	2100	1000	0,193	0,2470	0,610	0,419	0,153	363	329	421	362	
1x120/16	45,0	2400	1000	0,153	0,1958	0,591	0,405	0,165	410	373	483	416	
1x150/25	46,5	2800	1000	0,124	0,1587	0,574	0,342	0,178	449	415	540	469	
1x185/25	48,5	3200	1000	0,0991	0,1268	0,557	0,381	0,191	503	468	615	536	
1x240/25	51,0	3800	1000	0,0754	0,0965	0,537	0,366	0,209	576	541	718	630	
1x300/25	53,0	4450	1000	0,0601	0,0769	0,520	0,354	0,248	641	608	812	717	
1x400/35	56,5	5550	1000	0,0470	0,0602	0,499	0,341	0,226	697	684	904	823	
1x500/35	60,0	6600	1000	0,0366	0,0468	0,482	0,330	0,274	768	762	1011	929	
1x630/35	63,5	7950	1000	0,0283	0,0362	0,466	0,320	0,300	858	847	1128	1043	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



40/69 kV XLPE insulated,  
radial and longitudinally sealed,  
single core cables with copper conductor



Code: N2XS(FL)2Y

Standards: VDE 0276-632, IEC 60840

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 40/69 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

Construction

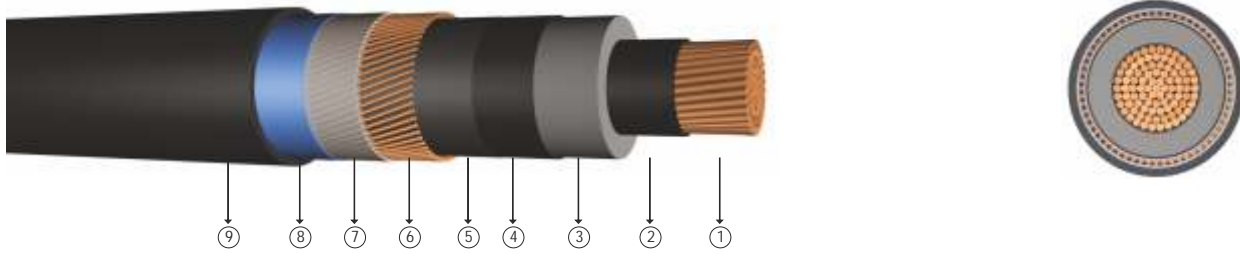
- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Copper screen
- ⑦ Semi conductor swelling tape
- ⑧ PE coated aluminium foil
- ⑨ PE outer sheath

DIMENSION AND WEIGHTS			ELECTRICAL PROPERTIES					
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Operation Capacitance (approx)	DC Conductor Resistance at 20°C (Max)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	µF/km	/km	In ground at 20°C	In duct 20°C	In air at 30°C	
							***	**
1x240/25	61,0	4700	0,18	0,0754	530	483	692	606
1x300/25	63,0	5400	0,19	0,0601	599	544	795	693
1x400/35	66,0	6300	0,21	0,0470	683	616	925	802
1x500/35	70,0	7600	0,23	0,0366	780	729	1075	929
1x630/35	75,0	9000	0,26	0,0283	886	828	1247	1066
1x800/35	79,0	10700	0,28	0,0221	997	929	1432	1210
1x1000/50	84,0	12900	0,31	0,0176	1173	1087	1728	1473
1x1200/50	90,0	15000	0,33	0,0151	1270	1173	1894	1611
1x1600/70	95,0	18800	0,37	0,0113	1465	1375	2245	1883
1x2000/95	102,0	22800	0,41	0,0090	1627	1530	2556	2111

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 64/110 kV XLPE insulated, radial and longitudinally sealed, single core cables with copper conductor



Code: N2XS(FL)2Y

Standards: VDE 0276-632, IEC 60840

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 64/110kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

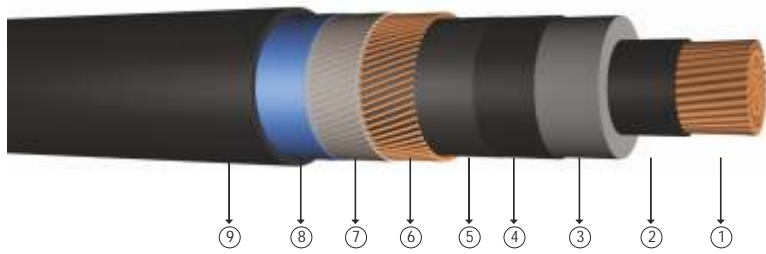
### Construction

- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Copper screen
- ⑦ Semi conductor swelling tape
- ⑧ PE coated aluminium foil
- ⑨ PE outer sheath

DIMENSION AND WEIGHTS			ELECTRICAL PROPERTIES					
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Operation Capacitance (approx)	DC Conductor Resistance at 20°C (Max)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	µF/km	/km	In ground at 20°C	In duct 20°C	In air at 30°C	
							***	**
1x240/25	68,0	5400	0,18	0,0754	528	495	682	605
1x300/25	71,0	6100	0,19	0,0601	597	559	783	692
1x400/35	74,0	7100	0,21	0,0470	681	650	909	800
1x500/35	78,0	8400	0,22	0,0366	775	739	1053	922
1x630/35	82,0	9900	0,24	0,0283	884	841	1226	1065
1x800/35	86,0	11600	0,26	0,0221	994	945	1406	1208
1x1000/50	92,0	14000	0,29	0,0176	1169	1106	1695	1465
1x1200/50	97,0	16000	0,31	0,0151	1264	1231	1849	1595
1x1600/70	104,0	20000	0,34	0,0113	1456	1415	2185	1860
1x2000/95	115,0	24000	0,37	0,0090	1618	1570	2487	2089

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

76/132kV XLPE insulated,  
radial and longitudinally sealed,  
single core cables with copper conductor



Code: N2XS(FL)2Y

Standards: VDE 0276-632, IEC 60840

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 76/132kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

Construction

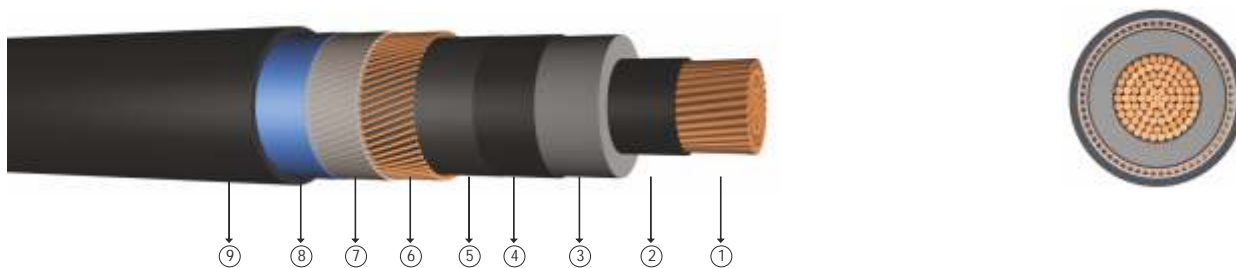
- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Copper screen
- ⑦ Semi conductor swelling tape
- ⑧ PE coated aluminium foil
- ⑨ PE outer sheath

DIMENSION AND WEIGHTS			ELECTRICAL PROPERTIES					
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Operation Capacitance (approx)	DC Conductor Resistance at 20°C (Max)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	µF/km	/km	In ground at 20°C	In duct 20°C	In air at 30°C	
							***	**
1x400/35	82,0	8900	0,17	0,0470	675	632	896	792
1x500/35	85,0	10000	0,19	0,0366	767	716	1033	908
1x630/35	89,0	11500	0,21	0,0283	872	811	1200	1045
1x800/35	93,0	13500	0,24	0,0221	979	932	1374	1182
1x1000/50	100,0	15500	0,23	0,0176	1145	1087	1649	1420
1x1200/50	105,0	17500	0,23	0,0151	1233	1212	1801	1539
1x1600/70	112,0	21500	0,25	0,0113	1414	1388	2125	1784
1x2000/95	120,0	25800	0,31	0,0090	1569	1532	2418	2003

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 89/154 kV XLPE insulated, radial and longitudinally sealed, single core cables with copper conductor



Code: N2XS(FL)2Y

Standards: VDE 0276-632, IEC 60840

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 89/154 kV  
 Min. bending radius : 20x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

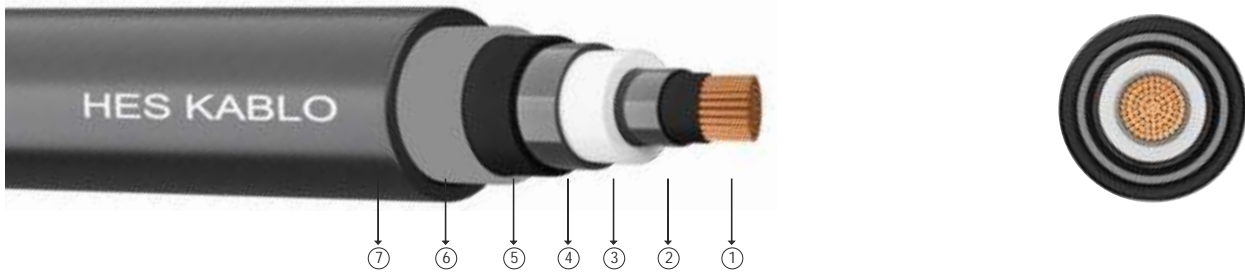
### Construction

- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Copper screen
- ⑦ Semi conductor swelling tape
- ⑧ PE coated aluminium foil
- ⑨ PE outer sheath

DIMENSION AND WEIGHTS			ELECTRICAL PROPERTIES					
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Operation Capacitance (approx)	DC Conductor Resistance at 20°C (Max)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	µF/km	/km	In ground at 20°C	In duct 20°C	In air at 30°C	
							***	**x
1x630/35	96,0	11400	0,19	0,0283	871	829	1193	1043
1x800/35	102,0	13600	0,20	0,0221	977	928	1367	1181
1x1000/50	106,0	16000	0,21	0,0176	1143	1081	1639	1415
1x1200/50	110,0	18500	0,22	0,0151	1232	1208	1790	1535
1x1600/70	120,0	22500	0,23	0,0113	1404	1382	2100	1765
1x2000/95	126,0	26500	0,27	0,0090	1554	1523	2384	1973

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\*x : Trefoil formation  
 Number of system : 1

# 26/45 kV with smooth welded aluminium sheath



Code: CU/XLPE/ATS/HDPE

Standards: VDE 0276-632, IEC 60840

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 26/45 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

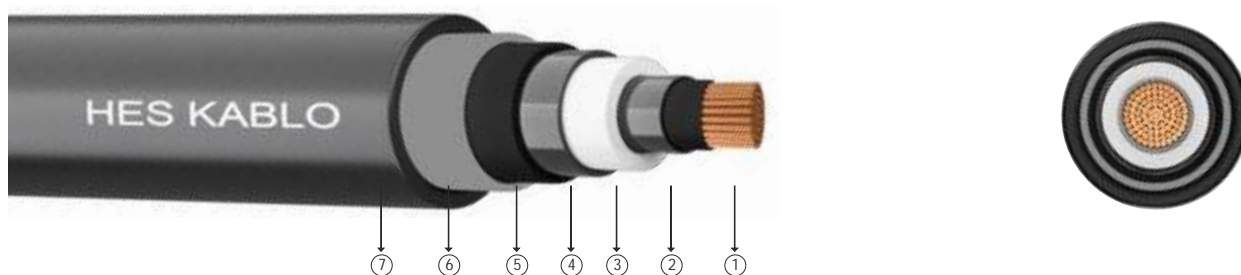
- ① Stranded copper conductors
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Smooth welded aluminium sheath
- ⑦ PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x95/16	43,0	2100	1000	0,193	0,2470	0,610	0,419	0,153	363	329	421	362	
1x120/16	45,0	2400	1000	0,153	0,1958	0,591	0,405	0,165	410	373	483	416	
1x150/25	46,5	2800	1000	0,124	0,1587	0,574	0,342	0,178	449	415	540	469	
1x185/25	48,5	3200	1000	0,0991	0,1268	0,557	0,381	0,191	503	468	615	536	
1x240/25	51,0	3800	1000	0,0754	0,0965	0,537	0,366	0,209	576	541	718	630	
1x300/25	53,0	4450	1000	0,0601	0,0769	0,520	0,354	0,248	641	608	812	717	
1x400/35	56,5	5550	1000	0,0470	0,0602	0,499	0,341	0,226	697	684	904	823	
1x500/35	60,0	6600	1000	0,0366	0,0468	0,482	0,330	0,274	768	762	1011	929	
1x630/35	63,5	7950	1000	0,0283	0,0362	0,466	0,320	0,300	858	847	1128	1043	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



## 40/69 kV with smooth welded aluminium sheath



Code: CU/XLPE/ATS/HDPE

Standards: VDE 0276-632, IEC 60840

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 40/69 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

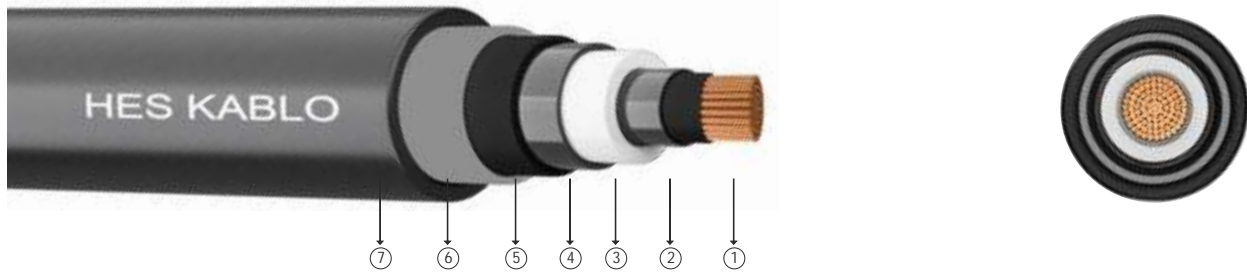
### Construction

- ① Stranded copper conductors
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Smooth welded aluminium sheath
- ⑦ PE outer sheath

DIMENSION AND WEIGHTS			ELECTRICAL PROPERTIES					
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Operation Capacitance (approx)	DC Conductor Resistance at 20°C (Max)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	µF/km	/km	In ground at 20°C	In duct 20°C	In air at 30°C	
							***	**
1x240/25	61,0	4700	0,18	0,0754	530	483	692	606
1x300/25	63,0	5400	0,19	0,0601	599	544	795	693
1x400/35	66,0	6300	0,21	0,0470	683	616	925	802
1x500/35	70,0	7600	0,23	0,0366	780	729	1075	929
1x630/35	75,0	9000	0,26	0,0283	886	828	1247	1066
1x800/35	79,0	10700	0,28	0,0221	997	929	1432	1210
1x1000/50	84,0	12900	0,31	0,0176	1173	1087	1728	1473
1x1200/50	90,0	15000	0,33	0,0151	1270	1173	1894	1611
1x1600/70	95,0	18800	0,37	0,0113	1465	1375	2245	1883
1x2000/95	102,0	22800	0,41	0,0090	1627	1530	2556	2111

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 64/110 kV with smooth welded aluminium sheath



Code: CU/XLPE/ATS/HDPE

Standards: VDE 0276-632, IEC 60840

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 64/110kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

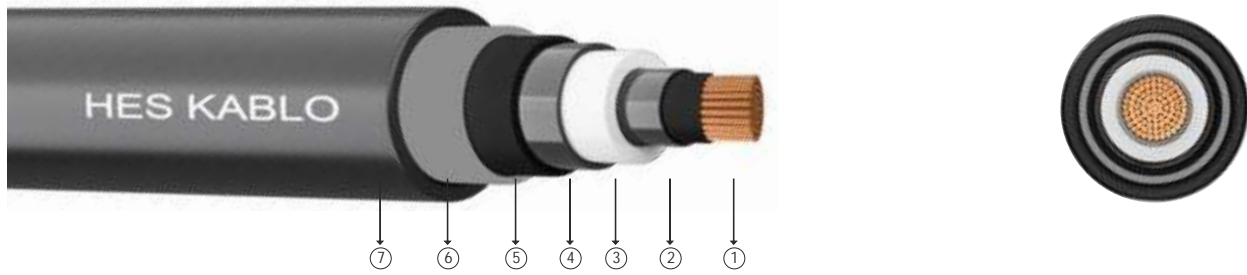
- ① Stranded copper conductors
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Smooth welded aluminium sheath
- ⑦ PE outer sheath

DIMENSION AND WEIGHTS			ELECTRICAL PROPERTIES					
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Operation Capacitance (approx)	DC Conductor Resistance at 20°C (Max)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	µF/km	/km	In ground at 20°C	In duct 20°C	In air at 30°C	
							***	**
1x240/25	68,0	5400	0,18	0,0754	528	495	682	605
1x300/25	71,0	6100	0,19	0,0601	597	559	783	692
1x400/35	74,0	7100	0,21	0,0470	681	650	909	800
1x500/35	78,0	8400	0,22	0,0366	775	739	1053	922
1x630/35	82,0	9900	0,24	0,0283	884	841	1226	1065
1x800/35	86,0	11600	0,26	0,0221	994	945	1406	1208
1x1000/50	92,0	14000	0,29	0,0176	1169	1106	1695	1465
1x1200/50	97,0	16000	0,31	0,0151	1264	1231	1849	1595
1x1600/70	104,0	20000	0,34	0,0113	1456	1415	2185	1860
1x2000/95	115,0	24000	0,37	0,0090	1618	1570	2487	2089

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



## 76/132kV with smooth welded aluminium sheath



Code: CU/XLPE/ATS/HDPE

Standards: VDE 0276-632, IEC 60840

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 76/132kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

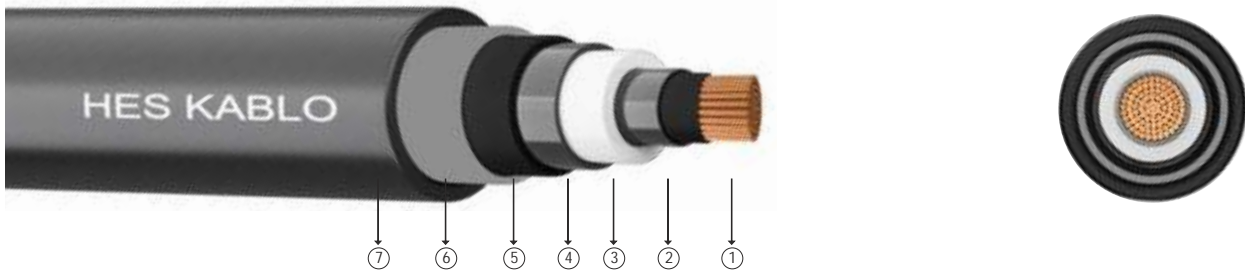
- ① Stranded copper conductors
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Smooth welded aluminium sheath
- ⑦ PE outer sheath

DIMENSION AND WEIGHTS			ELECTRICAL PROPERTIES					
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Operation Capacitance (approx)	DC Conductor Resistance at 20°C (Max)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	µF/km	/km	In ground at 20°C	In duct 20°C	In air at 30°C	
							***	**
1x400/35	82,0	8900	0,17	0,0470	675	632	896	792
1x500/35	85,0	10000	0,19	0,0366	767	716	1033	908
1x630/35	89,0	11500	0,21	0,0283	872	811	1200	1045
1x800/35	93,0	13500	0,24	0,0221	979	932	1374	1182
1x1000/50	100,0	15500	0,23	0,0176	1145	1087	1649	1420
1x1200/50	105,0	17500	0,23	0,0151	1233	1212	1801	1539
1x1600/70	112,0	21500	0,25	0,0113	1414	1388	2125	1784
1x2000/95	120,0	25800	0,31	0,0090	1569	1532	2418	2003

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 89/154 kV with smooth welded aluminium sheath



Code: CU/XLPE/ATS/HDPE

Standards: VDE 0276-632, IEC 60840

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 89/154 kV  
 Min. bending radius : 20x D  
 D : Cable outer diameter

### Application

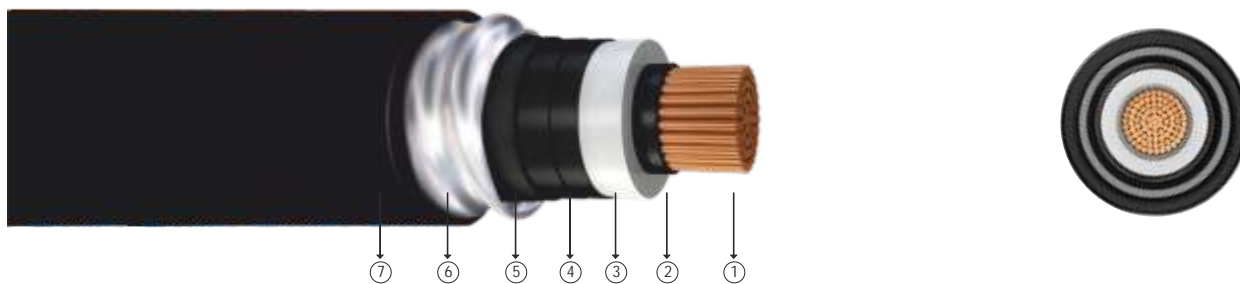
These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

- ① Stranded copper conductors
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Smooth welded aluminium sheath
- ⑦ PE outer sheath

DIMENSION AND WEIGHTS			ELECTRICAL PROPERTIES					
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Operation Capacitance (approx)	DC Conductor Resistance at 20°C (Max)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	µF/km	/km	In ground at 20°C	In duct 20°C	In air at 30°C	
							***	***
1x630/35	96,0	11400	0,19	0,0283	871	829	1193	1043
1x800/35	102,0	13600	0,20	0,0221	977	928	1367	1181
1x1000/50	106,0	16000	0,21	0,0176	1143	1081	1639	1415
1x1200/50	110,0	18500	0,22	0,0151	1232	1208	1790	1535
1x1600/70	120,0	22500	0,23	0,0113	1404	1382	2100	1765
1x2000/95	126,0	26500	0,27	0,0090	1554	1523	2384	1973

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\*\* : Trefoil formation  
 Number of system : 1



Code: CU/XLPE/Corrugated AL/HDPE

Standards: VDE 0276-632, IEC 60840

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 26/45 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

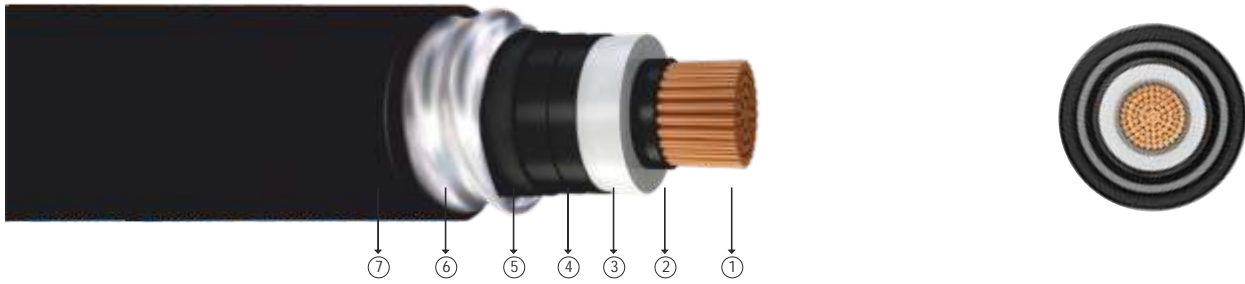
### Construction

- ① Stranded copper conductors
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Corrugated aluminium sheath
- ⑦ PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x95/16	43,0	2100	1000	0,193	0,2470	0,610	0,419	0,153	363	329	421	362	
1x120/16	45,0	2400	1000	0,153	0,1958	0,591	0,405	0,165	410	373	483	416	
1x150/25	46,5	2800	1000	0,124	0,1587	0,574	0,342	0,178	449	415	540	469	
1x185/25	48,5	3200	1000	0,0991	0,1268	0,557	0,381	0,191	503	468	615	536	
1x240/25	51,0	3800	1000	0,0754	0,0965	0,537	0,366	0,209	576	541	718	630	
1x300/25	53,0	4450	1000	0,0601	0,0769	0,520	0,354	0,248	641	608	812	717	
1x400/35	56,5	5550	1000	0,0470	0,0602	0,499	0,341	0,226	697	684	904	823	
1x500/35	60,0	6600	1000	0,0366	0,0468	0,482	0,330	0,274	768	762	1011	929	
1x630/35	63,5	7950	1000	0,0283	0,0362	0,466	0,320	0,300	858	847	1128	1043	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 40/69 kV with corrugated aluminium sheath



Code: CU/XLPE/Corrugated AL/HDPE

Standards: VDE 0276-632, IEC 60840

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 40/69 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

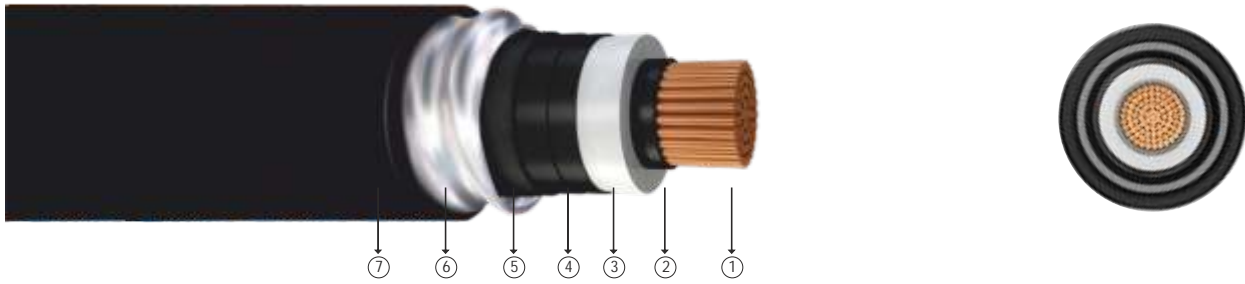
These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

- ① Stranded copper conductors
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Corrugated aluminium sheath
- ⑦ PE outer sheath

DIMENSION AND WEIGHTS			ELECTRICAL PROPERTIES					
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Operation Capacitance (approx)	DC Conductor Resistance at 20°C (Max)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	µF/km	/km	In ground at 20°C	In duct 20°C	In air at 30°C	
							***	**
1x240/25	61,0	4700	0,18	0,0754	530	483	692	606
1x300/25	63,0	5400	0,19	0,0601	599	544	795	693
1x400/35	66,0	6300	0,21	0,0470	683	616	925	802
1x500/35	70,0	7600	0,23	0,0366	780	729	1075	929
1x630/35	75,0	9000	0,26	0,0283	886	828	1247	1066
1x800/35	79,0	10700	0,28	0,0221	997	929	1432	1210
1x1000/50	84,0	12900	0,31	0,0176	1173	1087	1728	1473
1x1200/50	90,0	15000	0,33	0,0151	1270	1173	1894	1611
1x1600/70	95,0	18800	0,37	0,0113	1465	1375	2245	1883
1x2000/95	102,0	22800	0,41	0,0090	1627	1530	2556	2111

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



Code: CU/XLPE/Corrugated AL/HDPE

Standards: VDE 0276-632, IEC 60840

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 64/110kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

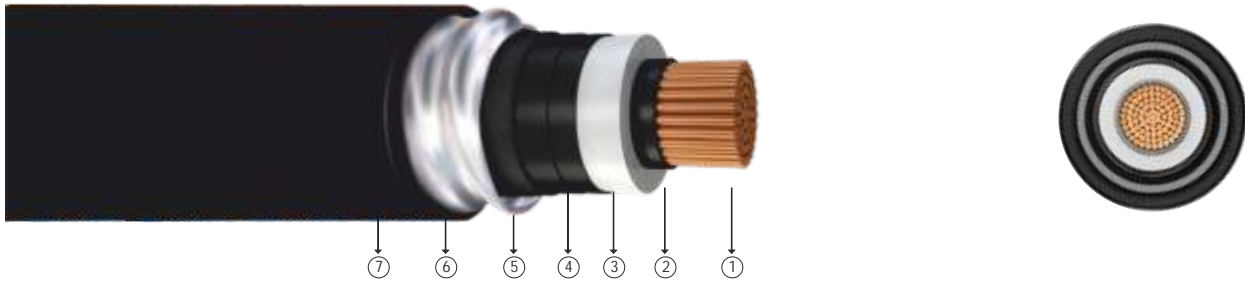
### Construction

- ① Stranded copper conductors
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Corrugated aluminium sheath
- ⑦ PE outer sheath

DIMENSION AND WEIGHTS			ELECTRICAL PROPERTIES					
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Operation Capacitance (approx)	DC Conductor Resistance at 20°C (Max)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	µF/km	/km	In ground at 20°C	In duct 20°C	In air at 30°C	
							***	**
1x240/25	68,0	5400	0,18	0,0754	528	495	682	605
1x300/25	71,0	6100	0,19	0,0601	597	559	783	692
1x400/35	74,0	7100	0,21	0,0470	681	650	909	800
1x500/35	78,0	8400	0,22	0,0366	775	739	1053	922
1x630/35	82,0	9900	0,24	0,0283	884	841	1226	1065
1x800/35	86,0	11600	0,26	0,0221	994	945	1406	1208
1x1000/50	92,0	14000	0,29	0,0176	1169	1106	1695	1465
1x1200/50	97,0	16000	0,31	0,0151	1264	1231	1849	1595
1x1600/70	104,0	20000	0,34	0,0113	1456	1415	2185	1860
1x2000/95	115,0	24000	0,37	0,0090	1618	1570	2487	2089

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 76/132kV with corrugated aluminium sheath



Code: CU/XLPE/Corrugated AL/HDPE

Standards: VDE 0276-632, IEC 60840

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 76/132kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

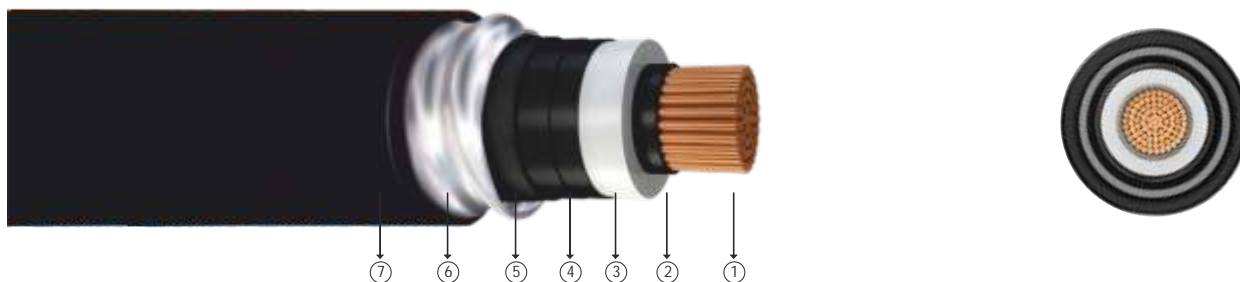
These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

- ① Stranded copper conductors
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Corrugated aluminium sheath
- ⑦ PE outer sheath

DIMENSION AND WEIGHTS			ELECTRICAL PROPERTIES					
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Operation Capacitance (approx)	DC Conductor Resistance at 20°C (Max)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	µF/km	/km	In ground at 20°C	In duct 20°C	In air at 30°C	
							***	**
1x400/35	82,0	8900	0,17	0,0470	675	632	896	792
1x500/35	85,0	10000	0,19	0,0366	767	716	1033	908
1x630/35	89,0	11500	0,21	0,0283	872	811	1200	1045
1x800/35	93,0	13500	0,24	0,0221	979	932	1374	1182
1x1000/50	100,0	15500	0,23	0,0176	1145	1087	1649	1420
1x1200/50	105,0	17500	0,23	0,0151	1233	1212	1801	1539
1x1600/70	112,0	21500	0,25	0,0113	1414	1388	2125	1784
1x2000/95	120,0	25800	0,31	0,0090	1569	1532	2418	2003

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



Code: CU/XLPE/Corrugated AL/HDPE

Standards: VDE 0276-632, IEC 60840

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 89/154 kV  
 Min. bending radius : 20x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

- ① Stranded copper conductors
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Corrugated aluminium sheath
- ⑦ PE outer sheath

DIMENSION AND WEIGHTS			ELECTRICAL PROPERTIES					
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Operation Capacitance (approx)	DC Conductor Resistance at 20°C (Max)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	µF/km	/km	In ground at 20°C	In duct 20°C	In air at 30°C	
							***	**x
1x630/35	96,0	11400	0,19	0,0283	871	829	1193	1043
1x800/35	102,0	13600	0,20	0,0221	977	928	1367	1181
1x1000/50	106,0	16000	0,21	0,0176	1143	1081	1639	1415
1x1200/50	110,0	18500	0,22	0,0151	1232	1208	1790	1535
1x1600/70	120,0	22500	0,23	0,0113	1404	1382	2100	1765
1x2000/95	126,0	26500	0,27	0,0090	1554	1523	2384	1973

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\*x : Trefoil formation  
 Number of system : 1

# 26/45 kV XLPE insulated, radial and longitudinally sealed, single core cables with aluminium conductor



Code: NA2XS(FL)2Y

Standards: VDE 0276-632, IEC 60840

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 26/45kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

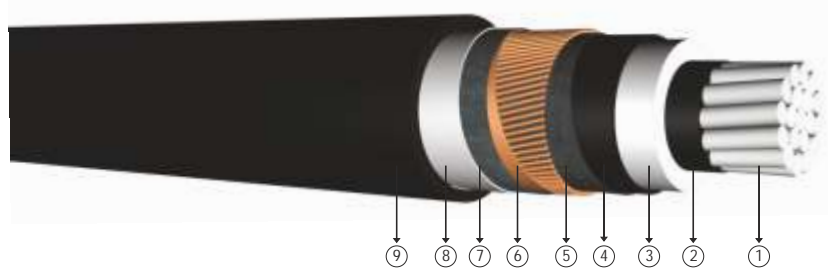
- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Copper screen
- ⑦ Semi conductive swelling tape
- ⑧ PE coated aluminium foil
- ⑨ PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x95/16	42,0	1400	1000	0,320	0,4096	0,609	0,416	0,153	284	256	328	281	
1x120/16	44,0	1500	1000	0,253	0,3238	0,590	0,401	0,165	322	290	378	323	
1x150/25	45,5	1750	1000	0,206	0,2637	0,572	0,389	0,178	355	324	425	365	
1x185/25	47,5	1950	1000	0,164	0,2099	0,556	0,376	0,191	400	366	485	418	
1x240/25	50,0	2200	1000	0,125	0,1600	0,535	0,363	0,209	461	426	572	494	
1x300/25	52,5	2450	1000	0,100	0,1280	0,519	0,351	0,226	516	479	649	564	
1x400/35	55,5	2950	1000	0,0788	0,1009	0,497	0,338	0,252	572	545	737	654	
1x500/35	59,0	3400	1000	0,0605	0,0774	0,481	0,328	0,274	638	614	835	747	
1x630/35	62,5	3900	1000	0,0469	0,0600	0,464	0,317	0,300	728	690	950	851	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 40/69 kV XLPE insulated, radial and longitudinally sealed, single core cables with aluminium conductor



Code: NA2XS(FL)2Y

Standards: VDE 0276-632, IEC 60840

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 40/69 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

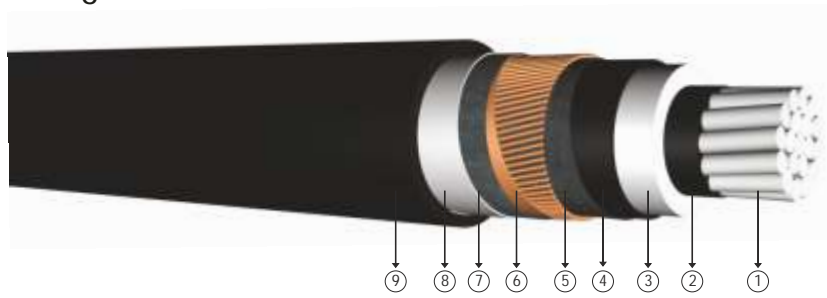
- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Copper screen
- ⑦ Semi conductive swelling tape
- ⑧ PE coated aluminium foil
- ⑨ PE outer sheath

DIMENSION AND WEIGHTS			ELECTRICAL PROPERTIES					
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Operation Capacitance (approx)	DC Conductor Resistance at 20°C (Max)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	µF/km	/km	In ground at 20°C	In duct 20°C	In air at 30°C	
							***	**
1x300/25	61,0	2900	0,19	0,100	480	450	640	510
1x400/35	65,0	3300	0,21	0,0778	550	525	752	614
1x500/35	67,0	4000	0,23	0,0605	630	605	875	669
1x630/35	73,0	4500	0,26	0,0469	720	700	1020	805
1x800/35	77,0	5200	0,28	0,0367	820	800	1180	930
1x1000/50	80,0	6200	0,31	0,0291	930	910	1360	1056
1x1200/50	84,0	6900	0,33	0,0247	1040	1025	1555	1169
1x1600/70	90,0	8500	0,37	0,0212	1210	1179	1834	1432

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



64/110 kV XLPE insulated,  
radial and longitudinally sealed,  
single core cables with aluminium conductor



Code: NA2XS(FL)2Y

Standards: VDE 0276-632, IEC 60840

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 64/110kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

Construction

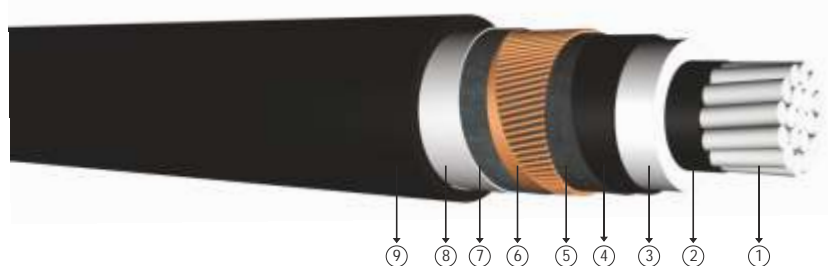
- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Copper screen
- ⑦ Semi conductive swelling tape
- ⑧ PE coated aluminium foil
- ⑨ PE outer sheath

DIMENSION AND WEIGHTS			ELECTRICAL PROPERTIES					
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Operation Capacitance (approx)	DC Conductor Resistance at 20°C (Max)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	µF/km	/km	In ground at 20°C	In duct 20°C	In air at 30°C	
							***	**
1x300/25	70,0	4677	0,19	0,100	407	377	593	527
1x400/35	74,0	5076	0,19	0,0778	485	444	690	627
1x500/35	78,0	5610	0,21	0,0605	523	479	745	677
1x630/35	81,0	6278	0,23	0,0469	591	542	910	844
1x800/35	85,0	6348	0,24	0,0367	665	590	1052	982
1x1000/50	89,0	7853	0,27	0,0291	727	643	1180	1110
1x1200/50	94,0	8792	0,29	0,0247	767	648	1226	1163
1x1600/70	100,0	10337	0,31	0,0212	912	784	1390	1310

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



# 76/132 kV XLPE insulated, radial and longitudinally sealed, single core cables with aluminium conductor



Code: NA2XS(FL)2Y

Standards: VDE 0276-632, IEC 60840

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 76/132kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

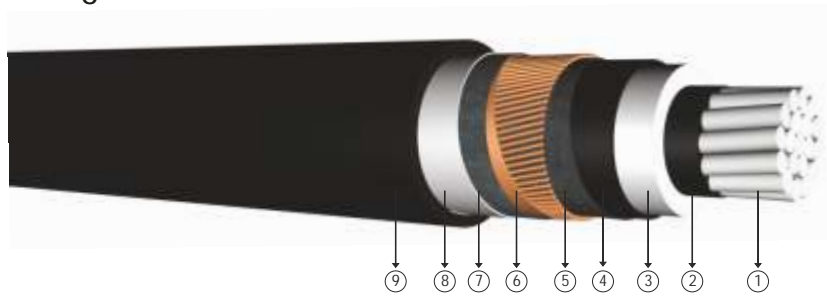
### Construction

- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive swelling tape
- 6 Copper screen
- 7 Semi conductive swelling tape
- 8 PE coated aluminium foil
- 9 PE outer sheath

DIMENSION AND WEIGHTS			ELECTRICAL PROPERTIES					
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Operation Capacitance (approx)	DC Conductor Resistance at 20°C (Max)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	µF/km	/km	In ground at 20°C	In duct 20°C	In air at 30°C	
							***	**
1x400/35	77,0	5533	0,17	0,0778	453	411	690	626
1x500/35	80,0	6034	0,19	0,0605	510	450	770	615
1x630/35	84,0	6740	0,21	0,0469	566	512	907	842
1x800/35	90,0	7756	0,23	0,0367	638	586	1017	982
1x1000/50	94,0	8596	0,23	0,0291	718	647	1186	1098
1x1200/50	97,0	9319	0,25	0,0247	760	674	1260	1162
1x1600/70	104,0	10910	0,27	0,0212	923	841	1362	1221

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

89/154 kV XLPE insulated,  
radial and longitudinally sealed,  
single core cables with aluminium conductor



Code: NA2XS(FL)2Y

Standards: VDE 0276-632, IEC 60840

Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 89/154 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

Construction

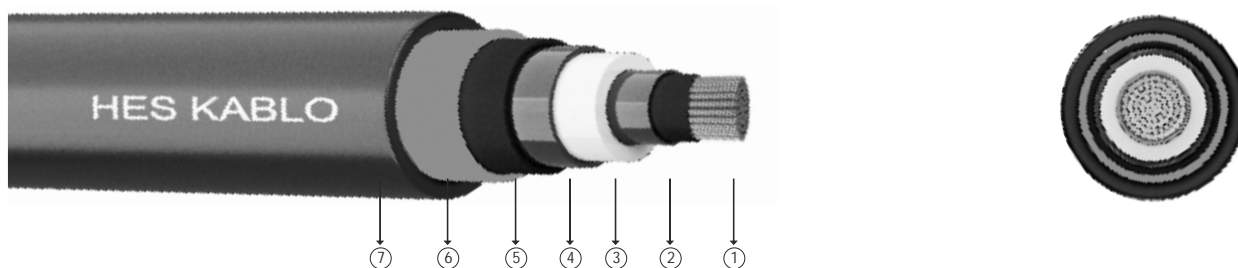
- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive swelling tape
- 6 Copper screen
- 7 Semi conductive swelling tape
- 8 PE coated aluminium foil
- 9 PE outer sheath

DIMENSION AND WEIGHTS			ELECTRICAL PROPERTIES					
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Operation Capacitance (approx)	DC Conductor Resistance at 20°C (Max)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	µF/km	/km	In ground at 20°C	In duct 20°C	In air at 30°C	
							***	**x
1x630/35	98,0	6700	0,19	0,0469	715	701	1009	815
1x800/35	101,0	7500	0,20	0,0367	813	803	1169	935
1x1000/50	105,0	8600	0,21	0,0291	920	910	1340	1060
1x1200/50	108,0	9300	0,22	0,0247	1030	1020	1530	1086
1x1600/70	120,0	11200	0,23	0,0212	1195	1179	1803	1421

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\*x : Trefoil formation  
 Number of system : 1



## 26/45 kV with smooth welded aluminium sheath



Code: AL/XLPE/ATS/HDPE

Standards: VDE 0276-632, IEC 60840

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 26/45kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

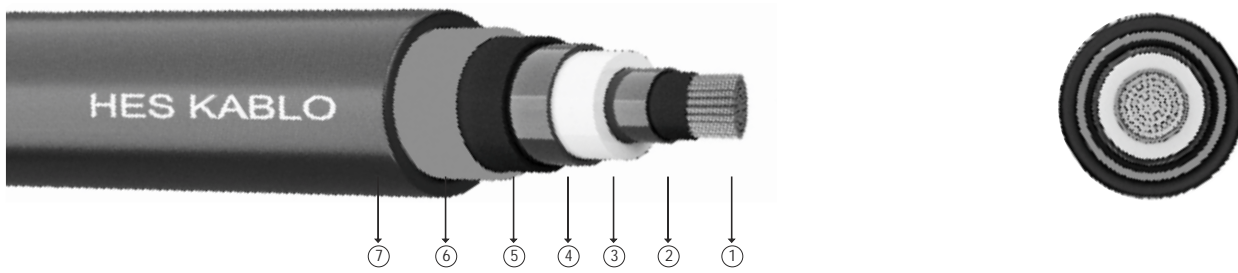
### Construction

- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Smooth welded aluminium sheath
- ⑦ PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x95/16	42,0	1400	1000	0,320	0,4096	0,609	0,416	0,153	284	256	328	281	
1x120/16	44,0	1500	1000	0,253	0,3238	0,590	0,401	0,165	322	290	378	323	
1x150/25	45,5	1750	1000	0,206	0,2637	0,572	0,389	0,178	355	324	425	365	
1x185/25	47,5	1950	1000	0,164	0,2099	0,556	0,376	0,191	400	366	485	418	
1x240/25	50,0	2200	1000	0,125	0,1600	0,535	0,363	0,209	461	426	572	494	
1x300/25	52,5	2450	1000	0,100	0,1280	0,519	0,351	0,226	516	479	649	564	
1x400/35	55,5	2950	1000	0,0788	0,1009	0,497	0,338	0,252	572	545	737	654	
1x500/35	59,0	3400	1000	0,0605	0,0774	0,481	0,328	0,274	638	614	835	747	
1x630/35	62,5	3900	1000	0,0469	0,0600	0,464	0,317	0,300	728	690	950	851	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 40/69 kV with smooth welded aluminium sheath



Code: AL/XLPE/ATS/HDPE

Standards: VDE 0276-632, IEC 60840

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 40/69 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

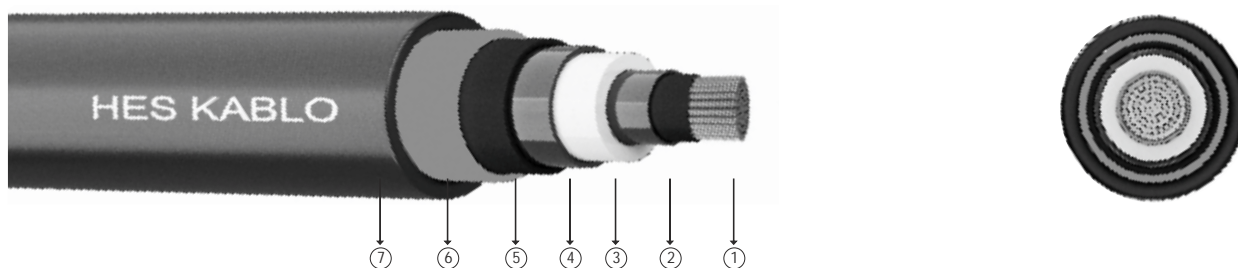
- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Smooth welded aluminium sheath
- ⑦ PE outer sheath

DIMENSION AND WEIGHTS			ELECTRICAL PROPERTIES					
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Operation Capacitance (approx)	DC Conductor Resistance at 20°C (Max)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	µF/km	/km	In ground at 20°C	In duct 20°C	In air at 30°C	
							***	**
1x300/25	61,0	2900	0,19	0,100	480	450	640	510
1x400/35	65,0	3300	0,21	0,0778	550	525	752	614
1x500/35	67,0	4000	0,23	0,0605	630	605	875	669
1x630/35	73,0	4500	0,26	0,0469	720	700	1020	805
1x800/35	77,0	5200	0,28	0,0367	820	800	1180	930
1x1000/50	80,0	6200	0,31	0,0291	930	910	1360	1056
1x1200/50	84,0	6900	0,33	0,0247	1040	1025	1555	1169
1x1600/70	90,0	8500	0,37	0,0212	1210	1179	1834	1432

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



## 64/110 kV with smooth welded aluminium sheath



Code: AL/XLPE/ATS/HDPE

Standards: VDE 0276-632, IEC 60840

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 64/110kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

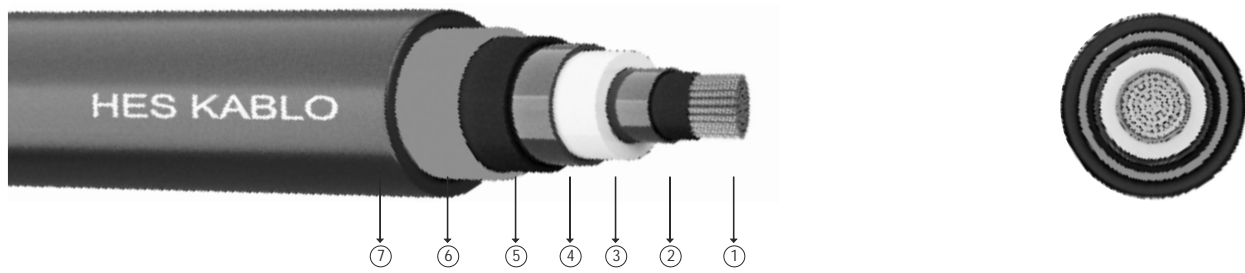
### Construction

- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Smooth welded aluminium sheath
- ⑦ PE outer sheath

DIMENSION AND WEIGHTS			ELECTRICAL PROPERTIES					
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Operation Capacitance (approx)	DC Conductor Resistance at 20°C (Max)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	µF/km	/km	In ground at 20°C	In duct 20°C	In air at 30°C	
							***	**
1x300/25	70,0	4677	0,19	0,100	407	377	593	527
1x400/35	74,0	5076	0,19	0,0778	485	444	690	627
1x500/35	78,0	5610	0,21	0,0605	523	479	745	677
1x630/35	81,0	6278	0,23	0,0469	591	542	910	844
1x800/35	85,0	6348	0,24	0,0367	665	590	1052	982
1x1000/50	89,0	7853	0,27	0,0291	727	643	1180	1110
1x1200/50	94,0	8792	0,29	0,0247	767	648	1226	1163
1x1600/70	100,0	10337	0,31	0,0212	912	784	1390	1310

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 76/132 kV with smooth welded aluminium sheath



Code: AL/XLPE/ATS/HDPE

Standards: VDE 0276-632, IEC 60840

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 76/132kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

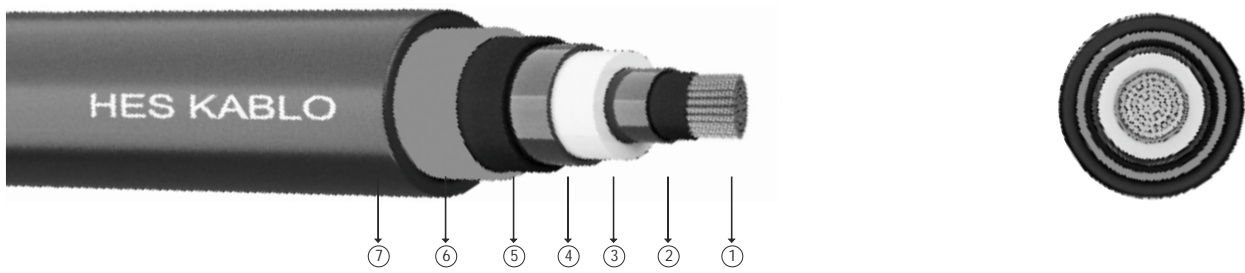
- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Smooth welded aluminium sheath
- ⑦ PE outer sheath

DIMENSION AND WEIGHTS			ELECTRICAL PROPERTIES					
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Operation Capacitance (approx)	DC Conductor Resistance at 20°C (Max)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	µF/km	/km	In ground at 20°C	In duct 20°C	In air at 30°C	
							***	**
1x400/35	77,0	5533	0,17	0,0778	453	411	690	626
1x500/35	80,0	6034	0,19	0,0605	510	450	770	615
1x630/35	84,0	6740	0,21	0,0469	566	512	907	842
1x800/35	90,0	7756	0,23	0,0367	638	586	1017	982
1x1000/50	94,0	8596	0,23	0,0291	718	647	1186	1098
1x1200/50	97,0	9319	0,25	0,0247	760	674	1260	1162
1x1600/70	104,0	10910	0,27	0,0212	923	841	1362	1221

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



## 89/154 kV with smooth welded aluminium sheath



Code: AL/XLPE/ATS/HDPE

Standards: VDE 0276-632, IEC 60840

### Technical Data

Max. operating temperature	: 90°C
Max. short circuit temperature	: 250°C (max. 5 sec.)
Rated voltage	: 89/154 kV
Min. bending radius	: 20 x D
D	: Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Smooth welded aluminium sheath
- ⑦ PE outer sheath

DIMENSION AND WEIGHTS			ELECTRICAL PROPERTIES					
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Operation Capacitance (approx)	DC Conductor Resistance at 20°C (Max)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	µF/km	/km	In ground at 20°C	In duct 20°C	In air at 30°C	
							***	**x
1x630/35	98,0	6700	0,19	0,0469	715	701	1009	815
1x800/35	101,0	7500	0,20	0,0367	813	803	1169	935
1x1000/50	105,0	8600	0,21	0,0291	920	910	1340	1060
1x1200/50	108,0	9300	0,22	0,0247	1030	1020	1530	1086
1x1600/70	120,0	11200	0,23	0,0212	1195	1179	1803	1421

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\*x : Trefoil formation  
 Number of system : 1



# 26/45 kV with corrugated aluminium sheath



Code: AL/XLPE/Corrugated AL/HDPE

Standards: VDE 0276-632, IEC 60840

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 26/45kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Corrugated aluminium sheath
- ⑦ PE outer sheath

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20°C (Max)	DC Conductor Resistance at 90°C (Max)	Operation Inductance (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm <sup>2</sup>	mm	kg/km	m	/km	/km	*** mH/km	** mH/km	µF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x95/16	42,0	1400	1000	0,320	0,4096	0,609	0,416	0,153	284	256	328	281	
1x120/16	44,0	1500	1000	0,253	0,3238	0,590	0,401	0,165	322	290	378	323	
1x150/25	45,5	1750	1000	0,206	0,2637	0,572	0,389	0,178	355	324	425	365	
1x185/25	47,5	1950	1000	0,164	0,2099	0,556	0,376	0,191	400	366	485	418	
1x240/25	50,0	2200	1000	0,125	0,1600	0,535	0,363	0,209	461	426	572	494	
1x300/25	52,5	2450	1000	0,100	0,1280	0,519	0,351	0,226	516	479	649	564	
1x400/35	55,5	2950	1000	0,0788	0,1009	0,497	0,338	0,252	572	545	737	654	
1x500/35	59,0	3400	1000	0,0605	0,0774	0,481	0,328	0,274	638	614	835	747	
1x630/35	62,5	3900	1000	0,0469	0,0600	0,464	0,317	0,300	728	690	950	851	

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\*\* : Trefoil formation  
 Number of system : 1



Code: AL/XLPE/Corrugated AL/HDPE

Standards: VDE 0276-632, IEC 60840

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 40/69 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Corrugated aluminium sheath
- ⑦ PE outer sheath

DIMENSION AND WEIGHTS			ELECTRICAL PROPERTIES					
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Operation Capacitance (approx)	DC Conductor Resistance at 20°C (Max)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	µF/km	/km	In ground at 20°C	In duct 20°C	In air at 30°C	
							***	**
1x300/25	61,0	2900	0,19	0,100	480	450	640	510
1x400/35	65,0	3300	0,21	0,0778	550	525	752	614
1x500/35	67,0	4000	0,23	0,0605	630	605	875	669
1x630/35	73,0	4500	0,26	0,0469	720	700	1020	805
1x800/35	77,0	5200	0,28	0,0367	820	800	1180	930
1x1000/50	80,0	6200	0,31	0,0291	930	910	1360	1056
1x1200/50	84,0	6900	0,33	0,0247	1040	1025	1555	1169
1x1600/70	90,0	8500	0,37	0,0212	1210	1179	1834	1432

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 64/110 kV with corrugated aluminium sheath



Code: AL/XLPE/Corrugated AL/HDPE

Standards: VDE 0276-632, IEC 60840

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 64/110kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Corrugated aluminium sheath
- ⑦ PE outer sheath

DIMENSION AND WEIGHTS			ELECTRICAL PROPERTIES					
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Operation Capacitance (approx)	DC Conductor Resistance at 20°C (Max)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	µF/km	/km	In ground at 20°C	In duct 20°C	In air at 30°C	
							***	**
1x300/25	70,0	4677	0,19	0,100	407	377	593	527
1x400/35	74,0	5076	0,19	0,0778	485	444	690	627
1x500/35	78,0	5610	0,21	0,0605	523	479	745	677
1x630/35	81,0	6278	0,23	0,0469	591	542	910	844
1x800/35	85,0	6348	0,24	0,0367	665	590	1052	982
1x1000/50	89,0	7853	0,27	0,0291	727	643	1180	1110
1x1200/50	94,0	8792	0,29	0,0247	767	648	1226	1163
1x1600/70	100,0	10337	0,31	0,0212	912	784	1390	1310

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1



Code: AL/XLPE/Corrugated AL/HDPE

Standards: VDE 0276-632, IEC 60840

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 76/132kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

- ① Stranded aluminium conductor
- ② Inner semi conductive layer
- ③ XLPE insulation
- ④ Outer semi conductive layer
- ⑤ Semi conductive swelling tape
- ⑥ Corrugated aluminium sheath
- ⑦ PE outer sheath

DIMENSION AND WEIGHTS			ELECTRICAL PROPERTIES					
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Operation Capacitance (approx)	DC Conductor Resistance at 20°C (Max)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	µF/km	/km	In ground at 20°C	In duct 20°C	In air at 30°C	
							***	**
1x400/35	77,0	5533	0,17	0,0778	453	411	690	626
1x500/35	80,0	6034	0,19	0,0605	510	450	770	615
1x630/35	84,0	6740	0,21	0,0469	566	512	907	842
1x800/35	90,0	7756	0,23	0,0367	638	586	1017	982
1x1000/50	94,0	8596	0,23	0,0291	718	647	1186	1098
1x1200/50	97,0	9319	0,25	0,0247	760	674	1260	1162
1x1600/70	104,0	10910	0,27	0,0212	923	841	1362	1221

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1

# 89/154 kV with corrugated aluminium sheath



Code: AL/XLPE/Corrugated AL/HDPE

Standards: VDE 0276-632, IEC 60840

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 89/154 kV  
 Min. bending radius : 20 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. Swellable tape prevents cable damage by stopping water or moisture if water ingress to the cable.

### Construction

- 1 Stranded aluminium conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive swelling tape
- 6 Corrugated aluminium sheath
- 7 PE outer sheath

DIMENSION AND WEIGHTS			ELECTRICAL PROPERTIES					
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Operation Capacitance (approx)	DC Conductor Resistance at 20°C (Max)	Current Carrying Capacity (A)			
mm <sup>2</sup>	mm	kg/km	µF/km	/km	In ground at 20°C	In duct 20°C	In air at 30°C	
							***	***
1x630/35	98,0	6700	0,19	0,0469	715	701	1009	815
1x800/35	101,0	7500	0,20	0,0367	813	803	1169	935
1x1000/50	105,0	8600	0,21	0,0291	920	910	1340	1060
1x1200/50	108,0	9300	0,22	0,0247	1030	1020	1530	1086
1x1600/70	120,0	11200	0,23	0,0212	1195	1179	1803	1421

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7  
 In air : 30°C, load factor 1,0  
 \*\*\* : Flat formation, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\*\* : Trefoil formation  
 Number of system : 1



High quality  
aluminum conductors!



Reliable technology

## Aluminium Rod

Aluminum, which is one of the most basic raw materials used in the production of the cables and conductors with copper, is produced in the new facilities established by HES Kablo in the Kayseri Industrial Park.

Producing the Aluminium rods in the HES facilities ensures that keeping the quality of Aluminium completely under control as it is in copper and minimizing the dependence to the external factors to the lowest possible levels. Production is carried out by converting the Aluminium ingots in to wire rods through the continuous casting technique. The Aluminium rods thus produced offer the highest quality in cables and overhead conductors with their excellent mechanical and electrical properties.

Product: Aluminium rod

Diameter:  $9,5 \pm 0,5$  and  $12 \pm 0,5$  mm

Packaging: The Aluminium rods are wound in large coils, tied with plastic tapes and presented to our customers on wooden pallets

Weight: 2000 kg  $\pm$  10

### Guaranteed Chemical Analysis: EN AW 1370 (EAI 99,7)

Al (%)	Fe (%)	Si (%)	Cu (%)	Zn (%)	Ti (%)	Mn (%)	Mg (%)	Cr (%)	B (%)
(Min)	(Max)	(Max)	(Max)	(Max)	(Max)	(Max)	(Max)	(Max)	(Max)
99,7	0,20	0,10	0,020	0,040	0,010	0,010	0,020	0,010	0,020

### Mechanical and Electrical Specifications:

Definition	Strength	Resistance (Mpa)	Resistivity (ohm.mm <sup>2</sup> /m)	Conductivity (%IACS)
EN AW 1370 (AA 1370)	H11	80-95	0,02785	61,90
	H12	95-110	0,02801	61,55
	H13	105-120	0,02801	61,55
	H14	115-130	0,02801	61,55

For any other special requests, please contact HES KABLO





## Properties

Properties Aluminium conductors can be divided into two groups : "All Aluminium Conductors" and "Steel Reinforced Aluminium Conductors". Aluminium wires, used to produce aluminium conductors are obtained by cold-drawing (hard or annealed) method from high quality rods.

All Aluminium Conductors - AAC

TS EN 50182, ASTM B-230, ASTM B-231, IEC 61089, CSAC 48  
DIN 48201

Aluminium Conductors Steel Reinforced - ACSR

TS EN 50182, ASTM B-230, ASTM B-232, IEC 61089  
ASTM B-498, DIN 48204, BS 215

All Aluminium Alloy Conductors - AAAC

TS EN 50182, ASTM B-299, IEC 61089, CSA C49.1  
B 231, BS 215, DIN 48201

Aluminium Alloy Conductors Steel Reinforced - AACSR

TS EN 50182, ASTM B-711, IEC 61089

manufactured in accordance with customer  
specifications or standards.





# AAC - All Aluminium Conductors, American Sizes ASTM B231 / B231M



Code Words	Wire Diameter	Overall Diameter	Cross Section	Approximate Weight	Breaking Load	DC Resistance	Current Carrying Capacity
	mm	mm	mm <sup>2</sup>	kg/km	kN	/km	A
Rose	7/1,96	5,88	21,10	58,2	3,91	1,3620	138
Iris	7/2,47	7,41	33,60	92,6	5,99	0,8574	185
Pansy	7/2,78	8,34	42,40	116,6	7,30	0,6801	214
Poppy	7/3,12	9,36	53,50	147,2	8,84	0,5390	247
Aster	7/3,50	10,50	67,40	185,7	11,10	0,4276	286
Phlox	7/3,93	11,79	85,00	233,9	13,50	0,3390	331
Oxlip	7/4,42	13,26	107,20	295,2	17,00	0,2688	383
Valerian	19/2,91	14,55	126,70	348,6	20,70	0,2275	425
Sneezewort	7/4,80	14,40	126,70	348,8	20,10	0,2275	425
Laurel	19/3,10	15,05	135,20	372,2	22,10	0,2133	443
Daisy	7/4,96	14,88	135,20	372,3	21,40	0,2133	443
Peony	19/3,19	15,95	152,00	418,3	24,30	0,1896	478
Tulip	19/3,38	16,90	170,50	469,5	27,30	0,1695	513
Daffodil	19/3,45	17,25	177,30	487,9	28,40	0,1625	526
Canna	19/3,67	18,35	201,40	554,9	31,60	0,1432	570
Goldentuft	19/3,91	19,55	228,00	627,6	35,00	0,1264	616
Syringa	37/2,88	20,16	242,00	664,8	38,60	0,1193	639
Cosmos	19/4,02	20,10	242,00	664,8	37,00	0,1193	639
Hyacinth	37/2,95	20,65	253,30	696,8	40,50	0,1137	658
Zinnia	19/4,12	20,60	253,30	697,1	38,90	0,1137	658
Dahlia	19/4,35	21,75	282,00	775,8	43,30	0,1023	703
Mistletoe	37/3,12	21,84	282,00	775,7	44,30	0,1023	704
Meadowsweet	37/3,23	22,61	304,00	836,3	47,50	0,0948	738
Orchid	37/3,33	23,31	323,30	886,9	50,40	0,0893	765
Heuchera	37/3,37	23,59	329,40	907,4	51,70	0,0875	775
Flag	61/2,72	24,48	354,70	975,8	57,10	0,0813	812
Varbena	37/3,49	24,43	354,70	975,7	55,40	0,0813	812
Nasturtium	61/2,75	24,75	362,60	998,5	58,40	0,0795	823
Violet	37/3,53	24,71	362,60	998,5	56,70	0,0795	823
Cattail	61/2,82	25,38	380,00	1046,0	60,30	0,0759	847
Petunia	37/3,62	25,34	380,00	1046,0	58,60	0,0759	847
Lilac	61/2,90	26,10	402,80	1110,0	63,80	0,0715	878
Arbustus	37/3,72	26,04	402,80	1109,0	61,80	0,0715	878
Snapdragon	61/3,09	27,81	456,00	1256,0	70,80	0,0632	948
Cockscomb	37/3,96	27,72	456,00	1256,0	68,40	0,0632	948
Goldenrod	61/3,18	28,62	483,40	1331,0	75,00	0,0596	982
Magnolia	37/4,08	28,56	483,40	1331,0	72,60	0,0596	982
Camellia	61/3,25	29,25	506,70	1394,0	78,30	0,0596	1010
Hawkweed	37/4,18	29,26	506,70	1395,0	76,20	0,0596	1010
Larkspur	61/3,31	29,79	523,70	1442,0	81,30	0,0550	1031
Bluebell	37/4,25	29,75	523,70	1441,0	78,80	0,0550	1031
Marigold	61/3,43	30,87	564,00	1553,0	87,30	0,0511	1079
Hawthorn	61/3,55	31,95	604,20	1662,0	93,50	0,0447	1124
Narcissus	61/3,67	33,03	644,50	1774,0	98,10	0,0447	1169
Columbine	61/3,78	34,02	694,80	1884,0	104,00	0,0421	1212
Carnation	61/3,89	35,01	725,10	1997,0	108,00	0,0398	1253
Gladiolus	61/4,00	36,00	765,41	2108,0	114,00	0,0376	1294
Coreopsis	61/4,10	36,90	805,70	2216,0	120,00	0,0358	1333
Jessamine	61/4,30	38,70	886,70	2442,0	132,00	0,0325	1408
Cowslip	91/3,77	41,47	1013,00	2787,0	153,00	0,0284	1518
Sagebrush	91/3,99	43,89	1140,00	3166,0	167,00	0,0255	1612
Lupine	91/4,21	46,31	1267,00	3519,0	186,00	0,0230	1706
Bitterroot	91/4,42	48,62	1393,00	3872,0	205,00	0,0209	1793
Trillium	127/3,90	50,70	1520,00	4226,0	223,00	0,0191	1874
Bluebonnet	127/4,22	54,86	1773,00	4977,0	261,00	0,0166	2024



# AAC - All Aluminium Conductors, Canadian Sizes CSA C 49

Code Words	Wire Diameter	Overall Diameter	Cross Section	Approximate Weight	Breaking Load	DC Resistance	Current Carrying Capacity
	mm	mm	mm <sup>2</sup>	kg/km	kN	/km	A
Rose	7/1,96	5,89	21,16	58	4,1	1,3510	104
Lily	7/2,20	6,61	26,65	73	5,0	1,0720	124
Iris	7/2,47	7,42	33,61	92	6,2	0,8497	136
Pansy	7/2,77	8,33	42,39	116	7,6	0,6739	157
Poppy	7/3,12	9,36	53,48	146	9,2	0,5341	180
Aster	7/3,50	10,51	67,42	184	11,6	0,4236	207
Phlox	7/3,93	11,80	85,03	232	14,1	0,3360	237
Oxlip	7/4,41	13,25	107,23	293	17,7	0,2664	273
Daisy	7/4,96	14,90	135,16	369	22,4	0,2113	313
Valerian	19/2,91	14,57	126,71	348	22,3	0,2274	305
Laurel	19/3,01	15,05	135,16	372	23,8	0,2129	317
Peony	19/3,19	15,97	152,00	417	26,2	0,1880	340
Tulip	19/3,38	16,91	170,45	467	29,4	0,1638	364
Daffodil	19/3,44	17,24	177,35	488	30,6	0,1624	373
Canna	19/3,67	18,36	201,42	554	34,0	0,1427	401
-	19/3,68	18,43	202,71	558	34,2	0,1421	402
Goldentuft	19/3,90	19,55	228,00	626	37,7	0,1263	432
Cosmos	19/4,02	20,12	241,68	664	40,0	0,1188	447
Zinnia	19/4,12	20,60	253,35	695	41,9	0,1132	459
Dahlia	19/4,34	21,73	282,00	774	46,7	0,1018	489
-	37/3,09	21,67	278,71	768	48,0	0,1033	485
Meadowsweet	37/3,23	22,63	304,00	838	52,4	0,0948	513
Orchid	37/3,33	23,31	322,26	888	55,6	0,0896	531
Heuchera	37/3,36	23,56	329,35	908	56,8	0,0876	538
Varbena	37/3,49	24,45	354,71	978	61,1	0,0814	562
Violet	37/3,53	24,74	362,58	1000	62,5	0,0797	570
Patunia	37/3,61	25,32	380,00	1048	64,2	0,0758	585
Arbutus	37/3,72	26,06	402,84	1112	68,1	0,0715	605
-	37/3,73	26,14	405,35	1118	68,5	0,0712	608
Anemone	37/3,90	27,33	443,10	1222	73,3	0,0653	641
Cockscomb	37/3,96	27,73	456,06	1257	75,4	0,0633	657
Magnolia	37/4,07	28,55	483,42	1333	80,0	0,0597	675
Hawkweed	37/4,17	29,23	506,71	1396	83,8	0,0568	693
Bluebell	37/4,24	29,72	523,68	1445	86,6	0,0551	706
-	61/3,41	30,70	557,35	1539	96,1	0,0518	733
Marigold	61/3,43	30,89	563,93	1559	97,2	0,0512	738
Hawthorn	61/3,55	31,95	604,26	1670	104,1	0,0479	767
-	61/3,56	32,08	608,06	1679	102,7	0,0476	771
Narcissus	61/3,66	33,02	644,51	1781	108,8	0,0450	797
-	61/3,70	33,37	658,71	1818	111,2	0,0440	807
Columbine	61/3,78	34,01	684,84	1893	115,6	0,0423	825
-	61/3,84	34,63	709,42	1958	117,4	0,0407	842
Carnation	61/3,89	35,03	725,10	2004	119,9	0,0400	854
-	61/3,98	35,85	760,06	2098	125,7	0,0381	877
Gladiolus	61/3,99	35,99	765,35	2116	126,5	0,0377	881
Coreopsis	61/4,09	36,91	805,68	2226	133,2	0,0358	907
-	61/4,11	37,04	810,71	2238	134,1	0,0358	910
-	61/4,23	38,15	861,42	2378	142,6	0,0335	942
-	61/3,57	39,28	912,06	2521	153,9	0,0316	975

## AAC - All Aluminium Conductors, German Sizes DIN EN 50182



Code	Wire Diameter	Overall Diameter	Cross Section	Approximate Weight	Breaking Load	DC Resistance	Current Carrying Capacity
	mm	mm	mm <sup>2</sup>	kg/km	kN	/km	A
16-AL1	7/1,70	5,1	15,9	43,4	3,02	1,7986	110
24-AL1	7/2,10	6,3	24,2	66,3	4,36	1,1787	144
34-AL1	7/2,50	7,5	34,4	93,9	6,01	0,8317	180
49-AL1	7/3,00	9,0	49,5	135,2	8,41	0,5776	225
48-AL1	19/1,80	9,0	48,3	132,9	8,94	0,5944	225
66-AL1	19/2,10	10,5	65,8	180,9	11,85	0,4367	270
93-AL1	19/2,50	12,5	93,3	256,3	16,32	0,3081	340
117-AL1	19/2,80	14,0	117,0	321,5	19,89	0,2456	390
147-AL1	37/2,25	15,8	147,1	405,7	26,48	0,1960	455
182-AL1	37/2,50	17,5	181,6	500,9	31,78	0,1588	520
243-AL1	61/2,25	20,3	242,5	671,1	43,66	0,1193	625
299-AL1	61/2,50	22,5	299,4	828,5	52,40	0,0966	710
400-AL1	61/2,89	26,0	400,1	1107,1	68,02	0,0723	855
500-AL1	61/3,23	29,1	499,8	1382,9	82,47	0,0579	990
626-AL1	91/2,69	32,6	626,2	1739,7	109,45	0,0464	1140
802-AL1	91/3,35	36,9	802,1	2218,3	132,34	0,0362	1340
1000-AL1	91/3,74	41,1	999,7	2777,3	159,95	0,0291	1540

## AAC - All Aluminium Conductors, Austria Sizes DIN EN 50182

Code Word	Stranding Wire Diameter	Overall Diameter	Sectional Area	Approximate Weight	Breaking Load	DC Resistance	Current Carrying Capacity
	mm	mm	mm <sup>2</sup>	kg/km	kN	/km	A
24-AL1	7/2,10	6,3	24,2	66,3	4,36	1,1787	144
34-AL1	7/2,50	7,5	34,4	93,9	6,01	0,8317	180
49-AL1	7/3,00	9,0	49,5	135,2	8,41	0,5776	225
66-AL1	19/2,10	10,5	65,8	180,9	11,85	0,4367	270
93-AL1	19/2,50	12,5	93,3	256,3	16,32	0,3081	340
117-AL1	19/2,80	14,0	117,0	321,5	19,89	0,2456	390
147-AL1	37/2,25	15,8	147,1	405,7	26,48	0,1960	455
182-AL1	37/2,50	17,5	181,6	500,9	31,78	0,1588	520
243-AL1	61/2,25	20,3	242,5	671,1	43,66	0,1193	625
299-AL1	61/2,50	22,5	299,4	828,5	52,40	0,0966	710
400-AL1	61/2,89	26,0	400,1	1107,1	68,02	0,0723	855
452-AL1	61/3,07	27,6	451,5	1249,3	74,50	0,0641	925
500-AL1	61/3,23	29,1	499,8	1382,9	82,47	0,0579	990
626-AL1	91/2,96	32,6	626,2	1739,7	106,45	0,0464	1140
802-AL1	91/3,35	36,9	802,1	2228,3	132,34	0,0362	1340
1000-AL1	91/3,74	41,1	997,7	2777,3	159,95	0,0291	1540



# ACSR - Aluminium Conductors Steel Reinforced, American Sizes ASTM B 232/B 232M

Code Words	Wire Diameter		Overall Diameter	Cross Section			Approx. Weight	Breaking Load	DC Resistance	Current Carrying Capacity
	Aluminium	Steel		Aluminium	Steel	Total				
	mm	mm	mm	mm <sup>2</sup>	mm <sup>2</sup>	mm <sup>2</sup>	kg/km	kN	/km	A
Turkey	6/1,68	1/1,68	5,03	13,30	2,22	15,52	53,7	5,3	2,1030	105
Swan	6/2,12	1/2,12	6,35	21,18	3,53	24,71	85,3	8,3	1,3222	140
Swanate	7/1,96	1/2,62	6,53	21,12	5,39	26,51	99,6	10,5	1,3090	140
Sparrow	6/2,67	1/2,67	8,03	33,59	5,60	39,19	136	12,7	0,8333	184
Sparate	7/2,47	1/3,3	8,26	33,54	8,55	42,09	159	15,4	0,8235	184
Robin	6/3,00	1/3,00	8,99	42,41	7,07	49,48	171	15,8	0,6594	212
Raven	6/3,37	1/3,37	10,11	53,52	8,92	62,44	216	19,5	0,5216	242
Quail	6/3,78	1/3,78	11,35	67,33	11,22	78,55	272	23,6	0,4134	276
Pigeon	6/4,25	1/4,25	12,75	85,12	14,19	99,30	343	29,5	0,3281	315
Penguin	6/4,77	1/4,77	14,30	107,22	17,87	125,09	433	37,2	0,2608	357
Waxwing	18/3,09	1/3,09	15,47	133,98	7,50	142,48	430	30,6	0,2110	449
Partridge	26/2,57	7/2,00	16,31	134,87	21,99	156,87	546	50,3	0,2090	475
Ostrich	26/2,73	7/2,12	17,27	152,19	24,71	176,90	613	56,5	0,1860	492
Merlin	18/3,47	1/3,47	17,37	170,22	9,46	179,68	543	38,6	0,1673	519
Linnet	26/2,89	7/2,25	18,29	170,55	27,83	198,39	687	62,7	0,1657	529
Oriole	30/2,69	7/2,69	18,82	170,50	39,78	210,28	783	77,0	0,1647	535
Chickadee	18/3,77	1/3,77	18,87	200,93	11,16	212,09	641	44,2	0,1417	576
Brant	24/3,27	7/2,18	19,61	201,56	26,13	227,68	761	65,0	0,1411	584
Ibis	26/3,14	7/2,44	19,89	201,34	32,73	234,07	812	72,5	0,1404	587
Lark	30/2,92	7/2,92	20,47	200,90	46,88	247,77	925	90,3	0,1394	594
Pelican	18/4,14	1/4,14	20,68	242,31	13,46	255,77	770	52,5	0,1181	646
Flicker	24/3,58	7/2,39	21,49	241,58	31,40	272,99	913	76,5	0,1175	655
Hawk	26/3,44	7/2,67	21,79	241,65	39,19	280,84	975	86,8	0,1168	659
Hen	30/3,20	7/3,20	22,43	241,27	56,30	297,57	1111	105,9	0,1161	666
Osprey	18/4,47	1/4,47	22,33	282,47	15,69	298,17	898	61,0	0,1010	711
Parakeet	24/3,87	7/2,58	23,22	282,31	36,60	318,90	1066	88,0	0,1007	721
Dove	26/3,72	7/2,89	23,55	282,59	45,92	328,50	1139	100,5	0,1004	726
Eagle	30/3,46	7/3,46	24,21	282,07	65,82	347,89	1296	123,6	0,0994	734
Peacock	24/4,03	7/2,69	24,21	306,13	39,78	345,92	1159	96,0	0,0925	760
Squab	26/3,87	7/3,01	24,54	305,83	49,81	355,64	1237	108,0	0,0922	765
Wood Duck	30/3,61	7/3,61	25,25	307,06	71,65	378,71	1408	128,5	0,0915	774
Teal	30/3,61	19/2,16	25,25	307,06	69,62	376,68	1397	133,4	0,0915	773
Kingbird	18/4,78	1/4,78	23,88	323,01	17,95	340,96	1027	69,8	0,0886	773
Swift	36/3,38	1/3,38	23,62	323,02	8,97	331,99	956	60,9	0,0889	769
Rook	24/4,14	7/2,76	24,82	323,07	41,88	364,95	1217	97,8	0,0879	784
Grosbeak	26/3,97	7/3,09	25,15	321,84	52,49	374,34	1301	112,0	0,0876	789
Scoter	30/3,70	7/3,70	25,88	322,56	75,26	397,83	1481	135,1	0,0840	798
Egret	30/3,70	19/2,22	25,88	322,56	73,54	396,11	1469	140,0	0,0873	798
Flamingo	24/4,23	7/2,82	25,40	337,27	43,72	380,99	1277	105,3	0,0840	807
Gannet	26/4,07	7/3,16	25,76	338,26	54,90	393,16	1363	117,3	0,0837	812
Stilt	24/4,39	7/2,92	26,31	363,27	46,88	410,15	1370	113,3	0,0784	844
Starling	26/4,21	7/3,28	26,70	361,93	59,15	421,08	1464	126,2	0,0781	849
Redwing	30/3,92	19/2,35	27,46	362,06	82,41	444,47	1651	153,8	0,0774	859

# ACSR - Aluminium Conductors Steel Reinforced, American Sizes ASTM B 232/B 232M



Code Words	Wire Diameter		Overall Diameter	Cross Section			Approx. Weight	Breaking Load	DC Resistance	Current Carrying Capacity
	Aluminium	Steel		Aluminium	Steel	Total				
	mm	mm	mm	mm <sup>2</sup>	mm <sup>2</sup>	mm <sup>2</sup>	kg/km	kN	/km	A
Coot	36/3,77	1/3,77	26,42	401,86	11,16	413,02	1198	74,7	0,07397	884
Tern	45/3,38	7/2,25	27,00	403,77	27,83	431,60	1332	98,3	0,07192	887
Condor	54/3,08	7/3,08	27,74	402,33	52,15	454,49	1521	125,4	0,07192	889
Cuckoo	24/4,62	7/3,08	27,74	402,33	52,15	454,49	1522	124,1	0,07190	887
Drake	26/4,44	7/3,45	28,14	402,56	65,44	468,00	1626	140,1	0,07192	907
Mallard	30/4,14	19/2,48	28,96	403,84	91,78	495,62	1836	170,8	0,07208	918
Ruddy	45/3,59	7/2,40	28,73	455,50	31,67	487,17	1507	108,3	0,06356	958
Canary	54/3,28	7/3,28	29,51	456,28	59,15	515,43	1723	141,9	0,06352	961
Rail	45/3,70	7/2,47	29,51	483,84	33,54	517,39	1598	115,2	0,05994	993
Cardinal	54/3,38	7/3,38	30,38	484,53	62,81	547,33	1826	150,3	0,05994	996
Ortolan	45/3,85	7/2,57	30,78	523,87	36,31	560,18	1731	123,2	0,05531	1043
Curllew	54/3,51	7/3,51	31,62	522,51	67,73	590,25	1978	162,8	0,05531	1047
Bluejay	45/4,00	7/2,66	31,98	565,49	38,90	604,39	1866	132,6	0,05161	1092
Finch	54/3,65	19/2,19	32,84	565,03	71,57	636,60	2128	173,9	0,05161	1093
Bunting	45/4,14	7/2,76	33,07	605,76	41,88	647,64	1997	141,9	0,04820	1139
Grackle	54/3,77	19/2,27	33,99	602,79	76,89	679,68	2278	185,9	0,04820	1140
Bittern	45/4,27	7/2,85	34,16	644,40	44,66	689,06	2131	151,7	0,04518	1184
Pheasant	54/3,90	19/2,34	35,10	645,08	81,71	726,79	2431	193,9	0,04518	1187
Dipper	45/4,39	7/2,93	35,20	685,39	47,20	728,33	2263	161,0	0,04259	1229
Martin	54/4,02	19/2,41	36,17	685,39	86,67	772,06	2582	205,9	0,04259	1232
Bobolink	45/4,53	7/3,02	36,25	725,27	50,14	775,41	2397	170,8	0,04016	1272
Plover	54/4,14	19/2,48	37,21	726,92	91,78	818,70	2735	218,0	0,04016	1275
Nuthatch	45/4,65	7/3,10	37,24	764,20	52,83	817,04	2530	178,4	0,03802	1313
Parrot	54/4,25	19/2,55	38,23	766,06	97,03	863,09	2884	230,4	0,03802	1318
Lapwing	45/4,78	7/3,18	38,20	807,53	55,60	863,12	2664	187,3	0,03612	1354
Falcon	54/4,36	19/2,62	39,24	806,23	102,43	908,66	3039	242,9	0,03612	1359
Chukar	84/3,70	19/2,22	40,69	903,18	73,54	976,72	3083	228,2	0,03228	1453
Bluebird	84/4,07	19/2,44	44,75	1092,84	88,84	1181,69	3736	268,7	0,02667	1623
Kiwi	72/4,41	7/2,94	44,07	1099,76	47,52	1147,28	3426	222,0	0,02667	1607





# ACSR - Aluminium Conductors Steel Reinforced, Canadian Sizes CSA C 49

Code Words	Wire Diameter		Overall Diameter	Cross Section			Approx. Weight	Breaking Load	DC Resistance	Current Carrying Capacity
	Aluminium	Steel		Aluminium	Steel	Total				
	mm	mm	mm	mm <sup>2</sup>	mm <sup>2</sup>	mm <sup>2</sup>	kg/km	kN	/km	A
Wren	6/1,33	1/1,33	3,99	8,39	1,42	9,81	34	3,3	3,4226	63
Warbler	6/1,50	1/1,50	4,50	10,59	1,34	11,93	43	4,2	2,7139	67
Turkey	6/1,68	1/1,68	5,04	13,29	2,19	15,48	54	5,2	2,1535	86
Thrush	6/1,89	1/1,89	5,67	16,77	2,77	19,54	68	6,5	1,7077	93
Swan	6/2,12	1/2,12	6,36	21,16	3,55	24,71	85	8,2	1,3537	109
Swallow	6/2,38	1/2,38	7,14	26,65	4,45	31,09	108	10,0	1,0738	126
Sparrow	6/2,67	1/2,67	8,01	33,61	5,61	39,22	136	12,4	0,8504	140
Robin	6/3,00	1/3,00	9,00	42,39	7,10	49,49	171	15,5	0,6752	162
Raven	6/3,37	1/3,37	10,11	53,48	8,90	62,38	215	19,0	0,5351	186
Quail	6/3,78	1/3,78	11,34	67,42	11,23	78,65	273	10,8	0,4245	211
Pigeon	6/4,25	1/4,25	12,75	85,03	14,19	99,22	343	29,7	0,3366	241
Penguin	6/4,77	1/4,77	14,31	107,23	17,87	125,10	433	37,5	0,2671	276
Owl	6/5,36	7/1,74	16,09	135,16	17,55	152,71	508	42,5	0,2119	322
Waxwing	18/3,09	1/3,09	15,15	135,16	7,48	142,64	430	31,5	0,2126	319
Partridge	26/2,57	7/2,00	16,28	135,16	22,00	157,16	545	50,0	0,2136	321
Phoebe	18/3,28	1/3,28	16,40	152,00	8,45	160,45	483	35,5	0,1893	341
Ostrich	26/2,73	7/2,12	17,28	152,00	24,71	176,71	613	56,2	0,1898	343
Piper	30/2,54	7/2,54	17,78	152,00	35,48	187,48	697	68,6	0,1903	348
Merlin	18/3,47	1/3,47	17,35	170,45	9,48	179,93	543	39,8	0,1686	364
Linnet	26/2,89	7/2,25	18,31	170,45	27,81	198,36	687	62,5	0,1696	368
Oriole	30/2,69	7/2,69	18,83	170,45	39,81	210,36	783	75,8	0,1696	370
Chickadee	18/3,77	1/3,77	18,85	201,42	11,16	212,58	641	46,3	0,1430	402
Ibis	26/3,14	7/2,44	19,88	201,42	32,77	234,19	813	72,0	0,1434	404
Lark	30/2,92	7/2,92	20,44	201,42	46,97	248,39	923	88,8	0,1437	410
Pelican	18/4,14	1/4,14	20,70	241,68	13,42	255,10	769	54,8	0,1191	449
-	22/3,74	7/2,08	21,20	241,68	23,74	265,42	853	68,6	0,1194	452
Hawk	26/3,44	7/2,67	21,77	241,68	39,42	281,10	975	86,5	0,1194	450
Hen	30/3,20	7/3,20	22,40	241,68	56,39	298,17	1108	103,9	0,1198	453
Heron	30/3,28	7/3,28	22,96	253,35	59,10	312,45	1162	108,8	0,1142	469
-	22/4,04	7/2,24	22,88	282,00	27,68	309,68	993	79,1	0,1024	496
Dove	26/3,72	7/2,89	23,55	282,00	45,94	327,94	1137	99,9	0,1024	495
Eagle	30/3,46	7/3,46	24,22	282,00	65,81	347,81	1293	121,2	0,1027	497
-	22/4,21	7/2,34	23,86	306,58	30,07	336,65	1080	84,9	0,0942	519
Duck	54/2,69	7/2,69	24,21	306,58	39,81	346,39	1159	100,1	0,0945	520
-	22/4,32	7/2,40	24,48	322,26	31,61	353,87	1135	84,8	0,0896	532
Grosbeak	26/3,97	7/3,09	25,15	322,26	52,45	374,71	1299	111,2	0,0896	530
Egret	30/3,70	19/2,22	25,90	322,26	73,55	395,81	1467	140,6	0,0896	542
Goose	54/2,76	7/2,76	24,84	322,26	41,74	364,00	1217	105,2	0,0899	534
-	42/3,20	7/1,78	24,54	337,74	17,35	355,09	1068	78,6	0,0856	546
Gull	54/2,82	7/2,82	25,38	337,74	43,81	381,55	1277	109,2	0,0856	553
Starling	26/4,21	7/3,28	26,68	362,58	59,03	421,61	1462	125,0	0,0797	575
Redwing	30/3,92	19/2,35	27,43	362,58	82,58	445,16	1648	153,9	0,0797	581
-	42/3,31	7/1,84	25,38	362,58	18,65	381,23	1148	84,3	0,0797	573
Crow	54/2,92	7/2,92	26,28	362,58	46,97	409,56	1369	117,2	0,0797	577
Drake	26/4,44	7/3,45	28,11	402,84	65,61	468,45	1624	139,0	0,0715	611
Mallard	30/4,14	19/2,48	28,96	402,80	91,84	494,64	1832	171,0	0,0719	618
-	42/3,50	7/1,94	26,82	402,80	20,71	423,51	1274	93,6	0,0719	610
Condore	54/3,08	7/3,08	27,72	402,80	52,19	455,99	1521	127,0	0,0719	615
-	42/3,67	7/2,04	28,14	443,10	22,84	465,94	1402	102,0	0,0653	645
Crane	54/3,23	7/3,23	29,07	443,10	57,48	500,58	1674	133,0	0,0653	649
-	42/3,72	7/2,07	28,53	456,10	23,42	479,52	1442	105,0	0,0633	655

# ACSR - Aluminium Conductors Steel Reinforced, Canadian Sizes CSA C 49



Code Words	Wire Diameter		Overall Diameter	Cross Section			Approx. Weight	Breaking Load	DC Resistance	Current Carrying Capacity
	Aluminium	Steel		Aluminium	Steel	Total				
	mm	mm	mm	mm <sup>2</sup>	mm <sup>2</sup>	mm <sup>2</sup>	kg/km	kN	/km	A
Canary	54/3,28	7/3,28	29,52	456,10	59,10	515,20	1724	144	0,0633	660
-	42/3,38	7/2,13	29,87	483,40	24,84	508,24	1528	109	0,0597	678
Cardinal	54/3,38	7/3,38	30,42	483,40	62,65	546,05	1826	152	0,0597	682
-	42/3,99	7/2,21	30,57	523,70	26,97	550,67	1657	118	0,0551	710
Curlew	54/3,51	7/3,51	31,59	523,70	67,87	591,57	1978	165	0,0551	715
-	42/4,41	7/2,30	31,74	563,90	28,97	592,87	1783	126	0,0512	741
Finch	54/3,65	19/2,19	32,85	563,90	71,55	635,45	2121	179	0,0512	746
-	42/4,28	7/2,38	32,82	604,30	31,10	635,40	1911	135	0,0479	772
Grackle	54/3,77	19/2,27	33,97	604,26	76,58	680,84	2271	192	0,0479	776
-	42/4,42	7/2,46	33,90	644,51	33,16	677,67	2039	144	0,0449	800
Pheasant	54/3,90	19/2,34	35,10	644,51	81,68	726,19	2421	199	0,0449	805
-	42/4,56	7/2,53	34,95	684,84	35,23	720,07	2166	153	0,0423	829
Martin	54/4,02	19/2,41	36,17	684,84	86,71	771,55	2573	212	0,0423	835
-	42/4,69	7/2,61	35,97	725,10	37,35	762,45	2294	162	0,0397	858
Plover	54/4,14	19/2,48	37,24	725,10	91,87	816,97	2725	224	0,0400	862
-	42/4,82	7/2,67	36,93	765,35	39,35	804,70	2420	171	0,0377	885
Parrot	54/4,25	19/2,55	38,25	765,40	96,84	862,24	2877	237	0,0377	890
-	48/4,36	7/3,60	38,58	805,70	71,10	876,80	2779	212	0,0358	929
Falcon	54/4,36	19/2,62	39,26	805,70	102,1	907,80	3028	250	0,0358	917
-	72/3,77	7/2,52	37,72	805,70	34,84	840,54	2498	176	0,0358	910
Bantam	3/1,68	4/1,68	5,04	6,65	8,84	15,49	88	11,7	4,3218	61
Magpie	3/2,12	4/2,12	6,36	10,58	14,13	24,71	140	18,6	2,7077	77
Shrike	3/2,67	4/2,67	8,01	16,84	22,45	39,29	223	28,6	1,7054	99
Snipe	3/3,37	4/3,37	10,11	26,17	35,68	61,85	354	43,9	1,0718	132
Loon	3/3,78	4/3,78	11,34	33,68	44,97	78,65	446	55,3	0,8514	149
Grouse	8/2,54	1/4,24	9,32	40,52	14,13	54,65	221	23,1	0,7077	157
Petrel	12/2,34	7/2,34	11,70	51,61	30,01	81,62	377	43,8	0,5591	193
Minorca	12/2,44	7/2,44	12,20	56,13	32,77	88,90	311	47,7	0,5134	198
Leghorn	12/2,69	7/2,69	13,45	68,19	39,81	108,00	499	57,5	0,4226	221
Guinea	12/2,92	7/2,92	14,60	80,68	46,97	127,65	588	67,6	0,3579	244
Dotterell	12/3,08	7/3,08	15,40	89,48	52,19	141,67	655	73,0	0,3215	260
Dorking	12/3,20	7/3,20	16,00	96,71	56,39	153,10	707	78,9	0,2982	271
Brahma	16/2,86	19/2,48	18,12	102,97	91,87	194,84	1005	122,5	0,2815	287
Auk	8/4,05	7/2,25	14,83	102,84	92,32	195,16	500	49,6	0,2789	276
Cochin	12/3,37	7/3,37	16,85	107,10	62,45	169,55	783	87,4	0,2694	288



# ACSR - Aluminium Conductors Steel Reinforced, German Sizes DIN EN 50182

Code	Old Code	Wire Diameter		Overall Diameter	Cross Section			Approx. Weight	Breaking Load	DC Resistance	Current Carrying Capacity
		Al	St		Al	St	Total				
		mm	mm		mm <sup>2</sup>	mm <sup>2</sup>	mm <sup>2</sup>				
15-AL1/3-ST1A	16/2,5	6/1,80	1/1,80	5,40	15,3	2,54	17,8	62	5,80	1,8769	105
24-AL1/4-ST1A	25/4	6/2,25	1/2,25	6,75	23,9	3,98	27,8	96	8,95	1,2012	140
34-AL1/6-ST1A	35/6	6/2,70	1/2,70	8,10	34,4	5,73	40,1	139	12,37	0,8342	170
44-AL1/32-ST1A	44/32	14/2,00	7/2,40	11,2	44,0	31,7	75,6	369	44,24	0,6574	-
48-AL1/8-SAT1A	50/8	6/3,20	1/3,20	9,60	48,3	8,04	56,3	195	16,81	0,5939	210
51-AL1/30-SAT1A	50/30	12/2,33	7/2,33	11,7	51,2	29,8	81,0	375	42,98	0,5644	-
70-AL1/11-ST1A	70/12	26/1,85	7/1,44	11,7	69,9	11,4	81,3	282	26,27	0,4132	290
94-AL1/15-ST1A	95/15	26/2,15	7/1,67	13,6	94,4	15,3	109,7	381	34,93	0,3060	350
97-AL1/56-ST1A	95/55	12/3,20	7/3,20	16,0	96,5	56,3	152,8	707	77,85	0,2992	-
106-AL1/76-ST1A	105/75	14/3,10	19/2,25	17,5	105,7	75,5	181,2	885	105,82	0,2742	-
122-AL1/20-ST1A	120/20	26/2,44	7/1,90	15,5	121,6	19,8	141,4	491	44,50	0,2376	410
122-AL1/71-ST1A	120/70	12/3,60	7/3,60	18,0	122,1	71,3	193,4	895	97,92	0,2364	-
128-AL1/30-ST1A	125/30	30/2,33	7/2,33	16,3	127,9	29,8	157,8	587	56,41	0,2260	425
149-AL1/24-ST1A	150/25	26/2,70	7/2,10	17,1	148,9	24,2	173,1	601	53,67	0,1940	470
172-AL1/40-ST1A	170/40	30/2,70	7/2,70	18,9	171,8	40,1	211,8	788	74,89	0,1683	520
184-AL1/30-ST1A	185/30	26/3,00	7/2,33	19,0	183,8	29,8	213,6	741	65,27	0,1571	535
209-AL1/34-ST1A	210/35	26/3,20	7/3,20	20,3	209,1	34,1	243,2	844	73,36	0,1381	590
212-AL1/49-ST1A	210/50	30/3,00	7/3,00	21,0	212,1	49,5	261,5	973	92,46	0,1363	610
231-AL1/30-ST1A	230/30	24/3,50	7/2,33	21,0	230,9	29,8	260,8	871	72,13	0,1250	630
243-AL1/39-ST1A	240/40	26/3,45	7/2,68	21,8	243,1	39,5	282,5	980	85,12	0,1188	645
264-AL1/34-ST1A	265/35	24/3,74	7/2,49	22,4	263,7	34,1	297,7	994	81,04	0,1095	680
304-AL1/49-ST1A	300/50	26/3,86	7/3,00	24,4	304,3	49,5	353,7	1227	105,09	0,0949	740
305-AL1/39-ST1A	305/40	54/2,68	7/2,68	24,1	304,6	39,5	344,1	1151	96,80	0,0949	740
339-AL1/30-ST1A	340/30	48/3,00	7/2,33	25,0	339,3	29,8	369,1	1171	91,71	0,0852	790
382-AL1/49-ST1A	380/50	54/3,00	7/3,00	27,0	381,7	49,5	431,2	1443	121,3	0,0758	840
386-AL1/34-ST1A	385/35	48/3,20	7/2,49	26,7	386,0	34,1	420,1	1334	102,56	0,0749	850
434-AL1/56-ST1A	435/55	54/3,20	7/3,20	28,8	434,3	56,3	490,6	1641	133,59	0,0666	900
449-AL1/39-ST1A	450/40	48/3,45	7/2,68	28,7	448,7	39,5	488,2	1549	119,05	0,0644	920
490-AL1/64-ST1A	490/65	54/3,40	7/3,40	30,6	490,3	63,6	553,8	1853	185,81	0,0590	960
494-AL1/34-ST1A	495/35	45/3,74	7/2,49	29,9	494,4	34,1	528,4	1633	117,96	0,0584	985
511-AL1/45-ST1A	510/45	48/3,68	7/2,87	30,7	510,5	45,3	555,8	1765	133,31	0,0566	995
550-AL1/71-ST1A	550/70	54/3,60	7/3,60	32,4	549,7	71,3	620,9	2077	166,32	0,0526	1020
562-AL1/49-ST1A	560/50	48/3,86	7/3,00	32,2	561,7	49,5	611,2	1940	146,28	0,0515	1040
571-AL1/39-ST1A	570/40	45/4,02	7/2,68	32,2	571,2	39,5	610,6	1887	136,40	0,0506	1050
653-AL1/45-ST1A	650/45	45/4,30	7/2,87	34,4	653,5	45,3	698,8	2160	156,18	0,0442	1120
679-AL1/86-ST1A	680/85	54/4,00	19/2,40	36,0	678,6	86,0	764,5	2550	206,56	0,0446	1150
1046-AL1/45-ST1A	1045/45	72/4,30	7/2,87	43,0	1045,6	45,3	1090,9	3248	218,92	0,0277	1580



# 0,6/1kV PE insulated, aerial power cables with aluminium conductor



Code: AER

Standards: TS 11654, SFS 2200, TS HD 626 S1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV

### Application

It is preferred to use of AER cables instead of uninsulated conductors at low voltage networks. AER cables are especially used at areas where the cost of underground networks is expensive and also for electrification of rural areas like villages.

### Construction

- ① Solid or stranded aluminium conductor    ② PE insulation    ③ Messenger wire

Number of Cores and Nominal Cross Section	INSULATED WIRES							MESSENGER WIRE			FINISHED CABLE	
	Phase Cross Section	Number of Wires	Phase Diameter	Resistance at 20°C	Current Carrying Capacity	Street Light Cross Section	Current Carrying Capacity	Neutral Diameter	Minimum Tensile Strength	Resistance at 20°C	App. Bundle Diameter	App. Net Weight
mm <sup>2</sup>	mm <sup>2</sup>		mm	/km	A	mm <sup>2</sup>	A	mm	kN	/km	mm	kg/km
1x16+1x16+25	1x16	1	4,4	1,91	70	1x16	60	5,9	7,4	1,38	15	225
3x16+1x16+25	3x16	1	4,4	1,91	60	1x16	60	5,9	7,1	1,38	22	350
3x25+1x16+35	3x25	7	5,9	1,2	80	1x16	60	6,9	10,3	0,986	26	475
3x35+1x16+50	3x35	7	6,9	0,868	95	1x16	60	8,1	14,2	0,72	30	625
3x50+1x16+70	3x50	7	8,1	0,641	120	1x16	60	9,7	20,6	0,493	35	800
3x70+1x16+95	3x70	7	9,7	0,443	150	1x16	60	11,4	27,9	0,363	41	1100
4x16+1x16+25	4x16	1	4,4	1,91	60	1x16	60	5,9	7,4	1,38	25	410
4x25+1x16+35	4x25	7	5,9	1,2	80	1x16	60	6,9	10,3	0,986	30	610
4x35+1x16+50	4x35	7	6,9	0,868	95	1x16	60	8,1	14,2	0,72	34	810
4x50+1x16+70	4x50	7	8,1	0,641	120	1x16	60	9,7	20,6	0,493	40	1060
4x70+1x16+95	4x70	7	9,7	0,443	150	1x16	60	11,4	27,9	0,363	47	1420



## 0,6/1kV PE insulated, aerial power cables with aluminium conductor



Code: AER

Standards: TS 11654, SFS 2200, TS HD 626 S1

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV

### Application

It is preferred to use of AER cables instead of uninsulated conductors at low voltage networks. AER cables are especially used at areas where the cost of underground networks is expensive and also for electrification of rural areas like villages.

### Construction

- ① Solid or stranded aluminium conductor    ② PE insulation    ③ Messenger wire

Number of Cores and Nominal Cross Section	INSULATED WIRES							MESSENGER WIRE			FINISHED CABLE	
	Phase Cross Section	Number of Wires	Phase Diameter	Resistance at 20°C	Current Carrying Capacity	Street Light Cross Section	Current Carrying Capacity	Neutral Diameter	Minimum Tensile Strength	Resistance at 20°C	App. Bundle Diameter	App. Net Weight
mm <sup>2</sup>	mm <sup>2</sup>		mm	/km	A	mm <sup>2</sup>	A	mm	kN	/km	mm	kg/km
1x16+25	1x16	1	4,4	1,91	75	-	-	5,9	7,4	1,38	15	140
1x25+35	1x25	7	5,9	1,2	10	-	-	6,9	10,3	0,986	17	200
1x35+50	1x35	7	6,9	0,868	125	-	-	8,1	14,2	0,72	20	275
3x16+25	3x16	1	4,4	1,91	70	-	-	5,9	7,4	1,38	22	275
3x25+35	3x25	7	5,9	1,2	90	-	-	6,9	10,3	0,986	26	400
3x35+50	3x35	7	6,9	0,868	115	-	-	8,1	14,2	0,72	30	575
3x50+70	3x50	7	8,1	0,641	140	-	-	9,7	20,6	0,493	35	750
3x70+95	3x70	7	9,7	0,443	180	-	-	11,4	27,9	0,363	41	1050
3x120+95	3x120	19	12,8	0,253	250	-	-	11,4	27,9	0,363	47	1550
4x16+25	4x16	1	4,4	1,91	70	-	-	5,9	7,4	1,38	24	375
4x25+35	4x25	7	5,9	1,2	90	-	-	6,9	10,3	0,986	28	500
4x35+50	4x35	7	6,9	0,868	115	-	-	8,1	14,2	0,72	32	680
4x50+70	4x50	7	8,1	0,641	140	-	-	9,7	20,6	0,493	38	900
4x70+95	4x70	7	9,7	0,443	180	-	-	11,4	27,9	0,363	45	1350

# 0,6/1kV XLPE insulated or PE insulated, aerial power cables with aluminium conductor



Code: ABC, NFA2X

Standards: TS HD 626 S1, NFC 33 209

### Technical Data

Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV

It is preferred to use of ABC cables instead of uninsulated conductors at low voltage networks. ABC cables are especially used at areas where the cost of underground networks is expensive and also for electrification of rural areas like villages.

### Construction

- ① Solid or stranded aluminium conductor
- ② PE or XLPE insulation
- ③ Messenger wire

Number of Cores and Nominal Cross Section	INSULATED WIRES							MESSENGER WIRE			FINISHED CABLE	
	Phase Cross Section	Number of Wires	Phase Diameter	Resistance at 20°C	Current Carrying Capacity	Street Light Cross Section	Current Carrying Capacity	Neutral Diameter	Minimum Tensile Strength	Resistance at 20°C	App. Bundle Diameter	App. Net Weight
mm <sup>2</sup>	mm <sup>2</sup>		mm	/km	A	mm <sup>2</sup>	A	mm	kN	/km	mm	kg/km
2x16	2x16	7	4,6	1,91	93	-	-	-	-	-	15	132
2x25	2x25	7	5,9	1,20	122	-	-	-	-	-	18,5	200
2x35	2x35	7	6,9	0,868	129	-	-	-	-	-	22	280
2x50	2x50	7	8,1	0,641	158	-	-	-	-	-	24	370
4x16	4x16	7	4,6	1,91	83	-	-	-	-	-	18	265
4x25	4x25	7	5,9	1,20	111	-	-	-	-	-	22	400
4x35	4x35	7	6,9	0,868	131	-	-	-	-	-	26	550
3x25+54,6	3x25	7	5,9	1,20	112	-	-	9,6	16,0	0,63	30	470
3x25+1x16+54,6	3x25	7	5,9	1,20	112	1x16	60	9,6	16,0	0,63	30	570
3x25+2x16+54,6	3x25	7	5,9	1,20	112	2x16	-	9,6	16,0	0,63	30	640
3x35+54,6	3x35	7	6,9	0,86	138	-	-	9,6	16,0	0,63	33	580
3x35+1x16+54,6	3x35	7	6,9	0,868	138	1x16	60	9,6	16,0	0,63	33	690
3x35+2x16+54,6	3x35	7	6,9	0,868	138	2x16	-	9,6	16,0	0,63	33	750
3x50+54,6	3x50	7	8,1	0,641	168	-	-	9,6	16,0	0,63	36	720
3x50+1x16+54,6	3x50	7	8,1	0,641	168	1x16	60	9,6	16,0	0,63	36	820
3x50+2x16+54,6	3x50	7	8,1	0,641	168	2x16	-	9,6	16,0	0,63	36	890
3x70+54,6	3x70	12	9,7	0,443	213	-	-	9,6	16,0	0,63	38	930
3x70+1x16+54,6	3x70	12	9,7	0,443	213	1x16	60	9,6	16,0	0,63	38	1030
3x70+2x16+54,6	3x70	12	9,7	0,443	213	2x16	-	9,6	16,0	0,63	38	1100
3x70+1x25+54,6	3x70	12	9,7	0,443	213	1x25	-	9,6	16,0	0,63	40	1070
3x70+2x25+54,6	3x70	12	9,7	0,443	213	2x25	-	9,6	16,0	0,63	40	1170
3x70+70	3x70	12	9,7	0,443	213	-	-	10,0	20,6	0,50	41	970
3x70+1x16+70	3x70	12	9,7	0,443	213	1x16	60	10,0	20,6	0,50	41	1080
3x70+2x16+70	3x70	12	9,7	0,443	213	2x16	-	10,0	20,6	0,50	41	1150
3x95+70	3x95	19	11,5	0,320	258	-	-	10,0	20,6	0,50	44	1200
3x95+1x16+70	3x95	19	11,5	0,320	258	1x16	60	10,0	20,6	0,50	44	1300
3x95+2x16+70	3x95	19	11,5	0,320	258	2x16	-	10,0	20,6	0,50	44	1380
3x120+70	3x120	19	12,8	0,253	300	-	-	10,0	20,6	0,50	46	1430
3x120+1x16+70	3x120	19	12,8	0,253	300	1x16	60	10,0	20,6	0,50	46	1540



## 0,6/1kV XLPE insulated or PE insulated, aerial power cables with aluminium conductor



Code: ABC, NFA2X

Standards: TS HD 604 S1, NFC 33 209

### Technical Data

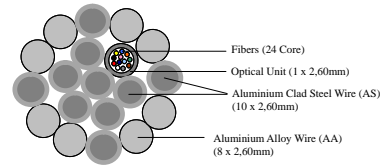
Max. operating temperature : 90°C  
 Max. short circuit temperature : 250°C (max. 5 sec.)  
 Rated voltage : 0,6/1 kV

It is preferred to use of ABC cables instead of uninsulated conductors at low voltage networks. ABC cables are especially used at areas where the cost of underground networks is expensive and also for electrification of rural areas like villages.

### Construction

① Solid or stranded aluminium conductor ② PE or XLPE insulation ③ Messenger wire

Number of Cores and Nominal Cross Section	INSULATED WIRES							MESSENGER WIRE			FINISHED CABLE	
	Phase Cross Section	Number of Wires	Phase Diameter	Resistance at 20°C	Current Carrying Capacity	Street Light Cross Section	Current Carrying Capacity	Neutral Diameter	Minimum Tensile Strength	Resistance at 20°C	App. Bundle Diameter	App. Net Weight
mm <sup>2</sup>	mm <sup>2</sup>		mm	/km	A	mm <sup>2</sup>	A	mm	kN	/km	mm	kg/km
3x120+2x16+70	3x120	19	12,8	0,253	300	2x16	-	10,0	20,6	0,50	46	1600
3x150+70	3x150	19	14,5	0,206	344	-	-	10,0	20,6	0,50	48	1680
3x150+1x16+70	3x150	19	14,5	0,206	344	1x16	60	10,0	20,6	0,50	48	1780
3x150+2x16+70	3x150	19	14,5	0,206	344	2x16	-	10,0	20,6	0,50	48	1850
3x120+95	3x120	19	12,8	0,253	300	-	-	12,9	27,9	0,343	47	1500
3x120+1x16+95	3x120	19	12,8	0,253	300	1x16	60	12,9	27,9	0,343	47	1620
3x120+2x16+95	3x120	19	12,8	0,253	300	2x16	-	12,9	27,9	0,343	47	1680
3x150+95	3x150	19	14,5	0,206	344	-	-	12,9	27,9	0,343	49	1740
3x150+1x16+95	3x150	19	14,5	0,206	344	1x16	60	12,9	27,9	0,343	49	1880
3x150+2x16+95	3x150	19	14,5	0,206	344	2x16	-	12,9	27,9	0,343	49	1940



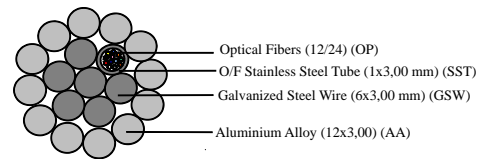
## Definition of OPGW

OPGW (optical ground wire) is a type of conductor that is used in the construction of electric power transmission lines. Here the conductor combines both the functions of grounding and communications. OPGW contains a tubular structure with one or more optical fibers in it, surrounded by layers of galvanized steel and aluminium alloy wire. In the OPGW system, the conductor serves as a normal ground wire, protecting the phase conductors against the lightning strikes. The optical fibers are integrated in a stainless steel tube filled with a thixotropic jelly and hermetically sealed to provide best protection of enclosed fibers at any stage of the installation or operation.

## Optical Fibers

The optical fiber of the OPGW is manufactured and designed to provide optimum transmission services. These fibers are used primarily in telecommunications networks characterised by long distance links and high capacity.

TECHNICAL SPECIFICATIONS		
Aluminium Alloy Wire Diameter	mm	2,60 ± 0,03
Aluminium Clad Steel Wire Diameter	mm	2,60 ± 0,05
O/F Stainless Steel Tube Diameter	mm	2,60 ± 0,05
OPGW Conductor Diameter	mm	13,00 ± 0,5
Number of Aluminium Clad Steel Wire	center	1
Number of Aluminium Clad Steel Wire	1 st Layer	5
Number of Stainless Steel Tube	1 st Layer	1
Number of Aluminium Alloy (AA) Wire	2 nd Layer	8
Number of Aluminium Clad Steel Wire	2 nd Layer	4
Lay Direction	1 st Layer	Left-Hand (S-twist)
Lay Direction	2 nd Layer	Right-Hand (Z-twist)
Total OPGW Cross-Section	mm <sup>2</sup>	95,6
Aluminium Alloy Unit Weight	kg/km	115
Aluminium Clad Steel Wire Unit Weight	kg/km	350
O/F Tube and Jelly Unit Weight	kg/km	16
Total OPGW Unit Weight	kg/km	485
OPGW Rated Tensile Strength (RTS)	daN	8200
Final Modulus Elasticity of OPGW	daN/mm <sup>2</sup>	11844
Thermal Expansion Coefficient of OPGW	10 <sup>-6</sup> /°C	15,1
Permissible Max. Working Stress	daN	3280
Medium High Tension	daN	1312 - 2050
Endurance Tensile Strength (ETS)	daN	5740
Short Time Overcurrent (0,5 second) (40-180°C)	A	14000
Temperature After Short Time Overcurrent	°C	180
Working Temperature (Max.)	°C	80
Resistance at 20°C (Max.)	/km	0,540
O/F Stainless Steel Tube Diameter (Inner/Outer)	mm	2,2/2,6
Fiber Count	-	12-24
Working Temperature	°C	-40 to 80



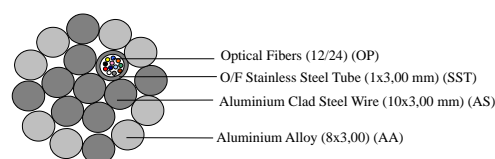
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TECHNICAL SPECIFICATIONS		
Aluminium Alloy Wire Diameter	mm	3,00±0,03
Galvanized Steel Wire Diameter	mm	3,00±0,05
O/F Stainless Steel Tube Diameter	mm	3,00±0,05
OPGW Conductor Diameter	mm	15,0±0,3 mm
Number of Galvanized Steel Wire	Center	1
Number of Galvanized Steel Wire	1 st Layer	5
Number of Stainless Steel Tube	1 st Layer	1
Number of Aluminium Alloy (AA) Wire	2 nd Layer	12
Lay Direction	1 st Layer	Left-Hand (S-twist)
Lay Direction	2 nd Layer	Right-Hand (Z-twist)
Total OPGW Cross-Section	mm <sup>2</sup>	134,3
Aluminium Alloy Unit Weight	kg/km	235
Galvanized Steel Unit Weight	kg/km	344
O/F Tube and Jelly Unit Weight	kg/km	16
Total OPGW Unit Weight	kg/km	595
OPGW Rated Tensile Strength (RTS)	daN	8950
Final Modulus Elasticity of OPGW	daN/mm <sup>2</sup>	9500
Thermal Expansion Coefficient of OPGW	10 <sup>-6</sup> / °C	15,7
Permissible Max. Tension	daN	10580
Medium High Tension	daN	3650
Endurance Tensile Strength (ETS)	daN	6258
Short Time Overcurrent (0,5 second) (40-180°C)	A	14700
Temperature After Short Time Overcurrent	°C	180
Working Temperature (Max.)	°C	80
Resistance at 20°C (Max.)	/km	0,4
O/F Stainless Steel Tube Diameter (Inner/Outer)	mm	2,6/3,0
Fiber Count	-	12-24
Working Temperature	°C	-40 to 80



## Definition of OPGW

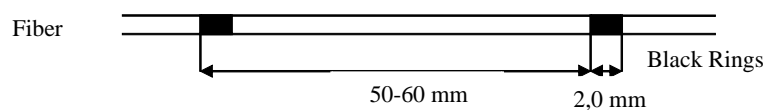
OPGW (optical ground wire) is a type of conductor that is used in the construction of electric power transmission lines. Here the conductor combines both the functions of grounding and communications. OPGW contains a tubular structure with one or more optical fibers in it, surrounded by layers of galvanized steel and aluminium alloy wire. In the OPGW system, the conductor serves as a normal ground wire, protecting the phase conductors against the lightning strikes. The optical fibers are integrated in a stainless steel tube filled with a thixotropic jelly and hermetically sealed to provide best protection of enclosed fibers at any stage of the installation or operation.

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O/F Stainless Steel Tube Diameter	mm	3,00 ± 0,05
OPGW Conductor Diameter	mm	15,00 ± 0,5
Number of Aluminium Clad Steel Wire	center	1
Number of Aluminium Clad Steel Wire	1 st Layer	5
Number of Stainless Steel Tube	1 st Layer	1
Number of Aluminium Alloy (AA) Wire	2 nd Layer	8
Number of Aluminium Clad Steel Wire	2 nd Layer	4
Lay Direction	1 st Layer	Left-Hand (S-twist)
Lay Direction	2 nd Layer	Right-Hand (Z-twist)
Total OPGW Cross-Section	mm <sup>2</sup>	134,3
Aluminium Alloy Unit Weight	kg/km	152,8
Aluminium Clad Steel Wire Unit Weight	kg/km	465,6
O/F Tube and Jelly Unit Weight	kg/km	16,0
Total OPGW Unit Weight	kg/km	634,4
OPGW Rated Tensile Strength (RTS)	daN	10700
Final Modulus Elasticity of OPGW	daN/mm <sup>2</sup>	11200
Thermal Expansion Coefficient of OPGW	10 <sup>-6</sup> /°C	15,1
Permissible Max. Working Stress	daN	4280
Medium High Tension	daN	1712 - 2675
Endurance Tensile Strength (ETS)	daN	7490
Short Time Overcurrent (0,5 second) (40-180 °C)	A	14600
Temperature After Short Time Overcurrent	°C	180
Working Temperature (Max.)	°C	80
Resistance at 20°C (Max.)	/km	0,4
O/F Stainless Steel Tube Diameter (Inner/Outer)	mm	2,6/3,0
Fiber Count	-	12-24
Working Temperature	°C	-40 to 80

12 FIBER TUBE COLORS	FIBER NO	24 FIBER TUBE COLORS
RED	1	RED
YELLOW	2	YELLOW
GREEN	3	GREEN
BLUE	4	BLUE
VIOLET	5	VIOLET
BROWN	6	BROWN
BLACK or GRAY	7	BLACK or GRAY
ORANGE	8	ORANGE
PINK	9	PINK
GRAY or AQUA	10	GRAY or AQUA
LIGHT GREEN or WHITE	11	LIGHT GREEN or WHITE
NATURAL	12	NATURAL
	13	RED with BLACK RINGS
	14	YELLOW with BLACK RINGS
	15	GREEN with BLACK RINGS
	16	BLUE with BLACK RINGS
	17	VIOLET with BLACK RINGS
	18	BROWN with BLACK RINGS
	19	WHITE with BLACK RINGS
	20	ORANGE with BLACK RINGS
	21	PINK with BLACK RINGS
	22	GRAY with BLACK RINGS
	23	LIGHT GREEN with BLACK RINGS
	24	NATURAL with BLACK RINGS



### General Application of Single Mode Fibers

Both G.652 and G.655 are called as single mode fibers which are optimized for OPGW network. The most important advantageous are,

- They have lowest PMD (polarization mode dispersion) value
- Better joining performance
- They are characterized with high wavelength rates (up to 1625 nm)

### NZDS (Non-Zero Dispersion Shifted)

Fiber designed for DWDM applications. It is characterised by very low dispersion from 1530 to 1625 nm and a high effective area, which prevents the non-linear effects of high speed in this type of transmission, offering improved service in comparison to the previous fibers.



**FIBER TECHNICAL SPECIFICATIONS (ITU-T G.652D)**

		1310 nm	1550 nm
Attenuation	dB/km	£ 0.36	£ 0.22
Macrobend Loss	dB	£ 0.05	£ 0.05
Fiber Cut-off Wavelength (- cf)	nm	£ 1260	
Cable Cut-off Wavelength (- cc)	nm	£ 1260	
Mode Field Diameter	µm	9.2 – 0.4	10.4 – 0.5

**DISPERSION**

Zero Dispersion Wavelength (- o)	nm	1300	£ - o £ 1324
Chromatic Dispersion [ ps/(nm x km)]	nm	£ 3.5	£ 18

**STRUCTURAL SPECIFICATIONS**

Cladding Diameter	µm	125.0 – 0.7
Core Concentricity Error	µm	£ 0.6
Cladding Non-circularity	(%)	£ 1.0
Coating Diameter	µm	245 – 5

**FIBER TECHNICAL SPECIFICATIONS (ITU-T G.655 NZDS)**

		1550 nm	1625 nm
Attenuation	dB/km	£ 0.25	£ 0.27
Macrobend Loss	dB	£ 0.05	£ 0.05
Fiber Cut-off Wavelength (- cf)	nm	£ 1450	
Cable Cut-off Wavelength (- cc)	nm	£ 1450	
Mode Field Diameter	µm	9.6 – 0.4	-

**DISPERSION**

Zero Dispersion Wavelength (- o)	nm	£ 1520
Chromatic Dispersion [ ps/(nm x km)] at 1530-1565	nm	£ 2.0-6.0
	at 1565-1625	nm £ 4.5-11.2

**STRUCTURAL SPECIFICATIONS**

Cladding Diameter	µm	125.0 – 0.7
Core Concentricity Error	µm	£ 0.5
Cladding Non-circularity	(%)	£ 0.7
Coating Diameter	µm	245 – 5

Copper Rod as the main material in cable production is produced in three sequential stages; anode casting, electrolyzing and rod drawing.

Quality of copper is continuously controlled in order to produce high quality of copper for high quality of cable thereafter.

The copper is supplied as pure copper rod or wire in requested diameters as well.

Standard  
TS EN 1977



### ANODE CASTING UNIT

Anode is produced from blister copper or scrap copper which is melted in 2 rotary furnaces each having the capacity of 30 tons/day. Weight of each anode copper produced is about 300-350 kg. The impurities are checked during the melting process so that the quality of anode copper is obtained as required. The samples taken from the anodes are tested and the production is arranged in accordance.



### ELECTROLYSIS UNIT

Copper anodes are refined and the impurities are eliminated in electrolyzing process and cathode copper with 99,99 % purity is produced. Weight of each cathode is approximate 100 – 125 kg and the production capacity is 24.000 tons/year.





## Construction

Stranded Copper Conductors are produced by stranding of hard copper wires to obtain maximum tensile strength in accordance with TS-3 standart. Round steel wires are stranded around a central element in one or more layers.

## Standards

TS-2, TS-3, TS EN 13602, DIN 48201

Nominal Cross-Section	Number of Wire/Wire Diameter	Overall Diameter of Cables (approx)	Net Weight (approx)	DC Conductor Resistance at 20°C de max	Max Break Strength
mm <sup>2</sup>	Number/mm	mm	kg/km	/km	kN
10	7/1,32	3,96	85,8	1,915	3,96
16	7/1,70	5,1	142,4	1,154	6,5
25	7/2,12	6,36	221,4	0,742	9,99
35	7/2,50	7,5	308	0,534	13,91
50	7/3,00	9	443,5	0,369	19,57
50	19/1,80	9	436,3	0,384	19,36
70	19/2,12	10,6	605,2	0,275	26,55
95	19/2,50	12,5	841,7	0,198	36,93
120	19/2,80	14	1056	0,158	45,27
150	37/2,24	15,68	1320	0,127	57,73
185	37/2,50	17,5	1644	0,102	71,91
240	61/2,24	20,2	2179	0,077	95,17
300	61/2,24	22,55	2715	0,062	118,56



## Construction

Soft annealed copper conductors are manufactured according to TS EN 13602 and ASTM B3-1990

## Standards

TS EN 13602, TS EN 60228

Nominal Cross Section	Number of Wire	Overall Diameter of Cables (Approx)	Net Weight (Approx)	DC Conductor Resistance at 20°C de max
mm <sup>2</sup>	Number	mm	kg/km	/km
10	7	3,9	85,2	1,83
16	7	4,90	135,4	1,15
25	7	6,10	214,4	0,727
35	7	7,0	296,8	0,524
50	10	8,05	406,2	0,387
70	14	9,75	586,9	0,268
95	19	11,45	810,6	0,193
120	24	12,9	1030,6	0,153
150	30	14,25	1255	0,124
185	37	15,90	1575,6	0,0991
240	49	18,13	2086	0,0754
300	60	20,45	2620	0,0601



# ENAMELLED WIRE

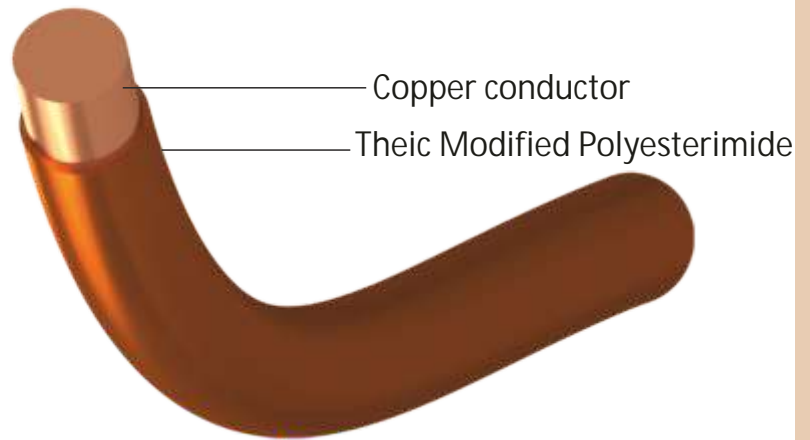


[www.hes.com.tr](http://www.hes.com.tr)



Technical Data

Standard:  
IEC 60317-8  
Enamel Coating Type:  
Double Coating  
Producible Product Range:  
0,15 - 4,00 mm  
Temperature Index (20000 hrs):  
180°C  
Heat Shock:  
200 ± 5 °C  
Cut Inward Through Insulation:  
320 ± 5 °C



Properties

- \* High thermal resistance
- \* High mechanical strength
- \* High heat shock
- \* Resistance to high voltage loads
- \* Thermal stability
- \* Resistance to Freon gas
- \* High resistance to friction
- \* Ease of winding
- \* Softness
- \* Resistance to solvents and transformer oil

Application

- \* All types of engines
- \* Transformer
- \* Generator
- \* High heat transformers
- \* Hermetic motors
- \* Universal motors
- \* Shaded pole motors



Technical Data

Standard:

IEC 60317-13

Enamel Coating Type:

Double Coating

Producible Product Range:

0,15 - 4,00 mm

Temperature Index (20000 hrs):

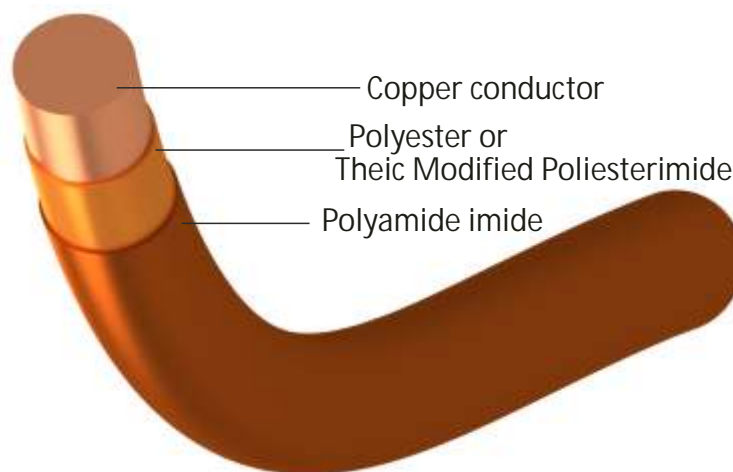
200°C

Heat Shock:

220 ± 5 °C

Cut Inward Through Insulation:

340 ± 5 °C

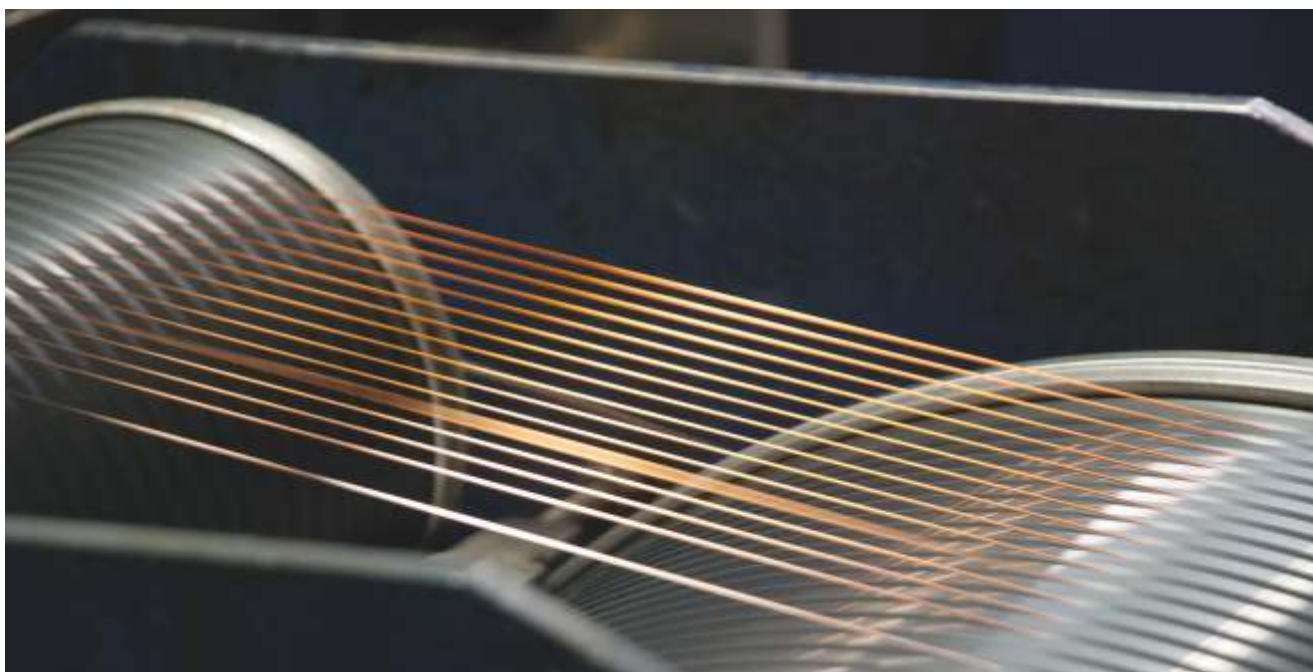


Properties

- \* High thermal resistance
- \* High mechanical strength
- \* High heat shock
- \* Resistance to high voltage loads
- \* Thermal stability
- \* Resistance to Freon gas
- \* High resistance to friction
- \* Ease of winding
- \* Softness
- \* Resistance to solvents and transformer oil

Application

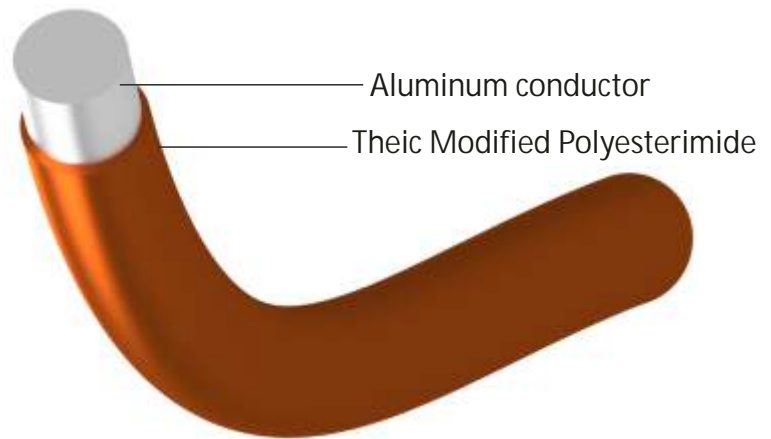
- \* All types of engines
- \* Transformer
- \* Generator
- \* High heat transformers
- \* Hermetic motors
- \* Universal motors
- \* Shaded pole motors





Technical Data

Standard:  
IEC 60317-15  
Enamel Coating Type:  
Double Coating  
Producible Product Range:  
1,00 – 4,00 mm  
Temperature Index (20000 hrs):  
180°C  
Heat Shock:  
200 ± 5 °C  
Cut Inward Through Insulation:  
320 ± 5 °C



Properties

- \* High thermal resistance
- \* High mechanical strength
- \* High heat shock
- \* Resistance to high voltage loads
- \* Thermal stability
- \* Resistance to Freon gas
- \* High resistance to friction
- \* Ease of winding
- \* Softness
- \* Resistance to solvents and transformer oil

Application

- \* Light engines
- \* Transformers



Technical Data

Standard:

IEC- 60317-25

Enamel Coating Type:

Double Coating

Producible Product Range:

1,00 – 4,00 mm

Temperature Index (20000 hrs):

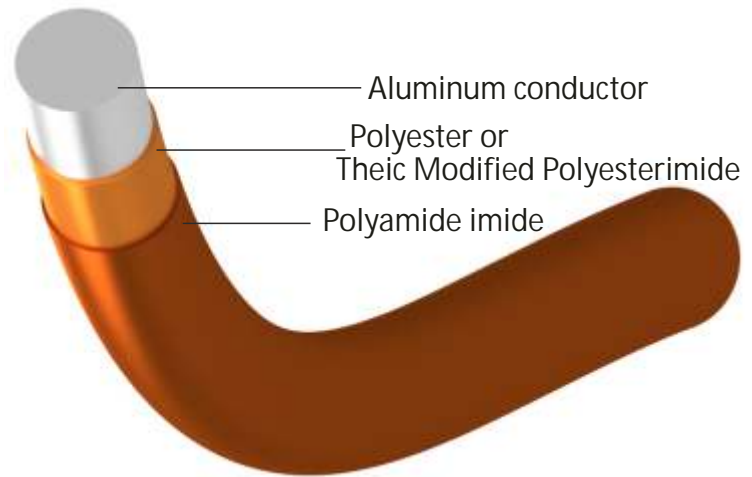
200°C

Heat Shock:

220 ± 5 °C

Cut Inward Through Insulation:

320 ± 5 °C

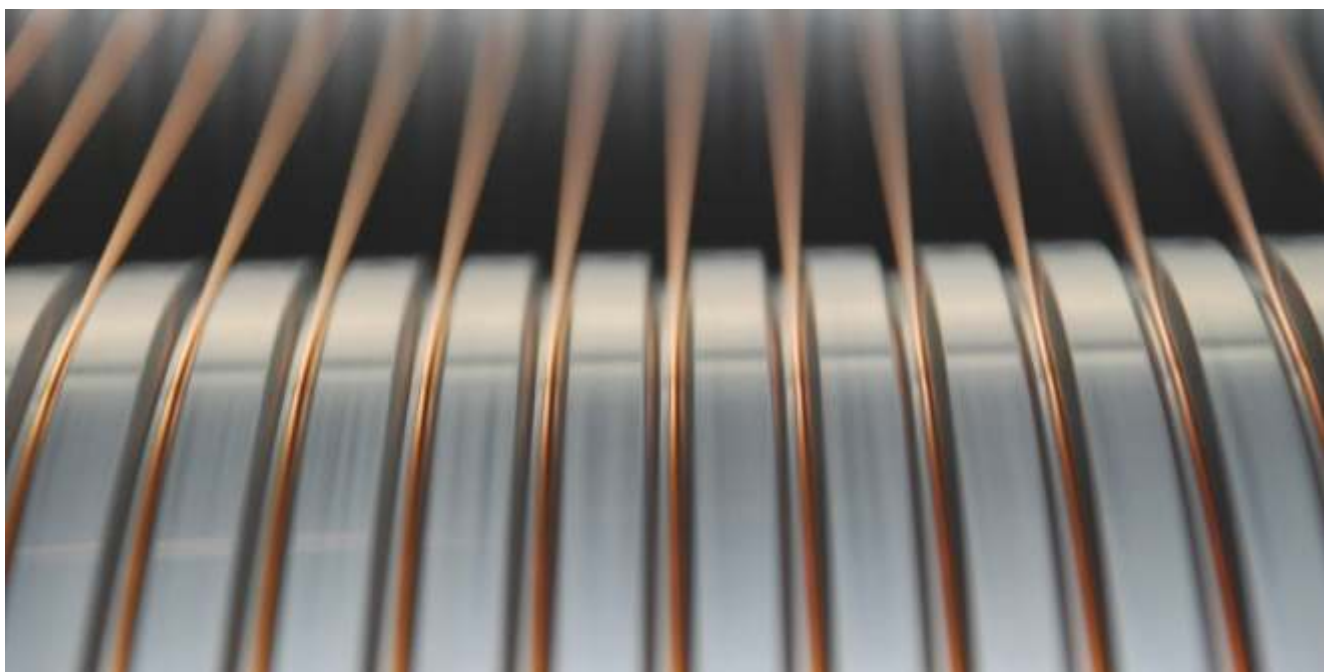


Properties

- \* High thermal resistance
- \* High mechanical strength
- \* High heat shock
- \* Resistance to high voltage loads
- \* Thermal stability
- \* Resistance to Freon gas
- \* High resistance to friction
- \* Ease of winding
- \* Softness
- \* Resistance to solvents and transformer oil

Application

- \* Light engines
- \* Transformers





Insulation colors used in low voltage cables are as follows.



Cable Type	No. of cores	O Type (without yellow/green ground wire)	J Type (with yellow/green ground wire)
<b>BUILDING WIRES AND CABLES</b>			
NVV (NYM) H03VV-F H05VV-F H07VVH6-F NHXMH 052XZ1-F	2	 Blue-Brown	
	3	 Grey-Brown-Black	 Blue-Brown-Yellow/Green
	4	 Blue-Brown-Black-Grey	 Blue-Brown-Black-Yellow/Green
	5	 Blue-Brown-Black-Grey-Black	 Blue-Brown-Black-Grey-Yellow/Green
	>5	 All black numbered with white colours	 Yellow/Green and all remaining black numbered
<b>0,6/1 kV LOW VOLTAGE CABLES</b>			
YVV (NYY) YVCV (NYCY) YVZ2V (NYRY) YVZ3V (NYFGY) YXV (2XY) N2XH N2XH FE 180 YAVV (NAYY)	2	 Blue-Brown	
	3	 Grey-Brown-Black	 Blue-Brown-Yellow/Green
	4	 Blue-Brown-Black-Grey	 Brown-Black-Grey-Yellow/Green
	5	 Blue-Brown-Black-Grey-Black	 Blue-Brown-Black-Grey-Yellow/Green
	>5	 All black numbered with white colours	 Yellow/Green and all remaining black numbered

## Cable to the current loading conditions:

Heat arising from a cable under load should be spread to the environment by every point on the surface of cable. Current load of the cable should be restricted according to this condition.

Current carrying capacities of cables given on the tables are prepared to meet the following installation conditions:

### A) In air (It is assumed that the cables are protected from sun light):

Environmental Temperature	: 30°C
Loading factor	: 1,0

It is also assumed that the heat arising from cable is not prevented to spread, environmental temperature is not heating source. If the cables are installed minimum 2 m distance from the nearest floor, ceiling or wall, these conditions are met. Distance between the cables installed side by side should be at least 2 times the diameter of the cable. Distance between the cables installed one on the top of the other should be at least 2 times the diameter of the cable. This distance is about 20 cm for cable installing systems. Because of the heat spreading effect, suitable distances should be arranged between the cables and also ducts are properly ventilated.

### B) In duct

Environmental Temperature	: 30°C
Loading factor	: 1,0

### C) In Ground

Environmental Temperature	: 20°C
Loading factor	: 1,0
Thermal resistivity of soil	: 0,7 K.m/W (very moist soil) : 1,0 K.m/W (moist soil) : 1,5 K.m/W (dry soil) : 2,5 K.m/W (very dry soil)
Installation depth	: 70 cm
No. Of cable system	: 1

For the given current values it is assumed that cables are directly installed to the underground which is lay downed by sand and bonded by bricks. In this case cable canal consists of limited numbers of cable ducts each of them not longer than 6 m. Also it is assumed that the cable joints are protected from direct sun light.

Current loading capacities of the cables can also vary according to specific heat resistance of the insulation material. This value

For PVC insulated cables	: 6,0 K.m/W
For XLPE insulated cables	: 3,5 K.m/W

If cable installation conditions are different than above conditions, current carrying capacities can be calculated by multiplying the currents given on the related tables.

Current carrying capacities of the cables for Standard installation conditions are given on Tables 1-4, and for other operating conditions on Table 5-14

**TABLE 1**

Current carrying capacities for 0,6/1 kV PVC and XLPE insulated cables with copper conductor (A)

A) In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7

B) In air : 30°C, load factor 1,0

Method of laying : Flat formation, gap between cables; in air= 1 x Cable outer diameter, in ground=7cm)

: Trefoil formation

1 (Number of system)

Insulation material Permissible conductor temp.	PVC 70°C								XLPE 90°C					
	1				2		3-4		1				3-4	
Number of cores														
Nominal cross-section area														
mm <sup>2</sup>	A	B	A	B	A	B	A	B	A	B	A	B	A	B
1,5	-	25	-	20	32	20	26	18.5	39	32	32	25	30	24
2,5	-	34	-	27	42	27	34	25	51	42	43	34	40	32
4	-	45	-	37	54	37	44	34	66	56	55	44	52	42
6	-	57	-	48	68	48	56	43	82	71	68	57	64	53
10	-	78	-	66	90	66	75	6	109	96	90	77	86	73
16	127	103	107	89	116	89	98	80	139	128	115	102	111	96
25	163	137	137	118	150	118	128	106	179	173	149	139	143	130
35	195	169	165	145	181	145	157	131	213	212	178	170	173	160
50	230	206	195	176	215	176	185	159	251	258	211	208	205	195
70	282	261	239	224	264	224	228	202	307	328	259	265	252	247
95	336	321	287	271	317	271	275	244	366	404	310	326	303	305
120	382	374	326	314	360	314	313	282	416	471	352	381	346	355
150	428	428	366	361	406	361	353	324	460	541	396	438	390	407
185	483	494	414	412	458	412	399	371	526	626	449	507	441	469
240	561	590	481	484	537	484	464	436	610	749	521	606	511	551
300	632	678	542	549	-	-	524	481	689	864	587	697	580	638
400	730	817	624	657	-	-	600	560	788	1018	669	816	663	746
500	823	940	698	749	-	-	-	-	889	1173	748	933	-	-

**TABLE 2**

Current carrying capacities for 0,6/1kV PVC and XLPE insulated cables with aluminium conductor (A)

A) In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7

B) In air : 30°C, load factor 1,0

Method of laying : Flat formation, gap between cables; in air= 1 x Cable outer diameter, in ground=7cm)

: Trefoil formation

1 (Number of system)

Insulation material Permissible conductor temp.	PVC 70°C								XLPE 90°C					
	1				2		3-4		1				3-4	
Number of cores														
Nominal cross-section area														
mm <sup>2</sup>	A	B	A	B	A	B	A	B	A	B	A	B	A	B
25	-	-	-	-	-	93	99	83	-	-	-	-	111	100
35	151	131	127	113	-	113	118	102	164	163	137	131	132	122
50	179	160	151	138	-	138	142	124	195	200	163	161	157	147
70	218	202	186	174	-	174	176	158	238	254	201	205	195	189
95	261	249	223	210	-	210	211	190	284	313	240	253	233	232
120	297	291	254	244	-	244	242	221	323	366	274	296	266	270
150	332	333	285	281	-	281	270	252	361	420	308	341	299	308
185	376	384	323	320	-	320	308	289	408	486	350	395	340	357
240	437	460	378	378	-	378	363	339	476	585	408	475	401	435
300	494	530	427	433	-	-	412	377	537	675	462	548	455	501
400	572	642	496	523	-	-	475	444	616	798	531	647	526	592
500	649	744	562	603	-	-	-	-	699	926	601	749	-	-

TABLE 3

Current carrying capacities for medium voltage, XLPE insulated cables with copper conductor (A)

A) In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7

B) In air : 30°C, load factor 1,0

Method of laying : Flat formation, gap between cables; in air= 1 x Cable outer diameter, in ground=7cm

: Trefoil laying 1 (Number of system)

Insulation material Permissible conductor temp.	XLPE 90°C																							
	3,5/6 kV						6/10 kV - 8,7/15 kV						12/20 kV						18/30 kV - 20,8/36 kV					
Rated voltage	1		3		1		3		1		3		1		3		1		3		1		3	
Nominal cross-section area mm <sup>2</sup>	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
	25	185	180	154	167	149	141	191	157	162	148	143	-	-	-	-	-	-	-	-	-	-	-	-
35	201	238	191	199	176	171	231	187	195	178	173	213	233	189	189	199	178	173	214	233	192	202	181	176
50	241	285	227	241	208	196	277	220	234	210	206	250	279	223	223	238	210	206	251	279	226	241	214	210
70	301	356	277	301	255	249	345	269	292	256	257	304	347	273	273	296	256	257	306	348	276	299	261	262
95	364	435	331	365	307	307	418	321	354	307	313	361	420	325	325	358	307	313	363	421	329	362	313	319
120	424	496	379	419	353	353	481	364	407	349	360	407	483	368	368	412	349	360	410	483	373	416	356	364
150	479	554	422	479	396	406	537	405	460	392	410	445	540	410	410	466	392	410	449	540	415	469	400	418
185	549	637	476	543	447	464	612	457	527	443	469	498	614	463	463	532	443	469	503	615	468	536	441	478
240	640	746	550	640	523	548	716	528	621	513	553	569	718	534	534	627	513	553	576	718	541	630	510	562
300	724	846	619	731	581	632	811	593	709	576	635	633	813	601	601	715	576	635	641	812	608	717	-	-
400	795	941	698	840	653	726	901	665	815	650	731	686	904	674	674	819	650	731	697	904	684	823	-	-
500	883	1051	773	949	-	-	1006	739	921	-	-	756	1011	750	750	927	-	-	768	1011	762	929	-	-

TABLE 4

Current carrying capacities for medium voltage XLPE insulated cables with aluminium conductor (A)

A) In ground : 20°C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0,7

B) In air : 30°C, load factor 1,0

Method of laying : Flat formation, gap between cables; in air= 1 x Cable outer diameter, in ground=7cm

: Trefoil laying 1 (Number of system)

Insulation material Permissible conductor temp.	XLPE 90°C																							
	3,5/6 kV						6/10 kV - 8,7/15 kV						12/20 kV						18/30 kV - 20,8/36 kV					
Rated voltage	1		3		1		3		1		3		1		3		1		3		1		3	
Nominal cross-section area mm <sup>2</sup>	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
	35	-	-	-	-	-	-	164	178	144	151	-	-	-	-	-	-	-	-	-	-	-	-	-
50	186	233	178	188	160	150	194	215	171	181	162	160	195	217	173	184	168	171	196	217	175	187	166	164
70	234	280	217	235	199	191	236	269	209	226	199	199	237	270	211	229	207	211	238	270	214	232	204	204
95	287	344	259	286	238	236	281	327	249	275	238	242	282	328	252	278	247	255	284	328	256	281	244	248
120	338	392	298	329	275	273	318	383	317	271	280	320	378	287	320	378	282	297	322	378	290	323	278	284
150	388	441	333	376	307	313	350	424	316	359	304	318	353	425	320	363	316	334	355	425	324	365	312	326
185	449	510	377	428	349	360	393	485	358	412	345	365	396	485	362	415	359	384	400	485	366	418	343	374
240	530	587	438	508	410	426	453	573	416	489	401	431	457	573	421	493	420	454	461	572	426	494	398	440
300	605	682	495	586	460	528	507	652	469	559	453	494	511	652	474	563	476	513	516	649	479	564	476	513
400	678	781	562	676	520	564	559	741	532	651	517	569	566	740	538	652	552	593	572	737	545	654	542	583
500	762	883	633	772	-	-	622	838	599	744	-	-	630	838	606	746	-	-	638	835	614	747	-	-

TABLE 5  
Rating factors for all cables laid underground

Permissible Operation Temperature	Soil Temperature (°C)	Thermal Resistivity of Earth K.m/W																	
		0,7 K.m/W					1,0 K.m/W					1,5 K.m/W					2,5 K.m/W		
		Load Factor					Load Factor					Load Factor					Load Factor		
		0,5	0,6	0,7	0,85	1,00	0,5	0,6	0,7	0,85	1,00	0,5	0,6	0,7	0,85	1,00	0,5-1,00		
XLPE Cables 90 °C	5	1,24	1,21	1,18	1,13	1,07	1,11	1,09	1,07	1,03	1,00	0,99	0,98	0,97	0,96	0,94	0,89		
	10	1,23	1,19	1,16	1,11	1,05	1,09	1,07	1,05	1,01	0,98	0,97	0,96	0,95	0,93	0,91	0,86		
	15	1,21	1,17	1,14	1,08	1,03	1,07	1,05	1,02	0,99	0,95	0,95	0,93	0,92	0,91	0,89	0,84		
	20	1,19	1,15	1,12	1,06	1,00	1,05	1,02	1,00	0,96	0,93	0,92	0,91	0,90	0,88	0,86	0,81		
	25	-	-	-	-	-	1,02	1,00	0,98	0,94	0,90	0,88	0,87	0,88	0,87	0,85	0,84	0,78	
	30	-	-	-	-	-	-	-	-	0,95	0,91	0,88	0,87	0,86	0,84	0,83	0,81	0,75	
	35	-	-	-	-	-	-	-	-	-	-	-	-	-	0,82	0,80	0,78	0,72	
40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0,68		
PVC Cables 70 °C	5	1,29	1,26	1,22	1,15	1,09	1,13	1,11	1,08	1,04	1,00	0,99	0,98	0,97	0,95	0,93	0,86		
	10	1,27	1,23	1,19	1,13	1,06	1,11	1,08	1,06	1,01	0,97	0,96	0,95	0,94	0,92	0,89	0,83		
	15	1,25	1,21	1,17	1,10	1,03	1,08	1,06	1,03	0,99	0,94	0,93	0,92	0,91	0,88	0,86	0,79		
	20	1,23	1,18	1,14	1,08	1,01	1,06	1,03	1,00	0,96	0,91	0,90	0,89	0,87	0,85	0,83	0,76		
	25	-	-	-	-	-	1,03	1,00	0,97	0,93	0,88	0,87	0,85	0,84	0,82	0,79	0,72	0,72	
	30	-	-	-	-	-	-	-	-	0,94	0,89	0,85	0,84	0,82	0,80	0,78	0,76	0,68	
	35	-	-	-	-	-	-	-	-	-	-	-	-	-	0,77	0,74	0,72	0,63	
40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0,59		

TABLE 6  
Rating factors for three-phase, 7 cm spacing between the systems in trefoil formation, single core cables laid underground flat

Number of Systems	Thermal Resistivity of Moist Soil (K.m/W)																				
	0,7 K.m/W					1,0 K.m/W					1,5 K.m/W					2,5 K.m/W					
	Load Factor					Load Factor					Load Factor					Load Factor					
	0,5	0,6	0,7	0,85	1,00	0,5	0,6	0,7	0,85	1,00	0,5	0,6	0,7	0,85	1,00	0,5	0,6	0,7	0,85	1,00	
XLPE Insulated Cables 0,6/1kV - 36 kV	1	1,09	1,04	0,99	0,93	0,87	1,11	1,05	1,00	0,93	0,87	1,13	1,07	1,01	0,94	0,87	1,17	1,09	1,03	0,94	0,87
	2	0,97	0,90	0,84	0,77	0,71	0,98	0,91	0,85	0,77	0,71	1,00	0,92	0,86	0,77	0,71	1,02	0,94	0,87	0,78	0,71
	3	0,88	0,80	0,74	0,67	0,61	0,89	0,82	0,75	0,67	0,61	0,90	0,82	0,76	0,68	0,61	0,92	0,83	0,76	0,68	0,61
	4	0,83	0,75	0,69	0,62	0,56	0,84	0,76	0,70	0,62	0,56	0,85	0,77	0,70	0,62	0,56	0,82	0,78	0,71	0,63	0,56
	5	0,79	0,71	0,65	0,58	0,52	0,80	0,72	0,66	0,58	0,52	0,80	0,73	0,66	0,58	0,52	0,81	0,73	0,67	0,59	0,52
	6	0,76	0,68	0,62	0,55	0,50	0,77	0,69	0,63	0,55	0,50	0,77	0,70	0,63	0,56	0,50	0,78	0,70	0,64	0,56	0,50
	8	0,72	0,64	0,58	0,51	0,46	0,72	0,65	0,59	0,52	0,46	0,73	0,65	0,59	0,52	0,46	0,74	0,66	0,59	0,52	0,46
10	0,69	0,61	0,56	0,49	0,44	0,69	0,62	0,56	0,49	0,44	0,70	0,62	0,56	0,49	0,44	0,70	0,63	0,57	0,49	0,44	
PVC Insulated Cables 0,6/1kV - 3,6/6 kV	1	1,01	1,02	0,99	0,93	0,87	1,04	1,05	1,00	0,93	0,87	1,07	1,06	1,01	0,94	0,87	1,11	1,08	1,01	0,94	0,87
	2	0,94	0,89	0,84	0,77	0,71	0,97	0,91	0,85	0,77	0,71	0,99	0,92	0,86	0,77	0,71	1,01	0,93	0,87	0,78	0,71
	3	0,86	0,79	0,74	0,67	0,61	0,89	0,81	0,75	0,67	0,61	0,90	0,83	0,76	0,68	0,61	0,91	0,83	0,77	0,68	0,61
	4	0,82	0,75	0,69	0,62	0,56	0,84	0,76	0,70	0,62	0,56	0,85	0,77	0,71	0,62	0,56	0,86	0,78	0,71	0,63	0,56
	5	0,78	0,71	0,65	0,58	0,52	0,80	0,72	0,66	0,58	0,52	0,80	0,73	0,66	0,58	0,52	0,81	0,73	0,67	0,59	0,52
	6	0,75	0,68	0,62	0,55	0,50	0,77	0,69	0,63	0,55	0,50	0,77	0,70	0,64	0,56	0,50	0,78	0,70	0,64	0,56	0,50
	8	0,71	0,64	0,58	0,51	0,46	0,72	0,65	0,59	0,52	0,46	0,73	0,65	0,59	0,52	0,46	0,73	0,66	0,60	0,52	0,46
10	0,68	0,61	0,55	0,49	0,44	0,69	0,62	0,56	0,49	0,44	0,69	0,62	0,56	0,49	0,44	0,70	0,63	0,57	0,49	0,44	



**TABLE 7**  
Rating factors for three-phase, 25 cm spacing between the systems in trefoil formation, single core cables laid underground flat

	Number of Systems	Thermal Resistivity of Moist Soil (K.m/W)																			
		0,7 K.m/W					1,0 K.m/W					1,5 K.m/W					2,5 K.m/W				
		Load Factor					Load Factor					Load Factor					Load Factor				
		0,5	0,6	0,7	0,85	1,00	0,5	0,6	0,7	0,85	1,00	0,5	0,6	0,7	0,85	1,00	0,5	0,6	0,7	0,85	1,00
XLPE Insulated Cables 0,6/1kV-36 kV	1	1,09	1,04	0,99	0,93	0,87	1,11	1,05	1,00	0,93	0,87	1,13	1,07	1,01	0,94	0,87	1,17	1,09	1,03	0,94	0,87
	2	1,01	0,94	0,89	0,82	0,75	1,02	0,95	0,89	0,82	0,75	1,04	0,97	0,90	0,82	0,75	1,06	0,98	0,91	0,83	0,75
	3	0,94	0,87	0,81	0,74	0,67	0,95	0,88	0,82	0,74	0,67	0,97	0,89	0,82	0,74	0,67	0,99	0,90	0,83	0,74	0,67
	4	0,91	0,84	0,78	0,70	0,64	0,92	0,84	0,78	0,70	0,64	0,93	0,85	0,79	0,70	0,64	0,95	0,86	0,79	0,71	0,64
	5	0,88	0,80	0,74	0,67	0,60	0,89	0,81	0,75	0,67	0,60	0,90	0,82	0,75	0,67	0,60	0,91	0,83	0,76	0,67	0,60
	6	0,86	0,79	0,72	0,65	0,59	0,87	0,79	0,73	0,65	0,59	0,88	0,80	0,73	0,65	0,59	0,89	0,81	0,74	0,65	0,59
	8	0,83	0,76	0,70	0,62	0,56	0,84	0,76	0,70	0,62	0,56	0,85	0,77	0,70	0,62	0,56	0,86	0,78	0,71	0,62	0,56
	10	0,81	0,74	0,68	0,60	0,54	0,82	0,74	0,68	0,60	0,54	0,83	0,75	0,68	0,61	0,54	0,84	0,76	0,69	0,61	0,54
PVC Insulated Cables 0,6/1kV - 3,6/6 kV	1	1,01	1,02	0,99	0,93	0,87	1,04	1,05	1,00	0,93	0,87	1,07	1,06	1,01	0,94	0,87	1,11	1,08	1,01	0,94	0,87
	2	0,97	0,95	0,89	0,82	0,75	1,00	0,96	0,90	0,82	0,75	1,03	0,97	0,91	0,82	0,75	1,06	0,98	0,92	0,83	0,75
	3	0,94	0,88	0,82	0,74	0,67	0,97	0,88	0,82	0,74	0,67	0,97	0,89	0,83	0,74	0,67	0,98	0,90	0,84	0,74	0,67
	4	0,91	0,84	0,78	0,70	0,64	0,92	0,85	0,79	0,70	0,64	0,93	0,86	0,79	0,70	0,64	0,95	0,87	0,80	0,71	0,64
	5	0,88	0,81	0,75	0,67	0,60	0,89	0,82	0,76	0,67	0,60	0,90	0,82	0,76	0,67	0,60	0,91	0,83	0,77	0,67	0,60
	6	0,86	0,79	0,73	0,65	0,59	0,87	0,80	0,74	0,65	0,59	0,88	0,81	0,74	0,65	0,59	0,89	0,81	0,75	0,65	0,59
	8	0,83	0,76	0,70	0,62	0,56	0,84	0,77	0,71	0,62	0,56	0,85	0,78	0,71	0,62	0,56	0,86	0,78	0,72	0,62	0,56
	10	0,82	0,75	0,69	0,60	0,54	0,82	0,75	0,69	0,60	0,54	0,83	0,76	0,69	0,61	0,54	0,84	0,76	0,70	0,61	0,54

**TABLE 8**  
Rating factors for three-phase, 25 cm spacing between the systems in flat formation, single core cables laid underground flat

	Number of Systems	Thermal Resistivity of Moist Soil (K.m/W)																			
		0,7 K.m/W					1,0 K.m/W					1,5 K.m/W					2,5 K.m/W				
		Load Factor					Load Factor					Load Factor					Load Factor				
		0,5	0,6	0,7	0,85	1,00	0,5	0,6	0,7	0,85	1,00	0,5	0,6	0,7	0,85	1,00	0,5	0,6	0,7	0,85	1,00
XLPE Insulated Cables 0,6/1kV-36 kV	1	1,08	1,05	0,99	0,91	0,85	1,13	1,07	1,00	0,92	0,85	1,18	1,09	1,01	0,92	0,85	1,19	1,11	1,03	0,93	0,85
	2	1,01	0,93	0,86	0,77	0,71	1,03	0,94	0,87	0,78	0,71	1,05	0,95	0,88	0,78	0,71	1,06	0,96	0,88	0,79	0,71
	3	0,92	0,84	0,77	0,69	0,62	0,93	0,85	0,77	0,69	0,62	0,95	0,86	0,78	0,69	0,62	0,96	0,86	0,79	0,69	0,62
	4	0,88	0,80	0,73	0,65	0,58	0,89	0,80	0,73	0,65	0,58	0,90	0,81	0,74	0,65	0,58	0,91	0,82	0,74	0,65	0,58
	5	0,84	0,76	0,69	0,61	0,55	0,85	0,77	0,70	0,61	0,55	0,87	0,78	0,70	0,62	0,55	0,87	0,78	0,71	0,62	0,55
	6	0,82	0,74	0,67	0,59	0,53	0,83	0,75	0,68	0,60	0,53	0,84	0,75	0,68	0,60	0,53	0,85	0,76	0,69	0,60	0,53
	8	0,79	0,71	0,64	0,57	0,51	0,80	0,71	0,65	0,57	0,51	0,81	0,72	0,65	0,57	0,51	0,81	0,72	0,65	0,57	0,51
	10	0,77	0,69	0,62	0,55	0,49	0,78	0,69	0,63	0,55	0,49	0,78	0,70	0,63	0,55	0,49	0,79	0,70	0,63	0,55	0,49
PVC Insulated Cables 0,6/1kV - 3,6/6 kV	1	0,96	0,97	0,98	0,91	0,85	1,01	1,01	1,00	0,92	0,85	1,07	1,05	1,01	0,92	0,85	1,16	1,10	1,02	0,93	0,85
	2	0,92	0,89	0,86	0,77	0,71	0,96	0,94	0,87	0,78	0,71	1,00	0,95	0,88	0,78	0,71	1,05	0,97	0,89	0,79	0,71
	3	0,88	0,84	0,77	0,69	0,62	0,91	0,85	0,78	0,69	0,62	0,95	0,86	0,79	0,69	0,62	0,96	0,87	0,79	0,69	0,62
	4	0,86	0,80	0,73	0,65	0,58	0,89	0,81	0,74	0,65	0,58	0,90	0,82	0,74	0,65	0,58	0,91	0,82	0,75	0,65	0,58
	5	0,84	0,76	0,70	0,61	0,55	0,85	0,77	0,70	0,61	0,55	0,87	0,78	0,71	0,62	0,55	0,87	0,79	0,71	0,62	0,55
	6	0,82	0,74	0,68	0,59	0,53	0,83	0,75	0,68	0,60	0,53	0,84	0,76	0,69	0,60	0,53	0,85	0,76	0,69	0,60	0,53
	8	0,79	0,71	0,65	0,57	0,51	0,80	0,72	0,65	0,57	0,51	0,81	0,72	0,65	0,57	0,51	0,81	0,73	0,66	0,57	0,51
	10	0,77	0,69	0,63	0,55	0,49	0,78	0,70	0,63	0,55	0,49	0,79	0,70	0,63	0,55	0,49	0,79	0,71	0,64	0,55	0,49

TABLE 9

Rating factors for three-phase, 7 cm spacing between the systems in flat formation, single or multi core cables laid underground side by side

	Number of Systems	Thermal Resistivity of Moist Soil (K.m/W)																			
		0,7 K.m/W					1,0 K.m/W					1,5 K.m/W					2,5 K.m/W				
		Load Factor					Load Factor					Load Factor					Load Factor				
		0,5	0,6	0,7	0,85	1,00	0,5	0,6	0,7	0,85	1,00	0,5	0,6	0,7	0,85	1,00	0,5	0,6	0,7	0,85	1,00
XLPE Insulated Cables 0,6/1kV-36 kV	1	1,02	1,03	0,99	0,94	0,89	1,06	1,05	1,00	0,94	0,89	1,09	1,06	1,01	0,94	0,89	1,11	1,07	1,02	0,95	0,89
	2	0,95	0,89	0,84	0,77	0,72	0,98	0,91	0,85	0,78	0,72	0,99	0,92	0,86	0,78	0,72	1,01	0,94	0,87	0,79	0,72
	3	0,86	0,80	0,74	0,68	0,62	0,89	0,81	0,75	0,68	0,62	0,90	0,83	0,77	0,68	0,62	0,92	0,84	0,77	0,69	0,62
	4	0,82	0,75	0,69	0,63	0,57	0,84	0,76	0,70	0,63	0,57	0,85	0,78	0,71	0,63	0,57	0,86	0,78	0,72	0,64	0,57
	5	0,78	0,71	0,65	0,59	0,53	0,80	0,72	0,66	0,59	0,53	0,81	0,73	0,67	0,59	0,53	0,82	0,74	0,67	0,60	0,53
	6	0,75	0,68	0,63	0,56	0,51	0,77	0,69	0,63	0,56	0,51	0,78	0,70	0,64	0,57	0,51	0,79	0,71	0,65	0,57	0,51
	8	0,71	0,64	0,59	0,52	0,47	0,72	0,65	0,59	0,52	0,47	0,73	0,66	0,60	0,52	0,47	0,74	0,66	0,60	0,53	0,47
	10	0,68	0,61	0,56	0,49	0,44	0,69	0,62	0,56	0,50	0,44	0,70	0,63	0,57	0,50	0,44	0,71	0,63	0,57	0,50	0,44
PVC Insulated Cables 0,6/1kV - 3,6/6 kV	1	0,91	0,92	0,94	0,94	0,89	0,97	0,97	1,00	0,94	0,89	1,04	1,03	1,01	0,94	0,89	1,13	1,07	1,02	0,95	0,89
	2	0,86	0,87	0,85	0,77	0,72	0,91	0,90	0,86	0,78	0,72	0,97	0,93	0,87	0,78	0,72	1,01	0,94	0,88	0,79	0,72
	3	0,82	0,80	0,75	0,68	0,62	0,86	0,82	0,76	0,68	0,62	0,91	0,84	0,77	0,68	0,62	0,92	0,84	0,78	0,69	0,62
	4	0,80	0,76	0,70	0,63	0,57	0,84	0,77	0,71	0,63	0,57	0,86	0,78	0,72	0,63	0,57	0,87	0,79	0,73	0,64	0,57
	5	0,78	0,72	0,66	0,59	0,53	0,81	0,73	0,67	0,59	0,53	0,81	0,74	0,68	0,59	0,53	0,82	0,75	0,68	0,60	0,53
	6	0,76	0,69	0,64	0,56	0,51	0,77	0,70	0,64	0,56	0,51	0,78	0,71	0,65	0,57	0,51	0,79	0,72	0,65	0,57	0,51
	8	0,72	0,65	0,59	0,52	0,47	0,73	0,66	0,60	0,52	0,47	0,74	0,67	0,61	0,52	0,47	0,75	0,67	0,61	0,53	0,47
	10	0,69	0,62	0,57	0,49	0,44	0,70	0,63	0,57	0,50	0,44	0,71	0,64	0,58	0,50	0,44	0,71	0,64	0,58	0,50	0,44

TABLE 10

Rating factor for differing air temperatures

HD 603 (1kV) - Rating factors for differing AIR temperatures

HD 603 (1kV)	Temperature (°C)	10	15	20	25	30	35	40	45	50
	Factor	1,22	1,17	1,12	1,03	1,0	0,93	0,87	0,79	0,71

HD 603 (1kV) - Rating factors for differing SOIL temperatures

HD 603 (1kV)	Temperature (°C)	5	10	15	20	25	30	35	40	45
	Factor	1,14	1,09	1,05	1,0	0,95	0,90	0,84	0,77	0,71

HD 620 (MV cables) - Rating factors for differing AIR temperatures

HD 620	Temperature (°C)	10	15	20	25	30	35	40	45	50
	Factor (Type 10B-A / 10B-B 8,7/15 kV - up to 20,8/36 kV)	1,15	1,12	1,08	1,04	1,0	0,96	0,91	0,87	0,82
	Factor (Type 10B-C 20,8/36 kV)	1,17	1,13	1,09	1,04	1,0	0,95	0,90	0,84	0,79

HD 620 (MV cables) - Rating factors for differing SOIL temperatures

HD 620	Temperature (°C)	5	10	15	20	25	30	35	40	45
	Factor (up to 8,7/15 kV - 20,8/36 kV)	1,10	1,07	1,04	1,0	0,96	0,92	0,89	0,85	0,79

IEC 60502-2 (MV cables) - Rating factors for differing AIR temperatures

IEC 60502-2	Temperature (°C)	20	25	30	35	40	45	50	55	60
	Factor (max. conductor temp.: 90°C)	1,08	1,04	1,0	0,96	0,91	0,87	0,82	0,76	0,71

IEC 60502-2 (MV cables) - Rating factors for differing SOIL temperatures

IEC 60502-2	Temperature (°C)	10	15	20	25	30	35	40	45	50
	Factor (max. conductor temp.: 90°C)	1,07	1,04	1,0	0,96	0,93	0,89	0,85	0,80	0,76

PREPARED BY STANDARDS : TS HD 603 S1 - TS HD 604 S1

TABLE 11  
Effective Resistance

Nominal Cross Sections of Conductor mm <sup>2</sup>	Resistance	
	Cu /km	Al /km
1,5	12,10	-
2,5	7,41	-
4	4,61	-
6	3,08	-
10	1,83	-
16	1,15	1,91
25	0,727	1,20
35	0,524	0,868
50	0,387	0,641
70	0,268	0,443
95	0,193	0,320
120	0,153	0,253
150	0,124	0,206
185	0,0991	0,164
240	0,0754	0,125
300	0,0601	0,100
400	0,0470	0,0778

Conversion of conductor resistance values for deviating

$$R_{20} = R_d \frac{254,5}{234,5 + d} \text{ (Cu)}$$

$$R_{20} = R_d \frac{248}{228 + d} \text{ (Al)}$$

R<sub>20</sub> : Conductor resistance at 20°C) ( /km)  
 R<sub>d</sub> : Conductor resistance at d°C) ( /km)  
 d : Conductor temperature (°C)

TABLE 12  
Correction laying depth factors

Depth cm	U= 1000 V	
	S 50 mm <sup>2</sup>	70-240 mm <sup>2</sup>
50	1,02	1,04
60	1,01	1,02
70	1,00	1,00
80	0,99	0,98
100	0,97	0,96
120	0,95	0,94
150	0,93	0,92

TS HD 603 S1 - TS HD 604 S1 PREPARED BY STANDARDS

TABLE 13  
Reduction factors for different ground thermal resistivity

Nominal area mm <sup>2</sup>	Thermal resistivity K x cm / W								
	50	70	80	100	120	150	200	250	300
1,5	1,14	1,08	1,05	1	0,96	0,90	0,83	0,77	0,72
2,5	1,15	1,08	1,05	1	0,96	0,90	0,82	0,76	0,71
4	1,16	1,08	1,05	1	0,95	0,89	0,82	0,76	0,71
6	1,16	1,09	1,06	1	0,95	0,89	0,81	0,75	0,70
10	1,17	1,09	1,07	1	0,95	0,89	0,80	0,75	0,70
16	1,18	1,10	1,08	1	0,95	0,89	0,80	0,74	0,69
25	1,20	1,10	1,08	1	0,94	0,89	0,79	0,72	0,67
50	1,24	1,13	1,08	1	0,94	0,89	0,77	0,70	0,65
95	1,24	1,13	1,08	1	0,94	0,86	0,77	0,70	0,64
150	1,25	1,13	1,08	1	0,94	0,86	0,76	0,69	0,64
240	1,25	1,13	1,08	1	0,93	0,86	0,76	0,69	0,64

PREPARED BY STANDARDS : TS HD 603 S1 - TS HD 604 S1

TABLE 14  
MV Cables correction factors  
Reduction factors thermal resistivity on the ground for single core cables

		Cross sectional area mm <sup>2</sup>	Thermal resistivity K.m/W								
			0,50	0,70	0,80	1,00	1,20	1,50	2,00	2,50	3,00
Type 10B-A	from 8,7/15kV to 20,8/36kV	25	1,37	1,19	1,12	1,00	0,91	0,80	0,67	0,58	0,52
		50	1,39	1,20	1,12	1,00	0,91	0,80	0,67	0,58	0,52
		95	1,42	1,21	1,13	1,00	0,91	0,79	0,67	0,58	0,52
		150	1,45	1,22	1,13	1,00	0,90	0,78	0,66	0,57	0,51
Type 10B-B	from 8,7/15kV to 20,8/36kV	240	1,47	1,23	1,14	1,00	0,90	0,78	0,65	0,57	0,51
		400	1,49	1,23	1,14	1,00	0,90	0,78	0,65	0,56	0,50
		630	1,51	1,24	1,14	1,00	0,89	0,77	0,65	0,56	0,50
		1000	1,53	1,25	1,15	1,00	0,89	0,77	0,64	0,55	0,49
Type 10B-C	20,8/36kV	240	1,29	1,15	1,09	1,00	0,93	0,85	0,75	0,68	0,62
		400	1,30	1,15	1,09	1,00	0,93	0,84	0,74	0,67	0,62
630		1,30	1,15	1,09	1,00	0,92	0,84	0,74	0,66	0,61	
Type 10 B-D		1000	1,32	1,16	1,10	1,00	0,92	0,83	0,73	0,66	0,61

TABLE 15  
Laying depth reducing factors

Depth cm	U 15 kV S 300 mm <sup>2</sup>	U 15 kV S 300 mm <sup>2</sup>	U > 15 kV S 300 mm <sup>2</sup>	U > 15 kV S 300 mm <sup>2</sup>
50	1,03	1,05	-	-
60	1,02	1,03	-	-
70	1,00	1,00	-	-
80	0,99	0,98	1,02	1,03
100	0,97	0,95	1,00	1,00
120	0,95	0,93	0,99	0,98
150	0,93	0,91	0,97	0,95
200	-	-	0,94	0,92
250	-	-	0,92	0,90

S = Cross-sectional area of the conductor

Number of systems	Cross sectional area mm <sup>2</sup>	2	3	4	5	6	8	10
	25	0,86	0,78	0,73	0,70	0,67	0,64	0,62
	50	0,85	0,77	0,72	0,69	0,67	0,64	0,62
	95	0,85	0,77	0,72	0,69	0,67	0,63	0,62
	150	0,84	0,76	0,72	0,68	0,66	0,63	0,62
	240	0,84	0,76	0,71	0,68	0,66	0,63	0,61
	400	0,84	0,75	0,71	0,67	0,65	0,62	0,60
	630	0,83	0,75	0,70	0,65	0,65	0,62	0,60
	1000	0,82	0,74	0,69	0,64	0,64	0,61	0,59
	25	0,89	0,81	0,77	0,73	0,72	0,69	0,67
	50	0,89	0,80	0,76	0,73	0,71	0,68	0,66
	95	0,89	0,80	0,76	0,73	0,71	0,68	0,66
	150	0,88	0,80	0,76	0,72	0,70	0,67	0,65
	240	0,88	0,79	0,75	0,72	0,70	0,67	0,65
	400	0,87	0,78	0,74	0,71	0,69	0,66	0,64
	630	0,87	0,77	0,73	0,70	0,68	0,65	0,63
	1000	0,86	0,76	0,72	0,69	0,67	0,64	0,62

PREPARED BY STANDARDS : TS HD 620 S3

TABLE 16  
Reduction factors for the other cable systems in the air

	Number of racks	Number of systems		
		1	2	3
<p>A. On non-aerated cable racks</p>	1 2 3 6	0,95 0,90 0,88 0,86	0,90 0,85 0,83 0,81	0,88 0,83 0,81 0,79
<p>B. On aerated cable racks</p>	1 2 3 6	1,00 1,00 1,00 1,00	0,98 0,95 0,94 0,93	0,96 0,93 0,92 0,90
<p>A. On non-aerated cable racks</p>	1 2 3 6	0,92 0,87 0,84 0,82	0,89 0,84 0,82 0,80	0,88 0,83 0,81 0,79
<p>B. On aerated cable racks</p>	1 2 3 6	1,00 1,00 1,00 1,00	0,97 0,94 0,93 0,91	0,96 0,93 0,92 0,90

TABLE 17

 Connection factors for multicore cables laid in ground or in air with crosssection from 1,5 mm<sup>2</sup> to 10 mm<sup>2</sup>

Number of Cores under load	In ground	In the air
5	0,70	0,75
7	0,60	0,65
10	0,50	0,55
14	0,45	0,50
19	0,40	0,45
24	0,35	0,40
40	0,30	0,35
61	0,25	0,30

TABLE 18

Permissible operating temperature short-circuit temperature and short circuit currents for cables with copper and aluminium conductor

Nominal short circuit current density for 1sec (A/mm <sup>2</sup> )											
Cable type	Max. operating temperature °C	Max. short circuit temperature °C	Initial temperature °C								
			90	80	70	65	60	50	40	30	20
Copper conductor XLPE insulation	90	250	143	149	154	157	159	165	170	176	181
Al. conductor XLPE insulation	90	250	94	98	102	104	105	109	113	116	120
Copper conductor PVC insulation ≤ 300 mm <sup>2</sup> > 300 mm <sup>2</sup>	70	160	---	---	115	119	122	129	136	143	150
	70	140	---	---	103	107	111	118	126	133	140
Al. conductor PVC insulation ≤ 300 mm <sup>2</sup> > 300 mm <sup>2</sup>	70	160	---	---	76	78	81	85	90	95	99
	70	140	---	---	68	71	73	78	83	88	93

 Short circuit current for various exposure time ,  $I_{th}$ 

$$I_{th} = \frac{I_{thN}}{\sqrt{T_k}}$$

 $I_{thN}$  = Short circuit current for 1sec

 $T_k$  = Exposure time, sec

 $I_{thN}$  = Conductive section (mm<sup>2</sup>) x short circuit current density (A/mm<sup>2</sup>) x 10<sup>-3</sup> kA

TABLE 19  
Inductive reactance of PVC insulated cables at 50 Hz.

Nominal cross-section of Conductor mm <sup>2</sup>	Nominal voltage					
	0,6/1 kV		3,6/6 kV		6/10 kV	
	Multi Core <sup>(1)</sup> ohm/km	1 Core <sup>(2)</sup> ohm/km	3 Core <sup>(1)</sup> ohm/km	1 Core <sup>(2)</sup> ohm/km	3 Core <sup>(1)</sup> ohm/km	1 Core <sup>(2)</sup> ohm/km
25	0,082	0,103	0,107	0,137	0,122	0,127
35	0,079	0,098	0,101	0,131	0,116	0,119
50	0,078	0,095	0,097	0,127	0,114	0,113
70	0,075	0,090	0,092	0,117	0,107	0,107
95	0,075	0,088	0,088	0,112	0,103	0,104
120	0,073	0,085	0,085	0,107	0,099	0,100
150	0,073	0,084	0,083	0,105	0,096	0,097
185	0,072	0,084	0,081	0,102	0,093	0,094
240	0,072	0,082	0,078	0,097	0,089	0,093
300	-	0,081	0,077	0,095	0,087	0,091
400	-	0,079	-	0,092	-	0,088
500	-	0,079	-	0,089	-	0,085

- 1- 10% more is taken for armored cables.
- 2- Trefoil formation.

TABLE 20  
Inductive reactance of XLPE insulated cables at 50 Hz.

Nominal cross-section of Conductor mm <sup>2</sup>	Nominal voltage									
	0,6/1 kV		6/10 kV		8,7/15 kV		12/20 kV		20,3/35 kV	
	1 Core <sup>(2)</sup> W/km	Multi Core <sup>(1)</sup> W/km	1 Core <sup>(2)</sup> W/km	Multi Core <sup>(1)</sup> W/km	1 Core <sup>(2)</sup> W/km	Multi Core <sup>(1)</sup> W/km	1 Core <sup>(2)</sup> W/km	Multi Core <sup>(1)</sup> W/km	1 Core <sup>(2)</sup> W/km	Multi Core <sup>(1)</sup> W/km
35	-	0,075	0,133	-	0,139	-	0,144	-	-	-
50	0,088	0,072	0,127	0,110	0,132	0,117	0,137	0,123	0,146	0,135
70	0,085	0,072	0,119	0,103	0,124	0,110	0,129	0,115	0,135	0,127
95	0,082	0,069	0,114	0,099	0,118	0,105	0,123	0,110	0,131	0,121
120	0,082	0,069	0,109	0,095	0,114	0,101	0,118	0,106	0,125	0,116
150	0,082	0,069	0,106	0,092	0,11	0,098	0,114	0,102	0,121	0,113
186	0,082	0,069	0,102	0,090	0,106	0,095	0,110	0,099	0,117	0,109
210	0,079	0,069	0,098	0,087	0,102	0,091	0,105	0,095	0,112	0,104
300	-	-	0,095	0,084	0,099	0,089	0,102	0,092	0,108	0,101
400	-	-	0,091	-	0,095	-	0,098	-	0,103	-
500	-	-	0,099	-	0,092	-	0,094	-	0,100	-
Longitudinally water-proof construction										
35	-	-	0,147	-	-	-	0,157	-	-	-
50	-	-	0,140	-	-	-	0,150	-	0,159	-
70	-	-	0,133	-	-	-	0,142	-	0,150	-
95	-	-	0,127	-	-	-	0,135	-	0,143	-
120	-	-	0,123	-	-	-	0,131	-	0,139	-
150	-	-	0,120	-	-	-	0,127	-	0,135	-
186	-	-	0,114	-	-	-	0,122	-	0,129	-
210	-	-	0,110	-	-	-	0,117	-	0,124	-
300	-	-	0,106	-	-	-	0,113	-	0,119	-
400	-	-	0,102	-	-	-	0,109	-	0,115	-
500	-	-	0,100	-	-	-	0,106	-	0,112	-

- 1- 10% more is taken for armored cables.
- 2- Trefoil formation.

TABLE 21  
Earth fault currents - PVC insulated cables

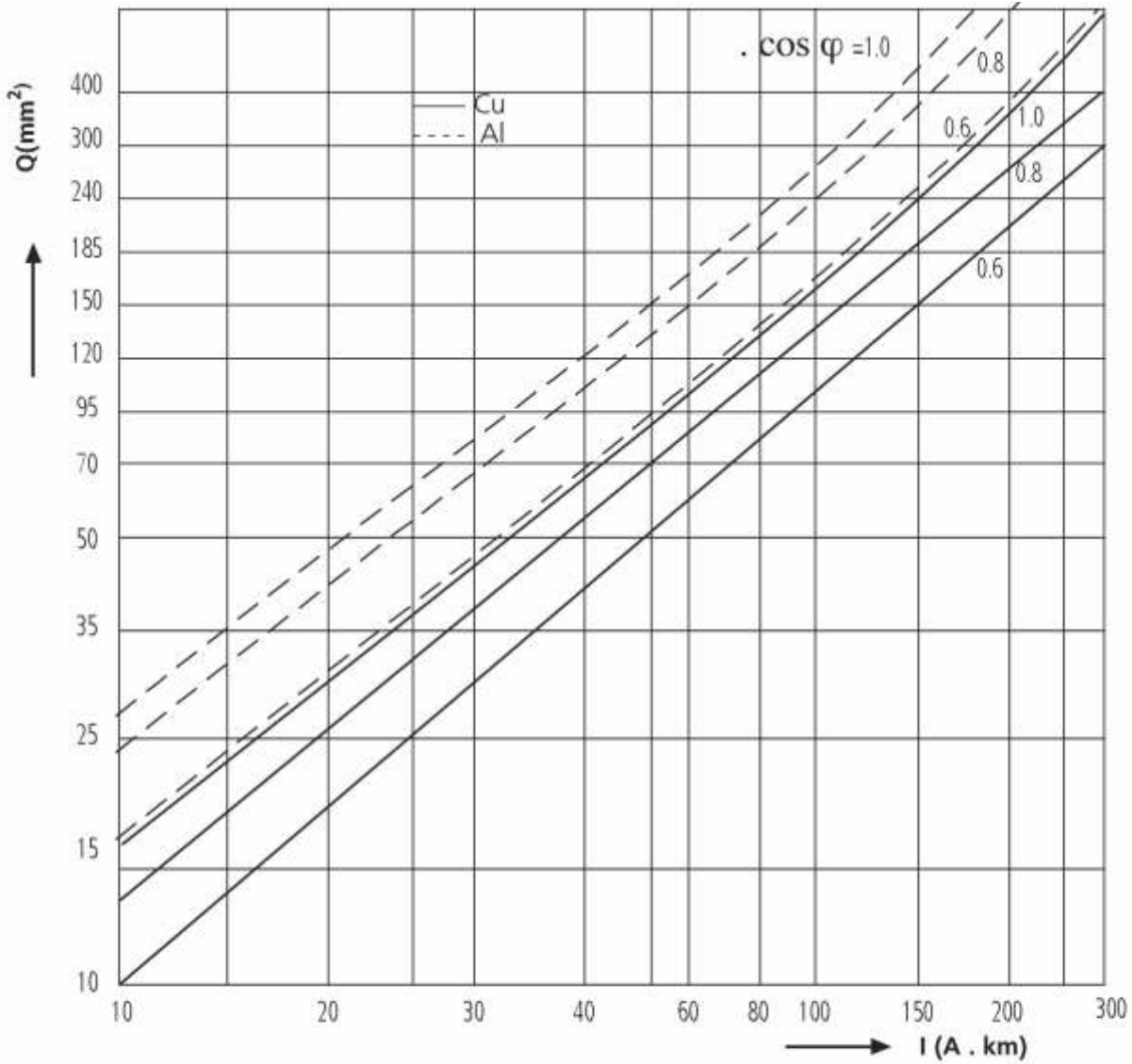
Nominal cross-section	Nominal Voltage	Nominal Voltage
mm <sup>2</sup>	3,6/6 kV (A/km)	6/10 kV (A/km)
25	0,60	1,9
35	0,60	2,1
50	0,70	2,3
70	0,70	2,6
95	0,80	2,9
120	0,90	3,2
150	0,90	3,4
185	1,00	3,8
210	1,00	4,5
300	1,20	5,0

TABLE 22  
Earth fault currents - XLPE insulated cables

Nominal cross-section	Nominal Voltage	Nominal Voltage	Nominal Voltage	Nominal Voltage
mm <sup>2</sup>	6/10 kV (A/km)	8.7/15 kV (A/km)	12/20 kV (A/km)	18/30 kV (A/km)
35	1,2	1,4	1,8	-
50	1,3	1,6	1,9	2,2
70	1,5	1,8	2,1	2,4
95	1,7	1,9	2,3	2,7
120	1,8	2,1	2,5	2,9
150	2,0	2,3	2,7	3,1
185	2,1	2,5	2,9	3,3
240	2,4	2,8	3,2	3,6
300	2,6	3,0	3,5	3,9
400	3,0	3,4	4,0	4,4
500	3,0	3,7	4,4	4,8



TABLE 23  
Voltage drop at low voltage cables



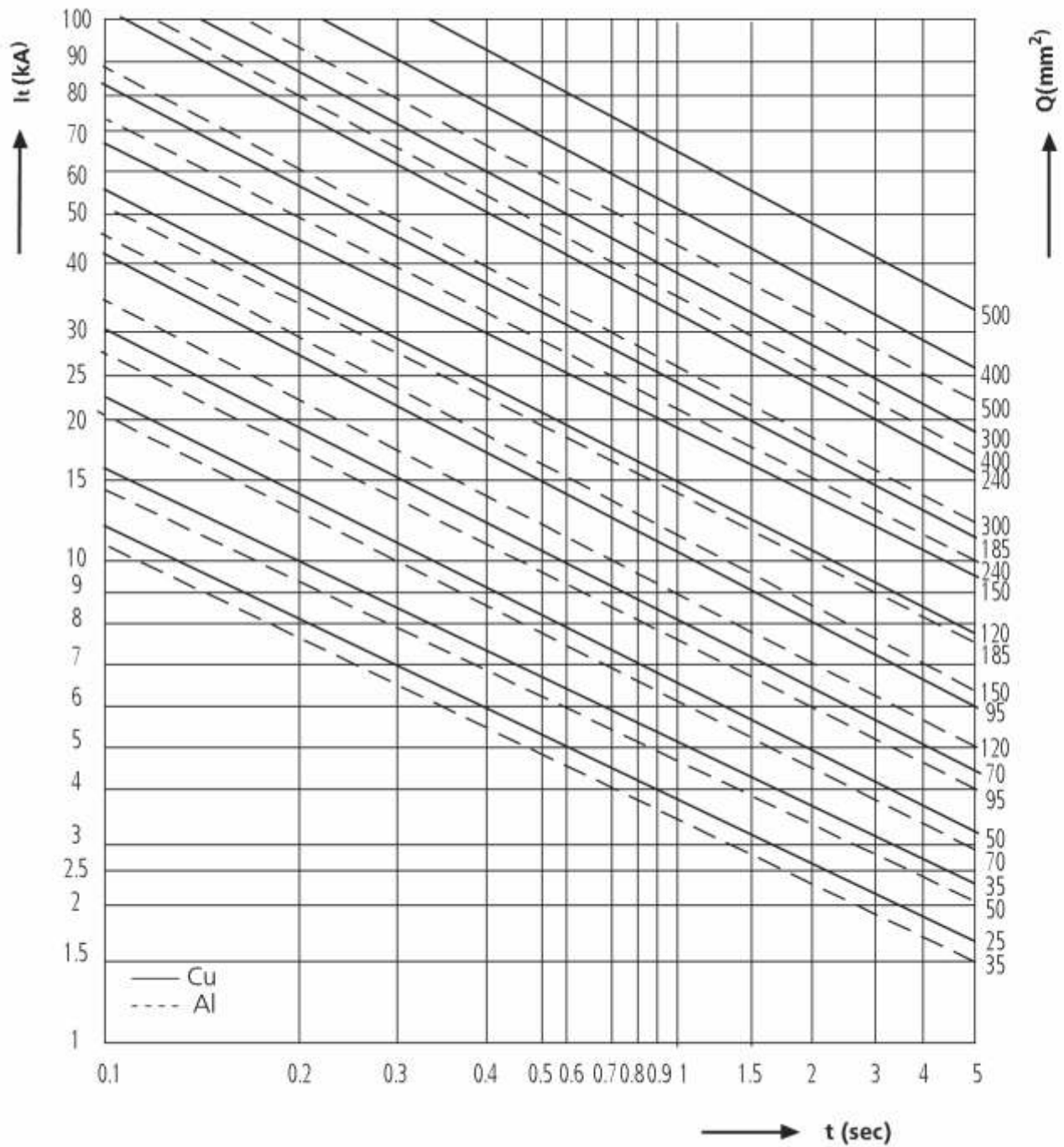
Voltage drop : %5  
Service voltage : 220/380V  
Conductor temperature : 70 °C

In many cases, especially for large cross section, the inductive voltage drop must be taken into consideration.

General formula for three phase systems: 
$$e = \frac{100 \cdot \sqrt{3} \cdot I \cdot l}{U} (R \cdot \cos \varphi + X \cdot \sin \varphi)$$

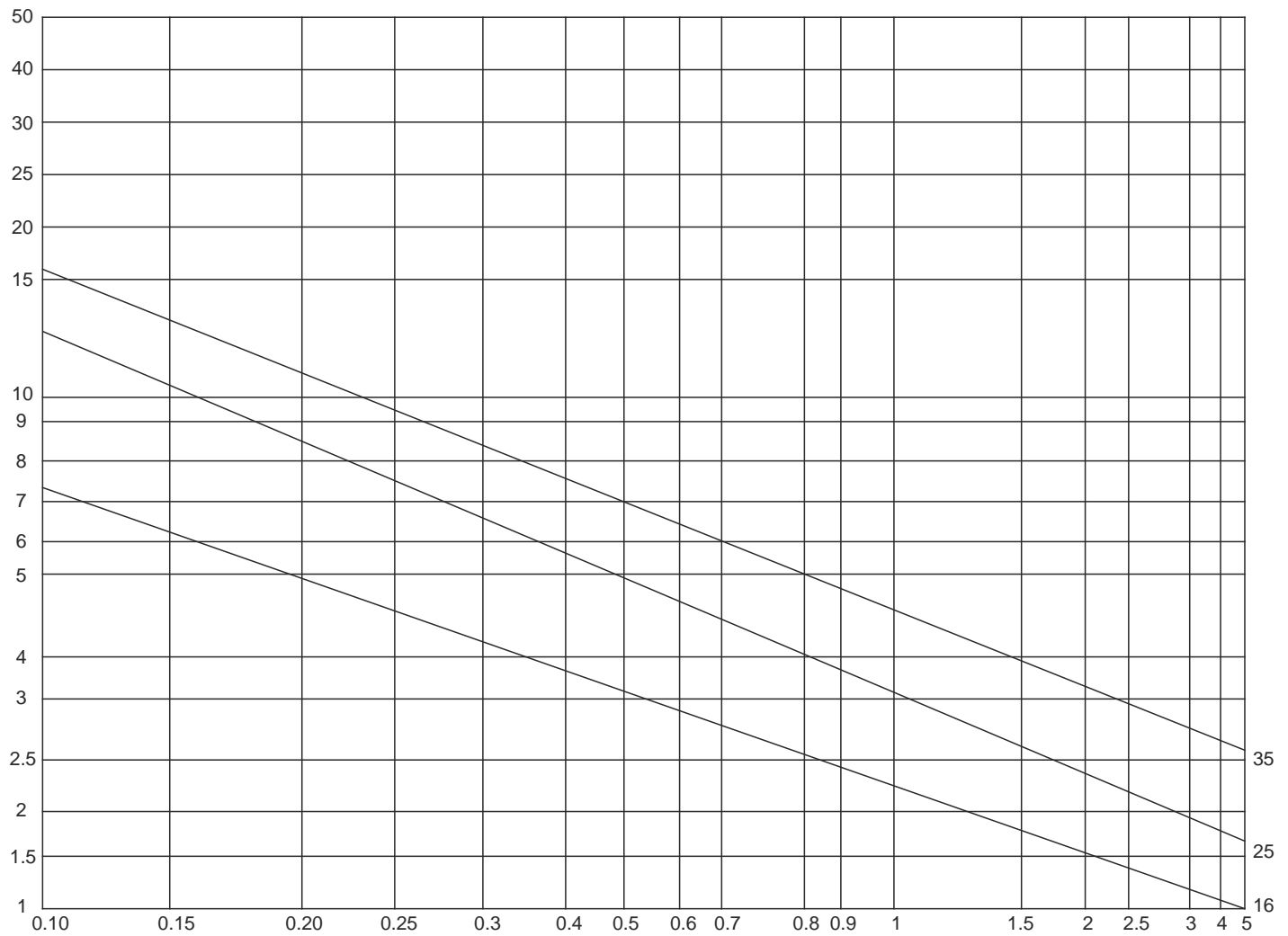
U= Phase to phase voltage (V)    l = Length cable (km)  
e= Voltage drop (%)                R= Resistance (ohm/km)  
I= Current loading (A)                X= Inductance (ohm/km)

TABLE 24  
Permissible short-circuit current for XLPE insulated cables for 1-30 kV



(Short circuit initial temperature 90 °C, final temperature 250 °C).

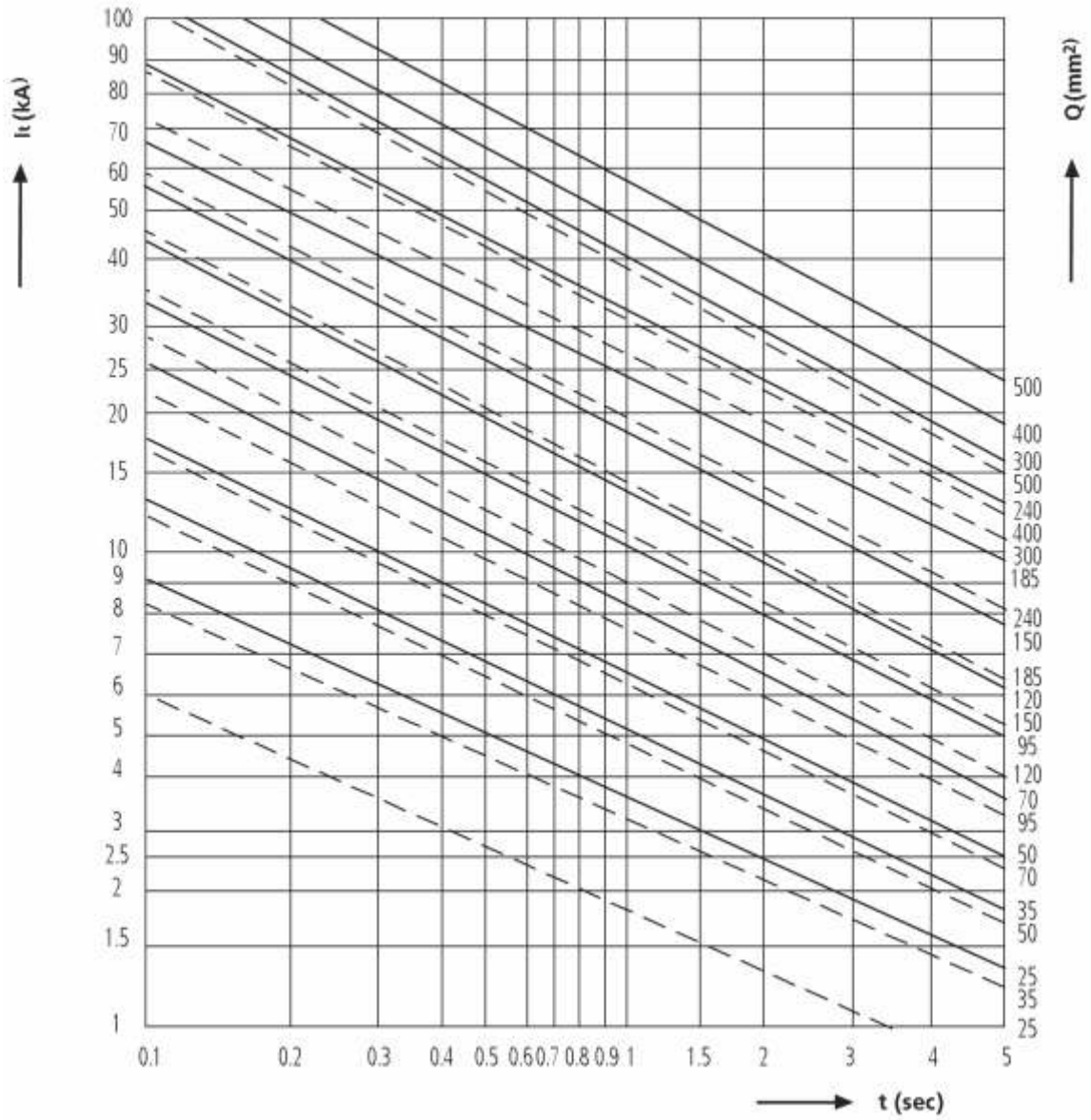
TABLE 25  
Permissible short-circuit current for various cross-sections of screens



**Standard cross-sections of screens**

Cross-sections of conductor (mm <sup>2</sup> )	Cross-sections of screen (mm <sup>2</sup> )
35 - 120	16
150 - 300	25
400 - 500	35

TABLE 26  
Permissible short-circuit current for PVC insulated cables for 1-10kV



For single core systems laying arrangement, cores shall be in the form of;

L1 L2 L3    L3 L2 L1    L1 L2 L3    L3 L2 L1

For the systems which have more than one layer, provided that, it shall be minimum 20 cm gap between systems.

1 st. layer            2nd. layer

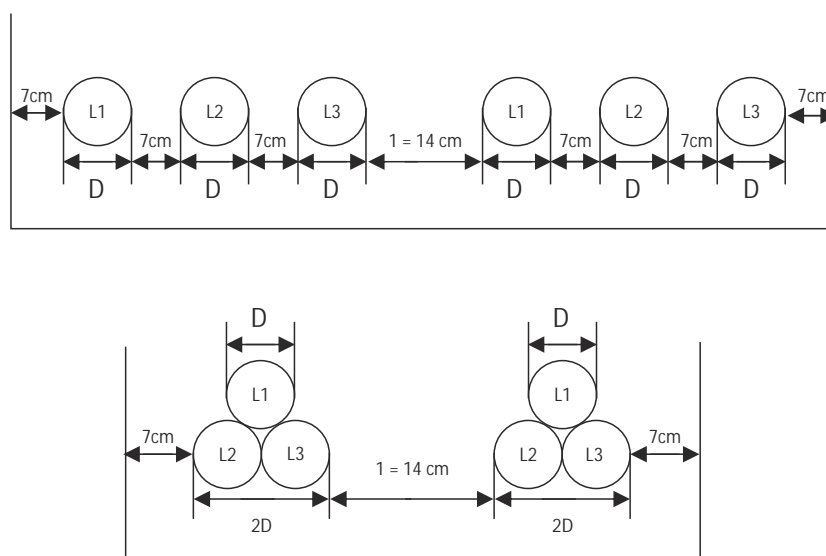
L1 L2 L3            L3 L2 L1  
 L1 L2 L3            L3 L2 L1  
 L1 L2 L3            L3 L2 L1

Same phases shall not install near side by side for all these systems. For example; L1 L1 L1, L2 L2 L2, L3 L3 L3 is a wrong formation for laying.

The minimum gap between two cables shall be as same diameter with cables and also length of cable shall be approximately equal for each of them.

Number of Cores	Bending Radius		
	Unarmoured LV Cables	Unarmoured MV Cables	Armoured Cables
Single Core	12 x D	14 x D	15 x D
Multi Core	10 x D	12 x D	12 x D

Example for single core system



## FORMULAS - CONVERSION FACTORS

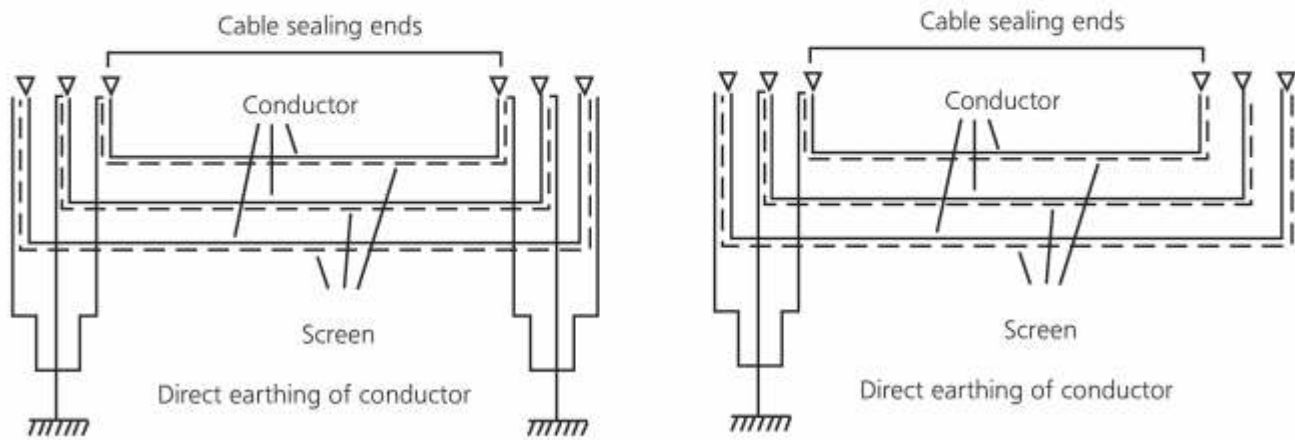
Ohms Law	$U = I \times R$	U	Rated voltage (V)
Energy	$W = I^2 \times R \times t$	I	Current (A)
Resistance of a Line (Feed and Return)	$R = \frac{2 \times l}{\gamma \times S}$	R	Resistance (ohm)
Power	$P = U \times I$	W	Energy (Joule)
Single-Phase Power	$P = U \times I \times \cos \phi$	t	Time (seconds)
Three-Phase Power	$P = 1,73 \times U \times I \times \cos \phi$	l	Length of cable (m)
Efficiency	$h = \frac{P_{\text{output}}}{P_{\text{input}}}$	u	Voltage drop (V) from sending to receiving end of line
		$\gamma$	Conductivity (for copper 58 MS/m at 20°C)
		S	Rated cross-section (mm <sup>2</sup> )
		cos $\phi$	Power factor
		P	Power (W)
		h	Efficiency

	In single-phase AC and DC systems	In three-phase AC and DC systems
If current is known	$u = \frac{2 \times l \times I}{\gamma \times S} \text{ (V)}$	$u = \frac{1,73 \times l \times I \times \cos \phi}{\gamma \times S} \text{ (V)}$
If power is known	$u = \frac{2 \times l \times P}{\gamma \times S \times U} \text{ (V)}$	$u = \frac{l \times P}{\gamma \times S \times U} \text{ (V)}$
If current is known	$S = \frac{2 \times l \times I}{\gamma \times u} \text{ (mm}^2\text{)}$	$S = \frac{1,73 \times l \times I \times \cos \phi}{\gamma \times u} \text{ (mm}^2\text{)}$
If power is known	$S = \frac{2 \times l \times P}{\gamma \times u \times U^2} \text{ (mm}^2\text{)}$	$S = \frac{l \times P}{\gamma \times u \times U^2} \text{ (mm}^2\text{)}$

Lenght	meters (m)	inches (in)	feet (ft)	yard (yd)	miles (mil)
1m	1,0	39,37	3,28	1,0936	0,621371 x 10 <sup>3</sup>
1 in	0,0254	1,0	0,0833	0,0277	0,0158 x 10 <sup>3</sup>
1 ft	0,3048	12,00	1,0	0,333	0,189 x 10 <sup>3</sup>
1 yd	0,9144	36,00	3,0	1,0	0,568 x 10 <sup>3</sup>
1 mile	1609,344	63360,0	5280,0	1760,0	1,0 x 10 <sup>3</sup>

Area	m <sup>2</sup>	in <sup>2</sup>	ft <sup>2</sup>
1 m <sup>2</sup>	1,0	1550,0	10,7639
1 in <sup>2</sup>	0,64516 x 10 <sup>3</sup>	1,0	6,944 x 10 <sup>3</sup>
1 ft <sup>2</sup>	0,0929	144,0	1,0

**EARTING METHODS FOR CABLE SCREENS**

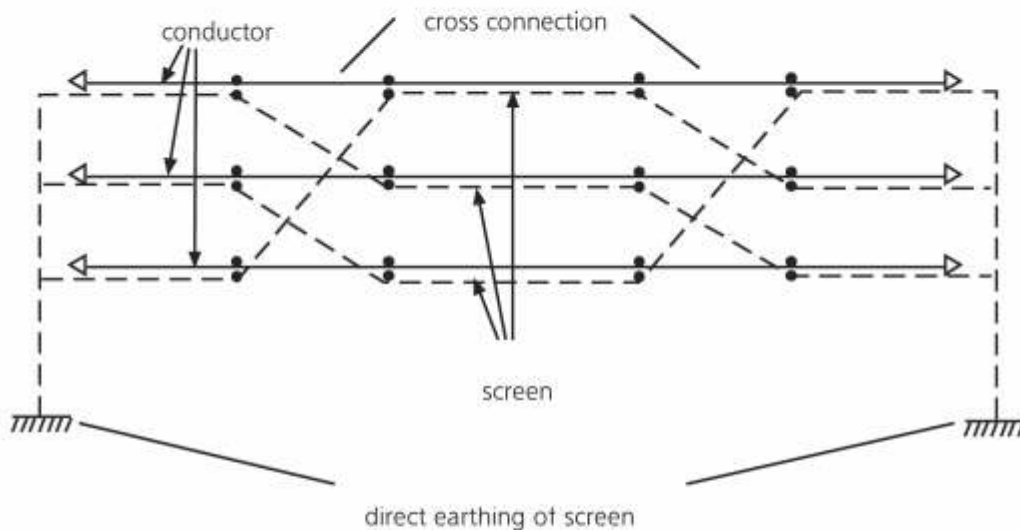


1) Earthing at two ends

Cable screens are connected together and earthed at both ends of cable route. On this method, current induced at cable screen cause additional losses and reduce the current carrying capacity. Losses at cables; installed as triangle bunch are lower than cables installed side by side.

2) Earthing at one end

Cable screens are connected together and earthed at one end of cable route. Voltage between the cable screen and earth is proportional with the cable length and current rate in conductor. This method is only applied for short distances.



3) Cross connection

It is used at long distances (1km or over). The line is splitted in 3 equal electrical parts. Screens of adjacent cables are cross connected at joint boxer are earthed via voltage limiter. Additionally the screens are connected and directly earthed at two ends. In this method, current carrying capacity is as big as screening at one and.

Permitted minimum bending radius during the cabling

Multi-core cables

0,6/1 kV : 12 D

0,6/1 kV : 15 D

All single mode cables

D : Cable diameter

Minimum ambient temperature during the cabling

: +3°C PVC cables

: -5°C XLPE cables

Permitted maximum tensile strenght during the cabling

Unarmoured cables with copper conductor :  $a \times 50 \text{ N/mm}^2$  (5 kg/mm<sup>2</sup>)

Unarmoured cables with aluminium conductor :  $a \times 30 \text{ N/mm}^2$  (3 kg/mm<sup>2</sup>)

All cables with steel wire armoured :  $d^2 \times 9 \text{ N/mm}^2$  (0,9 kg/mm<sup>2</sup>)

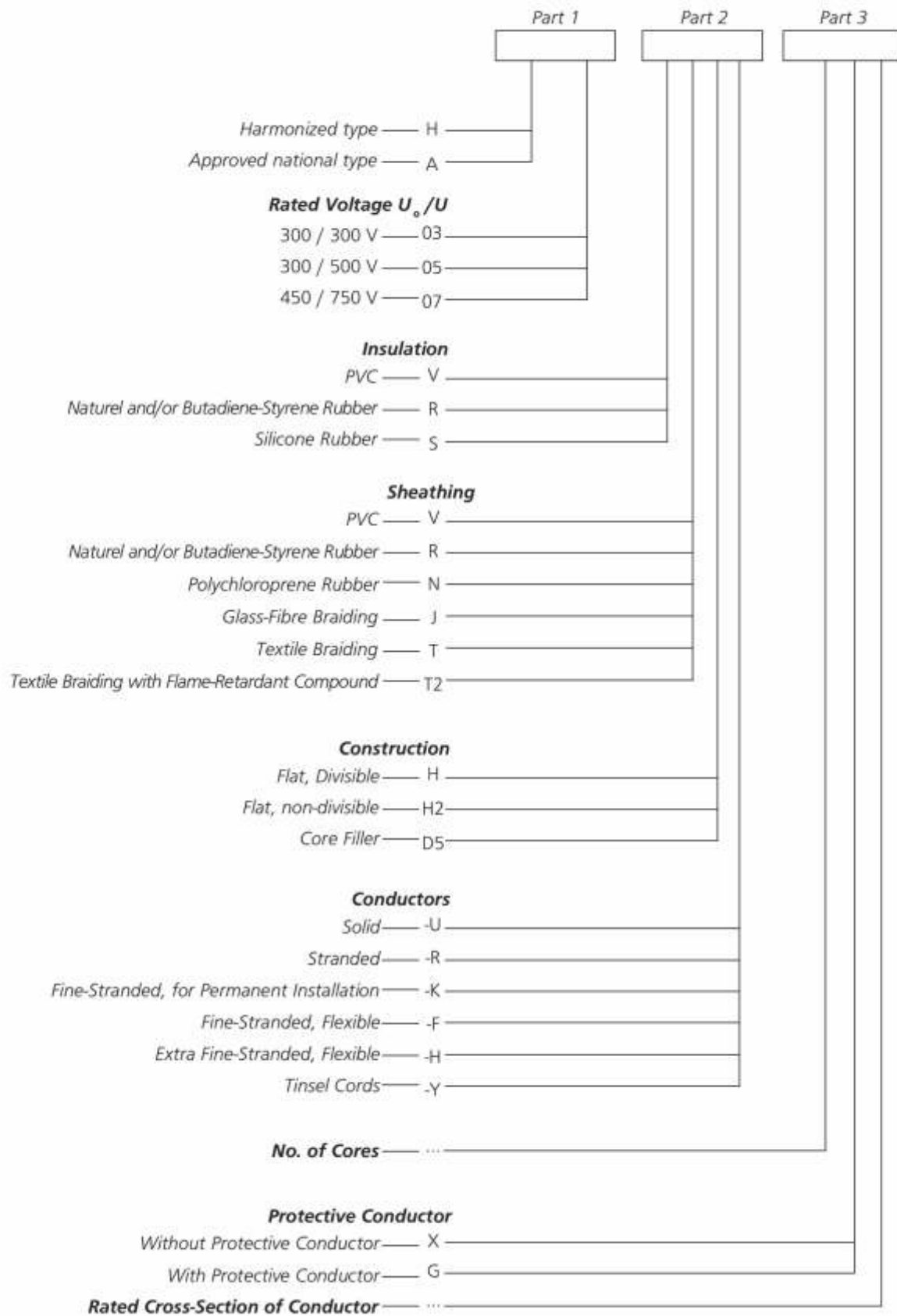
All cables with steel belt armoured :  $d^2 \times 3 \text{ N/mm}^2$  (0,3 kg/mm<sup>2</sup>)

A : Total conductive section of all cores

D : Cable Diameter (mm)







**(TS HD 361.53)**
**Symbols**

E  
N  
V  
X  
Z1

**Materials**
**Insulating and Unmetallic Sheath Materials**

Polyethylene  
Polychloroprene  
PVC  
Cross-linked polyethylene  
Thermoplastic material has a suitable low level corrosive gas emission with polyethylene basis for low smoke emission

AT  
A8  
C4  
C7  
C8

**Metallic Covers**

Aluminium screen  
Aluminium screen over each core  
Copper wire braiding over cores  
Copper screen from the ribbon or tape or copper wire over each core as C7

Z2  
Z3  
Z4  
Y2  
Y3

**Armouring**

Galvanized or plain round steel wire armour  
Galvanized or plain flat steel wire armour  
Galvanized or plain steel tape armour  
Round aluminium wire armour  
Flat aluminium wire armour

H  
H2  
H4  
H5  
  
H6

**Special Construction**

Circular constructed cable  
Sheathed or unsheathed separable flat constructed cable  
Unseparable flat constructed cables and cordon  
Multicore flat cable with non insulated one conductor  
Stranded cable with two or more cores together

**Conductor Material**

-A

Copper  
Aluminium

-F  
-H  
  
-K  
-R  
-S  
-U  
-W  
-Y

**Conductor Shape**

Twisted cable or twisted conductor of cordon  
Twisted cable or high level twisted conductor of cordon  
  
One cable conductor for fixed installation  
Rigid, round conductor, braided  
Rigid, with sector shaped conductor, braided  
Rigid, round conductor, solid  
Rigid, with sector shaped conductor, solid  
Conductor with the shape of the bride wire

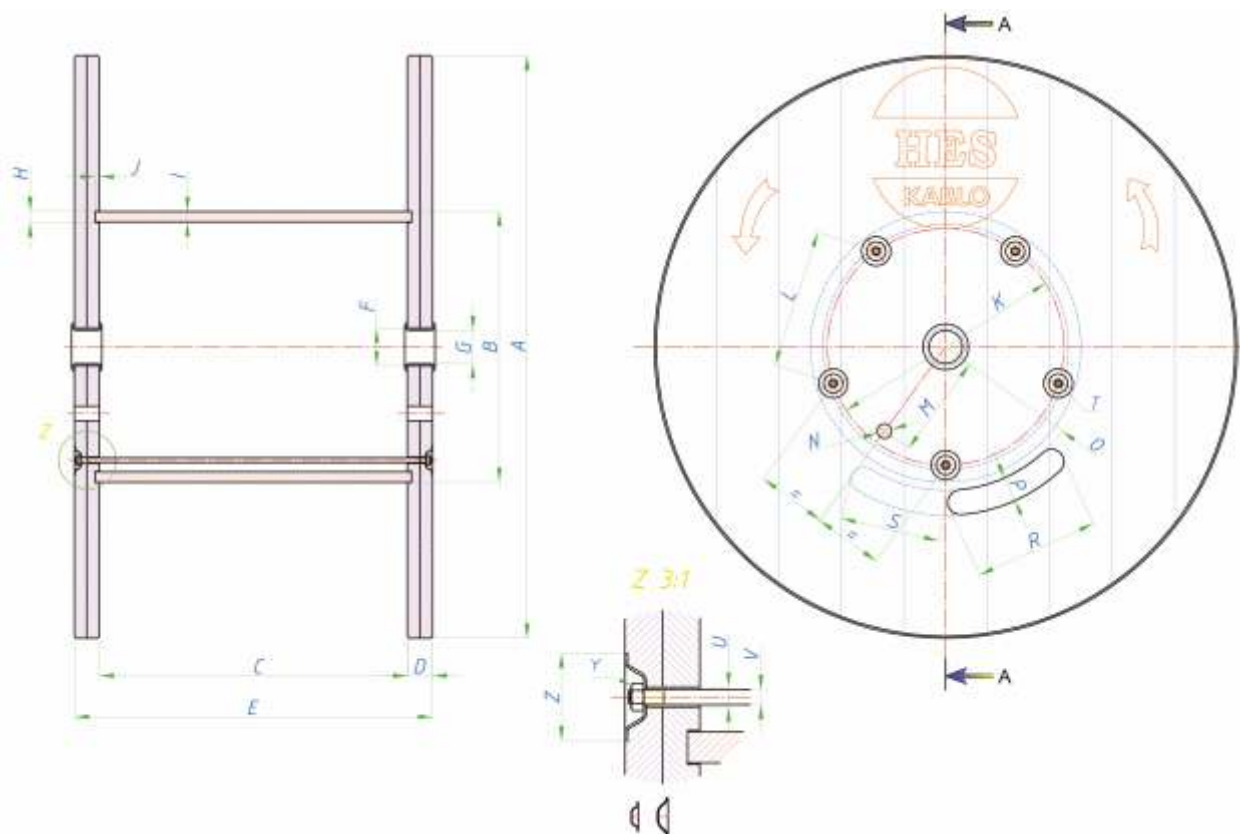
Example : YVV-U

Example : YVZ2V-R

Example : YAXC8VZ3V-R

<b>VDE 0271</b>	<b>Explanation</b>	<b>VDE 0250</b>	<b>Explanation</b>
A	<i>Aluminium conductor</i>	Y	<i>Thermoplastic insulation material (PVC)</i>
Y	<i>Polyvinylchloride insulation or sheath</i>	S	<i>Metallic screen</i>
2Y	<i>Polyethylene</i>	G	<i>Rubber insulation</i>
2X	<i>Cross-linked polyethylene</i>	2G	<i>Thermo resistant</i>
H	<i>Sheath or tape conductive layer</i>	W	<i>Resistant against air conditions</i>
S	<i>Copper shield</i>	u	<i>Flame retardant</i>
SE	<i>Metallic screen (copper) over each core</i>	AF	<i>Stranded cable</i>
C	<i>Concentric copper conductor</i>	B	<i>Metal Sheath (lead)</i>
F	<i>Galvanized flat steel wire armour</i>	T	<i>Pilot core (textile, steel or similar)</i>
R	<i>Galvanized round steel wire armour</i>	ö	<i>Oil resistant</i>
G	<i>Steel tape (for F and R)</i>	J	<i>Green / Yellow conductor for earth</i>
s	<i>Sector-shaped conductor</i>		
v	<i>Compacted conductor</i>		
rm	<i>Stranded conductors</i>		
k	<i>Resistant against corrosion</i>		
W	<i>Resistant against heat and corrosion</i>		
u	<i>Flame retardant</i>		

Flange Diameter	Hub	The Width Of The Reel	The Reel Outer Width	Belly Hole Diameter	Approximate Weight Reel
mm	mm	mm	mm	mm	Kg
700	350	280	360	80	40
800	350	460	540	80	60
900	400	460	540	80	80
1000	500	620	720	80	115
1100	600	620	720	80	140
1200	600	620	720	80	160
1300	650	670	770	80	190
1400	650	670	770	80	245
1500	750	670	770	80	275
1500	750	920	1020	80	350
1600	800	960	1080	108	370
1700	800	960	1080	108	500
1800	1000	960	1100	108	520
1900	1000	960	1100	108	550
2000	1000	960	1100	108	580
2100	1100	1150	1290	108	770
2200	1200	1250	1410	108	840
2300	1300	1400	1560	108	870
2400	1400	1550	1730	135	930
2500	1500	1650	1830	135	1000



### Drums

Cable Diameter (mm)	700	800	900	1000	1100	1200	1300	1400	1500 A:680	1500 A:900	1600	1700	1800	1900	2000	2100	2200	2400	
4	3580																		
5	2310	5204																	
6	1518	3583	5123																
7	1122	2574	3718	5808															
8	866	1935	2911	4537	5142	6751													
9	665	1539	2292	3526	3996	5193	7078												
10	554	1301	1879	2923	3312	4384	5791	7009											
11	412	928	1424	2244	2543	3326	4633	5502	6039										
12	342	788	1164	2803	2043	2885	3910	4690	5148										
13	277	660	1001	1551	1758	2393	3248	4020	4412										
14	264	603	850	1348	1528	2116	2758	3402	3733	4978									
15	208	509	735	1160	1314	1855	2396	3044	3341	4455									
16	196	422	629	985	1117	1612	2108	2570	2821	3762	4752								
17	158	407	607	933	1058	1425	1804	2319	2546	3309	4224								
18	148	330	511	801	908	1250	1630	2026	2224	3005	3598	4372							
19	139	317	490	754	855	1086	1434	1804	1980	2659	3205	3928	3665	4466					
20	115	304	423	658	745	1052	1394	1643	1803	2386	3077	3583	3515	4069					
21	86	198	343	547	620	820	1112	1443	1584	2079	2546	3005	2904	3408	4431				
22	79	189	286	462	524	792	1045	1256	1379	1838	2270	2703	2587	3062	4030				
23	79	189	286	429	486	662	919	1121	1230	1655	2010	2577	2288	2916	3649	4525			
24		179	272	412	467	636	889	1082	1188	1570	1961	2357	2231	2666	3286	4017	4723		
25		136	221	339	385	543	772	957	1050	1400	1720	2090	1953	2360	3017	3701	7274		
26		128	208	325	369	520	717	901	1011	1322	1629	1980	1901	2297	2866	3540	4103		
27				311	353	498	689	805	884	1167	1452	1787	1645	2014	2616	3168	3686	4926	
28				311	353	436	613	773	849	1131	1410	1736	1597	1955	2475	3092	3526	4747	
29				247	280	416	588	741	813	1096	1369	1556	1549	1750	2244	2745	3216	4263	
30				236	267	396	564	638	700	955	1207	1508	1364	1695	2178	2675	3067	4180	
31				236	267	396	472	609	668	923	1131	1296	1320	1504	1961	2419	2778	3726	
32				224	254	322	450	609	668	891	1131	1296	1276	1454	1900	2288	2709	3571	
33				212	240	305	450	515	566	764	984	1253	1109	1403	1697	2051	2372	3224	
34				240	305	429	515	566	566	735	950	1100	1069	1230	1640	1991	2308	3153	
35				182	288	429	490	537	537	707	916	1061	1030	1185	1584	1931	2244	3009	
36				182	288	349	464	509	509	707	784	1021	915	1185	1400	1715	1998	2693	
37				171	226	331	406	445	445	594	754	982	880	1139	1400	1715	1939	2627	
38				171	226	331	383	421	421	569	754	884	845	984	1348	1659	1881	2562	
39				160	212	313	383	421	421	569	724	849	845	984	1178	1458	1710	2269	
40						313	383	421	421	544	724	849	810	943	1178	1408	1656	2209	
41						260	361	396	396	520	607	813	678	902	1131	1408	1603	2150	
42						245	361	396	396	520	581	691	678	802	1084	1358	1549	2090	
43						245	290	318	318	424	581	691	647	766	976	1177	1394	1827	
44								318	318	424	554	660	647	766	933	1177	1346	1827	
45								318	318	424	554	660	616	729	933	1131	1298	1773	
46								297	297	403	453	629	528	729	891	1131	1298	1720	
47								297	297	403	453	550	528	638	792	965	1111	1481	
48								297	297	382	453	550	502	606	754	925	1111	1481	
49								276	276	382	430	522	502	606	754	925	1068	1433	
50											430	522	475	574	754	925	1068	1433	
51												407	495	475	574	717	885	1026	1385
52												407	495	475	574	717	885	1026	1337
53												407	424	449	465	594	739	860	1170
54													374	465	594	739	860	1129	
55													374	465	594	704	823	1129	
56													352	437	561	704	823	1087	
57													352	437	561	704	785	1087	
58													352	437	561	669	785	1045	
59													330	410	528	669	785	1045	
60													330	410	528	669	748	1045	
61													264	342	453	543	641	860	
62													264	342	453	543	641	860	
63													246	319	424	513	609	824	
64													246	319	424	513	609	824	
65													246	319	424	513	609	824	
66													246	319	424	513	577	788	
67																427	481	657	
68																402	481	657	
69																402	481	627	
70																402	454	627	
71																402	454	627	
72																377	454	597	
73																377	454	597	
74																	427	597	
75																	427	597	
76																	427	567	
77																	427	567	
78																	427	567	
79																	401	537	
80																		537	

Cable Diameter \* 15  
 Cable Diameter \* 18  
 Cable Diameter \* 22