POWER CABLES
PRODUCT CATALOGUE

HES® KABLO

Reliable technology

OVER 130 COUNTRIES CARRY
HES KABLO MARK!

HES HACILAR ELEKTRİK SANAYİ VE TİCARET A.Ş.

HES Hacılar Elektrik Sanayi ve Ticaret A.Ş. (HES KABLO) established in 1974 is a leading cable manufacturer in Turkey and the Globe.

Having more than 40 years of experience, HES KABLO has become an international leading company in wire and cable industry producing Power Cable, High Voltage Power Cables, Fiber Optic Cable, Copper Telecommunication Cable, Overhead Line Conductor, Enamelled Wire.

The production is performed at fully integrated plant with the total floor space of 120,000 m2 and site area of 250,000 m2 with the latest technologies and using the most updated machinery and methods under the supervision of skilled and experienced staff assuring the most updated & quality products.

All the production and QC procedures are achieved by the procedures and regulations of obtained ISO 9001, ISO 10002, ISO 14001, OHSAS 18001, ISO 27001, ISO 50001 and relevant international standards. Being a leading international cable manufacturer, HES KABLO products are supplied to all over the world for 40 years, in conformity with the international standards such as VDE, GOST, IEC, BS, CENELEC and also special customer requirements. Quality control of the products is fastidiously performed by the most updated equipments and methods. All these advanced technology and experience ensure high quality of products and make HES KABLO as a reputable brand name worldwide in cable industry.

HES KABLO is ranked at 69 th place among the top 500 industrial companies in Turkey by İstanbul Chamber of Industry, Turkey in 2015. HES KABLO is proud to be a leading international company that supplies “reliable technology” products more than 130 countries worldwide.

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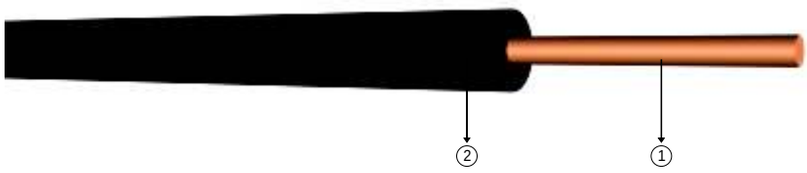
PVC Insulated, single core cables with copper conductor



Code: H05V-U, H07V-U, H07V-R (NYA), CU/PVC

U: Solid Conductor
R: Stranded Conductor Rigid

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

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

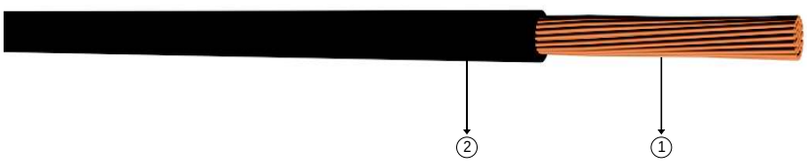
Construction

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)	
mm²	mm	kg/km	m	ohm/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
1.0 * 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
10RE	5.6	108	100	1.83	45	73
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

** : 300/500 V (H05V - U)*

PVC Insulated, single core cables with flexible copper conductor



Code: H05V-K, H07V-K, (NYAF), CU/PVC

K: Flexible Conductor

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

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.

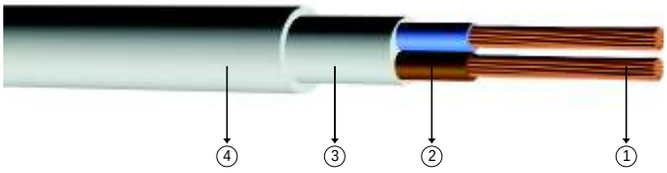
Construction

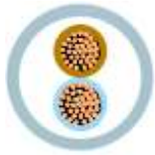
1 Flexible copper conductors
2 PVC insulation

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)	
mm²	mm	kg/km	m	ohm/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
1.0 *	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

** : 300/500 V (H05V - K)*

PVC insulated, stranded copper conductors, installation cables





Code: NYM, CU/PVC/PVC, NVV

Standards: TS 9759, VDE 0250, IEC 60227, BS 6004, HD 21.4 S2

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.

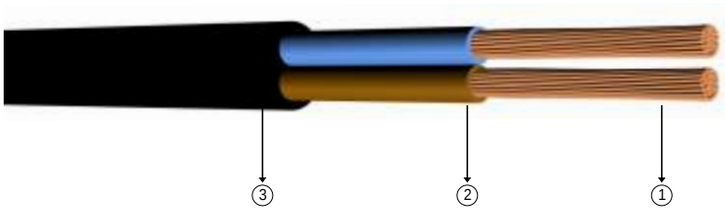
RE : Single conductor wire
RM : Stranded Conductor

Construction

1. Solid or stranded copper conductor
2. PVC insulation
3. Filler
4. PVC outer jacket

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
mm²	mm	kg/km	m	ohm/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, stranded copper conductors, installation cables



Code: H03VV-F, H05VV-F, NYMH-rd, CU/PVC/PVC

F: Fine Stranded Conductor

Standards: EN 50525-2-11, VDE 0281, IEC 60227, BS 6500, HD 21.5 S3,

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.

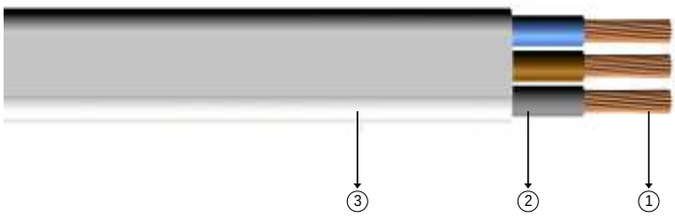
Construction

1. Fine stranded copper conductors
2. PVC insulation
3. PVC outer jacket

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
mm²	mm	kg/km	m	ohm/km	A
2x0.50*	5.5	48	100	39.0	8
2x0.75	6.2	55	100	26.0	13
2x1.0	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
2x4.0	11.0	210	100	4.95	34
3x0.50*	5.4	55	100	39.0	8
3x0.75	6.5	65	100	26.0	13
3x1.0	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
3x4.0	11.4	230	100	4.95	34
4x0.50*	6.4	65	100	39.0	8
4x0.75	7.1	75	100	26.0	13
4x1.0	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
4x4.0	12.5	290	100	4.95	34
5x0.75	8.0	100	100	26.0	13
5x1.0	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
5x4.0	14.5	370	100	4.95	34

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

PVC insulated flat cables with flexible copper conductor



Code: H07VVH6-F

F: Fine Stranded Conductors

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

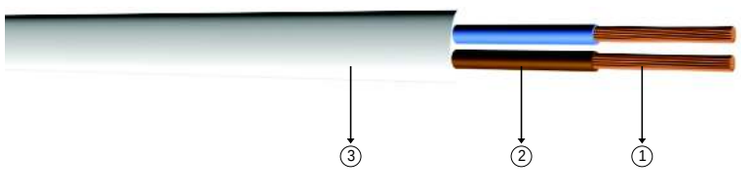
For use in passenger and goods lifts and special applications like hoists and travelling cranes.

Construction

1 Fine stranded copper conductors
2 PVC insulation
3 PVC outer jacket

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
mm²	mm (H x W)	kg/km	m	ohm/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
5x1.5	4.9x17.5	155	1000	13.3	14
5x2.5	5.60x18.0	230	1000	7.98	20
5x4	6.6x24.6	375	1000	4.95	26
5x6	7.50x29.1	520	1000	3.30	33
5x10	9.10x35.1	790	1000	1.91	46
5x16	10.30x40.5	1155	1000	1.21	62
5x25	12.3x49.5	1720	1000	0.78	81

PVC insulated flat cables with flexible copper conductor



Code: H03VVH2-F, H05VVH2-F

F: Fine Stranded Conductors

Standards: TS 9760 HD 21.5 S3, EN 50525-2-11

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.

Construction

1. Fine stranded copper conductors
2. PVC insulation
3. PVC outer jacket

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
mm²	mm (H x W)	kg/km	m	ohm/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
2x1.0	4.3x6.9	55	100	19.50	10

** : 300/300 V (H03VVH2-F)*

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 Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: (max. 5 sec.)
Cross section ≤ 300 mm²	: 160 °C
Cross section > 300 mm²	: 140 °C
Rated voltage	: 0.6/1 kV
Min. bending radius	: 12 x D
D	: Cable outer diameter

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

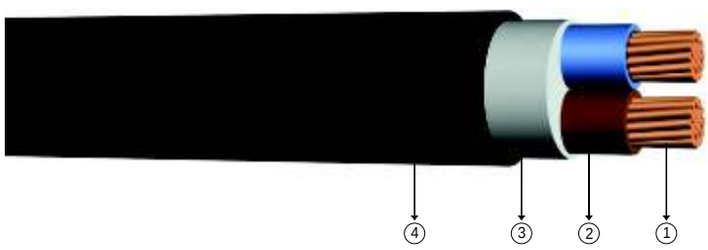
Construction

1. Solid or stranded copper conductor
2. PVC insulation
3. PVC outer jacket

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	
mm²	mm	kg/km	m	ohm/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, clearance 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 Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: 160 °C (max. 5 sec.)
Rated voltage	: 0.6/1 kV
Min. bending radius	: 12 x D
D	: Cable outer diameter

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

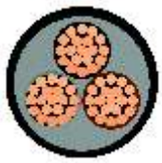
Construction

1. Solid or stranded copper conductor
2. PVC insulation
3. Filler
4. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

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^2	: 160 °C
Cross section > 300 mm^2	: 140 °C
Rated voltage	: 0.6/1 kV
Min. bending radius	: 12 x D
D	: Cable outer diameter

Application

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

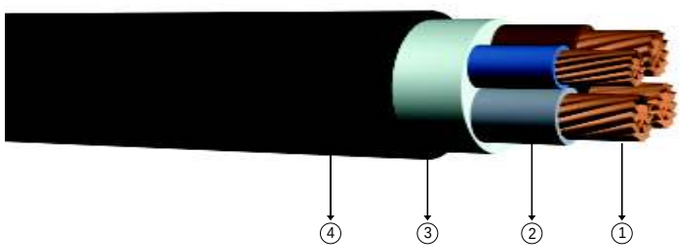
Construction

1. Solid or stranded copper conductor
2. PVC insulation
3. Filler
4. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

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^2	: 160 °C
Cross section > 300 mm^2	: 140 °C
Rated voltage	: 0.6/1 kV
Min. bending radius	: 12 x D
D	: Cable outer diameter

Application

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

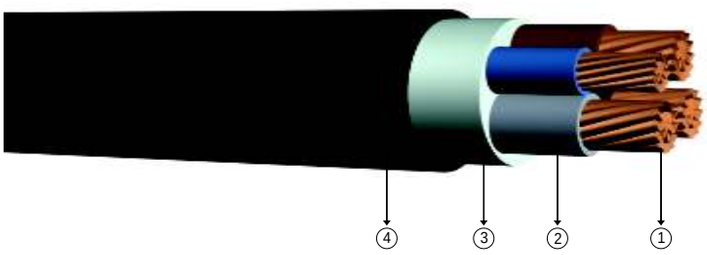
Construction

1. Stranded copper conductor
2. PVC insulation
3. Filler
4. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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

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 Rigid

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^2	: 160/1 kV
Cross section > 300 mm^2	: 140/1 kV
Rated voltage	: 0.6/1 kV
Min. bending radius	: 12 x D
D	: Cable outer diameter

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

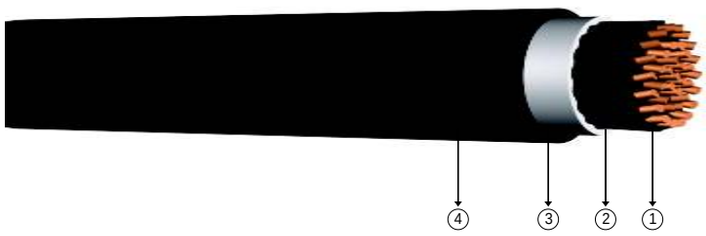
Construction

1. Solid or stranded copper conductor
2. PVC insulation
3. Filler
4. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 1, VDE 0271

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: 160 °C (max. 5 sec.)
Rated voltage	: 0.6/1 kV
Min. bending radius	: 12 x D
D	: Cable outer diameter

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

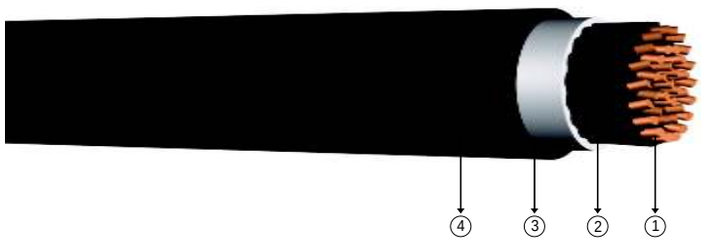
Construction

1. Solid or stranded copper conductor
2. PVC insulation
3. Filler
4. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/km	In ground at 20 °C	In air at 30 °C
5x1.5	13.5	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 Rigid

Standards: IEC 60502 - 1, VDE 0271

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: 160 °C (max. 5 sec.)
Rated voltage	: 0.6/1 kV
Min. bending radius	: 12 x D
D	: Cable outer diameter

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

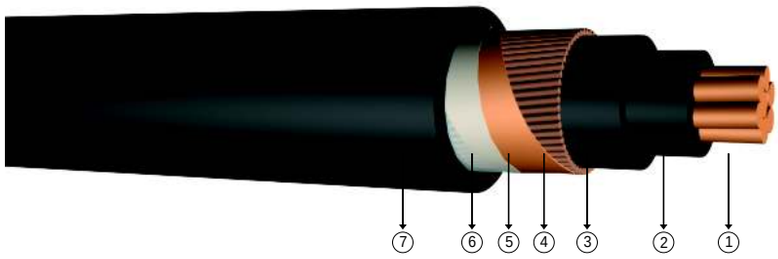
Construction

1. Solid or stranded copper conductor
2. PVC insulation
3. Filler
4. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 conductor screen, single core cables with copper conductor



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

U: Solid Conductor
R: Stranded Conductor Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: 160 °C (max. 5 sec.)
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.

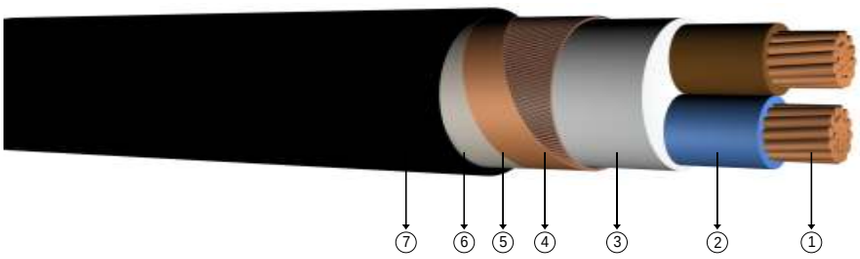
Construction

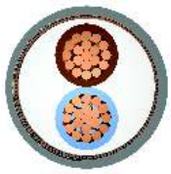
1. Solid or stranded copper conductor
2. PVC insulation
3. PVC inner sheath
4. Concentric copper wire
5. Copper tape as binder
6. Polyester tape
7. PVC outer jacket

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	
mm²	mm	kg/km	m	ohm/km	***	****	***	****
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 : Current carrying capacities are valid under the following conditions;
In ground : 20 °C, 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, clearance 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 conductor screen, multi-core cables with copper conductor





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

U: Solid Conductor
R: Stranded Conductor Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: 160 °C (max. 5 sec.)
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.

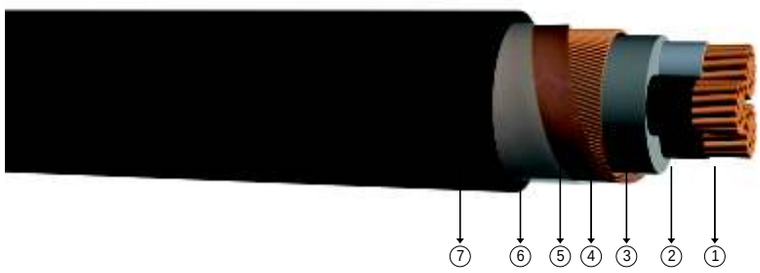
Construction

1. Solid or stranded copper conductor
2. PVC insulation
3. Filler
4. Concentric copper wire
5. Copper tape as binder
6. Polyester tape
7. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 conductor screen, multi-core cables with copper conductor



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

U: Solid Conductor
R: Stranded Conductor Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: 160 °C (max. 5 sec.)
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.

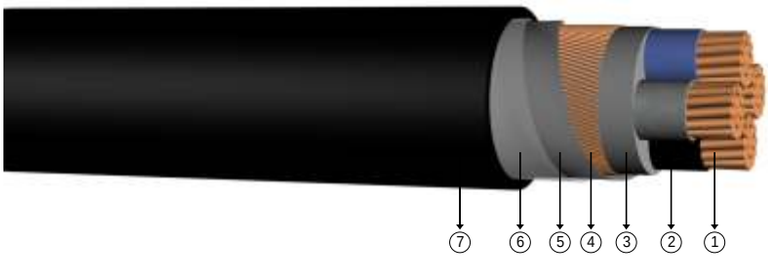
Construction

1. Solid or stranded copper conductor
2. PVC insulation
3. Filler
4. Concentric copper wire
5. Copper tape as binder
6. Polyester tape
7. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 conductor screen, multi-core cables with copper conductor



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

U: Solid Conductor
R: Stranded Conductor Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: 160 °C (max. 5 sec.)
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.

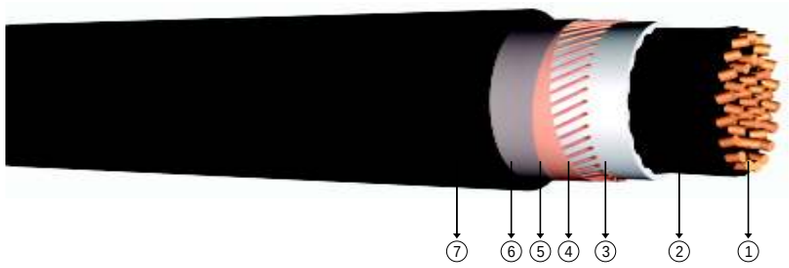
Construction

1. Solid or stranded copper conductor
2. PVC insulation
3. Filler
4. Concentric copper wire
5. Copper tape as binder
6. Polyester tape
7. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 conductor screen, control cables with copper conductor



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

U: Solid Conductor
R: Stranded Conductor Rigid

Standards: IEC 60502 - 1, VDE 0271

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: 160 °C (max. 5 sec.)
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.

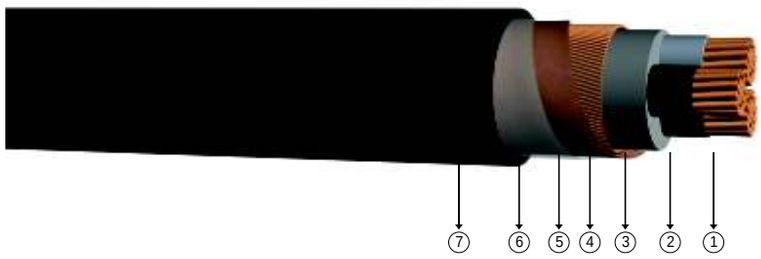
Construction

1. Solid or stranded copper conductor
2. PVC insulation
3. Filler
4. Concentric copper wire
5. Copper tape as binder
6. Polyester tape
7. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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, concentric conductor screen, multi-core cables with copper conductor



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

U: Solid Conductor
R: Stranded Conductor Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: 160 °C (max. 5 sec.)
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.

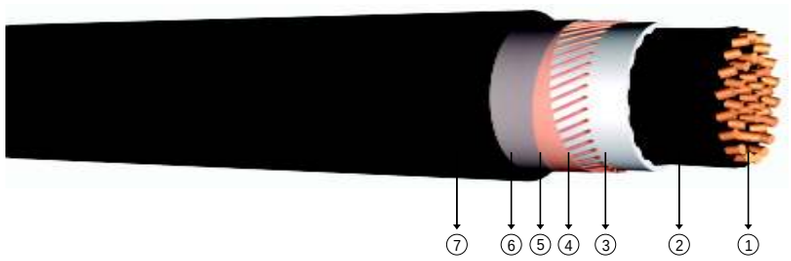
Construction

1. Solid or stranded copper conductor
2. PVC insulation
3. Filler
4. Concentric copper wire
5. Copper tape as binder. (100% coverage with overlap)
6. Polyester tape
7. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/km	In ground at 20 °C	In air at 30 °C
2x1.5/9	13.0	270	1000	12.1	32	20
2x2.5/9	13.5	320	1000	7.41	42	27
2x4/9	15.5	420	1000	4.61	54	37
2x6/9	16.5	490	1000	3.08	68	48
2x10/9	19.0	670	1000	1.83	90	66
3x1.5/9	14.0	300	1000	12.1	26	18.5
3x2.5/9	15.0	360	1000	7.41	34	25
3x4/9	17.0	480	1000	4.61	44	34
3x6/9	18.5	590	1000	3.08	56	43
3x10/9	20.0	720	1000	1.83	75	60
4x1.5/9	14.5	350	1000	12.1	26	18.5
4x2.5/9	15.5	410	1000	7.41	34	25
4x4/9	17.5	550	1000	4.61	44	34
4x6/9	18.5	660	1000	3.08	56	43
4x10/9	22.0	880	1000	1.83	75	60
5x1.5/9	15.0	360	1000	12.1	26	18.5
5x2.5/9	16.0	440	1000	7.41	34	25
5x4/9	18.0	600	1000	4.61	44	34

Note : Current carrying capacities are valid under the following conditions;
In ground : 20 °C, 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 conductor screen, control cables with copper conductor



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

U: Solid Conductor

Standards: IEC 60502 - 1, VDE 0271

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: 160 °C (max. 5 sec.)
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
2. PVC insulation
3. Filler
4. Concentric copper wire
5. Copper tape as binder. (100% overlap)
6. Polyester tape
7. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/km	In ground at 20 °C	In air at 30 °C
7x1.5/9	16.0	410	1000	12.1	15.6	12.0
8x1.5/9	17.0	460	1000	12.1	14.3	11.1
10x1.5/9	19.0	560	1000	12.1	13.0	10.2
12x1.5/9	19.5	610	1000	12.1	12.3	9.7
14x1.5/9	20.0	660	1000	12.1	11.7	9.3
19x1.5/9	22.0	900	1000	12.1	10.4	8.3
24x1.5/9	25.0	1060	1000	12.1	9.1	7.4
27x1.5/9	25.5	1120	1000	12.1	8.8	7.2
30x1.5/9	26.0	1160	1000	12.1	8.6	7.0
37x1.5/9	28.0	1410	1000	12.1	8.1	6.7
7x2.5/9	17.0	510	1000	7.41	20.4	16.3
8x2.5/9	18.5	610	1000	7.41	18.7	15.0
10x2.5/9	20.5	720	1000	7.41	17.0	13.8
12x2.5/9	21.0	760	1000	7.41	16.2	13.1
14x2.5/9	22.0	860	1000	7.41	15.3	12.5
19x2.5/9	24.0	1060	1000	7.41	13.6	11.3
24x2.5/9	27.0	1410	1000	7.41	11.9	10.0
27x2.5/9	28.0	1455	1000	7.41	11.5	9.8
30x2.5/9	28.5	1610	1000	7.41	11.2	9.4
37x2.5/9	30.5	1860	1000	7.41	10.6	9.1
7x4/9	19.5	710	1000	4.61	26.4	22.1
8x4/9	21.5	860	1000	4.61	24.2	20.4
10x4/9	24.0	1010	1000	4.61	22.0	18.7
12x4/9	24.5	1110	1000	4.61	20.9	17.9
14x4/9	25.5	1280	1000	4.61	19.8	17.0
19x4/9	28.0	1560	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 Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603, BS 6346

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: (max. 5 sec.)
Cross section ≤ 300 mm^2	: 160 °C
Cross section > 300 mm^2	: 140 °C
Rated voltage	: 0.6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

Application

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

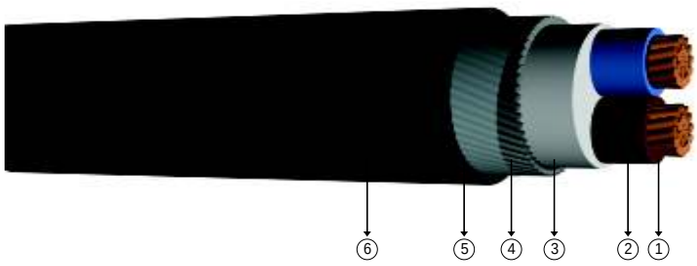
Construction

1. Stranded copper conductors
2. PVC insulation
3. Inner sheath
4. Round aluminium wire
5. Polyester tape
6. PVC outer jacket

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	
mm²	mm	kg/km	m	ohm/km	***	**	***	**
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, clearance 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 Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603, BS 6346

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: 160 °C (max. 5 sec.)
Rated voltage	: 0.6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

Application

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

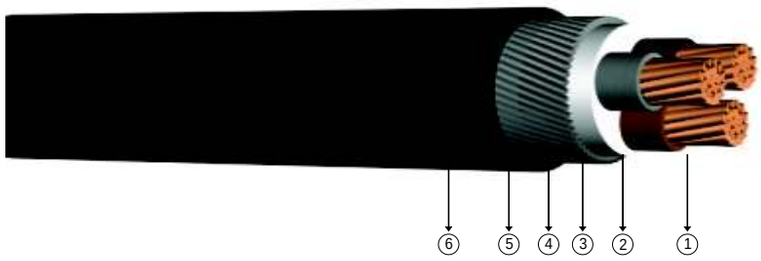
Construction

1. Solid or stranded copper conductor
2. PVC insulation
3. Filler
4. Galvanized round steel wire
5. Polyester tape
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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: YYVZ2V-U, YVZ2V-R, CU/PVC/SWA/PVC, NYRY

U: Solid Conductor
R: Stranded Conductor Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603, BS 6346

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: (max. 5 sec.)
Cross section ≤ 300 mm²	: 160 °C
Cross section > 300 mm²	: 140 °C
Rated voltage	: 0.6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

Application

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

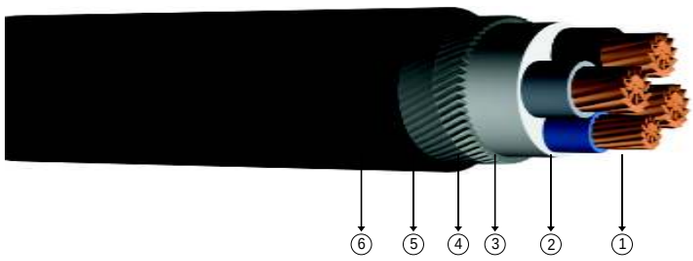
Construction

1. Solid or stranded copper conductor
2. PVC insulation
3. Filler
4. Galvanized round steel wire
5. Polyester tape
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603, BS 6346

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: (max. 5 sec.)
Cross section ≤ 300 mm²	: 160 °C
Cross section > 300 mm²	: 140 °C
Rated voltage	: 0.6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

Application

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

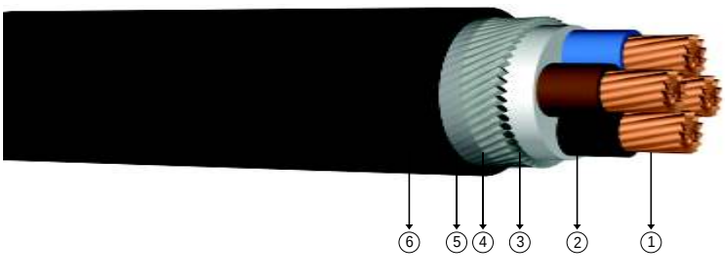
Construction

1. Solid or stranded copper conductor
2. PVC insulation
3. Filler
4. Galvanized round steel wire
5. Polyester tape
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603, BS 6346

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: (max. 5 sec.)
Cross section ≤ 300 mm²	: 160 °C
Cross section > 300 mm²	: 140 °C
Rated voltage	: 0.6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

Application

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

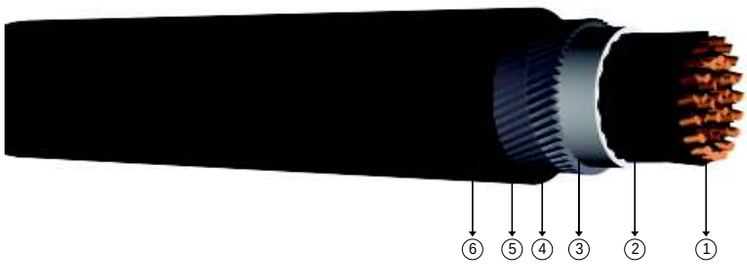
Construction

1. Solid or stranded copper conductor
2. PVC insulation
3. Filler
4. Galvanized round steel wire
5. Polyester tape
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 1, VDE 0271, BS 6346

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: 160 °C (max. 5 sec.)
Rated voltage	: 0.6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

Application
Indoors and outdoors, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

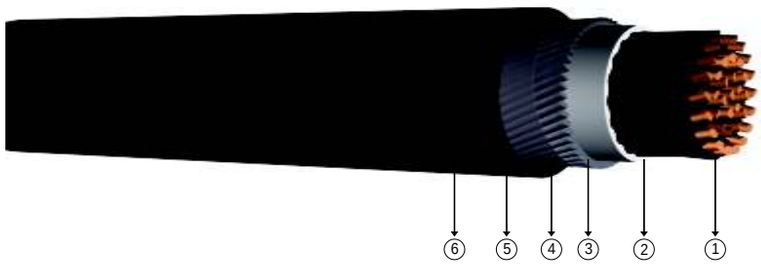
Construction

1. Solid or stranded copper conductor
2. PVC insulation
3. Filler
4. Galvanized round steel wire
5. Polyester tape
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 1, VDE 0271, BS 6346

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: 160 °C (max. 5 sec.)
Rated voltage	: 0.6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

Application

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

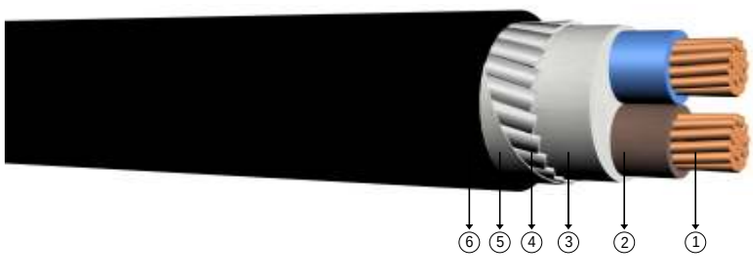
Construction

1. Solid or stranded copper conductor
2. PVC insulation
3. Filler
4. Galvanized round steel wire
5. Polyester tape
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: 160 °C (max. 5 sec.)
Rated voltage	: 0.6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

Application

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

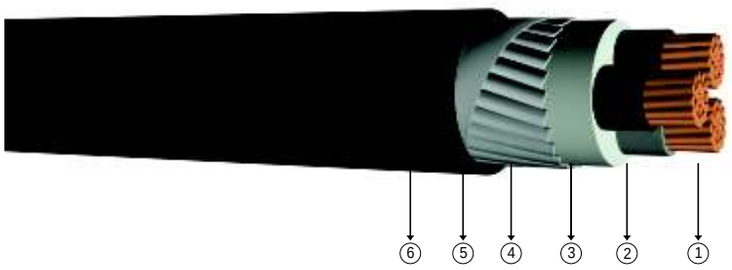
Construction

1. Stranded copper conductors
2. PVC insulation
3. Filler
4. Galvanized flat steel wire
5. Galvanized steel binding strap
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: (max. 5 sec.)
Cross section ≤ 300 mm²	: 160 °C
Cross section > 300 mm²	: 140 °C
Rated voltage	: 0.6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

Application

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

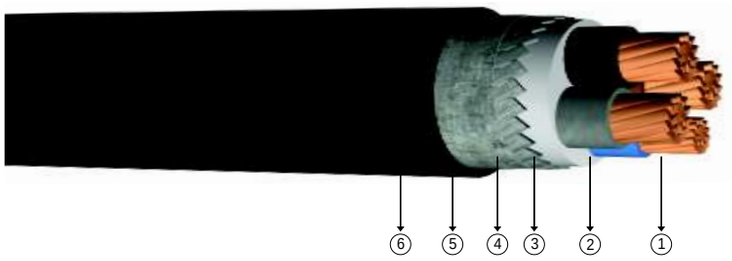
Construction

1. Solid or stranded copper conductor
2. PVC insulation
3. Filler
4. Galvanized flat steel wire
5. Galvanized steel binding strap
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

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^2	: 160 °C
Cross section > 300 mm^2	: 140 °C
Rated voltage	: 0.6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

Application

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

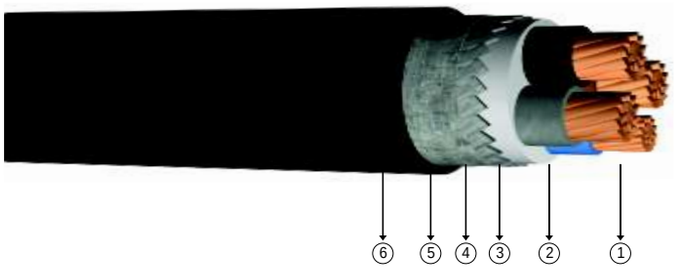
Construction

1. Stranded copper conductors
2. PVC insulation
3. Filler
4. Galvanized flat steel wire
5. Galvanized steel binding strap
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

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^2	: 160 °C
Cross section > 300 mm^2	: 140 °C
Rated voltage	: 0.6/1 kV
Min. bending radius D	: 15 x D

Application

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

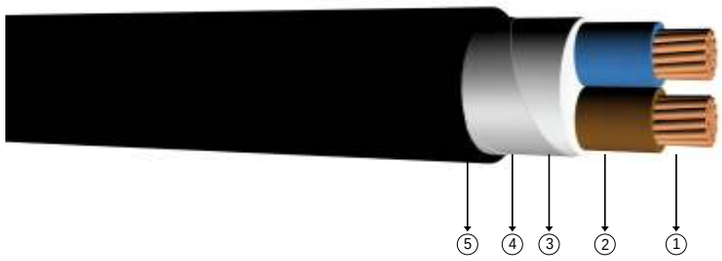
Construction

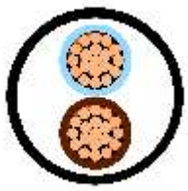
1. Stranded copper conductors
2. PVC insulation
3. Filler
4. Galvanized flat steel wire
5. Galvanized steel binding strap
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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, CU/PVC/DSTA/PVC, NYBY

U: Solid Conductor
R: Stranded Conductor Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603, BS 6346

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: 160 °C (max. 5 sec.)
Rated voltage	: 0.6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

Application

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

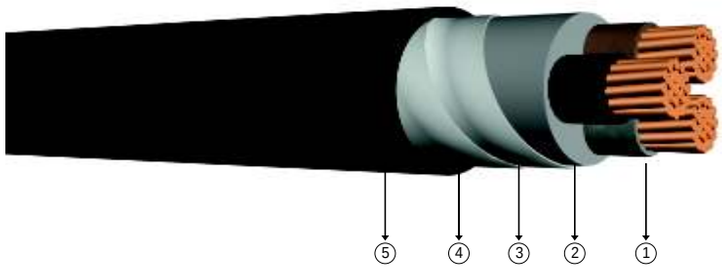
Construction

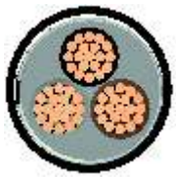
1. Solid or stranded copper conductor
2. PVC insulation
3. Filler
4. Galvanized double steel tape
5. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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, CU/PVC/DSTA/PVC, NYBY

U: Solid Conductor
R: Stranded Conductor Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603, BS 6346

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: (max. 5 sec.)
Cross section ≤ 300 mm^2	: 160 °C
Cross section > 300 mm^2	: 140 °C
Rated voltage	: 0.6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

Application

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

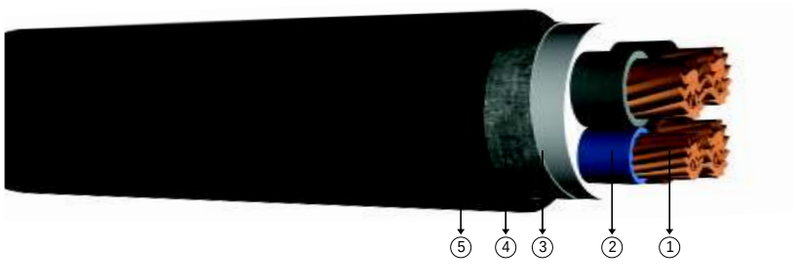
Construction

1. Solid or stranded copper conductor
2. PVC insulation
3. Filler
4. Galvanized double steel tape
5. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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, CU/PVC/DSTA/PVC, NYBY

R: Stranded Conductor Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603, BS 6346

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: (max. 5 sec.)
Cross section ≤ 300 mm²	: 160 °C
Cross section > 300 mm²	: 140 °C
Rated voltage	: 0.6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

Application

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

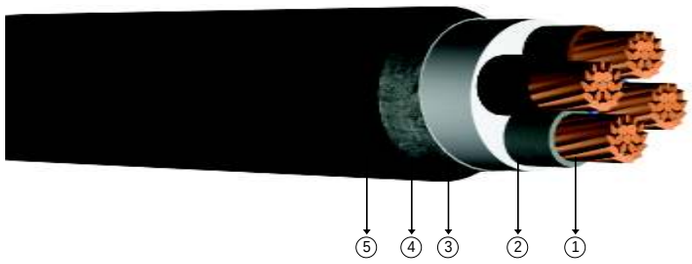
Construction

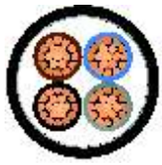
1. Stranded copper conductors
2. PVC insulation
3. Filler
4. Galvanized double steel tape
5. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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, CU/PVC/DSTA/PVC, NYBY

U: Solid Conductor
R: Stranded Conductor Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603, BS 6346

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: (max. 5 sec.)
Cross section ≤ 300 mm²	: 160 °C
Cross section > 300 mm²	: 140 °C
Rated voltage	: 0.6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

Application
Indoors and outdoors, 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. Filler
4. Galvanized double steel tape
5. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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-R, AL/PVC/PVC, NAYY

R: Stranded Conductor Rigid

Standards: IEC 60502 - 1, VDE 0276 -603

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: (max. 5 sec.)
Cross section ≤ 300 mm²	: 160 °C
Cross section > 300 mm²	: 140 °C
Rated voltage	: 0.6/1 kV
Min. bending radius	: 12 x D
D	: Cable outer diameter

Application

Indoors and outdoors, 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. PVC outer jacket

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	
mm²	mm	kg/km	m	ohm/km	***	****	***	****
1x16	10.0	130	1000	1.91	75	84	80	66
1x25	11.5	160	1000	1.20	125	105	87	75
1x35	12.5	200	1000	0.868	151	127	131	113
1x50	14.0	280	1000	0.641	179	151	160	138
1x70	16.0	350	1000	0.443	218	186	202	174
1x95	18.0	450	1000	0.320	261	223	249	210
1x120	20.0	550	1000	0.253	297	254	291	244
1x150	22.0	700	1000	0.206	332	285	333	281
1x185	24.0	800	1000	0.164	376	323	384	320
1x240	27.0	1050	1000	0.125	437	378	460	378
1x300	30.0	1300	1000	0.100	494	427	530	433
1x400	34.0	1700	1000	0.0778	572	496	642	523
1x500	37,5	2050	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, clearance 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-R, AL/PVC/PVC, NAYY

R: Stranded Conductor Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: (max. 5 sec.)
Cross section ≤ 300 mm²	: 160 °C
Cross section > 300 mm²	: 140 °C
Rated voltage	: 0.6/1 kV
Min. bending radius	: 12 x D
D	: Cable outer diameter

Application

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

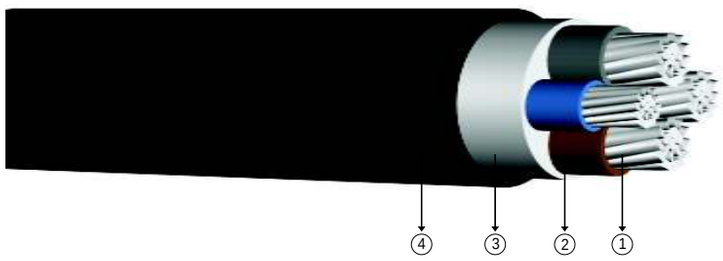
Construction

1. Stranded aluminium conductor
2. PVC insulation
3. Filler
4. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 conductor cables



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

R: Stranded Conductor Rigid

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^2	: 160 °C
Cross section > 300 mm^2	: 140 °C
Rated voltage	: 0.6/1 kV
Min. bending radius	: 12 x D
D	: Cable outer diameter

Application

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

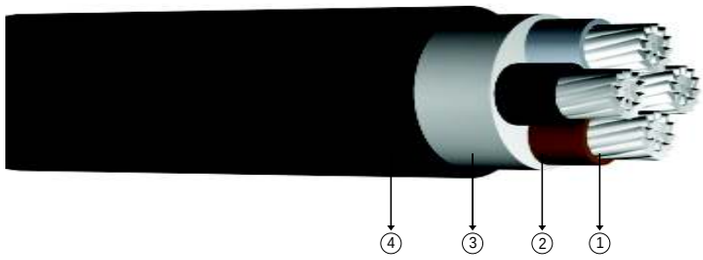
Construction

1. Stranded aluminium conductor
2. PVC insulation
3. Filler
4. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 conductor cables



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

R: Stranded Conductor Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: (max. 5 sec.)
Cross section ≤ 300 mm²	: 160 °C
Cross section > 300 mm²	: 140 °C
Rated voltage	: 0.6/1 kV
Min. bending radius	: 12 x D
D	: Cable outer diameter

Application

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

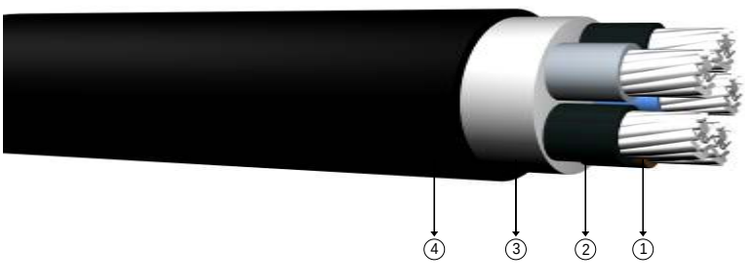
Construction

1. Stranded aluminium conductor
2. PVC insulation
3. Filler
4. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

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^2	: 160 °C
Cross section > 300 mm^2	: 140 °C
Rated voltage	: 0.6/1 kV
Min. bending radius	: 12 x D
D	: Cable outer diameter

Application

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

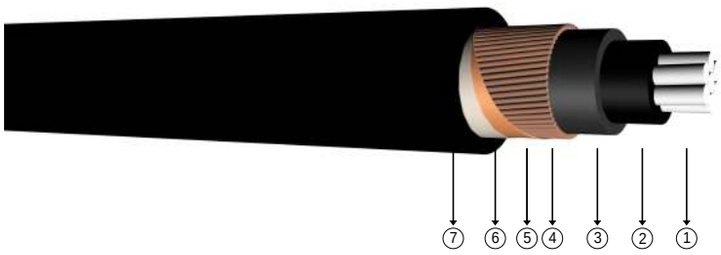
Construction

1. Stranded aluminium conductor
2. PVC insulation
3. Filler
4. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/km	In ground at 20 °C	In air at 30 °C
5x6	18.0	400	1000	4.87	-	-
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 : Current carrying capacities are valid under the following conditions;
In ground : 20 °C, 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 conductor screen, single core cables with aluminium conductor



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

R: Stranded Conductor Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: 160 °C (max. 5 sec.)
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.

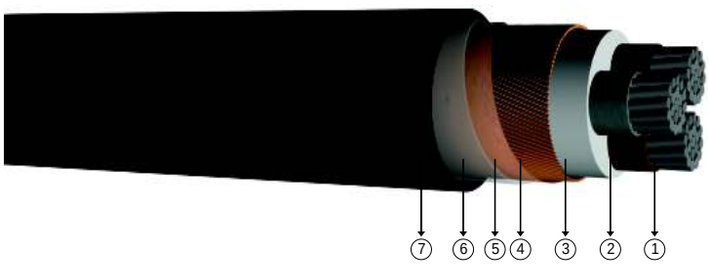
Construction

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

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	
mm²	mm	kg/km	m	ohm/km	***	****	***	****
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, clearance 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 conductor screen, multi-core cables with aluminium conductor



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

R: Stranded Conductor Rigid

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^2	: 160 °C
Cross section > 300 mm^2	: 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. Filler
4. Concentric copper wire
5. Copper tape as binder
6. Polyester tape
7. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603, BS 6346

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: (max. 5 sec.)
Cross section ≤ 300 mm^2	: 160 °C
Cross section > 300 mm^2	: 140 °C
Rated voltage	: 0.6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

Application

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

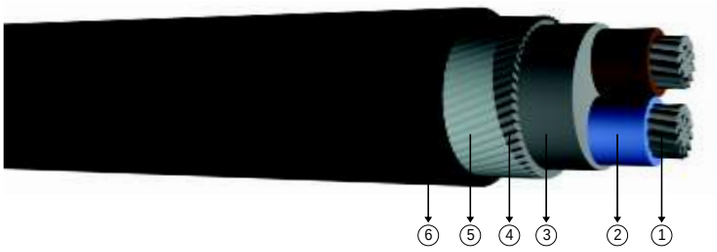
Construction

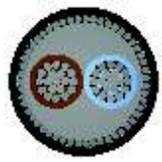
1. Stranded aluminium conductor
2. PVC insulation
3. PVC inner sheath
4. Round aluminium wire
5. Polyester tape
6. PVC outer jacket

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	
mm²	mm	kg/km	m	ohm/km	***	****	***	****
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, clearance 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 Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603, BS 6346

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: 160 °C (max. 5 sec.)
Rated voltage	: 0.6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

Application

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

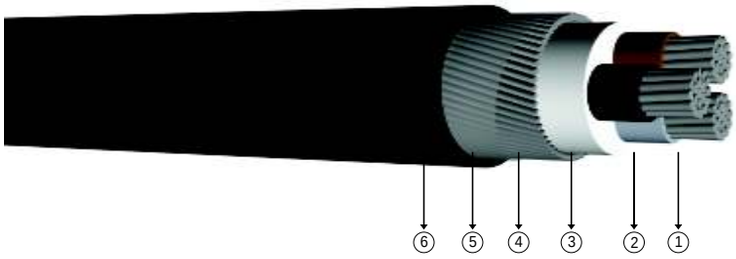
Construction

1. Stranded aluminium conductor
2. PVC insulation
3. Filler
4. Galvanized round steel wire
5. Polyester tape
6. PVC outer jacket

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)
mm²	mm	kg/km	m	ohm/km	In air at 30 °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 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 Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603, BS 6346

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: (max. 5 sec.)
Cross section ≤ 300 mm²	: 160 °C
Cross section > 300 mm²	: 140 °C
Rated voltage	: 0.6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

Application

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

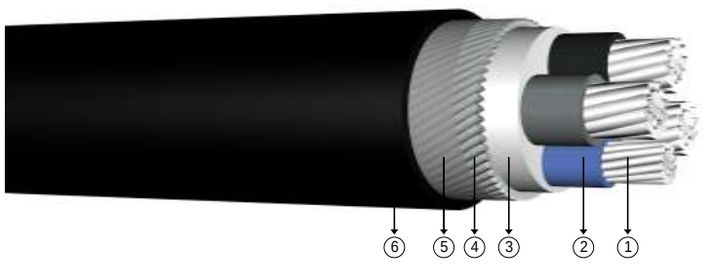
Construction

1. Stranded aluminium conductor
2. PVC insulation
3. Filler
4. Galvanized round steel wire
5. Polyester tape
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603, BS 6346

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: (max. 5 sec.)
Cross section ≤ 300 mm²	: 160 °C
Cross section > 300 mm²	: 140 °C
Rated voltage	: 0.6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

Application

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

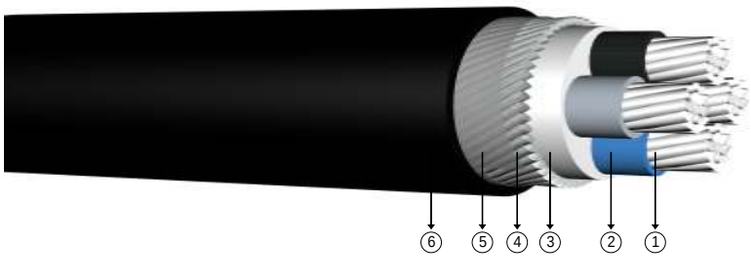
Construction

1. Stranded aluminium conductor
2. PVC insulation
3. Filler
4. Galvanized round steel wire
5. Polyester tape
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603, BS 6346

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: (max. 5 sec.)
Cross section ≤ 300 mm²	: 160 °C
Cross section > 300 mm²	: 140 °C
Rated voltage	: 0.6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

Application

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

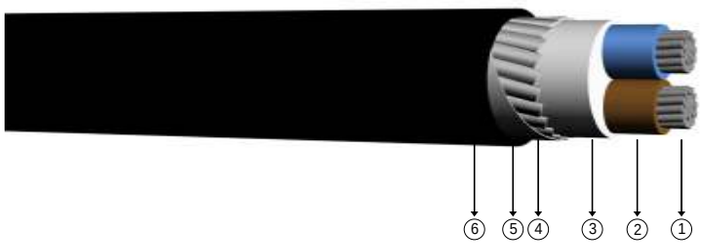
Construction

1. Stranded aluminium conductor
2. PVC insulation
3. Filler
4. Galvanized round steel wire
5. Polyester tape
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: 160 °C (max. 5 sec.)
Rated voltage	: 0.6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

Application

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

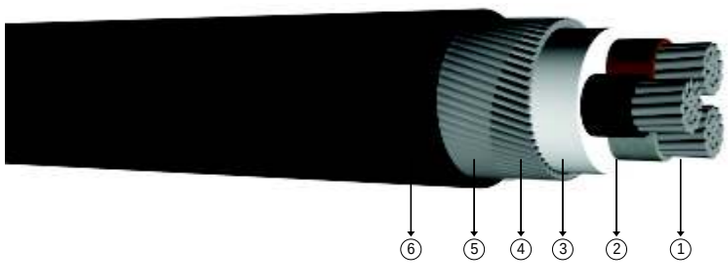
Construction

1. Stranded aluminium conductor
2. PVC insulation
3. Filler
4. Galvanized flat steel wire
5. Galvanized steel binding strap
6. PVC outer jacket.

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)
mm²	mm	kg/km	m	ohm/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 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 Rigid

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^2	: 160 °C
Cross section > 300 mm^2	: 140 °C
Rated voltage	: 0.6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

Application

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

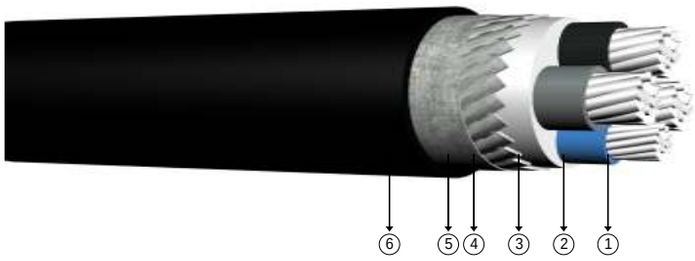
Construction

1. Stranded aluminium conductor
2. PVC insulation
3. Filler
4. Galvanized flat steel wire
5. Galvanized steel binding strap
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

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^2	: 160 °C
Cross section > 300 mm^2	: 140 °C
Rated voltage	: 0.6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

Application

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

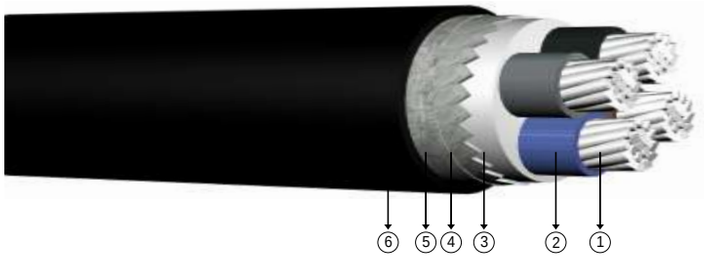
Construction

1. Stranded aluminium conductor
2. PVC insulation
3. Filler
4. Galvanized flat steel wire
5. Galvanized steel binding strap
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

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^2	: 160 °C
Cross section > 300 mm^2	: 140 °C
Rated voltage	: 0.6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

Application

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

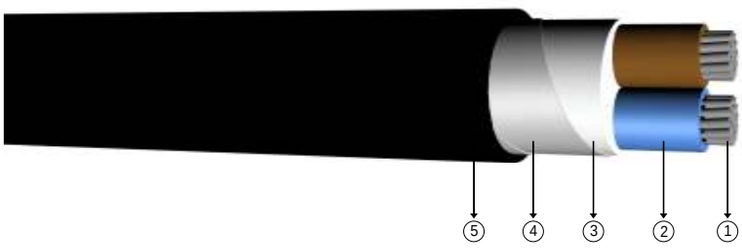
Construction

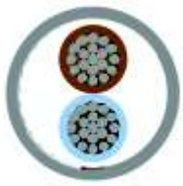
1. Stranded aluminium conductor
2. PVC insulation
3. Filler
4. Galvanized flat steel wire
5. Galvanized steel binding tape
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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, AL/PVC/DSTA/PVC, NAYBY

R: Stranded Conductor Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603, BS 6346

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: 160 °C (max. 5 sec.)
Rated voltage	: 0.6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

Application

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

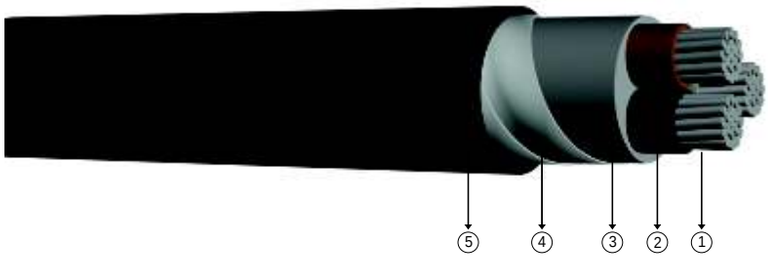
Construction

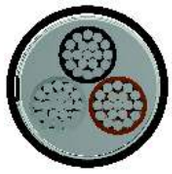
1. Stranded aluminium conductor
2. PVC insulation
3. Filler
4. Galvanized double steel tape
5. PVC outer jacket

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)
mm²	mm	kg/km	m	ohm/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 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 Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603, BS 6346

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: (max. 5 sec.)
Cross section ≤ 300 mm²	: 160 °C
Cross section > 300 mm²	: 140 °C
Rated voltage	: 0.6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

Application

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

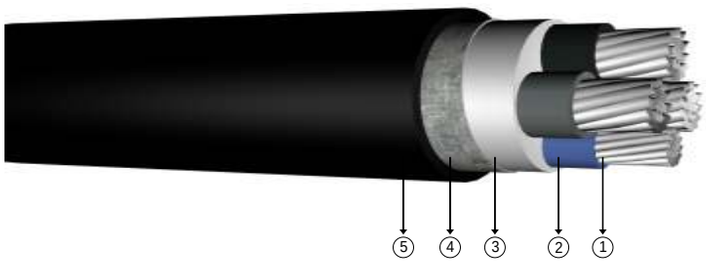
Construction

1. Stranded aluminium conductor
2. PVC insulation
3. Filler
4. Galvanized double steel tape
5. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603, BS 6346

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: (max. 5 sec.)
Cross section ≤ 300 mm^2	: 160 °C
Cross section > 300 mm^2	: 140 °C
Rated voltage	: 0.6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

Application

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

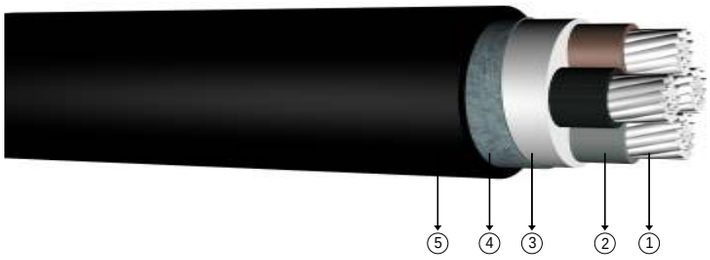
Construction

1. Stranded aluminium conductor
2. PVC insulation
3. Filler
4. Galvanized double steel tape
5. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603, BS 6346

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: (max. 5 sec.)
Cross section ≤ 300 mm²	: 160 °C
Cross section > 300 mm²	: 140 °C
Rated voltage	: 0.6/1 kV
Min. bending radius	: 15 x D
D	: Cable outer diameter

Application

Indoors and outdoors, 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. Filler
4. Galvanized double steel tape
5. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603, BS 7889

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

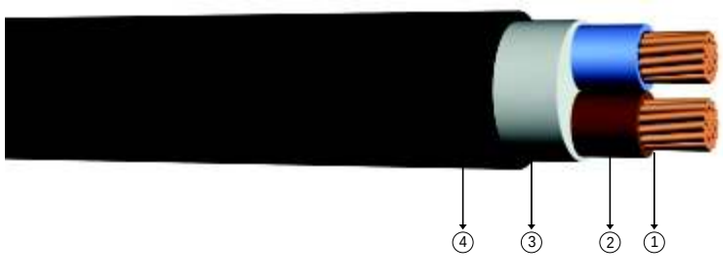
Construction

1. Solid or stranded copper conductor
2. XLPE insulation
3. PVC outer jacket

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	
mm²	mm	kg/km	m	ohm/km	***	****	***	****
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, clearance 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 Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603, BS 7889

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

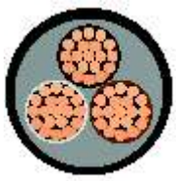
Construction

1. Solid or stranded copper conductor
2. XLPE insulation
3. Filler
4. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603, BS 7889

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

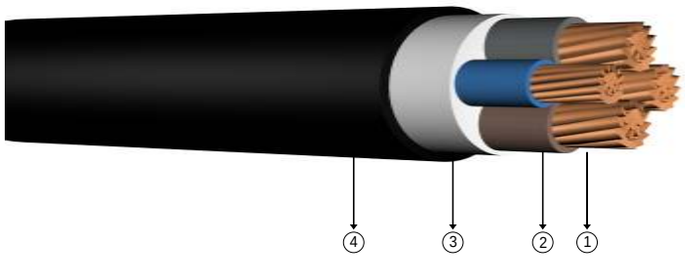
Construction

1. Solid or stranded copper conductor
2. XLPE insulation
3. Filler
4. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603, BS 7889

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

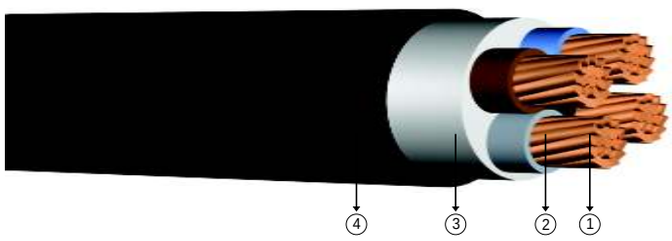
Construction

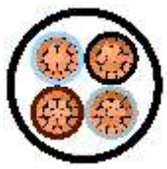
1. Stranded copper conductors
2. XLPE insulation
3. Filler
4. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603, BS 7889

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

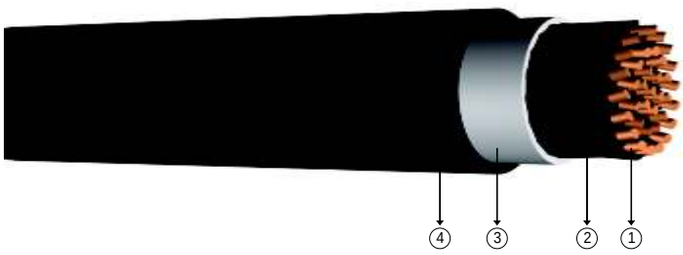
Construction

1. Solid or stranded copper conductor
2. XLPE insulation
3. Filler
4. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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, CU/XLPE/PVC, N2XY

U: Solid Conductor

Standards: IEC 60502 - 1, VDE 0271

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

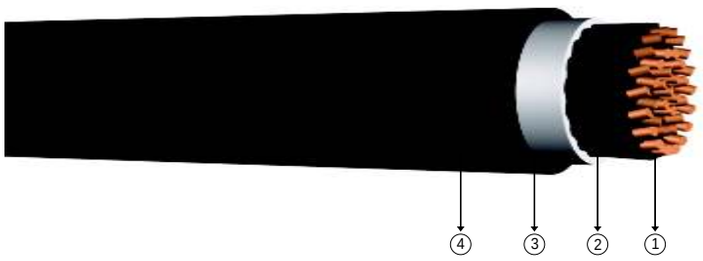
Construction

1. Solid copper conductor
2. XLPE insulation
3. Filler
4. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 1, VDE 0271

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

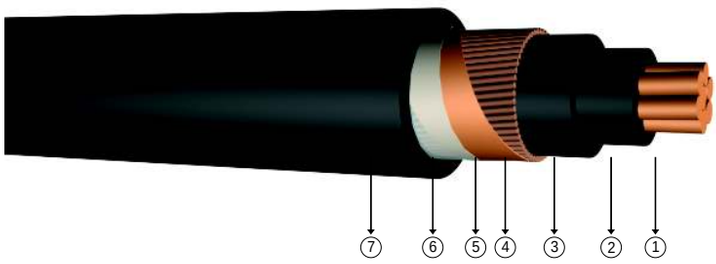
Construction

1. Solid or stranded copper conductor
2. XLPE insulation
3. Filler
4. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 conductor screen,single core cables with copper conductor



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

U: Solid Conductor
R: Stranded Conductor Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603, BS 7889

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.

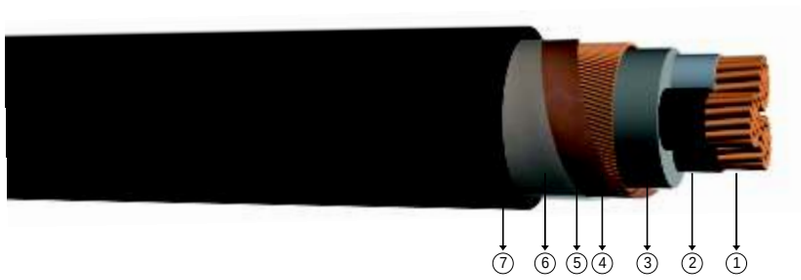
Construction

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

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	
mm²	mm	kg/km	m	ohm/km	***	****	***	****
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, clearance 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 conductor screen, multi-core cables with copper conductor



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

R: Stranded Conductor Rigid

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.

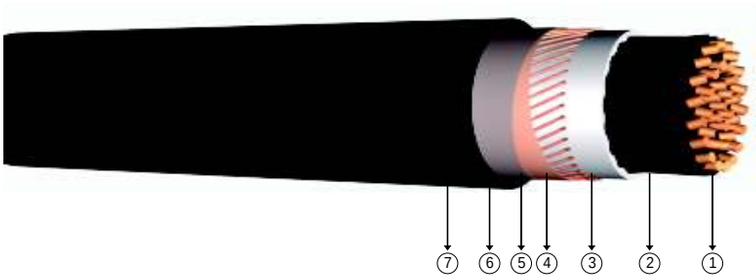
Construction

1. Stranded copper conductors
2. XLPE insulation
3. Filler
4. Concentric copper wire
5. Copper tape as binder
6. Polyester tape
7. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 conductor screen, control cables with copper conductor



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

U: Solid Conductor

Standards: IEC 60502 - 1, VDE 0271

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 plantsand 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.

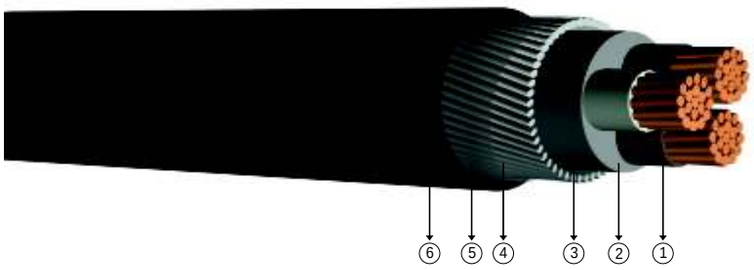
Construction

1. Solid copper conductor
2. XLPE insulation
3. Filler
4. Concentric copper wire
5. Copper tape as binder
6. Polyester tape
7. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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, N2XRY

U: Solid Conductor
R: Stranded Conductor Rigid

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

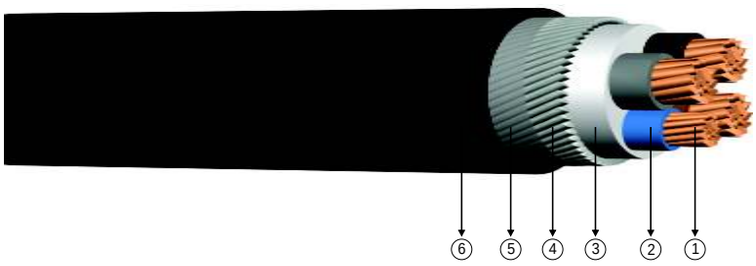
Construction

1. Solid or stranded copper conductor
2. XLPE insulation
3. Filler
4. Galvanized round steel wire
5. Polyester tape
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

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

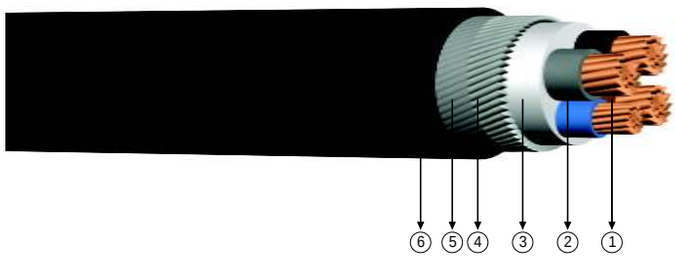
Construction

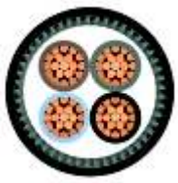
1. Stranded copper conductors
2. XLPE insulation
3. Filler
4. Galvanized round steel wire
5. Polyester tape
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

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

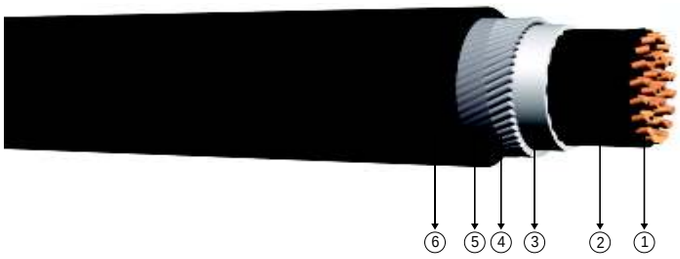
Construction

1. Solid or stranded copper conductor
2. XLPE insulation
3. Filler
4. Galvanized round steel wire
5. Polyester tape
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

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

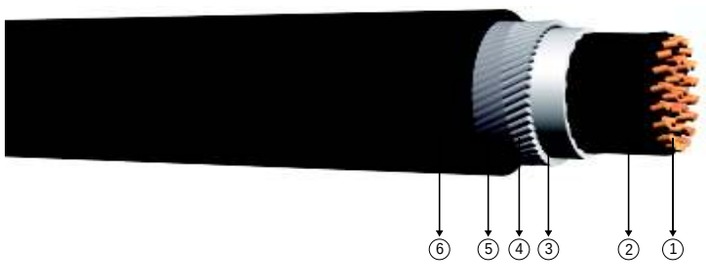
Construction

1. Solid or stranded copper conductor
2. XLPE insulation
3. Filler
4. Galvanized round steel wire
5. Polyester tape
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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, N2XRY

U: Solid Conductor
R: Stranded Conductor Rigid

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

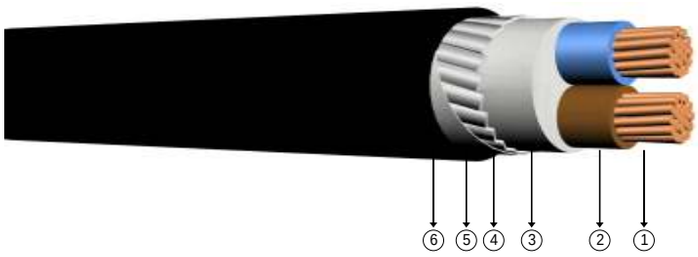
Construction

1. Solid or stranded copper conductor
2. XLPE insulation
3. Filler
4. Galvanized round steel wire
5. Polyester tape
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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, flat steel wire armoured, multi-core cables with copper conductor



Code: YXZ3V-R, N2XFGY

R: Stranded Conductor Rigid

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, used in indoors and outdoors, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

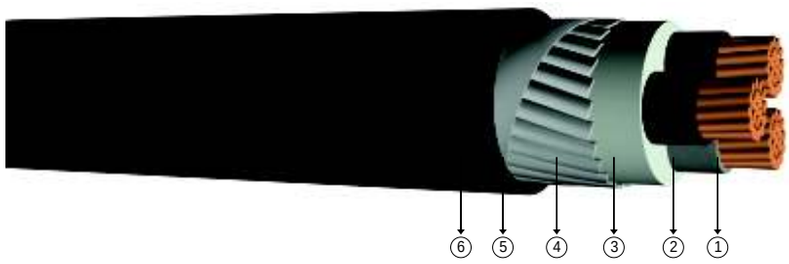
Construction

1. Stranded copper conductors
2. XLPE insulation
3. Filler
4. Galvanized flat steel wire
5. Galvanized steel binding tape
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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	0124	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 Rigid

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, used in indoors and outdoors, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

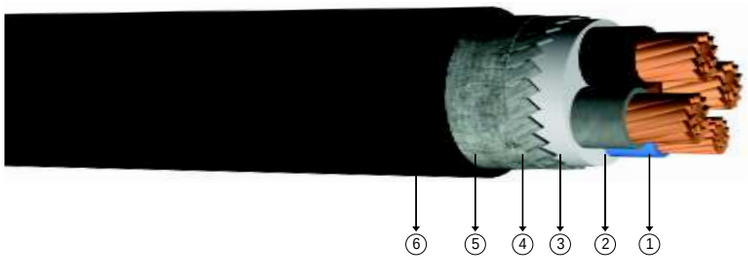
Construction

1. Stranded copper conductors
2. XLPE insulation
3. Filler
4. Galvanized flat steel wire
5. Galvanized steel binding tape
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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	0124	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 Rigid

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, used in indoors and outdoors, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

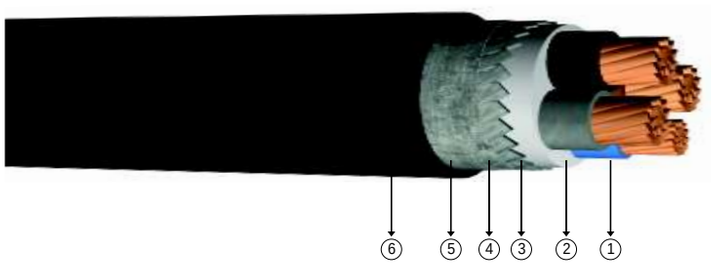
Construction

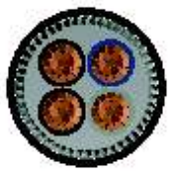
1. Stranded copper conductors
2. XLPE insulation
3. Filler
4. Galvanized flat steel wire
5. Galvanized steel binding tape
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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	0124	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 Rigid

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, used in indoors and outdoors, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

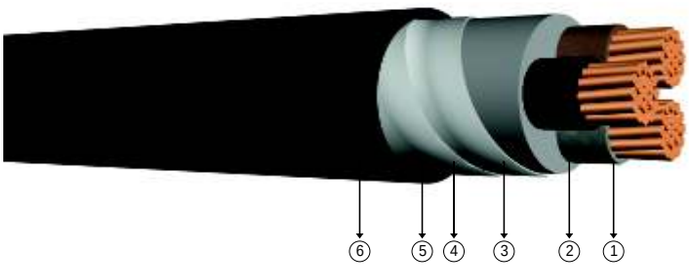
Construction

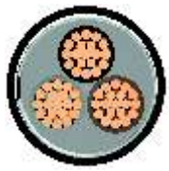
1. Stranded copper conductors
2. XLPE insulation
3. Filler
4. Galvanized flat steel wire
5. Galvanized steel binding tape
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

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, used in indoors and outdoors, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

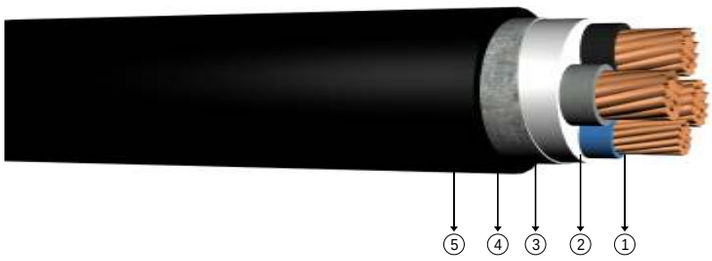
Construction

1. Solid or stranded copper conductor
2. XLPE insulation
3. Filler
4. Galvanized double steel tape
5. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

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, used in indoors and outdoors, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

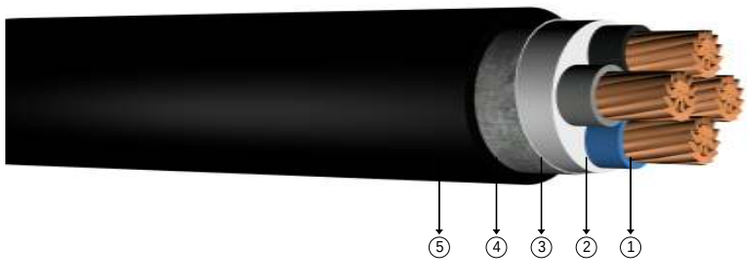
Construction

1. Stranded copper conductors
2. XLPE insulation
3. Filler
4. Galvanized double steel tape
5. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

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, used in indoors and outdoors, 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. Filler
4. Galvanized double steel tape
5. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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-R, AL/XLPE/PVC, NA2XY

R: Stranded Conductor Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603, BS 7889

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

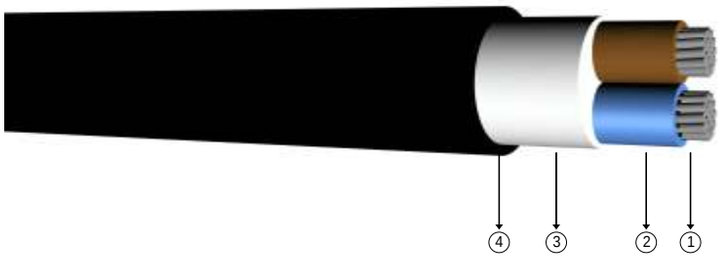
Construction

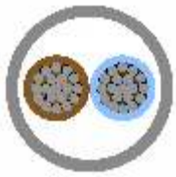
1. Stranded aluminium conductor
2. XLPE insulation
3. PVC outer jacket

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	
mm²	mm	kg/km	m	ohm/km	***	****	***	****
1x25	10.5	150	1000	1.200	-	114	-	106
1x35	12.0	180	1000	0.868	164	137	163	131
1x50	13.5	250	1000	0.641	195	163	200	161
1x70	15.5	300	1000	0.443	238	201	254	205
1x95	17.0	400	1000	0.320	284	240	313	253
1x120	19.0	500	1000	0.253	323	274	366	296
1x150	21.0	600	1000	0.206	361	308	420	341
1x185	23.0	750	1000	0.164	408	348	486	395
1x240	26.0	950	1000	0.125	476	408	585	475
1x300	27.0	1150	1000	0.100	537	462	675	548
1x400	31.0	1450	1000	0.0778	616	531	798	647
1x500	35.0	1800	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, clearance 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/PVCV, NA2XY

R: Stranded Conductor Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603, BS 7889

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 indoors and outdoors, 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. Filler
4. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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

Note : Current carrying capacities are valid under the following conditions;
In ground : 20 °C, 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 Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603, BS 7889

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

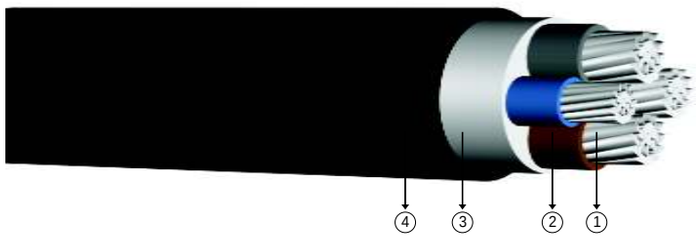
Construction

1. Stranded aluminium conductor
2. XLPE insulation
3. Filler
4. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603, BS 7889

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

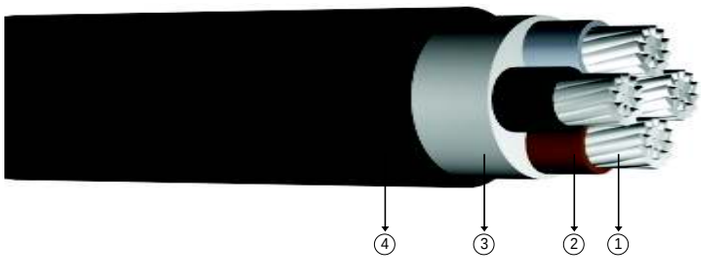
Construction

1. Stranded aluminium conductor
2. XLPE insulation
3. Filler
4. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 1, VDE 0276 - 603, BS 7889

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

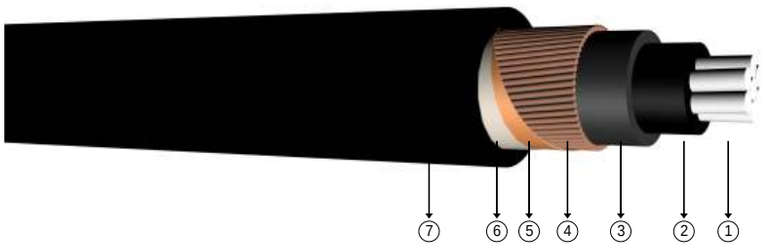
Construction

1. Stranded aluminium conductor
2. XLPE insulation
3. Filler
4. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 conductor Screen, single core cables with aluminium conductor



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

R: Stranded Conductor Rigid

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.

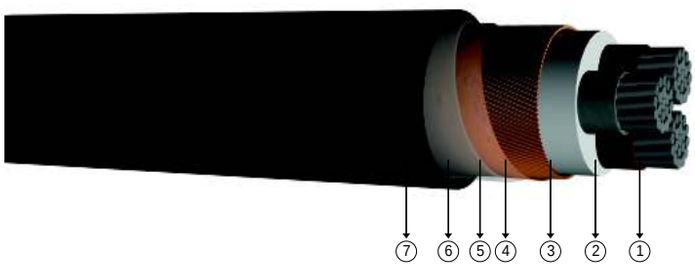
Construction

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

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	
mm²	mm	kg/km	m	ohm/km	***	****	***	****
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, clearance 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 conductor screen, multi-core cables with aluminium conductor



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

R: Stranded Conductor Rigid

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 aluminium conductor
2. XLPE insulation
3. Filler
4. Concentric copper wire
5. Copper tape as binder
6. Polyester tape
7. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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/AWA/PVC, NA2XR(A)Y

R: Stranded Conductor Rigid

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

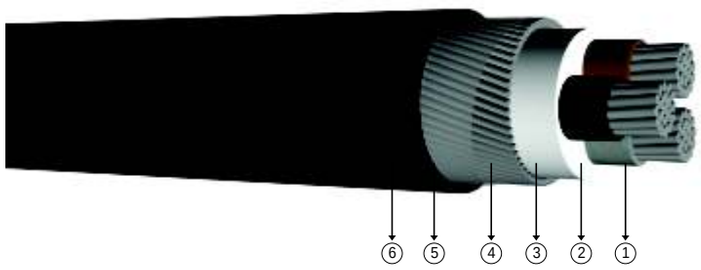
Construction

1. Stranded aluminium conductor
2. XLPE insulation
3. PVC inner sheath
4. Round aluminium wire
5. Polyester tape
6. PVC outer jacket

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	
mm²	mm	kg/km	m	ohm/km	***	****	***	****
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, clearance 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 Rigid

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

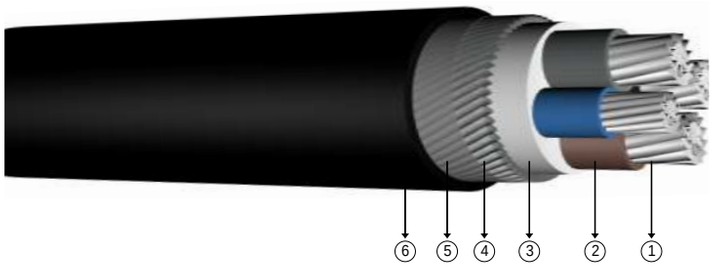
Construction

1. Stranded aluminium conductor
2. XLPE insulation
3. Filler
4. Galvanized round steel wire
5. Polyester tape
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

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

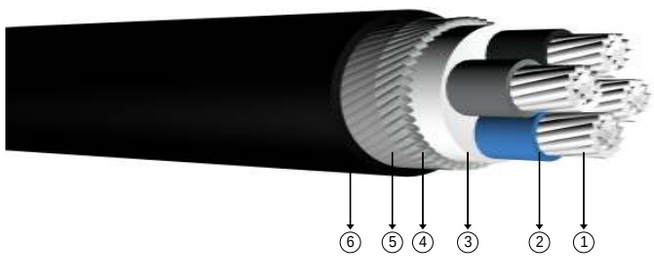
Construction

1. Stranded aluminium conductor
2. XLPE insulation
3. Filler
4. Galvanized round steel wire
5. Polyester tape
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

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

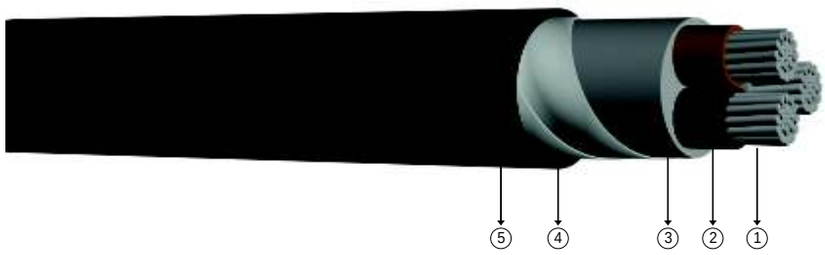
Construction

1. Stranded aluminium conductor
2. XLPE insulation
3. Filler
4. Galvanized round steel wire
5. Polyester tape
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

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, used in indoors and outdoors, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

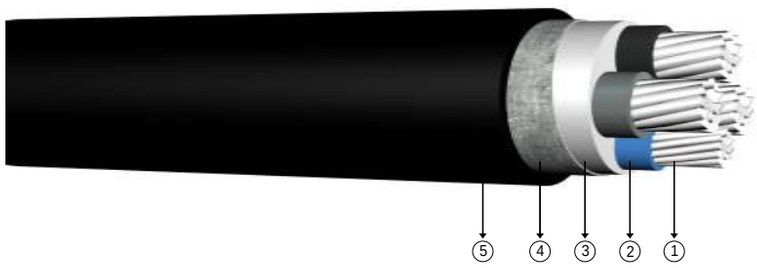
Construction

1. Stranded aluminium conductor
2. XLPE insulation
3. Filler
4. Galvanized double steel tape
5. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

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, used in indoors and outdoors, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

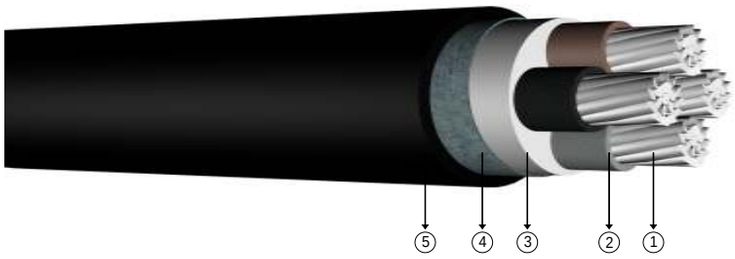
Construction

1. Stranded aluminium conductor
2. XLPE insulation
3. Filler
4. Galvanized double steel tape
5. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

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, used in indoors and outdoors, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

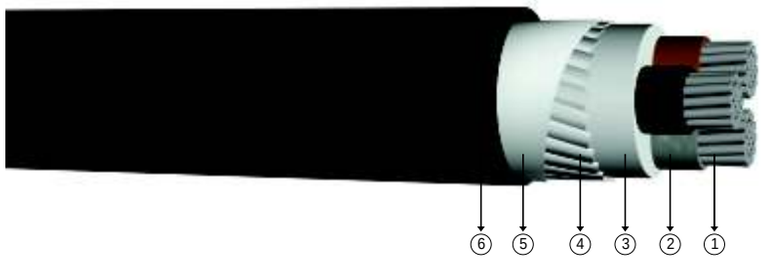
Construction

1. Stranded aluminium conductor
2. XLPE insulation
3. Filler
4. Galvanized double steel tape
5. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

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, used in indoors and outdoors, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

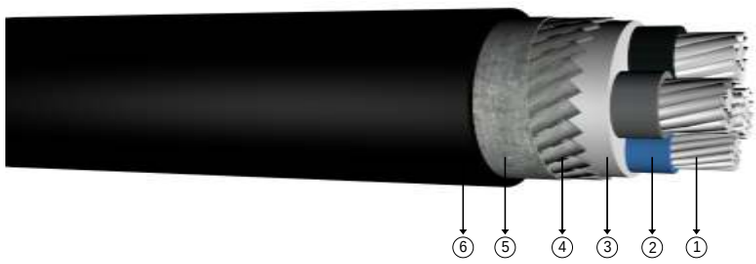
Construction

1. Stranded aluminium conductor
2. XLPE insulation
3. Filler
4. Galvanized flat steel wire
5. Galvanized steel binding tape
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

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, used in indoors and outdoors, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

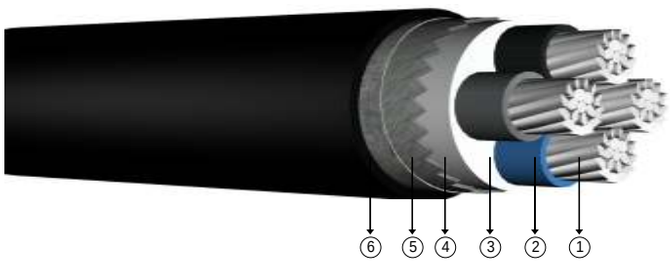
Construction

1. Stranded aluminium conductor
2. XLPE insulation
3. Filler
4. Galvanized flat steel wire
5. Galvanized steel binding tape
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

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, used in indoors and outdoors, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage.

Construction

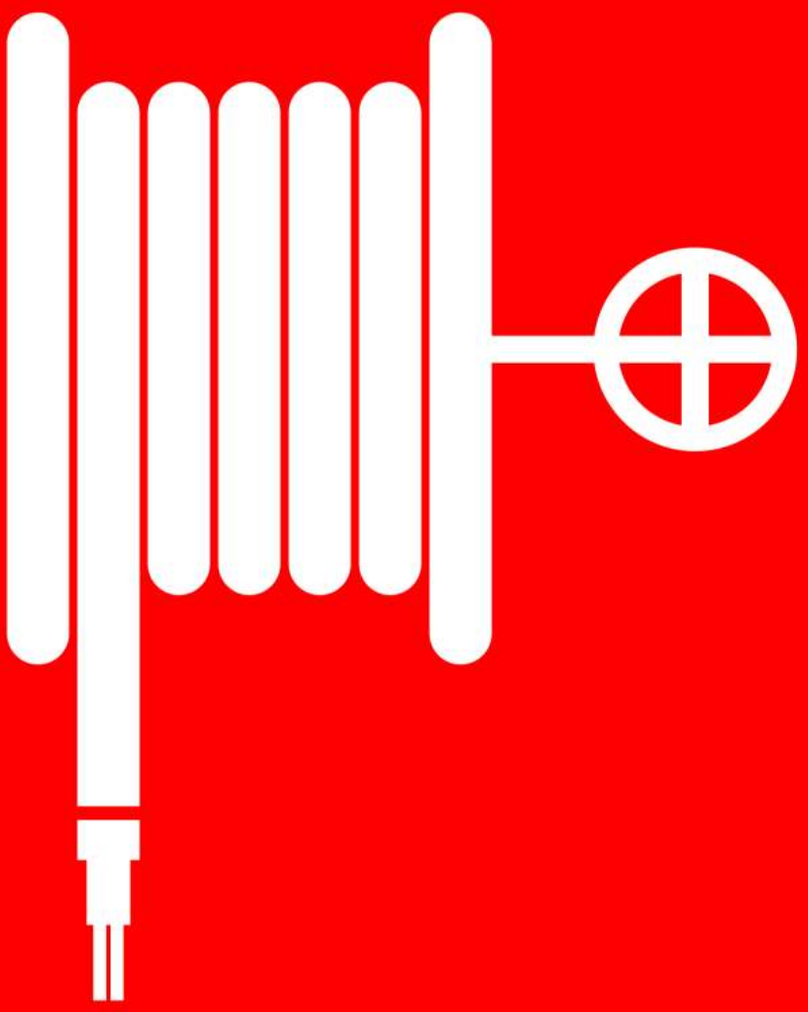
1. Stranded aluminium conductor
2. XLPE insulation
3. Filler
4. Galvanized flat steel wire
5. Galvanized steel binding tape
6. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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

FLARET

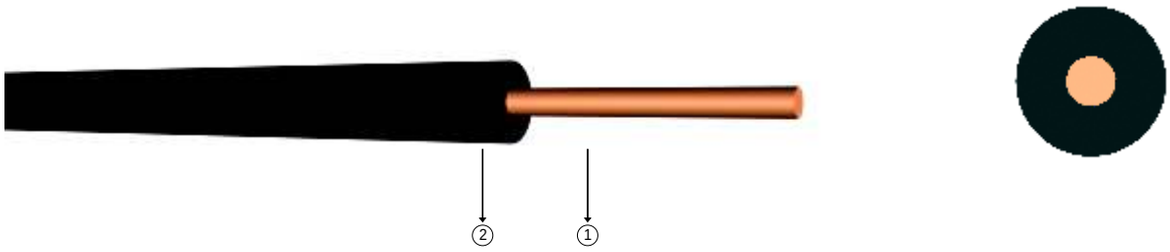
Did you take all your precautions against fire?



HES KABLO

Reliable technology

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



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

U: Solid conductor
R: Stranded Conductor Rigid

Standards: HD 21 15 S1, 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)

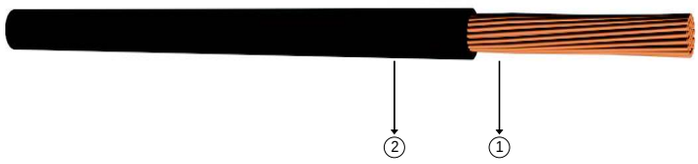
Construction

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)	
mm²	mm	kg/km	m	ohm/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 RE	5.6	108	100	1.83	48	73
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 (H05Z1 - U)*

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



Code: H05Z1-K, H07Z1-K

K: Flexible conductor

Standards: HD 21 15 S1, 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.

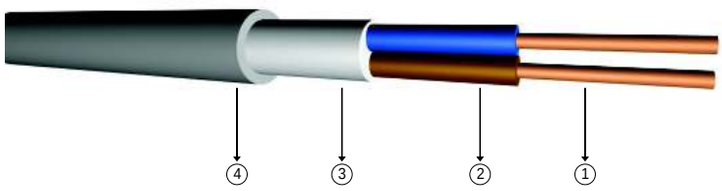
Construction

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)	
mm²	mm	kg/km	m	ohm/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 (H05Z1 - K)*

300/500V halogen free, flame retardant, multi core cables with copper conductor



Code: NHXMH-O, NHXMH-J (052XZ1-U, 052XZ1-R)

O : Without green - yellow conductor
J : With green - yellow conductor

Standards: VDE 0250 214, TSEK

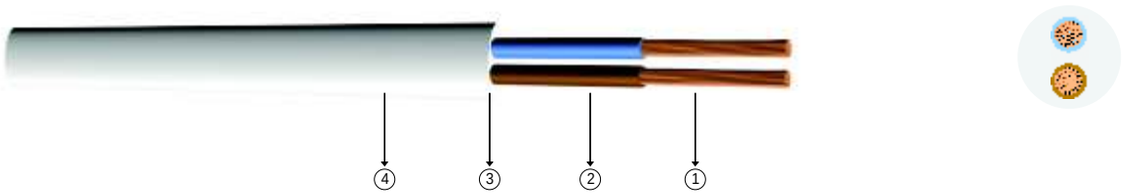
Technical Data
Max. operating temperature : 70 °C
Max. short circuit temperature : 160 °C (max. 5 sec.)
Rated voltage : 300/500 V

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.
RE : Solid conductor (052XZ1-U)
RM : Stranded conductor (052XZ1-R)

Construction
1 Solid or stranded copper conductor 2 XLPE insulation 3 Filler 4 HFFR outer jacket

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)
mm²	mm	kg/km	m	ohm/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

300/300V and 300/500V halogen free, flame retardant, multi core cables with copper conductor



Code: H05Z1Z1-F, H03Z1Z1-F

F: Fine stranded conductor

Standards: EN 50525-3-11, HD 21.14 S1, VDE 0281-14

Technical Data

Max. operating temperature	: 70 °C
Max. short circuit temperature	: 160 °C (max. 5 sec.)
Rated voltage	: 300/300 V 300/500 V
Min. bending radius	: 4 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.

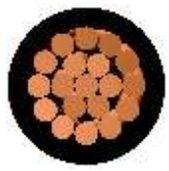
Construction

1 Flexible copper conductor
2 HFFR insulation
3 Filler
4 HFFR outer jacket

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)
mm²	mm	kg/km	m	ohm/km	In air at 30 °C
2x0.5*	5.0	40	100	39.0	11
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
3x0.5*	5.3	50	100	39.0	11
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
4x0.5*	5.8	65	100	39.0	11
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
5x0.5*	6.3	80	100	39.0	11
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

* *: 300/300 V (H03Z1Z1-F)*

0.6/1 kV halogen free, flame retardant, XLPE insulated single core cables with copper conductor



Code: N2XH

O : Without green - yellow conductor
J : With green - yellow conductor

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.

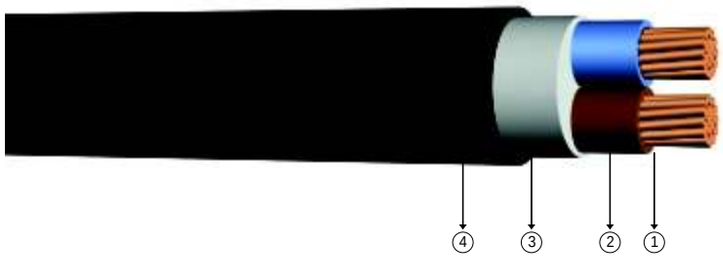
Construction

1 Solid or stranded copper conductor 2 XLPE insulation 3 HFFR outer jacket

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	
mm²	mm	kg/km	m	ohm/km	***	***	***	***
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 ºC, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0.7
In air : 30 ºC, load factor 1.0
*** : Flat formation, clearance 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: YXH-U, YXH-R, N2XH-O

U: Solid conductor O: Without green - yellow conductor
R: Stranded Conductor Rigid

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.

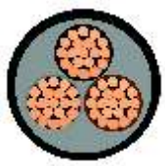
Construction

1. Solid or stranded copper conductor
2. XLPE insulation
3. Filler
4. HFFR outer jacket

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)	
mm²	mm	kg/km	m	ohm/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: YXH-U, YXH-R, N2XH-O

O : Without green - yellow conductor
J : With green - yellow conductor

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.

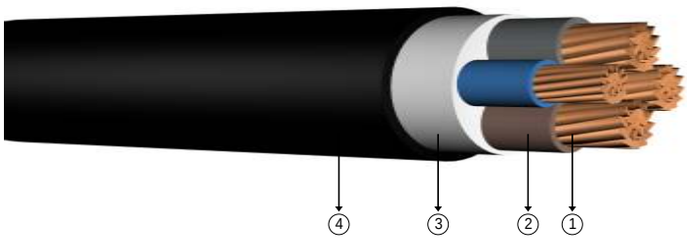
Construction

1. Solid or stranded copper conductor
2. XLPE insulation
3. Filler
4. HFFR outer jacket

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)	
mm²	mm	kg/km	m	ohm/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: YXH-R, N2XH-O

O: Without green - yellow conductor
R: Stranded Conductor Rigid

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.

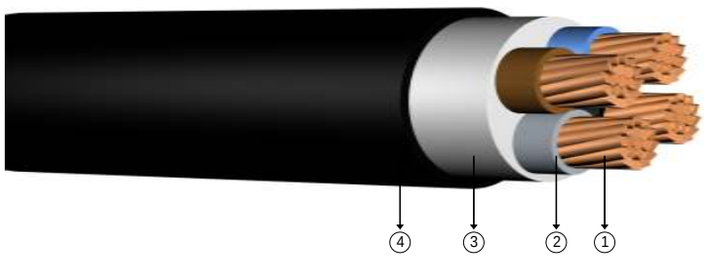
Construction

1. Solid or stranded copper conductor
2. XLPE insulation
3. Filler
4. HFFR outer jacket

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)	
mm²	mm	kg/km	m	ohm/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: YXH-U, YXH-R, N2XH-O

O : Without green - yellow conductor
J : With green - yellow conductor

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.

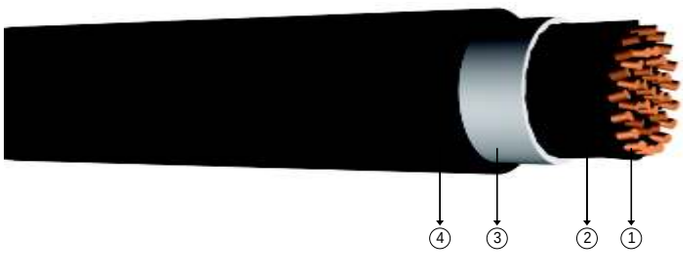
Construction

1 Solid or stranded copper conductor
2 XLPE insulation
3 Filler
4 HFFR outer jacket

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)	
mm²	mm	kg/km	m	ohm/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: YXH-U, N2XH-O

O: Without green - yellow conductor
U: Solid conductor

Standards: HD 604 S1, IEC 60502-1, VDE 0271

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 indoors and outdoors, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage and fire.

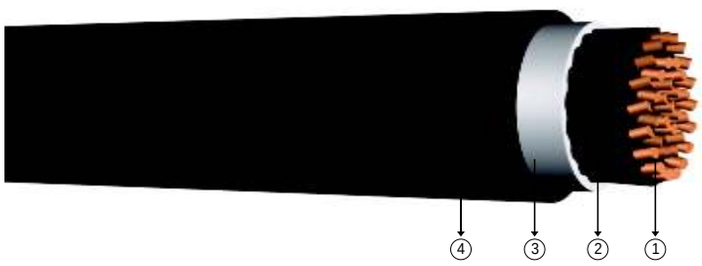
Construction

1 Solid or stranded copper conductor
2 XLPE insulation
3 Filler
4 HFFR outer jacket

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)	
mm²	mm	kg/km	m	ohm/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: YXH-U, N2XH-O

U: Solid conductor
O: Without green - yellow conductor

Standards: HD 604 S1, IEC 60502-1, VDE 0271

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 indoors and outdoors, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage and fire.

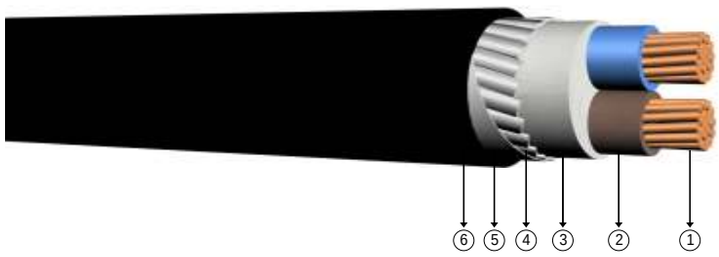
Construction

1. Solid or stranded copper conductor
2. XLPE insulation
3. Filler
4. HFFR outer jacket

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)	
mm²	mm	kg/km	m	ohm/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: N2XFGH

Standards: HD 604 S1, IEC 60502-1, VDE 0276

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 indoors and outdoors, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage and fire.

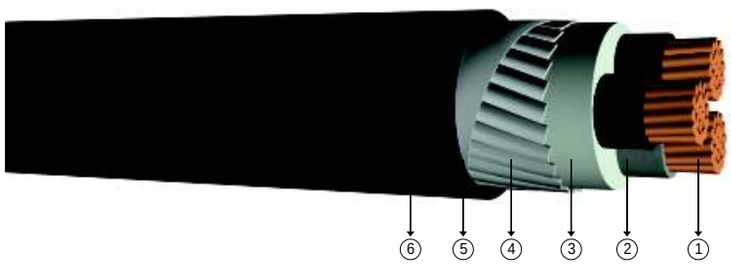
Construction

1. Solid or stranded copper conductor
2. XLPE insulation
3. Filler
4. Galvanized flat steel wire
5. Galvanized steel binding tape
6. HFFR outer jacket

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)	
mm²	mm	kg/km	m	ohm/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	0124	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: N2XFGH

Standards: HD 604 S1, IEC 60502-1, VDE 0276

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 indoors and outdoors, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage and fire.

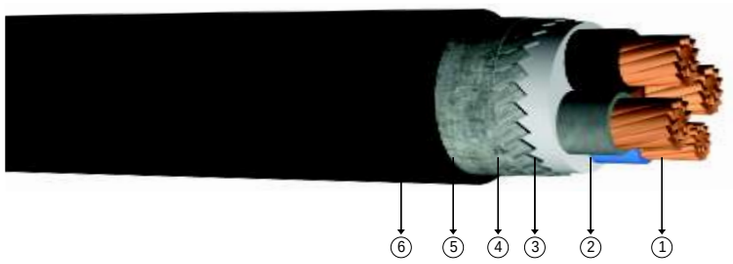
Construction

1. Stranded copper conductors
2. XLPE insulation
3. Filler
4. Galvanized flat steel wire
5. Galvanized steel binding tape
6. HFFR outer jacket

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)	
mm²	mm	kg/km	m	ohm/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: N2XFGH

Standards: HD 604 S1, IEC 60502-1, VDE 0276

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 indoors and outdoors, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage and fire.

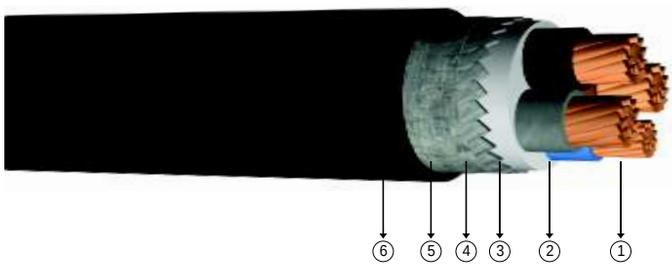
Construction

1. Stranded copper conductors
2. XLPE insulation
3. Filler
4. Galvanized flat steel wire
5. Galvanized steel binding tape
6. HFFR outer jacket

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)	
mm²	mm	kg/km	m	ohm/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	0124	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: N2XFGH

Standards: HD 604 S1, IEC 60502-1, VDE 0276

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 indoors and outdoors, 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. Filler
4. Galvanized flat steel wire
5. Galvanized steel binding tape
6. HFFR outer jacket

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)	
mm²	mm	kg/km	m	ohm/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	0124	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: N2XR(A)H, CU/XLPE/AWA/LSF

Standards: HD 604 S1, IEC 60502 - 1, VDE 0276 - 604, 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 indoors and outdoors, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage and fire.

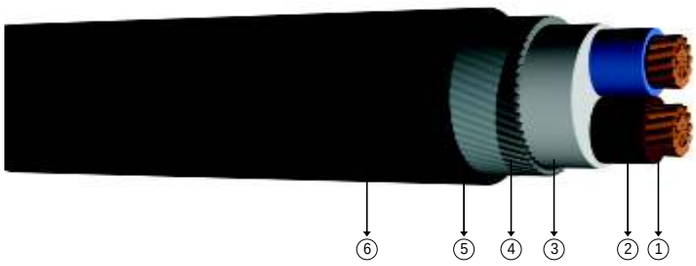
Construction

1. Stranded copper conductors
2. XLPE insulation
3. HFFR inner sheath
4. Round aluminium wire
5. Polyester tape
6. HFFR outer jacket

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	
mm²	mm	kg/km	m	ohm/km	***	****	***	****
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, clearance 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, multi core cables with copper conductor



Code: N2XRH, CU/XLPE/SWA/LSF

Standards: HD 604 S1, IEC 60502 - 1, VDE 0276-604, 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 indoors and outdoors, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage and fire.

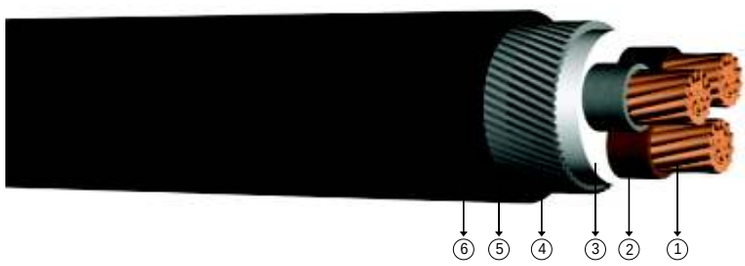
Construction

1. Solid or stranded copper conductor
2. XLPE insulation
3. Filler
4. Galvanized round steel wire
5. Polyester tape
6. HFFR outer jacket

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)	
mm²	mm	kg/km	m	ohm/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, multi core cables with copper conductor



Code: N2XRH, CU/XLPE/SWA/LSF

Standards: HD 604 S1, IEC 60502-1, VDE 0276 - 604, 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 indoors and outdoors, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage and fire.

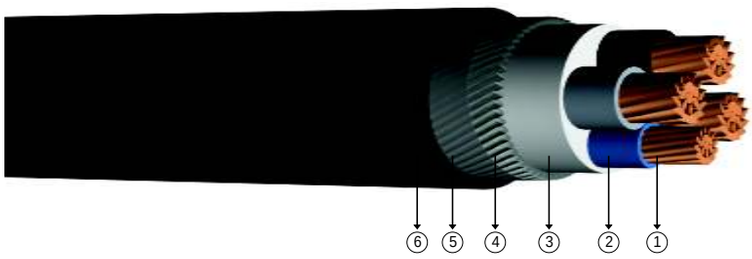
Construction

1. Solid or stranded copper conductor
2. XLPE insulation
3. Filler
4. Galvanized round steel wire
5. Polyester tape
6. HFFR outer jacket

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)	
mm²	mm	kg/km	m	ohm/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, multi core cables with copper conductor



Code: N2XRH, CU/XLPE/SWA/LSF

Standards: HD 604 S1, VDE 0276 - 604, BS 6724, 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 indoors and outdoors, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage and fire.

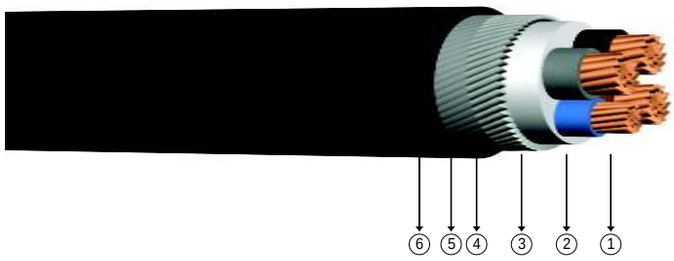
Construction

1. Stranded copper conductors
2. XLPE insulation
3. HFFR inner sheath
4. Galvanized round steel wire
5. Polyester tape
6. HFFR outer jacket

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)	
mm²	mm	kg/km	m	ohm/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, multi core cables with copper conductor



Code: N2XRH, CU/XLPE/SWA/LSF

U: Solid conductor
R: Stranded Conductor Rigid

Standards: IEC 60502 - 1, VDE 0276-604, HD 604 S1
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 indoors and outdoors, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is risk of mechanical damage and fire.

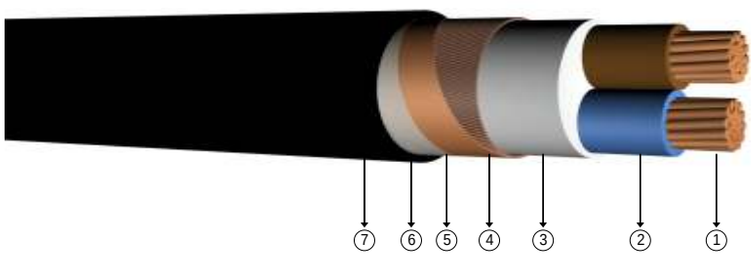
Construction

1. Solid or stranded copper conductor
2. XLPE insulation
3. Filler
4. Galvanized round steel wire
5. Polyester tape
6. HFFR outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 halogen free, flame retardant,XLPE insulated concentric conductor screened, multi core cables with copper conductor



Code: N2XCH

Standards: HD 604 S1, VDE 0276 - 604, 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.

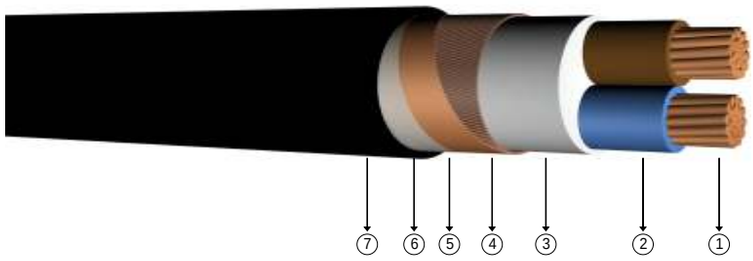
Construction

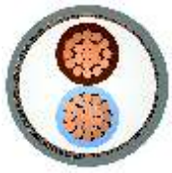
1. Solid or stranded copper conductor
2. XLPE insulation
3. Filler
4. Concentric copper wire
5. Copper tape as binder
6. Polyester tape
7. HFFR outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 conductor screened, multi core cables with copper conductor





Code: YXCH-U, YXCH-R, N2XCH

U: Solid conductor
R: Stranded Conductor Rigid

Standards: HD 604 S1, VDE 0276 - 604, 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.

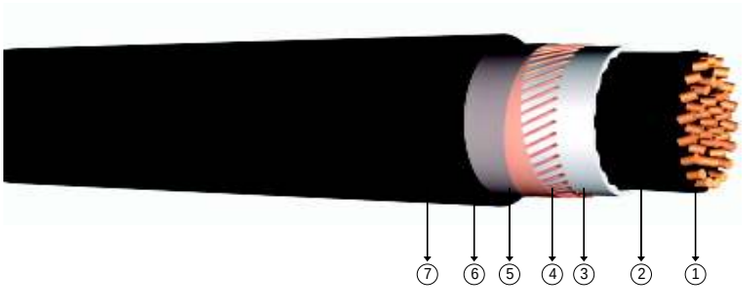
Construction

1. Solid or stranded copper conductor
2. XLPE insulation
3. Filler
4. Concentric copper wire
5. Copper tape as binder (100% coverage with overlap)
6. Polyester tape
7. HFFR outer jacket

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)	
mm²	mm	kg/km	m	ohm/km	In ground at 20 °C	In air at 30 °C
2x1.5/9	13.0	280	1000	12.1	39	32
2x2.5/9	13.5	310	1000	7.41	51	42
2x4/9	14.0	370	1000	4.61	66	56
2x6/9	15.0	450	1000	3.08	82	71
2x10/9	17.0	580	1000	1.83	109	96
3x1.5/9	13.5	300	1000	12.1	30	24
3x2.5/9	14.0	340	1000	7.41	40	32
3x4/9	15.0	410	1000	4.61	52	42
3x6/9	16.0	510	1000	3.08	64	53
3x10/9	18.5	670	1000	1.83	86	73
4x1.5/9	14.0	330	1000	12.1	30	24
4x2.5/9	15.0	380	1000	7.41	40	32
4x4/9	16.0	470	1000	4.61	52	42
4x6/9	18.0	590	1000	3.08	64	53
4x10/9	20.0	790	1000	1.83	86	73
5x1.5/9	15.0	360	1000	12.1	30	24
5x2.5/9	16.0	410	1000	7.41	40	32
5x4/9	17.0	520	1000	4.61	52	42

Note : Current carrying capacities are valid under the following conditions;
In ground : 20 °C, 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 conductor screened, control cables with copper conductor



Code: N2XCH

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	: 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.

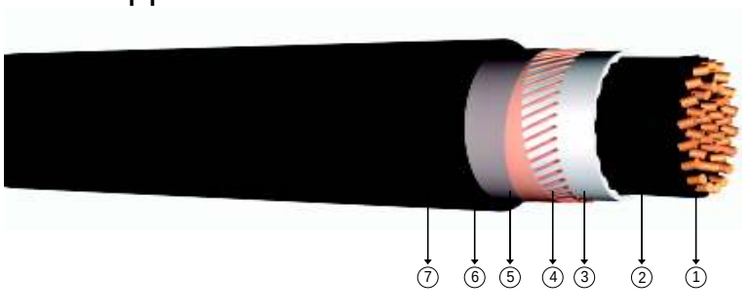
Construction

1. Solid or stranded copper conductor
2. XLPE insulation
3. Filler
4. Concentric conductor
5. Copper tape as binder
6. Polyester tape
7. HFFR outer jacket

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)	
mm²	mm	kg/km	m	ohm/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, concentric conductor screened, control cables with copper conductor



Code: YXCH-U, YXCH-R, N2XCH

U: Solid conductor
R: Stranded Conductor Rigid

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	: 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. Filler
4. Concentric conductor
5. Copper tape as binder (100% coverage with overlap)
6. Polyester tape
7. HFFR outer jacket

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)	
mm²	mm	kg/km	m	ohm/km	In ground at 20 °C	In air at 30 °C
7x1.5/9	15.0	410	1000	12.1	18.0	15.5
10x1.5/9	17.0	530	1000	12.1	15.0	13.0
12x1.5/9	19.0	580	1000	12.1	14.0	12.5
16x1.5/9	21.0	715	1000	12.1	12.8	11.4
21x1.5/9	22.0	775	1000	12.1	11.3	10.2
24x1.5/9	24.0	875	1000	12.1	10.5	9.5
27x1.5/9	24.5	980	1000	12.1	10.0	9.0
30x1.5/9	25.0	1025	1000	12.1	10.0	9.0
7x2.5/9	17.0	510	1000	7.41	24.0	21.0
10x2.5/9	19.0	660	1000	7.41	20.0	17.5
12x2.5/9	21.0	760	1000	7.41	19.0	17.0
16x2.5/9	23.0	895	1000	7.41	16.5	15.0
21x2.5/9	25.0	1105	1000	7.41	15.0	13.5
24x2.5/9	26.0	1195	1000	7.41	14.0	13.0
27x2.5/9	27.0	1280	1000	7.41	13.5	12.5
30x2.5/9	28.0	1400	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 single core cables with aluminium conductor

Code: YAXH-R, NA2XH-O

O: Without green - yellow conductor
R: Stranded Conductor Rigid

Standards: HD 604 S1, IEC 60502 - 1, VDE 0276

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.

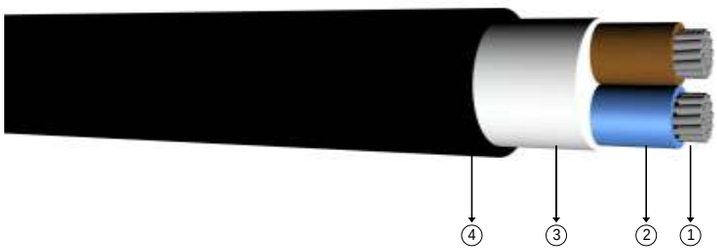
Construction

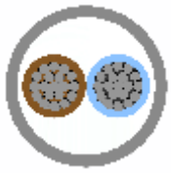
1. Stranded aluminum conductor
2. XLPE insulation
3. HFFR outer jacket

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	
mm²	mm	kg/km	m	ohm/km	***	****	***	****
1x25	10.5	150	1000	1.20	-	114	-	106
1x35	12.0	180	1000	0.868	164	137	163	131
1x50	13.5	225	1000	0.641	195	163	200	161
1x70	15.5	305	1000	0.443	238	201	254	205
1x95	17.0	405	1000	0.320	284	240	313	253
1x120	19.0	510	1000	0.253	323	274	366	296
1x150	21.0	605	1000	0.206	361	308	420	341
1x185	23.0	765	1000	0.164	408	348	486	395
1x240	26.0	925	1000	0.125	476	408	585	475
1x300	28.0	1155	1000	0.100	537	462	675	548
1x400	31.0	1480	1000	0.0778	616	531	798	647
1x500	35.0	1850	1000	0.0605	699	601	926	749

Note : Current carrying capacities are valid under the following conditions;
In ground : 20 ºC, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0.7
In air : 30 ºC, load factor 1.0
*** : Flat formation, clearance 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 aluminium conductor





Code: YAXH-R, NA2XH-O

O: Without green - yellow conductor
R: Stranded Conductor Rigid

Standards: HD 604 S1, IEC 60502 - 1, VDE 0276

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. Filler
4. HFFR outer jacket

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)	
mm²	mm	kg/km	m	ohm/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: YAXH-R, NA2XH-O

O: Without green - yellow conductor
R: Stranded Conductor Rigid

Standards: HD 604 S1, IEC 60502 - 1, VDE 0276

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.

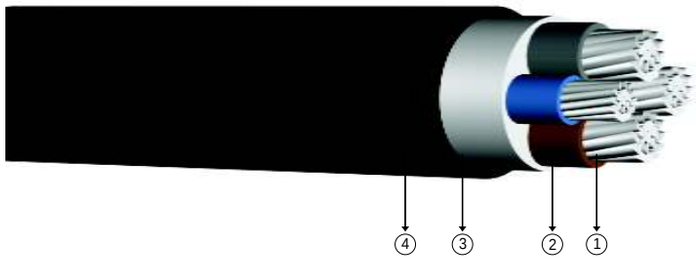
Construction

1. Stranded aluminium conductor
2. XLPE insulation
3. Filler
4. HFFR outer jacket

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)	
mm²	mm	kg/km	m	ohm/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	27.0	1050	1000	0.641	157	147
3x70	32.0	1450	1000	0.443	195	189
3x95	36.0	1850	1000	0.320	233	232
3x120	40.0	2250	1000	0.253	266	270
3x150	45.0	2800	1000	0.206	299	308
3x185	49.0	3450	1000	0.164	340	357
3x240	56.0	4400	1000	0.125	401	435
3x300	61.0	5300	500	0.100	455	501
3x400	69.0	6800	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: YAXH-R, NA2XH-O

O: Without green - yellow conductor
R: Stranded Conductor Rigid

Standards: HD 604 S1, IEC 60502 - 1, VDE 0276

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.

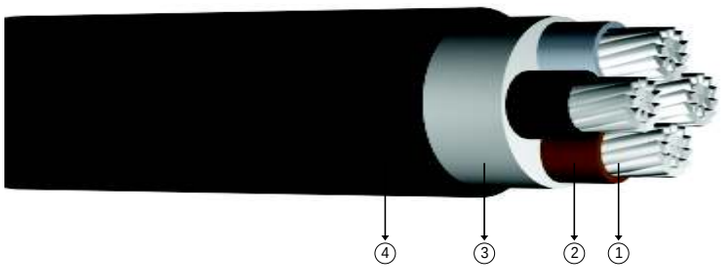
Construction

1. Stranded aluminium conductor
2. XLPE insulation
3. Filler
4. HFFR outer jacket

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)	
mm²	mm	kg/km	m	ohm/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: YAXH-R, NA2XH-O

O: Without green - yellow conductor
R: Stranded Conductor Rigid

Standards: HD 604 S1, IEC 60502 - 1, VDE 0276

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.

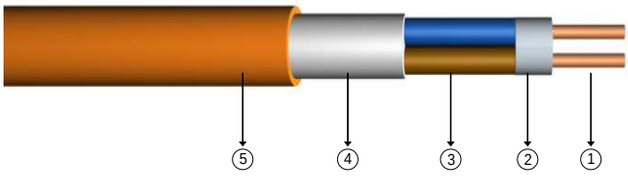
Construction

1. Stranded aluminium conductor
2. XLPE insulation
3. Filler
4. HFFR outer jacket

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)	
mm²	mm	kg/km	m	ohm/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

300/500V halogen free, flame retardant, XLPE insulated multi core cables with copper conductor FE 180



Code: NHXMH-O FE 180, NHXMH-J FE 180 (052XZ1-U, 052XZ1-R)

O : Without green - yellow conductor
J : With green - yellow conductor

Standards: VDE 0250 214, TSEK

Technical Data
Max. operating temperature : 70 °C
Max. short circuit temperature : 160 °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.
U/RE : Solid conductor
R/RM : Stranded conductor

Construction

1. Solid or stranded copper conductor
2. Mica tape
3. XLPE insulation
4. Filler
5. HFFR outer jacket

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)
mm²	mm	kg/km	m	ohm/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, flame retardant, XLPE insulated single core cables with copper conductor FE 180

Code: YXH-U, YXH-R, N2XH-O FE 180

U: Solid conductor O: Without green - yellow conductor
R: Stranded Conductor Rigid

Standards: HD 604 S1, IEC 60502 - 1, VDE 0276

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.

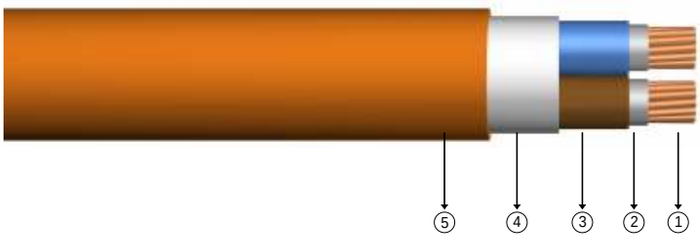
Construction

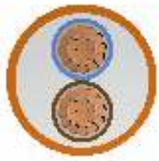
1. Solid or stranded copper conductor
2. Mica tape.
3. XLPE insulation
4. HFFR outer jacket

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	
mm²	mm	kg/km	m	ohm/km	***	***	***	***
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 ºC, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0.7
In air : 30 ºC, load factor 1.0
*** : Flat formation, clearance 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 FE 180





Code: YXH-U, YXH-R, N2XH-O FE 180

U: Solid conductor O: Without green - yellow conductor
R: Stranded Conductor Rigid

Standards: HD 604 S1, IEC 60502 - 1, VDE 0276

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.

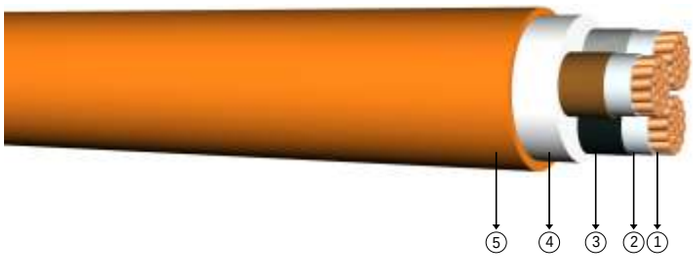
Construction

1. Solid or stranded copper conductor
2. Mica tape
3. XLPE insulation
4. Filler
5. HFFR outer jacket

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)	
mm²	mm	kg/km	m	ohm/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, flame retardant, XLPE insulated multi core cables with copper conductor FE 180



Code: YXH-U, YXH-R, N2XH-O FE 180

U: Solid conductor O: Without green - yellow conductor
R: Stranded Conductor Rigid

Standards: HD 604 S1, IEC 60502 - 1, VDE 0276

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.

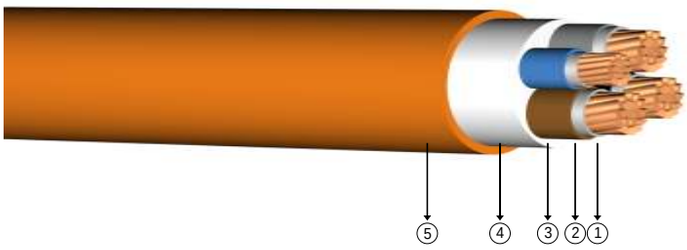
Construction

1. Solid or stranded copper conductor
2. Mica tape
3. XLPE insulation
4. Filler
5. HFFR outer jacket

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)	
mm²	mm	kg/km	m	ohm/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, flame retardant, XLPE insulated multi core cables with copper conductor FE 180



Code: YXH-R, N2XH-O FE 180

O: Without green - yellow conductor
R: Stranded Conductor Rigid

Standards: HD 604 S1, IEC 60502 - 1, VDE 0276

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.

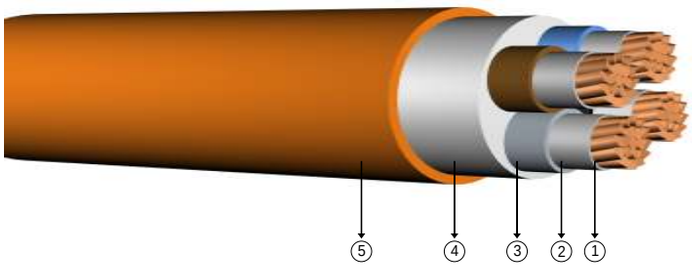
Construction

1. Stranded copper conductors
2. Mica tape
3. XLPE insulation
4. Filler
5. HFFR outer jacket

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)	
mm²	mm	kg/km	m	ohm/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, flame retardant, XLPE insulated multi core cables with copper conductor FE 180



Code: YXH-U, YXH-R, N2XH-O FE 180

U: Solid conductor O: Without green - yellow conductor
R: Stranded Conductor Rigid

Standards: HD 604 S1, IEC 60502 - 1, VDE 0276

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.

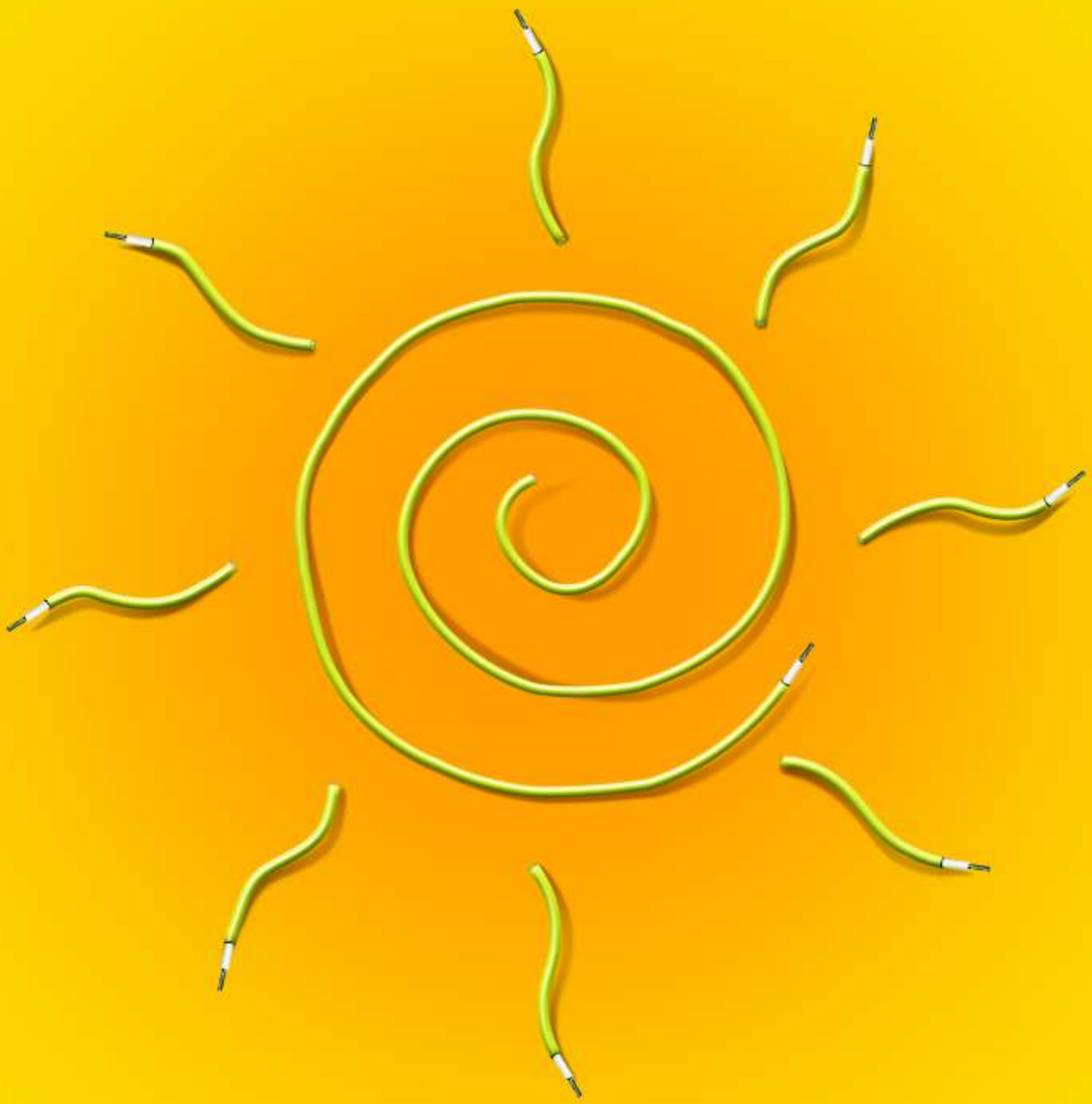
Construction

1. Solid or stranded copper conductor
2. Mica tape
3. XLPE insulation
4. Filler
5. HFFR outer jacket

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)	
mm²	mm	kg/km	m	ohm/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

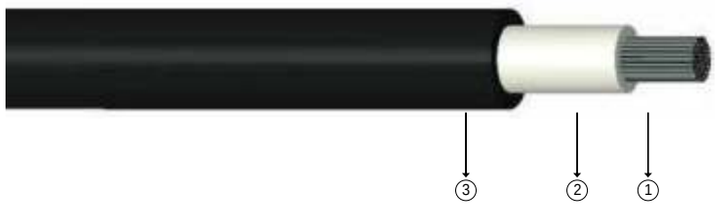
Carries the solar energy to life!



HES KABLO

Reliable technology

0.6/1 kV LSFOH Insulated, single core, solar cables



Code: PV1 - F

Standards: TÜV 2 PfG 1169 / 08.2007

Technical Data

Temperature rating	: Between-40°C and +120°C
Short-circuit temp	: 250 °C (max. 5 sec.)
Rated operating voltage (A.C.)	: 0.6/1 kV
Rated operating voltage (D.C)	: 1.8 kV
Test Voltage	: 6 kV (5 min.)

Application

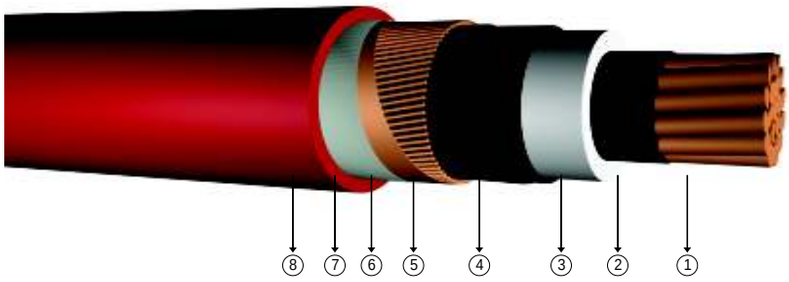
Intended for the interconnection of the various elements of photovoltaic systems such as solar panel arrays and inverters. Suitable for fixed installations, internal and external, within unprotected pipes, or in similar closed systems.

Construction

1. Tinned filexible conductors
2. LSFOH insulation
3. LSFOH outer jacket

MECHANICAL AND ELECTRICAL PROPERTIES							
Cross Section	Conductor Diameter (Approx)	Cable Diameter (Approx)	Cable Weight	Current Capacity 60 °C	Min. Bending Radius	Max. Tensile Load	Short-circuit Withstand
mm²	mm	mm	kg/km	Amper	mm	N	kA
1.5	1.6	4.6	35	30	14	23	0.19
2.5	1.9	4.9	47	41	15	38	0.32
4	2.4	5.4	65	55	16	60	0.50
6	2.9	6.8	90	70	18	90	0.76
10	4.5	7.5	135	98	23	150	1.26
16	5.6	9.5	200	132	35	240	2.02
25	6.1	11.0	285	176	38	375	3.15
35	7.3	12.3	385	218	43	525	4.41
50	8.7	14.0	530	276	48	750	6.30
70	10.5	16.4	730	347	61	1050	8.82
95	12.2	18.5	840	416	69	1425	11.97
120	14.8	21.0	1190	488	84	1800	15.12
150	15.7	22.0	1470	566	85	2250	18.90
185	17.8	24.5	1750	644	95	2775	23.31
240	20.4	27.2	2290	775	107	3600	30.24
300	23.6	32.0	2900	896	120	4500	37.80

3.6/6 kV XLPE insulated, single core, cables with copper conductor



Code: YXC7V-R, N2XSY, CU/XLPE/CWS/PVC

R: Stranded Conductor Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620

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 in ducts.

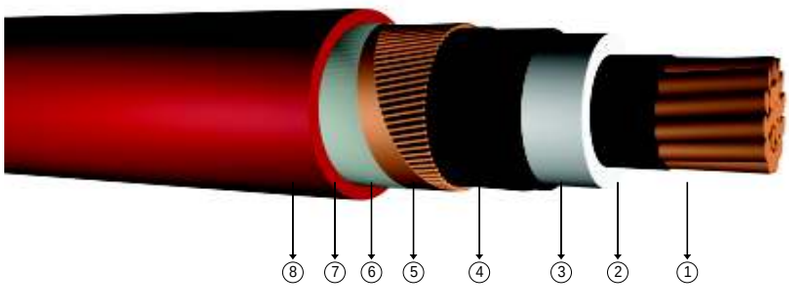
Construction

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. Polyester tape
8. PVC outer jacket

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		Operational Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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	500	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, clearance between cables; in air = 1 x Cable outer diameter, in ground = 7 cm
*** : Trefoil formation
Number of system : 1

5.8/10 kV (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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620

Technical Data

Max. operating temperature	: 90 °C
Max. short circuit temperature	: 250 °C (max. 5 sec.)
Rated voltage	: 5.8/10 kV (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 in ducts.

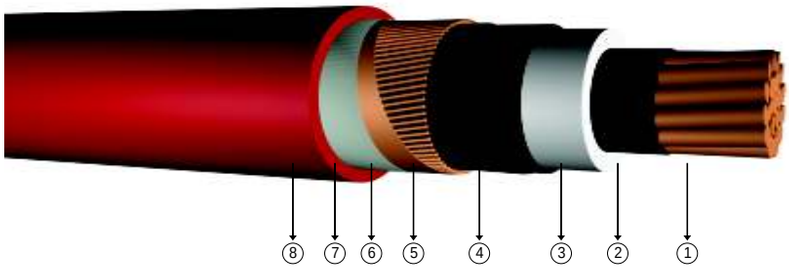
Construction

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. Polyester tape
8. PVC outer jacket

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		Operational Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
1x35/16	22.5	800	1000	0.524	0.6707	0.661	0.383	0.223	212	187	231	195
1x50/16	24.0	950	1000	0.387	0.4954	0.636	0.366	0.248	249	220	277	234
1x70/16	26.0	1200	1000	0.268	0.3430	0.606	0.349	0.285	303	269	345	292
1x95/16	27.5	1450	1000	0.193	0.2470	0.582	0.334	0.320	358	321	418	354
1x120/16	29.5	1700	1000	0.153	0.1958	0.563	0.323	0.350	404	364	481	407
1x150/25	30.5	2100	1000	0.124	0.1587	0.546	0.313	0.382	441	405	537	460
1x185/25	32.5	2450	1000	0.0991	0.1268	0.529	0.304	0.415	493	457	612	527
1x240/25	35.0	3050	1000	0.0754	0.0965	0.509	0.294	0.462	563	528	716	621
1x300/25	37.5	3650	1000	0.0601	0.0769	0.493	0.288	0.507	626	593	811	709
1x400/35	41.0	4700	1000	0.0470	0.0602	0.473	0.278	0.573	676	665	901	815
1x500/35	44.0	5700	500	0.0366	0.0468	0.457	0.271	0.631	743	739	1006	921
1x630/35	47.5	7000	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, clearance 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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620

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 in ducts.

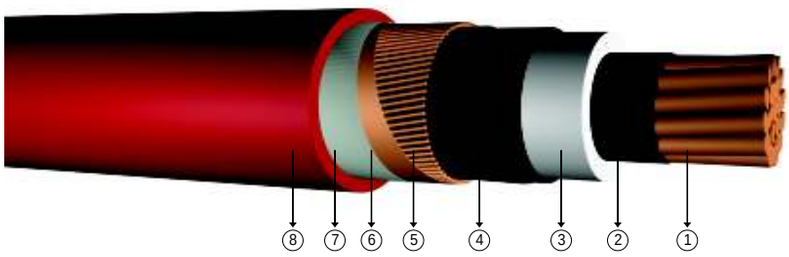
Construction

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. Polyester tape
8. PVC outer jacket

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		Operational Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance 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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620

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 in ducts.

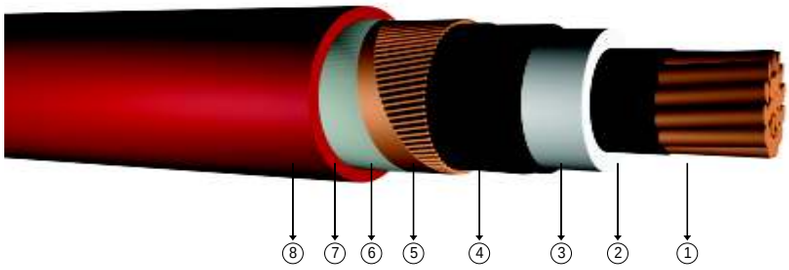
Construction

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. Polyester tape
8. PVC outer jacket

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		Operational Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance 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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620

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 in ducts.

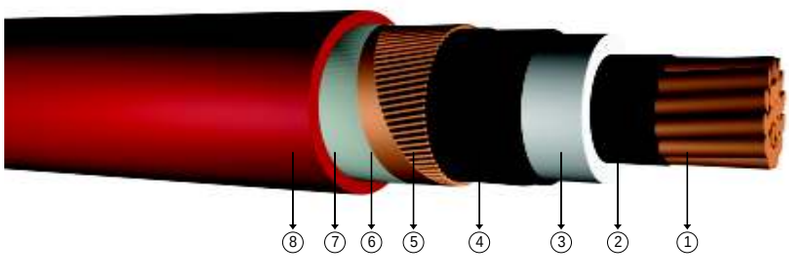
Construction

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. Polyester tape
8. PVC outer jacket

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		Operational Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance 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: YXC7V-R, N2XSY, CU/XLPE/CWS/PVC

R: Stranded Conductor Rigid

Standards: HD 620 S2, TSEK

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 in ducts.

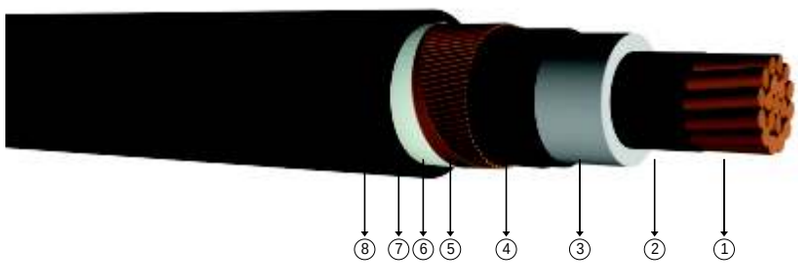
Construction

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. Polyester tape
8. PVC outer jacket

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		Operational Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/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 : Current carrying capacities are valid under the following conditions;
In ground : 20 °C, 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, clearance 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/SCWBT/CWS/WBT/PE

Standards: IEC 60502 - 2, VDE 276 - 620

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 in ducts. If the cable gets water inside due to the mechanical damages, swellable tapes prevent the penetration of the water inside the cable.

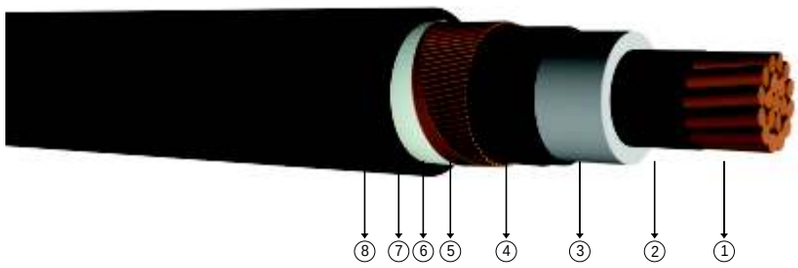
Construction

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 jacket

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		Operational Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/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	500	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, clearance between cables; in air = 1 x Cable outer diameter, in ground = 7 cm
*** : Trefoil formation
Number of system : 1

5.8/10 kV (6/10 kV) or 6.35/11 kV XLPE insulated, longitudinally sealed, single core cables with copper conductor



Code: N2XS(F)2Y, CU/XLPE/SCWBT/CWS/WBT/PE

Standards: IEC 60502 - 2, VDE 276 - 620, BS 7870 - 4.10

Technical Data

Max. operating temperature	: 90 °C
Max. short circuit temperature	: 250 °C (max. 5 sec.)
Rated voltage	: 5.8/10 kV (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 in ducts. If the cable gets water inside due to the mechanical damages, swellable tapes prevent the penetration of the water inside the cable.

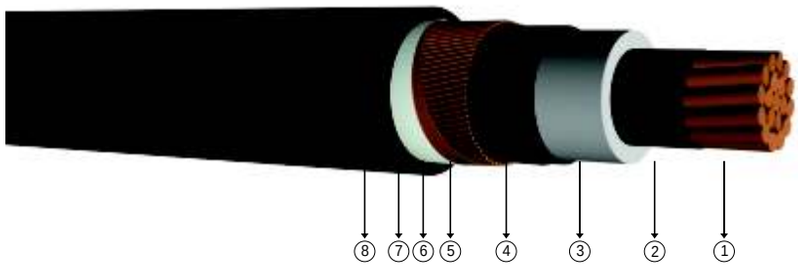
Construction

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 jacket

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		Operational Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance 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/SCWBT/CWS/WBT/PE

Standards: IEC 60502 - 2, VDE 0276 - 620

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 in ducts. If the cable gets water inside due to the mechanical damages, swellable tapes prevent the penetration of the water inside the cable.

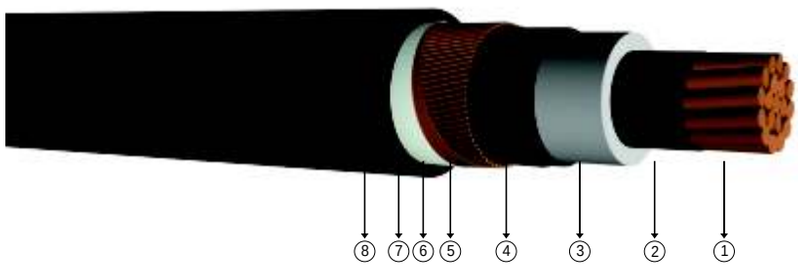
Construction

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 jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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 ºC, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0.7
In air : 30 ºC, load factor 1.0
*** : Flat formation, clearance 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/SCWBT/CWS/WBT/PE

Standards: IEC 60502 - 2, VDE 0276 - 620, 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 in ducts. If the cable gets water inside due to the mechanical damages, swellable tapes prevent the penetration of the water inside the cable.

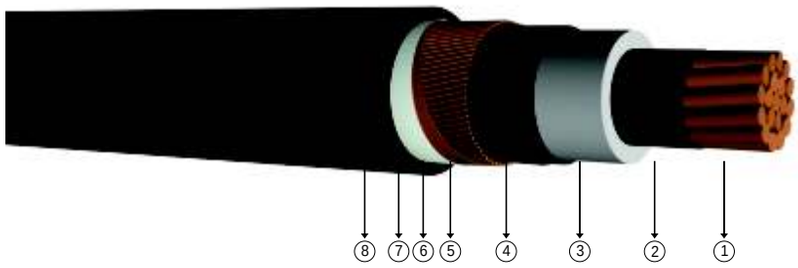
Construction

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 jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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 ºC, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0.7
In air : 30 ºC, load factor 1.0
*** : Flat formation, clearance 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, CU/XLPE/SCWBT/CWS/WBT/PE

Standards: IEC 60502 - 2, VDE 0276 - 620, 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 in ducts. If the cable gets water inside due to the mechanical damages, swellable tapes prevent the penetration of the water inside the cable.

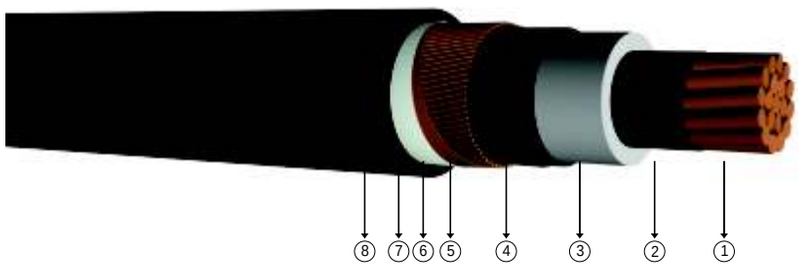
Construction

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 jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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 ºC, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0.7
In air : 30 ºC, load factor 1.0
*** : Flat formation, clearance 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, CU/XLPE/SCWBT/CWS/WBT/PE

Standards: HD 620 S2, TSEK

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 in ducts. If the cable gets water inside due to the mechanical damages, swellable tapes prevent the penetration of the water inside the cable.

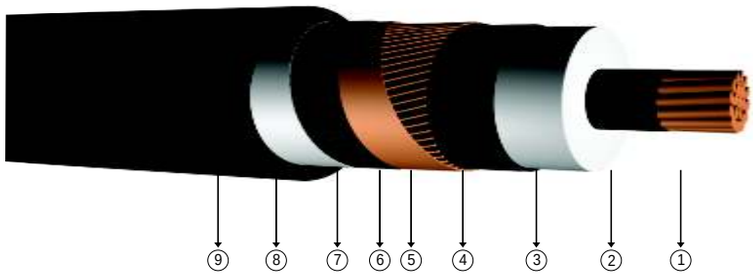
Construction

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 jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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 ºC, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0.7
In air : 30 ºC, load factor 1.0
*** : Flat formation, clearance 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, CU/XLPE/LW/CWS/LW/PE

Standards: IEC 60502 - 2, VDE 0276 - 620

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 in ducts. If the cable gets water inside due to the mechanical damages, swellable tapes prevent the penetration of the water inside the cable.

Construction

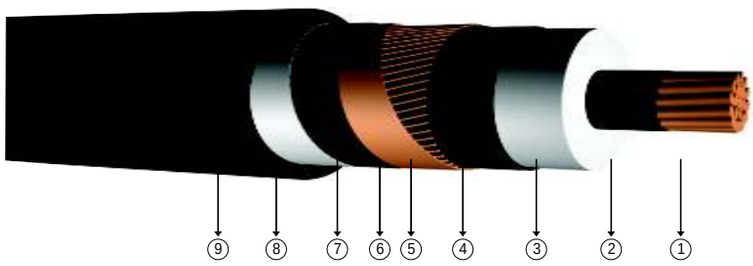
1 Stranded copper conductors 3 XLPE insulation 5 Semi conductive swelling tape 7 Swellable tape 9 PE outer jacket

2 Inner semi conductive layer 4 Outer semi conductive layer 6 Copper screen 8 PE coated aluminium foil.

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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	500	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 ºC, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0.7
In air : 30 ºC, load factor 1.0
*** : Flat formation, clearance between cables; in air = 1 x Cable outer diameter, in ground = 7 cm
*** : Trefoil formation
Number of system : 1

5.8/10 kV (6/10 kV) or 6.35/11 kV XLPE insulated, radial and longitudinally sealed, single core cables with copper conductor



Code: N2XS(FL)2Y, CU/XLPE/LW/CWS/LW/PE

Standards: IEC 60502 - 2, VDE 0276 - 620, BS 7870 - 4.10

Technical Data

Max. operating temperature : 90 °C
Max. short circuit temperature : 250 °C (max. 5 sec.)
Rated voltage : 5.8/10 kV (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 in ducts. If the cable gets water inside due to the mechanical damages, swellable tapes prevent the penetration of the water inside the cable.

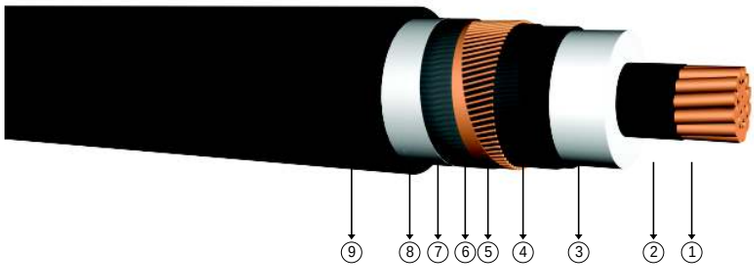
Construction

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 coated aluminium foil.
9 PE outer jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance 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, CU/XLPE/LW/CWS/LW/PE

Standards: IEC 60502 - 2, VDE 0276 - 620

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 in ducts. If the cable gets water inside due to the mechanical damages, swellable tapes prevent the penetration of the water inside the cable.

Construction

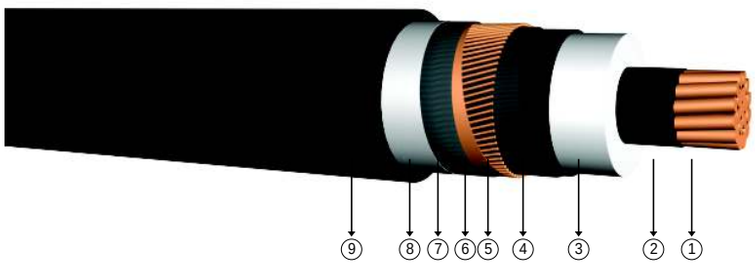
1 Stranded copper conductors 3 XLPE insulation 5 Semi conductive swelling tape 7 Swellable tape 9 PE outer jacket

2 Inner semi conductive layer 4 Outer semi conductive layer 6 Copper screen 8 PE coated aluminium foil

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance 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, CU/XLPE/LW/CWS/LW/PE

Standards: IEC 60502 - 2, VDE 0276 - 620, 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 in ducts. If the cable gets water inside due to the mechanical damages, swellable tapes prevent the penetration of the water inside the cable.

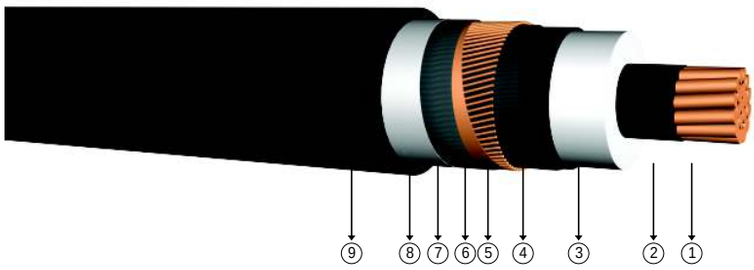
Construction

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 coated aluminium foil
9 PE outer jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance 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, CU/XLPE/LW/CWS/LW/PE

Standards: IEC 60502 - 2, VDE 0276 - 620, 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 in ducts. If the cable gets water inside due to the mechanical damages, swellable tapes prevent the penetration of the water inside the cable.

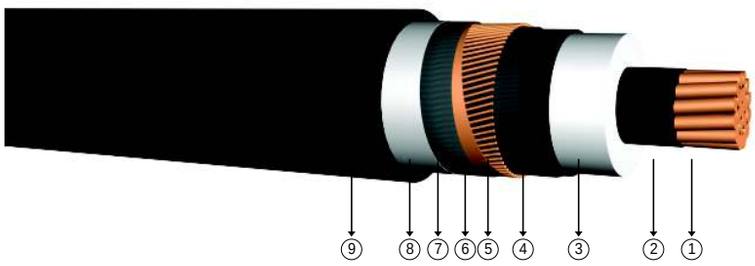
Construction

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 coated aluminium foil
9. PE outer jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance 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, CU/XLPE/LW/CWS/LW/PE

Standards: HD 620 S2, TSEK

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 in ducts. If the cable gets water inside due to the mechanical damages, swellable tapes prevent the penetration of the water inside the cable.

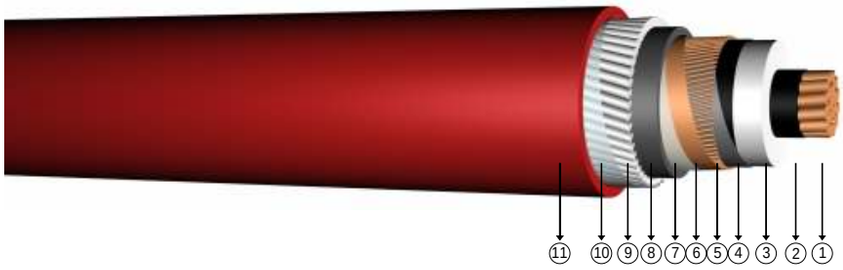
Construction

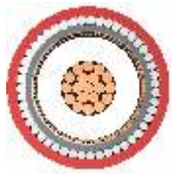
1 Stranded copper conductors
2 Inner semi conductive layer
3 XLPE insulation
4 Outer semi conductive layer
5 Semi conductive swelling tape
6 Copper screen
7 Swellable tape
8 PE coated aluminium foil
9 PE outer jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance 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, VDE 0276 - 620, BS 6622

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 in ducts.

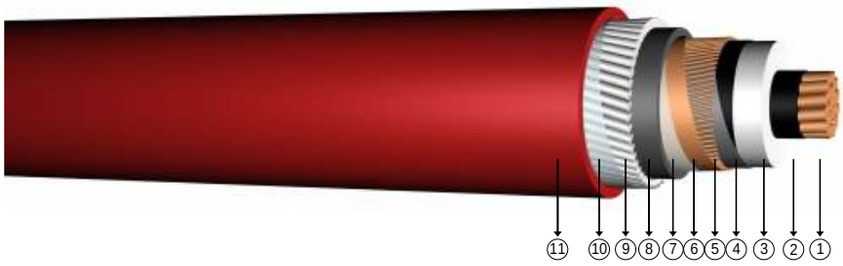
Construction

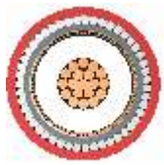
1. Stranded copper conductors
2. Inner semi conductive layer
3. XLPE insulation
4. Outer semi conductive layer
5. Semi conductive tape
6. Copper screen
7. Polyester tape
8. Inner sheath
9. Round aluminium wire
10. Polyester tape
11. PVC outer jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
mm²	mm	kg/km	m	ohm/km	ohm/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, clearance between cables; in air = 1 x Cable outer diameter, in ground = 7 cm
*** : Trefoil formation
Number of system : 1

5.8/10 kV (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, VDE 0276 - 620, BS 6622

Technical Data

Max. operating temperature	: 90 °C
Max. short circuit temperature	: 250 °C (max. 5 sec.)
Rated voltage	: 5.8/10 kV (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 in ducts.

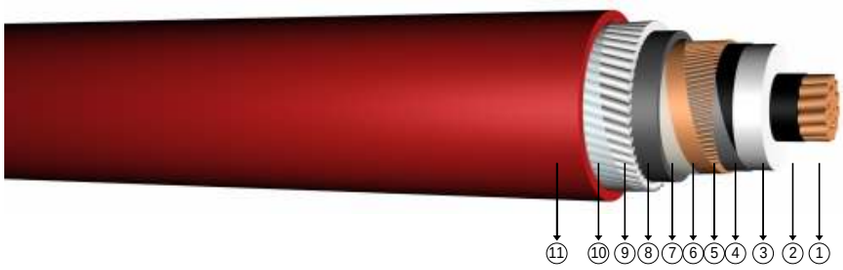
Construction

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. Polyester tape
8. Inner sheath
9. Round aluminium wire
10. Polyester tape
11. PVC outer jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance 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, VDE 0276 - 620, BS 6622

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 in ducts.

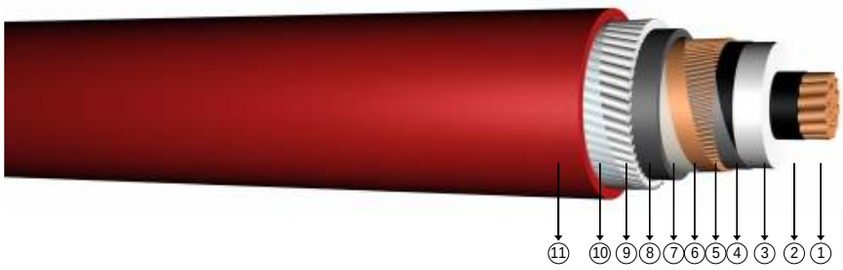
Construction

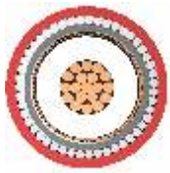
1. Stranded copper conductors
2. Inner semi conductive layer
3. XLPE insulation
4. Outer semi conductive layer
5. Semi conductive tape
6. Copper screen
7. Polyester tape
8. Inner sheath
9. Round aluminium wire
10. Polyester tape
11. PVC outer jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance 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, VDE 0276 - 620, 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	: 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 in ducts.

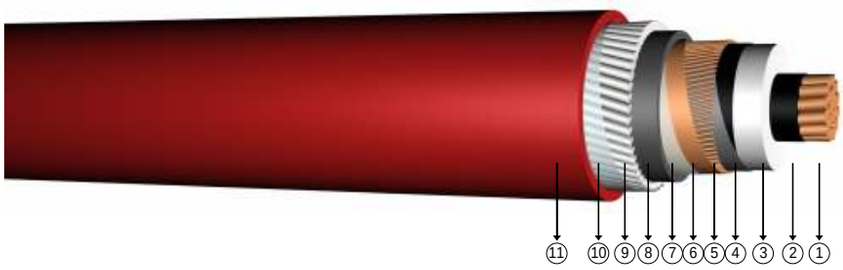
Construction

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. Polyester tape
8. Inner sheath
9. Round aluminium wire
10. Polyester tape
11. PVC outer jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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 ºC, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0.7
In air : 30 ºC, load factor 1.0
*** : Flat formation, clearance 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, VDE 0276 - 620, 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	: 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 in ducts.

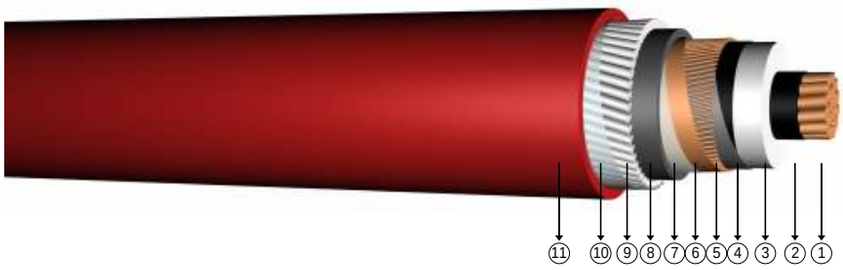
Construction

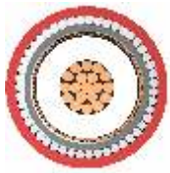
1. Stranded copper conductors
2. Inner semi conductive layer
3. XLPE insulation
4. Outer semi conductive layer
5. Semi conductive tape
6. Copper screen
7. Polyester tape
8. Inner sheath
9. Round aluminium wire
10. Polyester tape
11. PVC outer jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance 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 S2, TSEK

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 in ducts.

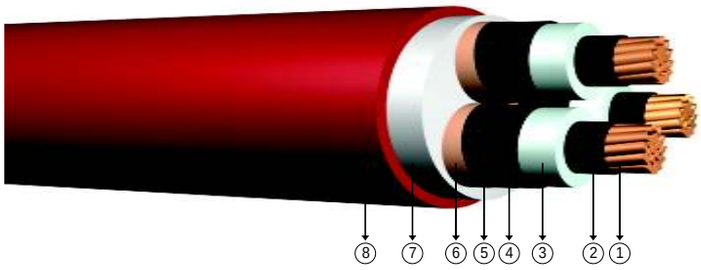
Construction

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. Polyester tape
8. Inner sheath
9. Round aluminium wire
10. Polyester tape
11. PVC outer jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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 ºC, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0.7
In air : 30 ºC, load factor 1.0
*** : Flat formation, clearance 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 copper conductor



Code: YXC8V-R, N2XSEY, CU/XLPE/CTS/PVC

R: Stranded Conductor Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620

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 in ducts.

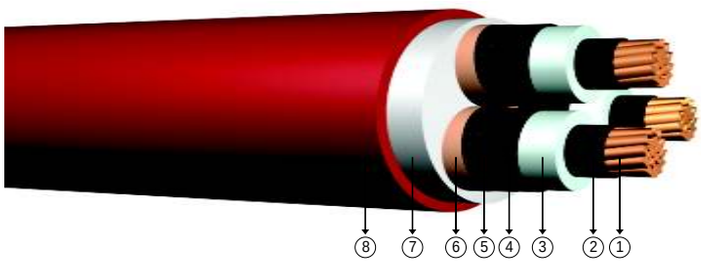
Construction

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. Filler
8. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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

5.8/10 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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620

Technical Data

Max. operating temperature	: 90 °C
Max. short circuit temperature	: 250 °C (max. 5 sec.)
Rated voltage	: 5.8/10 kV (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 in ducts.

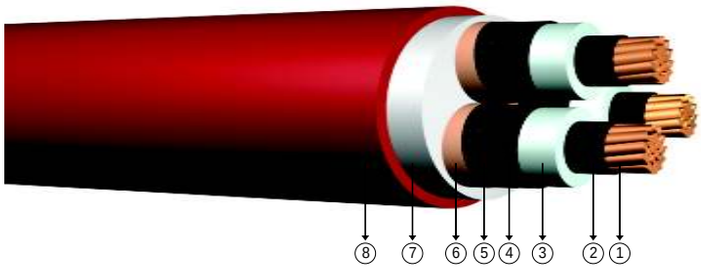
Construction

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. Filler
8. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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

8.7/15 kV XLPE insulated, three core cables with copper conductor



Code: YXC8V-R, N2XSEY, CU/XLPE/CTS/PVC

R: Stranded Conductor Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620

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 in ducts.

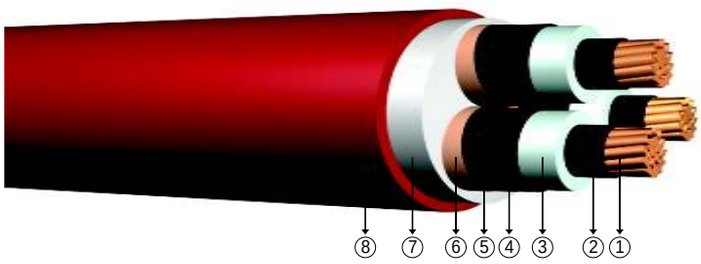
Construction

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. Filler
8. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620

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 in ducts.

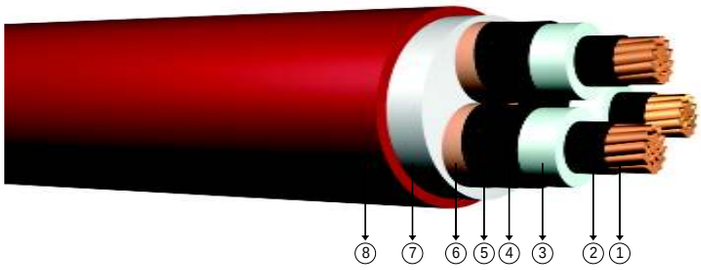
Construction

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. Filler
8. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620

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 in ducts.

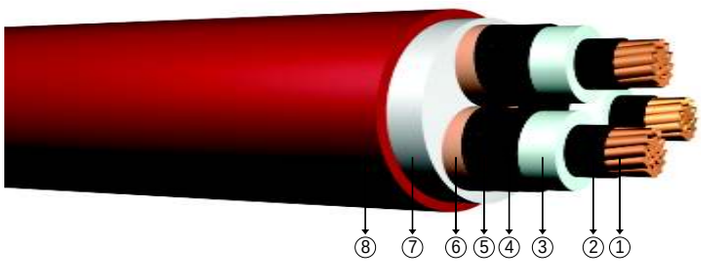
Construction

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. Filler
8. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: HD 620 S2, TSEK

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 in ducts.

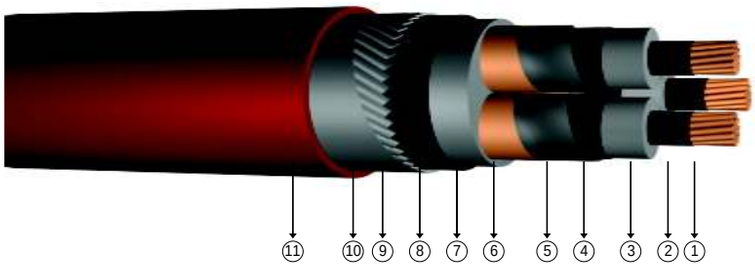
Construction

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. Filler
8. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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

3.6/6 kV XLPE insulated flat steel wire armoured, three core cables with copper conductor



Code: YXC8VZ3V-R, N2XSEYFGY

R: Stranded Conductor Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620

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 in ducts.

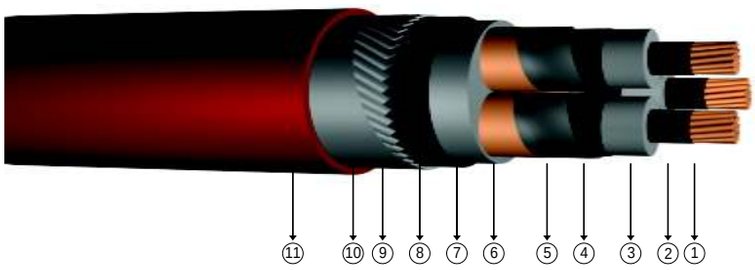
Construction

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. Filler
8. Inner sheath
9. Galvanized flat steel wire
10. Galvanized steel tape
11. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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

5.8/10 kV (6/10 kV) XLPE insulated flat steel wire armoured, three core cables with copper conductor



Code: YXC8VZ3V-R, N2XSEYFGY

R: Stranded Conductor Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620

Technical Data

Max. operating temperature	: 90 °C
Max. short circuit temperature	: 250 °C (max. 5 sec.)
Rated voltage	: 5.8/10 kV (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 in ducts.

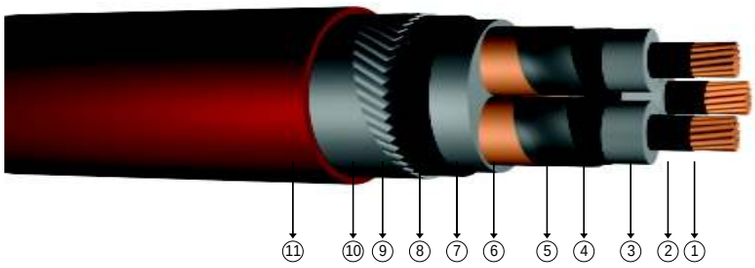
Construction

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. Filler
8. Inner sheath
9. Galvanized flat steel wire
10. Galvanized steel tape
11. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620

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 in ducts.

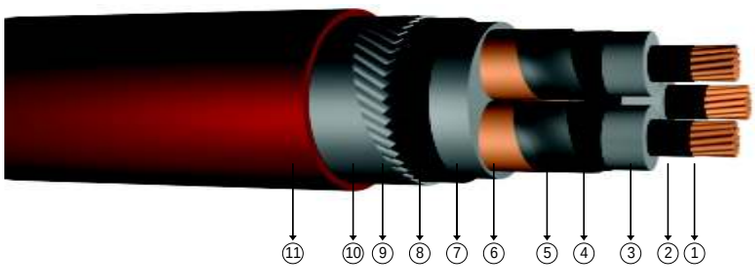
Construction

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. Filler
8. Inner sheath
9. Galvanized flat steel wire
10. Galvanized steel tape
11. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620

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 in ducts.

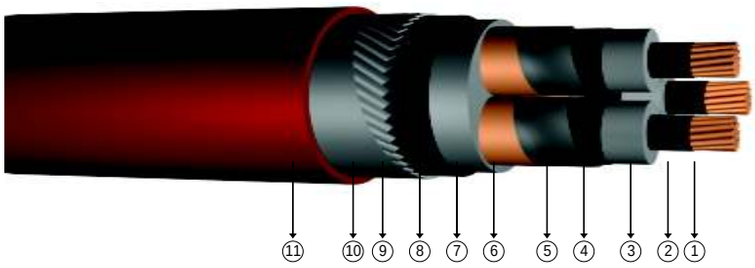
Construction

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. Filler
8. Inner sheath
9. Galvanized flat steel wire
10. Galvanized steel tape
11. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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

18/30 kV XLPE insulated flat steel wire armoured, three core cables with copper conductor



Code: YXC8VZ3V-R, N2XSEYFGY

R: Stranded Conductor Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620

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 in ducts.

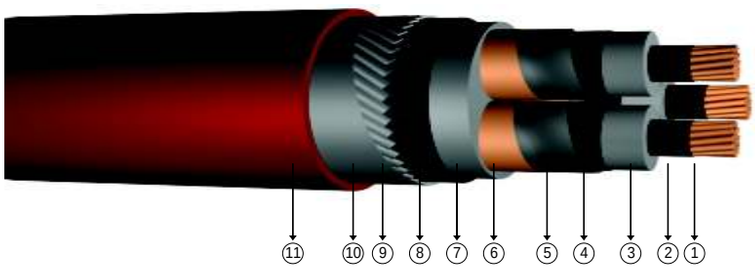
Construction

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. Filler
8. Inner sheath
9. Galvanized flat steel wire
10. Galvanized steel tape
11. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: HD 620 S2, TSEK

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 in ducts.

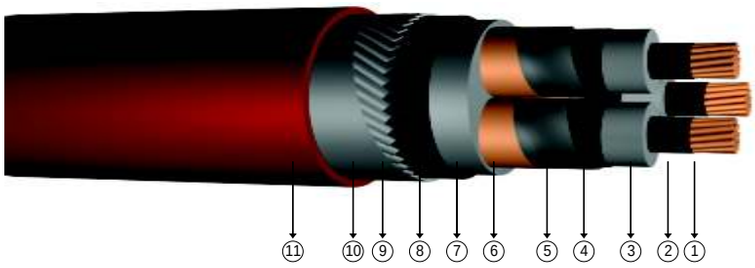
Construction

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. Filler
8. Inner sheath
9. Galvanized flat steel wire
10. Galvanized steel tape
11. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620, BS 6622

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 in ducts.

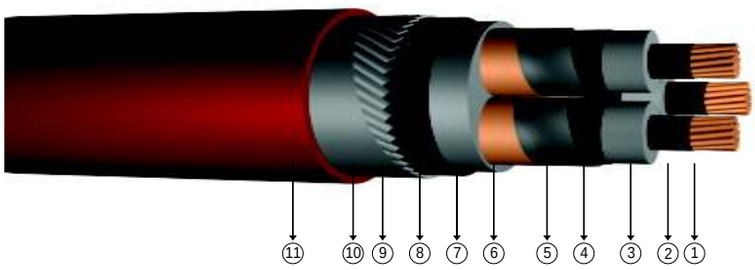
Construction

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. Filler
8. Inner sheath
9. Galvanized round steel wire
10. Polyester tape
11. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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

5.8/10 kV (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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620, BS 6622

Technical Data

Max. operating temperature	: 90 °C
Max. short circuit temperature	: 250 °C (max. 5 sec.)
Rated voltage	: 5.8/10 kV (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 in ducts.

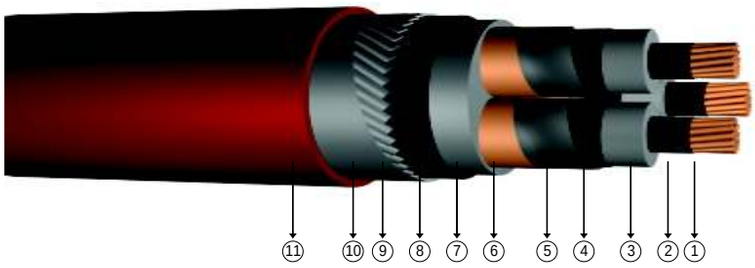
Construction

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. Filler
8. Inner sheath
9. Galvanized round steel wire
10. Polyester tape
11. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620, BS 6622

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 in ducts.

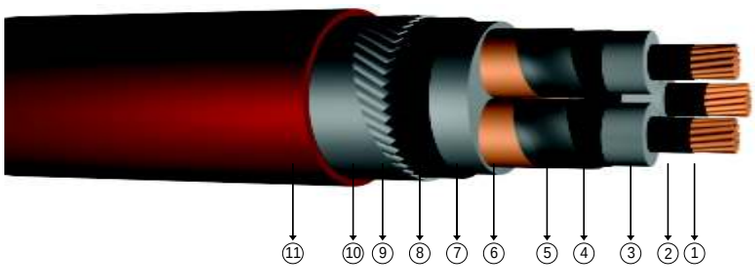
Construction

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. Filler
8. Inner sheath
9. Galvanized round steel wire
10. Polyester tape
11. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620, 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	: 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 in ducts.

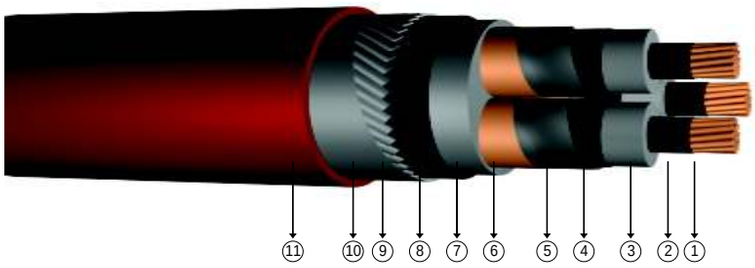
Construction

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. Filler
8. Inner sheath
9. Galvanized round steel wire
10. Polyester tape
11. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620, 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	: 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 in ducts.

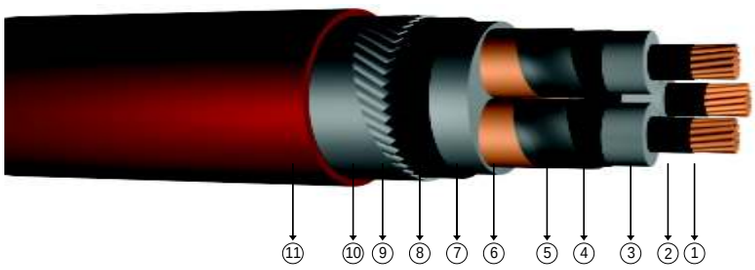
Construction

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. Filler
8. Inner sheath
9. Galvanized round steel wire
10. Polyester tape
11. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: HD 620 S2, TSEK

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 in ducts.

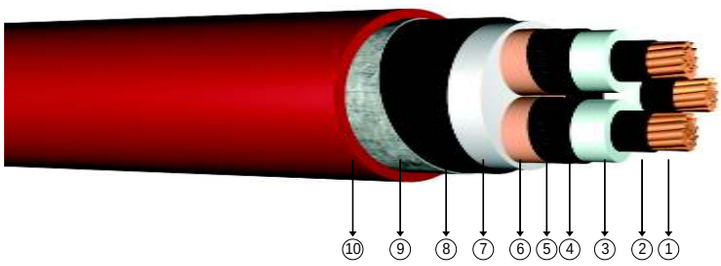
Construction

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. Filler
8. Inner sheath
9. Galvanized round steel wire
10. Polyester tape
11. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 double steel tape armoured, three core cables with copper conductor



Code: YXC8VZ4V-R, N2XSEYBY, CU/XLPE/CTS/PVC/STA/PVC

R: Stranded Conductor Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620

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 in ducts.

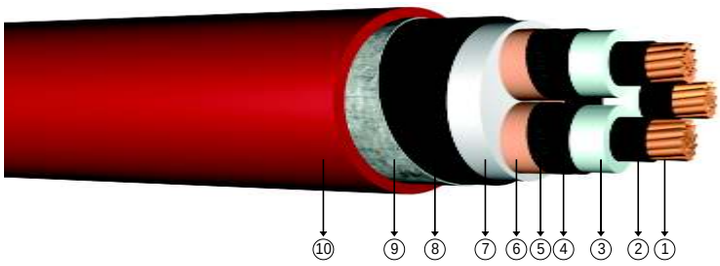
Construction

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. Filler
8. Inner sheath
9. Galvanized double steel tape
10. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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

5.8/10 kV (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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620

Technical Data

Max. operating temperature	: 90 °C
Max. short circuit temperature	: 250 °C (max. 5 sec.)
Rated voltage	: 5.8/10 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 in ducts.

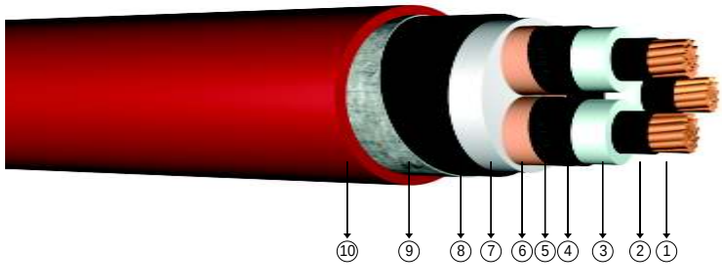
Construction

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. Filler
8. Inner sheath
9. Galvanized double steel tape
10. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620

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 in ducts.

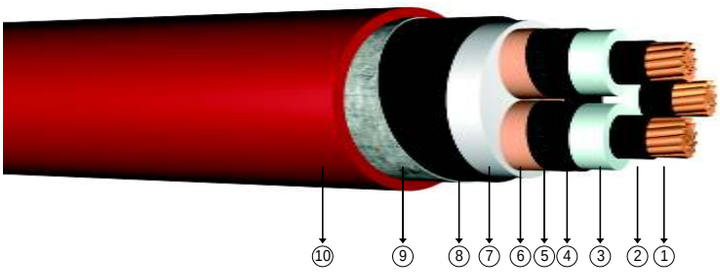
Construction

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. Filler
8. Inner sheath
9. Galvanized double steel tape
10. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620

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 in ducts.

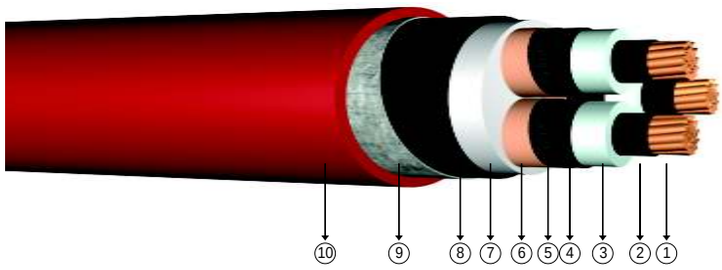
Construction

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. Filler
8. Inner sheath
9. Galvanized double steel tape
10. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620

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 in ducts.

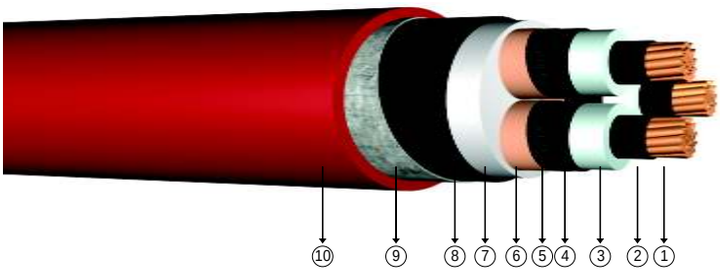
Construction

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. Filler
8. Inner sheath
9. Galvanized double steel tape
10. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: HD 620 S2, TSEK

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 in ducts.

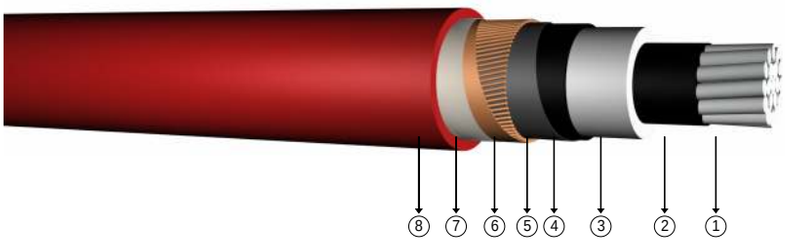
Construction

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. Filler
8. Inner sheath
9. Galvanized double steel tape
10. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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

3.6/6 kV XLPE insulated single core cables with aluminium conductor



Code: YAXC7V-R, NA2XSY, AL/XLPE/CWS/PVC

R: Stranded Conductor Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620

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

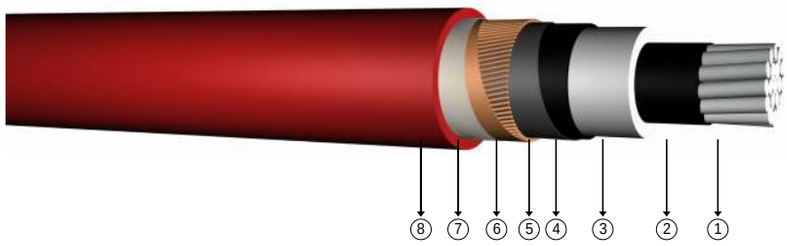
Construction

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. Polyester tape
8. PVC outer jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance between cables; in air = 1 x Cable outer diameter, in ground = 7 cm
*** : Trefoil formation
Number of system : 1

5.8/10 kV (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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620

Technical Data

Max. operating temperature	: 90 °C
Max. short circuit temperature	: 250 °C (max. 5 sec.)
Rated voltage	: 5.8/10 kV (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 indoors and outdoors, in cable ducts, underground, in power or switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

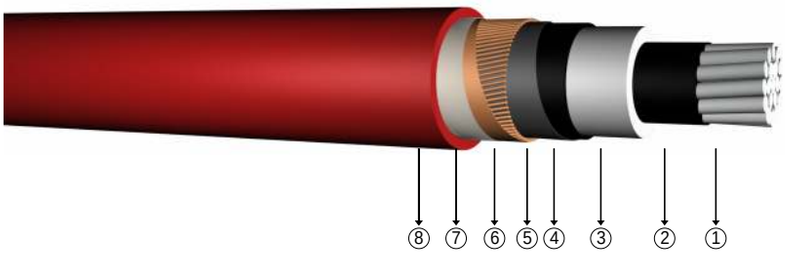
Construction

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. Polyester tape
8. PVC outer jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance 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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620

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

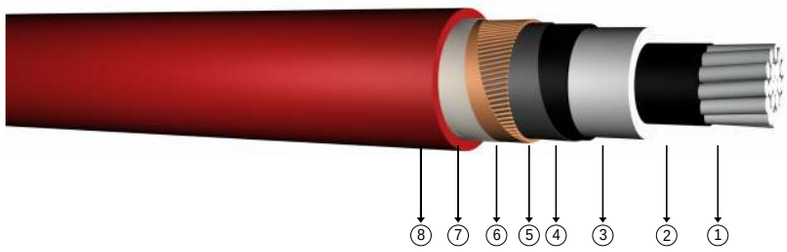
Construction

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. Polyester tape
8. PVC outer jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance 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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620

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

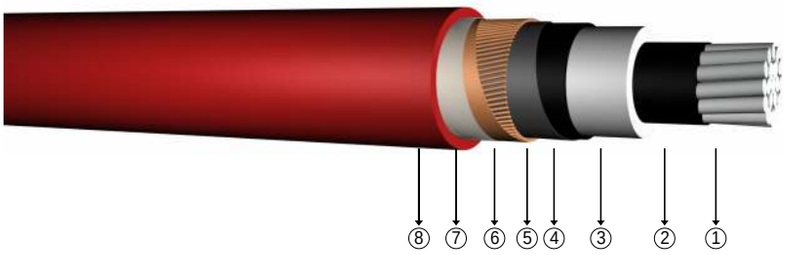
Construction

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. Polyester tape
8. PVC outer jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance 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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620

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

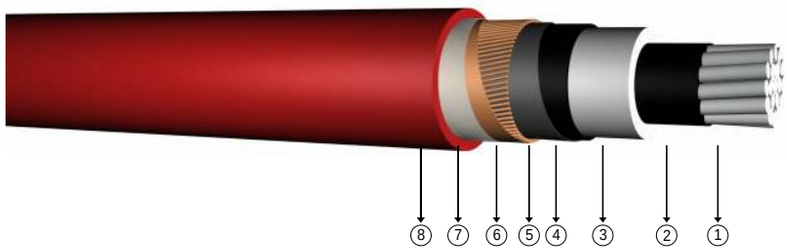
Construction

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. Polyester tape
8. PVC outer jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
mm²	mm	kg/km	m	ohm/km	ohm/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, clearance 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 Rigid

Standards: HD 620 S2, TSEK

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

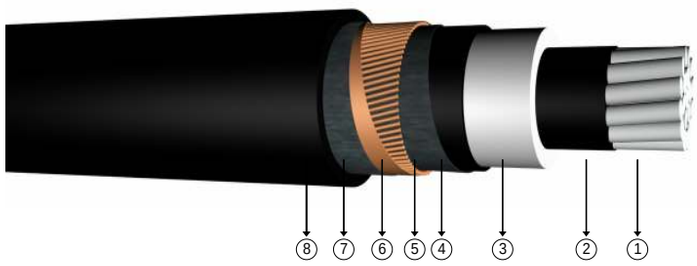
Construction

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. Polyester tape
8. PVC outer jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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 ºC, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0.7
In air : 30 ºC, load factor 1.0
*** : Flat formation, clearance 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/SCWBT/CWS/WBT/PE

Standards: IEC 60502 - 2, VDE 0276 - 620

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 in ducts. If the cable gets water inside due to the mechanical damages, swellable tapes prevent the penetration of the water inside the cable.

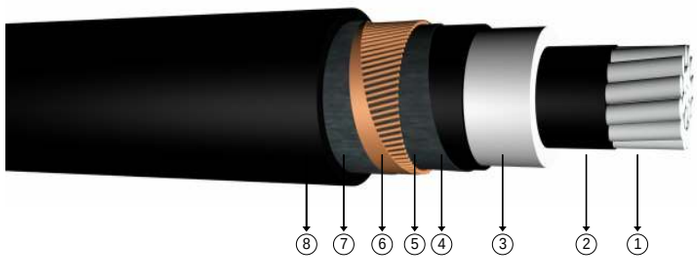
Construction

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 jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance between cables; in air = 1 x Cable outer diameter, in ground = 7 cm
*** : Trefoil formation
Number of system : 1

5.8/10 kV (6/10 kV) or 6.35/11 XLPE insulated, longitudinally sealed, single core cables with aluminium conductor



Code: NA2XS(F)2Y, AL/XLPE/SCWBT/CWS/WBT/PE

Standards: IEC 60502 - 2, VDE 0276 - 620, BS 7870 - 4.10

Technical Data

Max. operating temperature	: 90 °C
Max. short circuit temperature	: 250 °C (max. 5 sec.)
Rated voltage	: 5.8/10 kV (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 in ducts. If the cable gets water inside due to the mechanical damages, swellable tapes prevent the penetration of the water inside the cable.

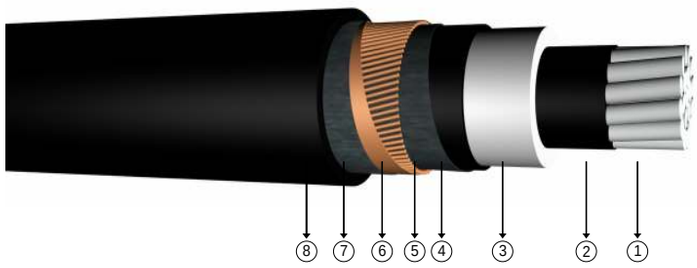
Construction

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 jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance 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/SCWBT/CWS/WBT/PE

Standards: IEC 60502 - 2, VDE 0276 - 620

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 in ducts. If the cable gets water inside due to the mechanical damages, swellable tapes prevent the penetration of the water inside the cable.

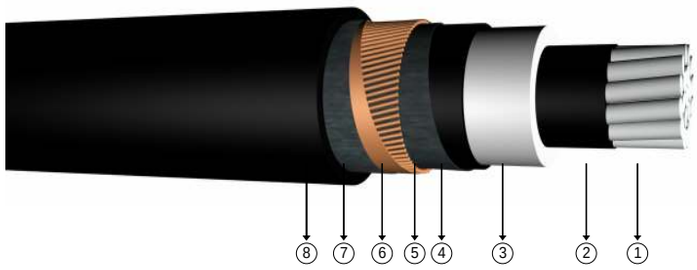
Construction

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 jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance 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/SCWBT/CWS/WBT/PE

Standards: IEC 60502 - 2, VDE 0276 - 620, 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 in ducts. If the cable gets water inside due to the mechanical damages, swellable tapes prevent the penetration of the water inside the cable.

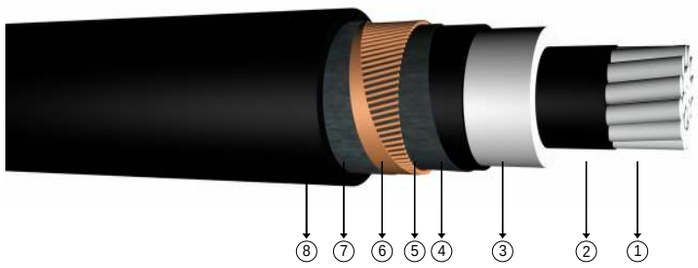
Construction

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 jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance 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/SCWBT/CWS/WBT/PE

Standards: IEC 60502 - 2, VDE 0276 - 620, 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 in ducts. If the cable gets water inside due to the mechanical damages, swellable tapes prevent the penetration of the water inside the cable.

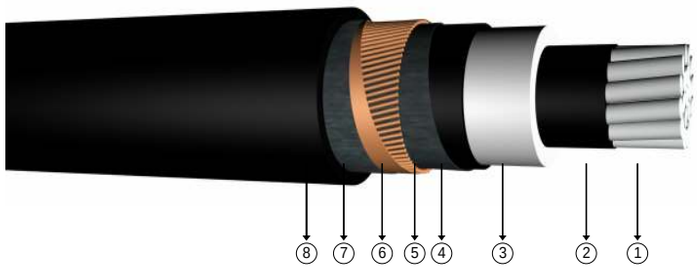
Construction

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 jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance 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/SCWBT/CWS/WBT/PE

Standards: HD 620 S2, TSEK

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 in ducts. If the cable gets water inside due to the mechanical damages, swellable tapes prevent the penetration of the water inside the cable.

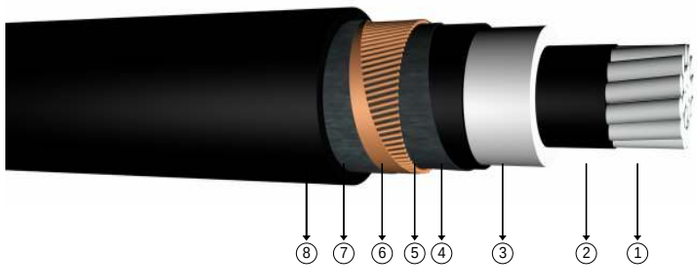
Construction

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 jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance 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, AL/XLPE/CWS/LW/PE

Standards: IEC 60502 - 2, VDE 0276 - 620

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 in ducts. If the cable gets water inside due to the mechanical damages, swellable tapes prevent the penetration of the water inside the cable.

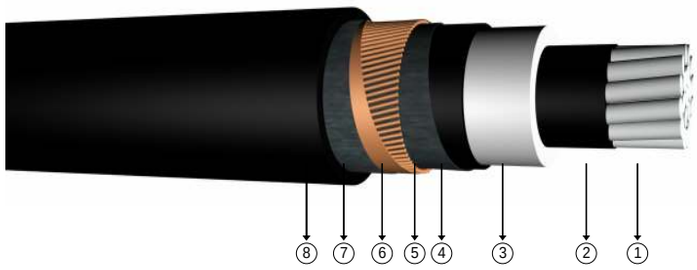
Construction

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 jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance between cables; in air = 1 x Cable outer diameter, in ground = 7 cm
*** : Trefoil formation
Number of system : 1

5.8/10 kV (6/10 kV) or 6.35/11 kV XLPE insulated, radial and longitudinally sealed, single core cables with aluminium conductor



Code: NA2XS(FL)2Y, AL/XLPE/CWS/LW/PE

Standards: IEC 60502 - 2, VDE 0276 - 620, BS 7870 - 4.10

Technical Data

Max. operating temperature	: 90 °C
Max. short circuit temperature	: 250 °C (max. 5 sec.)
Rated voltage	: 5.8/10 kV (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 in ducts. If the cable gets water inside due to the mechanical damages, swellable tapes prevent the penetration of the water inside the cable.

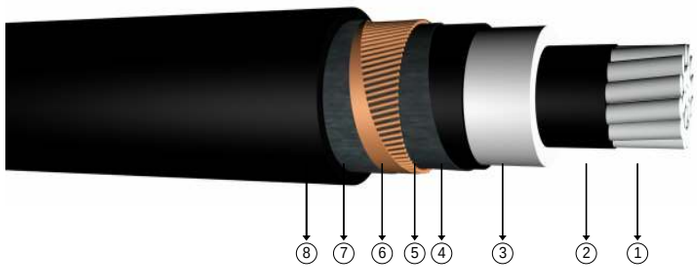
Construction

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 jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance 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, AL/XLPE/CWS/LW/PE

Standards: IEC 60502 - 2, VDE 0276 - 620, 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 in ducts. If the cable gets water inside due to the mechanical damages, swellable tapes prevent the penetration of the water inside the cable.

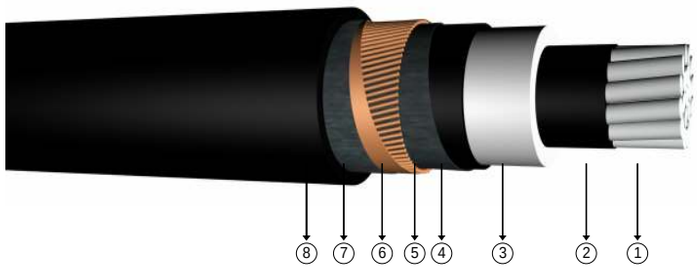
Construction

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 jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance 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, AL/XLPE/CWS/LW/PE

Standards: IEC 60502 - 2, VDE 0276 - 620, 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 in ducts. If the cable gets water inside due to the mechanical damages, swellable tapes prevent the penetration of the water inside the cable.

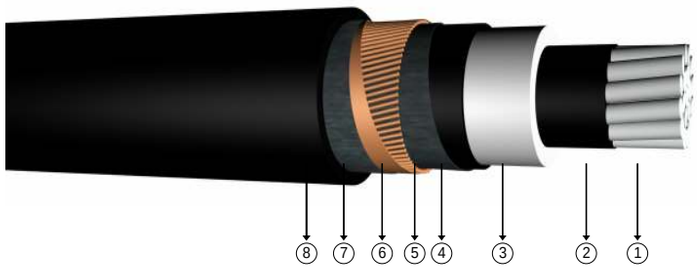
Construction

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 jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance 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, AL/XLPE/CWS/LW/PE

Standards: IEC 60502 - 2, VDE 0276 - 620, 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 in ducts. If the cable gets water inside due to the mechanical damages, swellable tapes prevent the penetration of the water inside the cable.

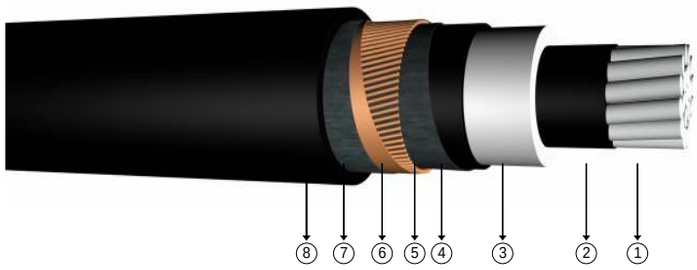
Construction

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 jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance 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, AL/XLPE/CWS/LW/PE

Standards: HD 620 S2, TSEK

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 in ducts. If the cable gets water inside due to the mechanical damages, swellable tapes prevent the penetration of the water inside 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 jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance 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, VDE 0276 - 620, BS 6622

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 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. Polyester tape
8. Inner sheath
9. Round aluminium wire
10. Polyester tape
11. PVC outer jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance between cables; in air = 1 x Cable outer diameter, in ground = 7 cm
*** : Trefoil formation
Number of system : 1

5.8/10 kV (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, VDE 0276 - 620, BS 6622

Technical Data

Max. operating temperature	: 90 °C
Max. short circuit temperature	: 250 °C (max. 5 sec.)
Rated voltage	: 5.8/10 kV (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 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. Polyester tape
8. Inner sheath
9. Round aluminium wire
10. Polyester tape
11. PVC outer jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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 ºC, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0.7
In air : 30 ºC, load factor 1.0
*** : Flat formation, clearance 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, VDE 0276 - 620, BS 6622

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 in ducts.

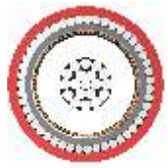
Construction

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. Polyester tape
8. Inner sheath
9. Round aluminium wire
10. Polyester tape
11. PVC outer jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance 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, VDE 0276 - 620, 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	: 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 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. Polyester tape
8. Inner sheath
9. Round aluminium wire
10. Polyester tape
11. PVC outer jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance 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, VDE 0276 - 620, 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	: 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 in ducts.

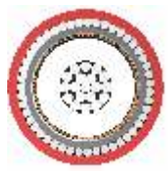
Construction

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. Polyester tape
8. Inner sheath
9. Round aluminium wire
10. Polyester tape
11. PVC outer jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance 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, TSEK

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 in ducts.

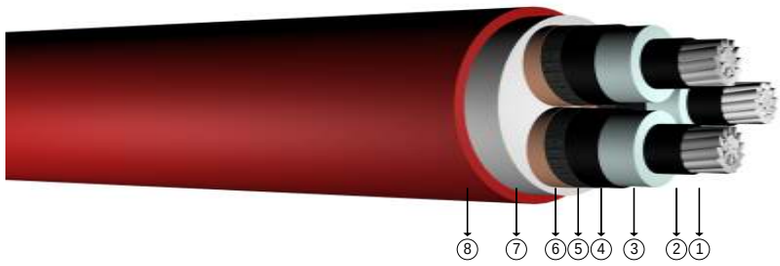
Construction

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. Polyester tape
8. Inner sheath
9. Round aluminium wire
10. Polyester tape
11. PVC outer jacket

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		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
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, clearance 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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620, BS 6622

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 in ducts.

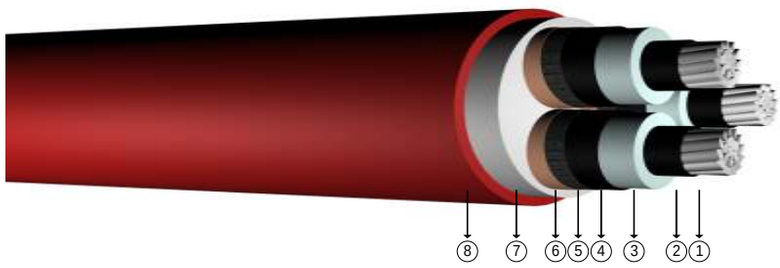
Construction

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. Filler
8. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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

5.8/10 kV (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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620, BS 6622

Technical Data

Max. operating temperature	: 90 °C
Max. short circuit temperature	: 250 °C (max. 5 sec.)
Rated voltage	: 5.8/10 kV (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 in ducts.

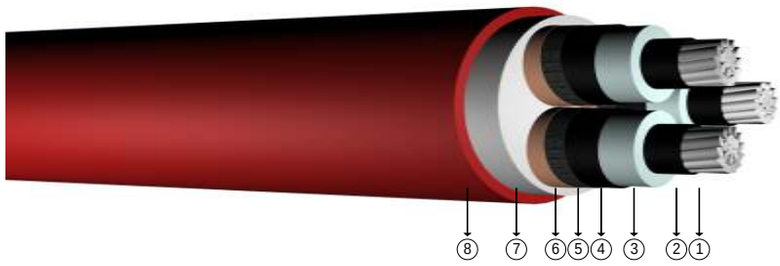
Construction

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. Filler
8. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620, BS 6622

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 in ducts.

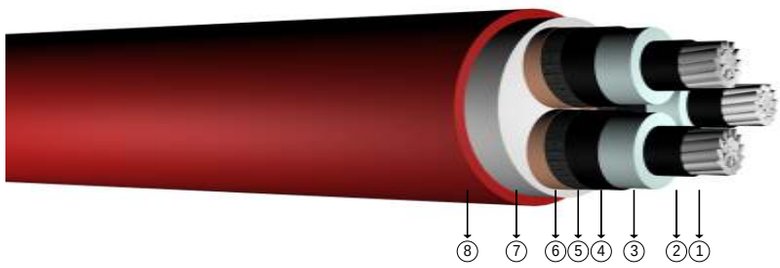
Construction

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. Filler
8. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620, 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	: 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 in ducts.

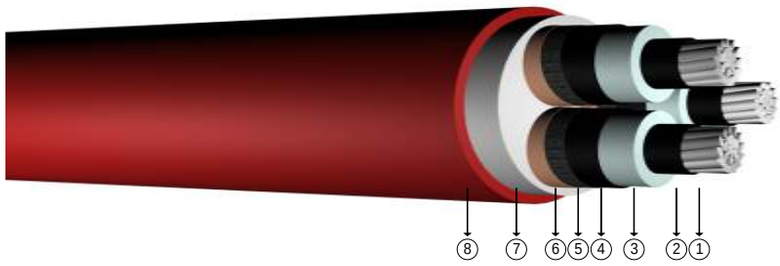
Construction

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. Filler
8. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620, 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	: 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 in ducts.

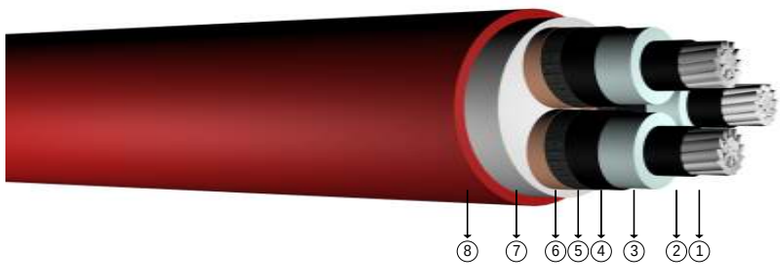
Construction

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. Filler
8. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: HD 620 S2, TSEK

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 in ducts.

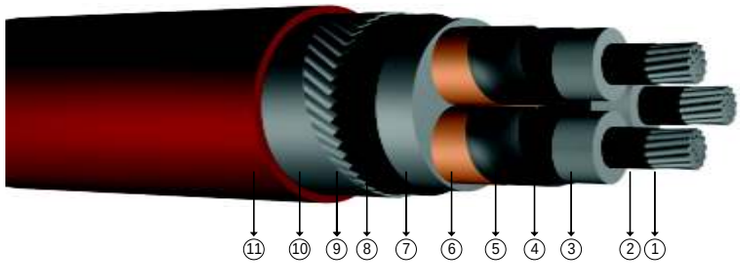
Construction

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. Filler
8. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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

3.6/6 kV XLPE insulated flat steel wire armoured, three core cables with aluminium conductor



Code: YAXC8VZ3V-R, NA2XSEYFGY

R: Stranded Conductor Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620, BS 6622

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 in ducts.

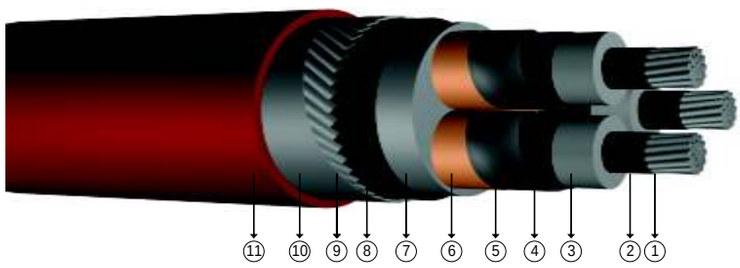
Construction

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. Filler
8. Inner sheath
9. Galvanized flat steel wire
10. Galvanized steel tape
11. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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

5.8/10 kV (6/10 kV) XLPE insulated flat steel wire armoured, three core cables with aluminium conductor



Code: YAXC8VZ3V-R, NA2XSEYFGY

R: Stranded Conductor Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620, BS 6622

Technical Data

Max. operating temperature	: 90 °C
Max. short circuit temperature	: 250 °C (max. 5 sec.)
Rated voltage	: 5.8/10 kV (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 in ducts.

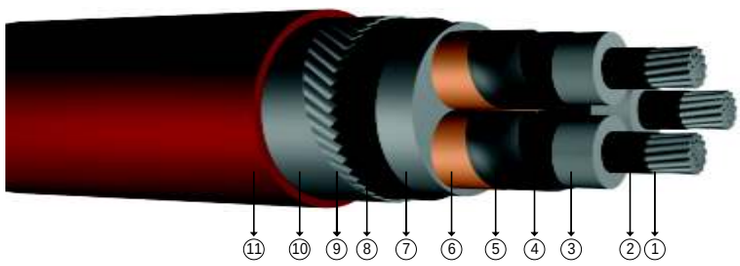
Construction

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. Filler
8. Inner sheath
9. Galvanized flat steel wire
10. Galvanized steel tape
11. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620, BS 6622

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 in ducts.

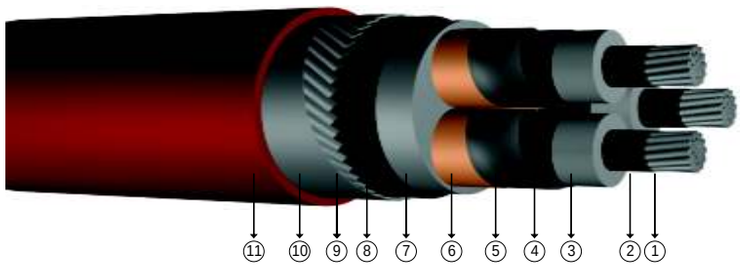
Construction

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. Filler
8. Inner sheath
9. Galvanized flat steel wire
10. Galvanized steel tape
11. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620, 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	: 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 in ducts.

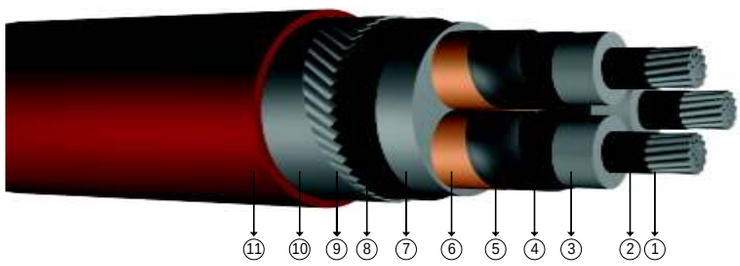
Construction

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. Filler
8. Inner sheath
9. Galvanized flat steel wire
10. Galvanized steel tape
11. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620, 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	: 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 in ducts.

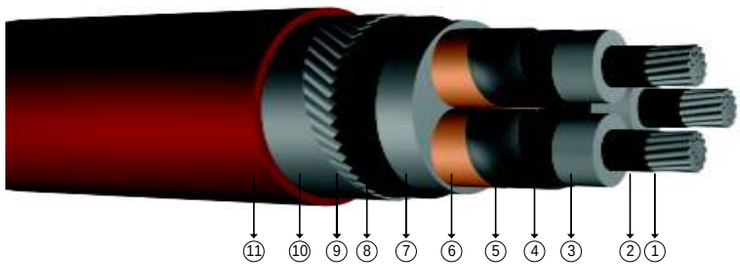
Construction

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. Filler
8. Inner sheath
9. Galvanized flat steel wire
10. Galvanized steel tape
11. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: HD 620 S2, TSEK

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 in ducts.

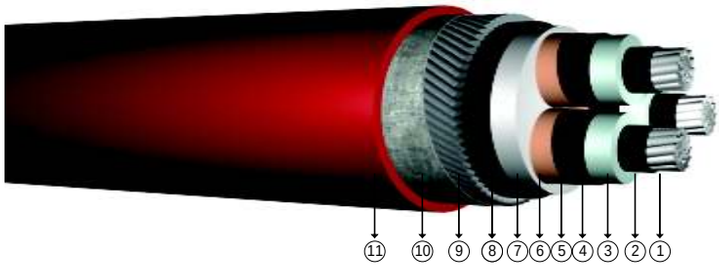
Construction

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. Filler
8. Inner sheath
9. Galvanized flat steel wire
10. Galvanized steel tape
11. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620, BS 6622

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 in ducts.

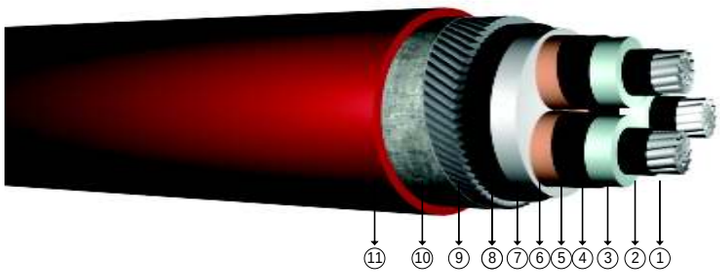
Construction

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. Filler
8. Inner sheath
9. Galvanized round steel wire
10. Galvanized steel tape
11. PVC outer jacket

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)	
mm²	mm	kg/km	m	ohm/km	mH/km	µF/km	In ground at 20 °C	In air at 30 °C
3x35/16	50.5	4500	1000	0.868	0.352	0.229	-	-
3x50/16	54.0	5000	1000	0.641	0.336	0.255	160	150
3x70/16	58.0	5700	1000	0.443	0.318	0.288	199	191
3x95/16	62.0	6600	500	0.320	0.303	0.324	238	236
3x120/16	66.5	7400	500	0.253	0.292	0.359	275	273
3x150/25	70.0	8100	500	0.206	0.284	0.388	307	313
3x185/25	74.0	9000	500	0.164	0.276	0.424	349	360
3x240/25	82.0	11500	250	0.125	0.267	0.469	410	426
3x300/25	89.0	13200	250	0.100	0.263	0.486	460	528
3x400/35	98.0	15600	250	0.0778	0.257	0.521	520	564

Note : Current carrying capacities are valid under the following conditions;
In ground : 20 ºC, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0.7
In air : 30 ºC, load factor 1.0
Number of system : 1

5.8/10 kV (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 Rigid

Standards: IEC 60502 - 2, VDE 0276 - 620, BS 6622

Technical Data

Max. operating temperature	: 90 °C
Max. short circuit temperature	: 250 °C (max. 5 sec.)
Rated voltage	: 5.8/10 kV (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 in ducts.

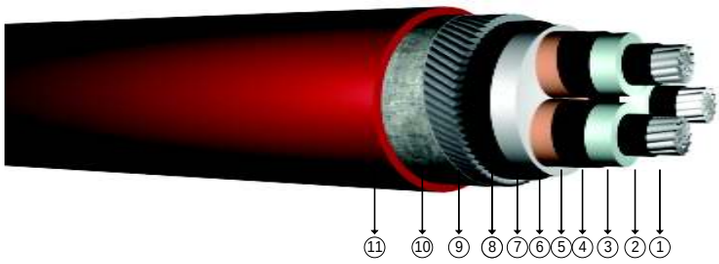
Construction

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. Filler
8. Inner sheath
9. Galvanized round steel wire
10. Galvanized steel tape
11. PVC outer jacket

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 Capaticance (approx)	Current Carrying Capacity (A)	
mm²	mm	kg/km	m	ohm/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 Rigid

Standards: IEC 60502 - 2, VDE 0276, BS 6622

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 in ducts.

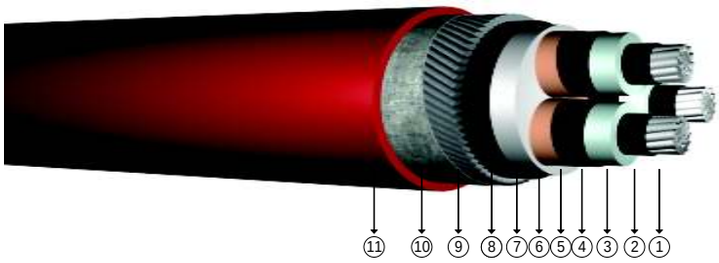
Construction

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. Filler
8. Inner sheath
9. Galvanized round steel wire
10. Galvanized steel tape
11. PVC outer jacket

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 Capaticance (approx)	Current Carrying Capacity (A)	
mm²	mm	kg/km	m	ohm/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 ºC, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0.7
In air : 30 ºC, 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 Rigid

Standards: IEC 60502 - 2, VDE 0276, 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	: 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 in ducts.

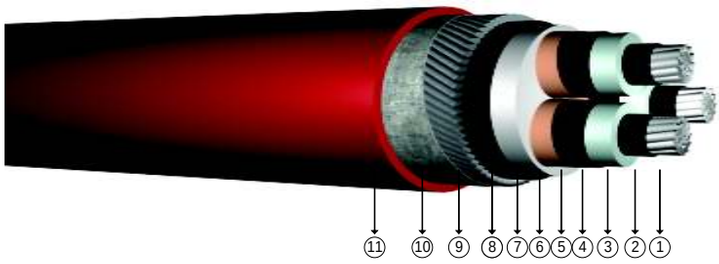
Construction

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. Filler
8. Inner sheath
9. Galvanized round steel wire
10. Galvanized steel tape
11. PVC outer jacket

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 Capaticance (approx)	Current Carrying Capacity (A)	
mm²	mm	kg/km	m	ohm/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 ºC, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0.7
In air : 30 ºC, 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 Rigid

Standards: IEC 60502 - 2, VDE 0276, 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	: 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 in ducts.

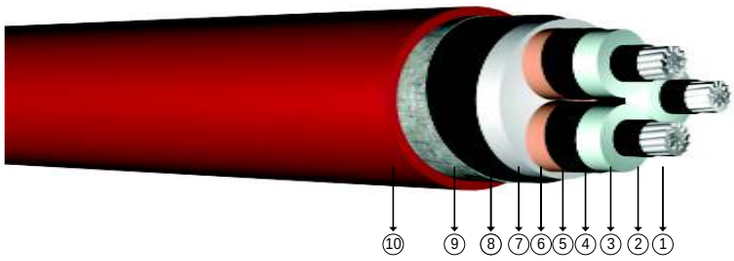
Construction

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. Filler
8. Inner sheath
9. Galvanized round steel wire
10. Galvanized steel tape
11. PVC outer jacket

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 Capaticance (approx)	Current Carrying Capacity (A)	
mm²	mm	kg/km	m	ohm/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 ºC, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0.7
In air : 30 ºC, 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 Rigid

Standards: IEC 60502 - 2, VDE 0276, BS 6622

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 in ducts.

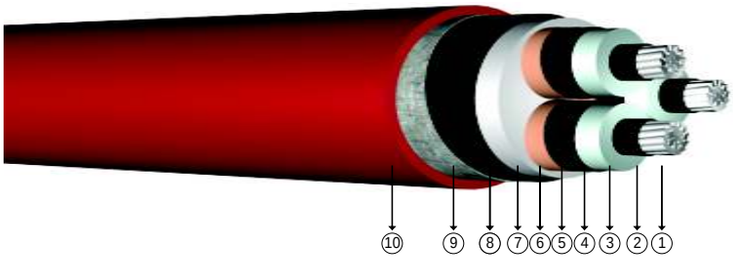
Construction

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. Filler
8. Inner sheath
9. Galvanized steel tape
10. PVC outer jacket

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 Capaticance (approx)	Current Carrying Capacity (A)	
mm²	mm	kg/km	m	ohm/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 ºC, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0.7
In air : 30 ºC, load factor 1.0
Number of system : 1

5.8/10 kV (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 Rigid

Standards: IEC 60502 - 2, VDE 0276, BS 6622

Technical Data

Max. operating temperature	: 90 °C
Max. short circuit temperature	: 250 °C (max. 5 sec.)
Rated voltage	: 5.8/10 kV (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 in ducts.

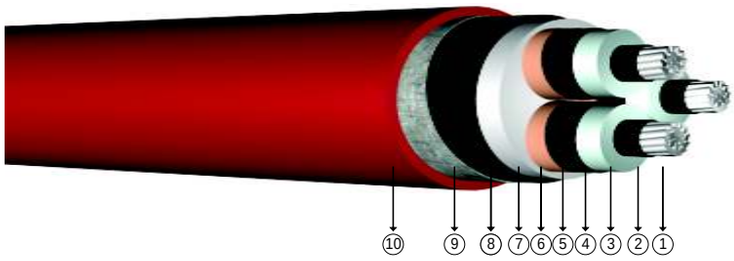
Construction

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. Filler
8. Inner sheath
9. Galvanized steel tape
10. PVC outer jacket

DIMENSION AND WEIGHTS				ELECTRICAL PROPERTIES				
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20 °C Max	Operation Inductanse (approx)	Operation Capaticance (approx)	Current Carrying Capacity (A)	
mm²	mm	kg/km	m	ohm/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 ºC, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0.7
In air : 30 ºC, 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 Rigid

Standards: IEC 60502 - 2, VDE 0276, BS 6622

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 in ducts.

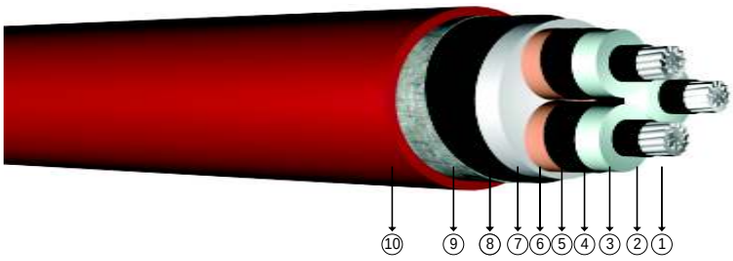
Construction

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. Filler
8. Inner sheath
9. Galvanized steel tape
10. PVC outer jacket

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 Capaticance (approx)	Current Carrying Capacity (A)	
mm²	mm	kg/km	m	ohm/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 ºC, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0.7
In air : 30 ºC, 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 Rigid

Standards: IEC 60502 - 2, VDE 0276, 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	: 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 in ducts.

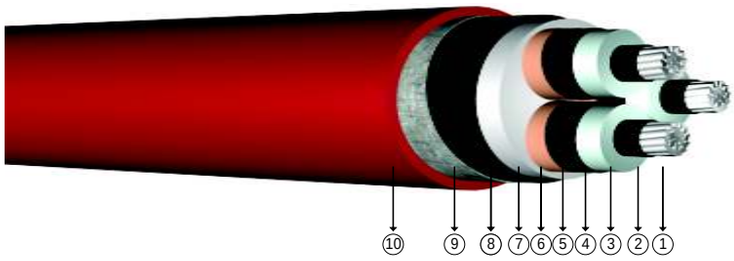
Construction

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. Filler
8. Inner sheath
9. Galvanized steel tape
10. PVC outer jacket

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 Capaticance (approx)	Current Carrying Capacity (A)	
mm²	mm	kg/km	m	ohm/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 ºC, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0.7
In air : 30 ºC, 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 Rigid

Standards: IEC 60502 - 2, VDE 0276, 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	: 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 in ducts.

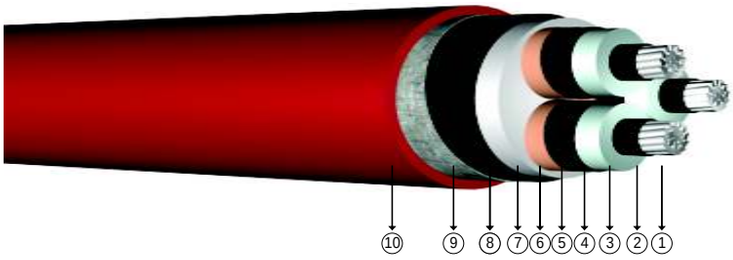
Construction

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. Filler
8. Inner sheath
9. Galvanized steel tape
10. PVC outer jacket

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 Capaticance (approx)	Current Carrying Capacity (A)	
mm²	mm	kg/km	m	ohm/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 ºC, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0.7
In air : 30 ºC, load factor 1.0
Number of system : 1

20.3/35 kV veya 20.8/36 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 Rigid

Standards: HD 620 S2, TSEK

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 in ducts.

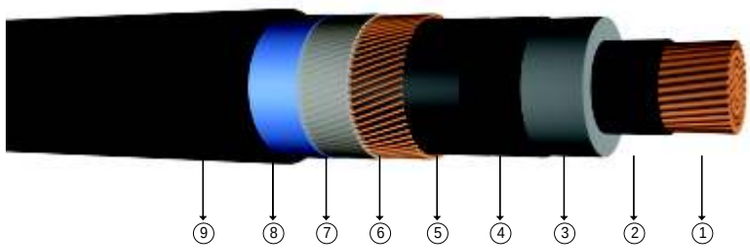
Construction

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. Filler
8. Inner sheath
9. Galvanized steel tape
10. PVC outer jacket

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 Capaticance (approx)	Current Carrying Capacity (A)	
mm²	mm	kg/km	m	ohm/km	mH/km	µF/km	In ground at 20 °C	In air at 30 °C
3x35/16	78.0	4650	1000	0.868	0.471	0.107	-	-
3x50/16	82.0	5150	500	0.641	0.448	0.116	166	164
3x70/16	86.0	5800	500	0.443	0.423	0.127	204	204
3x95/16	90.0	6500	500	0.320	0.401	0.140	244	248
3x120/16	93.0	7250	500	0.253	0.384	0.152	278	284
3x150/25	97.0	8000	500	0.206	0.372	0.161	312	326
3x185/25	101.0	9500	500	0.164	0.359	0.173	343	374
3x240/25	107.0	11000	250	0.125	0.341	0.193	398	440
3x300/25	112.0	12350	250	0.100	0.330	0.207	476	513
3x400/35	119.0	20620	250	0.0778	0.316	0.231	552	593

Note : Current carrying capacities are valid under the following conditions;
In ground : 20 ºC, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0.7
In air : 30 ºC, load factor 1.0
Number of system : 1

40/69 kV XLPE insulated, radial and longitudinally sealed, single core cables with copper conductor



Code: N2XS(FL)2Y, CU/XLPE/LW/CWS/LW/PE

Standards: VDE 0276 - 632, IEC 60840 TEST STANDARDS

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 in ducts. If the cable gets water inside due to the mechanical damages, swellable tapes prevent the penetration of the water inside the cable.

Construction

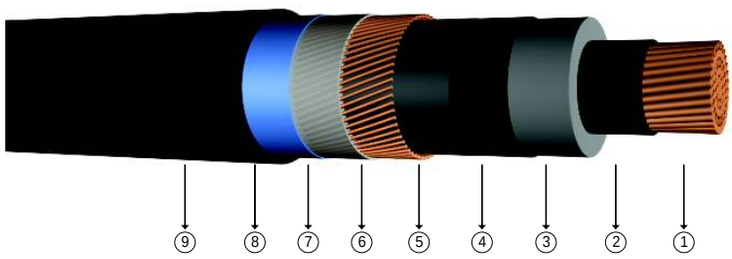
1 Stranded copper conductors 3 XLPE insulation 5 Semi conductive swelling tape 7 Semi conductor swelling tape

2 Inner semi conductive layer 4 Outer semi conductive layer 6 Copper screen 8 PE coated aluminium foil

9 PE outer jacket

DIMENSION AND WEIGHTS			ELECTRICAL PROPERTIES					
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Operation Capaticance (approx)	DC Conductor Resistance at 20 °C Max	Current Carrying Capacity (A)			
					In ground at 20 °C	In duct 20 °C	In air at 30 °C	
mm²	mm	kg/km	µF/km	ohm/km			***	****
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

89/154 kV XLPE insulated, radial and longitudinally sealed, single core cables with copper conductor



Code: N2XS(FL)2Y, CU/XLPE/LW/CWS/LW/PE

Standards: VDE 0276 - 632, IEC 60840 TEST STANDARDS

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 in ducts. If the cable gets water inside due to the mechanical damages, swellable tapes prevent the penetration of the water inside the cable.

Construction

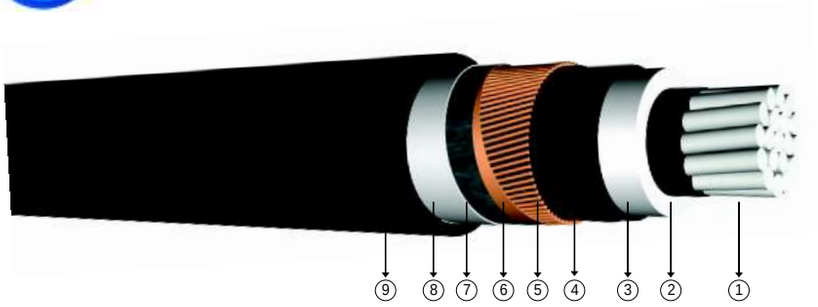
1 Stranded copper conductors 3 XLPE insulation 5 Semi conductive swelling tape 7 Semi conductive swelling tape

2 Inner semi conductive layer 4 Outer semi conductive layer 6 Copper screen 8 PE coated aluminium foil

9 PE outer jacket

DIMENSION AND WEIGHTS			ELECTRICAL PROPERTIES					
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Operation Capaticance (approx)	DC Conductor Resistance at 20 °C Max	Current Carrying Capacity (A)			
					In ground at 20 °C	In duct 20 °C	In air at 30 °C	
mm²	mm	kg/km	µF/km	ohm/km			***	****
1x300/25	85.0	7100	0.15	0.0601	591	553	765	684
1x400/35	89.0	8200	0.16	0.0470	673	629	887	789
1x500/35	93.0	9700	0.18	0.0366	766	713	1027	907
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

40/69 kV XLPE insulated, radial and longitudinally sealed, single core cables with aluminium conductor



Code: NA2XS(FL)2Y, AL/XLPE/LW/CWS/LW/PE

Standards: VDE 0276 - 632, IEC 60840 TEST STANDARDS

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

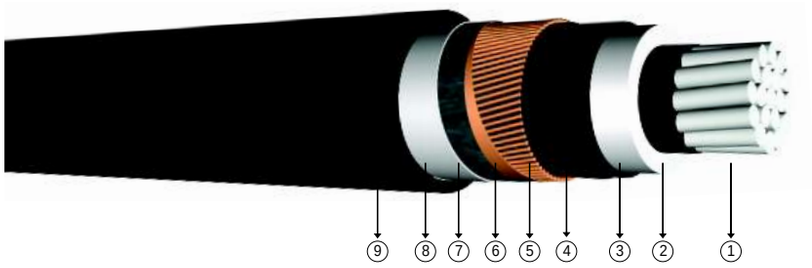
These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground in ducts. If the cable gets water inside due to the mechanical damages, swellable tapes prevent the penetration of the water inside the cable.

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 jacket

DIMENSION AND WEIGHTS			ELECTRICAL PROPERTIES					
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Operation Capaticance (approx)	DC Conductor Resistance at 20 °C Max	Current Carrying Capacity (A)			
					In ground at 20 °C	In duct 20 °C	In air at 30 °C	
mm²	mm	kg/km	µF/km	ohm/km			***	****
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

89/154 kV XLPE insulated, radial and longitudinally sealed, single core cables with aluminium conductor



Code: NA2XS(FL)2Y, AL/XLPE/LW/CWS/LW/PE

Standards: VDE 0276 - 632, IEC 60840 TEST STANDARDS

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

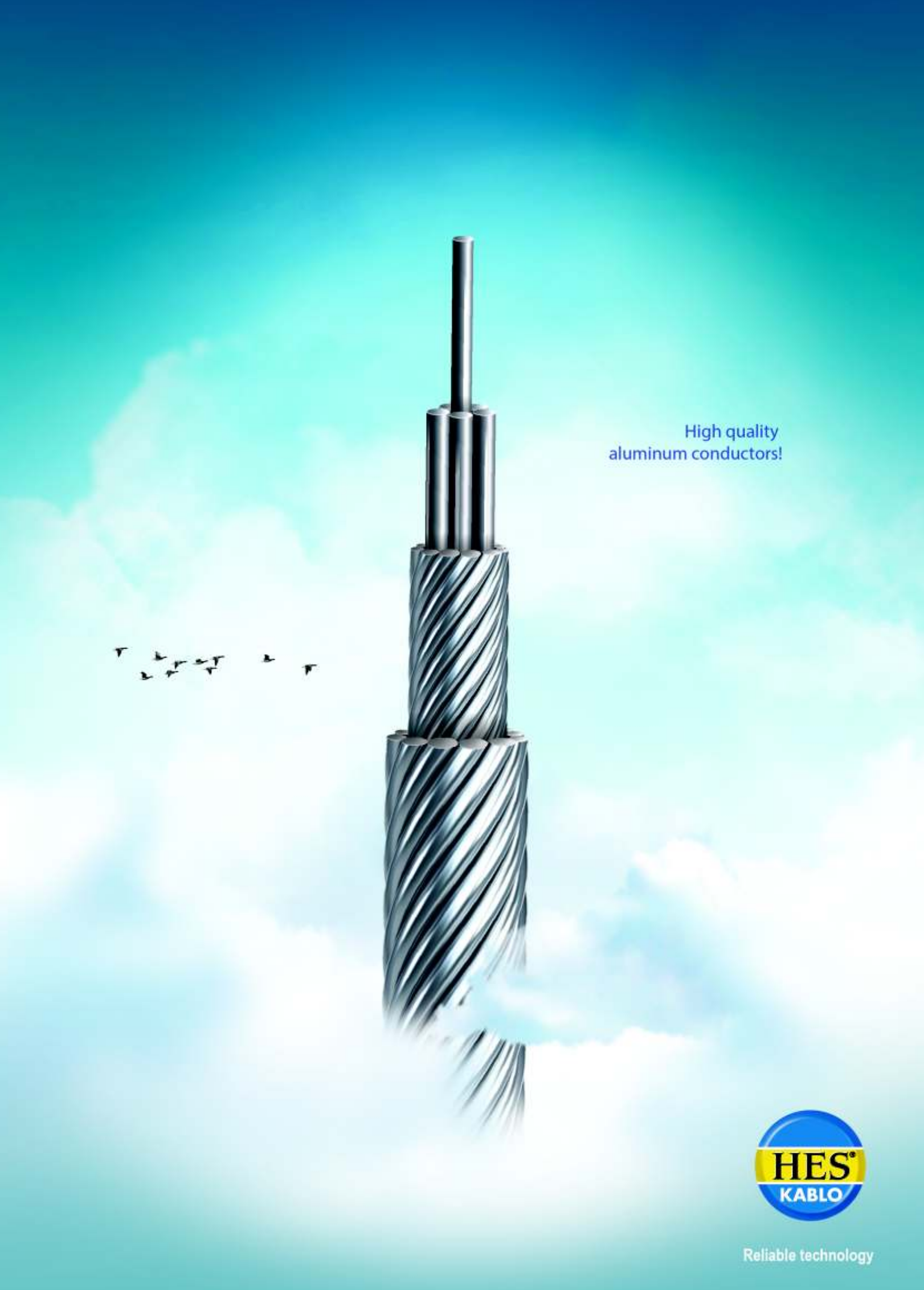
Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground in ducts. If the cable gets water inside due to the mechanical damages, swellable tapes prevent the penetration of the water inside 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 jacket

DIMENSION AND WEIGHTS			ELECTRICAL PROPERTIES					
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Operation Capaticance (approx)	DC Conductor Resistance at 20 °C Max	Current Carrying Capacity (A)			
					In ground at 20 °C	In duct 20 °C	In air at 30 °C	
mm²	mm	kg/km	µF/km	ohm/km			***	****
1x300/25	87.0	4800	0.15	0.100	475	450	620	510
1x400/35	90.0	5400	0.16	0.0778	545	525	741	615
1x500/35	93.0	6000	0.18	0.0605	625	610	860	680
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


High quality
aluminum conductors!
HES
KABLO
Reliable technology

Aluminium wire-rod

Properties

Aluminium conductors can be divided into two groups : “Stranded 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.

Stranded Aluminium Conductors - AAC
EN 50182, ASTM B - 230, ASTM B-231, IEC 61089, CSAC 48
DIN 48201

Steel Reinforced Aluminium Conductors - ACSR

EN 50182, ASTM B-230, ASTM B-232, IEC 61089
ASTM B-498, DIN 48204, BS 215

Aluminium Alloy Stranded Conductors - AAAC
EN 50182, ASTM B-299, IEC 61089, CSA C49.1
B 231, BS 215, DIN 48201

Aluminium Alloy Conductors Steel Reinforced - AACSR

EN 50182, ASTM B-711, IEC 61089

manufactured in accordance with customer specifications or standards.

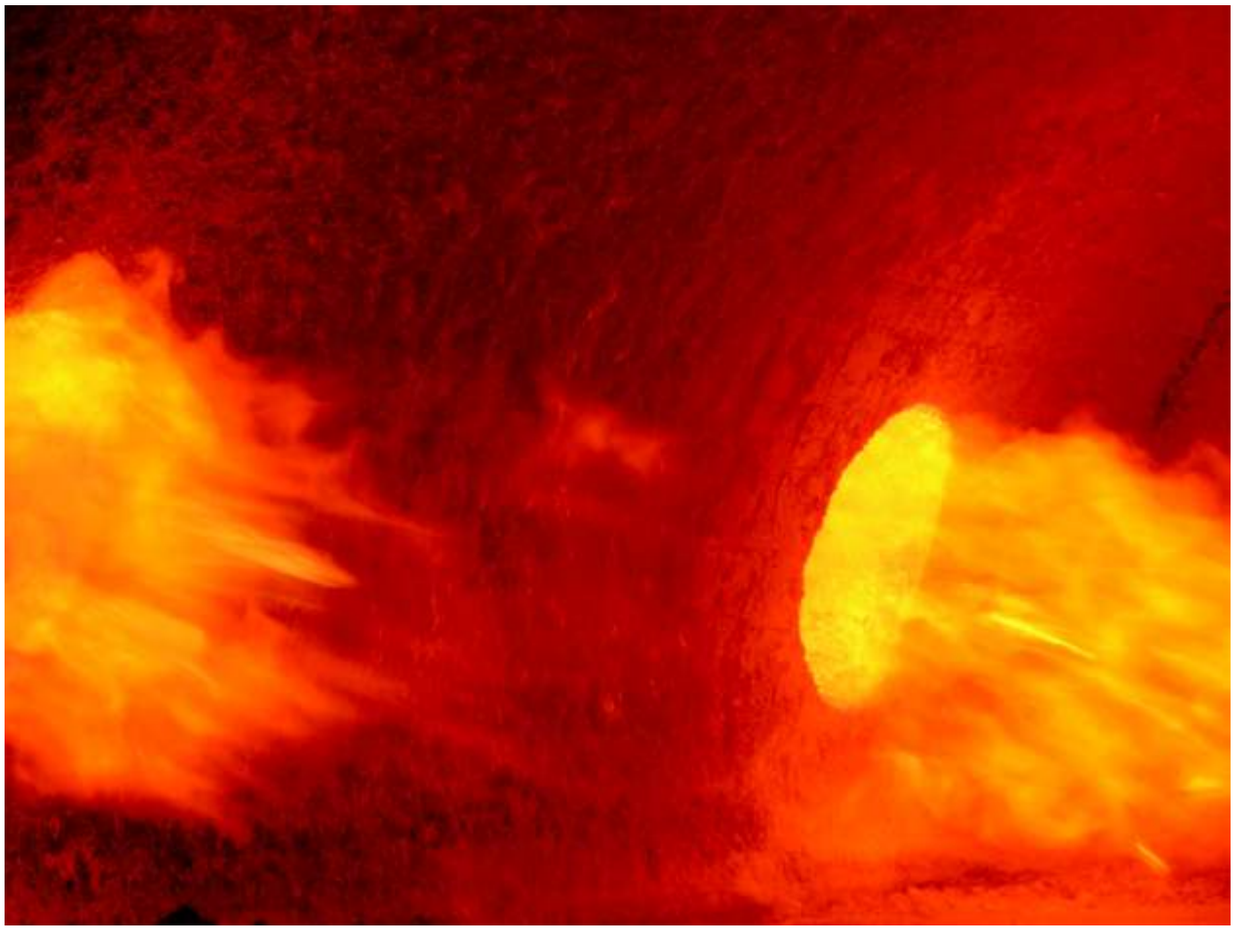
AAC Stranded Aluminium conductors
American sizes ASTM B231 / B231M

Code Name	Stranding Wire Diameter	Overall Diameter	Sectional Area	Approximate Weight	Breaking Load	D.C. Resistance	Current Carrying Capacity
	mm	mm	mm²	kg/km	kN	ohm/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 Stranded Aluminium conductors
Canadian sizes CSA C 49

Code Name	Stranding Wire Diameter	Overall Diameter	Sectional Area	Approximate Weight	Breaking Load	D.C. Resistance	Current Carrying Capacity
	mm	mm	mm²	kg/km	kN	ohm/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
Corepsis	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

Code	Stranding Wire Diameter	Overall Diameter	Sectional Area	Approximate Weight	Breaking Load	D.C. Resistance	Current Carrying Capacity
	mm	mm	mm²	kg/km	kN	ohm/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	106.45	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

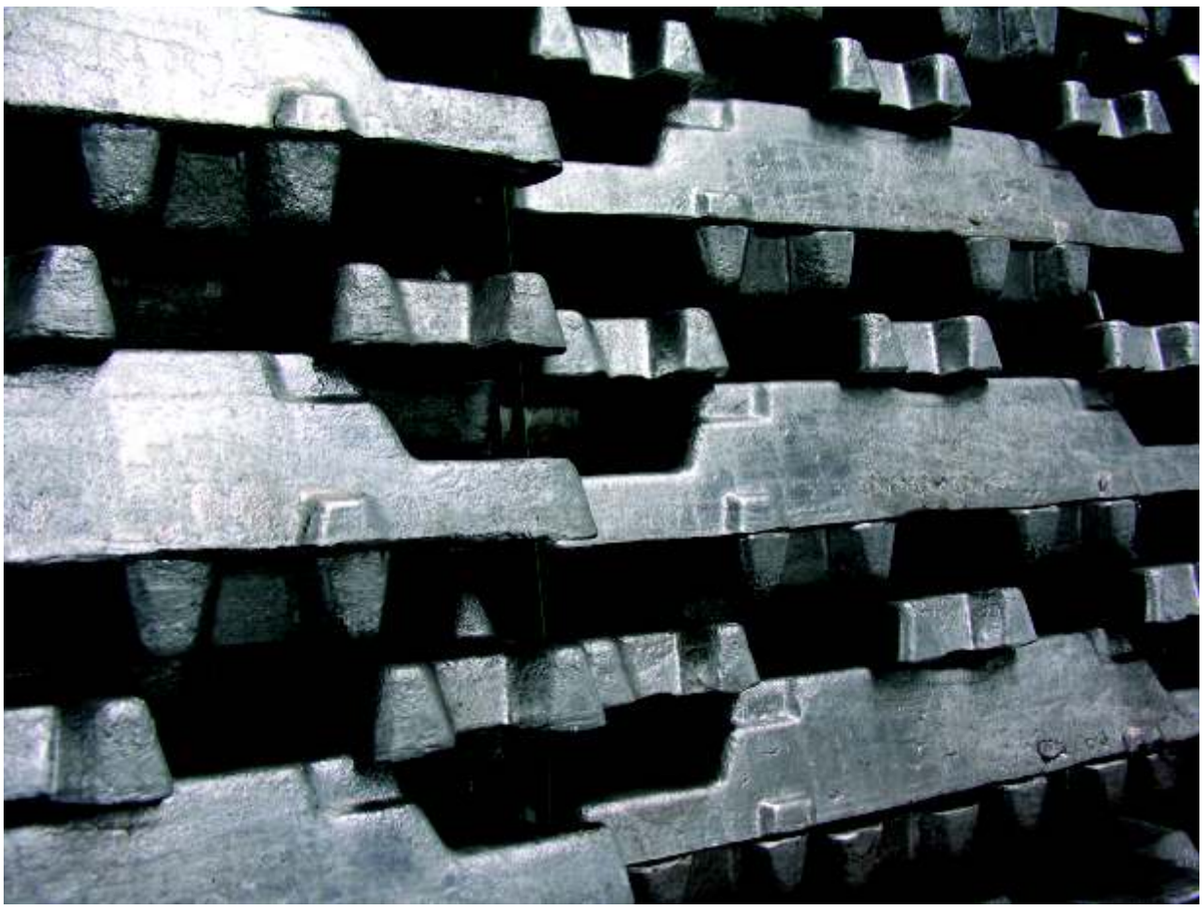


ACSR Steel reinforced Aluminium conductors
American sizes ASTM B 232/B 232M

Code Name	Stranding Wire Diameter		Overall Diameter	Sectional Area			Approximate Weight	Breaking Load	D.C. Resistance	Current Carrying Capacity
	Aluminium	Steel		Aluminium	Steel	Total				
	mm	mm	mm	mm²	mm²	mm²	kg/km	kN	ohm/km	A
Turkey	6/1.68	1/1.68	5.03	13.29	2.21	15.52	53,7	5.29	2.1030	105
Swan	6/2.12	1/2.12	6.35	21.17	3.53	24.70	85,3	8.28	1.3222	140
Swanate	7/1.96	1/2.62	6.53	21.11	5.38	26.49	99,6	10.50	1.3090	140
Sparrow	6/2.67	1/2.67	8.03	33.57	5.60	39.20	136	12.68	0.8333	184
Sparate	7/2.47	1/3.3	8.26	33.53	8.55	42.08	159	15.39	0.8235	184
Robin	6/3	1/3	8.99	42.40	7.06	49.46	171	15.79	0.6594	212
Raven	6/3.37	1/3.37	10.11	53.50	8.91	62.41	216	19.49	0.5216	242
Quail	6/3.78	1/3.78	11.35	67.30	11.22	78.52	272	23.62	0.4134	276
Pigeon	6/4.25	1/4.25	12.75	85.07	14.18	99.25	343	29.45	0.3281	315
Penguin	6/4.77	1/4.77	14.30	107.20	17.86	125.06	433	37.15	0.2608	357
Waxwing	18/3.09	1/3.09	15.47	135.00	7.50	142.50	430	30.61	0.2110	449
Partridge	26/2.57	7/2	16.31	135.00	21.98	156.98	546	50.27	0.2090	475
Ostrich	26/2.73	7/2.12	17.27	152.00	24.70	176.70	613	56.50	0.1860	492
Merlin	18/3.47	1/3.47	17.37	170.14	9.45	179.59	543	38.62	0.1673	519
Linnet	26/2.89	7/2.25	18.29	170.46	27.82	198.30	687	62.73	0.1657	529
Oriole	30/2.69	7/2.69	18.82	170.41	39.76	210.20	783	76.97	0.1647	535
Chickadee	18/3.77	1/3.77	18.87	200.83	11.16	212.00	641	44.22	0.1417	576
Brant	24/3.27	7/2.18	19.61	201.45	26.11	227.60	761	64.96	0.1411	584
Ibis	26/3.14	7/2.44	19.89	201.23	32.71	234.00	812	72.52	0.1404	587
Lark	30/2.92	7/2.92	20.47	200.80	47.00	247.80	925	90.31	0.1394	594
Pelican	18/4.14	1/4.14	20.68	242.20	13.45	255.65	770	52.50	0.1181	646
Flicker	24/3.58	7/2.39	21.49	241.50	31.40	273.00	913	76.52	0.1175	655
Hawk	26/3.44	7/2.67	21.79	241.50	39.17	280.70	975	86.76	0.1168	659
Hen	30/3.2	7/3.2	22.43	241.15	56.27	297.50	1111	105.9	0.1161	666
Osprey	18/4.47	1/4.47	22.33	282.30	15.70	298.00	898	60.95	0.1010	711
Parakeet	24/3.87	7/2.58	23.22	282.16	36.60	318.80	1066	88.01	0.1007	721
Dove	26/3.72	7/2.89	23.55	282.44	45.90	328.34	1139	100.5	0.1004	726
Eagle	30/3.46	7/3.46	24.21	282.00	65.80	348.00	1296	123.6	0.0994	734
Peacock	24/4.03	7/2.69	24.21	306.00	40.00	346.00	1159	96.01	0.0925	760
Squab	26/3.87	7/3.01	24.54	305.70	50.00	355.70	1237	108.0	0.0922	765
WoodDuck	30/3.61	7/3.61	25.25	307.00	71.61	378.60	1408	128.5	0.0915	774
Teal	30/3.61	19/2.16	25.25	307.00	69.60	376.60	1397	133.4	0.0915	773
Kingbird	18/4.78	1/4.78	23.88	323.00	18.00	341.00	1027	69.79	0.0886	773
Swift	36/3.38	1/3.38	23.62	323.00	9.00	332.00	956	60.85	0.0889	769
Rook	24/4.14	7/2.76	24.82	323.00	42.00	365.00	1217	97.79	0.0879	784
Grosbeak	26/3.97	7/3.09	25.17	321.70	52.50	374.20	1301	112.0	0.0876	789
Scoter	30/3.7	7/3.7	25.88	322.40	75.23	397.60	1481	135.1	0.0840	798
Egret	30/3.7	19/2.22	25.88	322.40	73.51	396.00	1469	140.0	0.0873	798
Flamingo	24/4.23	7/2.82	25.40	337.10	43.70	381.00	1277	105.3	0.0840	807
Gannet	26/4.07	7/3.16	25.76	338.10	55.00	393.10	1363	117.3	0.0837	812
Stilt	24/4.39	7/2.92	26.31	363.10	46.85	410.00	1370	113.3	0.0784	844
Starling	26/4.21	7/3.28	26.70	361.75	59.12	421.00	1464	126.2	0.0781	849
Redwing	30/3.92	19/2.35	27.46	362.00	82.37	444.40	1651	153.8	0.0774	859

ACSR Steel reinforced Aluminium conductors
American sizes ASTM B 232/B 232M

Code Name	Stranding Wire Diameter		Overall Diameter	Sectional Area			Approximate Weight	Breaking Load	D.C. Resistance	Current Carrying Capacity
	Aluminium	Steel		Aluminium	Steel	Total				
	mm	mm	mm	mm²	mm²	mm²	kg/km	kN	ohm/km	A
Coot	36/3.77	1/3.77	26.39	401.9	11.2	413.1	1198	74.7	0,07397	884
Tern	45/3.38	7/2.25	27.03	402.84	27.87	430.71	1331.8	98.3	0.07192	887
Condor	54/3.08	7/3.08	27.72	402.84	52.19	455.03	1520.7	125.4	0.07192	889
Cuckoo	24/4.62	7/3.08	27.74	402.9	52.2	455.1	1522.2	124.1	0.07190	887
Drake	26/4.44	7/3.45	28.11	402.84	65.61	468.45	1626.4	140.1	0.07192	907
Mallard	30/4.14	19/2.48	28.96	402.84	91.87	494.71	1836.0	170.8	0.07208	918
Ruddy	45/3.59	7/2.40	28.73	455.81	31.54	487.35	1507.3	108.3	0.06356	958
Canary	54/3.28	7/3.28	29.52	456.06	59.1	515.16	1723.1	141.9	0.06352	961
Rail	45/3.70	7/2.47	29.61	483.42	33.42	516.84	1598.1	115.2	0.05994	993
Cardinal	54/3.38	7/3.38	30.42	483.42	62.65	546.07	1825.9	150.3	0.05994	996
Ortolan	45/3.85	7/2.57	30.81	523.68	36.19	559.87	1730.5	123.2	0.05531	1043
Curlew	54/3.52	7/3.52	31.68	523.68	67.87	591.55	1977.6	162.8	0.05531	1047
Bluejay	45/4.00	7/2.66	31.98	563.93	39.03	602.96	1866.0	132.6	0.05161	1092
Finch	54/3.65	19/2.19	32.85	563.93	71.48	635.41	2127.8	173.9	0.05161	1093
Bunting	45/4.14	7/2.76	33.12	604.26	41.55	645.81	1996.9	141.9	0.04820	1139
Grackle	54/3.77	19/2.27	33.97	604.26	76.52	680.78	2278.1	185.9	0.04820	1140
Bittern	45/4.27	7/2.85	34.17	644.1	44.52	688.62	2130.8	151.7	0.04518	1184
Pheasant	54/3.90	19/2.34	35.1	644.51	81.68	726.19	2431.4	193.9	0.04518	1187
Dipper	45/4.40	7/2.92	35.16	685.16	47.1	732.26	2263.0	161.0	0.04259	1229
Martin	54/4.02	19/2.41	36.17	684.84	86.71	771.55	2581.7	205.9	0.04259	1232
Bobolink	45/4.53	7/3.02	36.24	725.16	50.32	775.48	2397.2	170.8	0.04016	1272
Plover	54/4.14	19/2.48	37.24	725.16	91.81	816.97	2734.9	218.0	0.04016	1275
Nuthatch	45/4.65	7/3.10	37.2	765.16	52.9	818.06	2529.6	178.4	0.03802	1313
Parrot	54/4.25	19/2.55	38.25	765.16	97.16	62.32	2883.7	230.4	0.03802	1318
Lapwing	45/4.77	7/3.18	38.16	805.8	55.48	861.28	2663.5	187.3	0.03612	1354
Falcon	54/4.36	19/2.62	39.26	805.8	102.32	908.12	3038.5	242.9	0.03612	1359
Chuckar	84/3.70	19/2.22	42.7	901.93	73.55	975.48	3083.1	228.2	0.03228	1453
Bluebird	84/4.07	19/2.44	44.76	1092.2895	88.80	1181.09	3736.1	268.7	0.02667	1623
Kiwi	72/4.41	7/2.94	44.1	1099.21	47.50	1146.70	3425.6	222.0	0.02667	1607



ACSR Steel reinforced Aluminium conductors
Canadian sizes CSA C 49

Code Name	Stranding Wire Diameter		Overall Diameter	Sectional Area			Approximate Weight	Breaking Load	D.C. Resistance	Current Carrying Capacity
	Aluminium	Steel		Aluminium	Steel	Total				
	mm	mm	mm	mm²	mm²	mm²	kg/km	kN	ohm/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	4.5	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	42.39	7.1	49.49	171	15.5	0.6752	162
Raven	6/3.37	1/3.37	10.11	53.48	8.9	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	125.1	433	37.5	0.2671	276
Owl	6/5.36	7/1.74	16.09	135.16	17.55	152.7	508	42.5	0.2119	322
Waxwing	18/3.09	1/3.09	15.15	135.16	7.48	142.6	430	31.5	0.2126	319
Partridge	26/2.57	7/2.00	16.28	135.16	22	157.2	545	50.01	0.2136	321
Phoebe	18/3.28	1/3.28	16.4	152	8.45	160.5	483	35.5	0.1893	341
Ostrich	26/2.73	7/2.12	17.28	152	24.71	176.7	613	56.2	0.19	343
Piper	30/2.54	7/2.54	17.78	152	35.48	187.5	697	68.6	0.1903	348
Merlin	18/3.47	1/3.47	17.35	170.45	9.48	179.9	543	39.8	0.1686	364
Linnet	26/2.89	7/2.25	18.31	170.45	27.81	198.3	687	62.5	0.1696	368
Oriole	30/2.69	7/2.69	18.83	170.45	39.81	210.3	783	75.8	0.1696	370
Chickadee	18/3.77	1/3.77	18.85	201.42	11.16	212.6	641	46.3	0.143	402
Ibis	26/3.14	7/2.44	19.88	201.42	32.77	234.2	813	72.0	0.1434	404
Lark	30/2.92	7/2.92	20.44	201.42	46.97	248.4	923	88.8	0.1437	410
Pelican	18/4.14	1/4.14	20.7	241.68	13.42	255.1	769	54.8	0.1191	449
-	22/3.74	7/2.08	21.2	241.68	23.74	265.4	853	68.6	0.1194	452
Hawk	26/3.44	7/2.67	21.77	241.68	39.42	281.1	975	86.5	0.1194	450
Hen	30/3.20	7/3.20	22.4	241.68	56.39	298.1	1108	103.9	0.1198	453
Heron	30/3.28	7/3.28	22.96	253.35	59.1	312.5	1162	108.8	0.1142	469
-	22/4.04	7/2.24	22.88	282	27.68	309.7	993	79.1	0.1024	496
Dove	26/3.72	7/2.89	23.55	282	45.94	327.9	1137	99.9	0.1024	495
Eagle	30/3.46	7/3.46	24.22	282	65.81	347.8	1293	121.2	0.1027	497
-	22/4.21	7/2.34	23.86	306.58	30.07	336.7	1080	84.9	0.0942	519
Duck	54/2.69	7/2.69	24.21	306.58	39.81	346.4	1159	100.1	0.0945	520
-	22/4.32	7/2.40	24.48	322.26	31.61	353.9	1135	84.8	0.0896	532
Grosbeak	26/3.97	7/3.09	25.15	322.26	52.45	374.7	1299	111.2	0.0896	530
Egret	30/3.70	19/2.22	25.9	322.26	73.55	395.8	1467	140.6	0.0896	542
Goose	54/2.76	7/2.76	24.84	322.26	41.74	364	1217	105.2	0.0899	534
-	42/3.20	7/1.78	24.54	337.74	17.35	355.1	1068	78.6	0.0856	546
Gull	54/2.82	7/2.82	25.38	337.74	43.81	381.6	1277	109.2	0.0856	553
Starling	26/4.21	7/3.28	26.68	362.58	59.03	421.6	1462	125.0	0.0797	575
Redwing	30/3.92	19/2.35	27.43	362.58	82.58	445.2	1648	153.9	0.0797	581
-	42/3.31	7/1.84	25.38	362.58	18.65	381.2	1148	84.3	0.0797	573
Crow	54/2.92	7/2.92	26.28	362.58	46.97	409.6	1369	117.2	0.0797	577
Drake	26/4.44	7/3.45	28.11	402.84	65.61	468.5	1624	139	0.0715	611
Mallard	30/4.14	19/2.48	28.96	402.8	91.84	494.7	1832	171.0	0.0719	618
-	42/3.50	7/1.94	26.82	402.8	20.71	423.6	1274	93.6	0.0719	610
Condore	54/3.08	7/3.08	27.72	402.8	52.19	455	1521	127.0	0.0719	615
-	42/3.67	7/2.04	28.14	443.1	22.84	465.9	1402	102	0.0653	645
Crane	54/3.23	7/3.23	29.07	443.1	57.48	500.7	1674	133	0.0653	649
-	42/3.72	7/2.07	28.53	456.1	23.42	479.5	1442	105	0.0633	655

Code Name	Stranding Wire Diameter		Overall Diameter	Sectional Area			Approximate Weight	Breaking Load	D.C. Resistance	Current Carrying Capacity
	Aluminium	Steel		Aluminium	Steel	Total				
	mm	mm	mm	mm²	mm²	mm²	kg/km	kN	ohm/km	A
Canary	54/3.28	7/3.28	29.52	456.1	59.1	515,20	1724	144	0.0633	660
-	42/3.38	7/2.13	29.87	483.4	24.84	508,24	1528	109.0	0.0597	678
Cardinal	54/3.38	7/3.38	30.42	483.4	62.65	546,05	1826	152	0.0597	682
-	42/3.99	7/2.21	30.57	523.7	26.97	550,67	1657	118	0.0551	710
Curlew	54/3.51	7/3.51	31.59	523.7	67.87	591,57	1978	165	0.0551	715
-	42/4.41	7/2.30	31.74	563.9	28.97	592,87	1783	126	0.0512	741
Finch	54/3.65	19/2.19	32.85	563.9	71.55	635,45	2121	179	0.0512	746
-	42/4.28	7/2.38	32.82	604.3	31.1	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	33.9	644.51	33.16	677,67	2039	144	0.0449	800
Pheasant	54/3.90	19/2.34	35.1	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	725.1	37.35	762,45	2294	162	0.0397	858
Plover	54/4.14	19/2.48	37.24	725.1	91.87	816,97	2725	224	0.04	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	765.4	96.84	862,24	2877	237	0.0377	890
-	48/4.36	7/3.60	38.58	805.7	71.1	876,80	2779	212	0.0358	929
Falcon	54/4.36	19/2.62	39.26	805.7	102.1	907,80	3028	250	0.0358	917
-	72/3.77	7/2.52	37.72	805.7	34.84	840,54	2498	176	0.0358	910
Bantam	3/1.68	4/1.68	5.04	6.65	8.84	15,49	87.80	11.7	4.3218	61
Magpie	3/2.12	4/2.12	6.36	10.58	14.13	24,71	139.70	18.6	2.7077	77
Shrike	3/2.67	4/2.67	8.01	16.84	22.45	39,29	222.60	28.6	1.7054	99
Snipe	3/3.37	4/3.37	10.11	26.17	35.68	61,85	354.10	43.9	1.0718	132
Loon	3/3.78	4/3.78	11.34	33.68	44.97	78,65	445.80	55.3	0.8514	149
Grouse	8/2.54	1/4.24	9.32	40.52	14.13	54,65	221.20	23.1	0.7077	157
Petrel	12/2.34	7/2.34	11.7	51.61	30.01	81,62	376.90	43.8	0.5591	193
Minorca	12/2.44	7/2.44	12.2	56.13	32.77	88,90	311.30	47.7	0.5134	198
Leghorn	12/2.69	7/2.69	13.45	68.19	39.81	108,00	498.50	57.5	0.4226	221
Guinea	12/2.92	7/2.92	14.6	80.68	46.97	127,65	587.80	67.6	0.3579	244
Dotterell	12/3.08	7/3.08	15.4	89.48	52.19	141,67	654.80	73.0	0.3215	260
Dorking	12/3.20	7/3.20	16	96.71	56.39	153,10	706.90	78.9	0.2982	271
Brahma	16/2.86	19/2.48	18.12	102.97	91.87	194,84	1004.9	122.5	0.2815	287
Auk	8/4.05	7/2.25	14.83	102.84	92.32	195,16	500.00	49.6	0.2789	276
Cochin	12/3.37	7/3.37	16.85	107.1	62.45	169,55	782.8	87.4	0.2694	288

ACSR Steel reinforced Aluminium conductors
German sizes DIN EN 50182

Code	Stranding Wire Diameter		Overall Diameter	Sectional Area			Approximate Weight	Breaking Load	D.C. Resistance	Current Carrying Capacity
	Al	Steel		Aluminium	Steel	Total				
	mm	mm	mm	mm²	mm²	mm²	kg/km	kN	ohm/km	A
16/2.5	6/1.80	1/1.80	5.4	15.3	2.5	17.9	62	5.81	1.8793	105
25/4	6/2.25	1/2.25	6.8	23.8	4	27.8	96	9.02	1.2028	140
35/6	6/2.70	1/2.70	8.1	34.3	5.7	40	139	12.70	0.8353	170
44/32	14/2.00	7/2.40	11.2	44	31.7	75.7	369	45.46	0.6573	-
50/8	6/3.20	1/3.20	9.6	48.3	8	56.3	195	17.18	0.5946	210
50/30	12/2.33	7/2.33	11.7	51.2	29.8	81	375	44.28	0.5644	-
70/12	26/1.85	7/1.44	11.7	69.9	11.4	81.3	282	26.31	0.4130	290
95/15	26/2.15	7/1.67	13.6	94.4	15.3	110	381	35.17	0.3058	350
95/55	12/3.20	7/3.20	16	96.5	56.3	153	707	80.20	0.2992	-
105/75	14/3.10	19/2.25	17.5	105.7	75.5	182	885	106.69	0.2736	-
120/20	26/2.44	7/1.90	15.5	121.6	19.8	141	491	44.94	0.2374	410
120/70	12/3.60	7/3.60	18	122	71.3	193	895	98.16	0.2364	-
125/30	30/2.33	7/2.33	16.1	127.9	29.8	158	587	57.86	0.2259	425
150/25	26/2.70	7/2.10	17.1	148.9	24.2	173	601	54.37	0.1939	470
170/40	30/2.70	7/2.70	18.9	171.8	40.1	212	788	77.01	0.1682	520
185/30	26/3.00	7/2.33	19	183.8	29.8	214	741	66.28	0.1571	535
210/35	26/3.20	7/2.49	20.3	209.1	34.1	243	844	74.94	0.1380	590
210/50	30/3.00	7/3.00	21.3	212.1	49.5	262	973	92.25	0.1363	610
230/30	24/3.50	7/2.33	21	230.9	29.8	261	871	73.09	0.1249	630
240/40	26/3.45	7/2.68	21.9	243	39.5	283	980	86.46	0.1188	645
265/35	24/3.74	7/2.49	22.4	263.7	34.1	298	994	82.94	0.1094	680
300/50	26/3.86	7/3.00	24.5	304.3	49.5	354	1227	105.09	0.0949	740
305/40	54/2.68	7/2.68	24.1	304.6	39.5	344	1151	99.30	0.0949	740
340/30	48/3.00	7/2.33	25	339.3	29.8	369	1171	92.56	0.0851	790
380/50	54/3.00	7/3.00	27	382	49.5	432	1443	120.91	0.0757	840
385/35	48/3.20	7/2.49	26.7	386	34.1	420	1334	104.31	0.0748	850
435/55	54/3.20	7/3.20	28.8	434.3	56.3	491	1641	136.27	0.0666	900
450/40	48/3.45	7/2.68	28.7	448.7	39.5	488	1549	120.19	0.0644	920
490/65	54/3.40	7/3.40	30.6	490.3	63.6	554	1853	152.85	0.0590	960
495/35	45/3.74	7/2.49	29.9	494.4	34.1	528.4	1632	117.96	0.0584	985
510/45	48/3.68	7/2.87	30.7	510.15	45.3	555.8	1765	133.31	0.0566	995
550/70	54/3.60	7/3.60	32.4	550	71.3	621	2077	166.32	0.0526	1020
560/50	48/3.86	7/3.00	32.2	561.7	49.5	611	1940	146.28	0.0514	1040
570/40	45/4.02	7/2.68	32.2	571.2	39.5	610.6	1887	136.4	0.0506	1050
650/45	45/4.30	7/2.87	34.4	653.5	45.3	698.8	2160	156.18	0.0442	1120
680/85	54/4.00	19/2.40	36	678.8	86	765	2550	206.56	0.0426	1150
1045/45	72/4.30	7/2.87	43	1045.6	45.3	1010	3248	218.92	0.0277	1580

0.6/1kV PE insulated aerial power cables with aluminium conductor

Code: AER

Standards: TS 11654, SFS 2200, 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 prefered 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 or XLPE insulation 3 Messenger wire

Number Of Conductor Cross Section	INSULATED WIRES							MESSENGER WIRE			FINISHED CABLE	
	Conductor size	Number of wires	Diameter of conductors	Resistance of 20 °C	Current Carrying Capacity	Resistance of 20 °C	Current Carrying Capacity	Diameter of Messenger Wire	Minimum Tensile Strenght	Maximum Resistance of 20 °C	App.Max. Bundle Diameter	App. Net Weight
mm²	mm²	Adet	mm	ohm/km	A	mm²	A	mm	kN	ohm/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	8x1	14.2	0.72	30	625
3x50+1x16+70	3x50	7	8.1	0.641	120	1x16	60	9.6	20.6	0.493	35	800
3x70+1x16+95	3x70	7	9.6	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	9.63	20.6	0.493	40	1060
4x70+1x16+95	4x70	7	9.3	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, 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 prefered 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 Conductor Cross Section	INSULATED WIRES							MESSENGER WIRE			FINISHED CABLE	
	Conductor size	Number of wires	Diameter of conductors	Resistance of 20 °C	Current Carrying Capacity	Number of wires	Current Carrying Capacity	Diameter of Messenger Wire	Minimum Tensile Strenght	Maximum Resistance of 20 °C	App.Max. Bundle Diameter	App. Net Weight
mm²	mm²	Adet	mm	ohm/km	A	mm²	A	mm	kN	ohm/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	-	-	9.6	20.6	0.493	35	750
3x70+95	3x70	7	9.6	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	-	-	9.6	20.6	0.493	38	900
4x70+95	4x70	7	9.6	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: NFA2X

Standards: 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 prefered 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 conductor cross section	INSULATED WIRES							MESSENGER WIRE			FINISHED CABLE	
	Conductor size	Number of wires	Diameter of conductors	Resistance of 20 °C	Current Carrying Capacity	Conductor size	Current Carrying Capacity	Diameter of Messenger Wire	Minimum Tensile Strenght	Maximum Resistance of 20 °C	App.Max. Bundle Diameter	App. Net Weight
mm²	mm²	Adet	mm	ohm/km	A	mm²	A	mm	kN	ohm/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	1x20	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	063	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	-	-	10.2	20.6	0.50	41	970
3x70+1x16+70	3x70	12	9.7	0.443	213	1x16	60	10.2	20.6	0.50	41	1080
3x70+2x16+70	3x70	12	9.7	0.443	213	2x16	-	10.2	20.6	0.50	41	1150
3x95+70	3x95	19	11.5	0.320	258	-	-	10.2	20.6	0.50	44	1200
3x95+1x16+70	3x95	19	11.5	0.320	258	1x16	60	10.2	20.6	0.50	44	1300
3x95+2x16+70	3x95	19	11.5	0.320	258	2x16	-	10.2	20.6	0.50	44	1380
3x120+70	3x120	19	12.8	0.253	300	-	-	10.2	20.6	0.50	46	1430
3x120+1x16+70	3x120	19	12.8	0.253	300	1x16	60	10.2	20.6	0.50	46	1540

0.6/1kV XLPE insulated or PE insulated aerial power cables with aluminium conductor

Code: NFA2X

Standards: 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

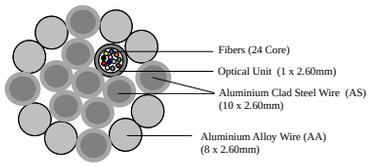
It is prefered to use of ABC cables instead of uninsulated conductors at low voltage networks. ABC cables are especially used at areas where the cost of underground networks is expensive and also for electrification of rural areas like villages.

Construction

1 Solid or stranded aluminium conductor 2 PE or XLPE insulation 3 Messenger wire

Number of conductor cross section	INSULATED WIRES							MESSENGER WIRE			FINISHED CABLE	
	Conductor size	Number of wires	Diameter of conductors	Resistance of 20 °C	Current Carrying Capacity	Conductor size	Current Carrying Capacity	Diameter of Messenger Wire	Minimum Tensile Strenght	Maximum Resistance of 20 °C	App.Max. Bundle Diameter	App. Net Weight
mm²	mm²	Adet	mm	ohm/km	A	mm²	A	mm	kN	ohm/km	mm	kg/km
3x120+2x16+70	3x120	19	12.8	0.253	300	2x16	-	10.2	20.6	0.50	46	1600
3x150+70	3x150	19	14.5	0.206	344	-	-	10.2	20.6	0.50	48	1680
3x150+1x16+70	3x150	19	14.5	0.206	344	1x16	60	10.2	20.6	0.50	48	1780
3x150+2x16+70	3x150	19	14.5	0.206	344	2x16	-	10.2	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

Composite fiber optic overhead ground wire (OPGW-95)



Definition of OPGW

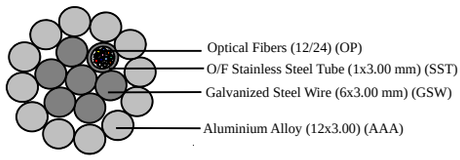
OPGW (optical ground wire) is a type of conductor that is used in the construction of electric power transmission lines. Here the conductor combines both the functions of grounding and communications. OPGW contains a tubuler structure with one or more optical fibers in it, surrounded by layers of galvanized 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 telecomunications 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 (AAA) 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	mm²	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/mm²	11844
Thermal Expansion Coefficient of OPGW	10-6/°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.)	ohm/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

Composite fiber optic overhead ground wire (OPGW- 127-1)



Definition of OPGW

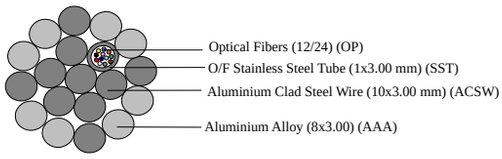
OPGW (optical ground wire) is a type of conductor that is used in the construction of electric power transmission lines. Here the conductor combines both the functions of grounding and communications. OPGW contains a tubuler structure with one or more optical fibers in it, surrounded by layers of galvanized 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 telecomunications networks characterised by long distance links and high capacity.

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 (AAA) 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	mm²	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/mm²	9500
Thermal Expansion Coefficient of OPGW	10-6 / °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.)	ohm/km	0.4
O/F Stainless Steel Tube Diameter (Inner/Outer)	mm	2.6/3.0
Fiber Count	-	12-24
Working Temperature	°C	-40 ile 80

Composite fiber optic overhead ground wire (OPGW-127-2)



Definition of OPGW

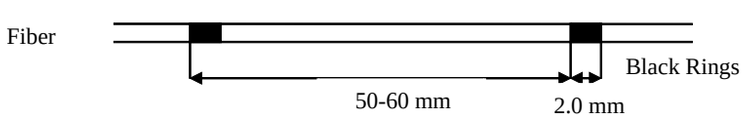
OPGW (optical ground wire) is a type of conductor that is used in the construction of electric power transmission lines. Here the conductor combines both the functions of grounding and communications. OPGW contains a tubuler structure with one or more optical fibers in it, surrounded by layers of galvanized 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 telecomunications networks characterised by long distance links and high capacity.

TECHNICAL SPECIFICATIONS		
Aluminium Alloy Wire Diameter	mm	3.00 ± 0.03
Aluminium Clad Steel Wire Diameter	mm	3.00 ± 0.05
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 (AAA) 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	mm²	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/mm²	11200
Thermal Expansion Coefficient of OPGW	10-6/°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.)	ohm/km	0.4
O/F Stainless Steel Tube Diameter (Inner/Outer)	mm	2.6/3.0
Fiber Count	-	12-24
Working Temperature	°C	-40 ile 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 (λcf)	nm	≤ 1260	
Cable Cut-off Wavelength (λcc)	nm	≤ 1260	
Mode Field Diameter	µm	9.2 ± 0.4	10.4 ± 0.5

DISPERSION			
Zero Dispersion Wavelength (λo)	nm	λ 1300 ≤ λo ≤ 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 (λcf)	nm	≤ 1450	
Cable Cut-off Wavelength (λcc)	nm	≤ 1450	
Mode Field Diameter	µm	9.6 ± 0.4	-

DISPERSION		
Zero Dispersion Wavelength (λo)	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

Copper Rod as the main material in cable production is produced in three sequantial stages; anode casting, electrolysing and rod drawing.

Quality of copper is continiously controlled in order to produce high quality of copper for high quality of cable thereafter.

The copper is supplied as electrolytic cathode or as copper rod in requested diameters as well.

Standards
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. The production capacity of anode casting unit is about 30.000 tons/year. 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 electrolysing process and cathode copper with 99.99 % purity is produced. Average weight of each cathode is between 100 – 125 kg and the production capacity is 24.000 tons/year.

Stranded copper conductors for OHL

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, 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 max	Max Break Strength
mm²	Number/mm	mm	kg/km	ohm/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 EN 13602 and ASTM B3-1990

Standards

EN 13602, EN 60228

Nominal Cross Section	Number of Wire	Overall Diameter of Cables (Approx)	Net Weight (Approx)	DC Conductor Resistance at 20 °C max
mm²	Number	mm	kg/km	ohm/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

Aluminium wire-rod

Aluminum, which is one of the most basic raw materials used at production of the cables and conductors is produced in the new facilities established by HES KABLO

Producing the Aluminium wire-rods in the HES KABLO facilities ensures the quality of Aluminium under control and minimize the dependence to the external factors to the lowest levels. Production is carried out by converting the Aluminium ingots in to wire rods through the continuous casting technique. Thus the Aluminium wire-rods produced offer the highest quality in cables and overhead conductors with their excellent mechanical and electrical properties.

Product: Aluminium wire-rod

Diameter: 9.5±0.5 and12±0.5 mm

Packaging: The Aluminium wire-rods are wound in coils, tied with plastic tapes and delivered to our customers on wooden pallets

Weight: 2000 kg ±%10

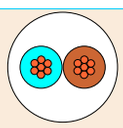
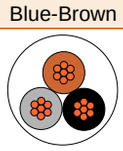
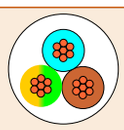
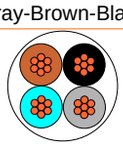
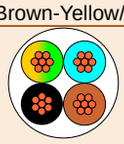
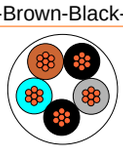
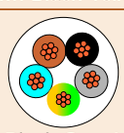
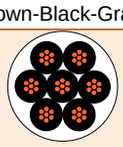
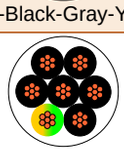
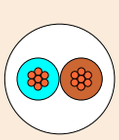
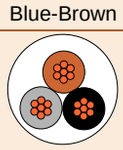
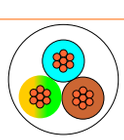
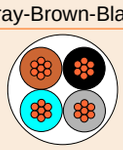
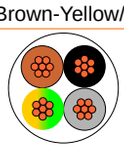
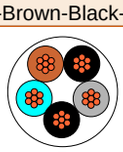
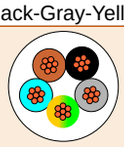
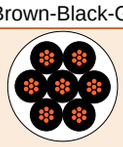
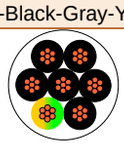
Guaranteed Chemical Analysis: EN AW 1370 (EAI 99.7)

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 (mΩmm²/m)	Conductivity (%IACS)
EN AW 1370 (AA 1370)	H11	80 - 95	27.85	61.90
	H12	95 - 110	28.01	61.55
	H13	105 - 120	28.01	61.55
	H14	115 - 130	28.01	61.55

Insulation colors used in installation and low voltage cables are as follows. The cables available in our stocks are shown in color

Cable Type	No. of cores	O Type (no Yellow-Green wire)	J Type (withYellow-Green wire)
INSTALLATION CABLES			
NVV (NYM) H03VV-F H05VV-F H07VVH6-F NHXMH 052XZ1-F	2	 Blue-Brown	
	3	 Gray-Brown-Black	 Blue-Brown-Yellow/Green
	4	 Blue-Brown-Black-Gray	 Blue-Brown-Black-Yellow/Green
	5	 Blue-Brown-Black-Gray-Black	 Blue-Brown-Black-Gray-Yellow/Green
	>5	 All black numbered with white colours	 Yellow/Green and all remaining black numbered
0.6/1 kV LOW VOLTAGE CABLES			
YVV (NYY) YVCV (NYCY) YVZ2V (NYRY) YVZ3V (NYFGY) YXV (2XY) N2XH N2XH FE 180 YAVV (NAYY)	2	 Blue-Brown	
	3	 Gray-Brown-Black	 Blue-Brown-Yellow/Green
	4	 Blue-Brown-Black-Gray	 Brown-Black-Gray-Yellow/Green
	5	 Blue-Brown-Black-Gray-Black	 Blue-Brown-Black-Gray-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 envirmoment 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 flor,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	:0.7
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 assument 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 assume that the cable joints are protected from direct sun light.
Current loading capacities of the cables can also vary according to spesific 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 then above conditions,current carrying capacities can be calculated by multiplying the currents given on the related tables.
Current carring 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

Load capacity for 0.6/1 kV PVC and XLPE insulated cables with copper conductor

A) In gorund : 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  : Side by side, clearance between cables; in air= 1 x Cable outer diameter, in ground=7cm)

: Bunched laying

1 (Number of system)

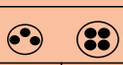
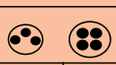
Insulation material Permissible conductor temp.	PVC 70°C								XLPE 90°C					
Number of cores	1				2		3-4		1				3-4	
Nominal cross-section area														
mm	A	B	A	B	A	B	A	B	A	B	A	B	A	B
1.5	-	25	-	20	32	20	26	18.5	39	32	32	25	30	24
2.5	-	34	-	27	42	27	34	25	51	42	43	34	40	32
4	-	45	-	37	54	37	44	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	60	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	465	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

Load capacity for 0.6/1kV PVC and XLPE insulated cables with aluminium conductor

A) In gorund : 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  : Side by side, clearance between cables; in air= 1 x Cable outer diameter, in ground=7cm

: Bunched laying

1 (Number of system)

Insulation material Permissible conductor temp.	PVC 70°C								XLPE 90°C					
Number of cores	1				2		3-4		1				3-4	
Nominal cross-section area														
mm	A	B	A	B	A	B	A	B	A	B	A	B	A	B
25	-	-	-	-		91	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

Load capacity for medium voltage, XLPE insulated cables with copper conductor

A) In gorund : 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 : Side by side, clearance between cables; in air= 1 x Cable outer diameter, in ground=7cm)

: Bunched laying 1 (Number of system)

Insulation material Permissible conductor temp.	XLPE 90°C																							
Rated voltage	3.5/6 kV						5.8/10 kV-8.7/15 kV						12/20 kV						18/30 kV -20.8/36 kV					
Number of cores	1				3		1				3		1				3		1				3	
Nominal cross-section area mmr																								
	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	179	191	157	162	148	143	-	-	-	-	-	-	-	-	-	-	-	-
35	201	238	191	199	176	171	212	231	187	195	178	173	213	233	189	199	183	182	214	233	192	202	181	176
50	241	285	227	241	208	196	249	277	220	234	210	206	250	279	223	238	216	217	251	279	226	241	214	210
70	301	356	277	301	255	249	303	345	269	292	256	257	304	347	273	296	264	269	306	348	276	299	261	262
95	364	435	331	365	307	307	358	418	321	354	307	313	361	420	325	358	316	326	363	421	329	362	313	319
120	424	496	379	419	353	353	404	481	364	407	349	360	407	483	368	412	360	377	410	483	373	416	356	364
150	479	554	422	479	396	406	441	537	405	460	392	410	445	540	410	466	404	426	449	540	415	469	400	418
185	549	637	476	543	447	464	493	612	457	527	443	469	498	614	463	532	457	488	503	615	468	536	441	478
240	640	746	550	640	523	548	563	716	528	621	513	553	569	718	534	627	532	576	576	718	541	630	510	562
300	724	846	619	731	581	632	626	811	593	709	576	635	633	813	601	715	599	654	641	812	608	717	-	-
400	795	941	695	840	653	726	676	901	665	815	650	731	686	904	674	819	685	750	697	904	684	823	-	-
500	883	1051	773	949	-	-	743	1006	739	921	-	-	756	1011	750	927	-	-	768	1011	762	929	-	-

TABLE 4

Load capacity for medium voltage XLPE insulated cables with aluminium conductor

A) In gorund : 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 : Side by side, clearance between cables; in air= 1 x Cable outer diameter, in ground=7cm

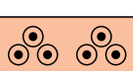
: Bunched laying 1 (Number of system)

Insulation material Permissible conductor temp.	XLPE 90°C																							
Rated voltage	3.5/6 kV						5.8/10 kV-8.7/15 kV						12/20 kV						18/30 kV -20.8/36 kV					
Number of cores	1				3		1				3		1				3		1				3	
Nominal cross-section area mmr																								
	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	377	283	317	271	280	320	378	287	320	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 factor for all cables (not applicable to PVC cables with Uo/U=6/10kV
for installation in ground and differing air temperature

Permissible Operation Temperature	Temperature Of Earth	Thermal Resistivity of Earth K.m/W															
		0.7					1.0					1.5					2.5
		Loading					Loading					Loading					Loading
°C	°C	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	05-1.00
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	0.90	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
XLPE Cables 90 °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
	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 factor for installation in ground. Single-core cables in three-phase system, bunched

Type of Construction	Soil-termal resistivity	Method of laying 7 cm 																			
		0.7					1.0					1.5					2.5				
°C	°C	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 - 6/10 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

TS HD 603 S1 - TS HD 604 S1 PREPARED BY STANDARDS

TABLE 8
Rating factor for installation in ground. Single-core cables in three-phase system, bunched

Type of Construction	Soil-termal resistivity	Method of laying 25 cm 																			
		0.7					1.0					1.5					2.5				
°C	km/W	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 - 6/10 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 9
Rating factor for installation in ground. Single-core cables in three-phase system, side by side

Type of Construction	Soil-termal resistivity	Method of laying 7 cm 																			
		0.7					1.0					1.5					2.5				
°C	km/W	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 - 6/10 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

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TABLE 10
Rating factor for installation in ground. Three-core cables in three-phase system, bunched

Type of Construction	Soil-termal resistivity	Method of laying 7 cm ⦿ ⦿ ⦿																			
		0.7					1.0					1.5					2.5				
°C	km/W	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 - 6/10 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 11
Rating factor for differing air temperatures

Type of Construction	Permissible Conductor Temperature	Air Temperature								
	°C	5 °C	10 °C	15 °C	20 °C	25 °C	30 °C	35 °C	40 °C	45 °C
XLPE Cables PE and PVC Cables	90	1.15	1.12	1.08	1.04	1.0	0.96	0.91	0.87	0.82
	70	1.22	1.22	1.12	1.06	1.0	0.94	0.87	0.79	0.71

Rating factor for differing soil temperatures

Type of Construction	Permissible Conductor Temperature	Soil Temperature								
	°C	5 °C	10 °C	15 °C	20 °C	25 °C	30 °C	35 °C	40 °C	45 °C
XLPE Cables PE and PVC Cables	90	1.10	1.07	1.04	1.00	0.96	0.92	0.89	0.85	0.79
	70	1.14	1.09	1.05	1.00	0.95	0.94	0.84	0.77	0.71

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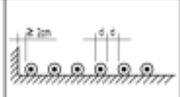
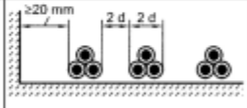
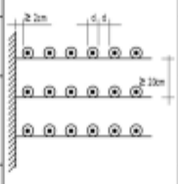
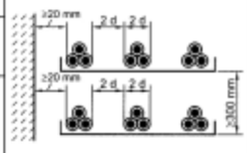
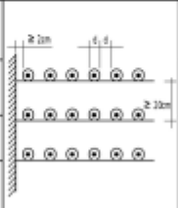
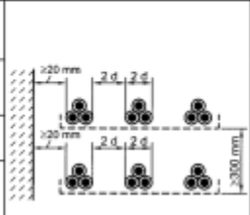
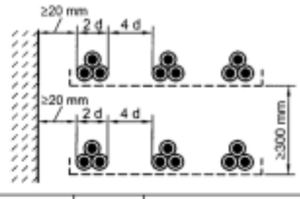
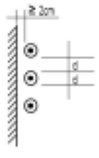
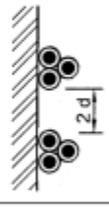
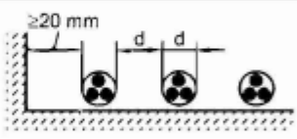
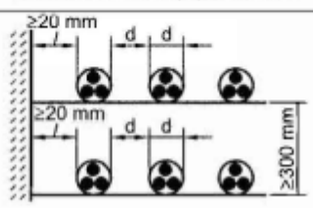
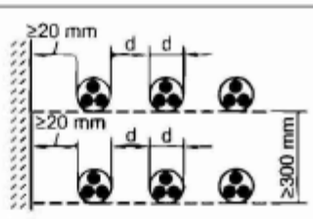
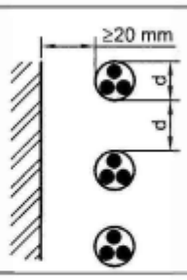
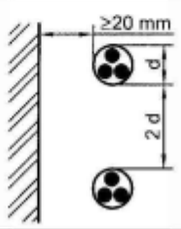
Conversion factors for single-core cables in three-phase systems

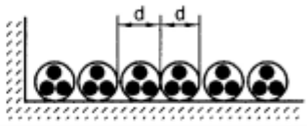
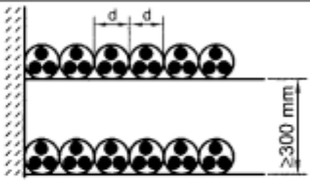
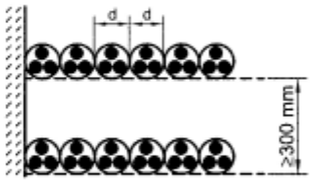
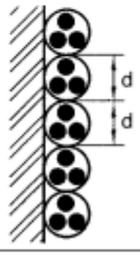
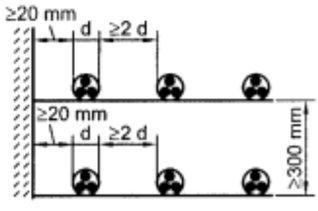
1	2		3				4			
1	Arrangement of the cables		Flat formation clear space = cable diameter distance from the wall > 20 mm				Laid cable shaped like triangle Space = 2d Distance from the wall ≥ 20 mm			
	Number of systems		1	2	3	Drawing	1	2	3	
2	Laid in Earth		0,92	0,89	0,88		0,98	0,96	0,94	
3	In the cable channels with poor circulation	No of tray								
		1	0,92	0,89	0,88		0,98	0,96	0,94	
		2	0,87	0,84	0,83		0,95	0,91	0,87	
		3	0,84	0,82	0,81		0,94	0,90	0,85	
		6	0,82	0,80	0,79		0,93	0,88	0,82	
4	On the cable ladder	No of ladder								
		1	1,00	0,97	0,96		1,00	1,00	1,00	
		2	0,97	0,94	0,93		0,97	0,95	0,93	
		3	0,96	0,93	0,92		0,96	0,94	0,90	
		6	0,94	0,91	0,90		0,95	0,93	0,87	
5	Installation with no need to the load current		With a longer distance, there are more reduce losses in the metal sheath and in the armouring while cooling improves. Each case must be calculated separately							
6	Number of overlying systems		1	2	3		1	2	3	
7	On racks or the wall		0,94	0,91	0,89		0,89	0,86	0,84	

1) The data is valid, provided that the ambient temperature does not rise significantly in result of the increasing heat by dissipation in the cable.

Correction factors aerial cables
Three core cable and multicore cables only single mode cable

	1		2	3	4	5	6	7
	Arrangement		Installation side by side					
1	Number of adjacent cables		1	2	3	4	6	
2	Installation in Earth		0.97	0.96	0.94	0.93	0.90	
3	In cable channels with poor circulation	Number of ducts						
		1	0.97	0.96	0.94	0.93	0.90	
		2	0.97	0.95	0.92	0.90	0.86	
		3	0.97	0.94	0.91	0.89	0.84	
		6	0.97	0.93	0.90	0.88	0.83	
4	In the cable channels	Number of ducts						
		1	1.00	1.00	1.00	1.00	1.00	
		2	1.00	0.99	0.98	0.97	0.96	
		3	1.00	0.98	0.97	0.96	0.93	
		6	1.00	0.97	0.96	0.94	0.91	
5	Cables vertically arranged on wall one on top of the other		1	2	3	4	6	
6	Aplication either shelves or on the wall		1.00	0.91	0.89	0.87	0.86	
7	Installation with no need to reduce the load current		Randomly selected number of cables					
Correction factors for the varying air temperatures at the table 15 are applied, provided that ambient temperature rises in the result of the heat by dissipation in the cable for closed spaces or large groupings.								

Correction factors aerial cables
Three core cable and multicore cables only single mode cable

	1		2	3	4	5	6	7	8
	Arrangement		Installation side by side						
1	Number of adjacent cables		1	2	3	4	6	9	
2	Installation on earth		0.97	0,85	0,78	0,75	0,71	0,68	
3	In cable channels with poor air circulation	Number of cable shelves							
		1	0.97	0.85	0.78	0.75	0.71	0.68	
		2	0.97	0.84	0.76	0.73	0.68	0.63	
		3	0.97	0.83	0.75	0.72	0.66	0.61	
		6	0.97	0.81	0.73	0.69	0.63	0.58	
4	In the cable channels	Number of cable shelves							
		1	1.00	0.87	0.82	0.80	0.79	0.78	
		2	1.00	0.86	0.80	0.78	0.76	0.73	
		3	1.00	0.85	0.79	0.76	0.73	0.70	
		6	1.00	0.83	0.76	0.73	0.69	0.66	
5	Number of overlying systems		1	2	3	4	6	9	
6	Application on either shelves or the wall		0.95	0.78	0.73	0.72	0.68	0.66	
7	Installation with no need to reduce the load current		Randomly selected number of cables						

1) Correction factors for the varying air temperatures at the table 15 are applied, provided that ambient temperature rises in the result of the heat by dissipation in the cable for closed spaces or large groupings.

TABLE 24
Effective resistance

Nominal cross sections of conductor mm2	Resistance	
	Cu ¿ / km	Al ¿ / km
1.5	12.10	-
2.5	7.41	-
4	1.61	-
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

$$R_{20} = R\delta \cdot \frac{254.5}{234.5 + \delta} \text{ (Cu)}$$

$$R_{20} = R\delta \cdot \frac{248}{228 + \delta} \text{ (Al)}$$

R_{20} : Conductor resistance at20^{0}C) (Ω/km)

$R\delta$: (Conductor resistance atδ ^{0}C) (Ω/km)

δ : (conductor temperature) (^{0}C)

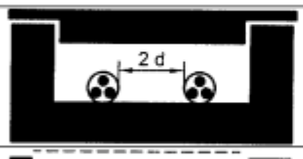
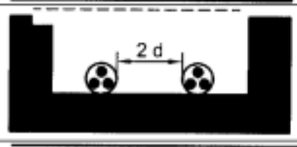
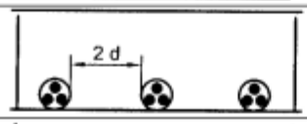
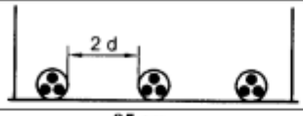
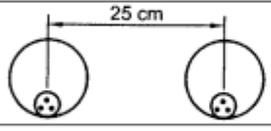
Correction laying depth factors

Depth cm	U=1000 V	
	S ≤ 50 mm^2	70-240 mm^2
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

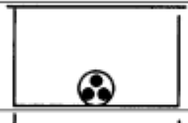
Reduction factors for different ground termal resistivity

Nominal area mm^2	Termal 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

Reduction factors related to closeness to other cables laid in cable channels, channels with cable equipment and ducts.

		Number of multi-core cables				
		2	3	4	5	6
Closed cable channels		0,94	0,90	0,88	0,86	0,85
Half open cable channels		0,95	0,91	0,89	0,87	0,86
With closed cable channels		0,94	0,90	0,88	0,86	0,85
With open cable channels		0,97	0,93	0,91	0,89	0,88
Ducts depth 120 cm		0,91	0,85	0,81	0,78	0,76

Reduction factors related to influance for with cable channel, channel with cable equipment and duct.

		Nominal area mm^2	multi-core cables
Closed cable channels			0,90
Half open cable channels			0,95
With closed cable channels			0,90
With open cable channels			0,98
Ducts depth 120 cm		≤ 0,50 70 – 150 240	0,81 0,80 0,79

Medium Voltage cables correction factors

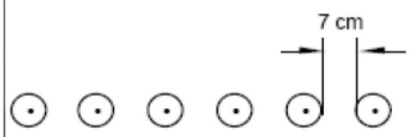
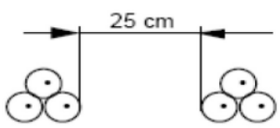
Reduction factors termal resistivity on the ground for single mode cables.

Cross sectional area mm²	Termal resistivity K.m/W								
	0,50	0,70	0,80	1,00	1,20	1,50	2,00	2,50	3,00
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
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
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
1000	1,32	1,16	1,10	1,00	0,92	0,83	0,73	0,66	0,61

Laying depth reducing factors

Depth (cm)	U≤15 kV S ≤ 300 mm²	U≤15 kV S > 300 mm²	U >15 kV S ≤ 300 mm²	U >15 kV S > 300 mm²
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 mm²	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

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Reduction factors for the other cable systems in the air

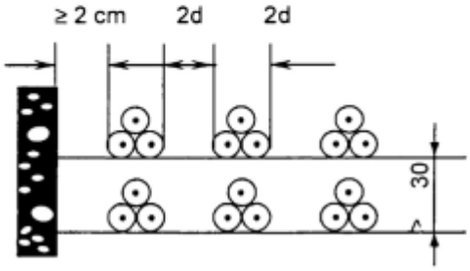
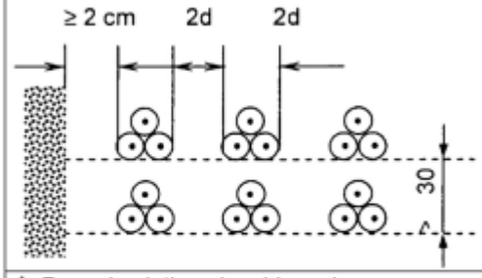
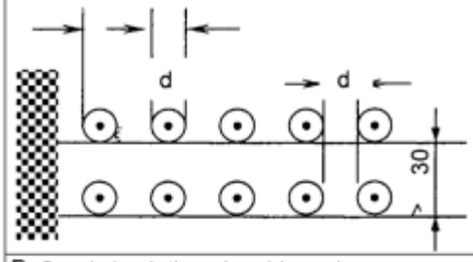
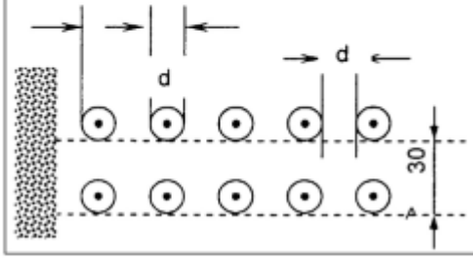
	Number of racks	Number of systems		
		1	2	3
A. Poor circulation air cable racks ≥ 2 cm 2d 2d 	1	0,95	0,90	0,88
	2	0,90	0,85	0,83
	3	0,88	0,83	0,81
	6	0,86	0,81	0,79
B. Good circulation air cable racks ≥ 2 cm 2d 2d 	1	1,00	0,98	0,96
	2	1,00	0,95	0,93
	3	1,00	0,94	0,92
	6	1,00	0,93	0,90
A. Poor circulation air cable racks ≥ 2 cm 	1	0,92	0,89	0,88
	2	0,87	0,84	0,83
	3	0,84	0,82	0,81
	6	0,82	0,80	0,79
B. Good circulation air cable racks ≥ 2 cm 	1	1,00	0,97	0,96
	2	1,00	0,94	0,93
	3	1,00	0,93	0,92
	6	1,00	0,91	0,90

TABLE 14
Correction factors for multicore cables laid in ground or in air with cross section from 1.5 mm² to 10 mm²

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 15
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/mm²)											
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 mm²	70	160	—	—	115	119	122	129	136	143	150
> 300 mm²	70	140	—	—	103	107	111	118	126	133	140
Al. conductor PVC insulation											
⩽ 300 mm²	70	160	—	—	76	78	81	85	90	95	99
> 300 mm²	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 (mm²) x short circuit current density (A/mm²) x 10^{-3} kA

TABLE 16
Inductive reactance of PVC-insulated cables at 50 Hz.

Nominal cross-section of Conductor mm²	Nominal voltage					
	0.6/1 kV		3.6/6 kV		6/10 kV	
	(MultiCore) ohm/km	(OneCore) ohm/km²	(ThreeCore) ohm/km²	(OneCore) ohm/km²	(ThreeCore) ohm/km	(OneCore) ohm/km²
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

TABLE 17
Inductive reactance of XLPE-insulated cables at 50 Hz.

Nominal cross-section of Conductor mm²	Nominal voltage									
	0.6/1 kV		6/10 kV		8.7/15 kV		12/20 kV		20.8/36 kV	
	(OneCore) W/km²	(MultiCore) W/km	(OneCore) W/km²	(MultiCore) W/km	(OneCore) W/km²	(MultiCore) W/km	(OneCore) W/km²	(MultiCore) W/km	(OneCore) W/km²	(MultiCore) 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	0.110	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	-	-	0.089	-	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	-

TABLE 18
Earth fault currents - PVC insulated cables

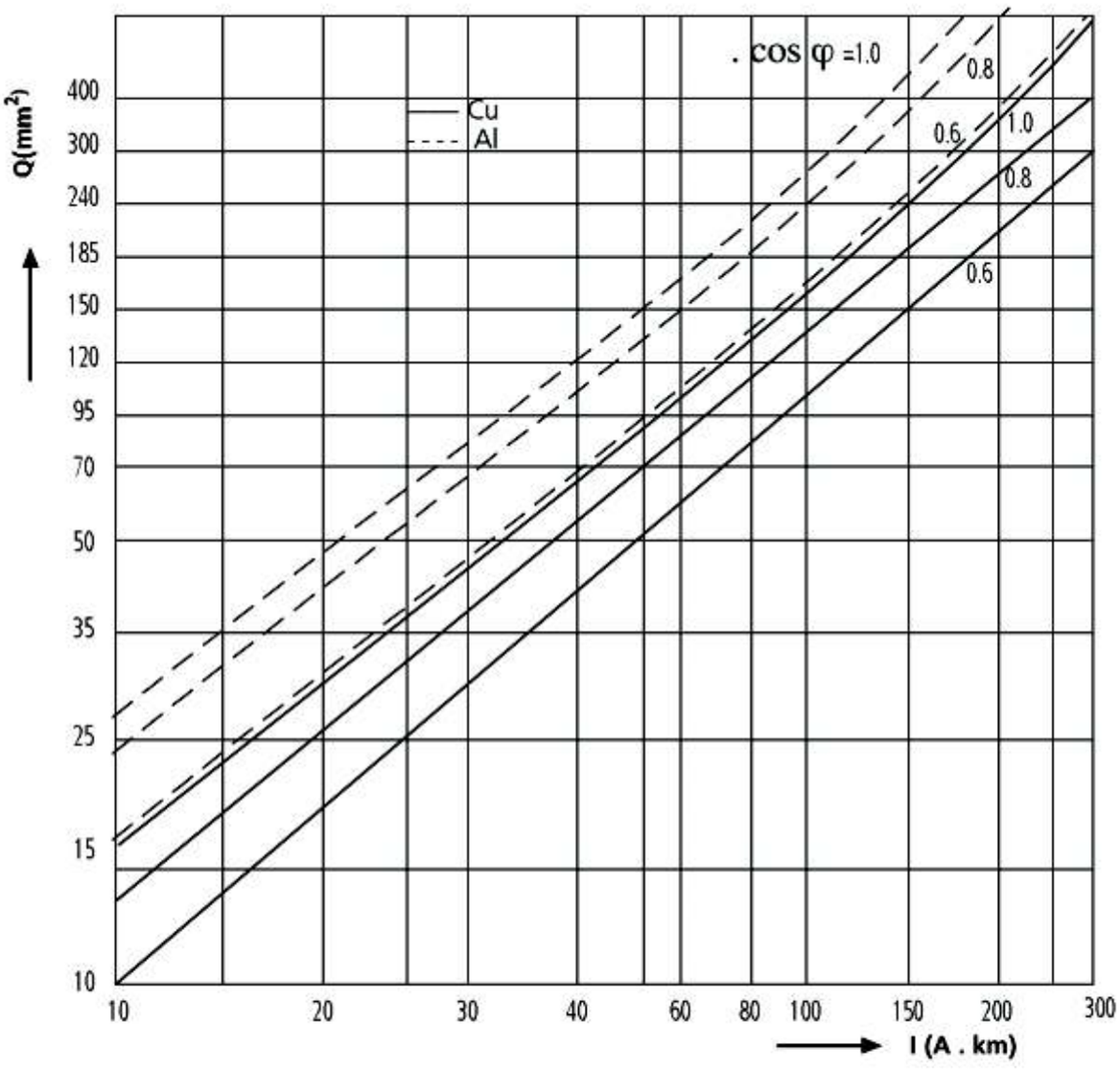
Nominal cross-section	Nominal Voltage	Nominal Voltage
mm²	3.6/6 kV (A/km)	6/10 kV (A/km)
25	0.60	1.9
35	0.60	2.1
50	0.70	2.3
70	0.70	2.6
95	0.80	2.9
120	0.90	3.2
150	0.90	3.4
185	1.00	3.8
210	1.00	4.5
300	1.20	5.0

TABLE 18
Earth fault currents - XLPE insulated cables

Nominal cross-section	Nominal Voltage	Nominal Voltage	Nominal Voltage	Nominal Voltage
mm²	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 20)

Voltage drop at low voltage cables



Voltage drop : %5
Service voltage : 220/380V
Conductor tempature : 70 °C

In many cases, especially for large cross section, the inductive voltage drop must be taken into consideration.
General formula for theree phase systems:

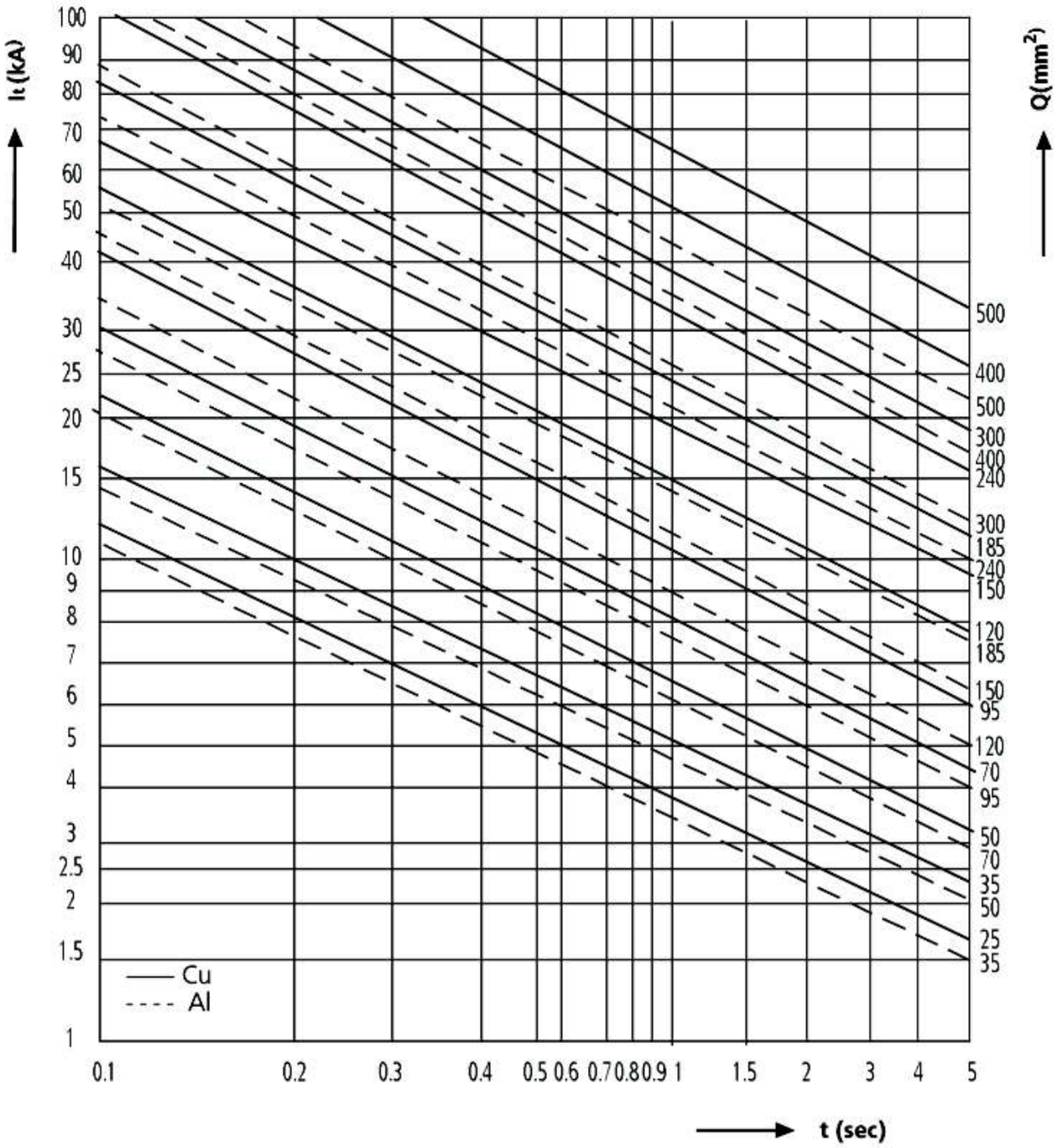
$$e = \frac{100 \cdot \sqrt{3} \cdot I \cdot l}{U} (R \cdot \cos\varphi + X \cdot \sin\varphi)$$

U= Phase to phase voltage (V)
e= Voltage drop (%)
I= Current loading (A)
l = Length cable (km)
R= Resistance (ohm/km)
X= Inductance (ohm/km)

∀!#

(TABLE 21)

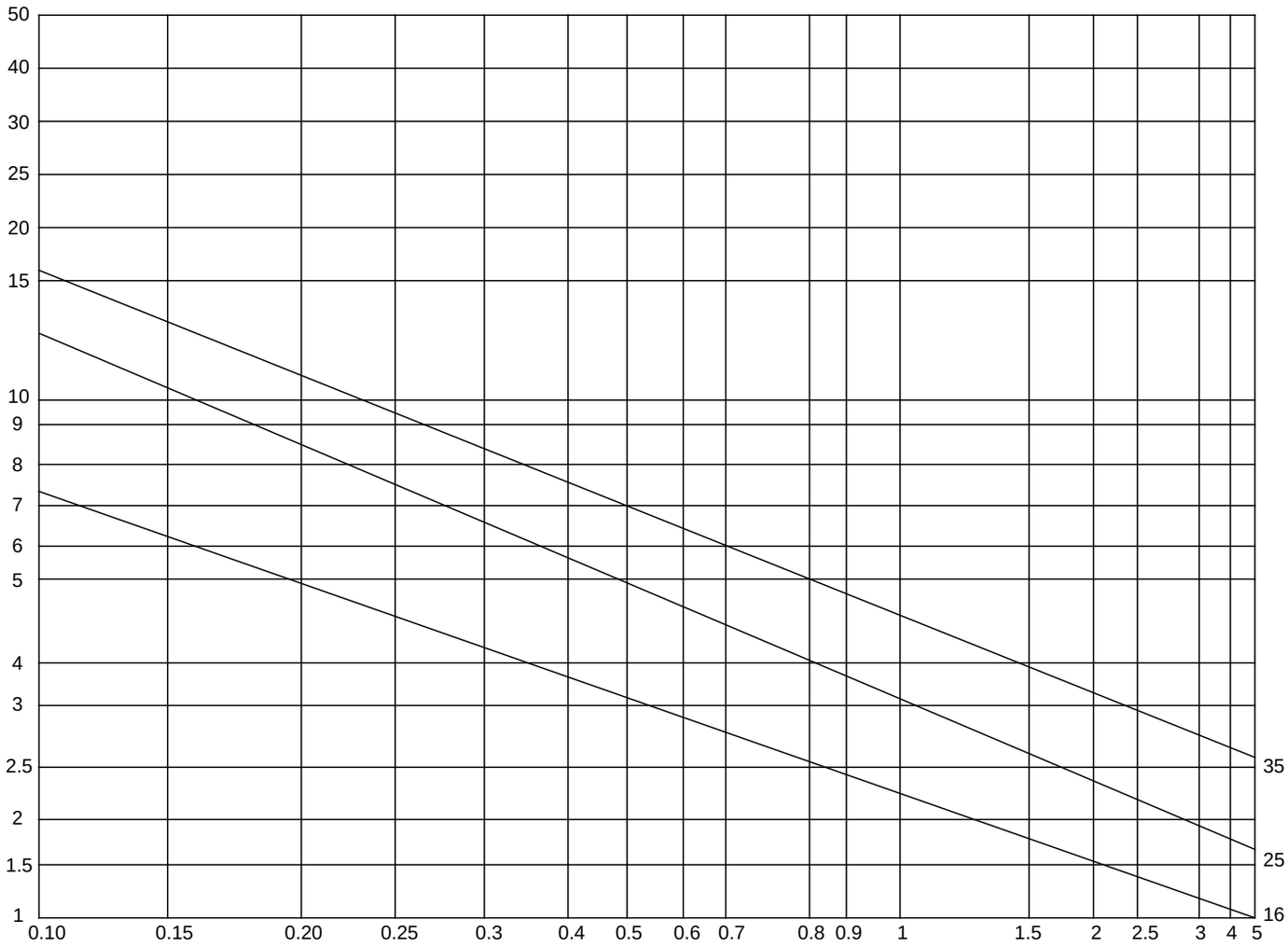
Permissible short-circuit current for XLPE-insulated cables for 1-30kV



(K.d initial temperature 90 °C. final temperature 250 °C).

(TABLE 22)

Permissible short-circuit current for variouscross - sections of screens

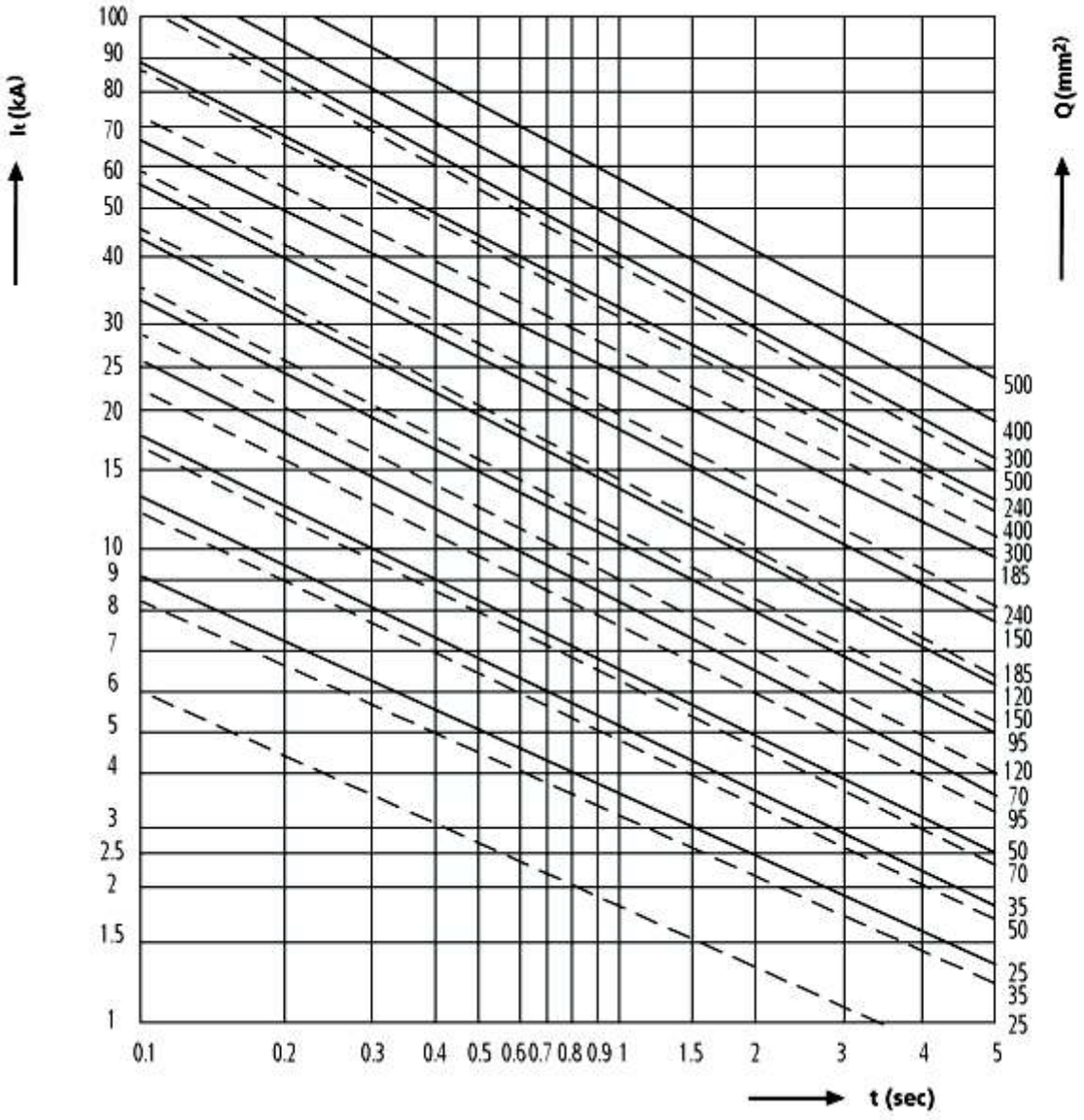


Standard cross-sections of screens

Cross-sections of conductor (mm^2)	Cross-sections of screen (mm^2)
35 - 120	16
150 - 300	25
400 - 500	35

(TABLE 23)

Permissible short-circuit current for PVC-insulated cables for 1-10kV



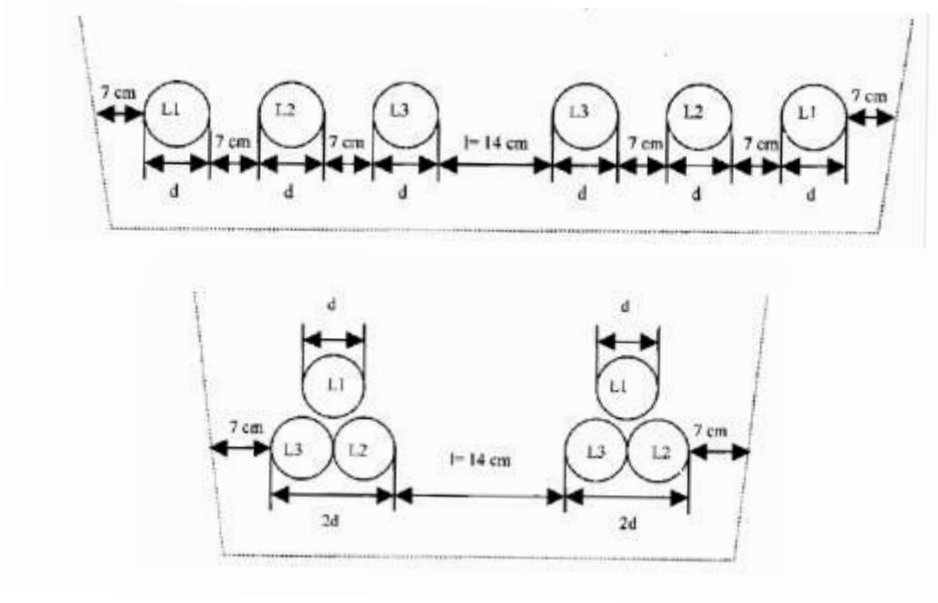
Installing Cables

In the consist of single core system feeds, in the single file laying arrangement, cores in the form of
L1 L2 L3 L3 L2 L1 L1 L2 L3 L3 L2 L1
In the more than one laying, provided that it has minimum 20 cm; interstage must be in the form of;

1. layer	2. layer
L1 L2 L3	L3 L2 L1
L1 L2 L3	L3 L2 L1
L1 L2 L3	L3 L2 L1

Same phases mustn't be install side by side in this feeds. In the other words do not install in the form of L1 L1 L1 L2 L2 L2 L3 L3 L3. Intersystems must be have range up to cable diameter. Also lenght of all systems must be equal.

Example for single mode system



Minimum inflection diameter of cables , D; be about outer diameter, should be in the form of chart.

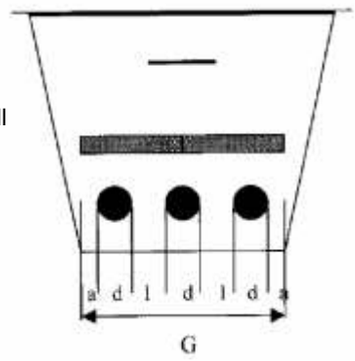
Number of Cores	Diameter of cable inflection(R)		
	XLPE and PVC insulated L.V.	XLPE and PVC insulated H.V.	Armoured Cables
Three Cores	12 x D	15 x D	15 x D
Single Core	15 x D	15 x D	15 x D

Installing more than one Low voltage or Medium voltage cables

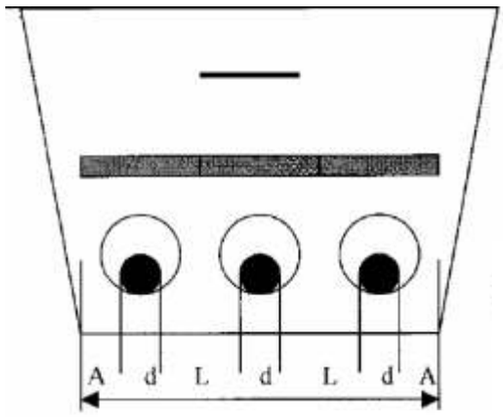
G: Calculated channel width
d: Cable outer diameter
ı: Distance between two cables
a: Distance between cable and channel wall

G: 3xd + 2x1 + 2xa

ı=7 cm If than else d<7 cm, ı=d
a=7 cm If than else d>7 cm, a=d



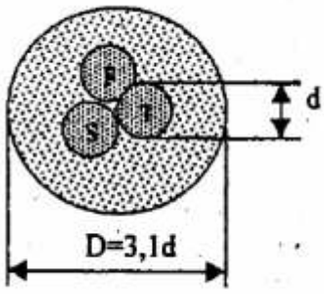
Installing more than one Low voltage or Medium voltage cables in the pipe

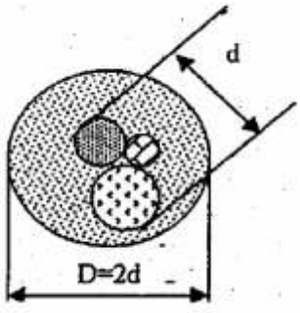


A=1,5 x a , L=1,5 x l

G= 3xd + 2xL +2xA

Duct montage and example calculation of more than one LV or HV(MV) Cables





As for single core cables transitions; not to be used steel tube; be used antimagnetik metal duct. 3 different phases must be conduct from steel duct shaped like triange bundle at the range of the mechanical strain

As for multi core cables inner diameter of steel duct must be double of the amount of outer diameter or projection of outer diameter at the more than one cables.

POINTS TO CONSIDER FOR CABLING

- Cabling can not less than 5 °C. If it is cold and absolutely necessary; cable must be laid after it is holded at + 20 °C' about 24 hours

- Cables mustn't be heat near the fire

- 2m Spaces must be left for joint shape of S

- One piece of cable must be used througout the cabling

-Cabling must be shape of S, taking into account consolidation at filling material

It was taken from TEDAS project and facility department publication.

FORMULAS - CONVERSION FACTORS

Ohms low	$U = I \times R$
Energy (heat)	$W = I^2 \times R \times t$
Resistance of a line (Feed and return)	$R = \frac{2 \times l}{\chi \times S}$
DC Power	$P = U \times I$
Single-Phase Power	$P = U \times I \times \cos \phi$
Three-Phase Power	$P = 1.73 \cdot U \cdot I \cdot \cos \phi$
Efficiency	$\eta = \frac{P \text{ output}}{P \text{ input}}$

U Rated voltage
I Current
R Resistance
W Energy (heat)
t Time in seconds
l length of cable (m)
u Voltage drop in V from sending to receiving end of line
χ Conductuvity for copper 58)
S Rated cross-section (mm2)
cos ϕ Power factor
P Power in watts (W)
η Efficiency

Voltage drop	In single-phase A.C. and D.C. systems	In three A.C. and D.C. systems.
If current is known	$u = \frac{2 \times l \times I}{\chi \times S}$ (V)	$u = \frac{1.73 \times l \times I \times \cos \phi}{\chi \times S}$ (V)
If power is known	$u = \frac{2 \times l \times P}{\chi \times S \times U}$ (V)	$u = \frac{l \times P}{\chi \times S \times U}$ (V)
Conductor section If current is known	$S = \frac{2 \times l \times I}{\chi \times u}$ (mm^2)	$S = \frac{1.73 \times l \times I \times \cos \phi}{\chi \times U}$ (mm^2)
If power is known $\chi \times S \times U$	$S = \frac{2 \times l \times P}{\chi \times u \times U^2}$ (mm^2)	$S = \frac{l \times P}{\chi \times u \times U^2}$ (mm^2)

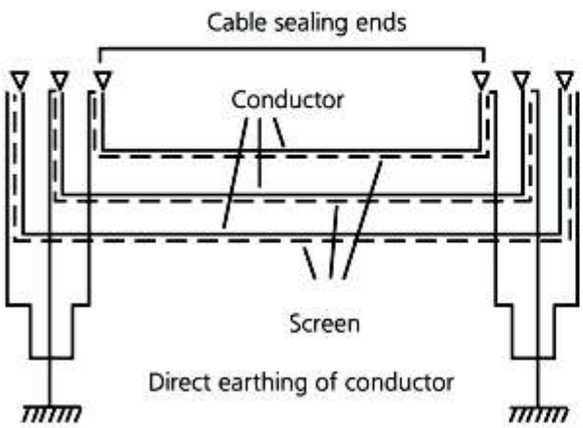
Length

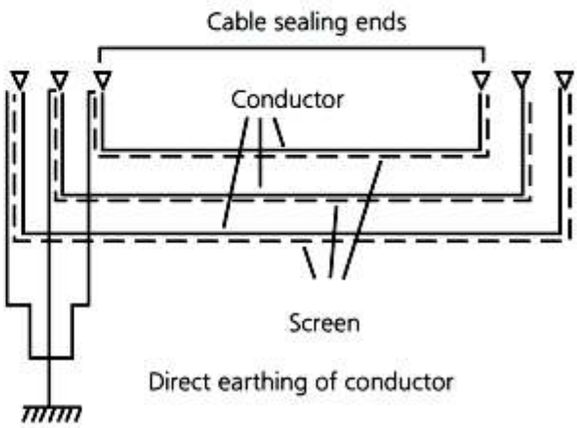
	meters (m)	inches (in)	feet (ft)	yards (yd)	miles (mil)
1 m	1.0	39.37	3.28	1.0936	0.621371×10^3
1 in	0.0254	1.0	0.0833	0.0277	0.0158×10^3
1 ft	0.3048	12.00	1.0	0.333	0.189×10^3
1 yd	0.9144	36.00	3.0	1.0	0.568×10^3
1 mile	1609.344	63360.0	5280.0	1760.0	1.0×10^3

Area

	m^2	$inç^2$	ft^2
1 m^2	1.0	1550.0	10.7639
1 $inç^2$	0.64516 x 10 3	1.0	6.944×10^3
1 ft^2	0.0929	144.0	1.0

EARTING METHODS FOR CABLE SCREENS



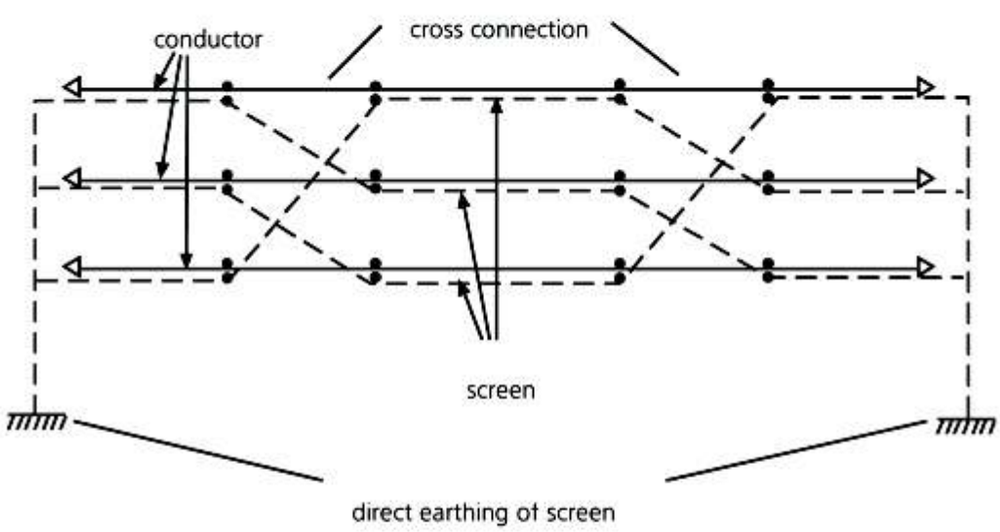


1) Earthing at two ends

Cable screens are connected together and earthed at both ends of cable route. On this method, current inducted 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

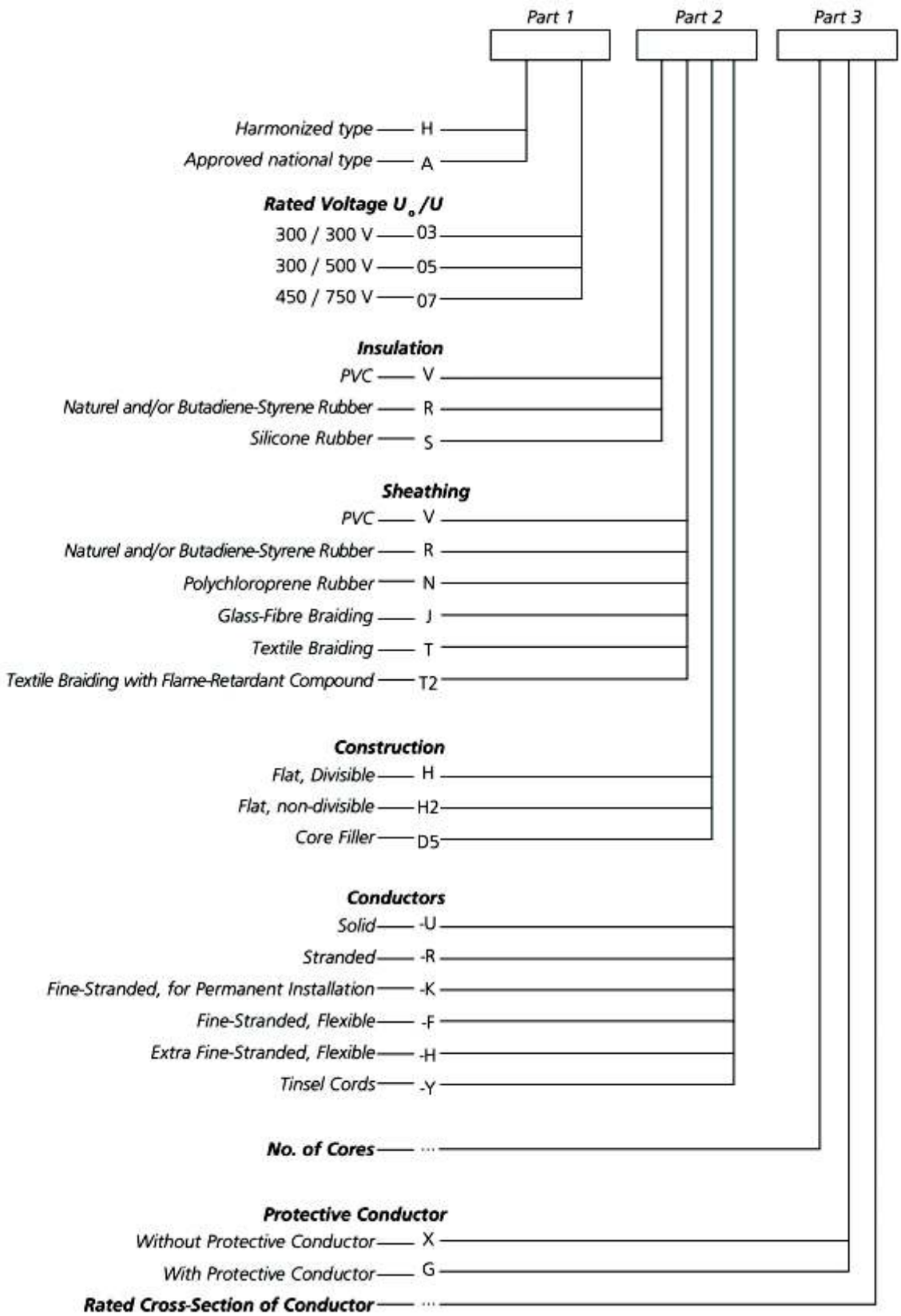
All single mode cables
D : Cable diameter

Minimum ambient temperature during the cabling
: + 3 °C PVC cables
: - 5 °C XLPE cables

Permitted maximum tensile strength during the cabling

Unarmoured cables with copper conductor : A x 50 N/mm² (5 kg/mm²)
Unarmoured cables with aluminium conductor : A x 30 N/mm² (3 kg/mm²)
All cables with steel wire armoured : D^2 X 9 N/mm² (0.9 kg/mm²)
All cables with steel tape armoured : D^2 X 3 N/mm² (0.3 kg/mm²)

A : Total conductive section of all cores
D : Cable Diameter (mm)


Part 1
Part 2
Part 3
Harmonized type H
Approved national type A
Rated Voltage U0/U
300 / 300 V 03
300 / 500 V 05
450 / 750 V 07
Insulation
PVC V
Naturel and/or Butadiene-Styrene Rubber R
Silicone Rubber S
Sheathing
PVC V
Naturel and/or Butadiene-Styrene Rubber R
Polychloroprene Rubber N
Glass-Fibre Braiding J
Textile Braiding T
Textile Braiding with Flame-Retardant Compound T2
Construction
Flat, Divisible H
Flat, non-divisible H2
Core Filler D5
Conductors
Solid -U
Stranded -R
Fine-Stranded, for Permanent Installation -K
Fine-Stranded, Flexible -F
Extra Fine-Stranded, Flexible -H
Tinsel Cords -Y
No. of Cores ...
Protective Conductor
Without Protective Conductor X
With Protective Conductor G
Rated Cross-Section of Conductor ...

(TS HD 361.S3)

Symbols	Materials
	Insulating and Unmetalic Sheath Materials
E	Polyethylene
N	Polychloroprene
V	PVC
X	Cross-linked polyethylene
Z1	Thermoplastic material has a suitable low level corrosive gas emission with polyethlene basis for low smoke emission
	Metalic Covers
AT	Aluminium screen
A8	Aluminium screen over each core
C4	Copper wire braiding over cores
C7	Copper screen from the ribbon or tape or copper wire
C8	over each core as C7
	Armouring
Z2	Galvanized or plain round steel wire armour
Z3	Galvanized or plain flat steel wire armour
Z4	Galvanized or plain steel tape armour
Y2	Round aluminium wire armour
Y3	Flat aluminium wire armour
	Special Construction
	Circular constructed cable
H	Sheathed or unsheathed separable flat constructed cable
H2	Unseparable flat constructed cables and cordon
H4	Multicore flat cable with non insulated one conductor
H5	Stranded cable with two or more cores together
H6	Flat cable with two or more
	Conductor Material
	Copper
-A	Aluminium
	Conductor Shape
-F	Twisted cable or twisted conductor of cordon
-H	Twisted cable or high level twisted conductor of cordon
-K	One cable conductor for fixed installation
-R	Rigid, round conductor, braided
-S	Rigid, with sector shaped conductor, braided
-U	Rigid, round conductor, solid
-W	Rigid, with sector shaped conductor, solid
-Y	Conductor with the shape of the bride wire

Example : YVV-U

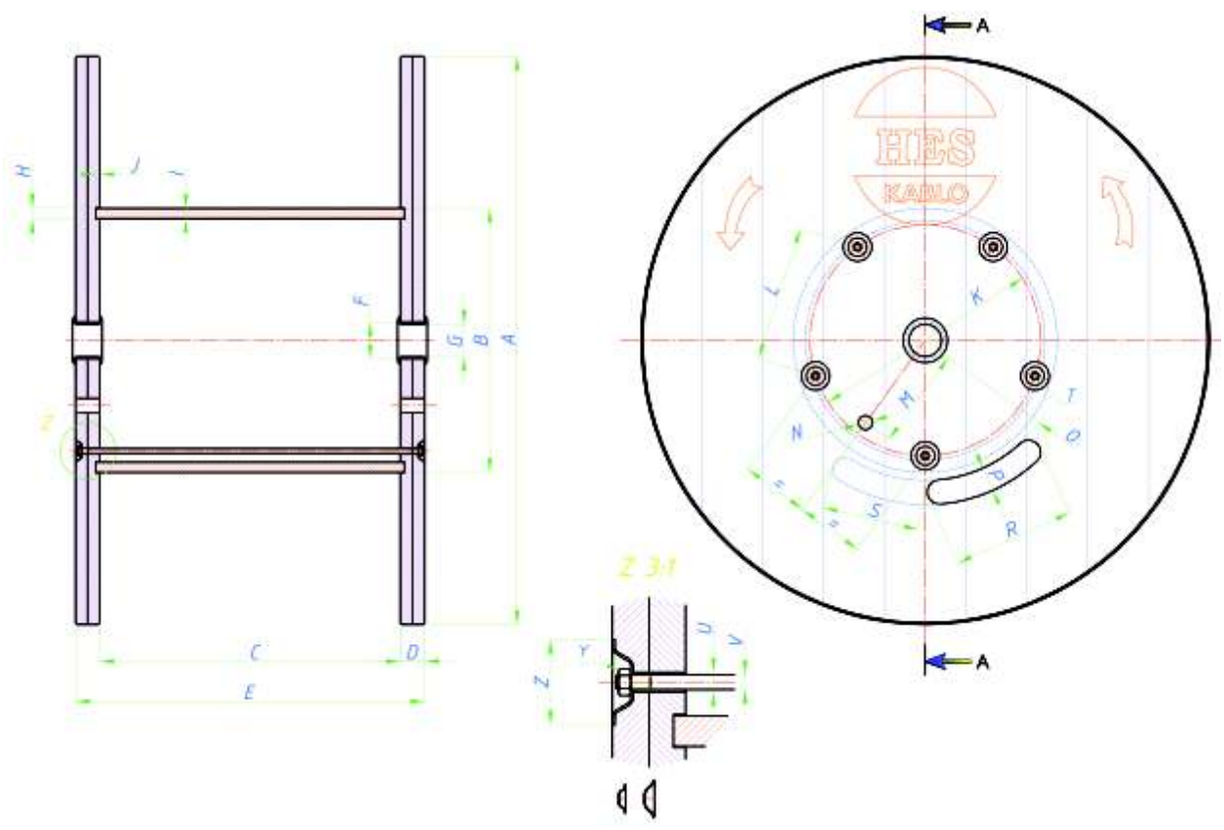
Example : YVZ2V-R

Example : YAXC8VZ3V-R

VDE 0271	Explanation
A	*Aluminium conductor*
Y	*Polyvinylichloride insulation or sheath*
2Y	*Polyethylene*
2X	*Cross-linked polythylene*
H	*Sheath or tape conductive layer*
S	*Copper shield*
SE	*Metallic screen (copper) over each core*
C	*Concentric copper conductor*
F	*Galvanized flat steel wire armour*
R	*Galvanized round steel wire armour*
G	*Steel tape (for F and R)*
s	*Sector-shaped conductor*
v	*Compacted conductor*
rm	*Stranded conductors*
k	*Resistant againts corrosion*
W	*Resistant againts heat and corrosion*
u	*Flame retardant*

VDE 0250	Explanation
Y	*Thermoplastic insulation material (PVC)*
S	*Metallic screen*
G	*Rubber insulation*
2G	*Thermo resistant*
W	*Resistant against air conditions*
u	*Flame retardant*
AF	*Stranded cable*
B	*Metal Sheath (lead)*
T	*Pilot core (textile, steel or similar)*
ö	*Oil resistant*
J	*Green / Yellow conductor for earth*

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	735	950	1100	1069	1230	1640	1991	2308	3153
35					182	288	429	490	537	707	916	1061	1030	1185	1584	1931	2244	3009
36					182	288	349	464	509	707	784	1021	915	1185	1400	1715	1998	2693
37					171	226	331	406	445	594	754	982	880	1139	1400	1715	1939	2627
38					171	226	331	383	421	569	754	884	845	984	1348	1659	1881	2562
39					160	212	313	383	421	569	724	849	845	984	1178	1458	1710	2269
40							313	383	421	544	724	849	810	943	1178	1408	1656	2209
41							260	361	396	520	607	813	678	902	1131	1408	1603	2150
42							245	361	396	520	581	691	678	802	1084	1358	1549	2090
43							245	290	318	424	581	691	647	766	976	1177	1394	1827
44									318	424	554	660	647	766	933	1177	1346	1827
45									318	424	554	660	616	729	933	1131	1298	1773
46									297	403	453	629	528	729	891	1131	1298	1720
47									297	403	453	550	528	638	792	965	1111	1481
48									297	382	453	550	502	606	754	925	1111	1481
49									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	543	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

HES Hacılar Elektrik Sanayi ve Ticaret A.Ş.

Head Office / Factory:
Erciyes Mah. Hes Cad. No: 22
38210 Hacılar - **Kayseri / TURKEY**
Tel: +90 (352) 207 4500
Fax: +90 (352) 207 4520
hes@hes.com.tr

Ankara District Office:
Beştepeler Mah. Nergis Sk. No: 7/26
VIATOWER 13. Kat, 06520
Söğütözü - **Ankara / TURKEY**
Tel: +90 (312) 205 6001
Fax: +90 (312) 219 1533
hesank@hes.com.tr

İstanbul District Office:
Bankalar Cad. Ekaş Han No: 29/29-A
34420 Karaköy - **İstanbul / TURKEY**
Tel: +90 (212) 393 8462
Fax: +90 (212) 255 4414
hesist@hes.com.tr