

INTERNATIONAL CATALOGUE

Low Voltage Cables



COMPANY HISTORY

Founded in 1994, Policabos - Soluções Técnicas de Condutores S.A., is committed to select, import, export, stock, integrate and distribute electrical and communication cables, connectors and accessories.

For over 20 years, Policabos has developed strategic partnerships with the main national and international manufacturers, built up on many years of expertise, hard work and cooperation.

Since 1995, the LAPP Group acquired a stake in the company, and since 2016, Policabos is 100% part of the group.

In June of 2018, part of the integration in the group, Policabos added to its name LAPP, hence becoming LAPP Policabos.

LAPP Policabos has over 60 employees, divided by the headquarters in Sintra, Lisboa, and the sales office in Gaia, Oporto.

The headquarters in Sintra has a warehouse with 4500 square meters which contains more than 4000 product references.

LAPP Policabos

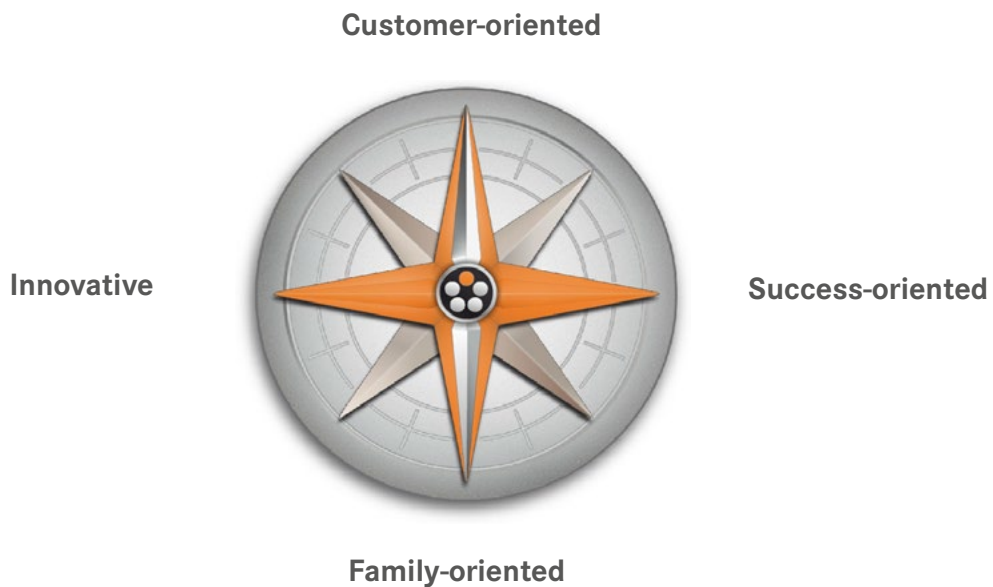
Lapp Policabos is committed to be the supplier reference, for cable and communication solutions, connectors and accessories, in the national market, as well as the developer of the LAPP Group's business in Africa.

We want to be renowned for the flexibility and availability of our products, in the infrastructure sector, and also in the field of special data cables.

We aim to guarantee that our service fulfill our customers and other stakeholders, for which the quality of products and processes, stock management and technical support should be the basis of our company.

Involvement and commitment, training and transparency to all stakeholders and especially to our employees are the roots to the success of our mission.

COMPANY VALUES



CUSTOMER-ORIENTED

We find quick and simple solutions for our customers – at a competitive price-performance ratio. We hold our customers and partners in the highest regard and guarantee them worldwide security of supply through international production sites. This enables them to be successful in their markets.

FAMILY-ORIENTED

We work together toward our goal in a spirit of trust. Respect and appreciation are just as important to us as personal responsibility and transparency. We actively train and develop our staff .

SUCCESS-ORIENTED

Our company is very versatile. It is our flexibility above all that secures profitable growth: our reaction to new challenges is quick and well-considered. Our processes are transparent, and we make sustainable, long-term-oriented decisions. We remain conscious of our risks while driving our growth. We also set standards for your benefit.

INNOVATIVE

We continuously develop our products, solutions and services. To ensure that there is no compromise when it comes to quality, we manufacture in our own plants. We pledge ourselves to ensure the well-being of our employees and the conservation of environmental resources.

LEGEND FOR ICONS



Flame-retardant



Fire-retardant



Fire resistance



Interference signals



Cold-resistant



Oil-resistant



UV-resistant



Mechanical resistance



Protection against rodents



Hydrocarbon-resistant



Corrosion-resistant



Suitable for indoor use



Suitable for outdoor use



Waterproof



Low Smoke Zero Halogen



Construction Products
Regulation



Certification mark that
indicates that the product
meets EU standards for
health, safety, and
environmental protection.



Harmonised european
standard cable

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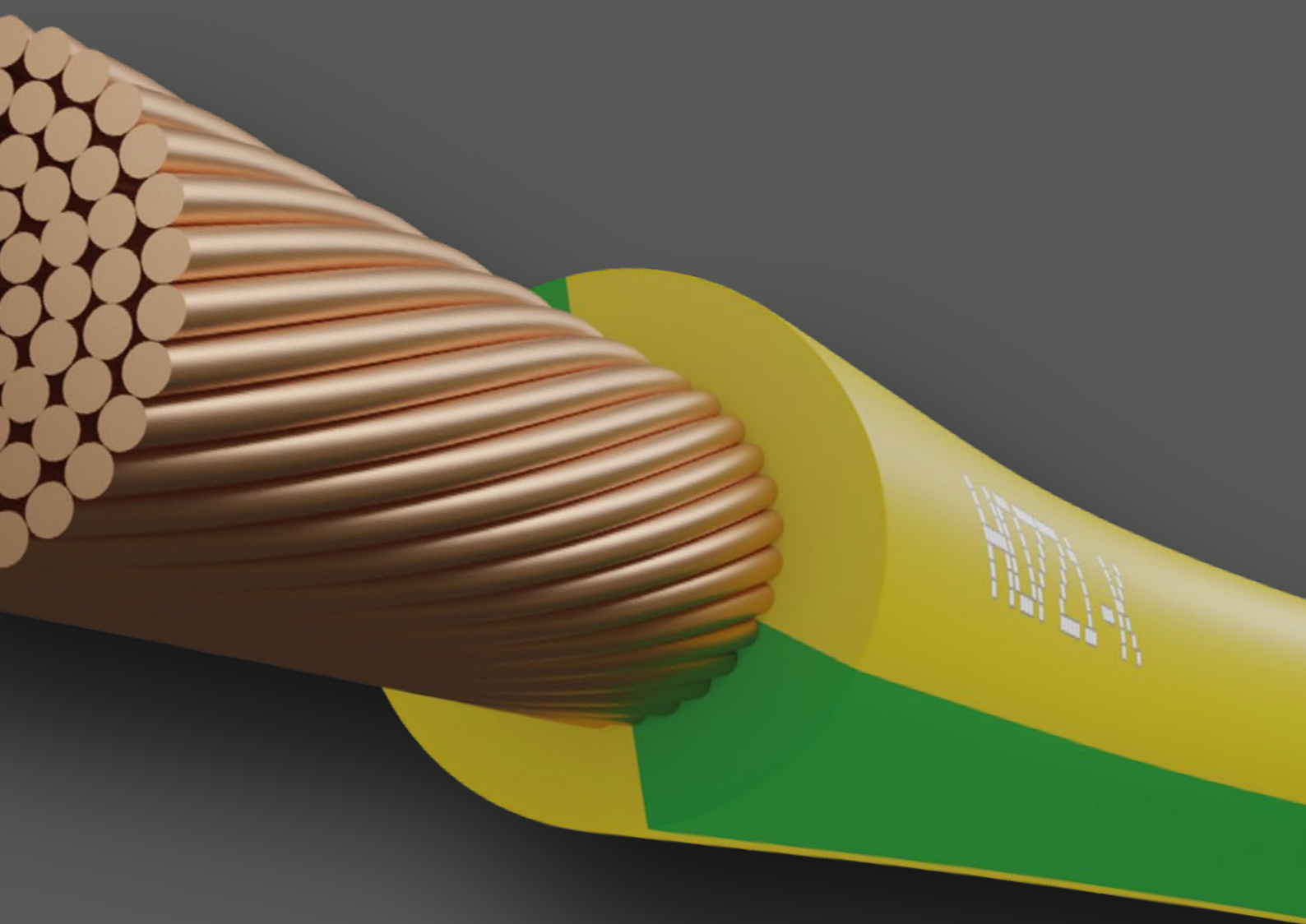
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LOW VOLTAGE CABLES $\leq 750 \text{ V}$

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H07V-U / -R



Application

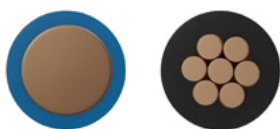
PVC insulated rigid copper cables, suitable for protected fixed installations, in or on lighting fitting and switchgear.

Standards

- EN 50525-2-31
- IEC/EN 60332-1-2
- EN 13501-6 & EN 50575

CPR

- Class: E_{ca}



Design

- Conductor: Copper class 1 to sections up to 6 mm², acc. IEC/EN 60228 (-U)
Copper class 2 to sections above 6 mm², acc. IEC/EN 60228 (-R)
- Insulation: PVC type TI 1
- Available on several colours, examples, BK, BN, BU, GY, GNYE, RED, VT.

Electrical properties at 20°C

Conductor section (mm ²)	Max. d.c. resistance (Ω/km)
1,5	12,1
2,5	7,41
4	4,61
6	3,08
10	1,83
16	1,15
25	0,727
35	0,524
50	0,387
70	0,268
95	0,193
120	0,153
150	0,124
185	0,0991
240	0,0754



Technical Data



Max. conductor temperature (°C): 70



Max. short circuit temperature (°C):
160 (5 minutes)

Minimum bending radius
At installation:
4 x (CD* ≤ 8 mm)
5 x (8 mm < CD* ≤ 12 mm)
6 x (CD* > 12 mm)



Voltage level
450/750 V



Voltage test
2,5 kV a.c. 5 minutes

*CD - Cable Diameter

H07V-U / -R

Construction (Nxmm ²)	Approx. outer diameter (mm)	Nominal weight (kg/km)	Max. permanent current rating (A) ^(*)
1x1,5	2,7	20	15
1x2,5	3,3	33	21
1x4	3,7	48	28
1x6	4,3	64	36
1x10	5,8	108	50
1x16	6,7	164	68
1x25	8,3	256	89
1x35	9,4	343	110
1x50	11,0	464	134
1x70	12,5	660	171
1x95	14,7	903	207
1x120	16,1	1.141	239
1x150	18,1	1.382	262
1x185	20,1	1.747	296
1x240	22,4	2.292	346

(*) Air at 30°C, three loaded conductors, one circuit inside embedded conduits.

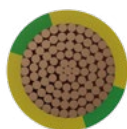
H07V-K



Application

PVC insulated flexible copper cables for fixed wiring applications.

Laying in tubes, exposed or buried in plaster, and in closed installation ducts.



Design

- Conductor: Copper class 5, acc. IEC/EN 60228 (-K)
- Insulation: PVC type TI 1
- Available on several colours, examples, BK, BN, BU, GY, GNYE, RED, VT

Standards

- EN 50525-2-31
- IEC/EN 60332-1-2
- EN 13501-6 & EN 50575

CPR

- Class: E_{ca}



Electrical properties at 20°C

Conductor section (mm ²)	Max. d.c. resistance (Ω/km)
1,5	13,3
2,5	7,98
4	4,95
6	3,30
10	1,91
16	1,21
25	0,780
35	0,554
50	0,386
70	0,272
95	0,206
120	0,161
150	0,129
185	0,106
240	0,0801

Technical Data



Max. conductor temperature (°C): 70



Max. short circuit temperature (°C):
160 (5 minutes)



Minimum bending radius
At installation:
4 x (CD* $\leq$ 8 mm)
5 x (8 mm < CD* $\leq$ 12 mm)
6 x (CD* > 12 mm)



Voltage level
450/750 V



Voltage test
2,5 kV a.c. 5 minutes

*CD - Cable diameter

H07V-K

Construction (Nxmm ²)	Approx. outer diameter (mm)	Nominal weight (kg/km)	Max. permanent current rating (A) ^(*)
1x1,5	3,0	20	15
1x2,5	3,5	35	21
1x4	4,1	45	28
1x6	4,6	65	36
1x10	6,0	110	50
1x16	7,0	160	68
1x25	8,6	250	89
1x35	9,7	340	110
1x50	11,5	480	134
1x70	13,5	655	171
1x95	15,5	880	207
1x120	17,2	1.110	239
1x150	19,0	1.380	262
1x185	21,0	1.680	296
1x240	24,2	2.235	346

^(*) Air at 30°C, three loaded conductors, one circuit inside embedded conduits.

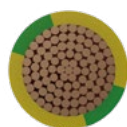
H07Z1-K



Application

LSZH insulated flexible copper cables for fixed wiring applications, lamps, devices, switchgear cabinets and distribution boxes.

Laying in tubes, exposed or buried in plaster, and in closed installation ducts. In building with a high density of people.



Design

- Conductor: Copper class 5, acc. IEC/EN 60228 (-K)
- Insulation: Halogen-free, cross-linked compound TI 7 acc. EN 50363-7
- Available on several colours, examples, BK, BN, BU, GY, GNYE, RED, VT.

Standards

- EN 50525-3-31
- IEC/EN 60332-1-2
- IEC/EN 60332-3-24
- IEC/EN 60754-1/-2
- IEC/EN 61034
- EN 13501-6 & EN 50575

CPR

Available:

- Class: C_{ca}-s_{1b},d₁,a₁
- Class: B2_{ca}-s_{1b},d₁,a₁



Electrical properties at 20°C

Conductor section (mm ²)	Max. d.c. resistance (Ω/km)
1,5	13,3
2,5	7,98
4	4,95
6	3,30
10	1,91
16	1,21
25	0,780
35	0,554
50	0,386
70	0,272
95	0,206
120	0,161
150	0,129
185	0,106
240	0,0801

Technical Data



Max. conductor temperature (°C): 70



Max. short circuit temperature (°C):
160 (5 minutes)

Minimum bending radius
At installation:
4 x (CD* ≤ 8 mm)
5 x (8 mm < CD* ≤ 12 mm)
6 x (CD* > 12 mm)



Voltage level
450/750 V



Voltage test
2,5 kV a.c. 5 minutes

*CD - Cable diameter

H07Z1-K

Construction (Nxmm²)	Approx. outer diameter (mm)	Nominal weight (kg/km)	Max. permanent current rating (A) ^(*)
1x1,5	3,0	20	15
1x2,5	3,5	35	21
1x4	4,1	45	28
1x6	4,6	65	36
1x10	6,0	110	50
1x16	7,0	160	68
1x25	8,6	250	89
1x35	9,7	340	110
1x50	11,5	480	134
1x70	13,5	655	171
1x95	15,5	880	207
1x120	17,2	1.110	239
1x150	19,0	1.380	262
1x185	21,0	1.680	296
1x240	24,2	2.235	346

(*) Air at 30°C, three loaded conductors, one circuit inside embedded conduits.



U-1000 RVFV/XFV



LOW VOLTAGE CABLES 1kV

PVC CABLES

U-1000 R2V/XV	16
U-1000 AR2V/LXV	18
U-1000 RVFV/XAV	20
X1AV	22
U-1000 ARVFV/LXAV	24
LX1AV	26

CU/XLPE/PVC 0,6/1 kV U-1000 R2V 0,6/1 kV XV 0,6/1 kV

Energy distribution cable, 0,6/1 kV.



Application

Power cables for buildings.
Suitable for the distribution of electricity in fixed indoor and outdoor installations, with support, in the air or in tubes, or buried in tubes.



Design

- Conductor: Copper class1 and 2, acc. to EN/IEC 60228
- Insulation: XLPE compound, type DIX 3
- Outer sheath: PVC material
- Outer sheath colour: Black

Standards

- Design: IEC 60502-1
- Design: XP C 32 321
- Flame retardant: EN/IEC 60332-1-2
- Flame retardant: NF C 32070 C2
- CPR: EN 13501-6 & EN 50575
- Colour code: HD 308

CPR

- Class: E_{ca}



Electrical properties at 20°C

Conductor section (mm²)	Max. d.c. resistance (Ω/km)
1,5	12,1
2,5	7,41
4	4,61
6	3,08
10	1,83
16	1,15
25	0,727
35	0,524
50	0,387
70	0,268
95	0,193
120	0,153
150	0,124
185	0,0991
240	0,0754
300	0,0601

Technical Data



Operating temperature (°C):
-15 up to 70



Minimum bending radius
At installation:
15 x cable diameter



Voltage level
0,6/1 kV



Voltage test
3,5 kV a.c. 5 minutes

CU/XLPE/PVC 0,6/1 kV

U-1000 R2V 0,6/1 kV

XV 0,6/1 kV

Energy distribution cable, 0,6/1 kV.

Construction (*) (Nxmm ²)	Approx. outer diameter (mm)	Nominal weight (kg/km)	Max. permanent current rating (A) (**)
1x10	8,0	139	75/58
1x16	8,9	200	100/75
1x25	10,5	297	135/96
1x35	11,6	387	169/115
1x50	13,0	507	207/135
1x70	14,8	715	268/167
1x95	16,7	957	328/197
1x120	18,2	1.205	383/223
1x150	20,5	1.459	444/251
1x185	22,5	1.829	510/281
1x240	24,6	2.366	607/324
1x300	27,4	2.990	703/365
2x1,5	9,1	115	26/25
2x2,5	9,9	146	36/33
2x4	10,8	188	49/43
2x6	11,8	240	63/53
2x10	14,9	392	86/71
2x16	16,8	547	115/91
2x25	20,0	808	149/116
2x35	22,4	1.053	185/139
3G1,5	9,6	133	23/21
3G2,5	10,4	172	32/28
3G4	11,4	227	42/36
3G6	12,4	295	54/44
3G10	14,7	448	75/48
3G16	16,8	649	100/75
3G25	20,3	870	127/96
3G35	22,7	1.141	158/115
3G50	25,6	1.501	192/135
3G70	29,7	2.412	246/167
3G95	33,0	3.200	298/197
3G120	37,0	3.570	346/223
3G150	40,6	4.425	299/251
3G185	52,4	5.370	456/281
3G240	57,9	7.850	538/324

Construction (*) (Nxmm ²)	Approx. outer diameter (mm)	Nominal weight (kg/km)	Max. permanent current rating (A) (**)
4x1,5	10,3	156	23/21
4x2,5	11,2	205	32/28
4x4	12,3	275	42/36
4x6	13,5	361	54/44
4x10	16,1	555	75/48
4x16	18,3	811	100/75
4x25	22,3	1.233	127/96
4x35	24,9	1.624	158/115
4x50	28,3	2.147	192/135
4x70	34,8	3.222	246/167
4x95	37,3	4.116	298/197
4x120	40,5	4.775	346/223
4x150	44,6	5.900	299/251
4x185	51,7	7.215	456/281
4x240	59,7	9.560	538/324
3x50+35	27,7	2.058	192/135
3x70+50	31,8	2.903	246/167
3x95+50	36,2	3.887	298/197
3x120+70	41,4	4.661	346/223
3x150+70	45,9	5.562	299/251
3x185+70	49,6	7.021	456/281
3x240+95	55,6	9.102	538/324
5G1,5	11,0	182	23/21
5G2,5	12,1	242	32/28
5G4	13,3	327	42/36
5G6	14,6	431	54/44
5G10	17,5	617	75/48
5G16	20,0	978	100/75
5G25	24,4	1.501	127/96

(*) The values are valid for construction with or without earth conductor (...X...or ...G...).

(**) Air at 30°C, cables protected from solar radiation / Buried at 20°C, deep 0.7 m and with soil thermal resistivity of 1 k.m/W.

Trademarking, an LAPP Policabos approved brand.

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

AL/XLPE/PVC 0,6/1 kV U-1000 AR2V 0,6/1 kV LXV 0,6/1 kV

Energy distribution cable, 0,6/1 kV.



Application

Power cables for buildings.
Suitable for the distribution of electricity in fixed indoor and outdoor installations, with support, in the air or in tubes, or buried in tubes.

Standards

- Design: IEC 60502-1
- Design: XP C 32 321
- Flame retardant: EN/IEC 60332-1-2
- Flame retardant: NF C 32070 C2
- CPR: EN 13501-6 & EN 50575
- Colour code: HD 308

CPR

- Class: E_{ca}



Design

- Conductor: Aluminium class 2, acc. to EN/IEC 60228
- Insulation: XLPE compound, type DIX 3
- Outer sheath: PVC material
- Outer sheath colour: Black

Electrical properties at 20°C

Conductor section (mm ²)	Max. d.c. resistance (Ω/km)
16	1,91
25	1,20
35	0,868
50	0,641
70	0,443
95	0,320
120	0,253
150	0,206
185	0,164
240	0,125
300	0,100
400	0,0778
500	0,0605
630	0,0469



Technical Data



Operating temperature (°C):
-15 up to 70



Minimum bending radius
At installation:
15 x cable diameter



Voltage level
0,6/1 kV



Voltage test
3,5 kV a.c. 5 minutes

AL/XLPE/PVC 0,6/1 kV U-1000 AR2V 0,6/1 kV LXV 0,6/1 kV

Energy distribution cable, 0,6/1 kV.

Construction (*) (Nxmm ²)	Approx. outer diameter (mm)	Nominal weight (kg/km)	Max. permanent current rating (A) (**)
1x16	9,1	103	77/59
1x25	11,0	144	103/75
1x35	12,0	181	129/90
1x50	13,0	223	159/103
1x70	15,0	301	206/130
1x95	17,0	394	253/154
1x120	18,5	473	296/174
1x150	20,5	590	343/197
1x185	23,0	730	395/220
1x240	25,6	933	471/253
1x300	28,1	1.203	547/286
1x400	32,5	1.585	663/—
1x500	35,0	2.047	770/—
1x630	39,0	2.534	899/—
2x16	16,2	315	91/71
2x25	19,3	456	108/90
2x35	21,6	582	174/108
3G16	17,4	365	77/59
3G25	20,8	532	97/75
3G35	23,3	680	120/90
3G50	25,8	851	146/106
3G70	30,2	1.114	187/130
3G95	34,1	1.539	227/154
3G120	37,8	1.891	263/174
3G150	42,4	2.384	304/197
3G185	47,1	2.982	347/220
3G240	53,3	3.835	409/253

Construction (*) (Nxmm ²)	Approx. outer diameter (mm)	Nominal weight (kg/km)	Max. permanent current rating (A) (**)
4x16	18,7	412	77/59
4x25	22,6	597	97/75
4x35	25,3	772	120/90
4x50	26,4	1.018	146/106
4x70	27,3	1.185	187/130
4x95	31,5	1.533	227/154
4x120	35,0	1.917	263/174
4x150	38,1	2.364	304/197
4x185	42,0	2.931	347/220
4x240	47,2	3.696	409/253
5G16	18,7	412	77/59
5G25	22,6	597	97/75
5G35	25,3	772	120/90
5G50	26,4	1.018	146/106
5G70	27,3	1.185	187/130
5G95	31,5	1.533	227/154
5G120	35,0	1.917	263/174
5G150	38,1	2.364	304/197
5G185	42,0	2.931	347/220
5G240	47,2	3.696	409/253

(*) The values are valid for construction with or without earth conductor (...X...or ...G...).

(**) Air at 30°C, cables protected from solar radiation / Buried at 20°C, deep 0.7 m and with soil thermal resistivity of 1 k.m/W.

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CU/XLPE/PVC/DSTA/PVC 0,6/1 kV U-1000 RVFV 0,6/1 kV XAV 0,6/1 kV

Energy distribution cable, 0,6/1 kV.



Application

Armoured cables for power applications. Suitable for indoor and outdoor, to be installed in ducts, or directly buried. The armour protects the cable from rodent's and mechanical impacts.



Standards

- Design: IEC 60502-1
- Design: XP C 32 322 in general
- Flame retardant: EN/IEC 60332-1-2
- Flame retardant: NF C 32070 C2
- CPR: EN 13501-6 & EN 50575
- Colour code: HD 308

CPR

- Class: E_{ca}

Design

- Conductor: Copper class1 and 2, acc. to EN/IEC 60228
- Insulation: XLPE compound, type DIX 3
- Inner sheath: PVC compound
- Armour: Double steel tapes, applied helicoidally with overlap
- Outer sheath: PVC material
- Outer sheath colour: Black

Electrical properties at 20°C

Conductor section (mm²)	Max. d.c. resistance (Ω/km)
1,5	12,1
2,5	7,41
4	4,61
6	3,08
10	1,83
16	1,15
25	0,727
35	0,524
50	0,387
70	0,268
95	0,193
120	0,153
150	0,124
185	0,0991
240	0,0754
300	0,0601



Technical Data



Operating temperature (°C):
-15 up to 70

Max. conductor temperature (°C): 90

Max. short-circuit conductor temperature (°C): 250 (5min.)



Minimum bending radius
At installation:
12 x cable diameter



Voltage level
0,6/1 kV



Voltage test
3,5 kV a.c. 5 minutes

CU/XLPE/PVC/DSTA/PVC 0,6/1 kV U-1000 RVFV 0,6/1 kV XAV 0,6/1 kV

Energy distribution cable, 0,6/1 kV.

Construction (*) (Nxmm ²)	Approx. outer diameter (mm)	Nominal weight (kg/km)	Max. permanent current rating (A) (**)
2x1,5	12,8	249	26/25
2x2,5	13,7	295	36/33
2x4	14,8	360	49/43
2x6	15,4	412	63/53
2x10	17,1	540	86/71
2x16	19,0	690	115/91
2x25	22,2	990	149/116
2x35	24,5	1.240	185/139
3G1,5	13,3	275	23/21
3G2,5	14,3	330	32/28
3G4	15,4	405	42/36
3G6	16,1	480	54/44
3G10	17,9	641	75/48
3G16	19,9	846	100/75
3G25	22,9	1.235	127/96
3G35	25,9	1.560	158/115
3G50	29,0	2.025	192/135
3G70	33,8	2.870	246/167
3G95	38,9	4.150	298/197
3G120	43,2	5.175	346/223
3G150	47,8	6.190	299/251
3G185	53,0	7.690	456/281
3G240	57,5	9.580	538/324
4x1,5	14,1	310	23/21
4x2,5	15,2	376	32/28
4x4	16,5	471	42/36
4x6	17,3	565	54/44
4x10	19,5	766	75/48
4x16	21,5	1.030	100/75
4x25	25,5	1.505	127/96
4x35	28,1	1.926	158/115
4x50	32,1	2.550	192/135
4x70	37,0	3.600	246/167

Construction (*) (Nxmm ²)	Approx. outer diameter (mm)	Nominal weight (kg/km)	Max. permanent current rating (A) (**)
4x95	43,0	5.166	298/197
4x120	47,2	6.435	346/223
4x150	53,0	7.752	299/251
4x185	58,0	9.595	456/281
4x240	63,0	12.040	538/324
3x50+35	31,5	2.342	192/135
3x70+50	34,2	3.252	246/167
3x95+50	41,0	4.672	298/197
3x120+70	46,0	5.630	346/223
3x150+70	51,3	6.840	299/251
3x185+70	55,0	8.405	456/281
3x240+95	62,0	11.080	538/324
5G1,5	15,0	350	23/21
5G2,5	16,0	426	32/28
5G4	17,6	542	42/36
5G6	18,5	655	54/44
5G10	21,0	900	75/48
5G16	23,2	1.220	100/75
5G25	27,5	1.806	127/96

(*) The values are valid for construction with or without earth conductor (...X...or ...G...).

(**) Air at 30°C, cables protected from solar radiation / Buried at 20°C, deep 0.7 m and with soil thermal resistivity of 1 k.m/W.

Trademarking, an LAPP Policabos approved brand.

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

CU/XLPE/PVC/DATA/PVC 0,6/1 kV X1AV 0,6/1 kV

Energy distribution cable, 0,6/1 kV.



Application

Armoured cables for power applications. Suitable for indoor and outdoor, to be installed in ducts, or directly buried. The armour protects the cable from rodent's and mechanical impacts.

Standards

- Design: IEC 60502-1
- Flame retardant: EN/IEC 60332-1-2
- CPR: EN 13501-6 & EN 50575
- Colour code: HD 308

CPR

- Class: E_{ca}



Design

- Conductor: Copper class1 and 2, acc. to EN/IEC 60228
- Insulation: XLPE compound, type DIX 3
- Inner sheath: PVC compound
- Armour: Double aluminium tapes, applied helicoidally with overlap
- Outer sheath: PVC material
- Outer sheath colour: Black

Electrical properties at 20°C

Conductor section (mm ²)	Max. d.c. resistance (Ω/km)
1,5	12,1
2,5	7,41
4	4,61
6	3,08
10	1,83
16	1,15
25	0,727
35	0,524
50	0,387
70	0,268
95	0,193
120	0,153
150	0,124
185	0,0991
240	0,0754
300	0,0601
400	0,0470



Technical Data



Operating temperature (°C):
-15 up to 70

Max. conductor temperature (°C): 90

Max. short-circuit conductor temperature (°C): 250 (5min.)



Minimum bending radius
At installation:
12 x cable diameter



Voltage level
0,6/1 kV



Voltage test
3,5 kV a.c. 5 minutes

CU/XLPE/PVC/DATA/PVC 0,6/1 kV X1AV 0,6/1 kV

Energy distribution cable, 0,6/1 kV.

Construction (Nxmm ²)	Approx. outer diameter (mm)	Nominal weight (kg/km)	Max. permanent current rating (A) (*)
1x25	15,5	472	135/96
1x35	16,8	587	169/115
1x50	18,2	731	207/135
1x70	20,5	1.000	268/167
1x95	22,5	1.284	328/197
1x120	24,5	1.589	383/223
1x150	26,7	1.887	444/251
1x185	29,3	2.345	510/281
1x240	31,4	2.916	607/324
1x300	34,7	3.703	703/365
1x400	37,8	4.838	823/—

(*) Air at 30°C, cables protected from solar radiation / Buried at 20°C, deep 0.7 m and with soil thermal resistivity of 1 k.m/W.

AL/XLPE/PVC/DSTA/PVC 0,6/1 kV U-1000 ARV FV 0,6/1 kV LXAV 0,6/1 kV

Energy distribution cable, 0,6/1 kV.



Application

Armoured cables for power applications. Suitable for indoor and outdoor, to be installed in ducts, or directly buried. The armour protects the cable from rodent's and mechanical impacts.



Standards

- Design: IEC 60502-1
- Design: XP C 32 322 in general
- Flame retardant: EN/IEC 60332-1-2
- Flame retardant: NF C 32070 C2
- CPR: EN 13501-6 & EN 50575
- Colour code: HD 308

CPR

- Class: E_{ca}

Design

- Conductor: Aluminium class 2, acc. to EN/IEC 60228
- Insulation: XLPE compound, type DIX 3.
- Inner sheath: PVC compound
- Armour: Double steel tapes, applied helicoidally with overlap
- Outer sheath: PVC material
- Outer sheath colour: Black

Electrical properties at 20°C

Conductor section (mm ²)	Max. d.c. resistance (Ω/km)
16	1,91
25	1,20
35	0,868
50	0,641
70	0,443
95	0,320
120	0,253
150	0,206
185	0,164
240	0,125
300	0,100



Technical Data



Operating temperature (°C):
-15 up to 70

Max. conductor temperature (°C): 90

Max. short-circuit conductor temperature (°C): 250 (5min.)



Minimum bending radius
At installation:
12 x cable diameter



Voltage level
0,6/1 kV



Voltage test
3,5 kV a.c. 5 minutes

AL/XLPE/PVC/DSTA/PVC 0,6/1 kV

U-1000 ARV FV 0,6/1 kV

LXAV 0,6/1 kV

Energy distribution cable, 0,6/1 kV.

Construction (*) (Nxmm ²)	Approx. outer diameter (mm)	Nominal weight (kg/km)	Max. permanent current rating (A) (**)
2x16	19	530	91 /76
2x25	22,3	687	108/98
2x35	24,6	838	135/117
3G16	20	556	77/64
3G25	23,4	760	97/82
3G35	26	935	120/98
3G50	29	1.148	146/117
3G70	34	1.608	187/144
3G95	39	2.403	227/172
3G120	43,2	2.913	263/197
3G150	47,5	3.473	304/220
3G185	53	4.292	347/250
3G240	58,7	5.247	409/290
4x16	22	865	77/64
4x25	25,6	1.157	97/82
4x35	28,5	1.412	120/98
4x50	31,6	1.749	146/117
4x70	33,3	1.840	187/144
4x95	34,5	2.289	227/172
4x120	39,7	2.831	263/197
4x150	43	3.342	304/220
4x185	47,1	4.066	347/250
4x240	52,5	5.000	409/290
5G16	23,6	990	77/64
5G25	25	1.648	97/82
5G35	28	3.323	120/98
3x50+35	33,3	1.731	146/117

Construction (*) (Nxmm ²)	Approx. outer diameter (mm)	Nominal weight (kg/km)	Max. permanent current rating (A) (**)
3x70+50	34,2	1.783	187/144
3x95+50	36,1	2.222	227/172
3x120+70	39,7	2.671	263/197
3x150+70	43	3.135	304/220
3x185+70	47,3	3.677	347/250
3x240+95	52,5	4.631	409/290

(*) The values are valid for construction with or without earth conductor (...X...or ...G...).

(**) Air at 30°C, cables protected from solar radiation / Buried at 20°C, deep 0.7 m and with soil thermal resistivity of 1 k.m/W.

Trademarking, an LAPP Policabos approved brand.

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AL/XLPE/PVC/DATA/PVC 0,6/1 kV LX1AV 0,6/1 kV

Energy distribution cable, 0,6/1 kV.



Application

Aluminium armoured cables for power applications. Suitable for indoor and outdoor, to be installed in ducts, or directly buried.

The armour protects the cable from rodent's and mechanical impacts.



Design

- Conductor: Aluminium class 2, acc. to EN/IEC 60228
- Insulation: XLPE compound, type DIX 3
- Inner sheath: PVC compound
- Armour: Double aluminium tapes, applied helicoidally with overlap
- Outer sheath: PVC material
- Outer sheath colour: Black

Standards

- Design: IEC 60502-1
- Flame retardant: EN/IEC 60332-1-2
- CPR: EN 13501-6 & EN 50575
- Colour code: HD 308

CPR

- Class: E_{ca}



Electrical properties at 20°C

Conductor section (mm ²)	Max. d.c. resistance (Ω/km)
16	1,91
25	1,20
35	0,868
50	0,641
70	0,443
95	0,320
120	0,253
150	0,206
185	0,164
240	0,125
300	0,100
400	0,0778
500	0,0605
630	0,0469

Technical Data



Operating temperature (°C):
-15 up to 70

Max. conductor temperature (°C): 90

Max. short-circuit conductor temperature (°C): 250 (5min.)



Minimum bending radius
At installation:
15 x cable diameter



Voltage level
0,6/1 kV



Voltage test
3,5 kV a.c. 5 minutes

AL/XLPE/PVC/DATA/PVC 0,6/1 kV LX1AV 0,6/1 kV

Energy distribution cable, 0,6/1 kV.

Construction (Nxmm ²)	Approx. outer diameter (mm)	Nominal weight (kg/km)	Max. permanent current rating (A) (*)
1x50	19,0	455	159/117
1x70	21,0	565	206/144
1x95	23,1	710	253/172
1x120	25,0	825	296/197
1x150	27,0	980	343/220
1x185	29,1	1.155	395/250
1x240	32,2	1.420	471/290
1x300	35,5	1.785	547/326
1x400	39,5	2.200	663/—
1x500	42,5	2.737	770/—
1x630	46,5	3.355	899/—

(*) Air at 30°C, cables protected from solar radiation / Buried at 20°C, deep 0.7 m and with soil thermal resistivity of 1 k.m/W.





LOW VOLTAGE CABLES

1kV

SCREENED CABLES

HN 33-S-34
VHV

30
32

Cable type HN 33-S-34 0,6/1 kV



Application

Cables appropriated for control and measurement signaling circuits, and power supply circuits.
Suitable for indoor and industrial installations, outdoor installation in gutters or pipes.
Low voltage rigid copper cables, provided with protection against electromagnetic interference, and fire retardant.

Standards

- HN 33-S-34 in general
- HD 604 S1
- NF C 32070 C1
- IEC/EN 60332-1-2



Design

- Conductor: Copper class 2, acc. to IEC/EN 60228
- Insulation: PVC compound
- Color code: Number identification
- Inner sheath: PVC compound
- Screen: corrugated copper tape applied with overlap
- Outer sheath: PVC compound
- Outer sheath color: Black

Electrical properties at 20°C

Conductor section (mm²)	Max. d.c. resistance (Ω/km)
1,5	12,1
2,5	7,41
4	4,61
6	3,08
10	1,83
16	1,15
25	0,727
35	0,524
50	0,387
70	0,268
95	0,193
120	0,153
150	0,124
185	0,0991
240	0,0754
300	0,0601



Technical Data



Operating temperature (°C):
-15 up to 70



Minimum bending radius
At installation:
15 x cable diameter – (cables 1x)
12 x cable diameter – (cables Mx)



Voltage level
0,6/1 kV



Voltage test
2 kV a.c. 5 minutes

Cable type HN 33-S-34 0,6/1 kV

Construction (Nxmm ²)	Approx. outer diameter (mm)	Nominal weight (kg/km)	Max. permanent current rating (A) (*)
1x95	21,1	1.242	285/335
1x150	25,3	1.830	385/425
1x185	25,8	2.165	450/480
1x240	34,6	2.798	535/550
2x2,5	16,2	351	33/52
2x4	18,0	447	44/67
2x6	18,6	505	58/86
2x10	20,6	640	79/115
2x16	22,5	817	82/125
2x25	26,0	1.160	110/150
4x1,5	16,6	372	17/28
4x2,5	17,8	447	25/40
4x4	20,0	586	34/52
4x6	20,7	681	44/66
4x10	23,3	928	61/88
7x1,5	19,2	500	—
7x2,5	20,7	615	—
7x4	24,1	865	—
7x6	25,2	1.033	—
12x1,5	23,4	746	—
12x2,5	25,4	935	—
14x1,5	24,2	815	—
14x2,5	26,4	1.030	—
19x1,9	26,4	995	—
19x2,5	28,9	1.272	—

(*) Air at 40°C, cables protected from solar radiation / Buried at 25°C, deep 0.7 m and with soil thermal resistivity of 1 k.m/W.

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Cu2/PVC/CTS/PVC 0,6/1 kV VHV 0,6/1 kV

Energy distribution cable, 0,6/1 kV.



Application

Signal, control and instrumentation for auxiliary services.

Suitable for industrial areas, power plants, substations and buildings.

Can be installed indoor, outdoor inducts or directly buried.



Design

- Conductor: copper class 2, acc. to EN/IEC 60228.
- Insulation: PVC compound, type PVC/A
- Inner sheath: PVC compound
- Screen: copper tape, applied helicoidally
- Outer sheath: PVC compound, type ST2
- Outer sheath colour: Black

Standards

- Design: IEC 60502-1
- Design: REN F-CTCB Rev. D 04.10.21
- Flame retardant: EN/IEC 60332-1-2
- CPR: EN 13501-6 & EN 50575
- Colour code: HD 308

CPR

- Class: E_{ca}



Electrical properties at 20°C

Conductor section (mm ²)	Max. d.c. resistance (Ω/km)
1,5	12,1
2,5	7,41
4	4,61
6	3,08
10	1,83
16	1,15
25	0,727
35	0,524
50	0,387
70	0,268
95	0,193
120	0,153
150	0,124
185	0,0991
240	0,0754
300	0,0601

Technical Data



Operating temperature (°C):
-15 up to 70



Minimum bending radius
At installation:
15 x cable diameter – (cables 1x)
12 x cable diameter – (cables Mx)



Voltage level
0,6/1 kV



Voltage test
2 kV a.c. 5 minutes

Cu2/PVC/CTS/PVC 0,6/1 kV VHV 0,6/1 kV

Energy distribution cable, 0,6/1 kV.

Construction (*) (Nxmm ²)	Approx. outer diameter (mm)	Nominal weight (kg/km)	Max. permanent current rating (A) (**)
1x50	18,0	757	167/116
1x70	19,2	990	216/143
1x95	21,5	1.286	264/169
1x120	23,0	1.557	308/192
1x150	25,0	1.844	356/217
1x185	27,0	2.262	409/243
1x240	29,5	2.878	485/280
1x300	33,0	3.629	561/316
1x400	37,0	4.977	656/—
2x1,5	12,0	265	22/21
2x2,5	13,0	312	30/29
2x4	14,5	385	40/37
2x6	16,0	465	51/46
2x10	17,0	540	70/60
2x16	19,0	700	94/79
2x25	22,0	1.005	119/99
2x35	24,0	1.260	148/119
2x50	27,5	1.670	180/140
2x70	31,0	2.240	232/173
2x95	35,0	2.985	282/204
2x120	39,5	3.720	328/231
3G1,5	12,5	290	19/18
3G2,5	13,3	335	25/24
3G4	15,0	440	34/30
3G6	16,2	485	43/38
3G10	18,0	550	60/50
3G16	21,3	990	80/64
3G25	23,0	1.262	101/82
3G35	24,0	1.436	126/98
3G50	29,5	1.980	153/116
3G70	31,2	2.600	196/143
3G95	35,7	3.485	238/169

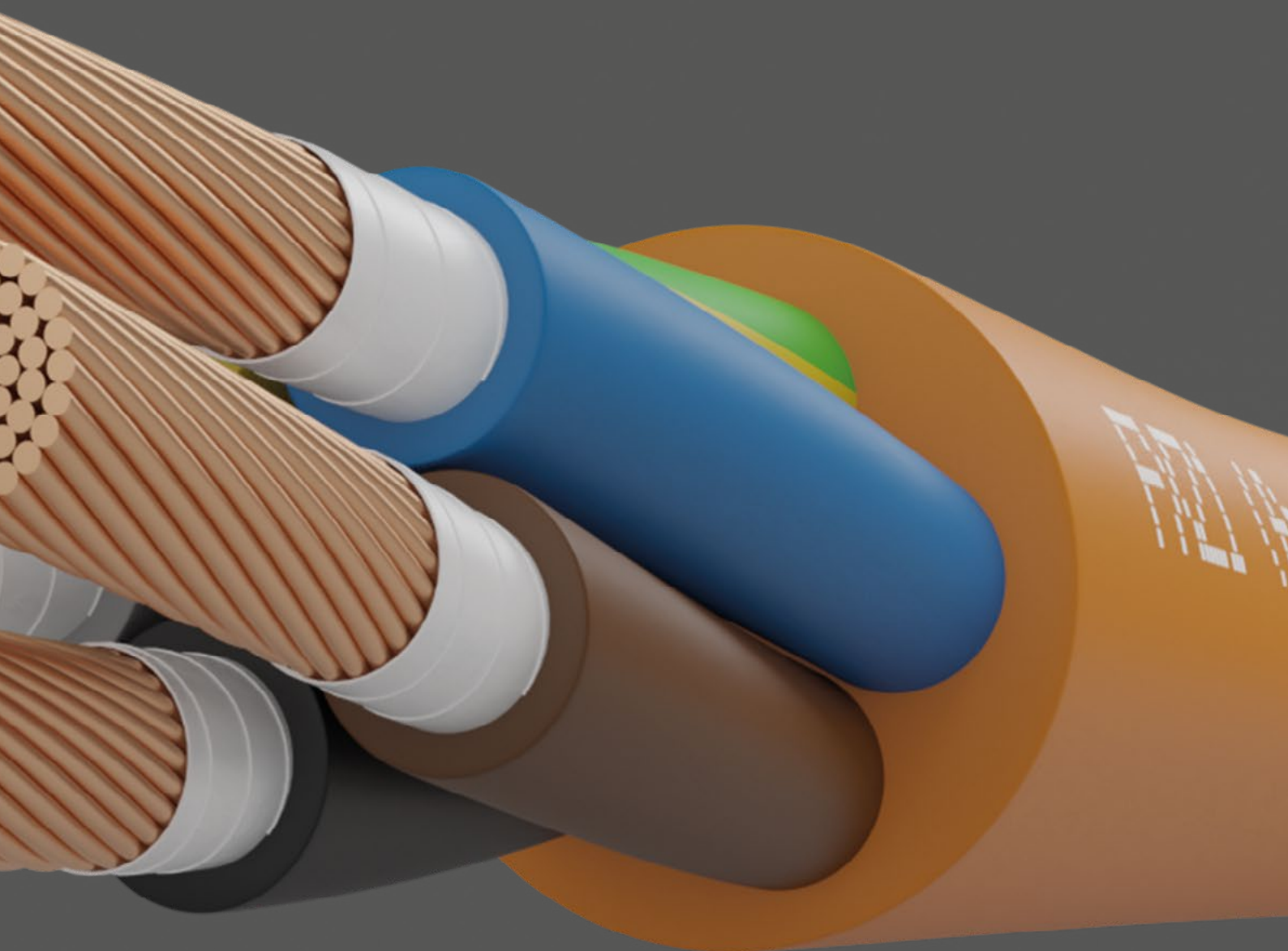
Construction (*) (Nxmm ²)	Approx. outer diameter (mm)	Nominal weight (kg/km)	Max. permanent current rating (A) (**)
4x1,5	13,4	325	19/18
4x2,5	14,3	385	25/24
4x4	16,0	465	34/30
4x6	17,5	577	43/38
4x10	20,0	790	60/50
4x16	21,5	1.072	80/64
4x25	25,5	1.554	101/82
4x35	26,0	1.842	126/98
4x50	30,5	2.500	153/116
4x70	34,0	3.386	196/143
4x95	40,0	4.585	238/169
3x25+16	24,5	1.435	101/82
3x35+16	26,0	1.655	126/98
3x50+16	30,3	2.270	153/116
3x70+35	34,0	3.065	196/143
3x95+50	40,0	4.100	238/169
3x120+70	43,0	5.185	276/192
3x150+70	46,6	6.105	39/217
3x185+95	51,0	7.575	364/243
3x240+120	58,0	9.760	430/280
5G1,5	14,0	386	19/18
5G2,5	15,2	440	25/24
5G4	17,5	545	37/30
5G6	19,0	680	43/38
5G10	21,2	930	60/50
5G16	23,5	1.270	80/64
5G25	28,0	1.875	101/82
5G35	31,0	2.430	126/98
5G50	36,5	3.325	153/116
5G70	40,5	4.467	196/143

(*) The values are valid for construction with or without earth conductor (...X...or ...G...).

(**) Air at 30°C, cables protected from solar radiation / Buried at 20°C, deep 0.7 m and with soil thermal resistivity of 1 k.m/W.

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LOW VOLTAGE CABLES 1kV

LSZH CABLES

RZ1-K (AS) / FXZ1 (frt,zh)	36
RZ1 (AS) AL / LXZ1 (frt,zh)	38
XZ1 (frs,zh)	40
RZ1-K (AS+) / FXZ1 (frs,zh)	42

Cu5/XLPE/LSZH 0,6/1 kV

RZ1-K (AS) 0,6/1 kV

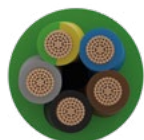
FXZ1 (frt,zh) 0,6/1 kV

Energy distribution cable, 0,6/1 kV.



Application

Power cables for buildings, with high fire safety requirements.
Suitable for the distribution of electricity in fixed indoor and outdoor installations, with support, in the air or in tubes.



Design

- Conductor: Flexible copper class 5, acc. to EN/IEC 60228
- Insulation: XLPE compound, type DIX 3
- Outer sheath: LSZH compound, acc. to UNE 21123-4
- Outer sheath colour: Green

Electrical properties at 20°C

Conductor section (mm²)	Max. d.c. resistance (Ω/km)
1,5	13,3
2,5	7,98
4	4,95
6	3,30
10	1,91
16	1,21
25	0,780
35	0,554
50	0,386
70	0,272
95	0,206
120	0,161
150	0,129
185	0,106
240	0,0801
300	0,0641
400	0,0486

Standards

- Design: UNE 21123-4
- Design: IEC 60502-1
- Flame-retardant: EN/IEC 60332-1-2
- Fire-retardant: EN/IEC 60332-3-24
- Halogen-free: EN/IEC 60754-1
- Corrosivity of gases: EN/IEC 60754-2
- Smoke opacity: EN/IEC 61034
- CPR: EN 13501-6 & EN 50575
- Colour codes: HD 308

CPR

- Class: C_{ca}-S_{1b}d₁a₁



Technical Data



Operating temperature (°C):
-15 up to 70



Minimum bending radius
4 x (CD* < 25 mm)
5 x (25 mm ≤ CD* ≤ 50 mm)
6 x (CD* > 50 mm)



Operating voltage
0,6/1 kV



Voltage test
3,5 kV

*CD - Cable diameter

Cu5/XLPE/LSZH 0,6/1 kV **RZ1-K (AS) 0,6/1 kV** **FXZ1 (frt,zh) 0,6/1 kV** Energy distribution cable, 0,6/1 kV.

Construction (*) (Nxmm ²)	Approx. outer diameter (mm)	Nominal weight (kg/km)	Max. permanent current rating (A) (**)
1x1,5	5,7	46	21/27
1x2,5	6,1	60	28/36
1x4	6,7	96	38/46
1x6	7,3	104	48/58
1x10	7,9	130	64/96
1x16	8,9	189	86/125
1x25	10,9	284	120/160
1x35	12,0	371	145/190
1x50	13,8	518	180/230
1x70	15,9	708	230/280
1x95	17,5	930	285/335
1x120	19,3	1.178	335/380
1x150	21,6	1.486	385/425
1x185	24,2	1.768	450/480
1x240	26,9	2.321	535/550
1x300	30,1	2.899	615/620
1x400	35,0	3.900	748/689
2x1,5	8,8	107	25/36
2x2,5	9,7	138	33/52
2x4	10,8	182	44/67
2x6	11,9	234	58/86
2x10	14,1	351	79/115
2x16	16,1	502	103/150
2x25	19,3	735	138/190
2x35	21,7	980	170/230
2x50	24,9	1.340	200/270
2x70	26,6	1.615	255/325
2x95	27,5	2.071	310/385
3G1,5	9,3	124	17/28
3G2,5	10,3	163	25/40
3G4	11,5	219	34/51

Construction (*) (Nxmm ²)	Approx. outer diameter (mm)	Nominal weight (kg/km)	Max. permanent current rating (A) (**)
3G6	12,7	285	44/66
3G10	15,0	435	61/88
3G16	17,2	635	82/115
3G25	20,0	900	110/106
3G35	24,3	1.296	135/180
3G50	26,3	1.560	167/152
3G70	28,7	2.154	210/260
3G95	31,1	2.792	260/310
4x1,5	10,1	146	17/28
4x2,5	11,2	195	25/40
4x4	12,5	264	34/51
4x6	13,8	348	44/66
4x10	16,4	536	61/88
4x16	19,1	801	82/115
4x25	23,3	1.196	110/150
4x35	26,4	1.603	135/180
4x50	31,0	2.273	165/192
4x70	32,2	2.889	210/260
4x95	35,4	3.712	260/310
5G1,5	10,9	171	17/28
5G2,5	12,1	230	25/40
5G4	13,6	312	34/51
5G6	15,1	414	44/66
5G10	18,0	644	61/88
5G16	20,9	965	82/115
5G25	25,7	1.453	110/150
5G35	29,0	1.948	135/180
5G50	33,2	2.740	165/192
5G70	38,7	3.892	210/260
5G95	43,1	5.005	260/310

(*) The values are valid for construction with or without earth conductor (...X...or ...G...).

(**) Air at 40°C, cables protected from solar radiation / Buried at 25°C, deep 0.7 m and with soil thermal resistivity of 1 k.m/W.

Trademarking, an LAPP Policabos approved brand.

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

AL2/XLPE/LSZH 0,6/1 kV

RZ1 (AS) AL 0,6/1 kV

LXZ1 (frt,zh) 0,6/1 kV

Energy distribution cable, 0,6/1 kV.



Application

Power aluminium cables for buildings, with high fire safety requirements. Suitable for the distribution of electricity in fixed indoor and outdoor installations, with support, in the air or in tubes.



Design

- Conductor: Aluminium class 2, acc. to EN/IEC 60228.
- Insulation: XLPE compound.
- Outer sheath: LSZH compound, acc. to UNE 21123-4.
- Outer sheath colour: Green

Standards

- Design: UNE 21123-4
- Design: IEC 60502-1
- Flame-retardant: EN/IEC 60332-1-2
- Fire-retardant: EN/IEC 60332-3-24
- Halogen-free: EN/IEC 60754-1
- Corrosivity of gases: EN/IEC 60754-2
- Smoke opacity: EN/IEC 61034
- CPR: EN 13501-6 & EN 50575
- Colour codes: HD 308

CPR

- Class: C_{ca}-S_{1b},d₁,a₁



Electrical properties at 20°C

Conductor section (mm ²)	Max. d.c. resistance (Ω/km)
16	1,91
25	1,20
35	0,868
50	0,641
70	0,443
95	0,320
120	0,253
150	0,206
185	0,164
240	0,125
300	0,100
400	0,0778
500	0,0605
630	0,0469

Technical Data



Operating temperature (°C):
-15 up to 70



Minimum bending radius
15 x cable diameter



Voltage level
0,6/1 kV



Voltage test
3,5 kV

AL2/XLPE/LSZH 0,6/1 kV

RZ1 (AS) AL 0,6/1 kV

LXZ1 (frt,zh) 0,6/1 kV

Energy distribution cable, 0,6/1 kV.

Construction (*) (Nxmm ²)	Approx. outer diameter (mm)	Nominal weight (kg/km)	Max. permanent current rating (A) (**)
1x16	9,1	104	77/59
1x25	11,0	146	103/75
1x35	12,0	183	129/90
1x50	13,0	225	159/103
1x70	15,0	305	206/130
1x95	17,0	400	253/154
1x120	18,5	477	296/174
1x150	20,5	595	343/197
1x185	23,0	735	395/220
1x240	25,6	940	471/253
1x300	28,1	1.210	547/286
1x400	32,5	1.566	663/—
1x500	35,0	2.045	770/—
1x630	39,0	2.560	899/—
2x16	16,2	327	91/71
2x25	19,4	450	108/90
2x35	21,6	592	174/108
3G16	17,4	365	77/59
3G25	20,8	532	97/75
3G35	23,3	680	120/90
3G50	25,8	851	146/106
3G70	30,2	1.114	187/130
3G95	34,1	1.539	227/154
3G120	37,8	1.891	263/174
3G150	42,4	2.384	304/197
3G185	47,1	2.982	347/220
3G240	53,3	3.835	409/253

Construction (*) (Nxmm ²)	Approx. outer diameter (mm)	Nominal weight (kg/km)	Max. permanent current rating (A) (**)
4x16	18,7	412	77/59
4x25	22,6	597	97/75
4x35	25,3	772	120/90
4x50	28,4	1.185	146/106
4x70	35,3	1.533	187/130
4x95	39,7	1.917	227/154
4x120	44,9	2.364	263/174
4x150	48,8	2.931	304/197
4x185	53,8	3.696	347/220
4x240	60,8	5.533	409/253
5G16	20,8	545	77/59
5G25	24,6	629	97/75
5G35	28,3	772	120/90
5G50	30,4	1.018	146/106
5G70	35,3	1.185	187/130
5G95	39,5	1.533	227/154
5G120	43,0	1.917	263/174
5G150	51,1	2.364	304/197
5G185	55,0	2.931	347/220

(*) The values are valid for construction with or without earth conductor (...X...or ...G...).

(**) Air at 30°C, cables protected from solar radiation / Buried at 20°C, deep 0.7 m and with soil thermal resistivity of 1 k.m/W.

Trademarking, an LAPP Policabos approved brand.

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Cu/Mica Tape/XLPE/LSZH 0,6/1 kV XZ1 (frs,zh) 0,6/1 kV

Energy distribution cable, 0,6/1 kV.



Application

Power cables for buildings, with high fire safety requirements.

Suitable for the distribution of electricity in fixed indoor and outdoor installations, with support, in the air or in tubes.

Standards

- Design: IEC 60502-1
- Flame-retardant: EN/IEC 60332-1-2
- Fire-retardant: EN/IEC 60332-3-24
- Fire-resistance: EN 50200 (PH 120)
- Fire-resistance: IEC 60331
- Halogen-free: EN/IEC 60754-1
- Corrosivity of gases: EN/IEC 60754-2
- Smoke opacity: EN/IEC 61034
- Colour codes: HD 308



Design

- Conductor: Copper class1 and 2, acc. to EN/IEC 60228
- Insulation: Mica tape and XLPE compound, type DIX 3
- Outer sheath: LSZH compound
- Outer sheath colour: Orange

Electrical properties at 20°C

Conductor section (mm ²)	Max. d.c. resistance (Ω/km)
1,5	12,1
2,5	7,41
4	4,61
6	3,08
10	1,83
16	1,15
25	0,727
35	0,524
50	0,387
70	0,268
95	0,193
120	0,153
150	0,124
185	0,0991
240	0,0754
300	0,0601
400	0,0470



Technical Data



Operating temperature (°C):
-15 up to 70



Minimum bending radius
4 x (CD* < 25 mm)
5 x (25 mm ≤ CD* ≤ 50 mm)
6 x (CD* > 50 mm)



Operating voltage
0,6/1 kV



Voltage test
3,5 kV a.c.

*CD - Cable diameter

Cu/Mica Tape/XLPE/LSZH 0,6/1 kV XZ1 (frs,zh) 0,6/1 kV

Energy distribution cable, 0,6/1 kV.

Construction (*) (Nxmm ²)	Approx. outer diameter (mm)	Nominal weight (kg/km)	Max. permanent current rating (A) (**)
1x4	6,7	96	38/46
1x6	7,3	104	48/58
1x10	7,9	130	64/96
1x16	8,9	189	86/125
1x25	10,9	284	120/160
1x35	12,0	371	145/190
1x50	13,8	518	180/230
1x70	15,9	708	230/280
1x95	17,5	930	285/335
1x120	19,3	1.178	335/380
1x150	21,6	1.486	385/425
1x185	24,2	1.768	450/480
1x240	26,9	2.321	535/550
1x300	30,1	2.899	615/620
2x1,5	8,8	107	25/36
2x2,5	9,7	138	33/52
2x4	10,8	182	44/67
2x6	11,9	234	58/86
2x10	14,1	351	79/115
2x16	16,1	502	103/150
2x25	19,3	735	138/190
2x35	21,7	980	170/230
2x50	24,9	1.340	200/270
2x70	26,6	1.615	255/325
2x95	27,5	2.071	310/385
3G1,5	9,3	124	17/28
3G2,5	10,3	163	25/40
3G4	11,5	219	34/51
3G6	12,7	285	44/66
3G10	15,0	435	61/88

Construction (*) (Nxmm ²)	Approx. outer diameter (mm)	Nominal weight (kg/km)	Max. permanent current rating (A) (**)
3G16	17,2	635	82/115
3G25	20,0	900	110/106
3G35	24,3	1.296	135/180
3G50	26,3	1.560	167/152
3G70	28,7	2.154	210/260
3G95	31,1	2.792	260/310
4x1,5	10,1	146	17/28
4x2,5	11,2	195	25/40
4x4	12,5	264	34/51
4x6	13,8	348	44/66
4x10	16,4	536	61/88
4x16	19,1	801	82/115
4x25	23,3	1.196	110/150
4x35	26,4	1.603	135/180
4x50	31,0	2.273	165/192
4x70	32,2	2.889	210/260
4x95	35,4	3.712	260/310
5G1,5	10,9	171	17/28
5G2,5	12,1	230	25/40
5G4	13,6	312	34/51
5G6	15,1	414	44/66
5G10	18,0	644	61/88
5G16	20,9	965	82/115
5G25	25,7	1.453	110/150
5G35	29,0	1.948	135/180
5G50	33,2	2.740	165/192
5G70	38,7	3.892	210/260
5G95	43,1	5.005	260/310

(*) The values are valid for construction with or without earth conductor (...X...or ...G...).

(**) Air at 40°C, cables protected from solar radiation / Buried at 25°C, deep 0.7 m and with soil thermal resistivity of 1 k.m/W.

Trademarking, an LAPP Policabos approved brand.

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Cu5/Mica Tape/XLPE/LSZH 0,6/1 kV

RZ1-K (AS+) 0,6/1 kV

FXZ1 (frs,zh) 0,6/1 kV

Energy distribution cable, 0,6/1 kV.



Application

Power cables for buildings, with high fire safety requirements.

Suitable for the distribution of electricity in fixed indoor and outdoor installations, with support, in the air or in tubes.



Standards

- Design: UNE 211025
- Design: IEC 60502-1
- Flame-retardant: EN/IEC 60332-1-2
- Fire-retardant: EN/IEC 60332-3-24
- Fire-resistance: EN 50200 (PH 120)
- Fire-resistance: IEC 60331
- Halogen-free: EN/IEC 60754-1
- Corrosivity of gases: EN/IEC 60754-2
- Smoke opacity: EN/IEC 61034
- Colour codes: HD 308

Design

- Conductor: Flexible copper class 5, acc. to EN/IEC 60228
- Insulation: Mica tape and XLPE compound, type DIX 3
- Outer sheath: LSZH compound
- Outer sheath colour: Orange

Electrical properties at 20°C

Conductor section (mm²)	Max. d.c. resistance (Ω/km)
1,5	13,3
2,5	7,98
4	4,95
6	3,30
10	1,91
16	1,21
25	0,780
35	0,554
50	0,386
70	0,272
95	0,206
120	0,161
150	0,129
185	0,106
240	0,0801
300	0,0641
400	0,0486



Technical Data



Operating temperature (°C):
-15 up to 70



Minimum bending radius
4 x (CD* < 25 mm)
5 x (25 mm ≤ CD* ≤ 50 mm)
6 x (CD* > 50 mm)



Operating voltage
0,6/1 kV



Voltage test
3,5 kV

*CD - Cable diameter

Cu5/Mica Tape/XLPE/LSZH 0,6/1 kV**RZ1-K (AS+) 0,6/1 kV****FXZ1 (frs,zh) 0,6/1 kV**

Energy distribution cable, 0,6/1 kV.

Construction (*) (Nxmm ²)	Approx. outer diameter (mm)	Nominal weight (kg/km)	Max. permanent current rating (A) (**)
1x4	6,7	96	38/46
1x6	7,3	104	48/58
1x10	7,9	130	64/96
1x16	8,9	189	86/125
1x25	10,9	284	120/160
1x35	12,0	371	145/190
1x50	13,8	518	180/230
1x70	15,9	708	230/280
1x95	17,5	930	285/335
1x120	19,3	1.178	335/380
1x150	21,6	1.486	385/425
1x185	24,2	1.768	450/480
1x240	26,9	2.321	535/550
1x300	30,1	2.899	615/620
2x1,5	8,8	107	25/36
2x2,5	9,7	138	33/52
2x4	10,8	182	44/67
2x6	11,9	234	58/86
2x10	14,1	351	79/115
2x16	16,1	502	103/150
2x25	19,3	735	138/190
2x35	21,7	980	170/230
2x50	24,9	1.340	200/270
2x70	26,6	1.615	255/325
2x95	27,5	2.071	310/385
3G1,5	9,3	124	17/28
3G2,5	10,3	163	25/40
3G4	11,5	219	34/51
3G6	12,7	285	44/66
3G10	15,0	435	61/88

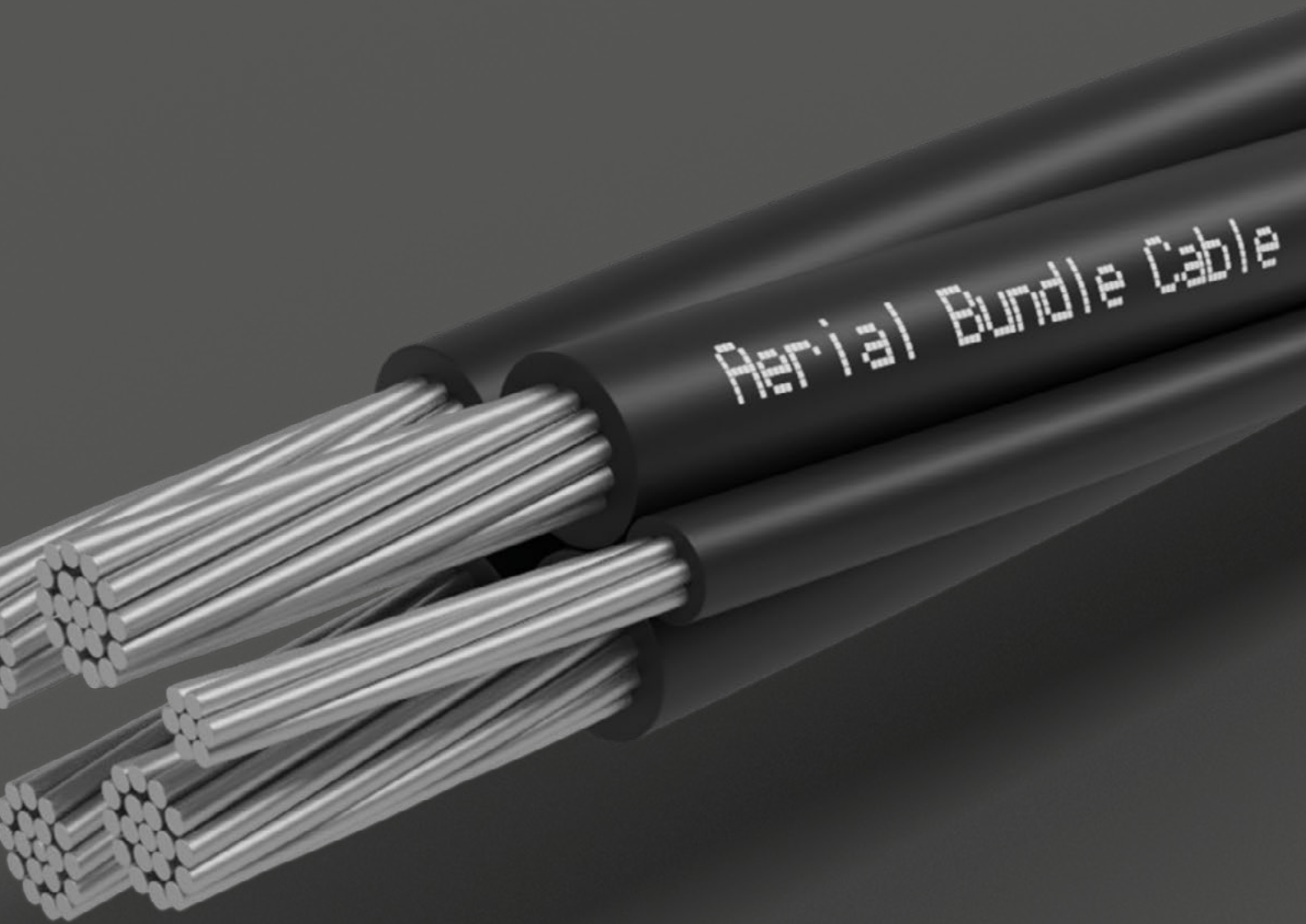
Construction (*) (Nxmm ²)	Approx. outer diameter (mm)	Nominal weight (kg/km)	Max. permanent current rating (A) (**)
3G16	17,2	635	82/115
3G25	20,0	900	110/106
3G35	24,3	1.296	135/180
3G50	26,3	1.560	167/152
3G70	28,7	2.154	210/260
3G95	31,1	2.792	260/310
4x1,5	10,1	146	17/28
4x2,5	11,2	195	25/40
4x4	12,5	264	34/51
4x6	13,8	348	44/66
4x10	16,4	536	61/88
4x16	19,1	801	82/115
4x25	23,3	1.196	110/150
4x35	26,4	1.603	135/180
4x50	31,0	2.273	165/192
4x70	32,2	2.889	210/260
4x95	35,4	3.712	260/310
5G1,5	10,9	171	17/28
5G2,5	12,1	230	25/40
5G4	13,6	312	34/51
5G6	15,1	414	44/66
5G10	18,0	644	61/88
5G16	20,9	965	82/115
5G25	25,7	1.453	110/150
5G35	29,0	1.948	135/180
5G50	33,2	2.740	165/192
5G70	38,7	3.892	210/260
5G95	43,1	5.005	260/310

(*) The values are valid for construction with or without earth conductor (...X...or ...G...).

(**) Air at 40°C, cables protected from solar radiation / Buried at 25°C, deep 0.7 m and with soil thermal resistivity of 1 k.m/W.

Trademarking, an LAPP Policabos approved brand.

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LOW VOLTAGE CABLES

1kV

AERIAL CABLES

LXS

46

LXS AERIAL BUNDLE CABLE



Application

Outdoor installation in overhead lines.
Cables for overhead power distribution systems mainly for public distribution.
Excellent resistance to external agents.
Not suitable for installation directly underground.

Standards

- HD 626
- NP 3528
- DMA C-33-209/N – EDP
- NF C 33209



Design

- Conductor: Aluminium class 2, acc. to IEC/EN 60228
- Insulation: Cross-linked polyethylene (XLPE), type TIX8
- Outer sheath colour: Black



Electrical and mechanical properties at 20°C

Conductor section (mm²)	Max. d.c. resistance (Ω/km)	Min. Tensile load (N)
16	1,91	1.900
25	1,20	3.000
35	0,868	4.200
50	0,641	6.000
70	0,443	8.400
95	0,320	11.400

Technical Data



Operating temperature (°C):
90



Minimum bending radius
4 x cable diameter



Voltage level
0,6/1 (1,2) kV



Voltage test
4 kV a.c.

LXS

AERIAL BUNDLE CABLE

Construction (Nxmm ²)	Approx. outer diameter (mm)	Nominal weight (kg/km)	Max. permanent current rating (*) (A)
2x16	15,0	136	85
4x16	18,0	272	75
4x25	18,5	407	100
4x35	24,7	544	120
4x50	28,0	714	150
4x70	29,0	892	190
4x95	37,0	1.325	230
5x16	21,0	325	75
4x25+16	19,0	475	100
4x35+16	25,0	612	120
4x50+16	25,0	785	150
4x70+16	30,0	1.090	190
4x95+16	36,0	1.404	230
4x70+2x16	36,0	1.135	190
4x95+2x16	40,0	1.455	230
3x35+54,6+16	29,0	685	120
3x35+54,6+2x16	32,0	750	120
3x50+54,6+16	31,0	800	150
3x50+54,6+2x16	33,0	865	150
3x70+54,6+16	34,0	1.030	190
3x70+54,6+2x16	36,0	1.095	190
3x95+54,6+16	38,0	1.265	230
3x95+54,6+2x16	40,0	1.330	230

(*) At open air 40°C.

(**) Other constructions on request.





LOW VOLTAGE CABLES 1kV

ÖLFLEX® POWER

ÖLFLEX® POWER RV-K

50

ÖLFLEX® POWER RV-K

Power and control cable with rated voltage 0,6/1 kV for fixed installation



Application

ÖLFLEX® POWER RV-K cables are suitable as power and control cables for fixed installation subject to medium mechanical load conditions. These cables are suitable to permanent indoor and outdoor fixed installations, can be buried in tubes or conduits, and directly in ground⁽¹⁾.

As power and connecting cable for control systems in machine tools, plant engineering and construction, industrial machinery, production and assembly lines, public buildings and similar applications.



Design

- Conductor: fine wire strands of class 5 copper, acc. IEC/EN 60228
- Insulation: cross-linked polyethylene (XLPE)
- Stranding: cores are stranded in layers
- Outer sheath: PVC compound ST₂ acc. to IEC 60502-1
- Outer sheath colour: black (similar RAL 9005)
- Outer sheath mark:
“LAPP KABEL STUTTGART ÖLFLEX® POWER RV-K <AZ G/X Q> 0,6/1 kV AENOR CE
<batch order> <traceability code> XXXXm”

Standards

- IEC 60502-1
- UNE 21123-2
- Colour code: acc. to HD 308 S2
- Flame-retardant: IEC/EN 60332-1-2
- CPR: EN 13501-6 & EN 50575

CPR

- DoP Number: UILCPRDoP19_15510001-1_A
- Range: Define on DoP
- Class: E_{ca}



Technical Data



Temperature (°C)

Fixed installation:
-15 up to 90
During installation:
-5 up to 70



Minimum bending radius

4 x (OD* ≤ 8 mm)
5 x (8 mm < OD* ≤ 12 mm)
6 x (OD* > 12 mm)



Nominal voltage (U₀/U)

0,6/1 kV (1,5 kV d.c.)



Voltage test

3,5 kV a.c. (5 minutes)

⁽¹⁾ Cables can be directly buried in ground, according with methods of installation are D1 or D2, of the standard IEC 60364-5-52.

*OD - Outer diameter

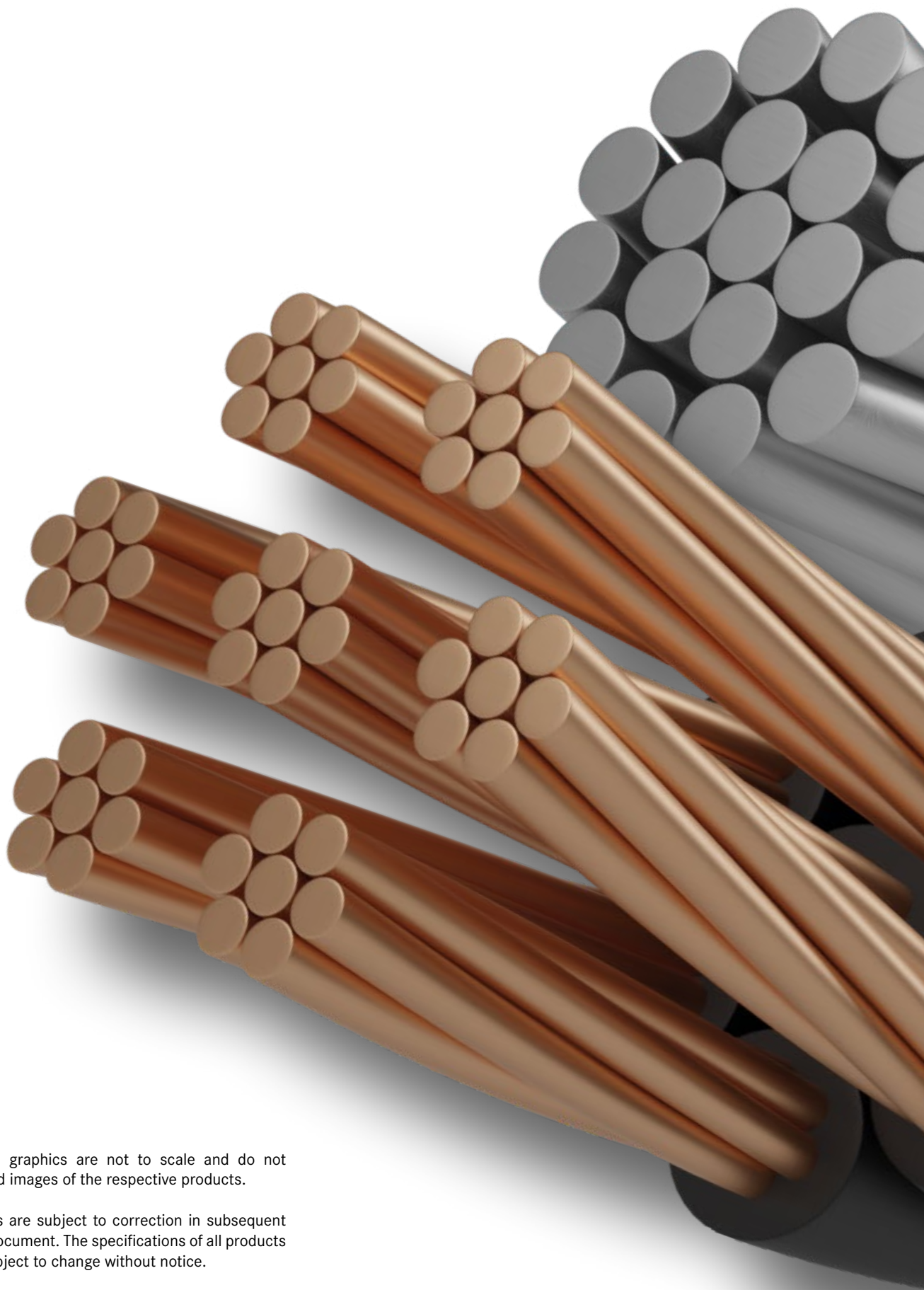
ÖLFLEX® POWER RV-K

Power and control cable with rated voltage 0,6/1 kV for fixed installation

Construction (Nxmm ²)	Approx. outer diameter (mm)	Nominal weight (kg/km)	Max. permanent current rating ^(*) (A)
1x6	7,3	102	48/58
1x10	8,3	147	64/96
1x16	9,3	214	86/125
1x25	11,1	314	120/160
1x35	12,4	419	145/185
1x50	14,2	578	185/190
1x70	16,1	795	230/280
1x95	17,7	1.046	285/335
1x120	19,1	1.320	335/380
1x150	21,4	1.687	385/425
1x185	24,0	1.985	450/480
1x240	26,7	2.596	535/550
1x300	30,3	3.183	615/620
2x4	10,6	186	44/67
3G1.5	9,2	123	17/28
3G2.5	10,1	169	25/40
3G4	11,3	230	34/52
3G6	12,5	301	44/66
3G10	14,3	456	61/88
3G16	16,7	657	82/115
3G25	20,3	991	110/150
3x240+1G120	58,7	9.220	468/370
4G1.5	10,7	168	17/28
4G2.5	11,8	223	25/40
4G4	13,1	303	34/52
4G6	14,4	399	44/66
4G10	16,8	595	61/88
4G16	19,3	859	82/115
4G25	23,7	1.318	110/150
4G35	26,8	1.771	135/152
4G50	31,4	2.482	165/180
4G70	35,7	3.630	210/260
4G95	38,2	4.170	259/222
4G120	40,5	5.328	301/253
4G150	44,6	7.560	353/286
4G185	49,3	8.114	400/350
4G240	56,6	10.656	468/370

Construction (Nxmm ²)	Approx. outer diameter (mm)	Nominal weight (kg/km)	Max. permanent current rating ^(*) (A)
5G1.5	11,5	186	17/28
5G2.5	12,7	253	25/40
5G4	14,2	350	31/52
5G6	15,7	468	44/66
5G10	18,4	705	61/88
5G16	21,1	1.027	82/115
5G25	26,1	1.582	110/150
5G35	29,4	2.134	135/180
7G1.5	13,1	260	NA/NA
7G2.5	14,5	335	NA/NA
12G1.5	16,2	362	NA/NA
12G2.5	18,1	506	NA/NA
19G1.5	18,9	523	NA/NA
19G2.5	21,2	743	NA/NA
24G1.5	21,5	643	NA/NA
24G2.5	24,2	919	NA/NA

(*) Air at 40°C, cables protected from solar radiation / Buried at 25°C, deep 0.7 m and with soil thermal resistivity of 1 k.m/W.

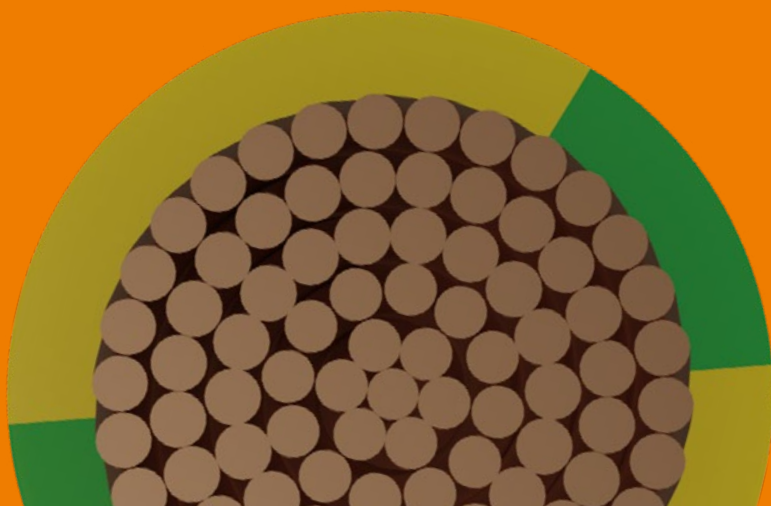


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LAPP Portugal

Av. Pedro Álvares Cabral, 2, Lugar da Capa Rota
2710-144 SINTRA • PORTUGAL

Phone: +351 219 178 640 • Fax: +351 219 178 649
www.policabos.pt • comercial@policabos.pt