Draka

A brand of the Prysmian Group

Power Cables 1kV

AXPK 1 core and AXPK-Plus 1 core 0,6/1(1,2) kV

Application

Power cable with round, stranded and compacted aluminium conductor. For fixed installations indoors and outdoors, perfect for ploughing down. Suitable for cable ducts and house connections. AXPK-Plus is the halogen-free version of the cable.

Alternative Product Name

AXPK-HF

Flame retardance

IEC 60332-1-2 - Vertical flame propagation for a single insulated wire or cable

Standard

SFS 4879	0.6/1 kV XLPE insulated Al and Cu wires.
IEC 60502-1	Construction Standard
IEC 60228	Conductor standard
CENELEC HD 603 Part 5 Section D	Harmonized construction standard
HD 60364-5-52	Selection and erection of electrical equipment. Wiring systems.

Construction

Cable Shape	Round.
Conductors	Round, compacted and stranded aluminium conductor.
Conductor Insulation	Black XLPE compound.
Outer Sheath	AXPK - black PVC. AXPK-Plus - black self-extinguishing halogen-free compound.
Example of marking on sheath	AXPK-PLUS 1KV DRAKA "Date and time", metre marked.

Temperature

Maximum operating Temperature	90°C
Temparatures at installation [°C]	Lowest cable temperature during installation: -20 °C below 0 °C extra precaution is recommended.

Features

CPR Performance class	Eca
UV resistance	Good.

Electrical

Max. short circuit temperature [°C]	250°C

Product Name	Standard delivery length [m]	Delivery Package	EAN/GTIN number	SAP Number
AXPK 1x185	1000	K14	4741532130006	20074943
AXPK 1x240	1000	K18	4741532130013	20074944
AXPK 1x300	1000	K18	4741532130020	20074945
AXPK 1x400	1000	K18	4741532130037	20074946
AXPK 1x500	500	K18	4741532130044	20074947
AXPK 1x630	500	K18	4741532130051	20074948
AXPK 1x800	500	K20	4741532130068	20074949
AXPK 1x1000	500	K22	4741532130075	20074950
AXPK-PLUS 1x300	500	K14	6410006019311	20140296
AXPK-PLUS 1x800	500	K20	6410006019359	20140297

Product Name	Cable diameter [mm]	Conductor weight [kg/km]	Cable weight [kg/km]	Min.permissible bending radius during laying [m]	Min. permissible bending radius at final installation [m]
AXPK 1x185	24	484	745	0.36	0.26
AXPK 1x240	27	635	940	0.405	0.29
AXPK 1x300	29	795	1150	0.435	0.31
AXPK 1x400	32	1020	1460	0.48	0.34
AXPK 1x500	36	1312	1850	0.54	0.38
AXPK 1x630	40	1692	2350	0.6	0.42
AXPK 1x800	44	2160	2950	0.66	0.47
AXPK-PLUS 1X300	29	795	2160	0.435	0.31
AXPK-PLUS 1X800	44	2160	2900	0.66	0.47

Product Name	Max. permissible pulling force with a pulling grip [kN]	Max. permissible pulling force with a pulling eye [kN]	Max. DC resistance of conductor * [Ω/km]
AXPK 1x185	2.7	9.2	0.164
AXPK 1x240	3.6	12	0.125
AXPK 1x300	4.5	15	0.1
AXPK 1x400	6	20	0.0778
AXPK 1x500	7	20	0.0605
AXPK 1x630	8.1	20	0.0467
AXPK 1x800	8.5	20	0.0367
AXPK-PLUS 1X300	4.5	15	0.1
AXPK-PLUS 1X800	8.5	20	0.0367
*Conductor temperature 20°C			

Product Name	Current rating in ground* [A]; flat formation	Current rating in ground* [A]; trefoil formation	Current rating in air** [A]; flat formation	Current rating in air** [A]; trefoil formation	Max. permisible short circuit current for 1 sec.***, kA
AXPK 1x185	431	334	500	390	17.5
AXPK 1x240	511	397	600	470	22.6
AXPK 1x300	525	460	690	560	28.3
AXPK 1x400	711	558	815	640	37.6
AXPK 1x500	821	647	930	750	47
AXPK 1x630	954	754	1110	880	59.2
AXPK 1x800	1000	830	1300	1050	75.6
AXPK-PLUS 1X300	525	460	690	555	28.3
AXPK-PLUS 1X800	1000	830	1300	1040	75.6

*Conductor temperature 70°C **Conductor temperature 90°C

*** Initial temperature of conductor before short circuit 90°C, final temperature of conductor after short circuit 250°C

The ratings are based on the following conditions : maximum conductor temperature- 90°C, ground temperature- 15°C, air temperature- 25°C, thermal resistivity of soil- 1,0 °Km/W, depth of burial-0,7m