



■ 2XS(F)YR(AL)Y-TGK

General Properties

Cable Code	:	2XS(F)YR(AL)Y-WTC
Applied Standard/Standards	:	IEC 60502-2
Rated Voltage (U ₀ /U)	(kV) :	6/10
Maximum Operating Voltage (U _m)	(kV) :	12
Number of Cores and Nominal Cross Section	(mm ²) :	1x120/16

Electrical Properties

Power Freq. Test Voltage (5 min.)	(kV-rms) :	21
Impulse Test Voltage	(kV-Peak) :	75
DC Resistance of Conductor at 20°C (Max.)	(Ω/km) :	0,153
Maximum Continuous Conductor Temperature	(°C) :	90
DC Resistance at Maximum Operating Voltage	(Ω/km) :	0,196
Operating Capacitance at 20°C	(uF/km) :	0,322
Operating Inductance (Flat formation) Operating Inductance (Trefoil formation) Partial Discharge (Max.) (at 1.73U ₀)	(mH/km) :	0,592
	(mH/km) :	0,372
	(pC) :	10

Short-Circuit Current Ratings

Maximum Short-Circuit Conductor Temperature	(°C) :	250
Maximum Short-Circuit Current (Phase to Phase) ^[2] (for 1 second)	(kA) :	17,1
Maximum Short-Circuit Current (Phase to Ground) ^[3] (for 1 second)	(kA) :	2,1

Current Carrying Capacities

In Air ^[4]	Flat formation	(A) :	481
	Trefoil formation	(A) :	407
Under Ground ^[5]	Flat formation	(A) :	404
	Trefoil formation	(A) :	364

Flammability Ratings

Flame Retardant	:	According to IEC 60332-1
Fire Retardant	:	N/A

Watertightness

Conductor	:	Yes
Metallic Screen	:	Yes
Radially	:	No

Cable Marking^[1] : [TGK - METER] [CABLE TYPE] [NUMBER OF CORES] [CROSS SECTION] [OPERATING VOLTAGE] [APPLIED STANDART] [PRODUCTION DATE]

21.10.2019

Notes:

- [1] As per customer request.
- [2] Initial Temperature: 90°C, Final Temperature: 250°C
- [3] Initial Temperature: 70°C, Final Temperature: 200°C
- [4] Load Factor: 1, Ambient Temperature: 30°C
- [5] Load Factor: 0.7, Depth of laying: 70 cm, Soil Temperature: 20°C, Thermal resistivity of soil: 1 K.m/W

- Die obigen Werte entsprechen den Angaben des Herstellers und können nicht garantiert werden.
- Wir behalten uns das Recht vor, Änderungen ohne vorherige Ankündigung vorzunehmen.
- Alle anderen Größen oder andere Ausführungen auf Anfrage
- The above values correspond to the manufacturer's specifications and are not guaranteed.
- We reserve the right to change details without notice.
- Any other sizes or any other designs available on request.

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Construction		Number of Cores and Nominal Cross Section				
		1x120/16	1x185/16	1x240/16	1x500/25	1x630/35
Conductor	Type	Electrolytic Pure Copper (Compacted, Watertight)				
	Class	Class 2: Stranded - according to IEC 60228				
Inner Semiconducting Screen	Type	Semiconductive XLPE				
	Thickness (Nom.) (mm)	0.5 ±0.1	0.5 ±0.1	0.5 ±0.1	0,6	0,6
	Thickness (Minimum Point) (mm)	0,3	0,3	0,3	0,3	0,3
Insulation	Type	Cross-linked Polyethylene (XLPE)				
	Thickness (Nom.) (mm)	3,4	3,4	3,4	3,4	3,4
	Thickness (Min.) (mm)	2,96	2,96	2,96	2,96	2,96
Outer Semiconducting Screen	Type	Semiconductive XLPE				
	Thickness (Nom.) (mm)	0,45	0,45	0,45	0,45	0,45
	Thickness (Minimum Point) (mm)	0,3	0,3	0,3	0,3	0,3
	Over Diameter of Screen (Nom.) (mm)	21,7	24,5	27,1	35,8	39,5
Metallic Screen	Type	Concentric Copper Wires + Copper Equalizing Tape				
	Geometrical Area (mm ²)	16	16	16	25	35
Core Lay-up	Assembly	Single Core				
	Filler	N/A	N/A	N/A	N/A	N/A
	Colours for core identification[1]	Black	Black	Black	Black	Black
Inner Sheath	Type	Polyvinyl chloride (PVC)				
	Colour	Black	Black	Black	Black	Black
	Thickness (Nom.) (mm)	1,2	1,2	1,2	1,3	1,4
Armour	Type	Aluminium Wire				
	Wire Diameter (Nom.) (mm)	2	2	2	2,5	2,5
Outer Sheath	Type	Polyvinyl chloride (PVC)				
	Colour	Red	Red	Red	Red	Red
	Thickness (Nom.) (mm)	2	2,1	2,2	2,5	2,7
	Thickness (Min.) (mm)	1,6	1,69	1,77	2,03	2,2
	Overall Diameter (Nom.) (mm)	35 ± 2	38 ± 2	41 ± 2	51 ± 3	55 ± 3
Drum	Type	Wooden				
	Flange (Wheel) Diameter	1700 mm	1900 mm	2000 mm	1900 mm	1900 mm
	Outside Width	1100 mm	1100 mm	1160 mm	1100 mm	1100 mm
	Delivery Length	1000 mm	1000 mm	1000 mm	500 mm	500 mm
	Minimum Bending Radius	700 mm	760 mm	820 mm	1020 mm	1100 mm
Other Properties	Lowest Installation Temperature	-5	-5	-5	-5	-5
	Net Weight	2250 +/- 3%(kg/km)	2960 +/- 3%(kg/km)	3600 +/- 3% (kg/km)	6560 +/- 3% (kg/km)	8140 +/- 3% (kg/km)
	Gross Weight	2750 +/- 3% (kg/drum)	3510 +/- 3% (kg/drum)	4180 +/- 3% (kg/drum)	3830 +/- 3% (kg/drum)	4620 +/- 3% (kg/drum)

