

Cable type

PANZERLITE 0.6/1 kV
Polyurethane double sheathed cables

Main application

Extra heavy duty control cables. For application with high mechanical stresses (i.e.: tensile and torsion simultaneously applied). This cable has been developed and designed in order to meet special conditions of application, in particular where small dimensions and light weight are mandatory.

Among its main features we can define:

- . small dimension
- . lighter weight
- . excellent flexibility
- . high operating speed (up to 240m/1')
- . excellent mechanical performances

Construction

Conductor:	Plain copper conductor, extraflexible better than cl.6 IEC 60228 Specially designed for mobile application.
Insulation:	Thin thickness made of special tecnopolyme Special compound with improved electrical and mechanical characteristics
Cores identification:	White with printed numbers
Central strainer:	Made of aramidic yarns To be used as support element
Laying-up:	Short lay length for better flexibility In maximum 3 layer
Separation (if any):	Tape(s)
Inner sheath:	Made of special polyurethane A combination of high flexibility characteristics with improved abrasion and tear resistance characteristics
Antitwisting protection:	Textile braid of synthetic yarns Firmly bonded between inner and outer sheath
Outer sheath:	Made of Yellow special polyurethane A combination of high flexibility characteristics with improved abrasion and tear resistance characteristics
Marking:	PALAZZO - PANZERLITE 0,6/1 kV n. of cores x cross section

Parameters

Electrical	Rated voltage	U ₀ /U = 0,6/1 kV
	Maximum permissible operating voltage in AC systems	U _m = 1,2 kV
	AC test voltage over 5 minutes	2,5 kV
	Current Carrying Capacity	According to DIN VDE 0298 part 4
Thermal	Fully flexible operation	- 30 °C
	Fixed installation	- 40 °C
	Maximum permissible operating temperature of the conductor	90 °C
	Short-circuit temperature of the conductor	200 °C
Mechanical	Tensile load	2000 N (up to 4000 N on request)
	Minimum bending radii	According to DIN VDE 0298 part 3
	Reeling operation '250 °C	No restriction. Consult the manufacturer if speed exceeds 240 m/min
Chemical	Resistance to oil	According to VDE / IEC standard
	Weather resistance	Unrestricted use outdoor and indoor, UV resistant, moisture resistant.

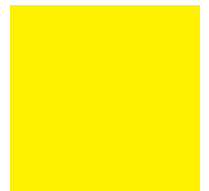
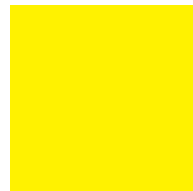
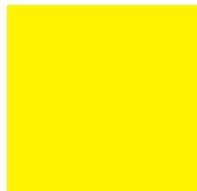


Table 1: PANZERLITE 0.6/1 kV

N. of cores and nominal section (n-mm ²)	Conductor		Overall diameter		Net weight approx. kg/km	Maximum permissible tensile force N	Laid straight A	Current carrying capacity at 30 °C *					Short circuit current 80 ° to 200 °C kA
	D.C. resist. at 20 °C Ohm/km	nom. diam. mm	min. mm	max. mm				Suspended in free air A	Spiral or 1 layer A	2 layer A	3 layer A		
18x2.5	8,21	2,2	20,5	23,0	805	2000	30	32	24	18	15	0,32	
37x2.5	8,21	2,2	29,5	32,5	1540	4000	30	32	24	18	15	0,32	
44x2.5	8,21	2,2	32,5	35,5	1780	4000	30	32	24	18	15	0,32	

*Tabulated values are valid up to three loaded conductors with or without earth
Derating factor shall be used for multicore cables depending on loaded conductors. See page 47

Other sizes or configurations are available on specific request.