Reeling cables in line with VDE 0250 part. 813

Cable type

PANZERFLAT-ELX 3,6/6 ÷ 12/20 kV
with or without integrated OPTICAL FIBRES - (N)TMFLCGEWÖU; H.V. reeling cable 6 to 20 kV

Main application

Flexible H.V. reeling combined power with or without data transmission cables for use on connecting movable parts of machine tools and any material handling equipment (i.e. Stacker/reclaimer, ship to shore crane, container crane, also suitable for festoon system).
Suitable for any energy supply on cable reels systems associated from mechanical stresses, frequent bending operation (IN ONE PLANE ONLY) in movement with medium acceleration.

Construction

Conductor:	Tinned copper conductor, flexible cl. 5 IEC 60228 Specially designed for mobile application
Insulation:	Micro filtered HEPR rubber compound better than 3GI3 New specially developed compound with improved electrical and mechanical characteristics
Cores identification:	Main cores: natural colour with black semiconductive layer Earth core: - of the same size of main conductor identified by yellow/green colour of insulation - splitted on the main cores
Field control:	- Conductor screen: semiconductive layer - Insulation screen: semiconductive layer of special compound Applied with insulation
Identification:	Printed numbers on semiconductor layer
Metallic screen:	Tinned copper wire braid on phase cores
Cores arrangement	Parallel Fiber optic module (if any) in the centre
Separation (if any):	Tape(s)
Outer sheath:	Red polychloroprene based compound UV resistant, oil and chemical resistant better than 5GM3 compound
Marking:	PALAZZO - PANZERFLAT-ELX *rated voltage nc x cross section year of manufacturing*

Parameters

Electrical	Rated voltage	Uo/U = 3,6/6 kV to 12/20 kV
	Maximum permissible operating voltage in AC systems	Um = 7,2 kV to 24 kV
	AC test voltage over 5 minutes	11 kV to 29 kV according to VDE 0250 part 813
	Current Carrying Capacity	According to DIN VDE 0298 part 4
Data transmission (if any)	Fibre-optics for absolute immunity from electrical interferences.	6, 12, 18 fibre-optics
	Main type: graded index 62,5/125	In a structure composed by 6 loose tubes
	Available also graded index 50/125 and monomode E9/125	(1, 2 or 3 fibres per tube)*
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	250 °C
Mechanical	Tensile load	Up to 15 N/mm²
	Minimum bending radii	According to DIN VDE 0298 part 3
	Reeling operation	No restriction. Only on monospiral reel without deflection Consult the manufacturer if speed exceeds 120 m/min
Chemical	Resistance to oil	According to VDE / IEC standard
	Weather resistance	Unrestricted use outdoor and indoor, UV resistant, moisture resistant.