

HTC-50-1-1, 0.5Lz/1.5 (CEH50)

Coaxial FRNC-High Voltage Low Power Cables acc. customer Specification



Application

see product overview

Standards

CERN CTS

Flame resistance

Vertical Flame Spread: IEC 60332-1-2 or IEC 60332-2-2 (if cross-section < 0.5mm²), max 0.425m char

Acidity: IEC 60754-2 (pH≥4.3, k≤10μS/mm)

Smoke opacity: IEC 61034-1/2 (>60% transmittance)

Construction

Inner conductor	stranded copper wires, tinned, 7x 0.17, diameter 0.51 mm
Semiconductive layer	semiconductive PE, diameter 0.70 mm
Insulation	XPE crosslinked, diameter 1.50 mm
Semiconductive layer	semiconductive PE, diameter 1.7 mm
Outer conductor	copper braid, bare
Wrapping	Mica tape
Sheath	FRNC, flame retardant, non corrosive Copolymer, diameter 3.2 mm
Colour	red RAL 3002

Mechanical properties

Minimum bending radius (during Installation)	without load	5 x D (D= outer diameter)
	with load	10 x D (D= outer diameter)
Temperature range		-25° C to + 70° C
Radiation resistance	Radiation Index 5.7 (0.5MGy, 5·10 ⁷ rad)	

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Electrical properties

at 20°C

DC resistance	Inner conductor	$\leq 120 \Omega/\text{km}$
	Outer conductor	$\leq 42.8 \Omega/\text{km}$
Mutual capacitance		167 pF/m
Characteristic impedance	1 MHz	42 Ω
Operating voltage		5 kV _{DC}
Test voltage	Inner/Outer conductor	12.5 kV _{DC}
Insulation resistance		$\geq 5 \text{ G}\Omega \cdot \text{km}$
Partial discharge test		5.3 kV _{rms}
Discharge pulse magnitude		$\leq 20 \text{ pC}$

Technical data

Product code	CTS	Type	Brand name	Outer diameter mm	Weight kg/km	Standard delivery length m	Drum size *PWD	Tensile force N
New will come	**4.31.51.750.1	0.5Lz/1.5	CEH50	3.2	15.5	1000	400/120/280	42

*PWD (Plywood drum)

****)Old**
Product
code:
60013942