

TAA3, 0.8/5.7

Coaxial and Triaxial FRNC-High Voltage Low Power Cables acc. to CERN and DESY Specifications



Application

see product overview

Standards

acc. to CERN-Specification ST-IE-GD/90-220

Flame resistance

IEC 60332-3-24

Construction

Inner conductor	copperclad steel wire, bare, diameter 0.8 mm
Insulation	PE, diameter 4.15 mm
Semiconductive layer	semiconductive PE, diameter 5.7 mm
1 st braid	copper wire braid, tinned
Inner sheath	PE
Wrapping	PET-foil
2 nd braid	copper wire braid, tinned
Wrapping	AI-PET-AI-foil
Sheath	FRNC, flame retardant, non corrosive Copolymer, diameter 10.2 mm
Colour	orange, RAL 2011

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		$\geq 10^6 \text{Gy} (= 10^8 \text{rad})$
Fire propagation test		cables < 10 mm acc. to IEC 60332-1
		cables > 10 mm acc. to IEC 60332-2-24
Corrosivity		acc. to IEC 60754-2
Smoke density		acc. to IEC 61034





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Electrical properties

at 20°C

DC resistance	Inner conductor	-
	1 st braid	9.8 Ω/km
	2 nd braid	6.5 Ω/km
Mutual capacitance		ca. 75 pF/m
Characteristic impedance		$70 \Omega \pm 10 \%$
Operating voltage	conductor/1st screen	3.5 kV _{DC}
	1 st screen/2 nd screen	0.5 kV _{DC}
Test voltage	conductor/1st screen	10 kV _{DC}
	1 st screen/2 nd screen	1 kV _{DC}
Insulation resistance	conductor/1st screen	≥ 10 GΩ*km
	1 st screen/2 nd screen	≥ 100 MΩ*km

Technical data

Product code	Desig- nation	Туре	Brand name	Outer diameter	Weight	Standard delivery length	Drum size	Gross weight	Copper content	Tensile force
				mm	kg/km	m	*OWD	kg		N
					37			,		

^{*}OWD (One-way drum)

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