



SeaTex® 10

DNV·GL SH

Certificate No: TAE00001JX

Description and application

SeaTex®10 is a low loss flexible halogen free communications coaxial cable especially designed for use on ships, offshore platforms, wet or dry environments as well as indoor and outdoor installations. Its outer jacket is made of SHF2 material which insures high resistance to oils, UV and weathering. SeaTex® 10 provides a long service life in tough environmental conditions. Additionally, its flexibility and small bending radius allows its installation in limited spaces which makes it the ideal solution for marine applications.

Design

Inner conductor: Stranded copper wire 7 X 1.0 (10 AWG)
Insulation of foamed Polyethylene (PE) with skin
Ø 2,85 mm (0,112 in dia)
Ø 7,20 mm (0,283 in dia)

• Copper foil overlapped, applied longitudinally

• Shield braiding of bare copper wires

• Coverage about 75% Ø 7,90 mm (0,311 in dia)

Jacket

• Special thermoplastic copolymer (FRNC) BK Ø (10,2 \pm 0,2) mm (0,402 \pm 0,008 in dia)

Electrical data at 20°C

Conductor resistance	≤ 3,5 Ohm/km
• Insulation resistance	≥ 10 GOhm*km
Characteristic impedance	(50±2) Ohm
Capacitance (1 kHz)	78 nF/km
• Screening attenuation 1 GHz (DIN EN 50289-1-6 / triaxial method)	≥ 90 dB
Relative velocity of propagation	85 %
• Test voltage (wire/screen rms 50Hz 1 min)	1000 V

Frequency (MHz)	10	100	500	1000	2000	2400	3000	4000	5000	6000	8000
Attenuation typ. (dB/100m) (dB/100ft)	1,2 (0,37)	4 (1,22)	9,6 (2,93)	14,2 (4,33)	21,2 (6,46)	23,6 (7,19)	26,7 (8,14)	31,1 (9,48)	35,2 (10,73)	39 (11,89)	46,4 (14,14)
Mean. Power (W) at 40°C	3960	1210	510	350	230	210	180	150	130	120	100

Mechanical and thermal characteristics

- Conductor/Screen material acc. to DIN EN 13602 Cu-ETP-R...
- Screen material acc. to DIN EN 13602 Cu-ETP-A...
- Insulating material acc. to. ISO 6722-1 part 5.14, class "A", Bending diameter 80 mm
- Jacket material acc. to IEC 60092-360 (IEC 60092-359) SHF2
- Flame retardant acc. to IEC 60332-1-2 and IEC 60332-3-22 (Cat. A)

Other characteristics

- RoHS compliant (Directive 2011/65/EC)
- Low Smoke, Fire retardant, Zero Halogen
- Corrosivity of fumes acc. to IEC 60754-2
- Smoke-density acc. to IEC 61034
- UV-resistant
- Oil resistant acc. to EN60811-2-1 (24 hours/100°C)
- Permissible temperature range
 - Transport and fixed installation: -55°C (-67°F) up to 85°C (185°F)
 - Installation and flexible use: -40°C (-40°F) up to 85°C (185°F)

Min. bending radius allowed: repeated 8X ø, single 4X ø

Weight about: 135 kg/km (90,5 lb/1000ft)

