

SeaTex® 10

ultraflexible, low loss and designed for marine applications



SeaTex 10 is a very flexible low loss and halogen-free communications coaxial cable perfectly designed to use for marine and offshore applications. It is worldwide approved for ship building (DNV GL certificate) and is suitable for use on ships, oil platforms, wind turbines and the entire maritime area. The jacket of the SeaTex 10 is made of a special thermoplastic copolymer (SHF2), which ensures that the cable is highly resistant to heat, cold, oils, salt-water, UV radiation and has a long service life in harsh environmental conditions.

The design of the SeaTex 10 is based on the successful Ecoflex 10 coaxial cable. It has excellent attenuation values, its flexibility and its small bending radius allow installation in limited spaces. Thus SeaTex 10 combines the advantages of Ecoflex coaxial cables with the special requirements in marine area. The product is specified up to 6 GHz and can be used in a temperature range from -55°C to 85°C.

Key features

Diameter	10,2 ± 0,2 mm
Impedance	50 ± 2 Ω
Attenuation at 1 GHz/100 m	14,20 dB
f max	6 GHz

Characteristics

- Conductor/screen material according to DIN EN 13602 Cu-ETP-R
- Screen material according to DIN EN 13602 Cu-ETP-A
- Insulating material according to ISO 6722-1 part 5.14, class „A“, bending diameter 80 mm
- Jacket material according to IEC 60092-360 (IEC 60092-359) SHF2
- Wall thickness of cable jacket according to IEC 60092-376
- Flame retardant according to IEC 60332-3-22 (Cat. A)
- Flame retardant according to IEC 60332-1-2
- Oil resistant according to EN 60811-2-1 (24 hours/100°C)
- RoHS compliant (Directive 2011/65/EC)
- Low Smoke, Fire retardant, Zero Halogen (LSZH)
- Corrosivity of fumes according to IEC 60754-2
- Smoke density according to IEC 61034
- UV-resistant
- Approved for marine and offshore applications
- DNV GL Certificate No. TAE00001JX



Technical data

Inner conductor	Stranded bare copper wire
Inner conductor Ø	2,85 mm (7 x 1,0 mm, 10 AWG)
Dielectric	foamed Polyethylene (PE) with skin
Dielectric Ø	7,2 mm
Outer conductor 1	copper foil overlapped
Shielding factor	100%
Outer conductor 2	shield braiding of bare copper wires
Shielding factor	75%
Outer conductor Ø	7,9 mm
Jacket	special thermoplastic copolymer (SHF2) black
Weight	135 kg/km
Min. Bending radius	4XØ single, 8XØ repeated
Temperature range	-55 to +85°C Transport & fixed installation -40 to +85°C Flexible use
Pulling strength	600 N

Electrical data at 20°C

Capacity (1 kHz)	78 nF/km
Velocity factor	0,85
Screening attenuation 1 GHz	≥ 90 dB
DC-resistance Inner conductor	≤ 3,5 Ω/km
DC-resistance Outer conductor	6,6 Ω/km
Insulation resistance	≥ 10 GΩ*km
Test voltage (Inner conductor/Outer conductor rms 50 Hz 1 Min.)	1000 V
Max. Voltage	600 kV

	SeaTex 10	RG 213/U	RG 58/U
Capacity	78 pF/m	101 pF/m	102 pF/m
Velocity factor	0,85	0,66	0,66
Attenuation (dB/100m)			
10 MHz	1,20	2,00	5,00
100 MHz	4,00	7,00	17,00
500 MHz	9,60	17,00	39,00
1000 MHz	14,20	22,50	54,60
3000 MHz	26,70	58,50	118,00

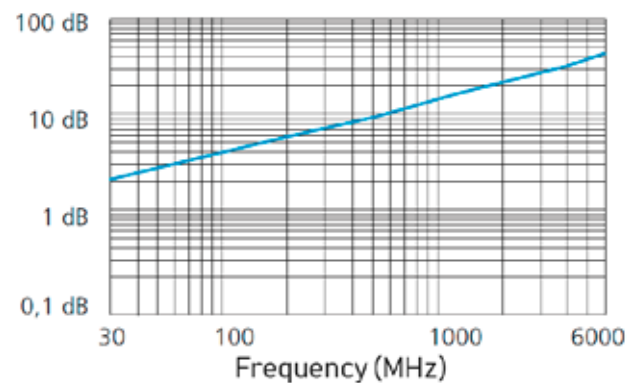
Typ. Attenuation (db/100 m at 20°C)

5 MHz	0,80	1000 MHz	14,20
10 MHz	1,20	1296 MHz	16,50
50 MHz	2,80	1500 MHz	17,90
100 MHz	4,00	1800 MHz	19,90
144 MHz	4,90	2000 MHz	21,20
200 MHz	5,80	2400 MHz	23,60
300 MHz	7,30	3000 MHz	26,70
432 MHz	8,90	4000 MHz	31,10
500 MHz	9,60	5000 MHz	35,20
800 MHz	12,50	6000 MHz	39,00

Max. Power handling (W at 40°C)

10 MHz	3.960	2400 MHz	210
100 MHz	1.210	3000 MHz	180
500 MHz	510	4000 MHz	150
1000 MHz	350	5000 MHz	130
2000 MHz	230	6000 MHz	120

Typ. Attenuation (db/100 m at 20°C)



Typ. Return loss

