SeaTex® 15

flexible, low-loss, stray radiation resistant and designed for marine applications

SeaTex 15 is a low-loss, halogen-free, highly flexible communication coaxial cable specially designed for marine and offshore applications. It holds the worldwide SHF shipbuilding approval (DNV certificate) and is suitable for deployment on ships, oil platforms, drilling rigs, and wind turbines. The outer jacket of SeaTex 15 is made of a special thermoplastic copolymer (SHF2), providing the cable with high resistance to heat, cold, oils, saltwater, UV radiation, and weather conditions, ensuring a long lifespan in harsh environments.

Based on the proven Ecoflex 15, SeaTex 15 features excellent attenuation values, and its flexibility and small bending radius allow for installation in tight spaces. Therefore, SeaTex 15 combines the advantages of Ecoflex coaxial cables with the requirements of maritime applications. The product is specified up to 6 GHz and can be used in a temperature range of -55 to 85°C.

Key features

Diameter	14.6 ± 0.2 mm
Impedance	50 ± 2 Ω
Attenuation at 1 GHz/100 m	9.80 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
- Insulation material according to ISO 6722-1 Chap. 5.14, Class "A", bending diameter 120 mm
- Jacket material according to IEC 60092-360 (IEC 60092-359) SHF2
- Wall thickness of the 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 hrs/100 °C)
- RoHS compliant (Directive 2011/65/EC & 2015/863/EU RoHS 3)
- Fire-resistant, low smoke, halogen-free (LSZH)
- Corrosivity of the combustion gases according to IEC 60754-2
- Smoke density according to IEC 61034
- UV-resistant
- Approved for marine and offshore applications
- DNV certificate no. TAE00001JX

DNV SHF 2

Technical Data

Inner conductor	stranded (Cu) copper wire
Inner conductor Ø	4.5 mm (7 × 1.5 mm)
Dielectric	foamed cellular polyethylene (PE) with skin
Dielectric Ø	11.3 mm
Outer conductor 1	overlapping copper (Cu) foil
Shielding factor	100 %
Outer conductor 2	Copper (Cu) shield braiding of bare copper wires
Shielding factor	75 %
Outer conductor Ø	12.1 mm
Jacket	special thermoplastic copolymer (SHF2) black
Weight	262 kg/km
Min. Bending radius	4 × Ø single, 8 × Ø repeated
Temperature range	-55 to +85 °C transport & fixed installation -40 to +85 °C mobile application
Pulling strength	1300 N

Electrical Data at 20 °C

Capacitance (1 kHz)	78 nF/km
Velocity factor	0.85
Shielding attenuation 1 GHz	≥ 90 dB
DC-resistance inner conductor	≤ 1.5 Ω/km
DC-resistance outer conductor	5.0 Ω/km
Insulation resistance	≥ 10 GΩ*km
Test Voltage DC (wire/screen)	7 kV
Max. voltage	5 kV

	SeaTex 15	RG 213/U	RG 58/U
Capacitance	78 pF/m	101 pF/m	102 pF/m
Velocity factor	0.85	0.66	0.66
Attenuation (dB/100m)			
10 MHz	0.86	2.00	5.00
100 MHz	2.81	7.00	17.00
500 MHz	6.70	17.00	39.00
1000 MHz	9.80	22.50	54.60
3000 MHz	18.30	58.50	118.00

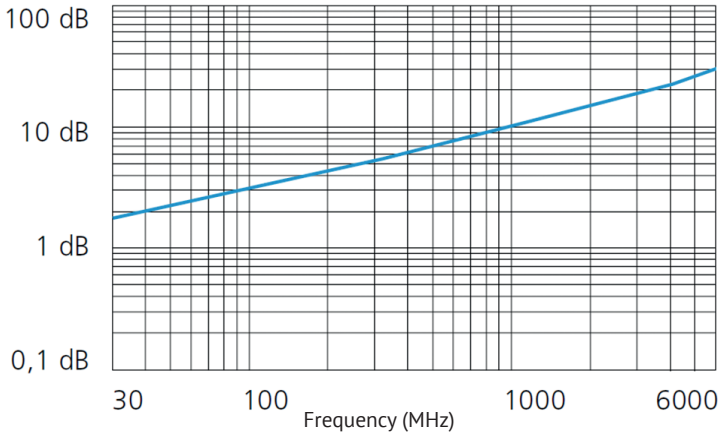
Typ. Attenuation (dB/100 m at 20 °C)

5 MHz	0.60	1000 MHz	9.80
10 MHz	0.86	1296 MHz	11.40
50 MHz	1.96	1500 MHz	12.40
100 MHz	2.81	1800 MHz	13.80
144 MHz	3.40	2000 MHz	14.60
200 MHz	4.05	2400 MHz	16.20
300 MHz	5.00	3000 MHz	18.30
432 MHz	6.10	4000 MHz	21.60
500 MHz	6.70	5000 MHz	24.60
800 MHz	8.60	6000 MHz	27.50

Max. Power Handling (W at 40 °C)

10 MHz	6.327	2400 MHz	326
100 MHz	1.928	3000 MHz	284
500 MHz	810	4000 MHz	237
1000 MHz	547	5000 MHz	206
2000 MHz	364	6000 MHz	183

Typ. Attenuation (dB/100 m at 20°C)



Typ. Return Loss