SeaTex® 15

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



SeaTex 15 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 15 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 15 is based on the successful Ecoflex 15 coaxial cable. It has excellent attenuation values, its flexibility and its small bending radius allow installation in limited spaces. Thus SeaTex 15 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.

DNV·GL



Key features

Diameter 14,6 \pm 0,3 mm Impedance 50 \pm 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 Insulating material according to ISO 6722-1 part 5.14, class "A", bending diameter 120 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) 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	4,5 mm (7 x 1,5 mm)
Dielectric	foamed Polyethylene (PE) with skin
Dielectric Ø	11,3 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	12,1 mm
Jacket	special thermoplastic copolymer (SHF2) black
Weight	262 kg/km
Min. Bending radius	4XØ single, 8XØ repeated
Temperature range	-55 bis +85°C Transport & fixed installation
	-40 bis +85°C Flexible use

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	\leq 1,5 Ω /km
DC-resistance Outer conductor	5,0 Ω /km
Insulation resistance	\geq 10 G Ω *km
Test voltage (Inner conductor/Outer conductor rms 50 Hz 1 Min.)	1000 V

	SeaTex 15	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	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

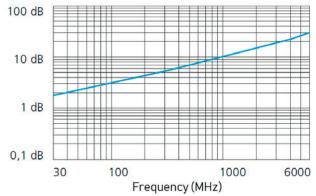
Typ. Attenuation (db/100 m at 20°C)

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

