



# Marine Grade 50 Ohm flexible, low loss and stray radiation resistant coaxial cable



## Application

Flexible low loss and halogen-free communications coaxial cable with excellent attenuation values, perfectly designed to use for marine and offshore applications. Suitable for use on ships, oil platforms, wind turbines and all maritime environments. The cable is highly resistant to heat, cold, oils, salt-water and UV radiation.

## Cable Design

|                   |  |
|-------------------|--|
| Inner conductor   | Stranded copper wire (7 x 1,5 mm) Ø 4,5 mm                   |
| Dielectric        | foamed Polyethylene (PE) with skin Ø 11,3 mm                 |
| Outer conductor 1 | copper foil overlapped, 100% coverage                        |
| Outer conductor 2 | Shield braiding of bare copper wires, 75% coverage Ø 12,1 mm |
| Outer Jacket      | Special thermoplastic copolymer SHF2 Ø 14,6 ± 0,3 mm         |

## Mechanical and Thermal characteristics

|                      |  |
|----------------------|--|
| Jacket material      | acc. to IEC 60092-360 (IEC 60092-359) SHF2 |
| Flame retardant      | IEC 60332-3-22 (Cat. A)                    |
| Corrosivity of fumes | acc. to IEC 60754-2                        |
| Smoke-density        | acc. to IEC 61034                          |
| Oil resistant        | acc. to EN60811 -2-1 (24 hours/100°C)      |
| Temperature Range    | -55°C up to 85°C (Transport and fixed)     |
| Temperature Range    | -40°C up to 85°C (Flexible use)            |
| Min. bending radius  | repeated 8X Ø, single 4X Ø                 |
| Weight approx.       | 262 kg/km                                  |
| RoHS compliant       | (Directive 2011/65/EC)                     |





# Marine Grade 50 Ohm flexible, low loss and stray radiation resistant coaxial cable

## 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                                   | ≤ 1,5 Ω/km |
| DC-resistance Outer conductor                                   | 5,0 Ω/km   |
| Insulation resistance   | ≥ 10 GΩ*km |
| Test voltage (Inner conductor/Outer conductor rms 50 Hz 1 Min.) | 1000 V     |

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

## Specification

| Part Number | Type   |
|-------------|--|
| SeaTex15    | Marine Grade 50 Ohm flexible, low loss and stray radiation resistant coaxial cable |