# RF 400 Marine 50Ω SHF1 - Solid

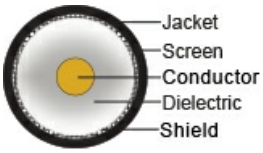
**Low loss feeder cable**
**Double shielded**
**50Ω**
**SHF1, UV**
**DNV**

## Application

Replaces RG-8/9913 as short run antenna feeder or jumper assemblies. Connects RF receiver systems with antenna systems in ships, buildings, tunnels and other underground installations. This product has better bending and handling properties, compared with cables with corrugated sheaths. Equal to LMR 400. Also meets the requirements of Anatel.

## Construction

| | |
|---|---|
| Conductor | Solid Copper-clad Al 2.74 [mm] |
| Dielectricum | Cellular PE 7.25 ± 0.18 [mm] |
| Screen | Al - PET - AL Tape 100 [% optical coverage] |
| Screen | Tinned Cu-braid 90 [% optical coverage] |
| Jacket | Black SHF1 |
| O.D. | 10.3 ± 0.18 [mm] |
| Weight | 124 ± 0.5 [kg/km] |




## Specifications

| | |
|---|---|
| Operating temperature normal | -40 – +80 [°C] |
| Test Voltage | 6 [kV] |
| Characteristic impedance | 50 ± 1.5 [Ω] |
| Braid Resistance | 5 [Ω/km] |
| Conductor resistance | 4.7 [Ω/km] |
| Capacitance | 80 [pF/m] |
| Velocity factor | 0,84 |
| Min. bending radius | 5 [x outer diam] |
| Min. bending radius flexible | 10 [x outer diam] |

## Norms

| | |
|---|---|
| Halogenfree, max content corrosive and toxic gases | IEC 60754-1 & IEC 60754-2 |
| Material properties, insulation and sheath | IEC 60092-360 (359) |
| Design and testing standards | IEC 60096-0-1 Ed 3 IEC 61196-1-100 |
| Flame resistance | IEC 60332-3-22 |
| Flame retardant | IEC 60332-1-2 |
| Smoke emission | IEC 61034-2 |
| Oil and fuel resistant | IEC 60811-3-1 |
| UV-resistant | UL 1581, ISO 4892 |
| Euroclass | Eca |
| Certification | DNV |

RoHS

| | |
|---|---|
| Part No. | 1092361 |

## Attenuation nominal, max 105%

| Frequency MHz | Attenuation dB/100m |
|---|---|
| 5 | 1.0 |
| 10 | 1.3 |
| 30 | 2.1 |
| 50 | 2.8 |
| 150 | 4.7 |
| 220 | 5.7 |
| 450 | 8.4 |
| 600 | 9.8 |
| 800 | 11.4 |
| 900 | 12.1 |
| 1000 | 12.8 |
| 1500 | 16.0 |
| 1800 | 17.7 |
| 2000 | 18.9 |
| 2500 | 21.1 |
| 3000 | 23.4 |
| 5200 | 32.7 |
| 5800 | 34.7 |

## Structural return loss

| MHz | dB |
|---|---|
| 30 – 450 | < 27 |
| 450 – 1000 | < 26 |
| 1000 – 2000 | < 23 |
| 2000 – 3000 | > 22 |
| 3000 – 4000 | > 21 |
| 4000 – 5800 | > 20 |

## Screen effectiveness IEC 61196-1

| MHz | dB |
|---|---|
| 100 – 900 | > 95 |
| 900 –2000 | > 85 |
| 2000 – 3000 | > 75 |

## Updated

| Date | Rev. | Description |
|---|---|---|
| 22.11.2017 | 1 | Design and electrical data |
| 27.02.2018 | 2 | Norms and attenuation |
| 27.04.2023 | 3 | Norms and attenuation |