# RF-LLX-CL 1/2" SHF2

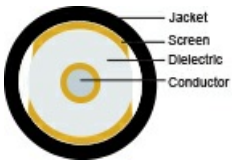
## Coupling Leaky Cable
## 50Ω
## SHF2, UV
## DNV

## Application

Radiating coaxial antenna cable for maritime, building, and tunnel installations where conventional radio coverage is limited. RF-LLX-CL supports wideband frequency operation and enables uniform RF signal coupling along the cable, making it suitable for communication systems with extended frequency range requirements.

## Construction

| | |
|---|---|
| Conductor | Copper-clad Al 4.8 ± 0.2 [mm] |
| Dielectricum | Foamed PE 12.0 ± 0.5 [mm] |
| Screen | Slotted corrugated copper tube 13.9 ± 0.5 [mm] |
| Jacket | Black SHF2 UV-resistant |
| O.D. | 16.0 ± 0.5 [mm] |
| Jacket marking | NEK Kabel – RF-LLX-CL 1/2" – SHF2 – DNV – DD/MM/YYYY – <batch no.> – ****m |




## Specifications

| | |
|---|---|
| Operating temperature normal | -20 – +70 [°C] |
| Temperature @ installation | -20 – +50 [°C] |
| Characteristic impedance | 50 ± 2 [Ω] |
| Insulation resistance | 5000 [MΩ x km] |
| Tensile strength | 1130 [N] |
| Velocity factor | 88 [%] |
| Min. bending radius | 80 [mm] |
| Min. bending radius @ installation | 125 [mm] |

## 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 Cat.A , IEC 60332-3-24 Cat.C |
| Flame retardant | IEC 60332-1-2 |
| Smoke emission | IEC 61034-1 & IEC 61034-2 |
| UV-resistant | ASTM G 154 |
| Certification | DNV |

| | |
|---|---|
| Prod.no | 3031016 |

NEK offers:
ConMarin N-Female PO: 65464
ConMarin N-Male PO: 65402

## Attenuation

| Frequency [MHz] | Attenuation [dB/100m ±5%] | Coupling loss 95% [dB±10] |
|---|---|---|
| 150 | 3.4 | 78 |
| 450 | 6.6 | 80 |
| 700 | 7.7 | 80 |
| 900 | 8.3 | 82 |
| 1800 | 13.7 | 88 |
| 1900 | 13.6 | 82 |
| 2200 | 15.4 | 85 |
| 2400 | 16.0 | 87 |
| 2600 | 16.8 | 82 |
| 3000 | 18.2 | 88 |
| 3500 | 19.9 | 85 |
| 3600 | 22.8 | 85 |

## VSWR

| Frequency [MHz] | - |
|---|---|
| 260 - 480 | ≤ 1.30 |
| 820 - 960 | ≤ 1.30 |
| 1700 - 1860 | ≤ 1.30 |
| 2100 - 2200 | ≤ 1.30 |
| 2300 - 2500 | ≤ 1.30 |
| 2500 - 2700 | ≤ 1.30 |
| 3400 – 3600 | ≤ 1.35 |

## Updated

| Date | Rev. | Description |
|---|---|---|
| 23.04.2025 | 1 | Attenuation |
| 03.03.2026 | 2 | Construction and attenuation |