RF LLF 1/2" SHF2

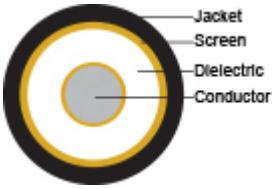
Feeder cable
50Ω
SHF2, UV
DNV

Application

Low loss flexible feeder cable designed for broadband transmission from sources like radio antennas, radars, GPS devices and mobile phone antennas to distribution systems inside ships, tunnels, buildings and underground areas where RF signals normally cannot be received. SHF2 Jacket.

Construction

Conductor	Copper coated Al wire 4.8 ± 0.2 [mm]
Dielectricum	Cellular PE 12.0 ± 0.5 [mm]
Screen	Corrugated Cu-tube 13.9 ± 0.5 [mm]
Jacket	Black SHF2 UV-resistant
O.D.	16.0 ± 0.5 [mm]
Weight	265 [kg/km]
Jacket marking	NEK Kabel – RF LLF 1/2" – SHF2 – DNV – DD/MM/YYYY – <batch no.> – ****m



Specifications

Operating temperature normal	-25 – +70 [°C]
Temperature @ installation	-20 – +50 [°C]
Inductance	0.19 [µH/m]
Peak RF voltage	1.8 [kV]
Characteristic impedance	50 ± 2 [Ω]
Peak power rating	32 [kW]
Insulation resistance	5000 [MΩ x km]
Tensile strength	1130 [N]
Capacitance	76 [pF/m]
Velocity factor	88 [%]
Min. bending radius	80 [mm]
Min. bending radius flexible	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
Oil and fuel resistant	IRM 902 100°C x 24h
UV-resistant	ASTM G 154
Certification	DNV

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

Prod.no	3031001

Attenuation and Power rating

Frequency [MHz]	Nom. att. [dB/100m] max. 105%	Power rating [kW]	Coupling loss 95% [dB±10]
100	2.65	3.7	-
200	3.58	2.6	-
450	4.93	1.7	80
700	6.48	1.3	80
800	7.10	1.3	-
900	7.30	1.25	82
1400	9.24	0.9	-
1800	10.90	0.78	88
2000	11.50	0.76	-
2400	12.90	0.66	87
3000	14.50	0.58	-
3400	15.50	0.54	-
6000	21.5	0.39	-
8000	27.0	0.31	-

VSWR

Frequency [MHz]	-
260 – 480	≤ 1.30
820 – 960	≤ 1.30
1700 – 1860	≤ 1.30
1900 – 2050	≤ 1.30
2100 – 2200	≤ 1.30
2300 – 2500	≤ 1.30
2500 – 2700	≤ 1.30
3400 – 2600	≤ 1.35

Updated

Date	Rev.	Description
07.07.2023	1	Additional info + VSWR
23.04.2025	2	Attenuation
12.12.2025	3	Additional info