RF LLF 7/8" SHF2

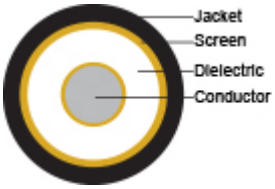
Feeder cable
50Ω
SHF2, UV
DNV

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	Cu-tube 9.45 ± 0.10 [mm]
Dielectricum	Cellular PE 23.0 [mm]
Screen	Corrugated Cu-tube 25.2 [mm]
Outer Jacket	Black SHF2 UV-resistant
O.D.	28.5 [mm]
Weight	470 [kg/km]
Jacket marking	NEK Kabel – RF LLF 7/8" 50 – SHF2 – DNV – DD/MM/YYYY – <batch no.> – ****m



Specifications

Operating temperature normal	-25 – +70 [°C]
Temperature @ installation	-5 – +50 [°C]
Recommended clamp spacing	1 [m]
Peak RF voltage	3.3 [kV]
Peak power rating	92 [kW]
Characteristic impedance	50 ± 2 [Ω]
Tensile strength	1700 [N]
Insulation resistance	10000 [MΩ x km]
Frequency	Max 5000 MHz
Capacitance	74.2 [pF/m]
Velocity factor	88 [%]
Min. bending radius	150 [mm]
Min. bending radius @ installation	275 [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

Prod.no	3031011

Attenuation and Power rating

Frequency [MHz]	Nom. att. [dB/100m] max. 105%	Power rating [kW]	Coupling loss 95% [dB±10]
100	1.3	8.0	-
200	1.7	5.6	-
450	2.5	3.6	74
700	3.3	2.8	77
800	3.4	2.6	-
900	3.7	2.5	79
1400	4.9	1.9	-
1800	5.4	1.7	78
2000	5.8	1.6	-
2400	6.4	1.4	84
3000	7.3	1.2	-
3400	8.3	1.2	-
4000	9.2	1.0	-
5000	10.5	0.9	-

VSWR

Frequency [MHz]	-
320 – 480	≤ 1.20
820 – 960	≤ 1.20
1700 – 1880	≤ 1.20
1880 – 2180	≤ 1.20
2300 – 2500	≤ 1.20
2500 – 2700	≤ 1.20
5700 – 5900	-

Updated

Date	Rev.	Description
23.04.2025	1	Attenuation
12.12.2025	2	Additional info