

RF LLF 7/8"

Feeder cable

50Ω

SHF1

DNV

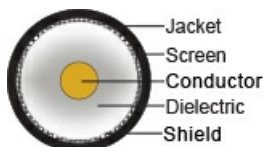
Application

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



Construction

Conductor	Cu-tube 9.45 ± 0.10 [mm]
Dielectricum	Cellular PE 23.20 ± 0.30 [mm]
Screen	Corrugated Cu tube 25.40 ± 0.30 [mm]
Jacket	Black or grey SHF1 UV-resistant
O.D.	28.5 ± 0.40 [mm]
Weight	450 [kg/km]
Jacket marking	NEK Kabel – RF LLF 7/8" 50 SHF1 – DNV – DD/MM/YYYY – <batch no.> – ****m



Specifications

Operating temperature normal	-40 – +70 [°C]
Temperature @ installation	-5 – +50 [°C]
Screen resistance	<1.6 [Ω/km]
Recommended clamp spacing	1 [m]
Peak RF voltage	3.3 [kV]
Peak power rating	92.0 [kW]
Characteristic impedance	50 ± 2 [Ω]
Conductor resistance	1.30 [Ω/km]
Frequency	Max 5,000 MHz
Tensile strength	1440 [N]
Capacitance	74.2 [pF/m]
Velocity factor	0.88
Min. bending radius	150 [mm]
Min. bending radius flexible	275 [mm]



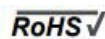
Norms

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
Weather resistant	ASTM G 154
Smoke emission	IEC 61034-1 & IEC 61034-2
Oil and fuel resistant	IEC 60811-2-1 Mineral Oils, IRM 902: 23°C / 7 days, 70°C / 4h Diesel, IRM 903: 23°C / 7 days, 70°C / 4h
UV-resistant	ASTM G 154
CPR classification	Dca-s1,d2,a1
Certification	DNV

Part No.	Black: 1028851 Grey: 1028858
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NEK offers connectors for RF LLF 7/8":
Male part no. 65437 and Female part no. 65427



Attenuation nominal, max 105%

Frequency MHz	Attenuation dB/100m
150	1.44
450	2.95
800	3.56
900	3.79
1800	5.59
2000	5.95
2200	6.30
2400	6.62
2500	6.77
2700	7.07
3000	7.52
5000	9.26

VSWR

Frequency [MHz]	-
320 – 480	1.09
820 – 960	1.11
1700 – 1880	1.09
1880 – 2180	1.10
2300 – 2500	1.10
2500 – 2700	1.13

Updated

Date	Rev.	Description
13.04.2016	1	Attenuation values
14.10.2016	2	Minor changes physical data (BS)
25.11.2016	3	Fire class.
13.09.2017	4	Update outer diam.
10.10.2017	5	Update screen resistance
27.11.2017	6	Update norms
27.09.2019	7	Corr. approvals
01.07.2022	8	corr. prod.no from 1092496 to 1028851
24.04.2024	9	Attenuation and VSWR