

RF LLF 1/2" MUD

Feeder cable

50Ω

LSZH, SHF2, MUD

DNV

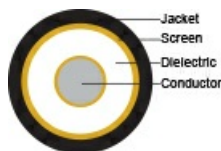
Application

Low loss 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. Chemical resistant, SHF2 MUD jacket.



Construction

Conductor	Copper coated Al wire 4.80 ± 0.05 [mm]
Dielectricum	Cellular PE 12.1 ± 0.3 [mm]
Screen	Corrugated Cu tube 13.90 ± 0.25 [mm]
Jacket	SHF2, MUD Black
O.D.	16.7 ± 0.5 [mm]
Weight	265 [kg/km]
Jacket marking	NEK Kabel – RF LLF 1/2" – MUD – DNV – DD/MM/YY – <batch no.> – ****m



Specifications

Operating temperature normal	-40 – +70 [°C]
Inductance	0.19 [μH/m]
Screen resistance	< 2.4 [Ω/km]
Peak RF voltage	1.8 [kV]
Characteristic impedance	50 ± 2 Ω
Peak power rating	32 [kW]
Conductor resistance	< 1.6 [Ω/km]
Tensile strength	1100 [N]
Insulation resistance	10 [GΩ x km]
Capacitance	76 [pF/m]
Velocity factor	0,88
Min. bending radius	85 [mm]
Min. bending radius flexible	135 [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
Weather resistant	ASTM G 154
Smoke emission	IEC 61034-1 & IEC 61034-2
MUD resistant	NEK TS 606
UV-resistant	ASTM G 154 ASTM D 4587
Certification	DNV



NEK offers connectors for RF LLF 1/2": Male, Part No. 65402 and Female, Part No. 65464

Part No.	1092481
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Screen effectiveness IEC 61196-1

MHz	dB
150	2.7
280	3.99
450	5.06
800	6.73
900	7.15
1500	9.33
1800	10.52
2000	11.62
2400	12.52
3000	13.46



Attenuation and Power rating

Frequency [MHz]	Nominal attenuation [dB/100m] max. 105%	Power rating [kW]
30	1.66	6.9
50	2.01	5.3
88	2.51	4.0
100	2.65	3.7
200	3.58	2.6
300	4.31	2.1
400	4.93	1.8
450	5.1	1.7
500	5.49	1.6
700	6.48	1.3
800	7.10	1.3
900	7.30	1.25
1000	7.78	1.1
1400	9.24	0.9
1800	10.90	0.78
2000	11.50	0.76
2400	12.90	0.66
3000	14.50	0.58
3400	15.50	0.54
6000	21.5	0.39
8000	27.0	0.31

VSWR

Frequency [MHz]	-
260 – 300	1.15
320 – 480	1.15
820 – 960	1.15
1400 – 1650	1.18
1700 – 1900	1.18
1860 – 2100	1.18
2100 – 2250	1.18
2300 – 2500	1.18



Updated

Date	Rev.	Description
27.11.2017	1	Update norms
19.04.2022	2	MUD