



RF LLF 7/8" Hiflex SHF1

Jumper cable

50Ω

SHF1, UV

DNV

Application

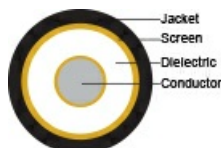
Low loss highly flexible feeder cable designed for broadband transmission from sources like radio antennas, radars, GPS devices, mobile phone antennas to distribution systems inside ships, tunnels, buildings and underground areas where RF signals normally cannot be received. The highly flexible design makes the product the best solution for installations which require small bending radius. The combination of extra flexibility and low loss makes this product the natural choice for most applications in RF networks.

Attenuation values, nominal (max. 105%)



Construction

Conductor	Helical Corrugated copper tube 9.40 ± 0.20 [mm]
Dielectricum	Cellular PE 22.20 ± 0.30 [mm]
Screen	Corrugated Cu tube 24.90 ± 0.30
Jacket	Black SHF1 UV-resistant
O.D.	27.50 ± 0.20 [mm]
Weight	430 [kg/km]
Jacket marking	NEK Kabel – RF LLF 7/8" Hiflex – SHF1 – DNV – DD/MM/YY – <batch no.> – ****m



Specifications

Operating temperature normal	-40 to +70 [°C]
Temperature flexible	-20 [°C]
Screen resistance	1,3 [Ω/km]
Recommended clamp spacing	1 [m]
Peak RF voltage	2,8 [kV]
Characteristic impedance	50 ± 2 Ω
Conductor resistance	2.5 [Ω/km]
Capacitance	74 [pF/m]
Velocity factor	0,88
Min. bending radius	90 [mm]
Min. bending radius flexible	120 [mm]



Norms

Halogenfree, max content corrosive and toxic gases	IEC 60754-1 & IEC 60754-2
Material properties, insulation and sheath	IEC 60092-360 (359) SHF1 3582
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	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
Certification	DNV

Part No.	1028855
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NEK offers connectors for RF LLF 7/8" Hiflex:
Male part no. 65439 and Female part no. 65411





Attenuation and Power rating

Frequency [MHz]	Nom. att. [dB/100m] max. 105%	Power rating [kW]
10	< 0.37	24
30	< 0.63	14
50	< 0.86	11
174	< 1.64	5.6
200	< 1.8	5.2
500	< 2.89	3.2
700	< 3.6	3.0
800	< 3.72	2.5
900	< 4.00	2.3
960	< 4.11	2.2
1600	< 5.47	1.7
1800	< 6.00	1.6
2000	< 6.38	1.5
2200	< 6.56	1.4
2400	< 7.10	1.3
2600	< 7.23	1.3
2800	< 7.55	1.2
3000	< 7.87	1.2
3400	< 8.48	1.1
4000	< 9.32	0.98
5000	< 10.95	0.86

Updated

Date	Rev.	Description
18.04.16	1	
27.11.2017	2	Update norms
27.09.2019	3	Corr. approvals
23.04.2025	4	Attenuation