RF LLF 1/2" Hiflex

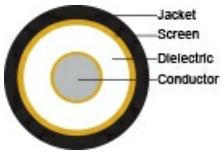
Jumper cable
50Ω
SHF1
DNV

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 wher RF signals normally cannot be received. The highly flexible design makes the product the best solution for installations which requires small bending radius. RF LLF 1/2" Hiflex is the best choice, used as jumper cable. The combination of extra flexibility and low loss makes RF LLF 1/2" Hiflex the natural choice for most applications in RF networks.

Construction

Conductor	Corrugated copper tube 3.55 ± 0.04 [mm]
Dielectricum	Cellular PE 9.0 ± 0.20 [mm]
Screen	Helical corrugated Cu-tape 12.00 ± 0.25
Jacket	Black or grey SHF1 UV-resistant
O.D.	13.70 ± 0.20 [mm]
Weight	190 [kg/km]
Jacket marking	NEK Kabel – RF LLF 1/2" Hiflex – SHF1 – DNV – DD/MM/YY – <batch no.> – ****m



Specifications

Operating temperature normal	-40 – +70 [°C]
Temperature @ installation	-20 – +50 [°C]
Recommended clamp spacing	1 [m]
Peak RF voltage	1.4 [kV]
Characteristic impedance	50 ± 2 Ω
Peak power rating	19,0 [kW]
Braid Resistance	3.70 [Ω/km]
Return Loss	23.1 [dB]
Conductor resistance	2.97 [Ω/km]
Max. load at installation	800 [N/mm²]
Insulation resistance	10 [GΩ x km]
Capacitance	82 [pF/m]
Attenuation	Se tabell
Min. bending radius	17 [mm]
Min. bending radius flexible	50 [mm]
Min. bending radius installed	17 [mm]
Min. bending radius @ installation	55 [mm]

Norms

Halogenfree, max content corrosive and toxic gases	IEC 60754-1 & IEC 60754-2
Material properties, insulation and sheath	IEC 60092-360 (359) . NEK 606
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
Weather resistant	ASTM G 154
Smoke emission	IEC 61034
Oil and fuel resistant	IEC 60811-2-1 Mineral Oils, IRM 902: 23ºC / 7 days, 70°C / 4h Diesel, IRM 903: 23ºC / 7 days, 70°C / 4h
UV-resistant	ASTM G 154
CPR classification	Dca-s1,d2,a1
Certification	DNV

Part No.	1028854-black, 1028856-grey

Tips

NEK offers connectors for RF LLF 1/2". Male, Part No. 65403 og Female, Part No. 65436

RoHS

Frequency (MHz)	Nominal attenuation (dB/100m) max 105%	Power rating (kW)
30	1,70	4,8
100	3,18	2,6
150	4.08	2.1
400	6.60	1,2
450	7.20	1.2
500	7.32	1.1
600	8.10	0.99
700	8.75	0.91
800	9.50	0.85
900	11.00	0.77
960	10.55	0.77
1000	10.80	0.75
1200	11.90	0.68
1400	13.0	0.62
1600	14.0	0.58
1800	15.5	0.54
2000	16.5	0.51
2200	17.5	0.48
2400	18.3	0.46
2700	19.6	0.44
3000	21.0	0.40
3400	22.5	0.37
4000	24.0	0.34
5800	33.0	0.27

Updated

Date	Rev.	Description
27.11.2017	1	Update Norms
27.09.2019	2	Corr. approvals
16.06.2020	3	Corr. approvals
22.12.2023	4	Norms