

RF LLF 7/8" Hiflex

Jumper cable

50Ω

SHF1

DNV

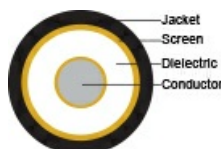
Application

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 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 |
| 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

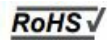
| | |
|------------------------------|-----------------|
| Operating temperature normal | -40 to +70 [°C] |
| Temperature flexible | -20 [°C] |
| Screen resistance | 1,3 [Ω/km] |
| Recommended clamp spacing | 1 [m] |
| Peak RF voltage | 2,8 [kV] |
| Characteristic impedance | 50 ± 2 Ω |
| Conductor resistance | 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 |
| Weather resistant | ASTM G 154 |
| Smoke emission | IEC 61034 |
| 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 |

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





Attenuation and Power rating

| Frequency [MHz] | Nominal attenuation [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 |
| 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 |