

FlexLine®

Flexible 1/2"R (FRNC)



Design

Inner conductor: copper-clad aluminium wire	Ø 4.8±0.05 mm
Insulation of foamed Polyethylene (PE) with skin	Ø 12.1 mm
Outer conductor: copper-tape Longitudinal welded	
Annular corrugation	Ø 13.8±0.3 mm

Jacket:

Polyethylene (FRNC), Black	
Wall thickness about 1.0mm	Ø 15.7±0.3 mm

Printing: xxxxxm LEONI LA* FlexLine® 1/2"R FRNC 50Ω "internal number" "Month/year"

Electrical data at 20°C

Inner conductor resistance	≤	1.62	Ohm/km
Outer conductor resistance	≤	3.34	Ohm/km
Insulation resistance	≥	3000	MΩ*km
Capacitance (1 kHz)		76	nF/km
Characteristic Impedance		50±2	Ω
Relative velocity of propagation		88%	
DC breakdown voltage		6000	V
Test voltage(wire/screen rms 50Hz 1min)		8000	V
Return loss(typical)			
820~960MHz		23	dB (VSWR1.15)
1700~2200MHz		23	dB (VSWR1.15)

LEONI Special Cables

LA-7.3-027

Technisches Datenblatt - Technical Data Sheet - Technisches Datenblatt - Technical Data Sheet - Technisches Datenblatt

Attenuation

s.table

Frequency(MHz)	100	450	800	900	1000	1800	1900	2200	2500	2700	3000
Attenuation typ.(dB/100m)	2.1	4.6	6.3	6.7	7.2	9.9	10.3	11.2	12	12.6	13.2
Mean. Power (kW) at 40°C (104 °F)	3.64	1.63	1.19	1.10	1.04	0.75	0.72	0.67	0.61	0.58	0.55

Mechanical and thermal characteristics

Jacket material acc. to DIN EN 50290-2-27 (HD 624.7)

Flame retardant acc. to IEC 60332-3-24 (Cat. C)

Other requirement

Corrosive of fire gases acc. to IEC 60754-2

Permissible temperature range, installation: -20°C To +60°C
 Permissible temperature range, storage : -40°C To +60°C
 Permissible temperature range, operation : -40°C To +60°C
 Min. bending radius allowed : repeated 125mm, single 80mm
 Number of bends. minimum : 15
 Tensile strength : ≤900 N
 RoHS compliant

Designation of order

V45466-B21-C36-C20-CT

02YSWKH 4.8/12.1-50 FRNC
 500 m on non-returnable reel