

### Design

Inner conductor: Stranded bare copper wire 7 X 0.85 ø 2.55 mm (0.100 in dia)  
 Insulation of foamed Polyethylene (PE) with skin ø 7.25 mm (0.285 in dia)  
 Alulaminat foil overlapped, applied longitudinally  
 Shield braiding of tinned copper wires 0.15 mm dia  
 Coverage about 70% ø 8.0 mm (0.315 in dia)

### Jacket:

Thermoplastic copolymer (FRNC) GY. RAL 7032  
 Wall thickness about 1.0 mm ø (10.3 ±0.3) mm (0.406 ±0.012 in dia)

Printing: LEONI L \* L45466-B18-C76 \* 1AC 00110 0022 \* "month year"  
 + marking every meter

### Electrical data at 20°C

Conductor resistance	≤	5.0	Ohm/km
Screen resistance	≤	7.5	Ohm/km
Insulation resistance	≥	10	GOhm*km
Capacitance (1 kHz)	≈	88	nF/km
Characteristic impedance		(50 ±2)	Ohm
Signal run time	≈	4.4	ns/m
rel. velocity of propagation	≈	75	%
Return loss	≥	30	dB
1 - 50 MHz	≥	26	dB
50 - 134 MHz	≥	24	dB
134 - 1000 MHz	≥	20	dB
1000 - 2000 MHz			
Single peaks until 25dB (1-50MHz) and until 20dB (50-1000MHz)			
Operating voltage (peak)	≤	300	V
Test voltage (wire/screen rms 50Hz 1min)	=	4000	V
Cutoff Frequency		14	GHz
Screening efficiency (100-2000 MHz)	≥	90	dB

Frequency (MHz)	1	10	20	50	100	134	400	750	1000	1500	2000
Attenuation max. (dB/100m)	0.7	1.65	2.3	3.6	5.3	6.5	11	15.0	18.4	23	27

### Mechanical and thermal characteristics

Screen material acc. to DIN EN 13602 Cu-ETP-A...  
 Jacket material acc. to DIN EN 50290-2-27 (HD 624.7)  
 Flame retardant acc. to IEC 60332-1-2

### Other characteristics:

Sunlight resistant acc. to UL 1581 Sec.1200  
Corrosivity of fire gases acc. to IEC 60754-2  
Smoke-density acc. to IEC 61034  
Halogen free acc. DIN VDE 0472, part 815  
Determination of the amount of halogen acid gas acc. IEC 60754-1

Permissible temperature range : -40 °C (-40 °F) up to 85 °C (185 °F)  
Min. bending radius allowed : repeated 7.5X  $\varnothing$  . single 5X  $\varnothing$   
Weight about : 125 kg/km (83,8 lb/1000ft)

### Designation of order:

L45466-B18-C76  
203248  
02YS(ST)CH 2.55/7.25-50 LI GR FRNC  
1000 m (3281 ft) on non-returnable reel

