

Design

Wire:

Bare copper wire ø 0.65 mm (0,026 in)
 Insulation of foamed Polyethylen (PE) with skin ø 2.55 mm (0,100 in)

Core:

2 wires, RD and GN twisted to a pair
 Plastic tape, overlapped
 Inner jacket: Thermoplastic copolymer (FRNC) NF ø 5.4 mm (0.213 in)
 Alulaminat foil overlapped, applied longitudinally
 Shield braiding of tinned copper wires 0.15 mm dia
 Coverage about 55% ø 6.2 mm (0,244 in)

Jacket:

Thermoplastic copolymer (FRNC) VT
 Wall thickness about 0.9 mm ø (8.0 ±0.4) mm (0.315 ±0.016 in)

| Printing: LEONI PROFIBUS ES FRNC * 22AWG (SHIELDED) (UL) E119100 CM 75°C
 + marking every meter
 Textintervals about 1000 mm

Electrical data at 20°C

Loop resistance	≤	110	Ohm/km
Screen resistance	≤	9.5	Ohm/km
Insulation resistance	≥	16000	MOhm*km
Characteristic Impedance			
3 - 20 MHz		(150 ± 15)	Ohm
38.4 kHz		(185 ± 18.5)	Ohm
9.6 kHz		(270 ± 27)	Ohm

Attenuation

16 MHz	≤	42	dB/km
4 MHz	≤	22	dB/km
38.4 kHz	≤	4	dB/km
9.6 kHz	≤	2.5	dB/km

Capacitance	1 kHz	≈	28.5	nF/km
Capacitance unbalance to ground		≤	1500	pF/km
Surface transfer impedance (20 MHz)		≤	5	mOhm/m
Operating voltage (effective value)		≤	100	V
UL-Rating			300	V
rel. velocity of propagation		≈	81	%
Test voltage		=	3600	V DC 3 sec

Mechanical and thermal characteristics

Conductor material acc. to DIN EN 13602 Cu-ETP-A...
Screen material acc. to DIN EN 13602 Cu-ETP-A...-B
Insulating material acc. to DIN EN 50290-2-23 (VDE 0819), table 2/A (HD 624.3)
Jacket material acc. to DIN EN 50290-2-27 (HD 624.7)

Flame retardant acc. to IEC 60332-1-2
Sunlight resistant acc. to UL 1581 Sec.1200
Corrosivity of fire gases acc. to IEC 60754-2

UL-FILE E119100 VOL.1 SEC.11 PAGE1

Application / Special feature:

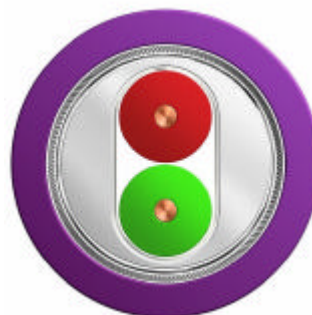
Limited oil resistance (4 Std. 60°C)

Permissible temperature range : -25°C (-77°F) up to +60°C (+140°F)
min. bending diameter allowed: multiple 20X ø, single 15X ø

Pulling force with : ≤ 100 N
Weight about : 72 Kg/km (48 lb/1000ft)

Designation of order:

L45467-G16-C286
203375
02YSH(ST)CH 1X2X0.64/2.55-150 VI KF25 FRNC ES
1000 m (3281 ft) on non-returnable reel



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