LEONI Special Cables GmbH

Design

Wire LI9Y 0.15/1.0
Stranded bare copper wire 19 X 0.1 ø 0.5 mm
Insulation of PP ø 1.0 mm

Core:
Strain member out of kevlar
4 wires LI9Y 0.15/1.0
Sequence of colors: BU - OG - WHBU - WHOG
Plastic tape, overlapped
Plastic tape conductiv
Shield braiding of tinned copper wires 0.1 mm dia
Coverage about 85%
Plastic tape, overlapped ø 3.4 mm

Jacket:
Polyurethane (PUR) GN
Wall thickness about 0.7 mm ø (4.8 -0.3) mm

Printing: LEONI L TRAILING CABLE 4X1X0.15 + marking every meter
Textintervals about 1000 mm

Electrical data at 20°C

Loop resistance		≤	250	Ohm/km
Resistance difference		≤	3	%
Signal running time		≤	5.55	ns/m
Insulation resistance		≥	150	MOhm*km
Characteristic impedance	64 kHz		(125 ±25)	Ohm
Characteristic impedance	1 – 100 MHz		(100 ±15)	Ohm
Near-end crosstalk attenuation			s. table	
Attenuation			s. table	
Ground unbalace attenuation	at 64 kHz	>	43	dB
Capacity unbalanced to ground	at 1 kHz	≤	3400	pF/km
Return loss (100 m)	1 – 20 MHz	≥	23	dB
	20 – 100 MHz	≥	23	dB - 10 log (f/20)
Surface transfer impedance	10 MHz	≤	50	mOhm/m
Test voltage (wire/wire/screen rms 50Hz 1min)		=	700	V
Capacitance 800 Hz			51	pF/m

Frequency (MHz)	0.772	1	4	10	16	20	31.25	62.5	100
Near crosstalk (dB)	64	62	53	47	44	42	40	35	32

Frequency (MHz)	0.064	0.256	0.512	0.772	1	4	10	16	20	31.25	62.5	100
Attenuation typ. (dB/100m)	1.2	1.65	2.25	2.70	3.15	6.45	9.9	12.3	13.8	17.7	25.65	33

Mechanical and thermal characteristic
Conductor material acc. to DIN 40500 part 4, E-Cu58 F21
Screen material acc. to DIN 40500 part 5, E-Cu58 F21-V2
Insulating material acc. to DIN VDE 0819, compoundtype full PP
Jacket material acc. F45052-F5100 (similar to DIN VDE 0282)
Flame test acc. to IEC 60332-1

Application / Special feature:
Similar to Cat.5

Torsion ≤ ±30°/m
Silicone free
FCKW free
Halogen free
Oil resistance

Application / Special feature:
Permissible temperature range : - 40 °C up to +80 °C

Trailing cable for following requirements
- 5 million bending cycles
- bending radius 7.5 x max. ø
- at a speed of 180m/min
- acceleration 5 m/s²

Pulling force with ≤ 100N

Weight about: 31 Kg/km

Designation of order:
L45581-B41-K8
202306
LI9Y(ST)C11Y 4X1X0.15 GN
3000 m on non-returnable reel