FieldLink®

DeviceNet

Design

a) Pair 02YS(ST) 1X2X1.3/3.8-120 LI

Wire
Stranded tinned copper wire 40 X 0.18 — ø 1.3 mm (0,051 in)
Insulation of foamed Polyethylenee (PE) with skin — ø 3.8 mm (0,150 in)
Wall thickness about 1.2 mm

2 wires, WH and BU side by side
Alulaminate foil overlapped, applied longitudinally

b) Pair LI2Y(ST) 1X2X1.5/2.7

Wire
Stranded tinned copper wire 84 X 0.16 — ø 1.7 mm (0.067 in)
Insulation of Polyethylenee (PE) — ø 2.7 mm (0,106 in)
Wall thickness about 0.5 mm

2 wires, RD and BK side by side
Alulaminate foil overlapped, applied longitudinally

Core:
Central element: Stranded tinned copper drain wire 0.86 mm² (19x0.24)
1 Pair 02YS(ST) 1X2X1.3/3.8-120 LI VZN
1 Pair LI2Y(ST) 1X2X1.5/2.7 VZN
+ fillers
Plastic tape conductive
Shield braiding of tinned copper wires 0.13 mm dia
Coverage about 80%
Plastic tape, overlapped — ø 8.8 mm (0,346 in)

Jacket:
Polyurethane (PUR) VT
Wall thickness about 1.7 mm — ø (12.2 ±0.3) mm (0,480 ±0,012 in)

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Printing: LEONI L DeviceNet Thick Cable highflex 2x18AWG 2x15AWG SHIELDED (UL) E119100
CMX 75°C or CL2X Sun Res

Electrical data at 20°C

Conductor resistance	(Pair to a)	≤	22.6	Ohm/km
Conductor resistance	(Pair to b)	≤	11.7	Ohm/km
Capacitance (1 kHz wire/wire)	(Pair to a)	≈	39.8	nF/km
Characteristic impedance (1 MHz)	(Pair to a)		(120 ±12)	Ohm
Signal run time	(Pair to a)	≤	4.46	ns/m
Capacity unbalanced to ground	(Pair to a)	≤	3937	pF/km
Operating voltage (peak)		≤	300	V
Insulation resistance		≥	200	MOhm*km
Test voltage (wire/wire/screen rms 50Hz 1min)		=	2000	V

Frequency (kHz)	125	500	1000
Attenuation typ. (dB/100m) (Pair to a) (dB/100ft)	0,42 (0,1)	0,81 (0,2)	1,31 (0,4)

Mechanical and thermal characteristics

Conductor/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)
Insulating material acc. to DIN EN 50290-2-23 (VDE 0819), table L/MD (HD 624.3)
Jacket material acc. F45052-F5100 (similar to DIN VDE 0282)
Sunlight resistant acc. to UL 1581 Sec.1200
Flame retardant acc. to UL 1581, Sec. 1080 (VW-1)

Trailing cable for following requirements
- 2.5 million bending cycles
- bending radius 200 mm
- at a speed of 4m/s
- acceleration 4 m/s²
- maximum length horizontal of cable 6m

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Other characteristics:

High-flexible Use
NEC Class 2

Permissible temperature range :	-40°C (-40°F) up to +80°C (+176°F)
Min. bending radius allowed	repeated 5X ø , single 2,5X ø
Weight about	184 Kg/km (124 lb/1000ft)

Designation of order of order:

L45467-F21-W8
203314
02YS 1X2X1.3/3.8-120 LI VZN PIMF
LI2Y C11Y 1X2X1.5 VZN PIMF VI FRNC
1000 m (3281 ft) on non-returnable reel