FieldLink®

DeviceNet

Design

a) Pair 02YS(ST) 1X2X0.67/1.9-120 LI VZN

Wire
Stranded tinned copper wire 19 X 0.13 — ø 0.67 mm (0,026 in)
Insulation of foamed Polyethylenee (PE) with skin — ø 1.9 mm (0.075 in)
Wall thickness about 0.6 mm

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

b) Pair LIY(ST) 1X2X0.38/1.4 VZN

Wire
Stranded tinned copper wire 19 X 0.16 — ø 0.75 mm (0.030 in)
Insulation of Polyvinylchloride (PVC) — ø 1.4 mm (0,055 in)
Wall thickness about 0.3 mm

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

Core:

Central element: Stranded tinned copper drain wire 0.38 mm² (19x0.16)
1 Pair 02YS(ST) 1X2X0.67/1.9-120 LI VZN
1 Pair LIY(ST) 1X2X0.38/1.4 VZN
Plastic tape conductiv
Shield braiding of tinned copper wires 0.13 mm dia
Coverage about 80%
Plastic tape, overlapped — ø 5.0 mm (0.197 in)

Jacket:
Polyvinylchloride (PVC) GY
Wall thickness about 0.9 mm ø (6.9 ±0.3) mm (2.717 ±0.012 in)

Printing: LEONI L DeviceNet Thin Cable highflex 2x24AWG 2x22AWG SHIELDED (UL) E119100
CMG 75°C or CL2 FT4 Sun Res Oil Res I

Electrical data at 20°C

Conductor resistance	(Pair to a)	≤	90	Ohm/km
Conductor resistance	(Pair to b)	≤	55	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		≥	20	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)	0,95 (0,3)	1,64 (0,5)	2,29 (0,7)

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 50290-2-21 (VDE 0819), compoundtype TI53 (HD 624.1)
Jacket material acc. to DIN VDE 0207, compoundtype YM3
Sunlight resistant acc. to UL 1581 Sec.1200
Flame retardant acc. to UL 1685 (CSA FT 4)
Oil resistant acc. to 1581 Sec. 480 (60°)

Trailing cable for following requirements
- 1.8 million bending cycles
- bending radius 110 mm
- at a speed of 4m/s
- acceleration 4 m/s²
- maximum length horinzontal of cable 6m

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Other characteristics:
High-flexible use
NEC Class 2

Permissible temperature range : -10°C (+14°F) up to +80°C (+176°F)
Min. bending radius allowed : single 2,5X ø
PVC weight with Phthalate : 23,9 Kg/km (16,0 lb/1000ft)
PVC weight without Phthalate : 0 Kg/km (0,0 lb/1000ft)
Weight about : 70 Kg/km (46,9 lb/1000ft)

Designation:
L45467-F16-W15
203320
02YS 1X2X0.67/1.9-120 LI VZN PIMF
LIY CY 1X2X0.38 VZN PIMF GR
1000 m (3281 ft) on non-returnable reel