

FieldLink[®]

DeviceNet



Design

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

Wire

Stranded tinned copper wire 40 X 0.18 (18AWG)
Insulation of foamed Polyethylene (PE) with skin
Wall thickness about 1.2 mm

∅ 1.3 mm (0,051 in)
∅ 3.8 mm (0,150 in)

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

b) Pair LIY(ST) 1X2X1.5/2.7 VZN

Wire

Stranded tinned copper wire 84 X 0.16 (15AWG)
Insulation of Polyvinylchloride (PVC)
Wall thickness about 0.5 mm

∅ 1.7 mm (0.067 in)
∅ 2.7 mm (0,106 in)

2 wires, RD and BK side by side
Alulaminat 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 LIY(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

∅ 8.8 mm (0.346 in)

Jacket

Polyvinylchloride (PVC) GY

Wall thickness about 1.7 mm

∅ (12.2 ±0.3) mm (0,480 ±0,012 in)

Printing: "sequential length in metres" BizLink Special Cables Germany * DeviceNet Thick Cable highflex
2x18AWG 2x15AWG SHIELDED (UL) E119100 CMG 75C or PLTC FT4 Sun Res Oil Res I *
"internal lot number"

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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		≥	20	MOhm*km
Test voltage (wire/wire/screen rms 50Hz 1 min)		=	2000	V

Frequency (kHz)	125	500	1000
Attenuation typ. (dB/100m) (Pair to a)	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 50290-2-21 (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°)

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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 : repeated 5X ø , single 2,5X ø

PVC weight with Phthalate : 79,2 Kg/km (53,1 lb/1000ft)

PVC weight without Phthalate : 10,5 Kg/km (7,0 lb/1000ft)

Weight about : 196 Kg/km (131,4 lb/1000ft)

Designation of order

L45467-F21-W15

203318

02YS 1X2X1.3/3.8-120 LI VZN PIMF

LIY CY 1X2X1.5 VZN PIMF GR

1000 m (3281 ft) on non-returnable reel

Product has not been tested and classified according to the CPR (EU/305/2011).

The product shall not be permanently installed in buildings in the EU.