

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

ø 1.3 mm (0,051 in)
ø 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

ø 1.7 mm (0,067 in)
ø 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

ø 8.8 mm (0.346 in)

LEONI Special Cables GmbH

Technisches Datenblatt – Technical Data Sheet – Technisches Datenblatt – Technical Data Sheet – Technisches Datenblatt – Technical Data Sheet

Jacket:

Polyvinylchloride (PVC) GY
Wall thickness about 1.7 mm

∅ (12.2 ±0.3) mm (0,480 ±0,012 in)

Printing: LEONI L DeviceNet Thick Cable highflex 2x18AWG 2x15AWG SHIELDED (UL) E119100
CMG 75°C or PLTC FT4 Sun Res Oil Res I

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 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 50290-2-21 (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°)

UL File E119100 Vol.1 Sec.17 Page 3
UL File E116441 Vol.1 Sec. 7 Page 3

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 ∅, single 2,5X ∅
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

LEONI Special Cables GmbH

Phone: +49-04491-292-292

Fax: +49-04491-292-169

Internet: www.leoni-special-cables.com

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Technical modification reserved

Creator : LSC E / BUSCHER

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Page 2 / 2