

# 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 Polyethylen (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 mm<sup>2</sup> (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 conductiv

Shield braiding of tinned copper wires 0.13 mm dia

Coverage about 80%

Plastic tape, overlapped

∅ 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 1.3 mm

 $\varnothing$  (11.4 ± 0.3) mm (0.449 ± 0.012 in)

Printing: To be define

**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)

**Application / Special feature:**

High-flexible Use

Permissible temperature range : -10°C (+14°F) up to +80°C (+176°F)

Min. bending radius allowed : repeated 5X  $\varnothing$ , single 2,5X  $\varnothing$

PVC weight with Phthalate : 55,9 Kg/km (37,5 lb/1000ft)

PVC weight without Phthalate : 9,1 Kg/km (6,1 lb/1000ft)

Weight about : 172 Kg/km (115,3 lb/1000ft)

**Designation of order:**

L45467-F21-W65

207040

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

LIY CY 1X2X1.5 VZN PIMF GR

1000 m (3281 ft) on non-returnable reel