

# FieldLink<sup>®</sup>

## DeviceNet



### Design

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

##### Wire

Stranded tinned copper wire 19 X 0.13

Insulation of foamed Polyethylen (PE) with skin

Wall thickness about 0.6 mm

ø 0.67 mm (0,026 in)

ø 1.9 mm (0,075 in)

2 wires, WH and BU side by side

Alulaminat foil overlapped, applied longitudinally

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

##### Wire

Stranded tinned copper wire 19 X 0.16

Insulation of Polyvinylchloride (PVC)

Wall thickness about 0.3 mm

ø 0.75 mm (0,030 in)

ø 1.4 mm (0,055 in)

2 wires, RD and BK side by side

Alulaminat foil overlapped, applied longitudinally

### Core:

Central element: Stranded tinned copper drain wire 0.38 mm<sup>2</sup> (19x0.16)

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

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

Shield braiding of tinned copper wires 0.13 mm dia

Coverage about 70%

ø 4.6 mm (0,181 in)

**LEONI Special Cables GmbH**

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

**Jacket:**Polyvinylchloride (PVC) GR  
Wall thickness about 0.9 mm

∅ (6.4 ±0.3) mm (0.252 ±0.012 in)

To be defined

**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)

**Application / Special feature:**

Permissible temperature range : -20°C (-4°F) up to +80°C (+176°F)  
 Min. bending radius allowed : repeated 10X ∅ , single 3,75X ∅  
 PVC weight with Phthalate : 21.1 Kg/km  
 PVC weight without Phthalate : 2.7 Kg/km  
 Weight about : 60 Kg/km (40,2 lb/1000ft)

**Designation of order of order:**

L45467-F16-W55  
 207037  
 02YS 1X2X0.67/1.9-120 LI VZN PIMF  
 LIY CY 1X2X0.38 VZN PIMF GR  
 1000 m (3281 ft) on non-returnable reel