

Design

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

Wire

Stranded tinned copper wire 40 X 0.18 (18AWG)

∅ 1.3 mm (0,051 in)

Insulation of foamed Polyethylen (PE) with skin

∅ 3.8 mm (0,150 in)

Wall thickness about 1.2 mm

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)

∅ 1.7 mm (0,067 in)

Insulation of Polyvinylchloride (PVC)

∅ 2.7 mm (0,106 in)

Wall thickness about 0.5 mm

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 conductiv

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

LEONI Special Cables GmbH

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

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) (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°)

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Application / Special feature:

High-flexible Use
 NEC Class 2

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

min. bending diameter allowed: multiple 10X ø
 single 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

