

2171272	<b>DATA SHEET</b>	
Valid from: 18.09.2018	<b>IE-PNC-5-M12D-A-(L*)-P-2-22-FD-RJ45</b>	

## Product description

Industrial Ethernet Patchcord, Profinet Type C, Cat.5, angled plug M12 (D-coded) on straight plug RJ45, PUR, for drag chain



This datasheet is also valid for other lengths configurations. Other lengths configurations on request.

## Product variations

Article number	Article description	Length (L*) [m]
2171272	IE-PNC-5-M12D-A-1-P-2-22-FD-RJ45	1
2171273	IE-PNC-5-M12D-A-2-P-2-22-FD-RJ45	2
2171274	IE-PNC-5-M12D-A-3-P-2-22-FD-RJ45	3
2171275	IE-PNC-5-M12D-A-5-P-2-22-FD-RJ45	5
2171276	IE-PNC-5-M12D-A-10-P-2-22-FD-RJ45	10
2171277	IE-PNC-5-M12D-A-20-P-2-22-FD-RJ45	20

## General properties, Patchcord

Outer diameter, cable	6.5 mm
Number of cores	4
Outer sheath	PVC
Outer sheath, color	green similar to RAL 6018
Mating cycles, M12 connector	100
Mating cycles, RJ45 connector	750
Screening	SF/UTP

## General properties, cable

LAPP-Article number of cable	2170894
LAPP-Description of cable	ETHERLINE FD P FC Cat. 5
Conductor, outer diameter	ca. 0.75 mm
Conductor, material	tinned copper, fine-wire stranded
Insulation, outer diameter	ca. 1.5 mm
Insulation, material	PE
Core identification code	acc. to IEC 708-1: white, yellow, blue, orange
Stranding	star quad
Wrapping	plastic tape
	plastic laminated aluminum foil
Screening	on top: braid of copper wire tinned wire, coverage ca. 85%

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### Electrical properties, cable at 20 °C

Resistance (loop)	≤ 120 Ω/km
Insulation material, specific electrical resistance	≥ 0.5 GΩ*km
Characteristic impedance (1 MHz to 100 MHz)	100 Ω ± 15 Ω
Signal propagation time	< 5.3 ns/m
Test voltage (rms 50 Hz, 1 min.), core-core	700 V
Test voltage (rms 50 Hz, 1 min.), core-screening	700 V

### Mechanical and thermal properties, cable

Minimum bending radius, during laying	8 x cable diameter
Minimum bending radius, fixed installation	5 x cable diameter
Permissible temperature range, during laying	-20 °C to +60 °C
Permissible temperature range, fixed installation	-30 °C to +70 °C
Sunlight resistance	sunlight resistant acc. to UL 1581 Sec. 1200
Flame propagation	flame retardant acc. to UL 1581 (VW-1)
Halogen free	halogen free acc. to VDE 0472-815
General requirements	Dangerous and forbidden substance acc. to RoHS directive (2002/95/EG) are not allowed to the manufacturing

### General properties, M12 connector

Coding	D
Protection degree	IP67/IP69 locked connector
Rated voltage max.	250 V
Rated current at 40 °C	4 A
Ambient temperature	-30 °C to +90 °C
Insulation resistance	≥ 10 <sup>8</sup> Ω
Locking nut with vibration protection	Yes
Tightening torque	1.0 Nm

### Materials, M12 connector

Contacts, base material	CuZn
Contacts, surface	Au
Grip body	TPU
Locking nut, base material	CuZn

### General properties, RJ45 connector

Protection degree	IP20
Rated voltage max.	50 V
Rated current at 40 °C	1 A
Ambient temperature	-40 °C to +70 °C
Insulation resistance	≥ 10 <sup>8</sup> Ω

### Materials, RJ45 connector

Contacts, base material	CuZn
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Contacts, surface  
Grip body

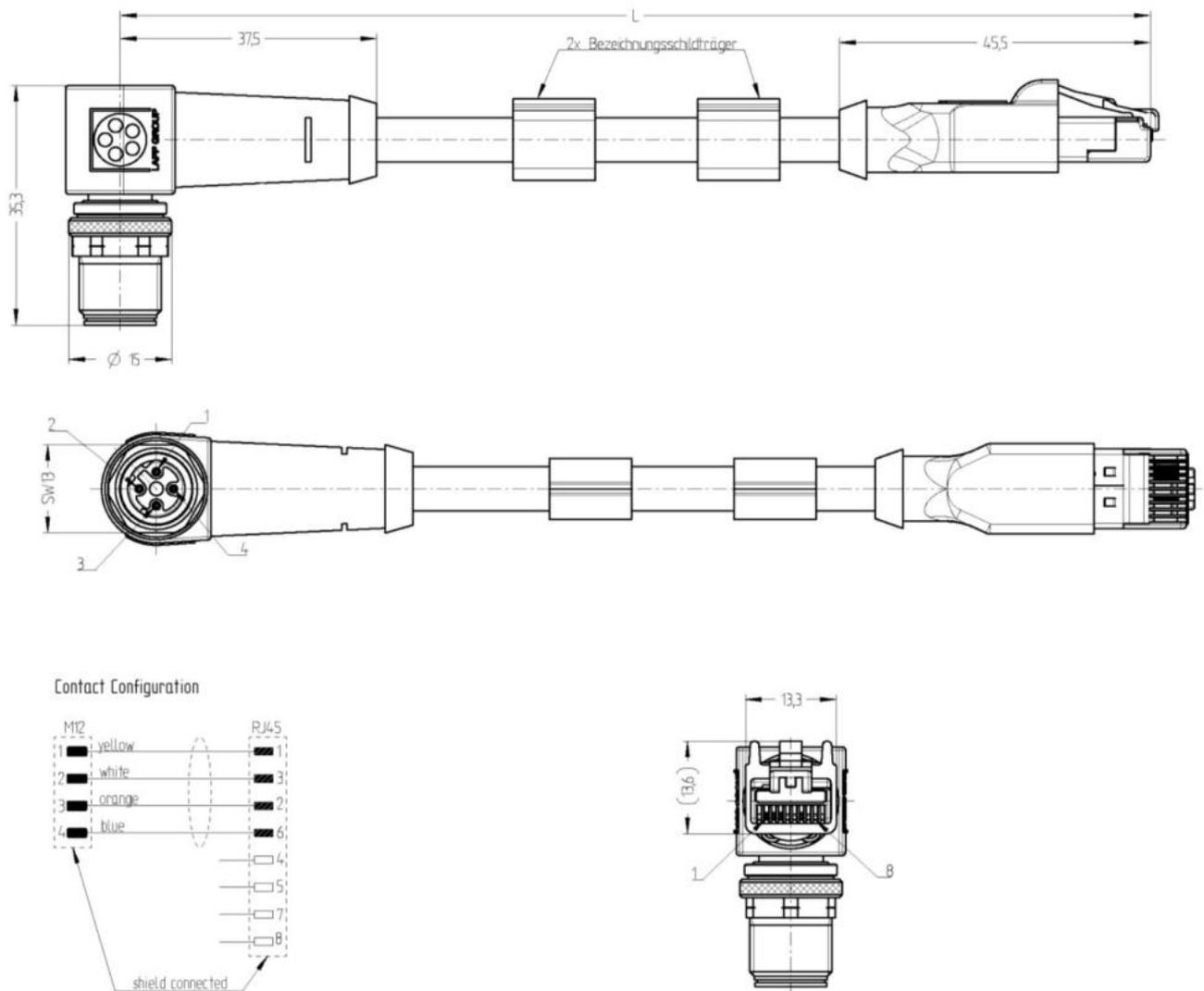
Au  
TPU

### Standards

Product standard, M12 connector  
Product standard, RJ45 connector

DIN EN 61076-2-101  
DIN EN 60603-7-51

### Drawings



### Application range

Automation, industrial machinery and plant engineering

### Note

Photographs are not true to scale and do not represent detailed images of the respective products.

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