


2171923	<b>DATA SHEET</b>	
Valid from: 08.11.2018	<b>IE-EC-5-M12D-A-(*L)-P-2-26-FD-RJ45</b>	

## Product description

Industrial Ethernet Patchcord, EtherCat, Cat.5e, 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]
2171923	IE-EC-5-M12D-A-0,5-P-2-26-FD-RJ45	0,5
2171924	IE-EC-5-M12D-A-1-P-2-26-FD-RJ45	1
2171925	IE-EC-5-M12D-A-2-P-2-26-FD-RJ45	2
2171926	IE-EC-5-M12D-A-3-P-2-26-FD-RJ45	3
2171927	IE-EC-5-M12D-A-5-P-2-26-FD-RJ45	5
2171928	IE-EC-5-M12D-A-10-P-2-26-FD-RJ45	10
2171929	IE-EC-5-M12D-A-20-P-2-26-FD-RJ45	20

## General properties, Patchcord

Number of cores	4
Outer sheath	PUR
Mating cycles, M12 connector	100
Mating cycles, RJ45 connector	750


## General properties, cable

LAPP-Article number of cable	2170433
LAPP-Description of cable	ETHERLINE P EC FD Cat.5e
Outer sheath, color	green similar to RAL 6018
Outer diameter	Ø4.8 mm
Conductor, horizontal cut	ca. 0.15 mm <sup>2</sup>
Conductor, material	tinned stranded copper
Insulation, outer diameter	ca. Ø1.00 mm
Insulation, material	Polyolefin
Core identification code	white-orange/orange, white-green/ green
Stranding	star quad
Wrapping	fleece
Screening	SF/UTP plastic laminated aluminum foil on top: braid of copper wire, coverage ca. 85%

## Electrical properties, cable at 20°C

Characteristic impedance (1 MHz to 100 MHz)	100 Ω ± 3 Ω
Operating peak voltage	125 V (not for power purposes)
Test voltage (rms 50 Hz, 1 min.), core-core	1500 V
Test voltage (rms 50 Hz, 1 min.), core-screening	1500 V

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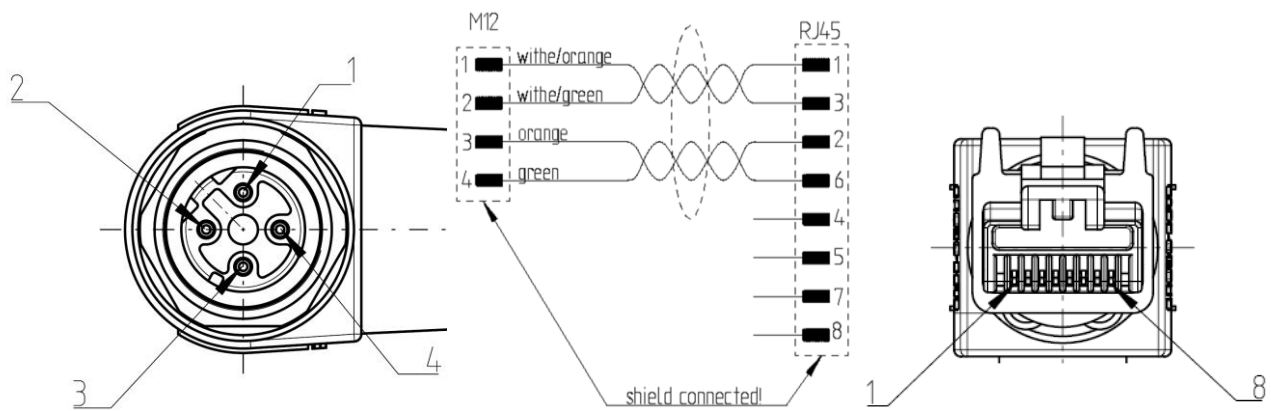
### Transmission characteristics

Category (ISO) 5

### Mechanical and thermal properties, cable

Minimum bending radius, during laying	16 x cable diameter
Minimum bending radius, fixed installation	4 x cable diameter
Permissible temperature range, during laying	-30 °C to +50 °C (-22 °F to +122 °F)
Permissible temperature range, fixed installation	-40 °C to +80 °C (-40 °F to +176 °F)
Flame propagation	flame retardant acc. UL 1581/UL 2556 (VW-1)
Halogen free	halogen free acc. to VDE 0472-815

### Connector pin assignment



### General properties, M12 connector

Coding	D
Protection degree	IP65/IP67 plugged and locked connector
Rated voltage max.	250 V
Rated current at 40 °C	4 A
Ambient temperature	-30 °C to +90 °C (-4 °F to 167 °F)
Insulation resistance	≥ 10 <sup>8</sup> Ω
Locking nut with vibration protection	Yes


### Materials, M12 connector

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

### General properties, RJ45 connector

Protection degree	IP20
Rated voltage max.	50 V
Rated current at 40 °C	1 A
Ambient temperature	-20 °C to +75 °C (-4 °F to +167 °F)
Insulation resistance	≥ 10 <sup>8</sup> Ω

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### Materials, RJ45 connector

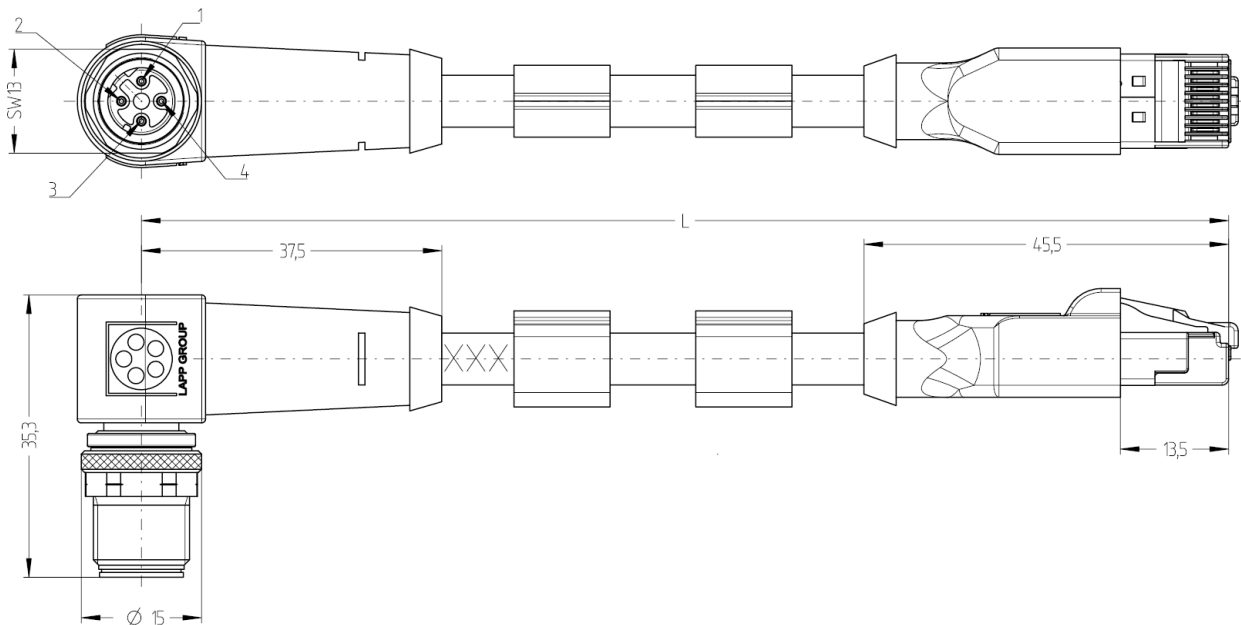
Contacts, base material	CuZn
Contacts, surface	Au
Grip body	TPU

### Standards

Product standard, M12 connector	IEC 61076-2-101
Product standard, RJ45 connector	IEC 60603-7-5
Generic cabling for customer premises - General requirements	ISO/IEC 11801:2010

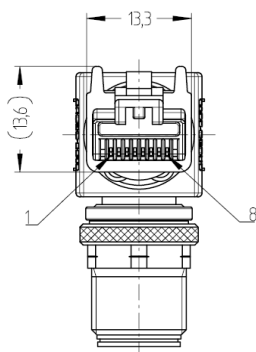
### Technical drawing

Dimensional drawing



Complete cable assembly

Dimensional drawing



Jack RJ45

### 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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