


2171750	<b>DATA SHEET</b>	
Valid from: 17.09.2018	<b>IE-EC-5-M12D-S-(L*)-P-2-26-FD-RJ45</b>	

## Product description

Industrial Ethernet Patchcord, EtherCat, Cat.5e, straight 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]
2171750	IE-EC-5-M12D-S-0,5-P-2-26-FD-RJ45	0,5
2171751	IE-EC-5-M12D-S-1-P-2-26-FD-RJ45	1
2171752	IE-EC-5-M12D-S-2-P-2-26-FD-RJ45	2
2171753	IE-EC-5-M12D-S-3-P-2-26-FD-RJ45	3
2171754	IE-EC-5-M12D-S-5-P-2-26-FD-RJ45	5
2171755	IE-EC-5-M12D-S-10-P-2-26-FD-RJ45	10
2171756	IE-EC-5-M12D-S-20-P-2-26-FD-RJ45	20


## General properties, Patchcord

Outer diameter, cable	4.8 mm
Number of cores	4
Outer sheath	PUR
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	2170433
LAPP-Description of cable	ETHERLINE P EC FD Cat.5e
Conductor, outer diameter	ca. 0.15 mm
Conductor, material	tinned stranded copper
Insulation, outer diameter	ca. 1.00 mm
Insulation, material	Polyolefin
Core identification code	pair 1: white-orange, orange; pair 2: white-green, green
Stranding	star quad
Wrapping	PET tape
Screening	plastic laminated aluminum foil on top: braid of copper wire, coverage ca. 85%

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### Electrical properties, cable at 20 °C

Resistance (loop)	≤ 142 Ω/km
Insulation material, specific electrical resistance	≥ 5 GΩ*km
Characteristic impedance (1 MHz to 100 MHz)	100 Ω ± 15 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

### 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
Permissible temperature range, fixed installation	-40 °C to +80 °C
Flame propagation	flame retardant acc. UL 1581 (FT1)
Halogen free	halogen free acc. to VDE 0472-815
General requirements	Dangerous and forbidden substance acc. to RoHS directive (2011/65/EU) 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
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	-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

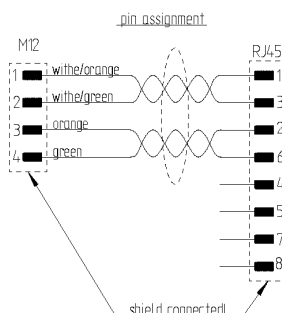
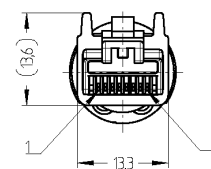
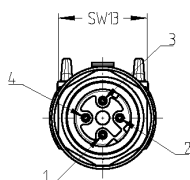
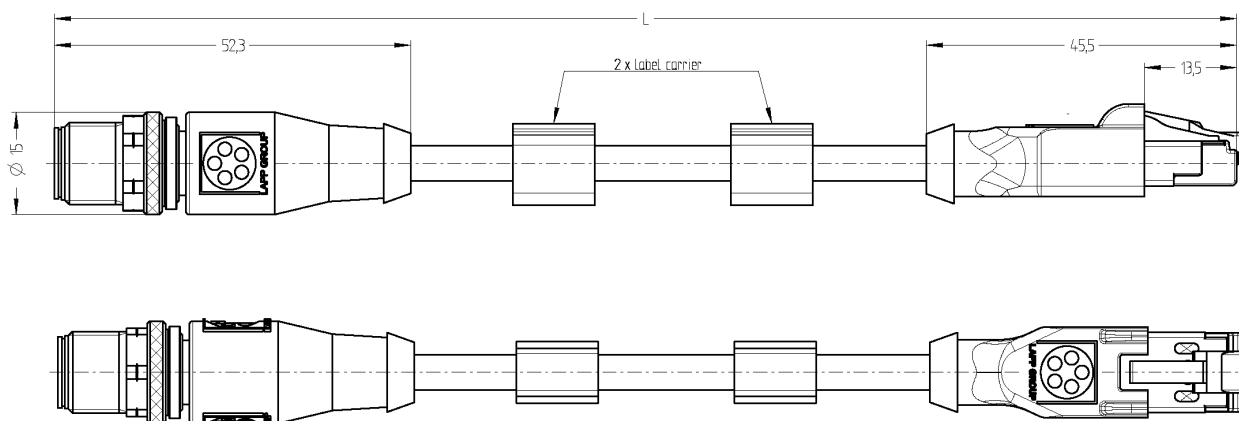
Au  
TPU

### 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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