

2171923	DATA SHEET	
Valid from: 30.03.2021	IE-EC-5-M12D-A-(*L)-P-2-26-FD-RJ45	

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 ²
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

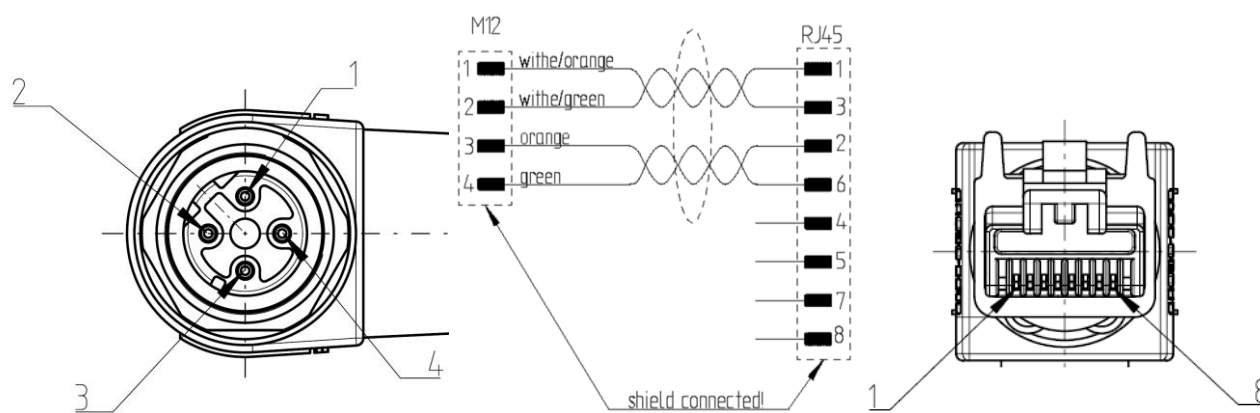
Category (ISO)

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	$\geq 10^8 \Omega$
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	$\geq 10^8 \Omega$

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Materials, RJ45 connector

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

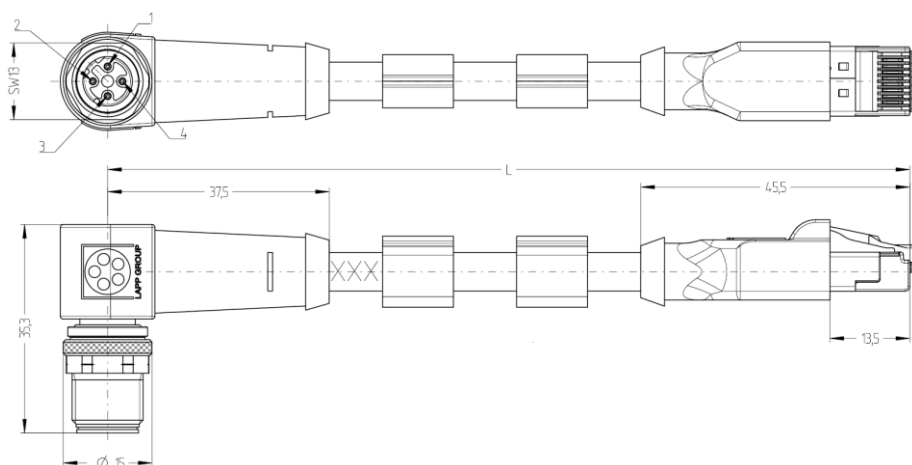
Standards

Product standard, M12 connector
Product standard, RJ45 connector
Generic cabling for customer premises – General requirements

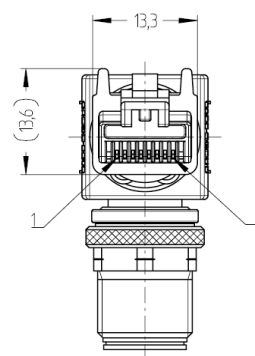
IEC 61076-2-101
IEC 60603-7-5
DIN EN 50173-1
ISO/IEC 11801

Technical drawing

Dimensional drawing



Dimensional drawing



Jack RJ45

Complete cable assembly

Certification

Certified acc. to ECE R118

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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