

2171750	DATA SHEET	
Valid from: 30.03.2021	IE-EC-5-M12D-S-(L*)-P-2-26-FD-RJ45	

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)	$\leq 142 \Omega/\text{km}$
Insulation material, specific electrical resistance	$\geq 5 \text{ G}\Omega \cdot \text{km}$
Characteristic impedance (1 MHz to 100 MHz)	$100 \Omega \pm 15 \Omega$
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	$\geq 10^8 \Omega$
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	$\geq 10^8 \Omega$

Materials, RJ45 connector

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

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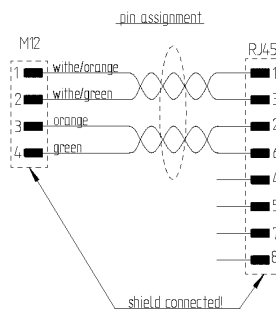
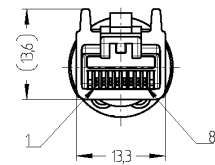
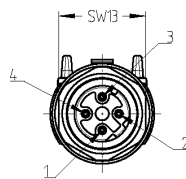
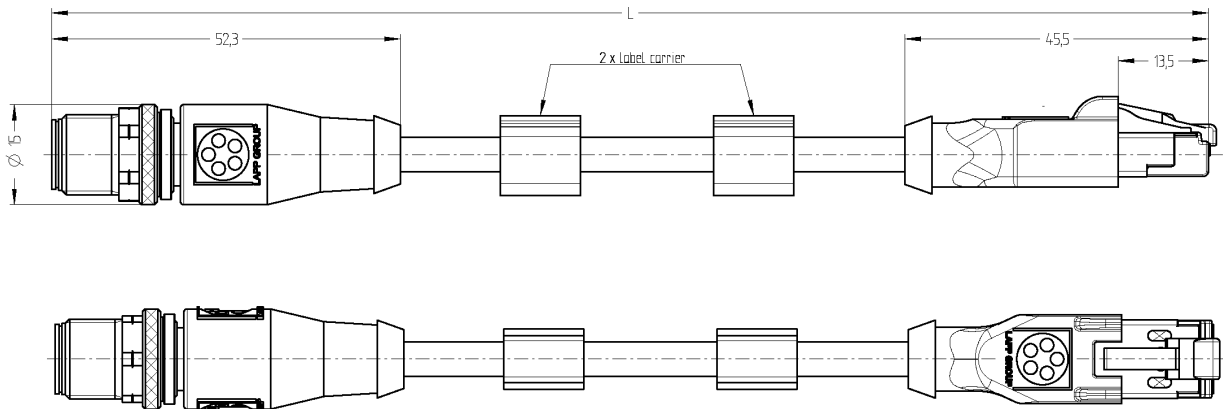
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Standards

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

DIN EN 61076-2-101
DIN EN 60603-7-51
DIN EN 50173-1
ISO/IEC 11801

Drawings



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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