

2171085	DATA SHEET	
Valid from: 17.09.2018	IE-5-M12D-S-(L*)-H-2-26-7-RJ45	

Product description

Industrial Ethernet Patchcord, Cat.5e, straight plug M12 (D-coded) on straight plug RJ45, halogen-free, flexible



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

Product variations

Article number	Article description	Length (L*) [m]
2171085	IE-5-M12D-S-1-H-2-26-7-RJ45	1
2171086	IE-5-M12D-S-2-H-2-26-7-RJ45	2
2171087	IE-5-M12D-S-3-H-2-26-7-RJ45	3
2171088	IE-5-M12D-S-5-H-2-26-7-RJ45	5
2171089	IE-5-M12D-S-10-H-2-26-7-RJ45	10
2171090	IE-5-M12D-S-20-H-2-26-7-RJ45	20

General properties, Patchcord

Outer diameter, cable	5.6 mm
Number of cores	4
Outer sheath	halogen free compound
Outer sheath, color	blue similar to RAL 5021
Mating cycles, M12 connector	100
Mating cycles, RJ45 connector	750
Screening	SF/UTP

General properties, cable

LAPP-Article number of cable	2170283
LAPP-Description of cable	ETHERLINE H Flex Cat. 5e 2x2x26/7 AWG
Conductor, cross-section	ca. 0.14 mm ²
Conductor, material	bare copper-wire
Insulation, outer diameter	ca. 0.95 mm
Insulation, material	Foam-Skin PE
Core identification code	pair 1: white-orange, orange; pair 2: white-green, green
Stranding	cores twisted to pairs, pairs twisted to bundle
Wrapping	non-woven 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)	$\leq 284 \Omega/\text{km}$
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)
Signal propagation time	$< 4.3 \text{ ns/m}$
Test voltage (rms 50 Hz, 1 min.), core-core	1000 V
Test voltage (rms 50 Hz, 1 min.), core-screening	500 V

Mechanical and thermal properties, cable

Minimum bending radius, during laying	15 x cable diameter
Minimum bending radius, fixed installation	6 x cable diameter
Permissible temperature range, during laying	-5 °C to + 60 °C
Permissible temperature range, fixed installation	-30 °C to +80 °C
Flame propagation	flame retardant acc. to IEC 60332-1-2
Halogen free	halogen free acc. to IEC 60754-1, 60754-2
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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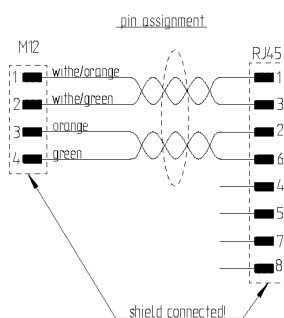
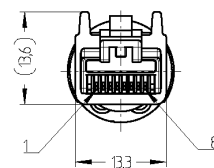
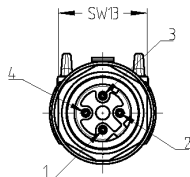
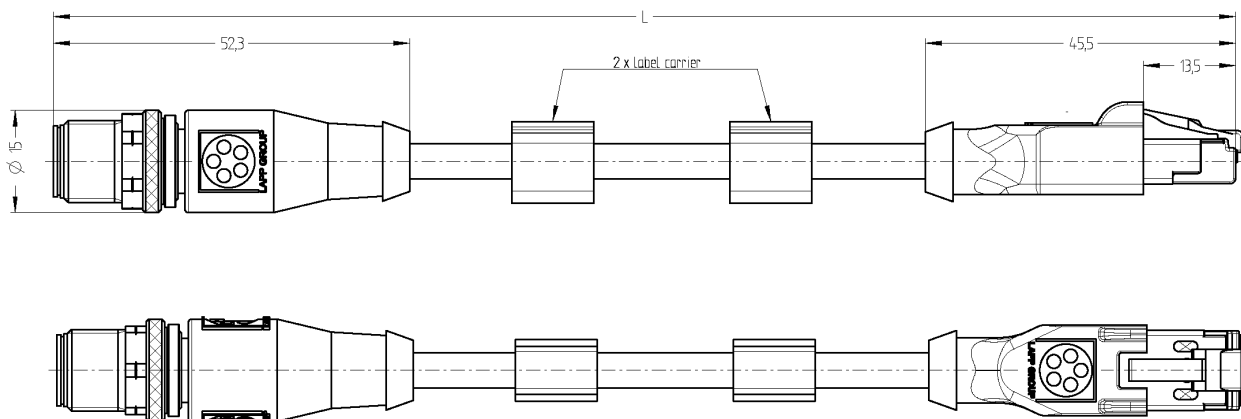
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Standards

Product standard, M12 connector
Product standard, RJ45 connector

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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