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|---------------------------|---------------------------------------|---|
| 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) | ≤ 284 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) |
| Signal propagation time | < 4.3 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 | ≥ 10 ⁸ 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 ⁸ Ω |

Materials RJ45, connector

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

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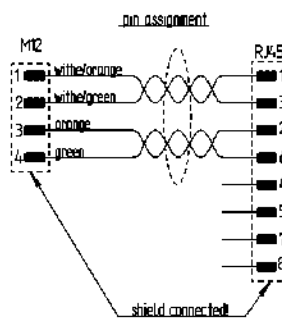
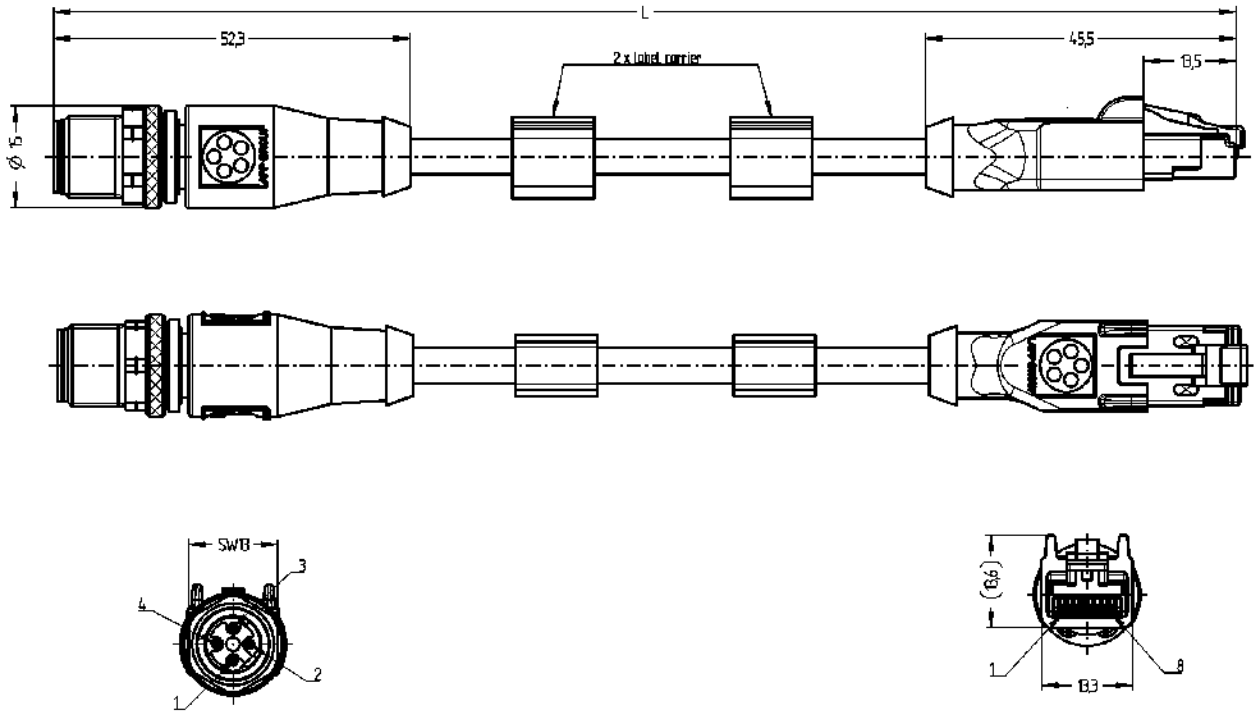
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Standards

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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