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| 2171109 | DATA SHEET |  |
| Valid from: 17.09.2018 | IE-5-M12D-S-(L*)-P-2-26-7-RJ45 | |

Product description

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



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

Product variations

| Article number | Article description | Length (L*) [m] |
|----------------|------------------------------|-----------------|
| 2171109 | IE-5-M12D-S-1-P-2-26-7-RJ45 | 1 |
| 2171110 | IE-5-M12D-S-2-P-2-26-7-RJ45 | 2 |
| 2171111 | IE-5-M12D-S-3-P-2-26-7-RJ45 | 3 |
| 2171112 | IE-5-M12D-S-5-P-2-26-7-RJ45 | 5 |
| 2171113 | IE-5-M12D-S-10-P-2-26-7-RJ45 | 10 |
| 2171114 | IE-5-M12D-S-20-P-2-26-7-RJ45 | 20 |


General properties, Patchcord

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|-------------------------------|----------------------------|
| Outer diameter, cable | 5.6 mm |
| Number of cores | 4 |
| Outer sheath | PUR, halogen free compound |
| Outer sheath, color | blue similar to RAL 502 1 |
| Mating cycles, M12 connector | 100 |
| Mating cycles, RJ45 connector | 750 |
| Screening | SF/UTP |

General properties, cable

| | |
|------------------------------|--|
| LAPP-Article number of cable | 2170284 |
| LAPP-Description of cable | ETHERLINE P FLEX Cat. 5e 2x2x26/7 AWG |
| Conductor, cross-section | ca. 0.14 mm ² |
| Conductor, material | bare copper, fine wire stranded |
| Insulation, outer diameter | ca. 0.95 mm |
| Insulation, material | Foam-Skin Polyolefin |
| Core identification code | pair 1: white-orange, orange; pair 2: white-green, green |
| Stranding | cores twisted to pairs, pairs stranded together |
| Wrapping | 1 layer non-woven tape |
| Screening | plastic laminated aluminum foil on top: braid of tinned copper 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 | < 4.33 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

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|---|--|
| Minimum bending radius, during laying | 15 x cable diameter |
| Minimum bending radius, fixed installation | 8 x cable diameter |
| Permissible temperature range, during laying (VDE) | -5 °C to +50 °C |
| Permissible temperature range, fixed installation (VDE) | -30 °C to +80 °C |
| Permissible temperature range, during laying (UL) | -5 °C to +80 °C |
| Permissible temperature range, fixed installation (UL) | -30 °C to +80 °C |
| Flame propagation | flame retardant acc. to IEC 60332-1-2 |
| 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

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|---------------------------------------|----------------------------|
| 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 |

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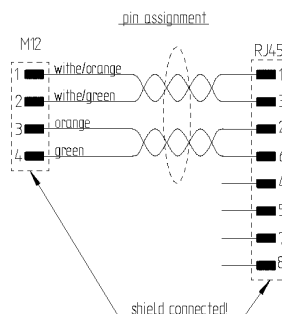
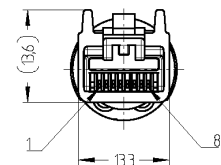
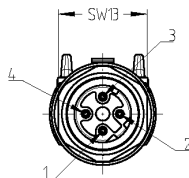
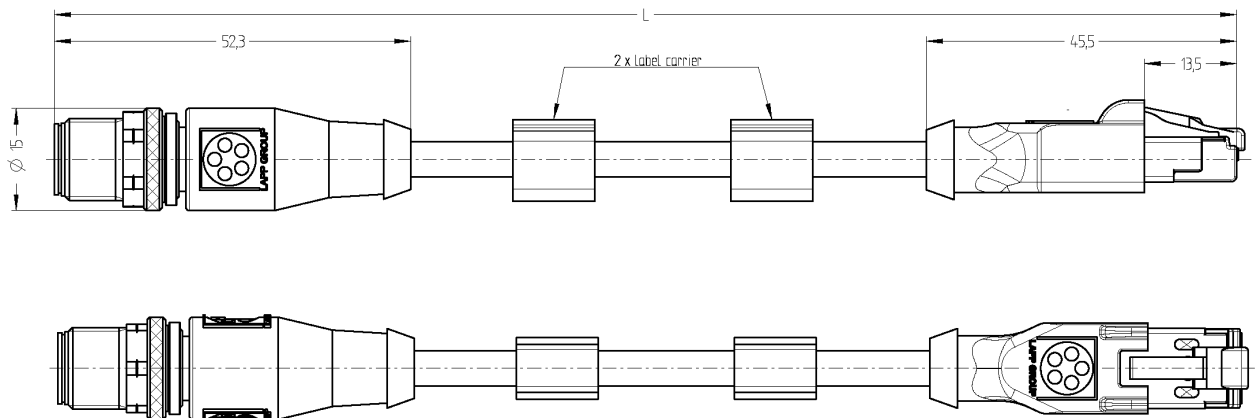
Materials RJ45, connector

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

Standards

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|----------------------------------|--------------------|
| Product standard, M12 connector | DIN EN 61076-2-101 |
| Product standard, RJ45 connector | 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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