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| 2171037 | DATA SHEET |  |
| Valid from: 17.09.2018 | IE-PNB-5-M12D-A-(L*)-Y-2-22-7-M12D-S | |

Product description

Industrial Ethernet Patchcord, Profinet Type B, Cat.5, angled plug M12 on straight plug M12, D-coded, PVC, flexible



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

Product variations

| Article number | Article description | Length (L*) [m] |
|----------------|------------------------------------|-----------------|
| 2171037 | IE-PNB-5-M12D-A-1-Y-2-22-7-M12D-S | 1 |
| 2171038 | IE-PNB-5-M12D-A-2-Y-2-22-7-M12D-S | 2 |
| 2171039 | IE-PNB-5-M12D-A-3-Y-2-22-7-M12D-S | 3 |
| 2171040 | IE-PNB-5-M12D-A-5-Y-2-22-7-M12D-S | 5 |
| 2171041 | IE-PNB-5-M12D-A-10-Y-2-22-7-M12D-S | 10 |
| 2171042 | IE-PNB-5-M12D-A-20-Y-2-22-7-M12D-S | 20 |


General properties, Patchcord

| | |
|------------------------------|---------------------------|
| Outer diameter, cable | 6.5 mm |
| Number of cores | 4 |
| Outer sheath | PVC |
| Outer sheath, color | green similar to RAL 6018 |
| Mating cycles, M12 connector | 100 |
| Screening | SF/UTP |

General properties, cable

| | |
|------------------------------|-----------------------------------------------------------------------------|
| LAPP-Article number of cable | 2170886 |
| LAPP-Description of cable | ETHERLINE PN Cat. 5 Y FLEX FC |
| Conductor, outer diameter | ca. 0.75 mm |
| Conductor, material | braid of copper wire, tinned wire |
| Insulation, outer diameter | ca. 1.5 mm |
| Insulation, material | PE |
| Core identification code | acc. to IEC 708-1: white, yellow, blue, orange |
| Stranding | star quad (optional with central filler) |
| Wrapping | plastic tape (overlapping) plastic laminated aluminum foil (overlapping) |
| Screening | on top: braid of copper wire tinned wire, coverage ca. 85% |

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Electrical properties, cable at 20°C

| | |
|-----------------------------------------------------|--------------|
| Resistance (loop) | ≤ 120 Ω/km |
| Insulation material, specific electrical resistance | ≥ 500 MΩ*km |
| Characteristic impedance (1 MHz to 100 MHz) | 100 Ω ± 15 Ω |
| UL-Rating | 600 V |
| Signal propagation time | < 5.3 ns/m |
| Test voltage (rms 50 Hz, 1 min.), core-core | 2000 V |
| Test voltage (rms 50 Hz, 1 min.), core-screening | 2000 V |

Mechanical and thermal properties, cable

| | |
|---------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Minimum bending radius, during laying | 15 x cable diameter |
| Minimum bending radius, fixed installation | 10 x cable diameter |
| Permissible temperature range, during laying | -20 °C to +60 °C |
| Permissible temperature range, fixed installation | -40 °C to +80 °C |
| Sunlight resistance | sunlight resistant acc. to UL 1581 Sec. 1200 |
| Oil resistance | oil resistant acc. to UL 1581 Sec. 480 (60°C) |
| Flame propagation | flame retardant acc. to UL 1685 (CSA FT 4) |
| General requirements | Dangerous and forbidden substance acc. to RoHS directive (2002/95/EG) 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 |


Standards

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

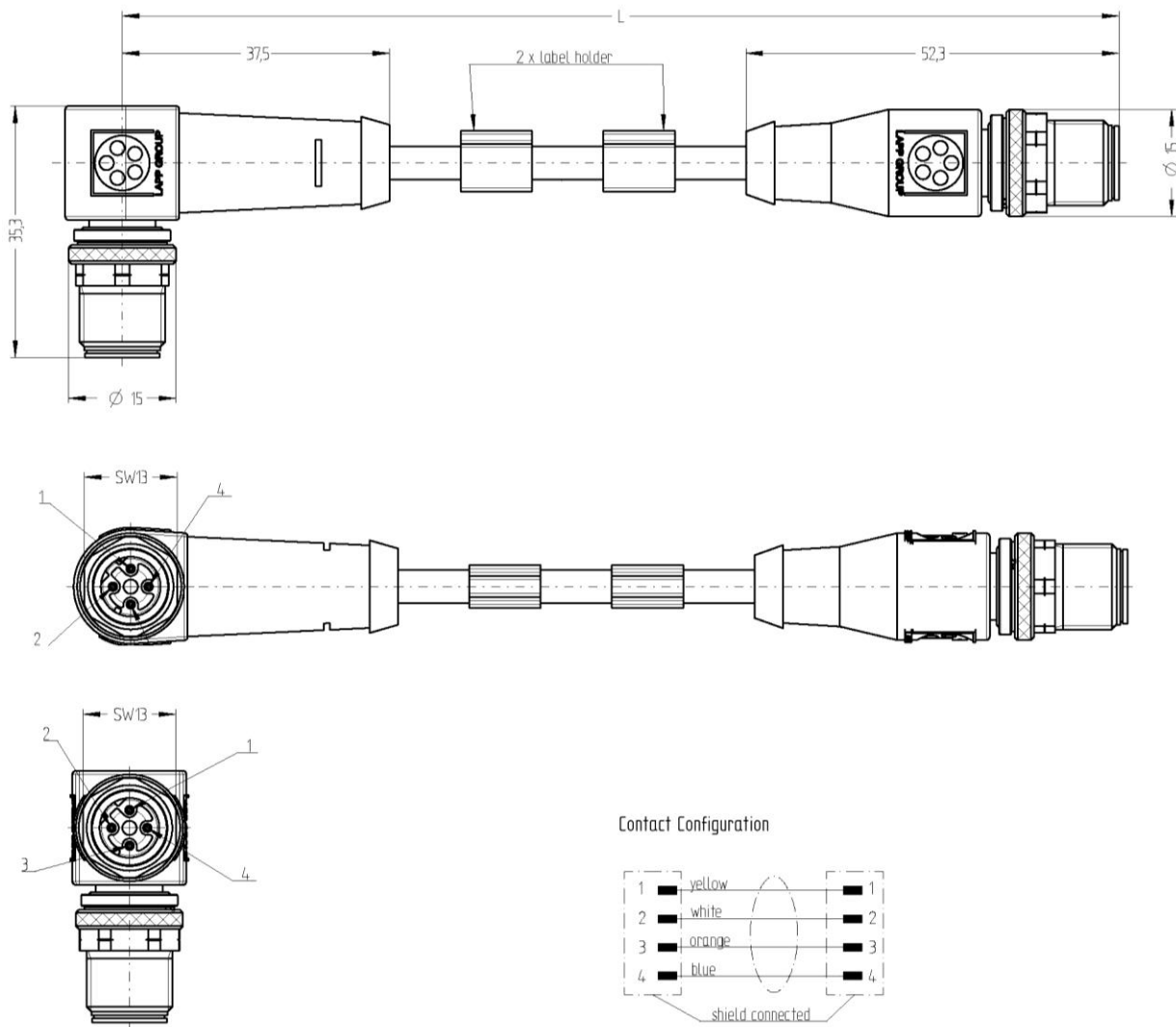
Approvals

| | |
|-------------------|---------|
| UL-listed, E-File | E249137 |
|-------------------|---------|

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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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