

M12 male 90° D-cod. with cable shielded

PUR 1x4xAWG22 shielded gn UL/CSA+drag ch. 1.5m

Ethernet CAT5

Male 90°

M12, 4-pole

D-coded

shielded

Transmission properties with channel transmission up to 100 m

Further cable lengths on request.

Plastic housings with good resistance against chemicals and oils.

The resistance to aggressive media should be individually tested for your application. Further details on request.

[Link to Product](#)**Illustration**

Product may differ from Image



Cable length

1,5 m

Side 1

| | |
|-------------------------------------|-------------------|
| Tightening torque | 0,6 Nm |
| Mounting method | inserted, screwed |
| Family construction form | M12 |
| Thread | M12 x 1 |
| Coding | D |
| Material | PUR |
| Width across flats | SW13 |
| Degree of protection (EN IEC 60529) | IP65, IP66K, IP67 |

Side 2

| | |
|---------------------------|-------|
| Stripping length (jacket) | 20 mm |
|---------------------------|-------|

Commercial data

| | |
|-----------------------|---------------|
| ECLASS-6.0 | 27061801 |
| ECLASS-7.0 | 27061801 |
| ECLASS-8.0 | 27061801 |
| ECLASS-9.0 | 27061801 |
| ECLASS-10.1 | 27060307 |
| ECLASS-11.1 | 27060307 |
| ECLASS-12.0 | 27060307 |
| ETIM-5.0 | EC002599 |
| customs tariff number | 85444290 |
| GTIN | 4048879863308 |
| Packaging unit | 1 |

Electrical data | Supply

| | |
|------------------------------------|-------|
| Operating voltage DC max. | 60 V |
| Current operating per contact max. | 1,5 A |

Industrial communication

| | |
|-----------------------------|--|
| Transfer parameters | CAT5, Class D (ISO/IEC 11801:2002), (EN 50173-1) |
| Data transmission rate max. | 100 MBit/s |

Industrial communication | Ethernet functionality

| | |
|--------|-------------|
| duplex | Full duplex |
|--------|-------------|

Installation | Connection

| | |
|---------------------------|---------|
| Stripping length (jacket) | 20 mm |
| Mounting set | M12 x 1 |

Device protection | Electrical

| | |
|--|-------------------|
| Additional condition protection degree | inserted, screwed |
| Pollution Degree | 3 |
| Rated surge voltage | 1,5 kV |
| Material group (IEC 60664-1) | I |

Mechanical data

| | |
|-----------------------------|---------|
| Contour for corrugated hose | without |
|-----------------------------|---------|

Mechanical data | Material data

| | |
|---------------------------|------------------|
| Coating locking | Nickeled |
| Coating of fitting | nickel plated |
| Locking material | Zinc die-casting |
| Material screw connection | Zinc die-casting |

Mechanical data | Mounting data

| | |
|-----------------|---------------------------------------|
| Mounting method | inserted, screwed, Shaking protection |
|-----------------|---------------------------------------|

Environmental characteristics | Climatic

| | |
|--|----------------------------|
| Operating temperature min. | -25 °C |
| Operating temperature max. | 85 °C |
| Additional condition temperature range | depending on cable quality |

Important installation notes

| | |
|------------------------|---|
| Note on strain relief | Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties. |
| Note on bending radius | Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces. |

Conformity

| | |
|------------------|--------------------------|
| Product standard | DIN EN 61076-2-101 (M12) |
|------------------|--------------------------|

Installation | Cable

| | |
|---|------------------------------------|
| Cable identification | 659 |
| Jacket Color | green |
| Type of Certificate | cURus |
| Amount stranding | 1 |
| Stranding | 4 wires around Core filler twisted |
| Cable shielding (type) | copper braid, tinned |
| Cable shielding (coverage) | 85 % |
| Banding | Fleece, Foil |
| Filler | yes |
| wire arrangement | white, yellow, blue, orange |
| Cable weight | 89,1 g/m |
| Material jacket | PUR |
| Shore hardness jacket | 90 ± Shore A |
| Freedom from ingredients (jacket) | lead-free, CFC-free, halogen-free |
| Outer-diameter (jacket) | 7,4 mm |
| Tolerance outer diameter (sheath) | ± 5 % |
| Material inner jacket | TPE-V |
| Color (inner jacket) | white |
| Material wire insulation | PE |
| Amount wires | 4 |
| Outer diameter insulation | 1,4 mm |
| Outer diameter tolerance core insulation | ± 5 % |
| Shore hardness wire insulation | 65 Shore D |
| Ingredient freeness wire insulation | lead-free, CFC-free, halogen-free |
| Amount strands (wire) | 7 |
| Diameter of single wires | 22 AWG |
| Conductor crosssection (wire) | 22 AWG |
| Material conductor wire | Stranded copper wire, bare |
| Traversing distance (C-track) | 5 m |
| Nominal voltage AC max. | 60 V |
| Current load capacity (standard) | to DIN VDE 0298-4 |
| Current load capacity min. wire | 4,8 A |
| Characteristic impedance | 100 Ω ± 15 % |
| Electrical resistance line constant wire | 55 Ω/km @ 20 °C |
| AC withstand voltage (wire - wire) | 2 kV @ 60 s |
| Electrical capacity line constant (wire - wire) | 50000 pF/km |
| Power frequency withstand voltage (wire - jacket) | 2 kV @ 60 s |
| AC withstand voltage (wire - shield) | 2 kV @ 60 s |
| Loop resistance | 5000 MΩ × km |
| Min. operating temperature (static) | -40 °C |
| Max. operating temperature (fixed) | 80 °C |
| Operating temperature min. (dynamic) | -30 °C |

| | |
|--------------------------------------|--|
| Operating temperature max. (dynamic) | 70 °C |
| Flame resistance | UL 1581 § 1100 FT2 IEC 60332-2-2 UL 1581 § 1090 |
| chemical resistance | Good, application-related testing |
| Gasoline resistance | Good, application-related testing |
| Oil resistance | DIN EN 60811-404 Good, application-related testing |
| Bending radius (fixed) | 5 x Outer diameter |
| Bending radius (dynamic) | 12 x Outer diameter |
| Travel speed (C-track) | 2 Mio. |