

**M12 male 90° D-cod. with cable shielded**

PUR 1x4xAWG22 shielded gn UL/CSA+drag ch. 3m

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

3 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
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**Commercial data**

ECLASS-6.0	27061801
ECLASS-6.1	27060307
ECLASS-7.0	27060307
ECLASS-8.0	27060307
ECLASS-9.0	27060307
ECLASS-10.1	27060307
ECLASS-11.1	27060307
ECLASS-12.0	27060307
ETIM-5.0	EC002599
customs tariff number	85444290
GTIN	4048879860482
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
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**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
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**Mechanical data | Material data**

Coating locking	Nickel
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
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**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	<b>Attention:</b> 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)
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#### 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
Traversing distance (C-track)	5 m
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
Loop resistance	5000 MΩ × km
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
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.