

**M12 male 0° / M12 male 0° D-cod. shielded**

PUR 1x4xAWG22 shielded gn UL/CSA+drag ch. 50m

Ethernet CAT5e

Transmission properties with channel transmission up to 100 m

Male straight – male straight

Cable is approved for 600 V

M12 – M12, 4-pole

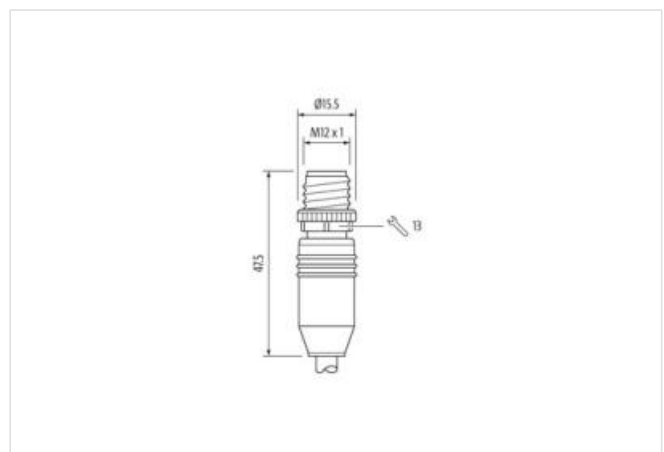
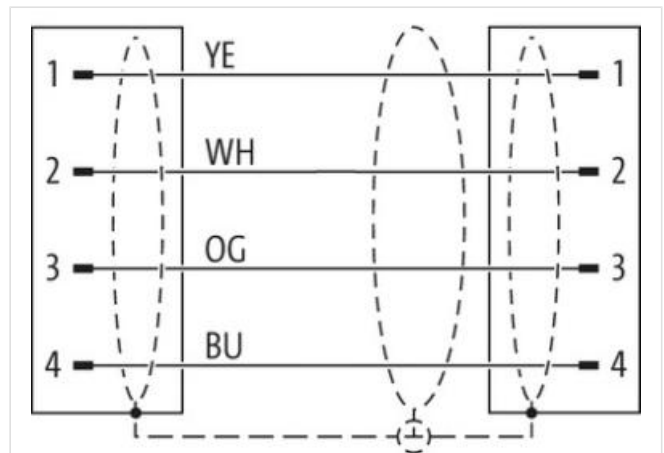
D-coded

shielded

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	50 m
<b>Side 1</b>	
Tightening torque	0,6 Nm
Mounting method	inserted, screwed
Family construction form	M12
Thread	M12 x 1
Cable outlet	straight
Coding	D
Material	PUR
No. of poles	4
Width across flats	SW13
Degree of protection (EN IEC 60529)	IP65, IP66K, IP67

<b>Side 2</b>	
Tightening torque	0,6 Nm
Mounting method	inserted, screwed
Family construction form	M12
Thread	M12 x 1
Cable outlet	straight
Coding	D
Material	PUR
No. of poles	4
Width across flats	SW13
Degree of protection (EN IEC 60529)	IP65, IP66K, IP67

<b>Commercial data</b>	
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	4048879740913
Packaging unit	1

<b>Electrical data   Supply</b>	
Operating voltage DC max.	60 V
Current operating per contact max.	1,5 A

<b>Industrial communication</b>	
Transfer parameters	CAT5e, Class D (ISO/IEC 11801:2002), (EN 50173-1)
Data transmission rate max.	100 MBit/s

**Industrial communication | Ethernet functionality**

The information in this Product-PDF has been compiled with the utmost care.  
Liability for the correctness completeness and topicality of the information is restricted to gross negligence. Version: 2024-06-24

duplex	Full duplex
<b>Device protection   Electrical</b>	
Degree of protection (EN IEC 60529)	IP65, IP67, IP66K
Additional condition protection degree	inserted, screwed
Pollution Degree	3
Rated surge voltage	1,5 kV
Material group (IEC 60664-1)	I
<b>Mechanical data</b>	
Contour for corrugated hose	without
<b>Mechanical data   Material data</b>	
Coating locking	Nickeled
Locking material	Zinc die-casting
<b>Mechanical data   Mounting data</b>	
Mounting method	inserted, screwed, Shaking protection
<b>Environmental characteristics   Climatic</b>	
Operating temperature min.	-25 °C
Operating temperature max.	85 °C
Additional condition temperature range	depending on cable quality
<b>Important installation notes</b>	
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.
<b>Conformity</b>	
Product standard	DIN EN 61076-2-101 (M12)
<b>Installation   Cable</b>	
wire arrangement	white, yellow, blue, orange
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
Nominal voltage AC max.	60 V
Current load capacity (standard)	to DIN VDE 0298-4
Current load capacity min. wire	4,8 A
Characteristic impedace	100 $\Omega \pm 15 \%$
Electrical resistance line constant wire	55 $\Omega/\text{km}$ @ 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
Isolation resistance	5000 M $\Omega$ × 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
No. of bending cycles (C-track)	2 Mio.
Traversing distance (C-track)	5 m
Travel speed (C-track)	3,3 m/s