

**M12 female 90° A-cod. with cable**

PUR AWG24+22 shielded bk UL/CSA+drag ch. 15m

DeviceNet, CANopen

Female 90°

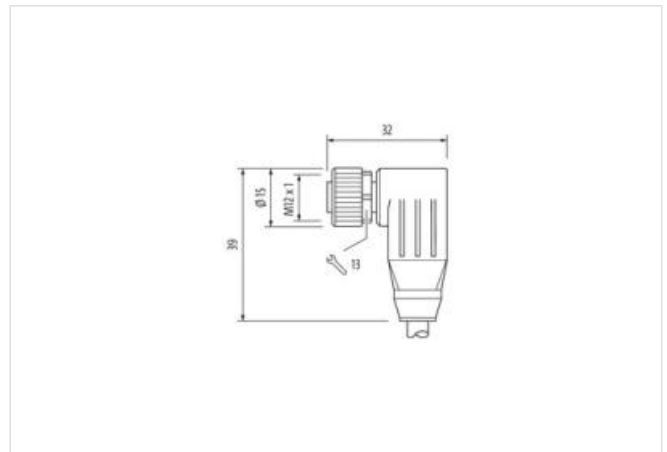
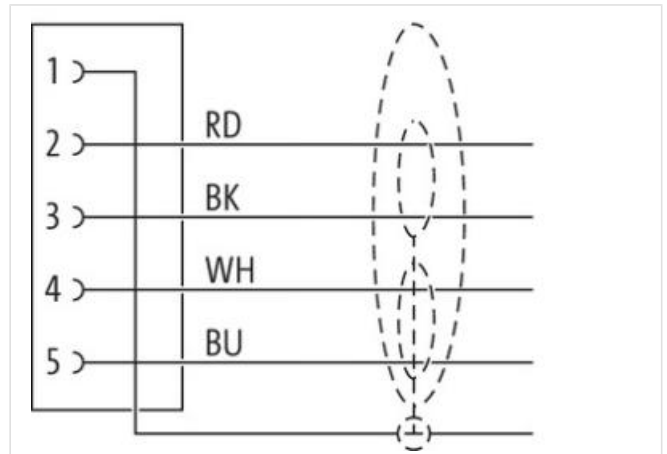
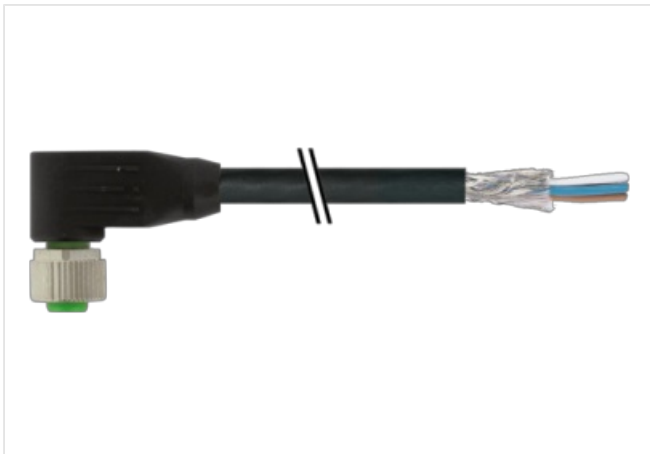
M12, 5-pole

shielded

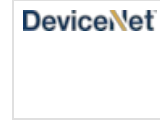
Plastic housings with good resistance against chemicals and oils.

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

Further cable lengths on request.

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

Product may differ from Image



Cable length	15 m
<b>Side 1</b>	
Tightening torque	0,6 Nm
Mounting method	inserted, screwed
Family construction form	M12
Thread	M12 x 1
Coding	A
Material	PUR
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	EC001855
customs tariff number	85444290
GTIN	4065909034101
Packaging unit	1

<b>Electrical data   Supply</b>	
Operating voltage AC max.	60 V
Operating voltage DC max.	60 V
Operating voltage AC (UL-listed)	30 V
Operating voltage DC (UL-listed)	30 V
Current operating per contact max.	4 A

<b>Installation   Connection</b>	
Mounting set	M12 x 1

<b>Device protection   Electrical</b>	
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
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.

#### Installation | Cable

wire arrangement                                 (white, blue), (black, red)

Cable identification                                838

Jacket Color                                        black

Type of Certificate                                cURus

Amount stranding                                 1

Stranding    2 wires twisted

Amount stranding (type 2)                      1

Stranding (type 2)                                2 Stranded joints twisted

Cable shielding (type)                            copper braid, tinned

Cable shielding (coverage)                      65 %

Banding    Foil

Drain wire (cross-section)                      22 AWG

wire arrangement                                 (white, blue), (black, red)

Cable weight                                      63,12 g/m

Material jacket                                    PUR

Shore hardness jacket                            90 ± 5 Shore A

Freedom from ingredients (jacket)            lead-free, cadmium-free, CFC-free, halogen-free, silicone-free

Outer-diameter (jacket)                         6,9 mm

Tolerance outer diameter (sheath)            ± 5 %

Material wire insulation                         PE

Amount wires                                      2

Outer diameter insulation                       2,1 mm

Outer diameter tolerance core insulation    ± 5 %

Shore hardness wire insulation                64 ± 5 Shore D

Ingredient freeness wire insulation         lead-free, CFC-free, halogen-free

Amount strands (wire)                         19

Diameter of single wires                        24 AWG

Conductor crosssection (wire)                24 AWG

Drain wire (cross-section)                      22 AWG

Material conductor wire                         copper stranded wire, tinned

Electrical function wire                        Data

Material wire insulation (Data)                PE

Outer diameter wire insulation (Data)        1,5 mm

Tolerance outer diameter wire insulation (data) ± 53 %

Ingredient freeness wire insulation (Data)   lead-free, CFC-free, halogen-free

Amount wires (Data)                            2

Amount strands wire (Data)                   19

Diameter of single wires (Data)               22 AWG

Conductor crosssection wire (Data)         22 AWG

Material conductor wire (Data)                copper stranded wire, tinned

Electrical function wire (data)                Power

Nominal voltage AC max.	300 V
Current load capacity (standard)	to DIN VDE 0298-4
Current load capacity min. wire	4,5 A
Current load capacity min. Wire (Data)	6 A
Electrical function wire	Data
Electrical function wire (data)	Power
Characteristic impedance	120 $\Omega$ $\pm$ 10 % @ 1 MHz
Electrical resistance line constant wire	78 $\Omega$ /km
Electrical resistance coating wire (Data)	54 $\Omega$ /km
AC withstand voltage (wire - wire)	2 kV @ 60 s
Electric capacitance	40000 pF/km
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
UV resistance	DIN EN ISO 4892-2 A
Flame resistance	IEC 60332-2-2   UL 1581 § 1090   UL 1581 § 1100 FT2
chemical resistance	Good, application-related testing
Gasoline resistance	Good, application-related testing
Oil resistance	Good, application-related testing   DIN EN 60811-404
Bending radius (installation)	x Outer diameter
Bending radius (fixed)	6 x Outer diameter
Bending radius (dynamic)	10 x Outer diameter
No. of bending cycles (C-track)	1 Mio.
Traversing distance (C-track)	5 m
Travel speed (C-track)	3 m/s
No. of torsion cycles	2 Mio.
Torsion stress	$\pm$ 30 °/m
Torsion speed	35 cycles/min