

M12 male 0° / M12 male 0° D-cod. shielded V2A

PUR 1x4xAWG22 shielded gn UL/CSA+drag ch. 1.8m

Art.No.: 7002-44511-7960180

Weight: 0.154

Country of origin: DE

Model designation: MSDAL0-DA-T796_1.8-ZS-S02

Product fulfills requirements according to UN/ECE R118

Advantages of our connectors:

Our connectors are versatile and specially optimised for industrial environments. All connectors are 100% tested during the manufacturing process to ensure the highest quality and reliability.

The contacts are gold-plated, which ensures optimum conductivity. Thanks to the high degree of protection, the connectors are ideal for demanding industrial environments. They are also vibration-resistant - this is ensured by the union nut with vibration protection.

Our connectors are resistant to oils and cooling lubricants, but resistance to aggressive media should be tested for each specific application. Different cable lengths available [on request](#)

If you are missing technical information? Please feel free to use our [dictionary](#) to find more technical details.

Product details:

Further cable lengths on request.

Ethernet CAT5

M12 – M12, 4-pole

Male straight – male straight

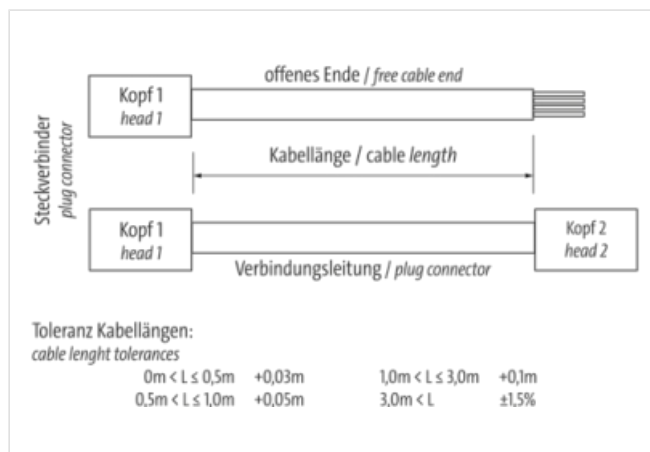
D-coded

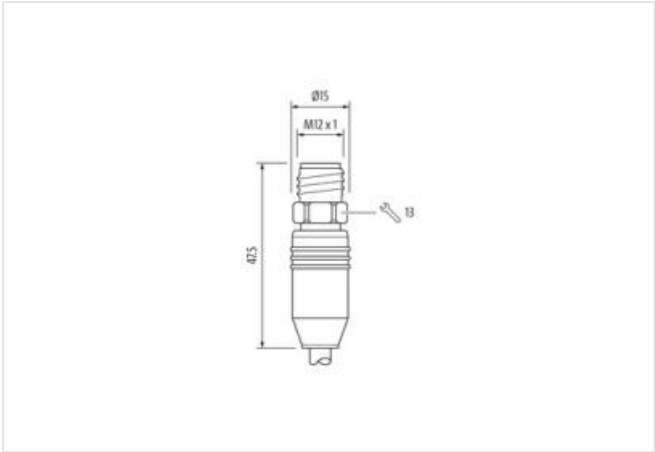
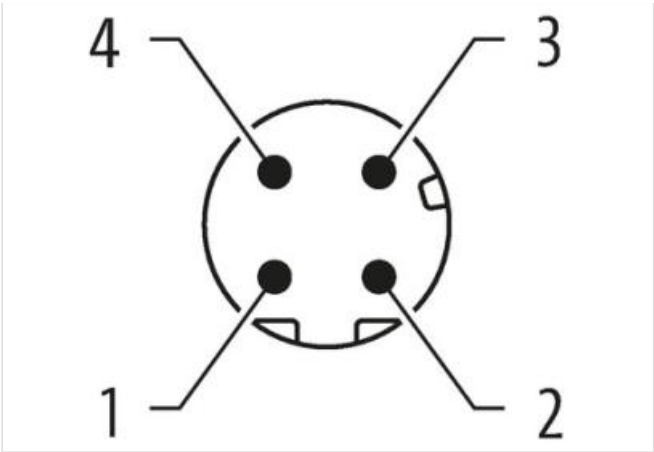
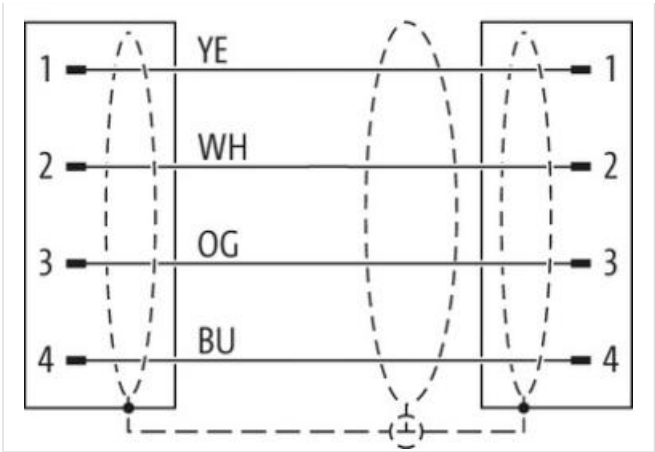
shielded

Stainless steel 1.4305 (V2A)

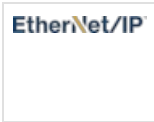
Plastic housings with good resistance against chemicals and oils.

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	1,8 m
Side 1	
Tightening torque	0,6 Nm
Mounting method	inserted, screwed
Coating contact	gold plated
Family construction form	M12
Thread	M12 x 1
Gender	male
Cable outlet	straight
Coding	D
Material contact	Copper alloy
No. of poles	4
Width across flats	SW13
Degree of protection (EN IEC 60529)	IP65, IP66K, IP67

Side 2

Tightening torque	0,6 Nm
Mounting method	inserted, screwed
Coating contact	gold plated
Family construction form	M12
Thread	M12 x 1
Gender	male
Cable outlet	straight
Coding	D
Material contact	Copper alloy
No. of poles	4
Width across flats	SW13
Degree of protection (EN IEC 60529)	IP65, IP66K, IP67

Side 3

Material contact	Copper alloy
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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
EAN	4048879800396
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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Device protection | Electrical

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

Mechanical data

Contour for corrugated hose	without
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Mechanical data | Material data

Color housing	black
Color contact carrier	green
Locking material	Stainless steel 1.4305 (V2A)
Material screw connection	Stainless steel 1.4305 (V2A)

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)
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Installation | Cable

wire arrangement	white, yellow, blue, orange
Cable identification	796
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	69,3 g/m
Material jacket	PUR
Shore hardness jacket	89 Shore A
Freedom from ingredients (jacket)	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Outer-diameter (jacket)	6,7 mm
Tolerance outer diameter (sheath)	± 5 %
Material inner jacket	FRNC
Color (inner jacket)	natural
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	30 AWG
Conductor crosssection (wire)	22 AWG
Material conductor wire	Stranded copper wire, bare
Nominal voltage AC max.	300 V
Current load capacity (standard)	to DIN VDE 0298-4
Current load capacity min. wire	4,8 A
Characteristic impedance	100 Ω ± 15 % @ 100 MHz
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
Isolation 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	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	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)	3 Mio. @ 25 °C
Traversing distance (C-track)	5 m @ 25 °C
Travel speed (C-track)	3,3 m/s @ 25 °C
No. of torsion cycles	1 Mio.
Torsion stress	± 180 °/m
Torsion speed	35 cycles/min