

**M12 male 0° D-cod. / M8 male 0° A-cod. shielded**

PUR 1x4xAWG26 shielded gn UL/CSA+drag ch. 3m

Art.No.: 7000-44901-7910300

Weight: 0.121 kg

Country of origin: DE

Model designation: MSDAL0-H-T791\_3.0-ZE

**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:**

EtherCAT

Male straight – male straight

M12 – M8, 4-pole

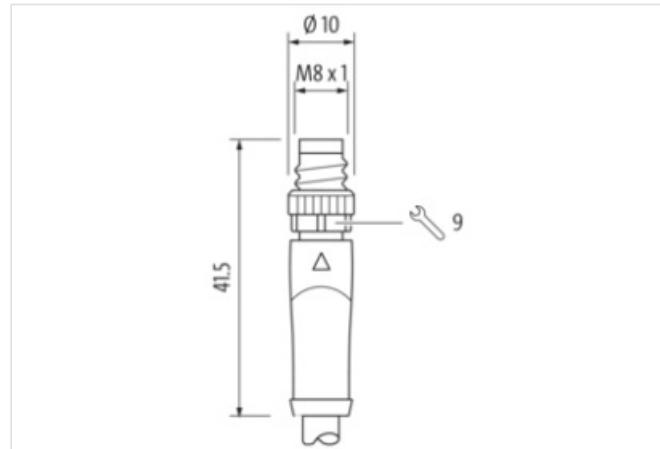
D-coded

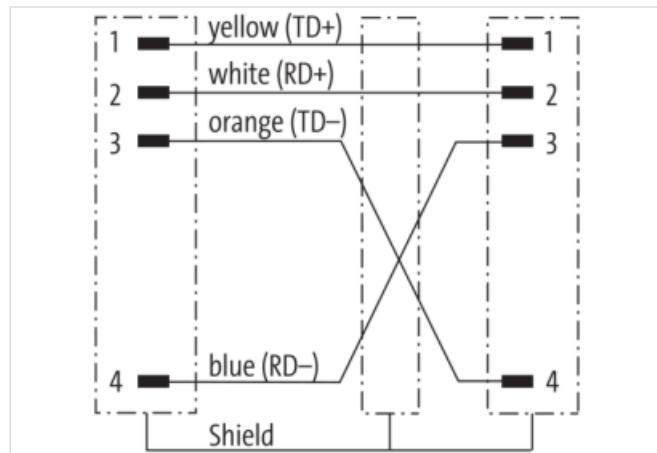
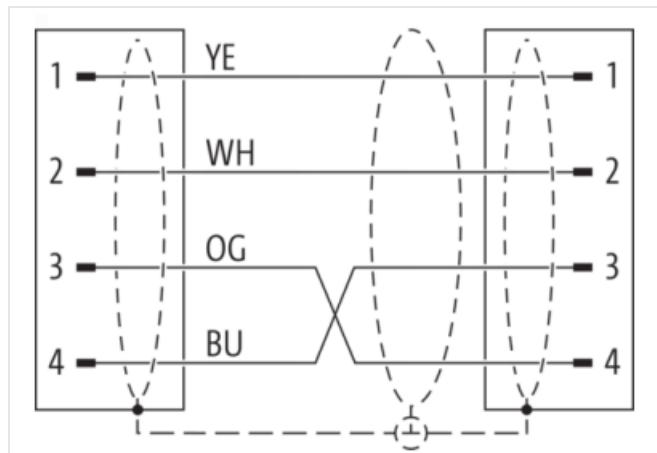
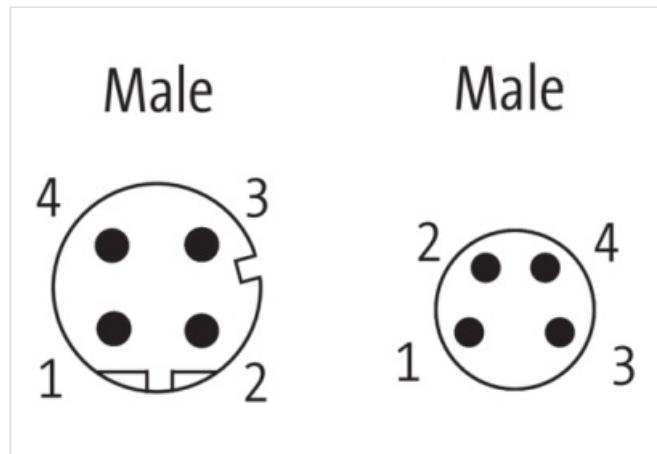
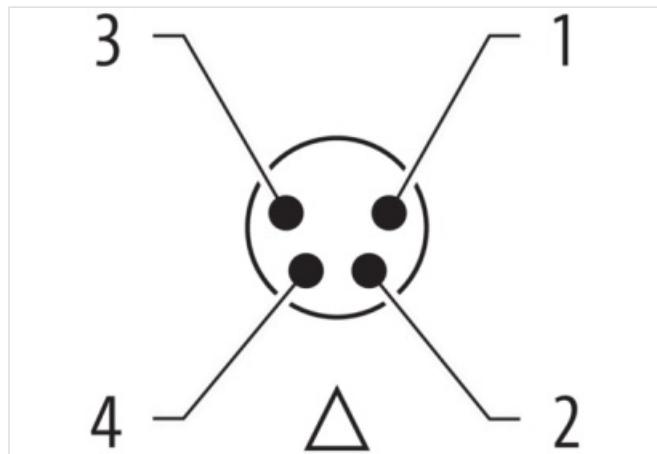
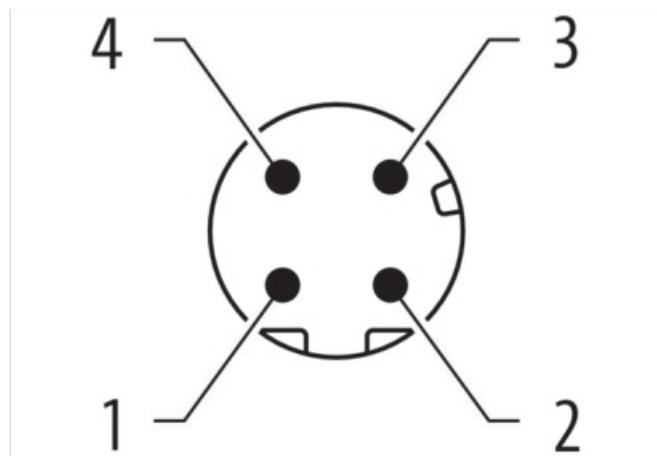
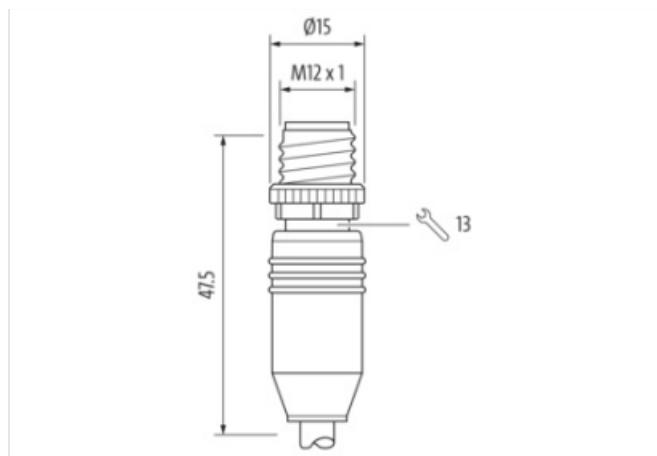
Shielded

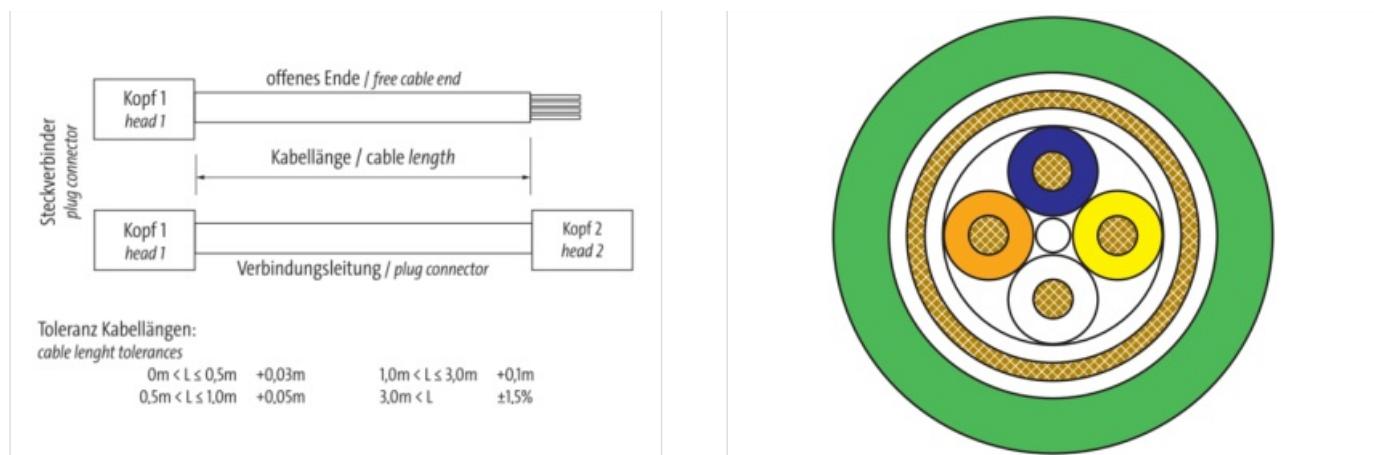
Further cable lengths on request.

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



#### Header

Material short text	MSDAL0-H-T791_3.0-ZE
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Cable length	3,00 m
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#### Side 1

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

#### Side 2

Family construction form	M8
No. of poles	4
Coding	A
Gender	male
Mounting method	inserted, screwed
Threaded hole	M8 x 1
Tightening torque	0,4 Nm
Width across flats	SW9
Cable outlet	straight
suitable for corrugated tube (internal Ø)	8,5 mm
Material	PUR
Material contact	Copper alloy
Coating contact	gold plated
Degree of protection (EN IEC 60529)	IP67, IP66K, IP65

#### Commercial data

URL Webshop <https://shop.murrelektronik.com/7000-44901-7910300>

GTIN	4048879496254
ECLASS-6.0	27061801
ECLASS-6.1	27060307
ECLASS-7.0	27060307
ECLASS-7.1	27060307
ECLASS-8.0	27060307
ECLASS-8.1	27060307
ECLASS-9.0	27060307
ECLASS-9.1	27060307
ECLASS-10.0.1	27060307
ECLASS-10.1	27060307
ECLASS-11.0	27060307
ECLASS-11.1	27060307
ECLASS-12.0	27060307
ECLASS-13.0	27060307
ECLASS-14.0	27060307
ETIM-5.0	EC001855
ETIM-6.0	EC001855
ETIM-7.0	EC001855
ETIM-8.0	EC001855
customs tariff number	85444290
EAN	4048879496254
Packaging unit	1

#### Electrical data | Supply

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

#### Industrial Communication

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

#### Industrial communication | Ethernet functionality

duplex	Full duplex
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#### Device protection | Electrical

Degree of protection (EN IEC 60529)	IP67
Additional condition protection degree	inserted, screwed
Pollution Degree	3
Rated surge voltage	1,5 kV
Material group (IEC 60664-1)	I

#### Mechanical data | Material data

Material screw connection	Zinc die-casting
Coating of fitting	Nickelized

#### Mechanical data | Mounting data

Mounting method	inserted, screwed, Shaking protection
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#### Environmental characteristics | Climatic

Operating temperature min.	-30 °C
Operating temperature max.	85 °C
Additional condition temperature range	depending on cable quality

#### Important installation notes

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.
Note on strain relief	Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.

### Conformity

Product standard EN IEC 61076-2-101 (M12), EN IEC 61076-2-114 (M8)

### Installation | Cable

Cable identification	791
Function cable	Data
Stranding	1 x Wires
Cable shielding (type)	copper braid, tinned
Cable shielding (coverage)	85 %
Banding	Fiber tape, Fleece, Foil
Filler	Yes
Cable weight	34 g/m
Material wire insulation	PP
Amount wires	4
Outer diameter insulation	1,04 mm
Outer diameter tolerance core insulation	± 0,05 mm
Shore hardness wire insulation	55 ± 3 Shore D
Ingredient freeness wire insulation	lead-free, CFC-free, halogen-free
Amount strands (wire)	19
Diameter of single wires	38 AWG
Conductor crosssection (wire)	26 AWG
Material conductor wire	Stranded copper wire, bare
Outer-diameter (jacket)	4,9 mm
Tolerance outer diameter (sheath)	± 5 %
Material jacket	PUR
Shore hardness jacket	90 ± 3 Shore A
Freedom from ingredients (jacket)	lead-free, CFC-free, halogen-free
Conductor resistance (wire)	140 Ω/km
Electric capacitance	51.000 pF/km
Isolation resistance	5.000 MΩ x km
Nominal voltage max.	125 V
Withstand voltage (wire - wire)	0.7 kV @ 60 s
Withstand voltage (wire - jacket)	0.7 kV @ 60 s
Withstand voltage (wire - shield)	0.7 kV @ 60 s
Current load capacity (standard)	to DIN VDE 0298-4
Current load capacity max. (wire)	2,4 A
Characteristic impedance	100 Ω 15 MHz
Operating temperature min. (static)	-40 °C
Operating temperature max. (static)	80 °C
Operating temperature min. (dynamic)	-30 °C
Operating temperature max. (dynamic)	70 °C
Bending radius (fixed)	7.5 x Outer diameter
Bending radius (dynamic)	12.5 x Outer diameter
No. of bending cycles (C-track)	5 Mio. @ 25 °C
Traversing distance (C-track)	5 m @ 25 °C
Travel speed (C-track)	3 m/s @ 25 °C
Acceleration (C-track)	5 m/s² @ 25 °C