

**M12 male 0° D-cod. / RJ45 male 0° shielded**

PUR 1x4xAWG22 shielded gn UL/CSA+drag ch. 1.5m

Art.No.: 7000-44711-7960150

Weight: 0.114 kg

Country of origin: HU

Model designation: MSRAL0-DA-T796\_1.5-ZS

Ethernet CAT5

Male straight – male straight

M12 – RJ45, 4-pole

D-coded

Shielded

with cable sleeves

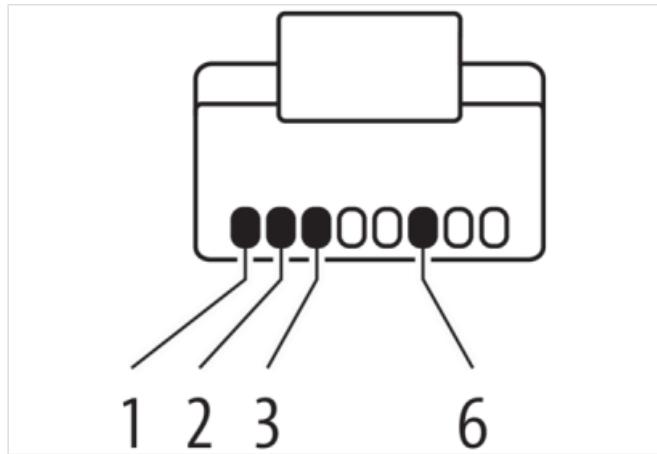
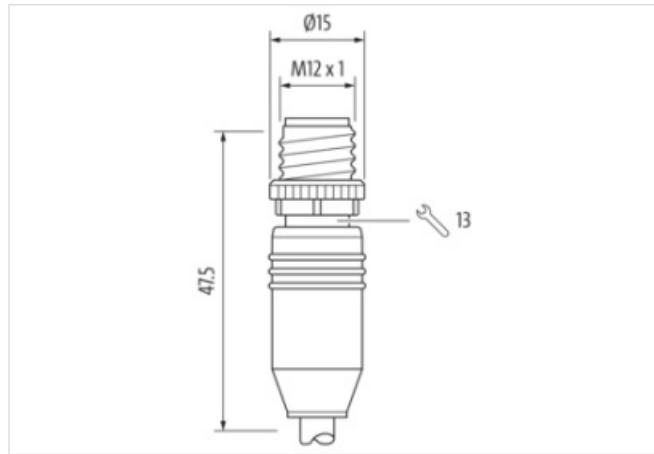
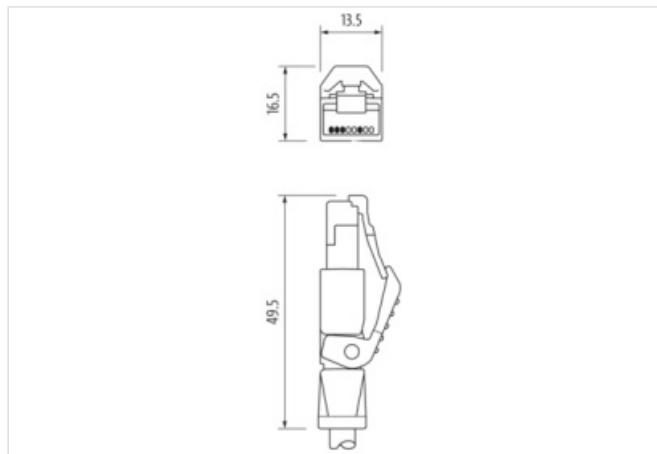
maximum length at channel transmission corresponds to 100 m

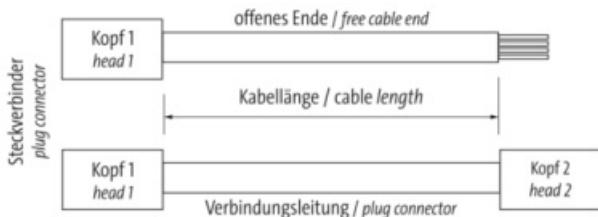
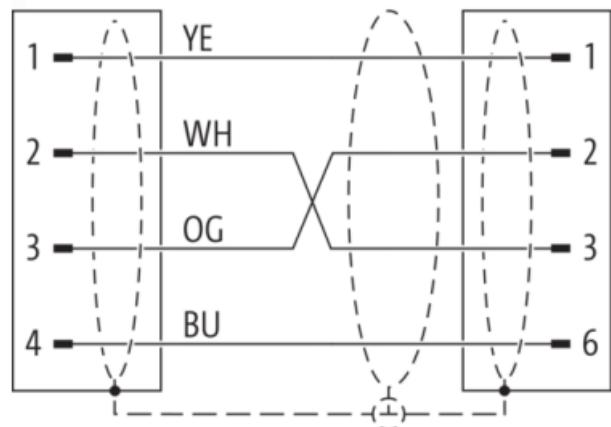
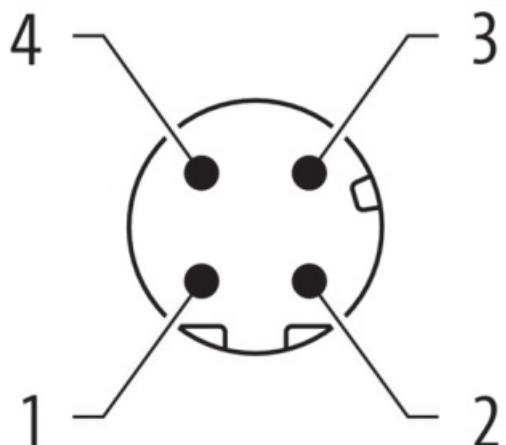
Product fulfills requirements according to UN/ECE R118

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**




Toleranz Kabellängen:  
cable length tolerances

0m < L ≤ 0,5m	+0,03m	1,0m < L ≤ 3,0m	+0,1m
0,5m < L ≤ 1,0m	+0,05m	3,0m < L	±1,5%



Product may differ from Image



#### Header

Material short text MSRAL0-DA-T796\_1.5-ZS

Cable length 1,50 m

#### 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	RJ45
No. of poles	4
Gender	male
Mounting method	pluggable
Cable outlet	straight
Material	PUR
Degree of protection (EN IEC 60529)	IP20

#### Commercial data

URL Webshop	<a href="https://shop.murrelektronik.com/7000-44711-7960150">https://shop.murrelektronik.com/7000-44711-7960150</a>
GTIN	4048879140911
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	EC002599
ETIM-6.0	EC002599
ETIM-7.0	EC002599
ETIM-8.0	EC002599
customs tariff number	85444290
EAN	4048879140911
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

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

#### Mechanical data

Contour for corrugated hose	without
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#### Mechanical data | Material data

Material screw connection	Zinc die-casting
Coating of fitting	Nickel
Locking material	PA

**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 60603-7 (RJ45)
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**Installation | Cable**

Cable identification	796
Function cable	Data
Stranding	1 x 4 wires around core filler star-shaped twisted
Cable shielding (type)	copper braid, tinned
Cable shielding (coverage)	85 %
Banding	Foil, Fleece
Filler	Yes
Cable weight	63 g/m
Material wire insulation	PE
Amount wires	4
Outer diameter insulation	1,4 mm
Outer diameter tolerance core insulation	± 0,05 mm
Shore hardness wire insulation	65 ± 5 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
Outer-diameter (jacket)	6,7 mm
Tolerance outer diameter (sheath)	± 5 %
Material jacket	PUR
Shore hardness jacket	89 ± 5 Shore A
Freedom from ingredients (jacket)	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Material property (jacket)	abrasion-resistant, low adhesion, good machinability, matte
Material inner jacket	FRNC
Color (inner jacket)	natural
Conductor resistance (wire)	55.4 Ω/km @ 20 °C
Electrical capacity line constant (wire - wire)	50.000 pF/km
Isolation resistance	5.000 MΩ x km
Nominal voltage max.	300 V
Withstand voltage (wire - wire)	2 kV @ 60 s
Withstand voltage (wire - jacket)	2 kV @ 60 s
Withstand voltage (wire - shield)	2 kV @ 60 s
Current load capacity (standard)	to DIN VDE 0298-4
Current load capacity max. (wire)	4,8 A
Characteristic impedance	100 Ω ± 15 %
Operating temperature min. (static)	-40 °C
Operating temperature max. (static)	80 °C
Operating temperature min. (dynamic)	-30 °C
Operating temperature max. (dynamic)	70 °C
Operating temperature min. (drag chain)	-30 °C
Operating temperature max. (drag chain)	70 °C

Flame resistance	IEC 60332-1-2, UL 1581 § 1090, UL 1581 § 1100
Oil resistance	IEC 60811-404, IRM 901, NEMA WC55
Ozone resistance	IEC 60811-403
UV resistance	UL 1581 § 1200
Other resistances	resistant to hydrolysis, resistant to microbes, MUD-resistant (NEK 606)
Bending radius (fixed)	5 × Outer diameter
Bending radius (dynamic)	12 × 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
Acceleration (C-track)	2 m/s <sup>2</sup> @ 25 °C
No. of torsion cycles	1 Mio. @ 25 °C
Torsion stress	± 180 °/m
Torsion speed	35 cycles/min