

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

PUR 1x4xAWG22 shielded gn UL/CSA+drag ch. 5m

Art.No.: 7000-44711-6590500

Weight: 0.431

Country of origin: DE

Model designation: MSRAL0-DA-T659_5.0-ZS

Male straight – male straight

M12 – RJ45, 4-pole

D-coded

shielded

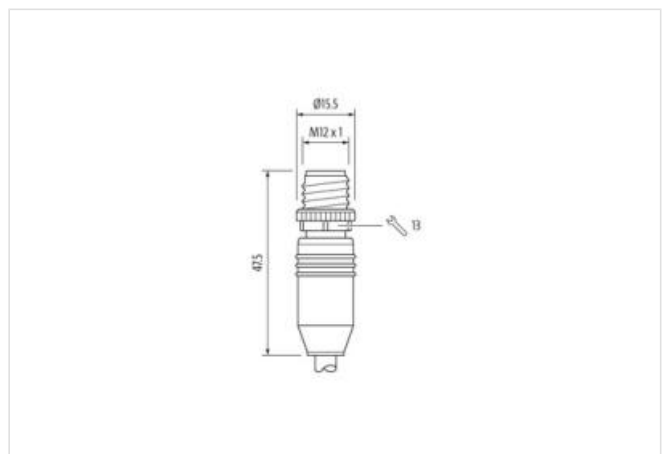
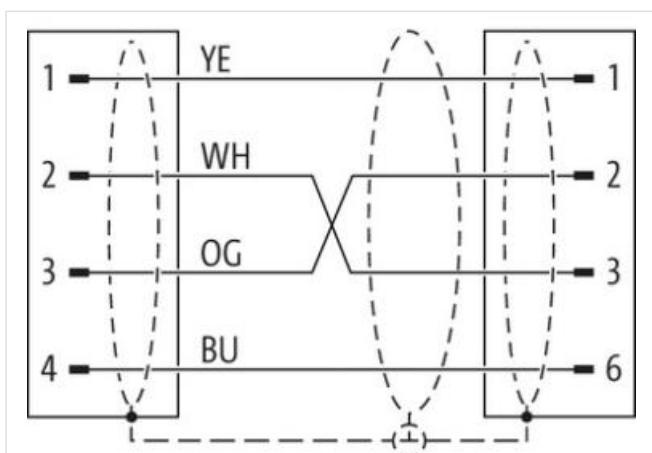
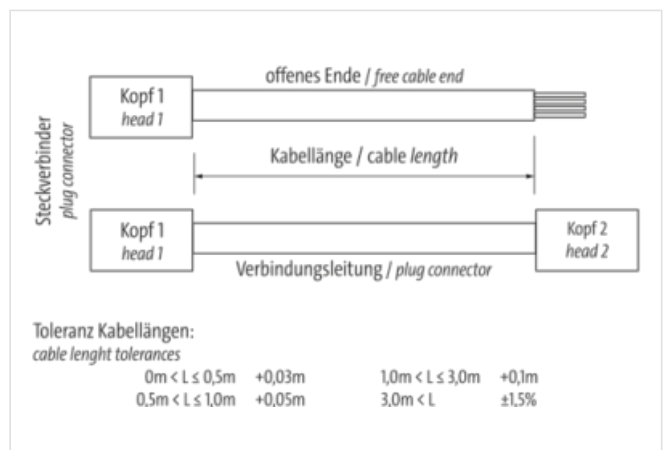
Cable is approved for 600 V

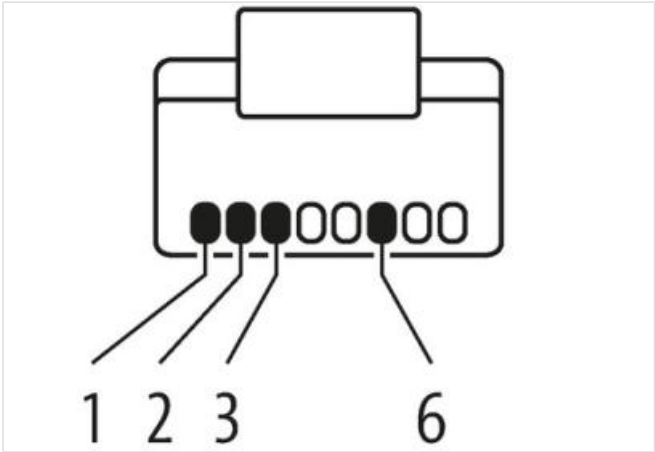
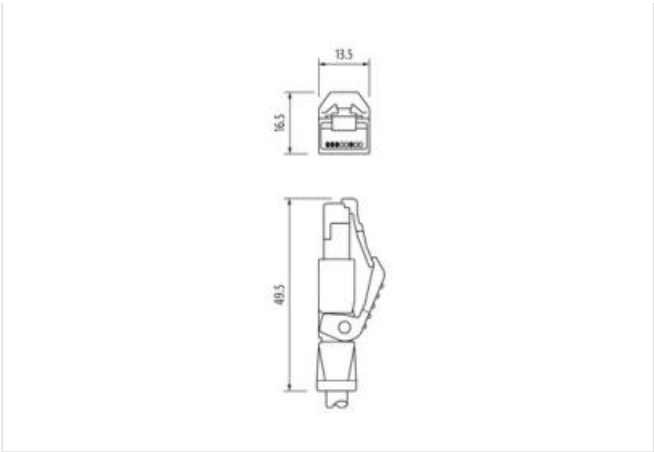
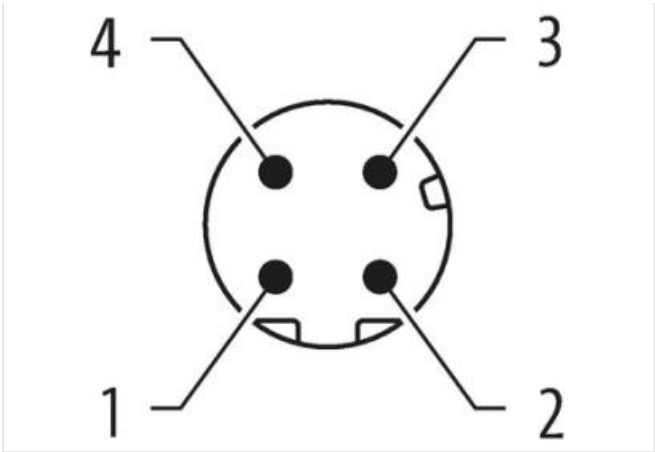
Ethernet CAT5

Further cable lengths on request.

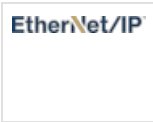
Plastic housings with good resistance against chemicals and oils.

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	5 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
Material	PUR
No. of poles	4
Width across flats	SW13
Degree of protection (EN IEC 60529)	IP65, IP66K, IP67
Side 2	
Mounting method	pluggable
Family construction form	RJ45

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

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
customs tariff number	85444290
EAN	4048879651240
EAN	4048879651240
Packaging unit	1
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

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

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

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), according to IEC 60603-7 (RJ45)
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Installation | Cable

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 impedance	100 Ω ± 15 %
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	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