

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

TPE 4x2x26AWG SF/UTP CAT6a bu UL/CSA. CMR 4.5m

Art.No.: 7700-51101-S4X0450

Weight: 0.321

Country of origin: CZ

Model designation: MSXAL0-RA-08D\_S4X\_4.5-ZS

Ethernet CAT6A

Plastic housings with good resistance against chemicals and oils.

Male straight – male straight

M12 – RJ45, 8-pole

X-coded

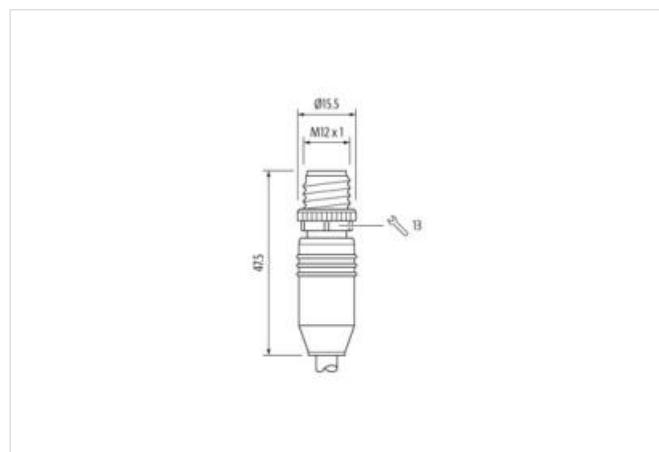
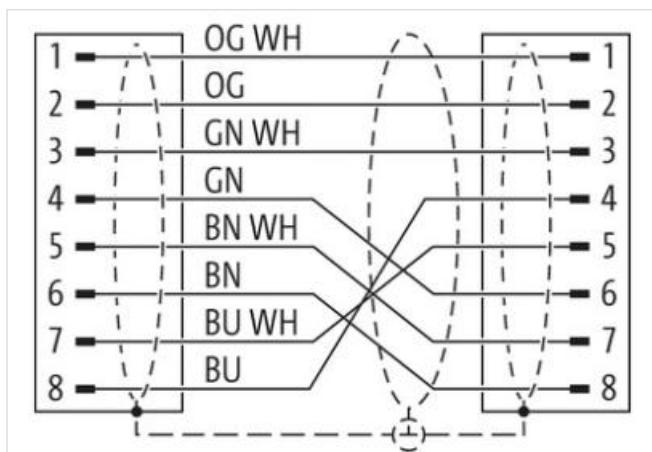
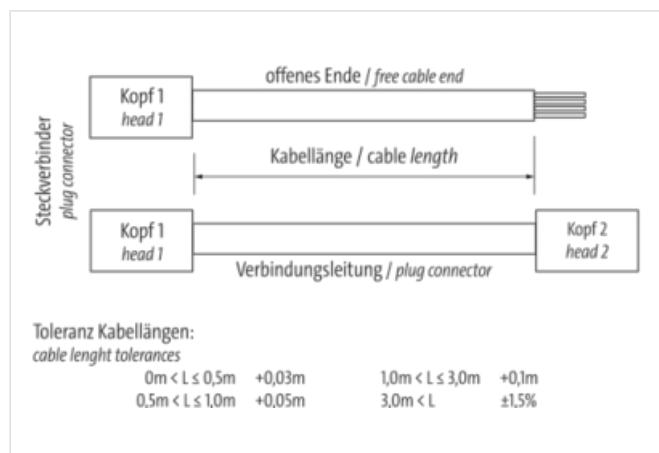
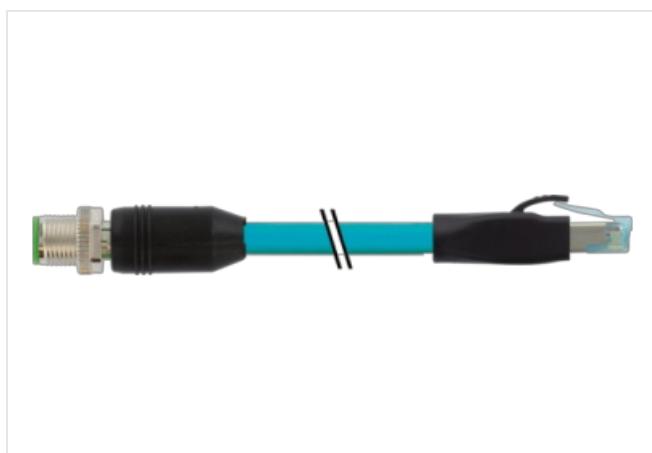
without cable sleeves

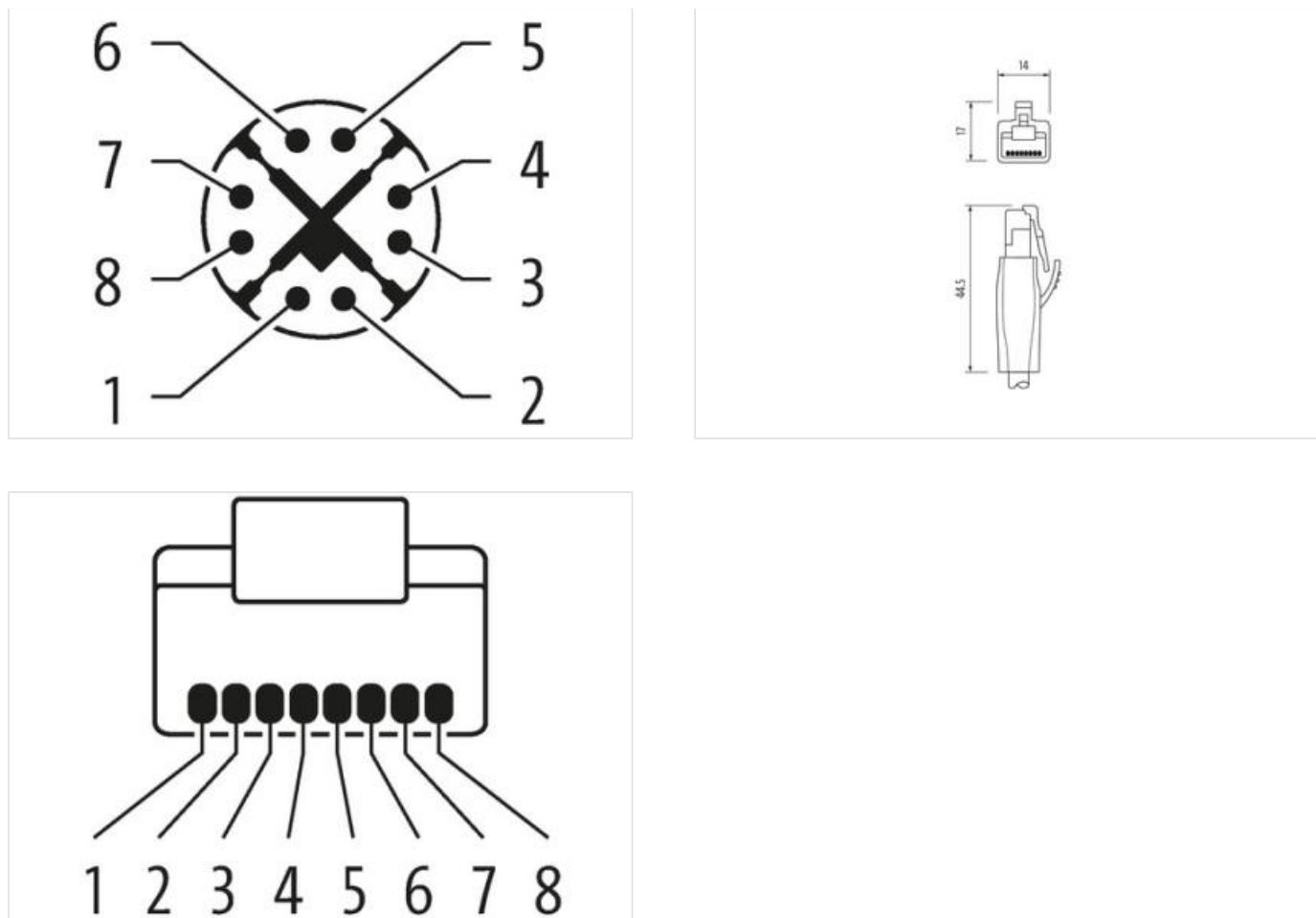
shielded

Protection cap

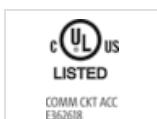
Transmission properties with channel transmission up to 50 m

Further cable lengths on request.

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



Product may differ from Image



Cable length	4,5 m
<b>Side 1</b>	
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	X
Material contact	Copper alloy
Material	PUR
No. of poles	8
Width across flats	SW13
Degree of protection (EN IEC 60529)	IP66K, IP67
<b>Side 2</b>	
Mounting method	pluggable
Family construction form	RJ45

Gender	male
Cable outlet	straight
No. of poles	8
Degree of protection (EN IEC 60529)	IP20

#### Commercial data

ECCLASS-6.0	27061801
ECCLASS-6.1	27060307
ECCLASS-7.0	27060307
ECCLASS-8.0	27060307
ECCLASS-9.0	27060307
ECCLASS-10.1	27060307
ECCLASS-11.1	27060307
ECCLASS-12.0	27060307
ETIM-5.0	EC002599
customs tariff number	85444290
customs tariff number	85444290
EAN	4048879813419
EAN	4048879813419
Packaging unit	1
Packaging unit	1

#### Electrical data | Supply

Operating voltage DC max.	60 V
Operating current max.	1,5 A

#### Industrial communication

Transfer parameters	CAT6, Class EA (ISO/IEC 11801:2002), (EN 50173-1)
Data transmission rate max.	10 GBit/s

#### Installation | Pin assignment

Configuration	fully used
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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

Color housing	black
Locking screw coating	Nickelated
Coating of fitting	nickel plated
Color contact carrier	green
Locking material screw	Zinc die-casting
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	<b>Attention:</b> Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.

#### Installation | Cable

wire arrangement	(orange-white, orange), (blue-white, blue), (brown-white, brown), (green-white, green)
Cable identification	S4X
Function cable	Data
Jacket Color	blue
Type of Certificate	cURus
Amount stranding	4
Stranding	2 wires twisted
Amount stranding (type 2)	1
Stranding (type 2)	4 Stranded joints around Insulation element twisted
Banding	Foil
Filler	Insulation element
wire arrangement	(orange-white, orange), (blue-white, blue), (brown-white, brown), (green-white, green)
Cable length max.	66 m
Cable weight	65,48 g/m
Material jacket	TPE
Freedom from ingredients (jacket)	lead-free, CFC-free
Outer-diameter (jacket)	7,4 mm
Tolerance outer diameter (sheath)	± 5 %
Material wire insulation	HDPE
Amount wires	8
Outer diameter insulation	0,9 mm
Outer diameter tolerance core insulation	± 5 %
Ingredient freeness wire insulation	lead-free, CFC-free
Amount strands (wire)	7
Diameter of single wires	26 AWG
Conductor crosssection (wire)	26 AWG
Material conductor wire	copper stranded wire, tinned
Nominal voltage AC max.	600 V
Current load capacity (standard)	to DIN VDE 0298-4
Current load capacity min. wire	2 A
Characteristic impedance	100 Ω @ 100 MHz
Electrical resistance line constant wire	212 Ω/km @ 20 °C
AC withstand voltage (wire - wire)	1,5 kV @ 2 s
Electrical capacity line constant (wire - wire)	84850 pF/km
Power frequency withstand voltage (wire - jacket)	1,5 kV @ 2 s
Loop resistance	424 Ω/km
Min. operating temperature (static)	-40 °C
Max. operating temperature (fixed)	80 °C
Operating temperature min. (dynamic)	-40 °C
Operating temperature max. (dynamic)	80 °C
Storage temperature min.	-40 °C
Storage temperature max.	80 °C
Flame resistance	IEC 60332-2-2   UL 1581 § 1100 FT2   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)	4 x Outer diameter
Bending radius (dynamic)	4 x Outer diameter
No. of bending cycles (C-track)	35 Mio. @ 25 °C
Traversing distance (C-track)	0,6 m @ 25 °C
Travel speed (C-track)	1,2 m/s @ 25 °C
No. of torsion cycles	3 Mio. 25 °C
Torsion stress	± 270 °/m @ 25 °C

Torsion speed

60 cycles/min 25 °C