

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

TPE 4x2x26AWG SF/UTP CAT6a bu UL/CSA. CMR 2.5m

Art.No.: 7700-51101-S4X0250

Weight: 0.190 kg

Country of origin: CZ

Model designation: MSXAL0-RA-08D_S4X_2.5-ZS

Ethernet CAT6A

Male straight – male straight

M12 – RJ45, 8-pole

X-coded

without cable sleeves

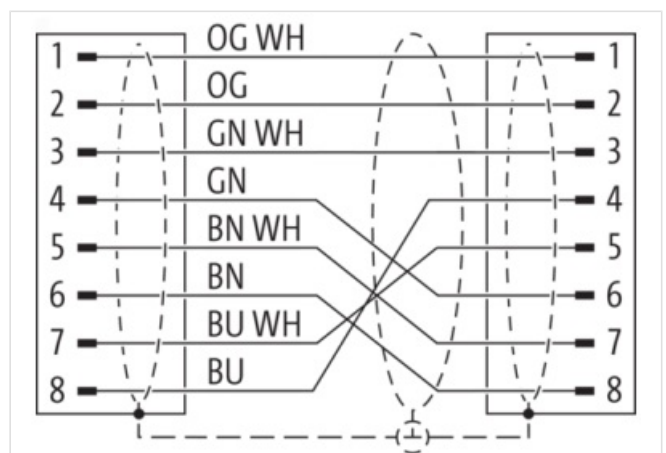
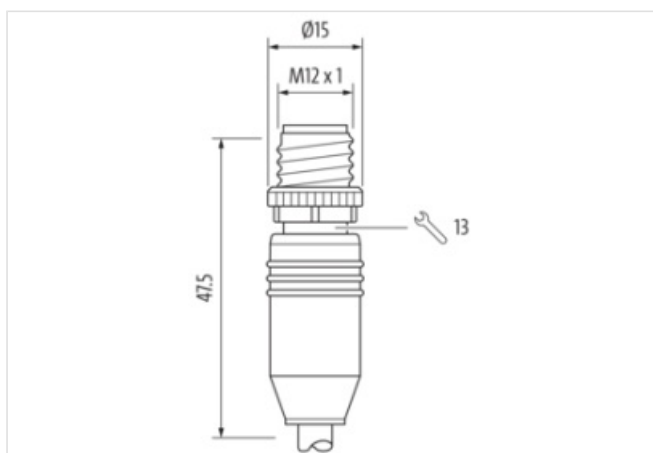
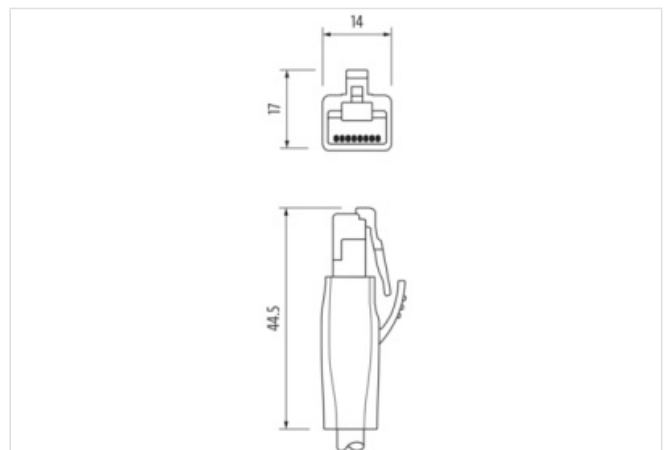
Shielded

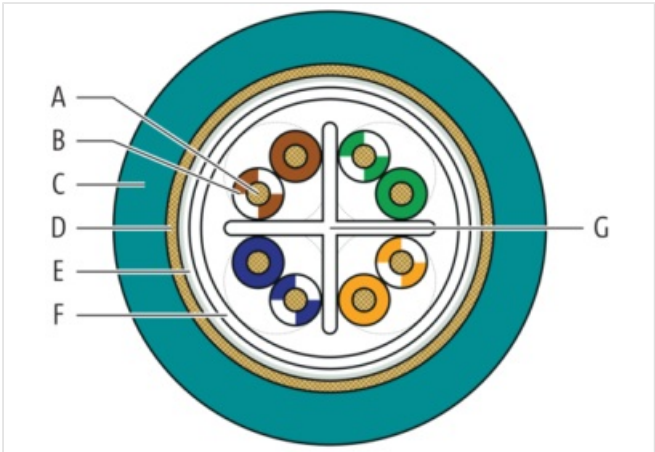
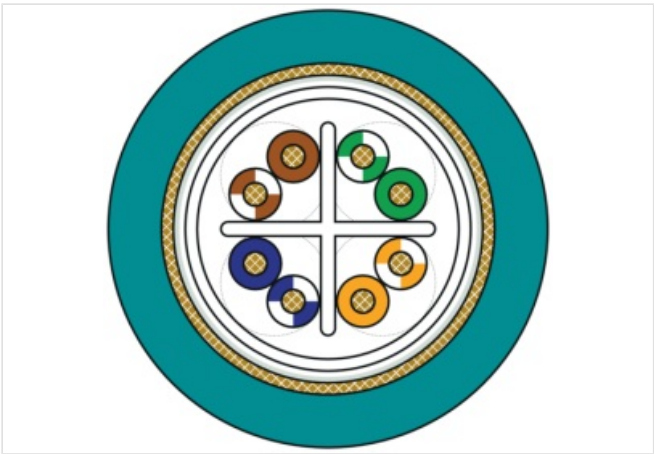
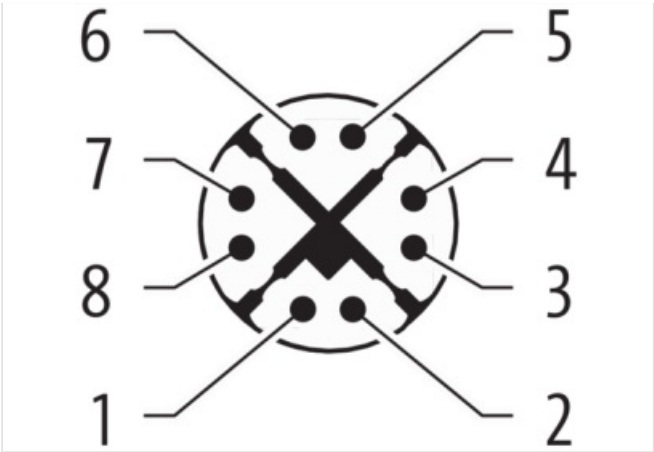
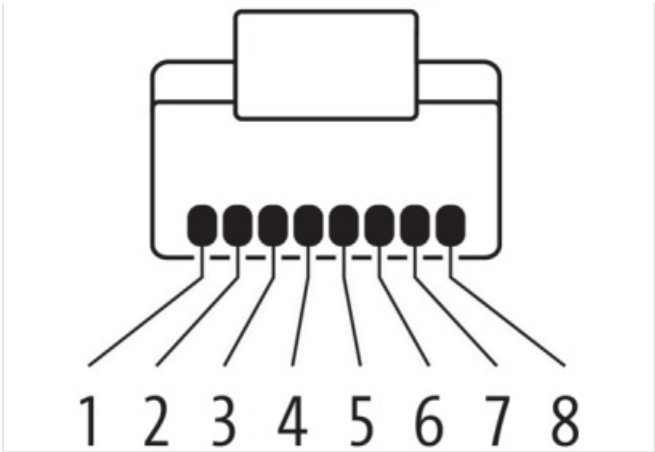
Protection cap

Transmission properties with channel transmission up to 50 m

Further cable lengths on request.

Plastic housings with good resistance against chemicals and oils.

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



Product may differ from Image



Header

Material short text MSXAL0-RA-08D_S4X_2.5-ZS

Cable length 2,50 m

Side 1

Family construction form	M12
No. of poles	8
Coding	X
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

Side 2

Family construction form	RJ45
No. of poles	8
Gender	male
Mounting method	pluggable
Cable outlet	straight
Degree of protection (EN IEC 60529)	IP20

Commercial data

URL Webshop	https://shop.murrelektronik.com/7700-51101-S4X0250
GTIN	4048879813280
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	4048879813280
Packaging unit	1

Electrical data | Supply

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

Industrial Communication

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

Installation | Pin assignment

Configuration fully used

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
Color contact carrier	green
Material screw connection	Zinc die-casting
Coating of fitting	nickel plated
Locking material screw	Zinc die-casting
Locking screw coating	Nickeled

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	Attention: 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.

Installation | Cable

Cable identification	S4X
Function cable	Data
Amount stranding	4
Stranding	2 wires stranded
Amount stranding (type 2)	1
Stranding (type 2)	4 stranding combinations stranded around insulation element
Banding	Foil
Filler	Insulation element
Cable weight	59,53 g/m
Material wire insulation	HDPE
Amount wires	8
Outer diameter insulation	0,9 mm
Outer diameter tolerance core insulation	± 0,05 mm
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
Outer-diameter (jacket)	7,4 mm
Tolerance outer diameter (sheath)	± 5 %
Material jacket	TPE
Shore hardness jacket	80 ± 5 Shore A
Freedom from ingredients (jacket)	lead-free, CFC-free
Cable length max.	66 m
Conductor resistance (wire)	212 Ω/km @ 20 °C
Electrical capacity line constant (wire - wire)	84.850 pF/km
Nominal voltage max.	600 V
Loop resistance	424 Ω/km

Withstand voltage (wire - wire)	1.5 kV @ 2 s
Withstand voltage (wire - jacket)	1.5 kV @ 2 s
Current load capacity (standard)	to DIN VDE 0298-4
Current load capacity max. (wire)	2 A
Characteristic impedance	100 Ω
Operating temperature min. (static)	-40 °C
Operating temperature max. (static)	80 °C
Operating temperature min. (dynamic)	-40 °C
Operating temperature max. (dynamic)	80 °C
Operating temperature min. (drag chain)	-40 °C
Operating temperature max. (drag chain)	80 °C
Storage temperature min.	-40 °C
Storage temperature max.	80 °C
Bending radius (fixed)	4 × Outer diameter
Bending radius (dynamic)	18 × 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
Acceleration (C-track)	2.4 m/s ² @ 25 °C
No. of torsion cycles	3 Mio. @ 25 °C
Torsion stress	± 270 °/m
Torsion speed	60 cycles/min @ 25 °C