

M12 male 0° / male 0° X-cod. shielded

TPE 4x2x26AWG SF/UTP CAT6a bu UL/CSA. CMR 45.0m

Art.No.: 7700-51001-S4X4500

Weight: 2.977 kg

Country of origin: CZ

Model designation: MSXAL0-XA-08D_S4X_45.0-ZS

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:

Ethernet CAT6A

Male straight – male straight

M12 – M12, 8-pole

X-coded

without cable sleeves

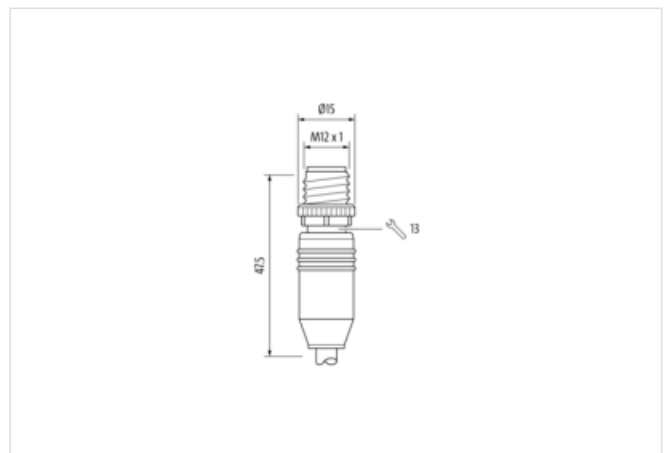
Shielded

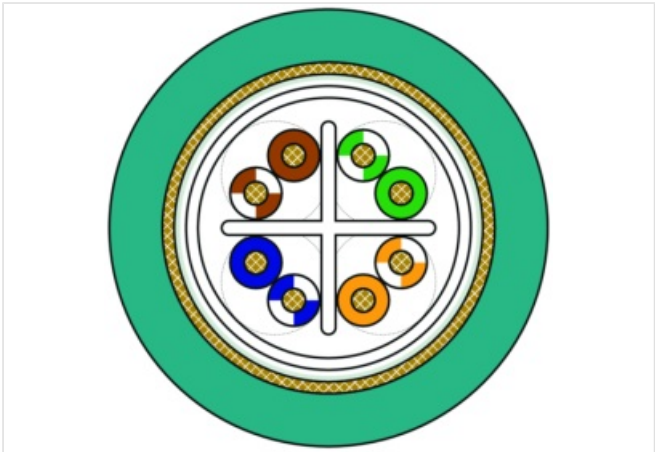
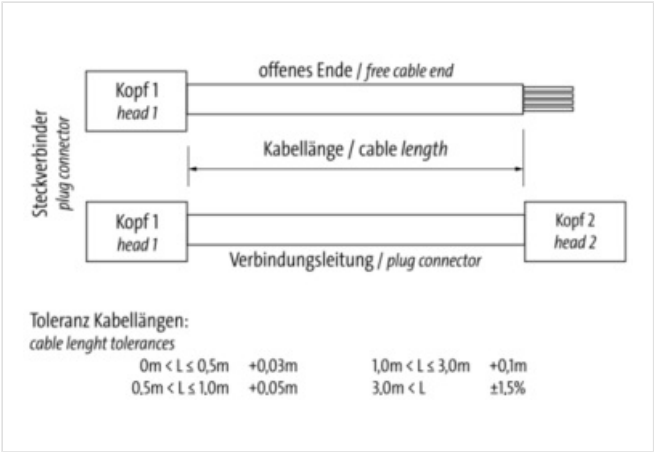
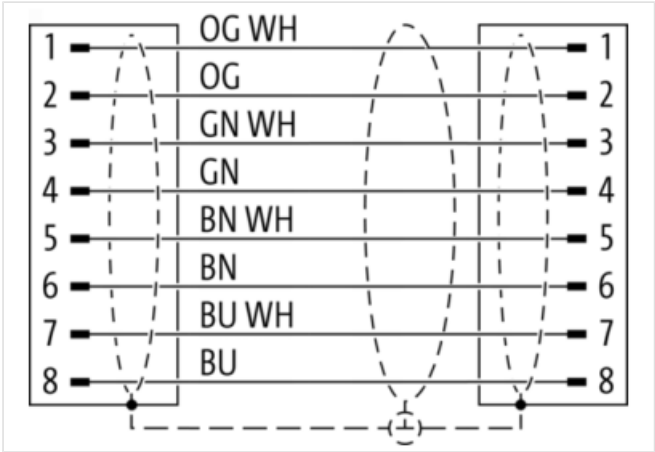
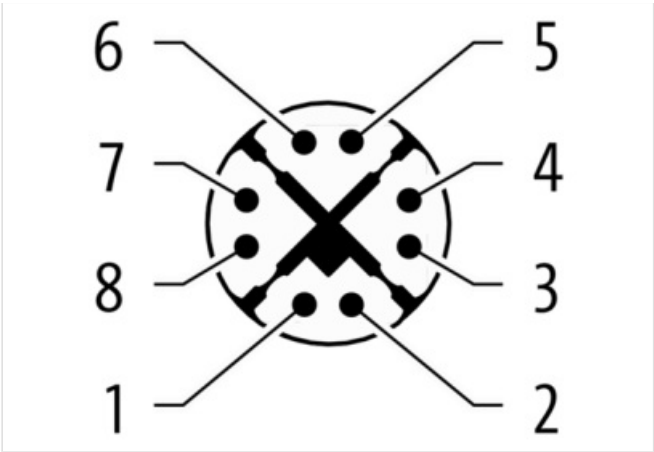
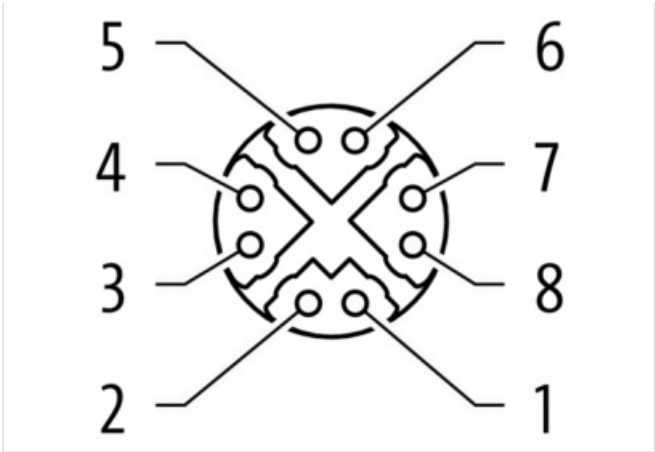
Transmission properties with channel transmission up to 50 m

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**



Product may differ from Image

Cable length	45,00 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

Side 2

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

Commercial data

URL Webshop	https://shop.murrelektronik.com/7700-51001-S4X4500
GTIN	4065909030707
EU-Customs tariff number	85444290
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	4065909030707
Packaging unit	1

Electrical data | Supply

Operating voltage DC max.	60 V
Current operating per contact max.	0,5 A
Industrial Communication	
Data transmission rate max.	10 Gbit/s
Transfer parameters	CAT6, Class EA (ISO/IEC 11801:2002), (EN 50173-1)
Diagnostics	
Status indication LED	No
Device protection Electrical	
Degree of protection (EN IEC 60529)	IP67
Pollution Degree	3
Rated surge voltage	1,5 kV
Material group (IEC 60664-1)	I
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	
Stranding	4 × 2 wires stranded
Stranding (type 2)	1 × 4 stranding combinations stranded around insulation element
Banding	Foil
Filler	Insulation element
Wire arrangement	(OGWH, OG), (BUWH, BU), (BNWH, BN), (GNWH, GN)
Material wire insulation	HDPE
Amount wires	8
Outer diameter insulation	0.9 mm ± 0.05 mm
Conductor crossection (wire)	26 AWG
Material conductor wire	copper stranded wire, tinned
Core construction (wire)	7
Ingredient freeness wire insulation	lead-free, CFC-free
Material jacket	TPE
Outer-diameter (jacket)	7.4 mm ± 5 %
Jacket Color	blue / RAL 5018
Freedom from ingredients (jacket)	lead-free, CFC-free
Conductor resistance (wire)	212 Ω/km @ 20 °C
Nominal voltage max.	600 V
Withstand voltage (wire - wire)	1.5 kV @ 2 s
Withstand voltage (wire - jacket)	1.5 kV @ 2 s
Current load capacity max. (wire)	2 A
Current load capacity (standard)	to DIN VDE 0298-4
Electrical capacity line constant (wire - wire)	84.850 pF/km
Characteristic impedance	100 Ω
Loop resistance	424 Ω/km
Cable type	Industrial Ethernet Profinet Typ C, CAT6A
Cable length max.	66 m
Operating temperature (static)	-40 °C ... 80 °C
Operating temperature (dynamic)	-40 °C ... 80 °C
Operating temperature (drag chain)	-40 °C ... 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/s² @ 25 °C
No. of torsion cycles	3 Mio. @ 25 °C
Torsion stress	± 270 °/m
Torsion speed	60 cycles/min @ 25 °C