

**M12 male 0° / M12 female 0° Y-cod. shielded**

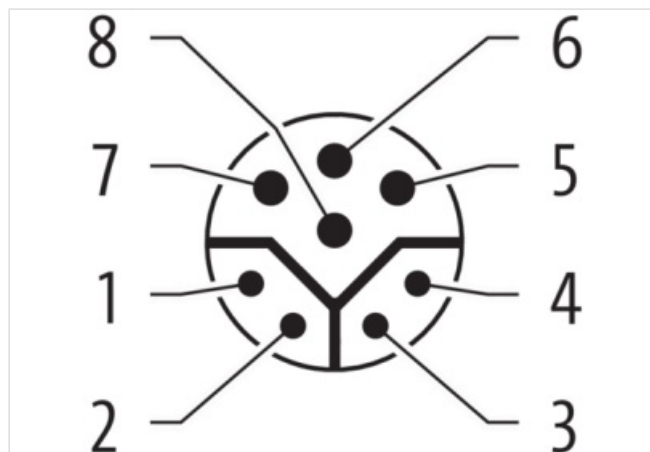
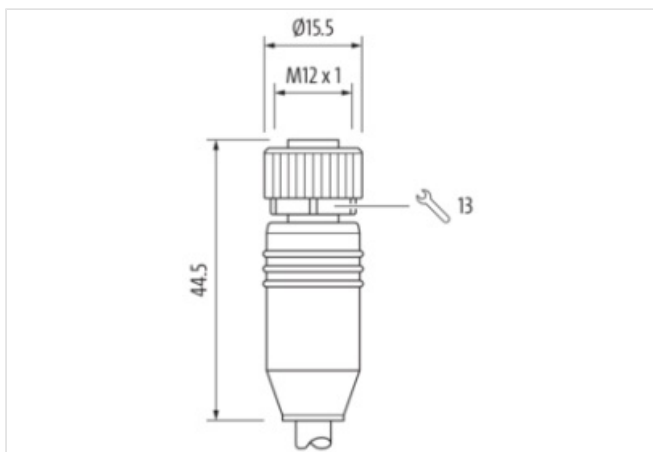
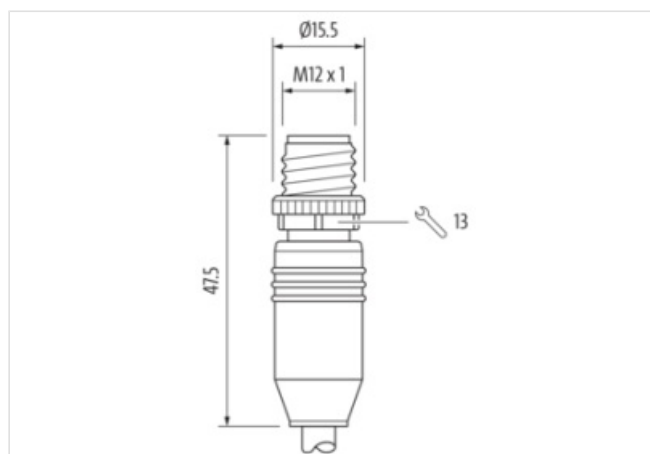
PUR AWG20/26 shielded gn UL/CSA+drag ch. 3m

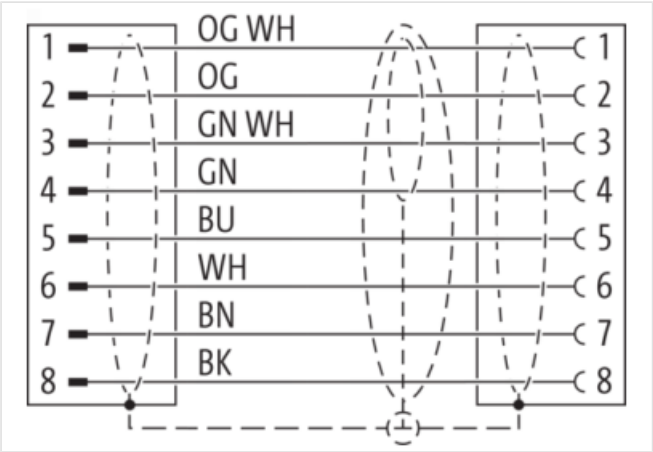
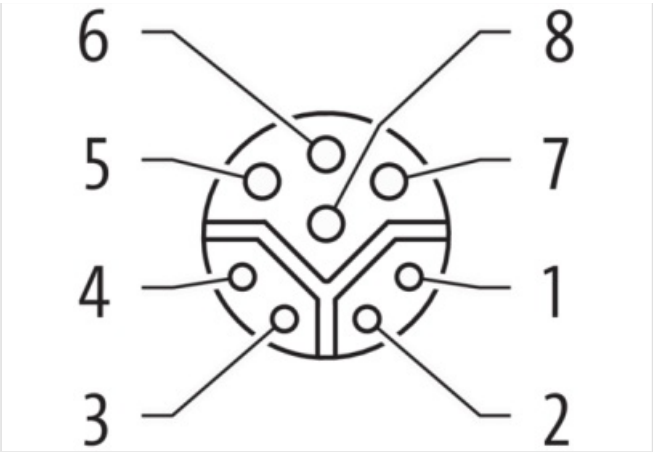
Art.No.: 7000-47051-8310300

Weight: 0.324

Country of origin: DE

Model designation: MSYBL0-YA-08D831\_3.0-ZS

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



Product may differ from Image



1

Header	
Cable length	3.0 m
Side 1	
Family construction form	M12
No. of poles	8
Coding	Y
Gender	male
Mounting method	inserted, screwed
Thread	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)	IP65, IP66K, IP67
Side 2	
Family construction form	M12

No. of poles	8
Coding	Y
Gender	female
Mounting method	inserted, screwed
Thread	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)	IP65, IP66K, IP67

#### Commercial data

URL Webshop	<a href="https://shop.murrelektronik.com/7000-47051-8310300">https://shop.murrelektronik.com/7000-47051-8310300</a>
GTIN	4048879680684
ECLASS-6.0	27279218
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	EC000830
ETIM-6.0	EC000830
EAN	4048879680684

#### Electrical data | Supply

Operating voltage AC max.	50 V
Operating voltage DC max.	50 V
Operating current per data contact max.	0.5 A
Operating current per power contact max.	6 A

#### Industrial communication

Data transmission rate max.	100 MBit/s
Transfer parameters	CAT5e, Class D (ISO/IEC 11801)

#### 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	0.8 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 plated
Material gasket	FKM
<b>Environmental characteristics   Climatic</b>	
Operating temperature min.	-30 °C
Operating temperature max.	85 °C
Additional condition temperature range	depending on cable quality
<b>Important installation notes</b>	
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.
<b>Conformity</b>	
Product standard	DIN EN 61076-2-113 (M12)
<b>Installation   Cable</b>	
Function cable	Hybrid, Data, Power
Amount stranding	1
Stranding	Wires
Amount stranding (type 2)	1
Stranding (type 2)	Wires
Cable shielding (type)	copper braid, tinned
Cable shielding (coverage)	85 %
Pair shielding (type)	copper braid, tinned
Pair shielding (coverage)	85 %
Banding	Fleece, Foil
Wire arrangement	(, black, brown, white, blue, ), orange-white, orange, green-white, green
Cable weight	107.8
Material wire insulation	PP
Amount wires	4
Outer diameter insulation	1.5 mm
Outer diameter tolerance core insulation	± 0.1 mm
Shore hardness wire insulation	55
Ingredient freeness wire insulation	CFC-free, cadmium-free, silicone-free, halogen-free, lead-free
Amount strands (wire)	19
Diameter of single wires	32 AWG
Conductor crosssection (wire)	20 AWG
Material conductor wire	Stranded copper wire, bare
Material wire insulation (type 2)	PP
Outer diameter wire insulation (type 2)	1.1 mm
Tolerance outer diameter wire insulation (type 2)	± 0.1 mm
Shore hardness wire insulation (type 2)	55
Ingredient freeness wire insulation (type 2)	CFC-free, cadmium-free, silicone-free, halogen-free, lead-free
Amount wires (type 2)	4
Amount strands wire (type 2)	19
Diameter of single wires (type 2)	38 AWG
Conductor crosssection wire (type 2)	26 AWG
Material conductor wire (type 2)	Stranded copper wire, bare
Outer-diameter (jacket)	8.1 mm
Tolerance outer diameter (sheath)	± 5 %
Material jacket	PUR
Shore hardness jacket	90
Freedom from ingredients (jacket)	CFC-free, cadmium-free, silicone-free, halogen-free, lead-free
Material property (jacket)	matte, good machinability, abrasion-resistant, low adhesion

Conductor resistance (wire)	35 $\Omega$ /km
Conductor resistance (wire type 2)	140 $\Omega$ /km @ 20 °C
Electrical capacity line constant (wire - wire)	52,000 pF/km
Isolation resistance	5,000 M $\Omega$ × km
Nominal voltage AC max.	60 V
Withstand voltage (wire - wire)	1 kV @ 60 s
Withstand voltage (wire - jacket)	1 kV @ 60 s
Withstand voltage (wire - shield)	1 kV @ 60 s
Current load capacity (standard)	to DIN VDE 0298-4
Current load capacity min. Wire (type 2)	2.4 A
Current carrying capacity min. wire (type 3)	7.2 A
Characteristic impedance	100 $\Omega$ 15 %
Min. operating temperature (static)	-40 °C
Max. operating temperature (fixed)	80 °C / 90 °C @ 10000 h Operation
Operating temperature min. (dynamic)	-30 °C
Operating temperature max. (dynamic)	80 °C / 90 °C @ 10000 h Operation
Bending radius (fixed)	5 × Outer diameter
Bending radius (dynamic)	10 × Outer diameter
No. of bending cycles (C-track)	5 Mio. @ 25 °C
Traversing distance (C-track)	5 m @ 25 °C
Travel speed (C-track)	3.3 m/s @ 25 °C
Acceleration (C-track)	5 m/s <sup>2</sup> @ 25 °C
No. of torsion cycles	2 Mio.
Torsion stress	30 °/m
Torsion speed	35 cycles/min