

M12 male 0° A-cod. with cable

PUR AWG24+22 shielded vt UL/CSA+drag ch. 1.5m

Art.No.: 7000-13105-8030150

Weight: 0.113

Country of origin: CZ

Model designation: MSAL0-U803_1.5

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: DeviceNet, CANopen

Male straight

M12, 5-pole

Product fulfills requirements according to UN/ECE R118

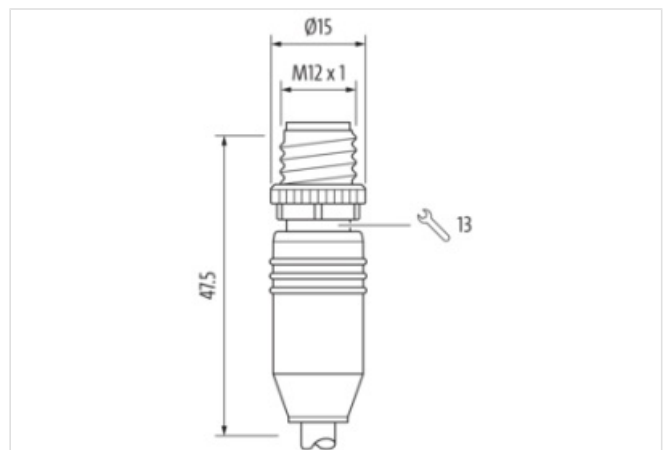
Plastic housings with good resistance against chemicals and oils.

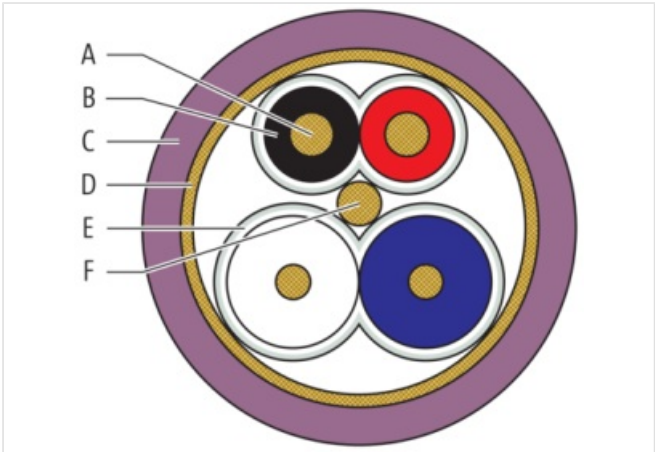
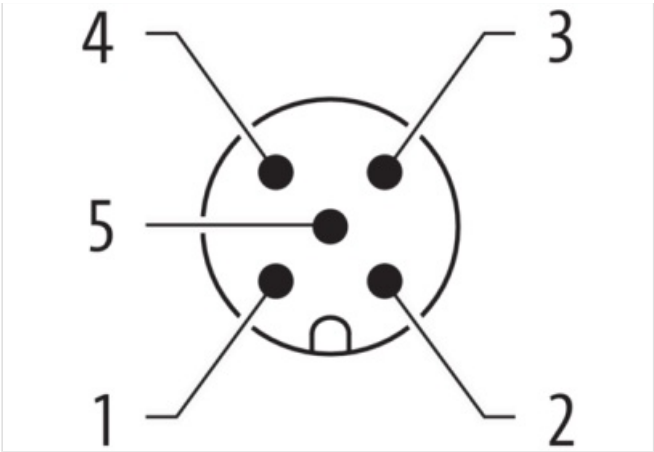
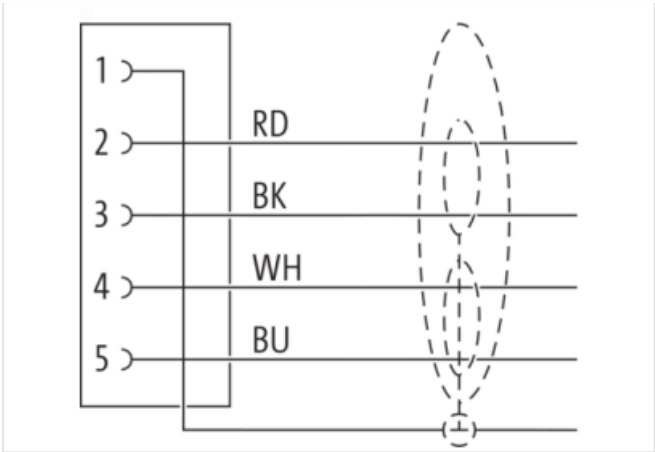
The resistance to aggressive media should be individually tested for your application. Further details on request.

Further cable lengths on request.

[Link to Product](#)

Illustration





Product may differ from Image



Header	
Material short text	MSAL0-U803_1.5
Cable length	1,50 m
Side 1	
Family construction form	M12
No. of poles	5
Coding	A
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)	IP67, IP66K, IP65
Side 2	
Family construction form	Free cable end
Stripping length (jacket)	20 mm
Commercial data	
URL Webshop	https://shop.murrelektronik.com/7000-13105-8030150
GTIN	4048879200905
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	EC001855
ETIM-6.0	EC001855
ETIM-7.0	EC001855
ETIM-8.0	EC001855
customs tariff number	85444290
EAN	4048879200905
Packaging unit	1
Electrical data Supply	
Operating voltage AC max.	60 V
Operating voltage DC max.	60 V
Current operating per contact max.	4 A
Operating voltage AC (UL-listed)	30 V
Operating voltage DC (UL-listed)	30 V
Installation Connection	

Mounting set M12 x 1

Device protection | Electrical

Additional condition protection degree	inserted, screwed
Pollution Degree	3
Rated surge voltage	1.5 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
Locking material	Zinc die-casting
Coating locking	Nickeled

Mechanical data | Mounting data

Mounting method	inserted, screwed, Shaking protection
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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.

Conformity

Product standard	EN IEC 61076-2-101 (M12)
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Installation | Cable

Cable identification	803
Function cable	Hybrid, Data, Power
Amount stranding	2
Stranding	2 wires stranded
Amount stranding (type 2)	1
Stranding (type 2)	2 stranding combinations stranded
Cable shielding (type)	copper braid, tinned
Cable shielding (coverage)	65 %
Banding	Foil
Drain wire (cross-section)	22 AWG
Wire arrangement	(white, blue), (Black, red)
Cable weight	57.38 g/m
Material wire insulation	PE
Amount wires	2
Outer diameter insulation	2.1 mm
Outer diameter tolerance core insulation	± 0.05 mm
Shore hardness wire insulation	65 ± 5 Shore D
Ingredient freeness wire insulation	lead-free, CFC-free, halogen-free
Amount strands (wire)	19
Diameter of single wires	36 AWG
Conductor crosssection (wire)	24 AWG
Drain wire (cross-section)	22 AWG
Material conductor wire	copper stranded wire, tinned
Electrical function wire	Data

Material wire insulation (type 2)	PE
Outer diameter wire insulation (type 2)	2.1 mm
Tolerance outer diameter wire insulation (type 2)	± 0.05 mm
Shore hardness wire insulation (type 2)	65 ± 5 Shore D
Ingredient freeness wire insulation (type 2)	lead-free, CFC-free, halogen-free
Amount wires (type 2)	2
Amount strands wire (type 2)	19
Diameter of single wires (type 2)	36 mm
Conductor crosssection wire (type 2)	22 AWG
Material conductor wire (type 2)	copper stranded wire, tinned
Electrical function wire (type 2)	Power
Outer diameter wire insulation (type 3)	1.5 mm
Tolerance outer diameter wire insulation (type 3)	± 0.05 mm
Shore hardness wire insulation (type 3)	65 ± 5 Shore D
Amount wires (type 3)	2
Amount strands wire (type 3)	19
Diameter of single wires (type 3)	22 mm
Outer-diameter (jacket)	6.9 mm
Tolerance outer diameter (sheath)	± 5 %
Material jacket	PUR
Shore hardness jacket	89 ± 5 Shore A
Freedom from ingredients (jacket)	lead-free, CFC-free, halogen-free
Conductor resistance (wire)	78 Ω/km @ 20 °C
Conductor resistance (wire type 2)	78 Ω/km @ 20 °C
Conductor resistance (wire type 3)	54 Ω/km @ 20 °C
Electric capacitance	40,000 pF/km
Isolation resistance	5,000 MΩ × km
Nominal voltage AC max.	300 V
Withstand voltage (wire - wire)	2 kV @ 60 s
Withstand voltage (wire - shield)	2 kV @ 60 s
Current load capacity (standard)	to DIN VDE 0298-4
Current load capacity min. wire	3 A
Current load capacity min. Wire (type 2)	3 A
Current carrying capacity min. wire (type 3)	6 A
Characteristic impedance	120 Ω ± 10 % @ 10 MHz
Min. operating temperature (static)	-40 °C
Max. operating temperature (static)	80 °C
Operating temperature min. (dynamic)	-30 °C
Operating temperature max. (dynamic)	70 °C
Flame resistance	UL 1581 § 1090, UL 1581 § 1100, IEC 60332-1-2
Oil resistance	IEC 60811-404, IRM 901, NEMA WC55
Ozone resistance	IEC 60811-403, EN 50396
UV resistance	UL 1581 § 1200
Other resistances	MUD-resistant (NEK 606), resistant to microbes
Bending radius (fixed)	6 × Outer diameter
Bending radius (dynamic)	10 × Outer diameter
No. of bending cycles (C-track)	1 Mio. @ 25 °C
Traversing distance (C-track)	5 m @ 25 °C
Travel speed (C-track)	3 m/s @ 25 °C
Acceleration (C-track)	5 m/s² @ 25 °C