

M12 Power female 0° L-cod. with cable

PUR 5x1.5 bk UL/CSA+drag ch. 15m

Art.No.: 7000-P4221-P041500

Weight: 1.977

Country of origin: DE

Model designation: MSWBLL0-UP04_15.0

Power

Female straight

M12, 5-pole

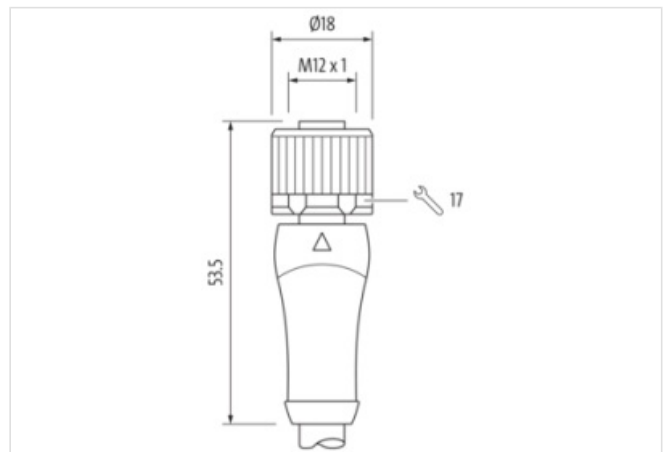
L-coded

with cable sleeves

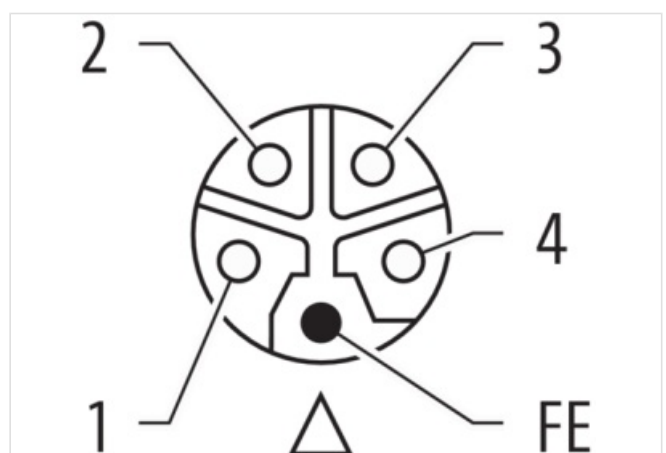
Plastic housings with good resistance against chemicals and oils.

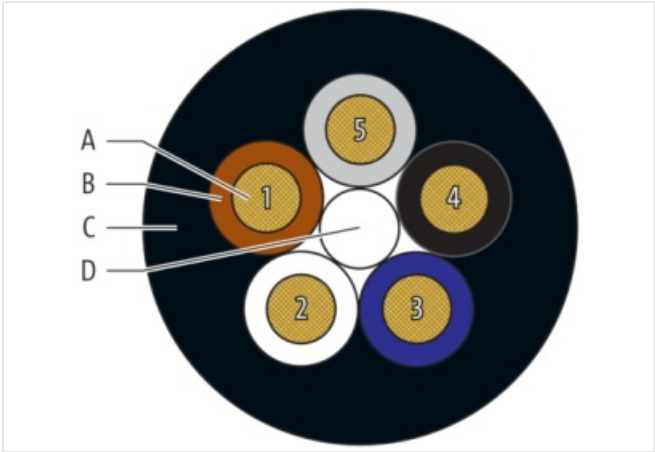
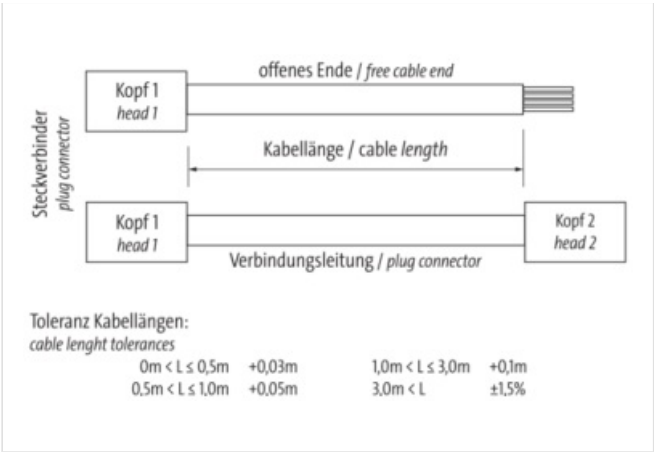
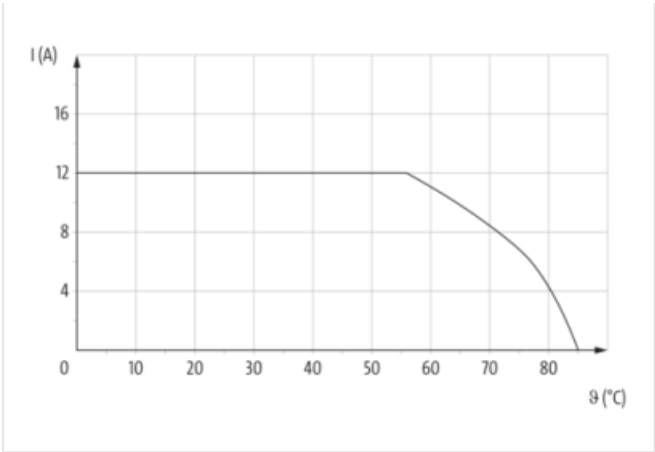
The resistance to aggressive media should be individually tested for your application. Further details on request.

Further cable lengths on request.

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

1	BN 1
2	WH 2
3	BU 3
4	BK 4
FE	GY 5





Product may differ from Image



Header	
Material short text	MSWBLL0-UP04_15.0
Cable length	15,00 m
Side 1	
Family construction form	M12P
No. of poles	5
Coding	L
Gender	female
Mounting method	inserted, screwed
Thread	M12 x 1
Tightening torque	0.6 Nm
Width across flats	SW17
Cable outlet	straight
suitable for corrugated tube (internal Ø)	12 mm
Material	PUR
Material contact	Copper alloy
Coating contact	gold plated
Degree of protection (EN IEC 60529)	IP65, IP67, IP69K
Side 2	

Family construction form	Free cable end
Stripping length (jacket)	100 mm
Commercial data	
URL Webshop	https://shop.murrelektronik.com/7000-P4221-P041500
GTIN	4048879684262
ECLASS-6.0	27279218
ECLASS-6.1	27279218
ECLASS-7.0	27279218
ECLASS-7.1	27279218
ECLASS-8.0	27279218
ECLASS-8.1	27279218
ECLASS-9.0	27060327
ECLASS-9.1	27060311
ECLASS-10.0.1	27060311
ECLASS-10.1	27060311
ECLASS-11.0	27060311
ECLASS-11.1	27060311
ECLASS-12.0	27060327
ECLASS-13.0	27060311
ECLASS-14.0	27060311
ETIM-5.0	EC001855
ETIM-6.0	EC001855
ETIM-7.0	EC001855
ETIM-8.0	EC001855
customs tariff number	85444290
EAN	4048879684262
Packaging unit	1
Electrical data Supply	
Operating voltage DC max.	63 V
Current operating per contact max.	12 A
Diagnostics	
Status indication LED	no
Installation Connection	
Width across flats	SW17
Mating cycles min.	100
Device protection Electrical	
Degree of protection (EN IEC 60529)	IP67, IP65, IP69K
Additional condition protection degree	inserted, screwed
Pollution Degree	3
Rated surge voltage	1.5 kV
Material group (IEC 60664-1)	I
Mechanical data Material data	
Material housing	PUR
Material screw connection	Brass
Coating of fitting	nickel plated
Material gasket	FKM
Mechanical data Mounting data	
Mounting method	inserted, screwed, Shaking protection
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 61076-2-111
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Installation | Cable

Cable identification	P04
Cable Type	3
Function cable	Power
Amount stranding	1
Stranding	5 wires around core filler twisted
Filler	yes
Cable weight	118 g/m
Material wire insulation	PP
Amount wires	5
Outer diameter insulation	2.3 mm
Outer diameter tolerance core insulation	± 0.1 mm
Shore hardness wire insulation	60 ± 5 Shore D
Ingredient freeness wire insulation	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Printing color of wire insulation	white (isolation blue), white (isolation brown), white (isolation black), black (white isolation), white (gray isolation)
Amount strands (wire)	84
Diameter of single wires	0.15 mm
Conductor crosssection (wire)	1.5 mm ²
Material conductor wire	Stranded copper wire, bare
Conductor type (wire)	strand class 6
Outer-diameter (jacket)	8.2 mm
Tolerance outer diameter (sheath)	± 5 %
Material jacket	PUR
Shore hardness jacket	90 ± 5 Shore A
Freedom from ingredients (jacket)	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Material property (jacket)	abrasion-resistant, low adhesion, good machinability, matte
Conductor resistance (wire)	13.3 Ω/km @ 20 °C
Nominal voltage AC max.	1,000 V
Withstand voltage (wire - wire)	10 kV @ 60 s
Withstand voltage (wire - jacket)	10 kV @ 60 s
Current load capacity (standard)	to DIN VDE 0298-4
Current load capacity min. wire	13.5 A
Min. operating temperature (static)	-50 °C
Max. operating temperature (static)	80 °C / 90 °C @ 10000 h Operation
Operating temperature min. (dynamic)	-25 °C
Operating temperature max. (dynamic)	80 °C / 90 °C @ 10000 h Operation
Operating temperature min. (drag chain)	-25 °C
Operating temperature max. (drag chain)	80 °C / 90 °C @ 10000 h Operation
Flame resistance	UL 1581 § 1080, CSA FT2, IEC 60332-1-2, IEC 60332-2-2
Oil resistance	IEC 60811-404
Chemical resistance	good
Other resistances	resistant to hydrolysis, resistant to microbes, good resistance to gasoline
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 ² @ 25 °C
No. of torsion cycles	5 Mio.
Torsion stress	± 180 °/m @ 180 °C
Torsion speed	35 cycles/min