MURR ELEKTRONIK
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M12 Power female 0° L-cod. with cable

PUR 5x1.5 bk UL/CSA+drag ch. 20m

Art.No.: 7000-P4221-P042000
Weight: 2.626
Country of origin: DE
Model designation: MSWBLL0-UP04_20.0

Advantages of our M12 power connectors:

Our M12 power connectors are ideal for supplying power to your industrial applications and are specially optimised for harsh environments.

The L-coded connectors are available in 4- and 5-pin versions and offer a current carrying capacity of 16A per pin at 63V DC. They are ideal for supplying power to decentralised devices such as I/O & fieldbus modules, power supply units, fuses, engines and motors. The Profinet User Organisation (PNO) has also described the L-coding as the future standard for the low-voltage supply of automation components, which ensures compatibility across different systems.

All Murrelektronik connectors are 100% tested during the manufacturing process to ensure the highest quality and reliability. The contacts are gold-plated, which ensures excellent conductivity. Thanks to the high IP67 protection rating and the integrated protective conduit connection, they are ideal for demanding industrial environments. They are also vibration-resistant - this is guaranteed by the integrated vibration protection.

The M12 power connectors are designed in accordance with the IEC 61076-2-111 standard and UL-approved in accordance with 2237 (PVVA - E492831). Our connectors are resistant to oils and cooling lubricants. However, resistance to aggressive media should be tested for each specific application.

Different cable lengths are possible on request. Are you missing technical information? Feel free to use our technical dictionary, where you will find explanations of coding and other technical details.

Product details:
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

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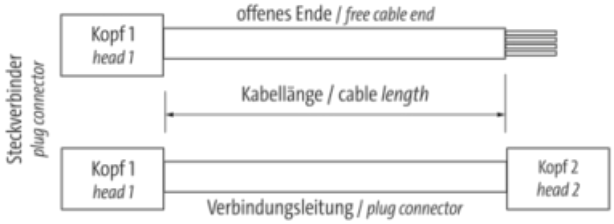
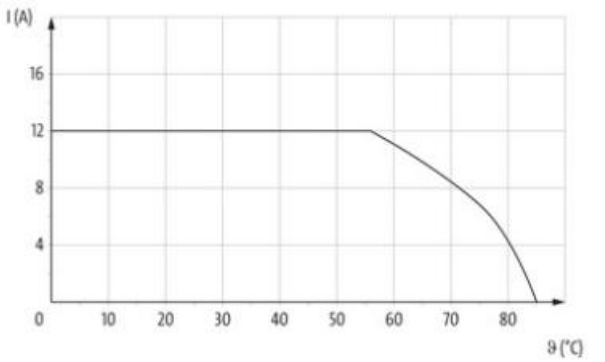
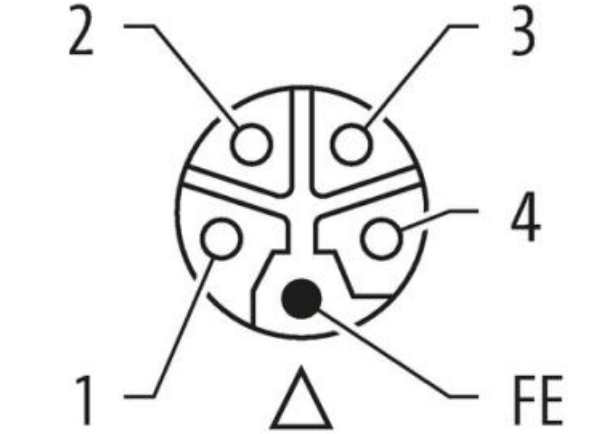
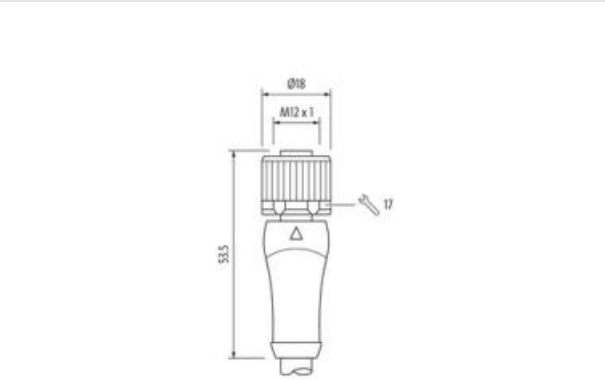


Toleranz Kabellängen:
cable lenght tolerances

0m < L ≤ 0,5m	+0,03m	1,0m < L ≤ 3,0m	+0,1m
0,5m < L ≤ 1,0m	+0,05m	3,0m < L	±1,5%







Product may differ from Image

Cable length	20 m
Side 1	
Tightening torque	0,6 Nm

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Mounting method	inserted, screwed
Coating contact	gold plated
Family construction form	M12P
Thread	M12 x 1
suitable for corrugated tube (internal Ø)	12 mm
Cable outlet	straight
Coding	L
Material contact	Copper alloy
Material	PUR
No. of poles	5
Width across flats	SW17
Degree of protection (EN IEC 60529)	IP65, IP67
Side 2	
Stripping length (jacket)	100 mm
Family construction form	free cable end
Commercial data	
ECLASS-6.0	27279218
ECLASS-6.1	27279218
ECLASS-7.0	27279218
ECLASS-8.0	27279218
ECLASS-9.0	27060327
ECLASS-10.1	27060311
ECLASS-11.1	27060311
ECLASS-12.0	27060327
ETIM-5.0	EC001855
customs tariff number	85444290
EAN	4048879714778
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	
Stripping length (jacket)	100 mm
Width across flats	SW17
Mating cycles min.	100
Device protection | Electrical	
Degree of protection (EN IEC 60529)	IP65, IP67
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
Coating locking	Nickeled
Material gasket	FKM
Locking material	Zinc die-casting
Mechanical data | Mounting data	
Mounting method	inserted, screwed, Shaking protection
Environmental characteristics | Climatic	

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Operating temperature min.	-25 °C
Operating temperature max.	85 °C
Additional condition temperature range	depending on cable quality
Important installation notes	
Note on strain relief	Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.
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.
Conformity	
Product standard	IEC 61076-2-111
Installation | Cable	
wire arrangement	gray 5, black 4, blue 3, white 2, brown 1
Cable identification	P04
Cable Type	3
Function cable	Power
Printing color of wire insulation	black (white isolation), white (isolation blue), white (isolation brown), white (isolation black), white (gray isolation)
Jacket Color	black
Type of Certificate	cURus
Amount stranding	1
Stranding	5 wires around Core filler twisted
Filler	yes
wire arrangement	gray 5, black 4, blue 3, white 2, brown 1
Cable weigth	129,8 g/m
Material jacket	PUR
Shore hardness jacket	90 ± 5 Shore A
Freedom from ingredients (jacket)	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Outer-diameter (jacket)	8,2 mm
Tolerance outer diameter (sheath)	± 5 %
Material wire insulation	PP
Amount wires	5
Outer diameter insulation	2,3 mm
Outer diameter tolerance core insulation	± 5 %
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	black (white isolation), white (isolation blue), white (isolation brown), white (isolation black), white (gray isolation)
Amount strands (wire)	84
Diameter of single wires	0,15 mm
Conductor crosssection (wire)	1,5 mm²
Material conductor wire	Stranded copper wire, bare
Conductor type (wire)	strand class 6
Nominal voltage AC max.	1000 V
Current load capacity (standard)	to DIN VDE 0298-4
Current load capacity min. wire	13,5 A
Electrical resistance line constant wire	13,3 Ω/km @ 20 °C
AC withstand voltage (wire - wire)	10 kV @ 60 s
Power frequency withstand voltage (wire - jacket)	10 kV @ 60 s
Min. operating temperature (static)	-50 °C
Max. operating temperature (fixed)	80 °C / 90 °C @ 10000 h Operation
Operating temperature min. (dynamic)	-25 °C
Operating temperature max. (dynamic)	80 °C / 90 °C @ 10000 h Operation
UV resistance	DIN EN ISO 4892-2 A
Flame resistance	UL 1581 § 1100 FT2 | UL 1581 § 1090 | IEC 60332-2-2
chemical resistance	Good, application-related testing
Gasoline resistance	Good, application-related testing

Oil resistance	Good, application-related testing | DIN EN 60811-404
Bending radius (fixed)	5 x Outer diameter
Bending radius (dynamic)	10 x 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
No. of torsion cycles	5 Mio.
Torsion stress	± 180 °/m
Torsion speed	35 cycles/min