

M12 Power female 0° L-cod. with cable

PUR 5x2.5 gy UL/CSA+drag ch. 25m

Art.No.: 7000-P4221-P392500

Weight: 5.597 Country of origin: DE

Model designation: MSWBLL0-UP39_25.0

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 <u>on request</u>. Are you missing technical information? Feel free to use our technical <u>dictionary</u>, where you will find explanations of coding and other technical details.

Product details:

Power

Female straight

M12, 5-pole

L-coded

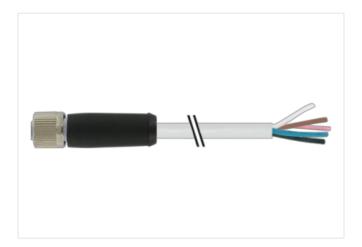
with cable sleeves

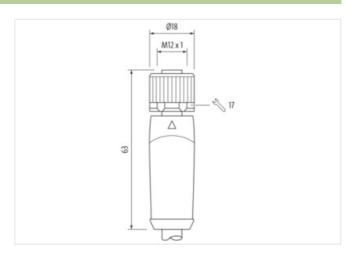
Plastic housings with good resistance against chemicals and oils.

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

Link to Product

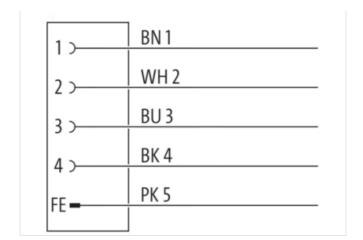
Illustration

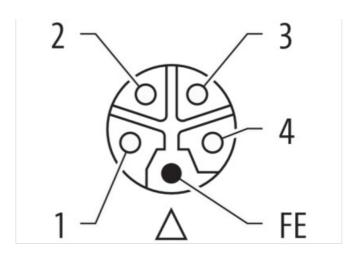


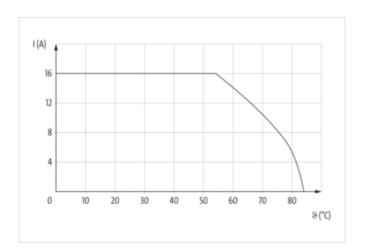


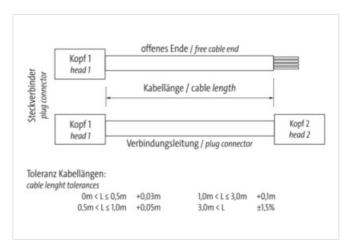


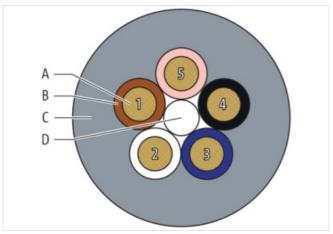
stay connected

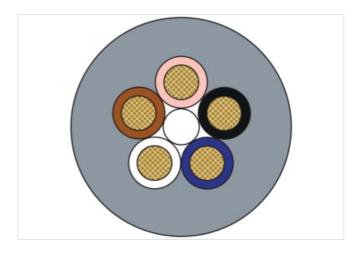












Product may differ from Image











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Material short text MSWBLL0-UP39_25.0

Cable length 25,00 m

Side 1



stay connected

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)	16.4 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-P392500
GTIN	4048879872492
ECLASS-6.0	27279218
ECLASS-6.1	27279218
ECLASS-7.0	27279218
ECLASS-7.1	27279218
ECLASS-8.0	27279218
ECLASS-6.0	27279218
ECLASS-9.0	27060327
ECLASS-9.1	27060327
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	4048879872492
Packaging unit	1
Electrical data Supply	
Operating voltage DC max.	63 V
Current operating per contact max.	16 A
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

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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	
Installation Cable		
Cable identification	P39	
Cable Type	3	
Function cable	Power	
Amount stranding	1	
Stranding	5 wires around core filler twisted	
Filler	yes	
Cable weigth	202 g/m	
Material wire insulation	PP	
	PP 5	
Material wire insulation		
Material wire insulation Amount wires	5	
Material wire insulation Amount wires Outer diameter insulation	5 2.85 mm	
Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation	5 2.85 mm ± 0.1 mm	
Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation Shore hardness wire insulation	5 2.85 mm ± 0.1 mm 60 ± 5 Shore D	
Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation Shore hardness wire insulation Ingredient freeness wire insulation	5 2.85 mm ± 0.1 mm 60 ± 5 Shore D CFC-free, cadmium-free, silicone-free, halogen-free	
Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation Shore hardness wire insulation Ingredient freeness wire insulation Printing color of wire insulation	2.85 mm ± 0.1 mm 60 ± 5 Shore D CFC-free, cadmium-free, silicone-free, halogen-free, lead-free white (isolation blue), white (isolation brown), white (isolation black), black (pink isolation), black (white isolation)	
Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation Shore hardness wire insulation Ingredient freeness wire insulation Printing color of wire insulation Amount strands (wire)	2.85 mm ± 0.1 mm 60 ± 5 Shore D CFC-free, cadmium-free, silicone-free, halogen-free, lead-free white (isolation blue), white (isolation brown), white (isolation black), black (pink isolation), black (white isolation) 140	
Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation Shore hardness wire insulation Ingredient freeness wire insulation Printing color of wire insulation Amount strands (wire) Diameter of single wires	2.85 mm ± 0.1 mm 60 ± 5 Shore D CFC-free, cadmium-free, silicone-free, halogen-free, lead-free white (isolation blue), white (isolation brown), white (isolation black), black (pink isolation), black (white isolation) 140 0.15 mm	
Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation Shore hardness wire insulation Ingredient freeness wire insulation Printing color of wire insulation Amount strands (wire) Diameter of single wires Conductor crosssection (wire)	2.85 mm ± 0.1 mm 60 ± 5 Shore D CFC-free, cadmium-free, silicone-free, halogen-free, lead-free white (isolation blue), white (isolation brown), white (isolation black), black (pink isolation), black (white isolation) 140 0.15 mm 2.5 mm ²	
Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation Shore hardness wire insulation Ingredient freeness wire insulation Printing color of wire insulation Amount strands (wire) Diameter of single wires Conductor crosssection (wire) Material conductor wire	2.85 mm ± 0.1 mm 60 ± 5 Shore D CFC-free, cadmium-free, silicone-free, halogen-free, lead-free white (isolation blue), white (isolation brown), white (isolation black), black (pink isolation), black (white isolation) 140 0.15 mm 2.5 mm² Stranded copper wire, bare	
Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation Shore hardness wire insulation Ingredient freeness wire insulation Printing color of wire insulation Amount strands (wire) Diameter of single wires Conductor crosssection (wire) Material conductor wire Conductor type (wire)	2.85 mm ± 0.1 mm 60 ± 5 Shore D CFC-free, cadmium-free, silicone-free, halogen-free, lead-free white (isolation blue), white (isolation brown), white (isolation black), black (pink isolation), black (white isolation) 140 0.15 mm 2.5 mm² Stranded copper wire, bare strand class 6	
Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation Shore hardness wire insulation Ingredient freeness wire insulation Printing color of wire insulation Amount strands (wire) Diameter of single wires Conductor crosssection (wire) Material conductor wire Conductor type (wire) Outer-diameter (jacket)	2.85 mm ± 0.1 mm 60 ± 5 Shore D CFC-free, cadmium-free, silicone-free, halogen-free, lead-free white (isolation blue), white (isolation brown), white (isolation black), black (pink isolation), black (white isolation) 140 0.15 mm 2.5 mm² Stranded copper wire, bare strand class 6 9.5 mm	
Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation Shore hardness wire insulation Ingredient freeness wire insulation Printing color of wire insulation Amount strands (wire) Diameter of single wires Conductor crosssection (wire) Material conductor wire Conductor type (wire) Outer-diameter (jacket) Tolerance outer diameter (sheath)	2.85 mm ± 0.1 mm 60 ± 5 Shore D CFC-free, cadmium-free, silicone-free, halogen-free, lead-free white (isolation blue), white (isolation brown), white (isolation black), black (pink isolation), black (white isolation) 140 0.15 mm 2.5 mm² Stranded copper wire, bare strand class 6 9.5 mm ± 5 %	
Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation Shore hardness wire insulation Ingredient freeness wire insulation Printing color of wire insulation Amount strands (wire) Diameter of single wires Conductor crosssection (wire) Material conductor wire Conductor type (wire) Outer-diameter (jacket) Tolerance outer diameter (sheath) Material jacket	2.85 mm ± 0.1 mm 60 ± 5 Shore D CFC-free, cadmium-free, silicone-free, halogen-free, lead-free white (isolation blue), white (isolation brown), white (isolation black), black (pink isolation), black (white isolation) 140 0.15 mm 2.5 mm² Stranded copper wire, bare strand class 6 9.5 mm ± 5 % PUR	
Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation Shore hardness wire insulation Ingredient freeness wire insulation Printing color of wire insulation Amount strands (wire) Diameter of single wires Conductor crosssection (wire) Material conductor wire Conductor type (wire) Outer-diameter (jacket) Tolerance outer diameter (sheath) Material jacket Shore hardness jacket	2.85 mm ± 0.1 mm 60 ± 5 Shore D CFC-free, cadmium-free, silicone-free, halogen-free, lead-free white (isolation blue), white (isolation brown), white (isolation black), black (pink isolation), black (white isolation) 140 0.15 mm 2.5 mm² Stranded copper wire, bare strand class 6 9.5 mm ± 5 % PUR 90 ± 5 Shore A	
Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation Shore hardness wire insulation Ingredient freeness wire insulation Printing color of wire insulation Amount strands (wire) Diameter of single wires Conductor crosssection (wire) Material conductor wire Conductor type (wire) Outer-diameter (jacket) Tolerance outer diameter (sheath) Material jacket Shore hardness jacket Freedom from ingredients (jacket)	2.85 mm ± 0.1 mm 60 ± 5 Shore D CFC-free, cadmium-free, silicone-free, halogen-free, lead-free white (isolation blue), white (isolation brown), white (isolation black), black (pink isolation), black (white isolation) 140 0.15 mm 2.5 mm² Stranded copper wire, bare strand class 6 9.5 mm ± 5 % PUR 90 ± 5 Shore A CFC-free, cadmium-free, silicone-free, halogen-free, lead-free	

Nominal voltage AC max.

Withstand voltage (wire - wire)

Withstand voltage (wire - jacket)

Current load capacity (standard) Current load capacity min. wire

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1,000 V

19.5 A

10 kV @ 60 s

10 kV @ 60 s to DIN VDE 0298-4



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
Bending radius (fixed)	7.5 × 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/s² @ 25 °C
No. of torsion cycles	2 Mio. @ 25 °C
Torsion stress	180 °C
Torsion speed	35 cycles/min