Product data sheet

Power connectors



Product description M23 Male cable connector, Contacts: 9, 6.0-10.0 mm, unshielded, solder, IP67

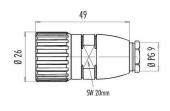
Area series 623
Part no. 99 4601 00 09

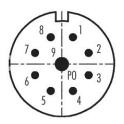
Illustration

Scale drawing

Contact arrangement (Plug-in side)







You can find the assembly instructions on the next page.

Technical data

General features

Part no.	99 4601 00 09
Connector design	Male cable connector
Version	Connector pin straight
Connector locking system	screw
Termination	solder
Degree of protection	IP67
Arrangement of contacts	clockwise
Cross-sectional area	8x1.50 / 1x2.50 mm ² / 8 x AWG 16 / 1 x AWG 14
Cable outlet	6.0-10.0 mm
Temperature range from/to	-25 °C / 125 °C
Mechanical operation	> 50 Mating cycles
Weight (g)	79.76
Customs tariff number	85369010
Country of Origin	DE

Electrical parameters

Rated voltage	48 V	
Rated impulse voltage	2500 V	
Rated current	8x8 A / 1x20 A	
Insulation resistance	≥ 10 ¹⁰ Ω	
Pollution degree	3	
Overvoltage category	II	
Insulating material group	III	
EMC compliance	unshielded	

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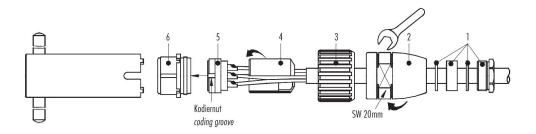
Material

Contact body material	PBT/PA66
Contact material	CuZn (brass)
Contact plating	Au (gold)
REACH SVHC	CAS 7439-92-1 (Lead)
SCIP number	8765fe60-48ba-4caf-a391-a0a85ee1909e

Classifications

eCl@ss 11.1	27-44-01-02
ETIM 9.0	EC002635

Assembly instructions



- Push the cable screw connection (1), adapter (2) and coupling nut (3) onto the cable.
- Strip the cable coating by 20 mm.
- Trim foil, filler and inner insulation.
- Strip the single wires by 3.5 mm, twist and tin.
- Solder the single wires to the contacts.
- Insert the distance shell (4).
- Guide the insert (5) and distance shell (4) into the insert ring (6), mind that the desired coding groove of the insert (6) is pushed into the coding bar.
- Screw the adapter (2) as tight as possible.
- Screw the cable gland (1) as tight as possible.

Please note: torque for clamping screw for contact insert (5) with screw contacts:

- max. 0.1 Nm for screw contacts with mating dia. 1 mm
- max. 0.2 Nm for screw contacts with mating dia. 2 mm

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Security notices

The connector must not be plugged or unplugged under load. Non-observance and improper use can result in personal injury.

The connectors have been developed for applications in plant engineering, control and electrical equipment construction. The user is responsible for checking whether the connectors can also be used in other areas of application.

To protect against unintentional opening of the connector, the thread between the housing and the connector head must be secured with a suitable cyanoacrylate adhesive when used in circuits with voltages dangerous to the touch. This does not apply to connectors used in SELV and PELV circuits according to IEC 61140 (EN 61140, VDE 0140-1).

Connectors which are used in circuits with voltages dangerous to the touch may only be installed and used by, or under the supervision of, persons with electrical engineering training, taking into account the applicable regulations and standards.

The user must take suitable safety precautions to ensure that the connector cannot be accidentally disconnected.

Plug connectors with enclosure protection IP67 and IP68 are not suitable for use under water. When used outdoors, the plug connectors must be protected separately against corrosion. For further information on the IP protection classes, please refer to the "Technical Information" download centre.

The plug connector is not suitable for mains voltages Please observe the pollution degree and the overvoltage category. For further information, please refer to the download center "Technical Information".