

# Product data sheet

## Power connectors

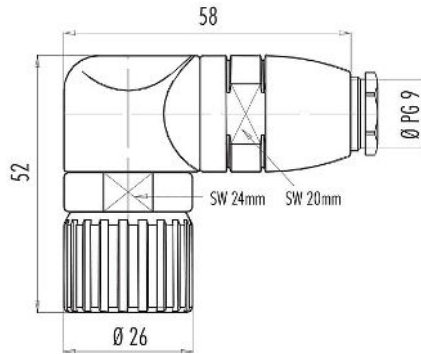


Product description	<b>M23 Male angled connector, Contacts: 9, 6.0-10.0 mm, unshielded, solder, IP67</b>
Area	<b>M23 series 623</b>
Part no.	<b>99 4601 70 09</b>

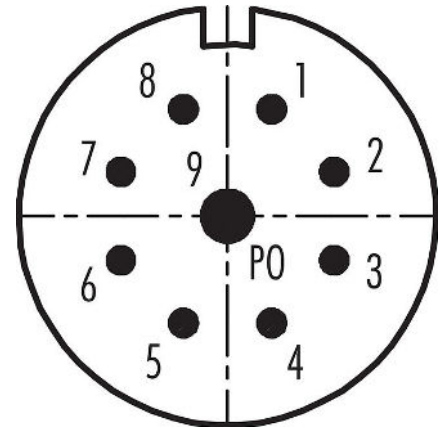
### Illustration



### Scale drawing



### Contact arrangement (Plug-in side)



You can find the assembly instructions on the next page.

## Technical data

### General features

Part no.	<b>99 4601 70 09</b>
Connector design	Male angled connector
Version	Connector pin angled
Connector locking system	screw
Termination	solder
Degree of protection	IP67
Arrangement of contacts	clockwise
Cross-sectional area	8x1.50 / 1x2.50 mm <sup>2</sup> / 8 x AWG 16 / 1 x AWG 14
Cable outlet	6.0-10.0 mm
Twistability	45° (8 coding options)
Temperature range from/to	-25 °C / 125 °C
Mechanical operation	> 50 Mating cycles
Weight (g)	146.00
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 <sup>10</sup> Ω
Pollution degree	3
Overvoltage category	II
Insulating material group	III
EMC compliance	unshielded

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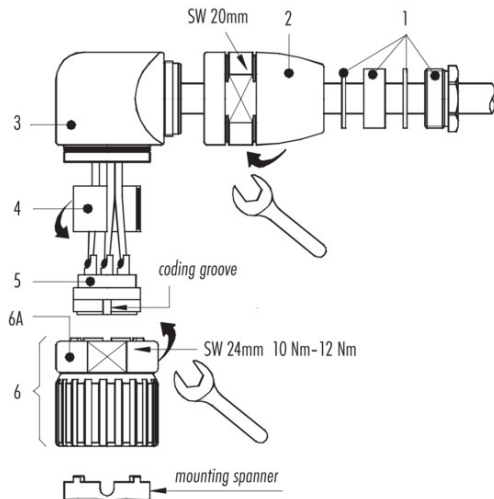
### Material

Contact body material	PBT/PA66
Contact material	CuZn (brass)
Contact plating	Au (gold)
REACH SVHC	None (No pollutants)
SCIP number	CAS 7439-92-1 (Lead)
	c376d900-cae2-40df-8593-b28edbf58d31

### Classifications

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

### Assembly instructions



- Push the cable screw connection (1), adapter (2) and angled housing (3) onto the cable.
- Strip the cable coating by 30 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 unit (6), mind that the desired coding groove of the insert (5) is pushed into the coding bar.
- Insert the entire unit into the angle housing
- (Attention: eight coding options) and secure with nut (6A) (torque: 10 Nm up to 12 Nm).
- 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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### **General Disclaim Notice**

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.

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.

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.

To lock the cable connector with the device connector, the threaded ring is tightened "hand-tight" (approx. 50 cNm).