

# Product data sheet

## Power connectors

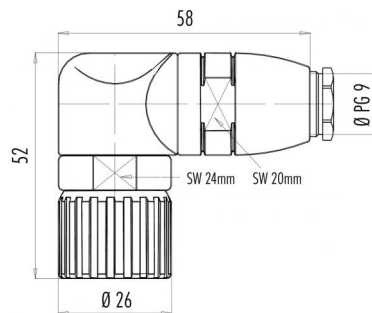


Product description	<b>M23 male angled connector, Contacts: 19, 6.0 - 10.0 mm, shielding is not possible, solder, IP67</b>
Area	<b>M23 series 623</b>
Order number	<b>99 4631 70 19</b>

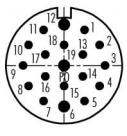
### Illustration



### Scale drawing



### Contact arrangement (Plug-in side)



	X	Y
1	3.00	5.20
2	5.20	3.00
3	6.00	0.00
4	5.20	-3.00
5	3.00	-5.20
6	0.00	-6.00
7	-3.00	-5.20
8	-5.20	-3.00
9	-6.00	0.00
10	-5.20	3.00
11	-3.00	5.20
12	0.00	6.00
13	2.75	1.60
14	2.75	-1.60
15	0.00	-3.00
16	-2.75	-1.60
17	-2.75	1.60
18	0.00	3.00
19	0.00	0.00

You can find the assembly instructions on the next page.

## Technical data

### General values

Connector design	male angled connector
Connector locking system	screw
Termination	solder
Arrangement of contacts	clockwise
Wire gauge (mm)	16x1.00 / 3x1.50 mm <sup>2</sup>
Wire gauge (AWG)	16x18 / 3x16
Cable outlet	6.0 - 10.0 mm
Upper limit temperature	125 °C
Lower limit temperature	- 20 °C
Customs tariff number	85369010
Packaging Unit	8

### Electrical values

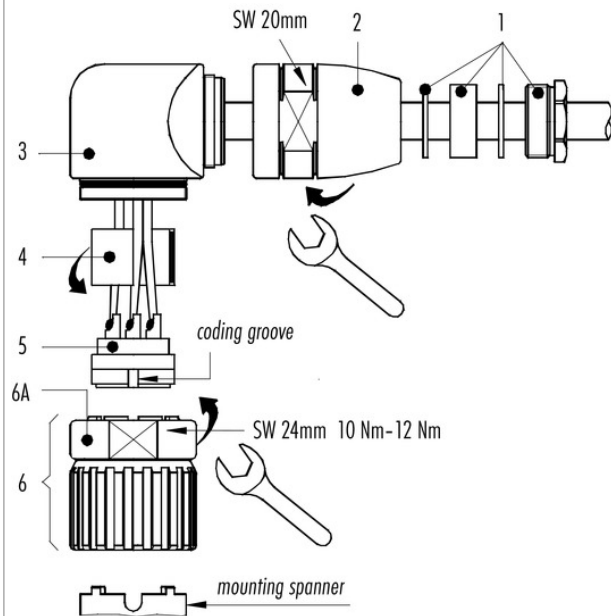
Rated current (40 °C)	16 x 8 A / 3 x 10 A
Rated voltage	150 V
Rated impulse voltage	1500 V
Pollution degree	3
Overvoltage category	II
Insulating material group	III
Insulation resistance	≥ 10 <sup>10</sup> Ω
EMC compliance	shielding is not possible
Degree of protection	IP67
Mechanical operation	> 50 Mating cycles

### Material

Contact material	CuZn (brass)
Contact plating	Au (gold)
Contact body material	PBT/PA66
REACH SVHC	CAS 7439-92-1 (Lead)

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### Assembly instructions / Panel cut-out



- 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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## Security notices

The connector must not be connected or separated under load. Non-observance and incorrect use can result in personal injury.

The connectors are designed for use in plant, control system and electrical equipment. The end user is responsible for checking whether the connectors are suitable for use in other applications.

Connectors used in electrical circuits containing hazardous life parts must only be assembled and used by or under the supervision of persons with the requisite electrotechnical training, taking the applicable regulations and standards into account.

Connectors with degree of protection IP 67 and IP 68 are not suitable for use under water. When used outdoors, the connectors must be separately protected against corrosion. For further information about IP degrees of protection refer to 'Technical support' in the Download Centre.

To lock the cable connector to the equipment connector, the threaded ring is tightened until it is 'finger-tight' (approx. 50 cNm).