Product data sheet

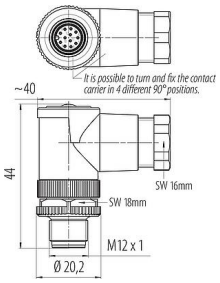
Automation technology - Sensors and actuators

Product description	**M12 Male angled connector, Contacts: 12, 6.0-8.0 mm, unshielded, solder, IP67, UL 2238**
Area	**M12-A**
Coding	**A-coded**
Series	**713**
Part no.	**99 0491 52 12**

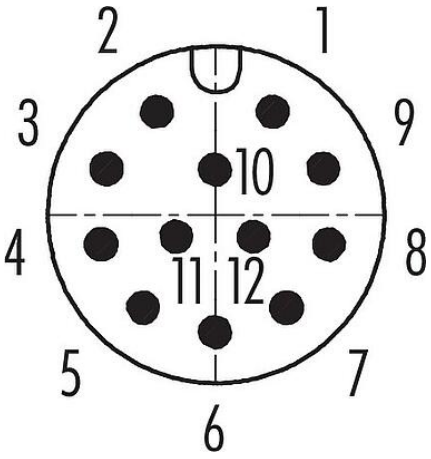
Illustration (may vary)



Scale drawing



Contact arrangement (Plug-in side)



You can find the assembly instructions on the next page.

Technical data

General features

Part no.	99 0491 52 12
Connector design	Male angled connector
Type standard	DIN EN 61076-2-101
Coding	A-coded
Version	Connector pin angled
Connector locking system	screw
Termination	solder
Degree of protection	IP67
Connection cross-section	max. 0.25 mm² / AWG 24
Cable outlet	6.0-8.0 mm
Twistability	90° (4 coding options)
Temperature range from/to	-40 °C / 85 °C
Mechanical operation	> 100 Mating cycles
Weight (g)	19.47
Customs tariff number	85369010
Country of Origin	DE

Electrical parameters

Rated voltage	30 V
Rated impulse voltage	800 V
Rated current	1.5 A

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Insulation resistance	> 10^8 Ω
Pollution degree	3
Overvoltage category	II
Insulating material group	III
EMC compliance	unshielded

Material

Housing material	PA
Contact body material	PA
Contact material	CuZn (brass)
Contact plating	Au (gold)
Locking material	Zinc die-cast nickel-plated
REACH SVHC	CAS 7439-92-1 (Lead)
SCIP number	4e3cc110-7fb9-49d3-badc-1fc325d09b70

Authorization/approvals

Approvals	UL 2238

Classifications

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

Trade-Compliance

Copper (9903.78.01)	0.000221 kg

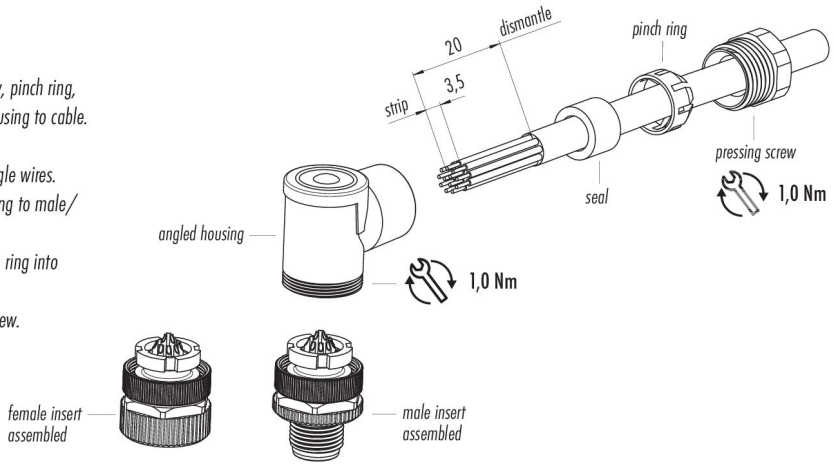
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Assembly instructions

1. Bead pressing screw, pinch ring, seal and angled housing to cable.
2. Dismantle cable.
3. Strip and solder single wires.
4. Screw angled housing to male/ female insert.
5. Push seal and pinch ring into angled housing.
6. Tighten pressing screw.



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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.

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.

Please observe the pollution degree and the overvoltage category. For further information, please refer to the download center "Technical Information".

To lock the cable connector with the device connector, the threaded ring is tightened "hand-tight" (approx. 60 cNm).