## **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

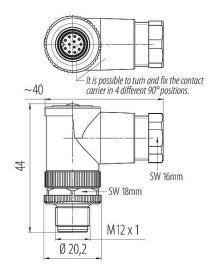
Area series 713
Part no. 99 0491 52 12

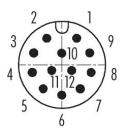
### Illustration

## Scale drawing

## Contact arrangement (Plug-in side)







You can find the assembly instructions on the next page.

### **Technical data**

### General features

Part no.	99 0491 52 12
Connector design	Male angled connector
Type standard	DIN EN 61076-2-101
Version	Connector pin angled
Connector locking system	screw
Termination	solder
Degree of protection	IP67
Cross-sectional area	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 (2 A UL)

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Insulation resistance	> 10 <sup>8</sup> Ω
Pollution degree	3
Overvoltage category	
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 96-45-7 (Imidazolidine-2-thione) CAS 7439-92-1 (Lead)
SCIP number	4e3cc110-7fb9-49d3-badc-1fc325d09b70

### Authorization/approvals

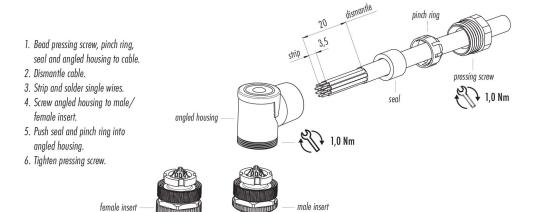
Approvals UL
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### Classifications

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

### **Assembly instructions**

assembled



assembled

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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".

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