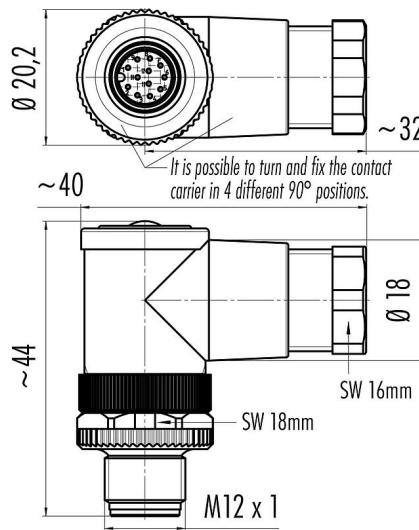


|                     |   |
|---------------------|---|
| Product description | M12-A male angled connector, Contacts: 12, 6.0 - 8.0 mm, unshielded, solder, IP67, UL |
| Area                | M12-A series 713  |
| Order number        | 99 0491 52 12   |

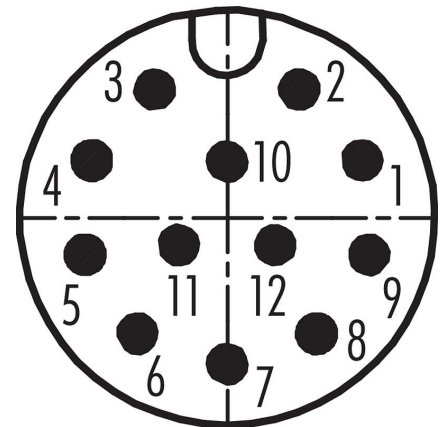
### Illustration



### Scale drawing



### Contact arrangement (Plug-in side)



You can find the component part drawing and assembly instructions on the next page.

### Technical data

#### General features

|                           |   |
|---------------------------|---|
| Order number              | 99 0491 52 12                           |
| Connector design          | male angled connector                   |
| Version                   | connector male angled                   |
| Connector locking system  | screw                                   |
| Termination               | solder                                  |
| Degree of protection      | IP67                                    |
| Cross-sectional area      | max. 0.25 mm <sup>2</sup> / max. 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)                | 19.468                                  |
| Customs tariff number     | 85369010                                |

#### Electrical parameters

|                       |       |
|-----------------------|-------|
| Rated voltage         | 30 V  |
| Rated impulse voltage | 500 V |

# Product data sheet

## Automation technology - sensors and actuators



|                     |   |
|---------------------|---|
| Product description | M12-A male angled connector, Contacts: 12, 6.0 - 8.0 mm, unshielded, solder, IP67, UL |
| Area                | M12-A series 713  |
| Order number        | 99 0491 52 12   |

|                           |                     |
|---------------------------|---------------------|
| Rated current (40 °C)     | 1.5 A (2 A UL)      |
| Insulation resistance     | > 10 <sup>8</sup> 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)  |
| REACH SVHC            | CAS 96-45-7 (Imidazolidine-2-thione)<br>CAS 7439-92-1 (Lead) |
| SCIP number           | None (No pollutants)   |

### Authorization/approvals

|           |    |
|-----------|----|
| Approvals | UL |
|-----------|----|

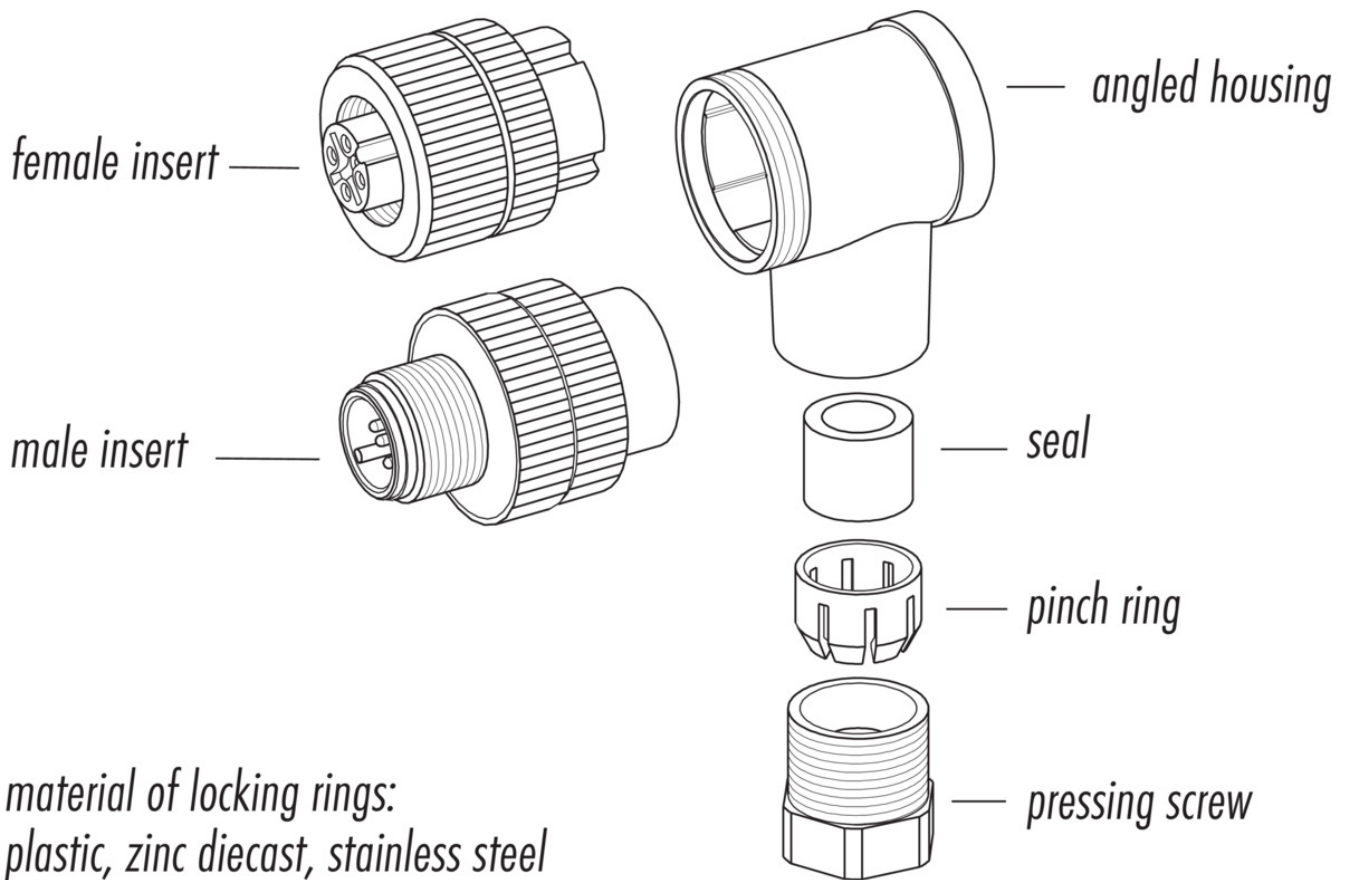
### Classifications

|             |             |
|-------------|-------------|
| eCl@ss 11.1 | 27-44-01-02 |
| ETIM 7.0    | EC002635    |

Product description M12-A male angled connector, Contacts: 12, 6.0 - 8.0 mm, unshielded, solder, IP67, UL

Area M12-A series 713  
Order number 99 0491 52 12

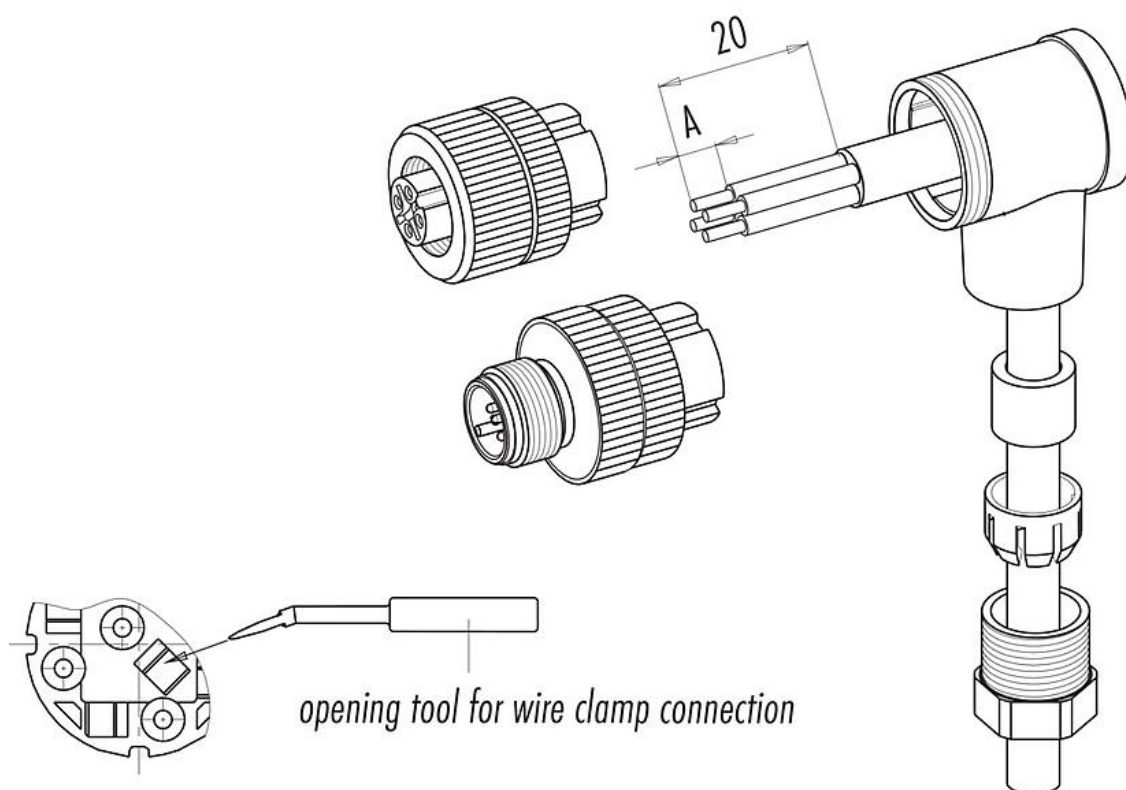
Component part drawing



material of locking rings:  
plastic, zinc diecast, stainless steel

|                     |   |
|---------------------|---|
| Product description | M12-A male angled connector, Contacts: 12, 6.0 - 8.0 mm, unshielded, solder, IP67, UL |
| Area                | M12-A series 713  |
| Order number        | 99 0491 52 12   |

### Assembly instructions



|                     | <i>screw connection</i> | <i>solder version</i> | <i>wire clamp connection</i> |
|---------------------|-------------------------|-----------------------|------------------------------|
| <i>measure A/mm</i> | <b>5</b>                | <b>3,5</b>            | <b>7</b>                     |

*material of locking rings: plastic, zinc diecast, stainless steel*

|                     |  |
|---------------------|--|
| Product description | <b>M12-A male angled connector, Contacts: 12, 6.0 - 8.0 mm, unshielded, solder, IP67, UL</b> |
| Area                | <b>M12-A series 713</b>  |
| Order number        | <b>99 0491 52 12</b>   |

### **Security notices**

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.

Plug connectors with enclosure protection IP 67 and IP 68 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. 60 cNm).