



Serie 720

## Miniatur Rundsteckverbinder Serie 720 Miniature circular connectors series 720

## Kurzinformation Brief information

### Kabelsteckverbinder

- Steckverbinder mit Schnappverriegelung
- Schutzart IP 67<sup>1)</sup>
- Innenliegende Zugentlastung
- Einfache Montage
- Versionen mit Farbkodierung

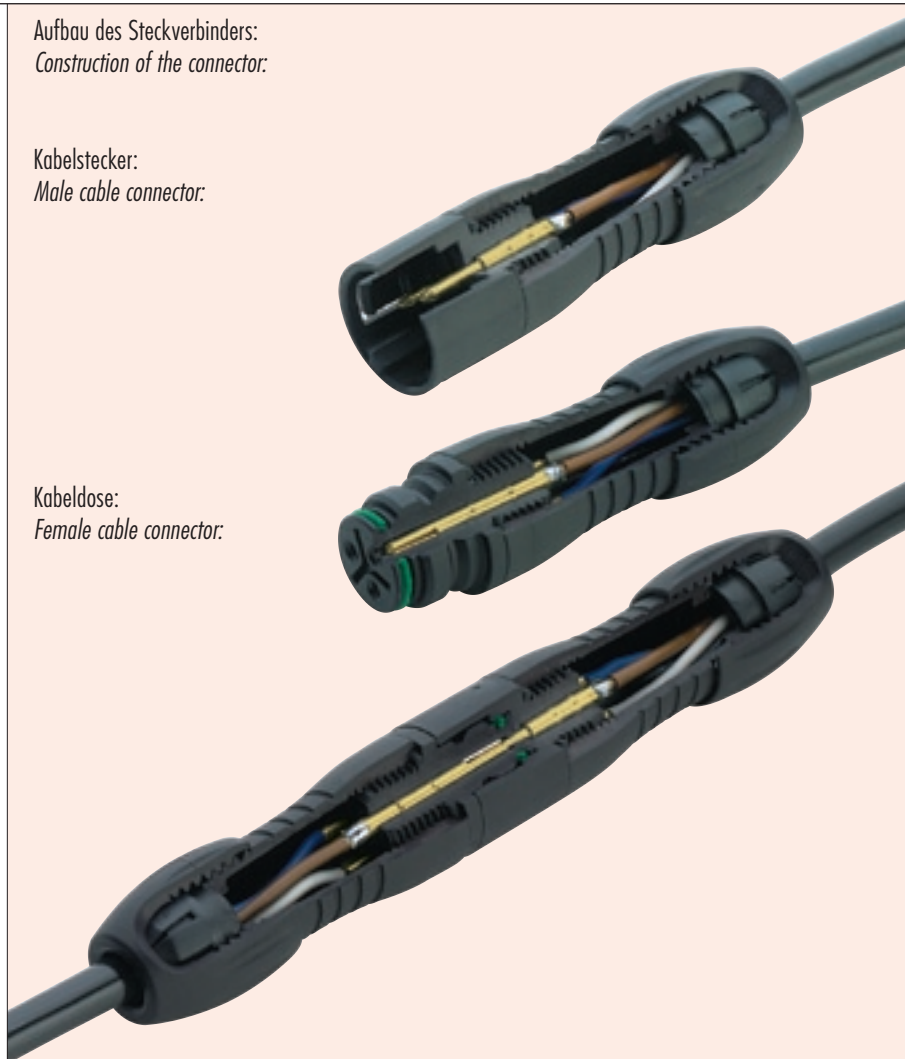
### Cable Connector

- Connector with snap-in locking
- Degree of protection IP 67<sup>1)</sup>
- Internal strain relief
- Easy assembly
- Versions with colour-coding

Aufbau des Steckverbinders:  
Construction of the connector:

Kabelstecker:  
Male cable connector:

Kabeldose:  
Female cable connector:



### Flanschsteckverbinder

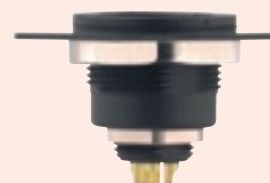
- Versenkter Einbau mit Adapter möglich
- Adapter als Frontmontage-Ausführung (Besonders geeignet für vorkonfektionierte Kabelbäume, die nach dem Lötten verschraubt werden)

### Chassis Sockets

- Adapter enables an immersed assembly
- Front fastened adapter (especially suited for preassembled cable trees, which are mounted after soldering)

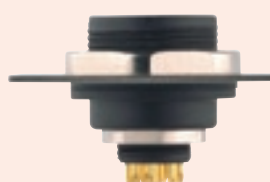
Flanschstecker:  
Male socket:

Flanschstecker mit Adapter:  
Male socket with adapter:



Flanschdose:  
Female socket:

Flanschdose mit Adapter, Verschraubung von vorn:  
Female socket with adapter, front fastened:



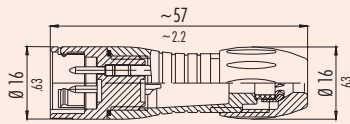
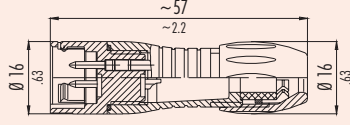
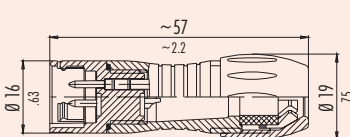
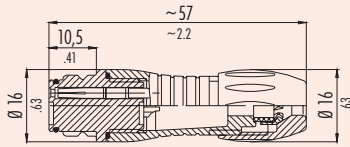
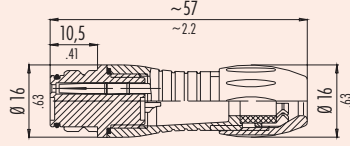
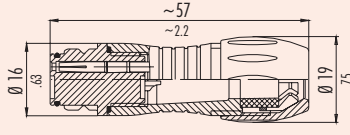
<sup>1)</sup> Erläuterung der Schutzarten siehe Seite TI-3 – TI-4. / <sup>1)</sup> Explanation of protection standards see page TI-3 – TI-4.

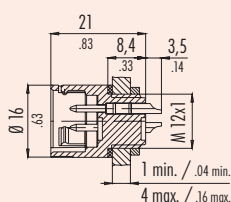
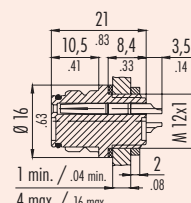
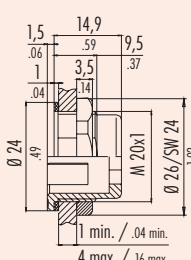
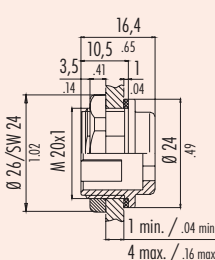
| Miniatur Rundsteckverbinder Serie 720<br>Miniature circular connectors series 720 |                         | Technische Daten <sup>1)</sup><br>Specifications <sup>1)</sup>                |        |           |       |
|-----------------------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------|--------|-----------|-------|
| Allgemeine Kennwerte                                                              |                         | General Characteristics                                                       |        |           |       |
| Polzahl                                                                           | Number of contacts      | 3                                                                             | 5      | 8         | 12    |
| Verriegelung                                                                      | Locking system          | schnapp / snap-in                                                             |        |           |       |
| Anschlussart                                                                      | Termination             | löten / solder                                                                |        |           |       |
| Anschlussquerschnitt in mm²                                                       | Wire gauge in mm²       | max. 0,75                                                                     |        | max. 0,25 |       |
| Anschlussquerschnitt in AWG                                                       | Wire gauge in AWG       | max. 20                                                                       |        | max. 24   |       |
| Kabeldurchlass                                                                    | Cable outlet            | 2,5 - 4 mm, 4 - 6 mm, 6 - 8 mm / .10 - .16 in., .16 - .24 in. / .24 - .31 in. |        |           |       |
| Schutzart Gehäuse                                                                 | Shell protection        | IP 67                                                                         |        |           |       |
| Mechanische Lebensdauer                                                           | Mechanical operation    | > 500 Steckzyklen / > 500 mating cycles                                       |        |           |       |
| Obere Grenztemperatur                                                             | Upper temperature       | + 85 °C (+ 185 °F)                                                            |        |           |       |
| Untere Grenztemperatur                                                            | Lower temperature       | − 40 °C (− 40 °F)                                                             |        |           |       |
| Gewicht Kabelsteckverbinder                                                       | Weight cable connector  | ~ 10 g                                                                        |        |           |       |
| Gewicht Flanschsteckverbinder                                                     | Weight socket           | ~ 5 g                                                                         |        |           |       |
| Elektrische Kennwerte                                                             |                         | Electrical Characteristics                                                    |        |           |       |
| Bemessungsspannung                                                                | Rated voltage           | 250 V                                                                         | 125 V  | 125 V     | 60 V  |
| Bemessungs-Stoßspannung                                                           | Rated impulse voltage   | 2500 V                                                                        | 1500 V | 2500 V    | 800 V |
| Verschmutzungsgrad                                                                | Pollution degree        | 2                                                                             |        |           |       |
| Überspannungskategorie                                                            | Overvoltage categorie   | II                                                                            |        |           |       |
| Isolierstoffgruppe                                                                | Material group          | II                                                                            |        |           |       |
| Prüfstoßspannung                                                                  | Test voltage            | 2950 V                                                                        | 1750 V | 1750 V    | 910 V |
| Bemessungsstrom (40 °C)                                                           | Rated current (40 °C)   | 7 A                                                                           | 5 A    | 2 A       |       |
| Durchgangswiderstand                                                              | Contact resistance      | ≤ 3 mΩ                                                                        |        |           |       |
| Isolationswiderstand                                                              | Insulation resistance   | ≥ 10 <sup>10</sup> Ω                                                          |        |           |       |
| Werkstoffe                                                                        |                         | Materials                                                                     |        |           |       |
| Kontaktstift                                                                      | Pin contact             | CuZn (Messing/brass)                                                          |        |           |       |
| Kontaktbuchse                                                                     | Socket contact          | CuSn (Bronze/bronze)                                                          |        |           |       |
| Kontaktoberfläche                                                                 | Contact plating         | Au (Gold/gold)                                                                |        |           |       |
| Steckverbinderkörper                                                              | Insert                  | Polyamid (PA66) - UL 94 V-0 / Polyamid (PA66) - UL 94 V-0                     |        |           |       |
| Gehäuse Kabelstecker                                                              | Housing plastic version | Polyamid (PA66) - UL 94 V-0 / Polyamid (PA66) - UL 94 V-0                     |        |           |       |
| Flanschadapter                                                                    | Socket adaptor          | Polyamid (PA66) - UL 94 V-0 / Polyamid (PA66) - UL 94 V-0                     |        |           |       |
| Flanschsteckverbinder                                                             | Socket                  | Polyamid (PA66) - UL 94 V-0 / Polyamid (PA66) - UL 94 V-0                     |        |           |       |
| 6-kant-Mutter                                                                     | Hexagonal nut           | CuZn (Messing, vernickelt / brass, nickel plated)                             |        |           |       |

<sup>1)</sup> Normen und Prüfbaedingungen für diese Angaben siehe Seite TI-16. / <sup>1)</sup> Standards and test parameters for this data see page TI-16.

## Miniatur Rundsteckverbinder Serie 720 Miniature circular connectors series 720

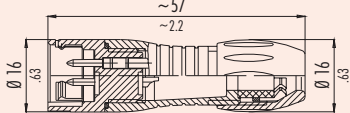
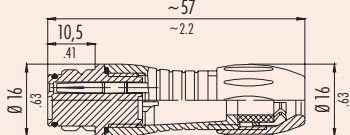
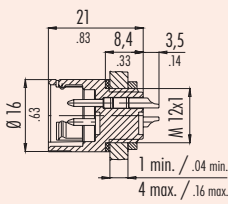
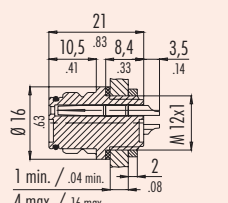
## Flanschsteckverbinder Sockets

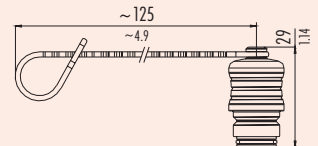
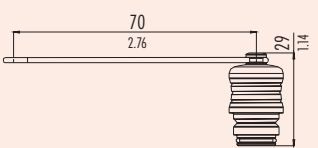
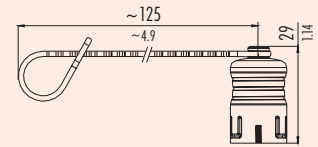
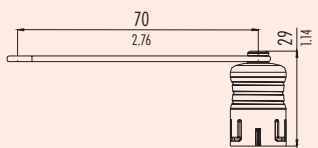
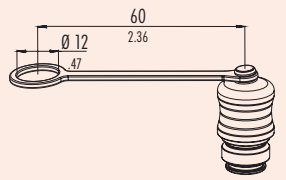
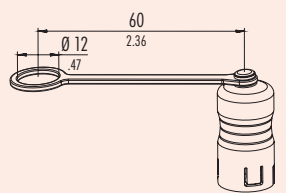
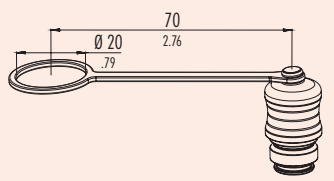
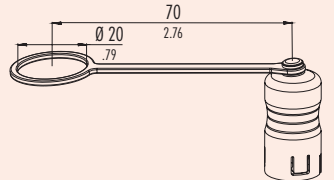
| Bezeichnung — Abbildung<br>Description — Figure                                                                                                                                                            | Maßzeichnung<br>Drawing                                                             | Polzahl<br>Contacts | Bestell-Nr.<br>Ordering-No. |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------|-----------------------------|
| Kabelstecker, Kabeldurchlass 2,5 - 4 mm<br><i>Male cable connector,<br/>cable outlet 2,5 - 4 mm<br/>(.10 - .16 in.)</i>   |    | 3                   | 99-9105-03-03               |
|                                                                                                                                                                                                            |                                                                                     | 5                   | 99-9113-03-05               |
|                                                                                                                                                                                                            |                                                                                     | 8                   | 99-9125-03-08               |
|                                                                                                                                                                                                            |                                                                                     | 12                  | 99-9133-03-12               |
| Kabelstecker, Kabeldurchlass 4 - 6 mm<br><i>Male cable connector,<br/>cable outlet 4 - 6 mm<br/>(.16 - .24 in.)</i>       |    | 3                   | 99-9105-00-03               |
|                                                                                                                                                                                                            |                                                                                     | 5                   | 99-9113-00-05               |
|                                                                                                                                                                                                            |                                                                                     | 8                   | 99-9125-00-08               |
|                                                                                                                                                                                                            |                                                                                     | 12                  | 99-9133-00-12               |
| Kabelstecker, Kabeldurchlass 6 - 8 mm<br><i>Male cable connector,<br/>cable outlet 6 - 8 mm<br/>(.24 - .31 in.)</i>     |  | 3                   | 99-9105-02-03               |
|                                                                                                                                                                                                            |                                                                                     | 5                   | 99-9113-02-05               |
|                                                                                                                                                                                                            |                                                                                     | 8                   | 99-9125-02-08               |
|                                                                                                                                                                                                            |                                                                                     | 12                  | 99-9133-02-12               |
| Kabeldose, Kabeldurchlass 2,5 - 4 mm<br><i>Female cable connector,<br/>cable outlet 2,5 - 4 mm<br/>(.10 - .16 in.)</i>  |  | 3                   | 99-9106-03-03               |
|                                                                                                                                                                                                            |                                                                                     | 5                   | 99-9114-03-05               |
|                                                                                                                                                                                                            |                                                                                     | 8                   | 99-9126-03-08               |
|                                                                                                                                                                                                            |                                                                                     | 12                  | 99-9134-03-12               |
| Kabeldose, Kabeldurchlass 4 - 6 mm<br><i>Female cable connector,<br/>cable outlet 4 - 6 mm<br/>(.16 - .24 in.)</i>      |  | 3                   | 99-9106-00-03               |
|                                                                                                                                                                                                            |                                                                                     | 5                   | 99-9114-00-05               |
|                                                                                                                                                                                                            |                                                                                     | 8                   | 99-9126-00-08               |
|                                                                                                                                                                                                            |                                                                                     | 12                  | 99-9134-00-12               |
| Kabeldose, Kabeldurchlass 6 - 8 mm<br><i>Female cable connector,<br/>cable outlet 6 - 8 mm<br/>(.24 - .31 in.)</i>      |  | 3                   | 99-9106-02-03               |
|                                                                                                                                                                                                            |                                                                                     | 5                   | 99-9114-02-05               |
|                                                                                                                                                                                                            |                                                                                     | 8                   | 99-9126-02-08               |
|                                                                                                                                                                                                            |                                                                                     | 12                  | 99-9134-02-12               |

| <b>Miniatur Rundsteckverbinder Serie 720</b><br><b>Miniature circular connectors series 720</b>                                                                                                                         |                                                                                     | <b>Flanschsteckverbinder, Adapter</b><br><b>Sockets, adaptors</b> |                             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------|-----------------------------|
| Bezeichnung — Abbildung<br>Description — Figure                                                                                                                                                                         | Maßzeichnung<br>Drawing                                                             | Polzahl<br>Contacts                                               | Bestell-Nr.<br>Ordering-No. |
| Flanschstecker<br><i>Male socket</i><br>                                                                                               |    | 3                                                                 | 99-9107-00-03               |
|                                                                                                                                                                                                                         |                                                                                     | 5                                                                 | 99-9115-00-05               |
|                                                                                                                                                                                                                         |                                                                                     | 8                                                                 | 99-9127-00-08               |
|                                                                                                                                                                                                                         |                                                                                     | 12                                                                | 99-9135-00-12               |
| Flanschdose<br><i>Female socket</i><br>                                                                                              |   | 3                                                                 | 99-9108-00-03               |
|                                                                                                                                                                                                                         |                                                                                     | 5                                                                 | 99-9116-00-05               |
|                                                                                                                                                                                                                         |                                                                                     | 8                                                                 | 99-9128-00-08               |
|                                                                                                                                                                                                                         |                                                                                     | 12                                                                | 99-9136-00-12               |
| Adapter für Flanschsteckverbinder<br><i>Adapter for socket</i><br>                                                                   |  | —                                                                 | 08-2433-000-001             |
| Adapter für Flanschsteckverbinder<br>(Verschraubung von vorn)<br><i>Adapter for socket</i><br><i>(fastening from front side)</i><br> |  | —                                                                 | 08-2434-000-001             |

## Miniatur Rundsteckverbinder Serie 720 Miniature circular connectors series 720

## Farbkodierung Colour coding

| Bezeichnung — Abbildung<br>Description — Figure                                                                           | Maßzeichnung<br>Drawing                                                             | Polzahl<br>Contacts | KabelØ<br>CableØ     | Bestell-Nr./Ordering-No. |               |               |
|---------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------|----------------------|--------------------------|---------------|---------------|
|                                                                                                                           |                                                                                     |                     |                      | rot/red                  | blau/blue     | grün/green    |
| Kabelstecker<br>Male cable connector<br> |    | 3                   | 4-6mm<br>.15-.24 in. | 99-9105-50-03            | 99-9105-60-03 | 99-9105-70-03 |
|                                                                                                                           |                                                                                     | 5                   | 4-6mm<br>.15-.24 in. | 99-9113-50-05            | 99-9113-60-05 | 99-9113-70-05 |
|                                                                                                                           |                                                                                     | 8                   | 4-6mm<br>.15-.24 in. | 99-9125-50-08            | 99-9125-60-08 | 99-9125-70-08 |
|                                                                                                                           |                                                                                     | 12                  | 6-8mm<br>.24-.31 in. | 99-9133-52-12            | 99-9133-62-12 | 99-9133-72-12 |
| Kabeldose<br>Female cable connector<br> |   | 3                   | 4-6mm<br>.15-.24 in. | 99-9106-50-03            | 99-9106-60-03 | 99-9106-70-03 |
|                                                                                                                           |                                                                                     | 5                   | 4-6mm<br>.15-.24 in. | 99-9114-50-05            | 99-9114-60-05 | 99-9114-70-05 |
|                                                                                                                           |                                                                                     | 8                   | 4-6mm<br>.15-.24 in. | 99-9126-50-08            | 99-9126-60-08 | 99-9126-70-08 |
|                                                                                                                           |                                                                                     | 12                  | 6-8mm<br>.24-.31 in. | 99-9134-52-12            | 99-9134-62-12 | 99-9134-72-12 |
| Flanschstecker<br>Male socket<br>      |  | 3                   | 4-6mm<br>.15-.24 in. | 99-9107-50-03            | 99-9107-60-03 | 99-9107-70-03 |
|                                                                                                                           |                                                                                     | 5                   | 4-6mm<br>.15-.24 in. | 99-9115-50-05            | 99-9115-60-05 | 99-9115-70-05 |
|                                                                                                                           |                                                                                     | 8                   | 4-6mm<br>.15-.24 in. | 99-9127-50-08            | 99-9127-60-08 | 99-9127-70-08 |
|                                                                                                                           |                                                                                     | 12                  | 6-8mm<br>.24-.31 in. | 99-9135-50-12            | 99-9135-60-12 | 99-9135-70-12 |
| Flanschdose<br>Female socket<br>       |  | 3                   | 4-6mm<br>.15-.24 in. | 99-9108-50-03            | 99-9108-60-03 | 99-9108-70-03 |
|                                                                                                                           |                                                                                     | 5                   | 4-6mm<br>.15-.24 in. | 99-9116-50-05            | 99-9116-60-05 | 99-9116-70-05 |
|                                                                                                                           |                                                                                     | 8                   | 4-6mm<br>.15-.24 in. | 99-9128-50-08            | 99-9128-60-08 | 99-9128-70-08 |
|                                                                                                                           |                                                                                     | 12                  | 6-8mm<br>.24-.31 in. | 99-9136-50-12            | 99-9136-60-12 | 99-9136-70-12 |

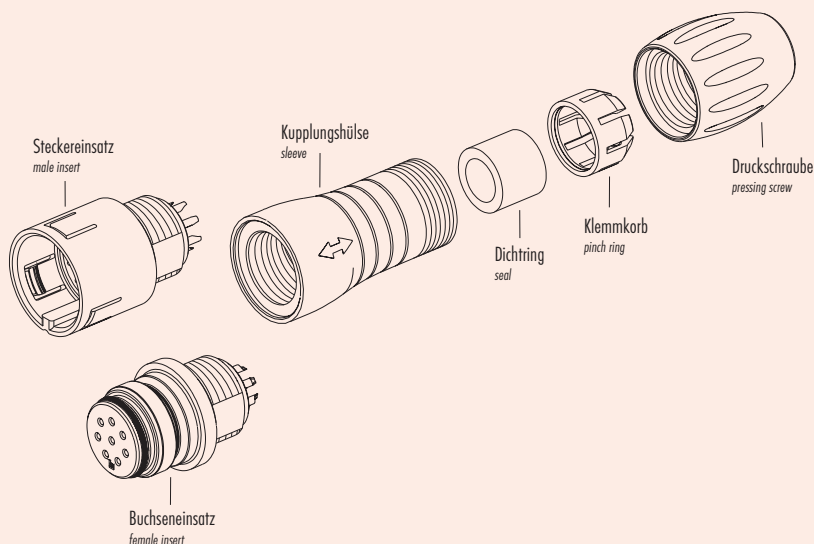
| <b>Miniatur Rundsteckverbinder Serie 720</b><br><b>Miniature circular connectors series 720</b> |                                                                                     | <b>Zubehör</b><br><b>Accessories</b>                                                 |                             |
|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-----------------------------|
| Bezeichnung<br>Description                                                                      | Abbildung<br>Figure                                                                 | Maßzeichnung<br>Drawing                                                              | Bestell-Nr.<br>Ordering-No. |
| Schutzkappe für Kabelstecker<br>Protection cap for male cable connector                         |    |    | 08-2587-000-000             |
| Schutzkappe für Flanschstecker<br>Protection cap for male socket                                |    |    | 08-2559-000-000             |
| Schutzkappe für Kabeldose<br>Protection cap for female cable connector                          |    |   | 08-2586-000-000             |
| Schutzkappe für Flanschdose<br>Protection cap for female socket                                 |  |  | 08-2567-000-000             |
| Schutzkappe für Flanschstecker, M12<br>Protection cap for male socket, M12                      |  |  | 08-2680-000-000             |
| Schutzkappe für Flanschdose, M12<br>Protection cap for female socket, M12                       |  |  | 08-2681-000-000             |
| Schutzkappe für Flanschstecker, M20<br>Protection cap for male socket, M20                      |  |  | 08-2674-000-000             |
| Schutzkappe für Flanschdose, M20<br>Protection cap for female socket, M20                       |  |  | 08-2675-000-000             |

## Miniatur Rundsteckverbinder Serie 720 Miniature circular connectors series 720

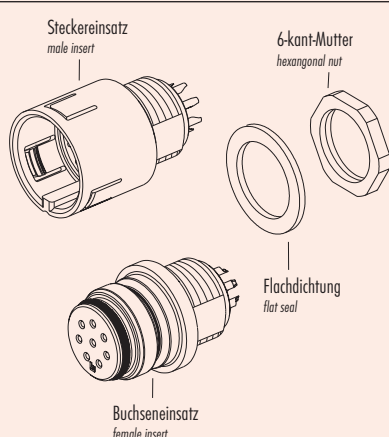
## Einzelteildarstellung, Polbilder Comp. part drawing, contact arrangements

### Einzelteildarstellung Component part drawing

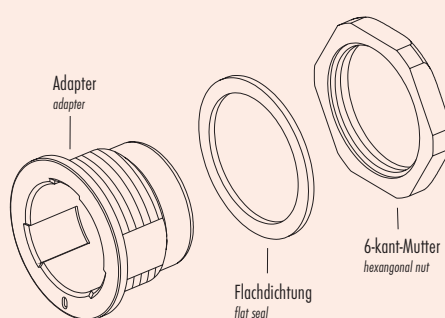
#### Kabelsteckverbinder Cable connector



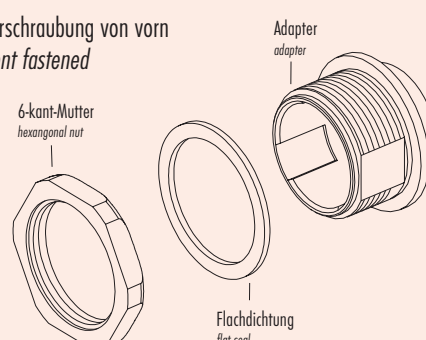
#### Flanschsteckverbinder Socket



#### Adapter Adapter



#### Adapter, Verschraubung von vorn Adapter, front fastened



### Polbilder mit Sicht auf Lötanschlusseite der Stifteinsätze Contact arrangements with view on solder termination side of male inserts

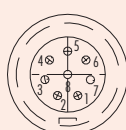
3 pol  
3 contacts



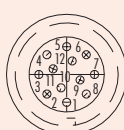
5 pol  
5 contacts



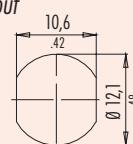
8 pol  
8 contacts



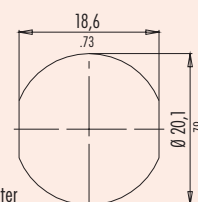
12 pol  
12 contacts



Montageausschnitt  
Panel cut out



Flanschsteckverbinder  
Socket



Adapter  
Adapter