



## Snap-in IP40 Subminiatur

## Snap-in IP40 Subminiature

### Kabelsteckverbinder

- Snap-in-Verriegelung
- 3 – 5-polig
- Schutzart IP40 <sup>1)</sup>
- Lötanschluss
- Am Kabel angespritzte Ausführungen
- Einfache Montage

### Cable Connectors

- Snap-in locking system
- 3 – 5 contacts
- Degree of protection IP40 <sup>1)</sup>
- Solder termination
- Moulded versions
- Easy assembly

### Flanschsteckverbinder

- Snap-in-Verriegelung
- 3 – 5-polig
- Schutzart IP40 <sup>1)</sup>
- Löt-/Tauchlötanschluss

### Panel Mount Connectors

- Snap-in locking system
- 3 – 5 contacts
- Degree of protection IP40 <sup>1)</sup>
- Solder/dip solder termination

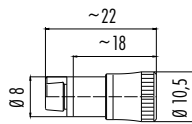
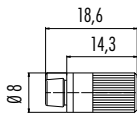
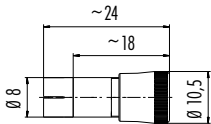
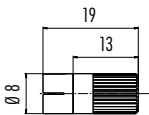
<sup>1)</sup> Erläuterung der Schutzarten siehe technische Informationen./ <sup>1)</sup> Explanation of protection standards see technical information.

Kabelstecker ohne Zugentlastung  
Male cable connector without strain relief

Kabelstecker mit Zugentlastung  
Male cable connector with strain relief

Kabeldose ohne Zugentlastung  
Female cable connector without strain relief

Kabeldose mit Zugentlastung  
Female cable connector with strain relief



| Polzahl<br>Contacts | Kabel-Ø max.<br>Max. cable Ø | Bestell-Nr.<br>Ordering-No. | Polzahl<br>Contacts | Kabel-Ø max.<br>Max. cable Ø | Bestell-Nr.<br>Ordering-No. | Polzahl<br>Contacts | Kabel-Ø max.<br>Max. cable Ø | Bestell-Nr.<br>Ordering-No. | Polzahl<br>Contacts | Kabel-Ø max.<br>Max. cable Ø | Bestell-Nr.<br>Ordering-No. |
|---------------------|------------------------------|-----------------------------|---------------------|------------------------------|-----------------------------|---------------------|------------------------------|-----------------------------|---------------------|------------------------------|-----------------------------|
| 3                   | 3,6 mm                       | 09 9747 00 03               | 3                   | 3–4 mm                       | 09 9747 70 03               | 3                   | 3,6 mm                       | 09 9748 00 03               | 3                   | 3–4 mm                       | 09 9748 70 03               |
|                     |                              |                             |                     | 4–5 mm                       | 09 9747 71 03               |                     |                              |                             |                     | 4–5 mm                       | 09 9748 71 03               |
| 4                   | 3,6 mm                       | 09 9767 00 04               | 4                   | 3–4 mm                       | 09 9767 70 04               | 4                   | 3,6 mm                       | 09 9764 00 04               | 4                   | 3–4 mm                       | 09 9764 70 04               |
|                     |                              |                             |                     | 4–5 mm                       | 09 9767 71 04               |                     |                              |                             |                     | 4–5 mm                       | 09 9764 71 04               |
| 5                   | 3,6 mm                       | 09 9789 00 05               | 5                   | 3–4 mm                       | 09 9789 70 05               | 5                   | 3,6 mm                       | 09 9790 00 05               | 5                   | 3–4 mm                       | 09 9790 70 05               |
|                     |                              |                             |                     | 4–5 mm                       | 09 9789 71 05               |                     |                              |                             |                     | 4–5 mm                       | 09 9790 71 05               |

| Polzahl                     | 3                                                                  | 4 | 5 | Number of contacts       |
|-----------------------------|--------------------------------------------------------------------|---|---|--------------------------|
| Steckverbinder Verriegelung | schnapp/snap-in                                                    |   |   | Connector locking system |
| Anschlussart                | löten/solder                                                       |   |   | Termination              |
| Anschlussquerschnitt        | max. 0,25 mm² (max. AWG 24)                                        |   |   | Wire gauge               |
| Kabeldurchlass              | 3–5 mm                                                             |   |   | Cable outlet             |
| Schutzart                   | IP40                                                               |   |   | Degree of protection     |
| Mechanische Lebensdauer     | > 100 Steckzyklen/> 100 mating cycles                              |   |   | Mechanical operation     |
| Obere Grenztemperatur       | + 70 °C                                                            |   |   | Upper temperature        |
| Untere Grenztemperatur      | – 25 °C                                                            |   |   | Lower temperature        |
| Bemessungsspannung          | 60 V                                                               |   |   | Rated voltage            |
| Bemessungs-Stoßspannung     | 800 V                                                              |   |   | Rated impulse voltage    |
| Verschmutzungsgrad          | 1                                                                  |   |   | Pollution degree         |
| Überspannungskategorie      | II                                                                 |   |   | Overvoltage categorie    |
| Isolierstoffgruppe          | III                                                                |   |   | Material group           |
| Bemessungsstrom (40°C)      | 3 A                                                                |   |   | Rated current (40 °C)    |
| Material Kontakt            | Stift/pin CuZn (Messing/brass), Buchse/socket CuSn (Bronze/bronze) |   |   | Material of contact      |
| Kontaktoberfläche           | Au (Gold/gold)                                                     |   |   | Contact plating          |
| Material Kontaktkörper      | PA                                                                 |   |   | Material of contact body |
| Material Gehäuse            | PA                                                                 |   |   | Material of housing      |
| Material Verriegelung       | —                                                                  |   |   | Material of locking      |

**Flanschstecker Lötanschluss**  
Male panel mount connector,  
solder termination



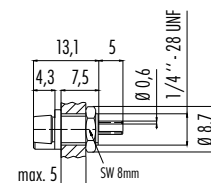
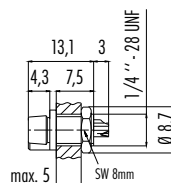
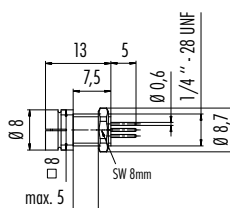
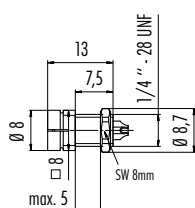
**Flanschstecker Tauchlötanschluss**  
Male panel mount connector,  
dip solder termination



**Flanschdose Lötanschluss**  
Female panel mount connector,  
solder termination



**Flanschdose Tauchlötanschluss**  
Female panel mount connector,  
dip solder termination



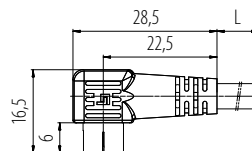
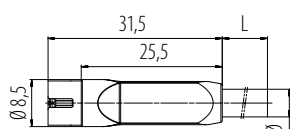
| Polzahl<br>Contacts | Bestell-Nr.<br>Ordering-No. | Polzahl<br>Contacts | Bestell-Nr.<br>Ordering-No. | Polzahl<br>Contacts | Bestell-Nr.<br>Ordering-No. | Polzahl<br>Contacts | Bestell-Nr.<br>Ordering-No. |
|---------------------|-----------------------------|---------------------|-----------------------------|---------------------|-----------------------------|---------------------|-----------------------------|
| 3                   | 09 9749 30 03               | 3                   | 09 9749 20 03               | 3                   | 09 9750 30 03               | 3                   | 09 9750 20 03               |
| 4                   | 09 9765 30 04               | 4                   | 09 9765 20 04               | 4                   | 09 9766 30 04               | 4                   | 09 9766 20 04               |
| 5                   | 09 9791 30 05               | 5                   | 09 9791 20 05               | 5                   | 09 9792 30 05               | 5                   | 09 9792 20 05               |

| Polzahl                     | 3                                                                  | 4 | 5 | Number of contacts       |
|-----------------------------|--------------------------------------------------------------------|---|---|--------------------------|
| Steckverbinder Verriegelung | schnapp/snap-in                                                    |   |   | Connector locking system |
| Anschlussart                | löten, tauchlöten/solder, dip solder                               |   |   | Termination              |
| Anschlussquerschnitt        | max. 0,25 mm <sup>2</sup> (max. AWG 24)                            |   |   | Wire gauge               |
| Kabeldurchlass              | —                                                                  |   |   | Cable outlet             |
| Schutzart                   | IP40                                                               |   |   | Degree of protection     |
| Mechanische Lebensdauer     | > 100 Steckzyklen/> 100 mating cycles                              |   |   | Mechanical operation     |
| Obere Grenztemperatur       | + 70 °C                                                            |   |   | Upper temperature        |
| Untere Grenztemperatur      | – 25 °C                                                            |   |   | Lower temperature        |
| Bemessungsspannung          | 60 V                                                               |   |   | Rated voltage            |
| Bemessungs-Stoßspannung     | 800 V                                                              |   |   | Rated impulse voltage    |
| Verschmutzungsgrad          | 1                                                                  |   |   | Pollution degree         |
| Überspannungskategorie      | II                                                                 |   |   | Overvoltage categorie    |
| Isolierstoffgruppe          | III                                                                |   |   | Material group           |
| Bemessungsstrom (40°C)      | 3 A                                                                |   |   | Rated current (40 °C)    |
| Material Kontakt            | Stift/pin CuZn (Messing/brass), Buchse/socket CuSn (Bronze/bronze) |   |   | Material of contact      |
| Kontaktoberfläche           | Au (Gold/gold)                                                     |   |   | Contact plating          |
| Material Kontaktkörper      | PA                                                                 |   |   | Material of contact body |
| Material Gehäuse            | PA                                                                 |   |   | Material of housing      |
| Material Verriegelung       | —                                                                  |   |   | Material of locking      |

Kabelstecker umspritzt  
Male cable connector moulded



Winkelstecker umspritzt  
Male angled connector moulded



| Polzahl<br>Contacts | Kabellänge 2 m<br>Cable length 2 m | Kabellänge 5 m<br>Cable length 5 m |
|---------------------|------------------------------------|------------------------------------|
| 3                   | 77 7095 0000 10003–0200            | 77 7095 0000 10003–0500            |
| 4                   | 77 7095 0000 10004–0200            | 77 7095 0000 10004–0500            |
| 5                   | 77 7095 0000 10005–0200            | 77 7095 0000 10005–0500            |

| Polzahl<br>Contacts | Kabellänge 2 m<br>Cable length 2 m | Kabellänge 5 m<br>Cable length 5 m |
|---------------------|------------------------------------|------------------------------------|
| 3                   | 77 7093 0000 10003–0200            | 77 7093 0000 10003–0500            |
| 4                   | 77 7093 0000 10004–0200            | 77 7093 0000 10004–0500            |
| 5                   | 77 7093 0000 10005–0200            | 77 7093 0000 10005–0500            |

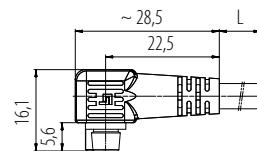
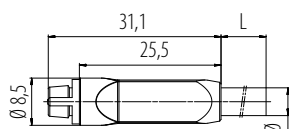
| Technische Daten Kabel                    | 3                                 | 4                                 | 5                                 | Specifications of cable                  |
|-------------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|------------------------------------------|
| Querschnitt mm <sup>2</sup> <sup>1)</sup> | 3 x 0,25 mm <sup>2</sup> (AWG 24) | 4 x 0,25 mm <sup>2</sup> (AWG 24) | 5 x 0,25 mm <sup>2</sup> (AWG 24) | Wire gauge mm <sup>2</sup> <sup>1)</sup> |
| Material Mantel                           | PVC                               |                                   |                                   | Material jacket                          |
| Isolation Litze                           | PVC                               |                                   |                                   | Insulation wire                          |
| Litzenaufbau (mm)                         | 32 x 0,1                          |                                   |                                   | Design of wire (mm)                      |
| Kabelmantel Ø (mm)                        | 4,5 ±0,2                          | 4,5 ±0,2                          | 5 ±0,2                            | Cable jacket Ø (mm)                      |
| Leiterwiderstand                          | 80 Ω/Km (20 °C)                   |                                   |                                   | Resistance of wire                       |
| Temp.-Bereich (Kabel bew.)                | – 5 °C /+ 70 °C                   |                                   |                                   | Temp. range (cable in move)              |
| Temp.-Bereich (Kabel fest)                | – 25 °C /+ 70 °C                  |                                   |                                   | Temp. range (cable fixed)                |
| Biegeradius (Kabel bew.)                  | 45 mm                             |                                   |                                   | Bending radius (cable in move)           |
| Biegeradius (Kabel fest)                  | 22 mm                             |                                   |                                   | Bending radius (cable fixed)             |
| Zulassung                                 | —                                 |                                   |                                   | Approval                                 |

| Polzahl                     | 3                                     | 4 | 5 | Number of contacts       |
|-----------------------------|---------------------------------------|---|---|--------------------------|
| Steckverbinder Verriegelung | schnapp/snap-in                       |   |   | Connector locking system |
| Anschlussart                | am Kabel angespritzt/moulded          |   |   | Termination              |
| Anschlussquerschnitt        | 0,25 mm <sup>2</sup> (AWG 24)         |   |   | Wire gauge               |
| Kabeldurchlass              | —                                     |   |   | Cable outlet             |
| Schutzart                   | IP40                                  |   |   | Degree of protection     |
| Mechanische Lebensdauer     | > 100 Steckzyklen/> 100 mating cycles |   |   | Mechanical operation     |
| Obere Grenztemperatur       | + 70 °C                               |   |   | Upper temperature        |
| Untere Grenztemperatur      | – 25 °C                               |   |   | Lower temperature        |
| Bemessungsspannung          | 60 V                                  |   |   | Rated voltage            |
| Bemessungs-Stoßspannung     | 800 V                                 |   |   | Rated impulse voltage    |
| Verschmutzungsgrad          | 1                                     |   |   | Pollution degree         |
| Überspannungskategorie      | II                                    |   |   | Overvoltage categorie    |
| Isolierstoffgruppe          | III                                   |   |   | Material group           |
| Bemessungsstrom (40°C)      | 3 A                                   |   |   | Rated current (40 °C)    |
| Material Kontakt            | (Messing/brass)                       |   |   | Material of contact      |
| Kontaktoberfläche           | Au (Gold/gold)                        |   |   | Contact plating          |
| Material Kontaktkörper      | PA                                    |   |   | Material of contact body |
| Material Gehäuse            | PUR                                   |   |   | Material of housing      |
| Material Verriegelung       | —                                     |   |   | Material of locking      |

Kabeldose umspritzt  
Female cable connector moulded



Winkeldose umspritzt  
Female angled connector moulded



| Polzahl<br>Contacts | Kabellänge 2 m<br>Cable length 2 m | Kabellänge 5 m<br>Cable length 5 m |
|---------------------|------------------------------------|------------------------------------|
| 3                   | 77 7096 0000 10003-0200            | 77 7096 0000 10003-0500            |
| 4                   | 77 7096 0000 10004-0200            | 77 7096 0000 10004-0500            |
| 5                   | 77 7096 0000 10005-0200            | 77 7096 0000 10005-0500            |

| Polzahl<br>Contacts | Kabellänge 2 m<br>Cable length 2 m | Kabellänge 5 m<br>Cable length 5 m |
|---------------------|------------------------------------|------------------------------------|
| 3                   | 77 7098 0000 10003-0200            | 77 7098 0000 10003-0500            |
| 4                   | 77 7098 0000 10004-0200            | 77 7098 0000 10004-0500            |
| 5                   | 77 7098 0000 10005-0200            | 77 7098 0000 10005-0500            |

| Technische Daten Kabel                    | 3                                 | 4                                 | 5                                 | Specifications of cable                  |
|-------------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|------------------------------------------|
| Querschnitt mm <sup>2</sup> <sup>1)</sup> | 3 x 0,25 mm <sup>2</sup> (AWG 24) | 4 x 0,25 mm <sup>2</sup> (AWG 24) | 5 x 0,25 mm <sup>2</sup> (AWG 24) | Wire gauge mm <sup>2</sup> <sup>1)</sup> |
| Material Mantel                           | PVC                               |                                   |                                   | Material jacket                          |
| Isolation Litze                           | PVC                               |                                   |                                   | Insulation wire                          |
| Litzenaufbau (mm)                         | 32 x 0,1                          |                                   |                                   | Design of wire (mm)                      |
| Kabelmantel Ø (mm)                        | 4,5 ±0,2                          | 4,5 ±0,2                          | 5 ±0,2                            | Cable jacket Ø (mm)                      |
| Leiterwiderstand                          | 80 Ω/Km (20 °C)                   |                                   |                                   | Resistance of wire                       |
| Temp.-Bereich (Kabel bew.)                | - 5 °C / + 70 °C                  |                                   |                                   | Temp. range (cable in move)              |
| Temp.-Bereich (Kabel fest)                | - 25 °C / + 70 °C                 |                                   |                                   | Temp. range (cable fixed)                |
| Biegeradius (Kabel bew.)                  | 45 mm                             |                                   |                                   | Bending radius (cable in move)           |
| Biegeradius (Kabel fest)                  | 22 mm                             |                                   |                                   | Bending radius (cable fixed)             |
| Zulassung                                 | —                                 |                                   |                                   | Approval                                 |

| Polzahl                     | 3                                     | 4 | 5 | Number of contacts       |
|-----------------------------|---------------------------------------|---|---|--------------------------|
| Steckverbinder Verriegelung | schnapp/snap-in                       |   |   | Connector locking system |
| Anschlussart                | am Kabel angespritzt/moulded          |   |   | Termination              |
| Anschlussquerschnitt        | 0,25 mm <sup>2</sup> (AWG 24)         |   |   | Wire gauge               |
| Kabeldurchlass              | —                                     |   |   | Cable outlet             |
| Schutzart                   | IP40                                  |   |   | Degree of protection     |
| Mechanische Lebensdauer     | > 100 Steckzyklen/> 100 mating cycles |   |   | Mechanical operation     |
| Obere Grenztemperatur       | + 70 °C                               |   |   | Upper temperature        |
| Untere Grenztemperatur      | - 25 °C                               |   |   | Lower temperature        |
| Bemessungsspannung          | 60 V                                  |   |   | Rated voltage            |
| Bemessungs-Stoßspannung     | 800 V                                 |   |   | Rated impulse voltage    |
| Verschmutzungsgrad          | 1                                     |   |   | Pollution degree         |
| Überspannungskategorie      | II                                    |   |   | Overvoltage categorie    |
| Isolierstoffgruppe          | III                                   |   |   | Material group           |
| Bemessungsstrom (40°C)      | 3 A                                   |   |   | Rated current (40 °C)    |
| Material Kontakt            | CuSn (Bronze/bronze)                  |   |   | Material of contact      |
| Kontaktoberfläche           | Au (Gold/gold)                        |   |   | Contact plating          |
| Material Kontaktkörper      | PA                                    |   |   | Material of contact body |
| Material Gehäuse            | PUR                                   |   |   | Material of housing      |
| Material Verriegelung       | —                                     |   |   | Material of locking      |

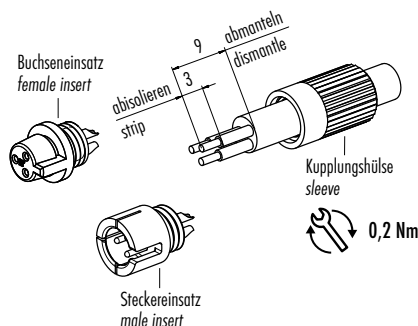
<sup>1)</sup> Vergleichbare AWG Leiter siehe technische Informationen. / <sup>1)</sup> Comparable AWG conductors see technical information.

Montageanleitung  
Assembly instruction

Kabelsteckverbinder ohne Zugentlastung  
Cable connector without strain relief

1. Kupplungshülse auf Kabel auffädeln.
2. Kabel abmanteln auf  $L = 9$  mm.
3. Litzen abisolieren und anlöten.
4. Kupplungshülse aufschrauben.

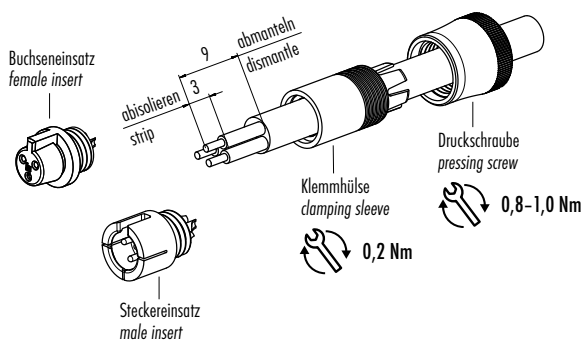
1. Bead sleeve to cable.
2. Dismantle cable to 9 mm length.
3. Strip and solder single wires.
4. Screw on sleeve.



Kabelsteckverbinder mit Zugentlastung  
Cable connector with strain relief

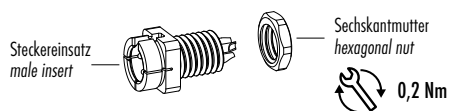
1. Druckschraube und Klemmhülse auf Kabel auffädeln.
2. Kabel abmanteln auf  $L = 9$  mm.
3. Litzen abisolieren und anlöten.
4. Klemmhülse aufschrauben.
5. Druckschraube festziehen.

1. Bead pressing screw and clamping sleeve to cable.
2. Dismantle cable to 9 mm length.
3. Strip and solder single wires.
4. Screw on clamping sleeve.
5. Tighten pressing screw.

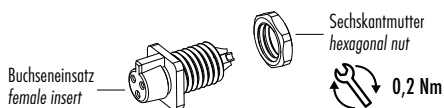


Einzelteildarstellung  
Component part drawing

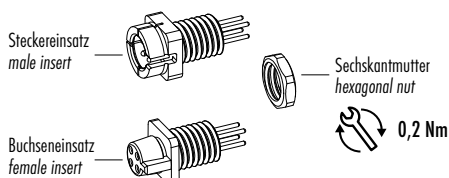
Flanschstecker, löten  
Male panel mount connector, solder



Flanschdose, löten  
Female panel mount connector, solder



Flanschsteckverbinder, tauchlöten  
Panel mount connectors, dip solder

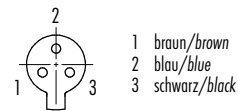
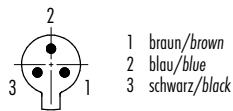


**Polbilder**  
Contact arrangements

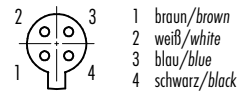
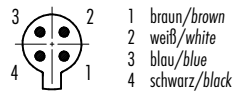
**Stifteinsatz (Steckseite)**  
Male insert (mating side)

**Buchseinsatz (Steckseite)**  
Female insert (mating side)

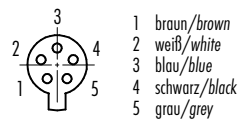
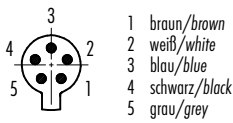
3 pol  
3 contacts



4 pol  
4 contacts



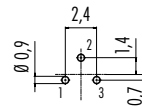
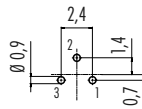
5 pol  
5 contacts



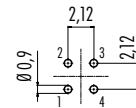
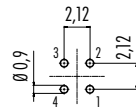
**Bohrbilder Stifteinsatz (Leiterplatte)**  
Drilling schemes male insert (PCB)

**Bohrbilder Buchseinsatz (Leiterplatte)**  
Drilling schemes female insert (PCB)

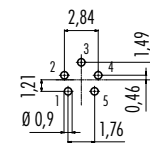
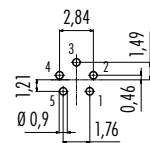
3 pol  
3 contacts



4 pol  
4 contacts



5 pol  
5 contacts



**Montageausschnitt**  
Panel cut out

