

## Han E<sup>®</sup> / Han<sup>®</sup> ES / Han<sup>®</sup> ESS / Han<sup>®</sup> EE

Page

|                                         |              |
|-----------------------------------------|--------------|
| Technical characteristics Han E .....   | <b>03.10</b> |
| Technical characteristics Han EE .....  | <b>03.11</b> |
| Technical characteristics Han ES .....  | <b>03.12</b> |
| Technical characteristics Han ESS ..... | <b>03.13</b> |
| Han 6 E / Han 6 ES / Han 6 ESS .....    | <b>03.14</b> |
| Han 10 EE .....                         | <b>03.15</b> |
| Han 10 E / Han 10 ES / Han 10 ESS ..... | <b>03.18</b> |
| Han 18 EE .....                         | <b>03.19</b> |
| Han 16 E / Han 16 ES / Han 16 ESS ..... | <b>03.22</b> |
| Han 32 EE .....                         | <b>03.23</b> |
| Han 24 E / Han 24 ES / Han 24 ESS ..... | <b>03.26</b> |
| Han 46 EE .....                         | <b>03.27</b> |
| Han 32 E / Han 32 ES / Han 32 ESS ..... | <b>03.30</b> |
| Han 64 EE .....                         | <b>03.31</b> |
| Han 48 E / Han 48 ES / Han 48 ESS ..... | <b>03.33</b> |
| Han 92 EE .....                         | <b>03.34</b> |
| Modified contact arrangements .....     | <b>03.36</b> |

Han  
E/EE

## Specifications

DIN VDE 0627  
DIN VDE 0110

## Approvals

, SEV

## Inserts

|                                                    |                                                 |
|----------------------------------------------------|-------------------------------------------------|
| Number of contacts                                 | 6, 10, 16, 24, 32 (2 x 16),<br>48 (2 x 24) + PE |
| Working current<br>(see current carrying capacity) | 16 A max.                                       |
| Working voltage                                    | 400 V                                           |
| Test voltage $U_{rms}$                             | 3 kV                                            |
| Pollution degree                                   | 3 (C)                                           |
| Insulation resistance                              | $\geq 10^{10} \Omega$                           |
| Material                                           | Polycarbonate                                   |
| Temperature range                                  | -40 °C ... +125 °C                              |
| Flammability acc. to UL 94                         | V 0                                             |
| Mechanical working life                            |                                                 |
| - Mating cycles                                    | $\geq 500$                                      |
| Working voltage<br>acc. to UL/CSA                  | 600 V                                           |

## Contacts

|                          |                                            |
|--------------------------|--------------------------------------------|
| Material                 | copper alloy                               |
| Surface                  |                                            |
| - hard-silver plated     | 3 $\mu\text{m}$ Ag                         |
| - hard-gold plated       | 2 $\mu\text{m}$ Au over 3 $\mu\text{m}$ Ni |
| Contact resistance       | $\leq 1 \text{ m}\Omega$                   |
| Crimp terminal           |                                            |
| - $\text{mm}^2$          | 0.5 - 4.0 $\text{mm}^2$                    |
| - AWG                    | 20 - 12                                    |
| Screw terminal           |                                            |
| - $\text{mm}^2$          | 2.5 $\text{mm}^2$                          |
| - AWG                    | 14                                         |
| - Tightening/test torque | 0.5 Nm                                     |

## Hoods/Housings

|                                                                  |                                   |
|------------------------------------------------------------------|-----------------------------------|
| Material                                                         | die cast aluminium                |
| Surface                                                          | powder-coated<br>RAL 7037         |
| Locking element                                                  | steel, zinc plated/Han-Easy Lock® |
| Hoods/Housings sealing                                           | NBR                               |
| Temperature range                                                | -40 °C ... +125 °C                |
| Degree of protection acc. to DIN<br>40 050 for coupled connector | IP 65                             |
| Further selection<br>of hoods/housings                           | chapter 30                        |

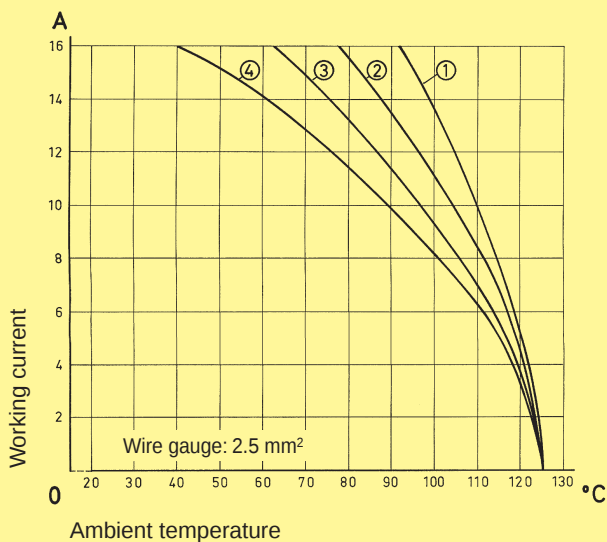
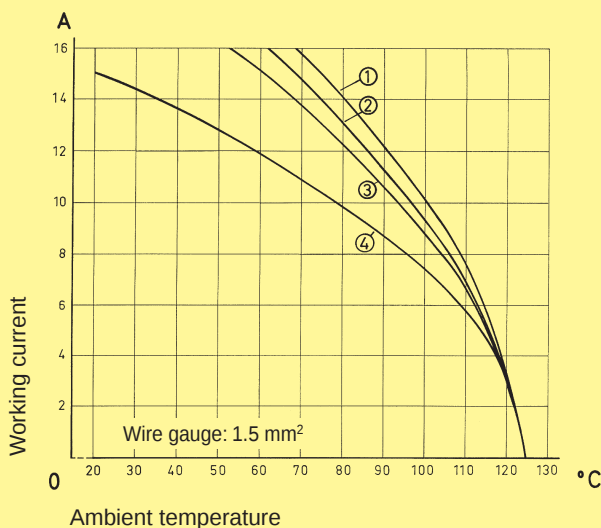
## Accessories

|                              |            |
|------------------------------|------------|
| Crimping tools               | chapter 12 |
| Cable clamps                 | chapter 40 |
| Coding of Hoods/Housings     | chapter 40 |
| Label acc. to CSA-approval   | chapter 40 |
| Han-Snap                     | chapter 11 |
| Test connectors              | chapter 20 |
| Special insert fixing screws | chapter 20 |

## Current carrying capacity

The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals. The current capacity-curve is valid for continuous, not interrupted current-loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the maximum temperature.

Control and test procedures according to DIN IEC 60 512-3.



- ① Han 6 E
- ② Han 10 E
- ③ Han 16 E
- ④ Han 24 E

## Specifications

DIN VDE 0627  
DIN VDE 0110

## Approvals



## Inserts

|                                                    |                                                  |
|----------------------------------------------------|--------------------------------------------------|
| Number of contacts                                 | 10, 18, 32, 46, 64 (2 x 32),<br>92 (2 x 46) + PE |
| Working current<br>(see current carrying capacity) | 16 A max.                                        |
| Working voltage                                    | 500 V                                            |
| Test voltage $U_{rms}$                             | 3 kV                                             |
| Pollution degree                                   | 3 (C)                                            |
| Insulation resistance                              | $\geq 10^{10} \Omega$                            |
| Material                                           | Polycarbonate                                    |
| Temperature range                                  | - 40 °C ... +125 °C                              |
| Flammability acc. to UL 94                         | V 0                                              |
| Mechanical working life                            |                                                  |
| - Mating cycles                                    | $\geq 500$                                       |
| Working voltage<br>acc. to UL/CSA                  | 600 V                                            |

## Contacts

|                      |                                            |
|----------------------|--------------------------------------------|
| Material             | copper alloy                               |
| Surface              |                                            |
| - hard-silver plated | 3 $\mu\text{m}$ Ag                         |
| - hard-gold plated   | 2 $\mu\text{m}$ Au over 3 $\mu\text{m}$ Ni |
| Contact resistance   | $\leq 1 \text{ m}\Omega$                   |
| Crimp terminal       |                                            |
| - $\text{mm}^2$      | 0.5 - 4.0 $\text{mm}^2$                    |
| - AWG                | 20 - 12                                    |

## Hoods/Housings

|                                                                  |                                   |
|------------------------------------------------------------------|-----------------------------------|
| Material                                                         | die cast aluminium                |
| Surface                                                          | powder-coated<br>RAL 7037         |
| Locking element                                                  | steel, zinc plated/Han-Easy Lock® |
| Hoods/Housings sealing                                           | NBR                               |
| Temperature range                                                | - 40 °C ... +125 °C               |
| Degree of protection acc. to DIN<br>40 050 for coupled connector | IP 65                             |
| Further selection<br>of hoods/housings                           | chapter 30                        |

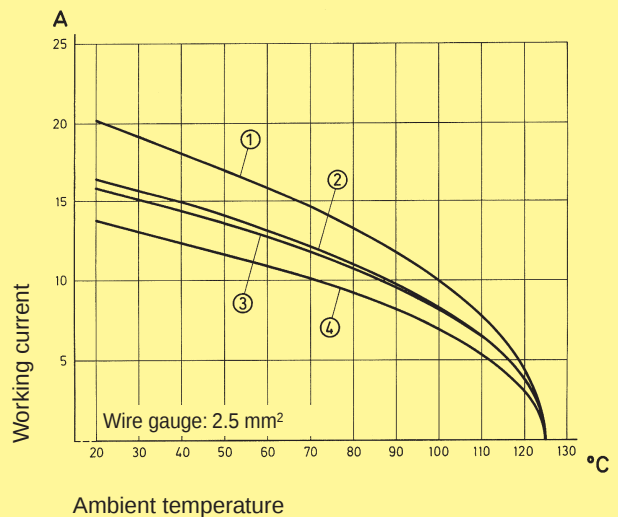
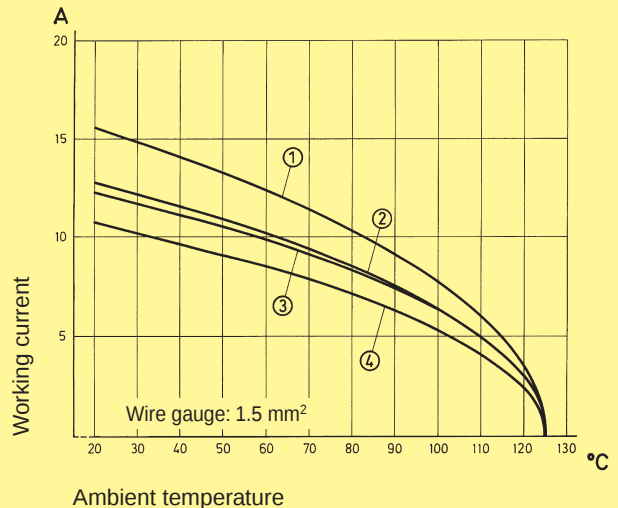
## Accessories

|                              |            |
|------------------------------|------------|
| Crimping tools               | chapter 12 |
| Cable clamps                 | chapter 40 |
| Coding of Hoods/Housings     | chapter 40 |
| Label acc. to CSA-approval   | chapter 40 |
| Han-Snap                     | chapter 11 |
| Special insert fixing screws | chapter 20 |

## Current carrying capacity

The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals. The current capacity-curve is valid for continuous, not interrupted current-loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the maximum temperature.

Control and test procedures according to DIN IEC 60 512-3.



- ① Han 10 EE
- ② Han 18 EE
- ③ Han 32 EE
- ④ Han 46 EE

## Specifications

DIN VDE 0627  
DIN VDE 0110

## Approvals

 , SEV

## Inserts

|                                                    |                                                 |
|----------------------------------------------------|-------------------------------------------------|
| Number of contacts                                 | 6, 10, 16, 24, 32 (2 x 16),<br>48 (2 x 24) + PE |
| Working current<br>(see current carrying capacity) | 16 A max.                                       |
| Working voltage                                    | 500 V                                           |
| Test voltage $U_{rms}$                             | 3 kV                                            |
| Pollution degree                                   | 3 (C)                                           |
| Insulation resistance                              | $\geq 10^{10} \Omega$                           |
| Material                                           | Polycarbonate                                   |
| Temperature range                                  | - 40 °C ... +125 °C                             |
| Flammability acc. to UL 94                         | V 0                                             |
| Mechanical working life                            |                                                 |
| - Mating cycles                                    | $\geq 500$                                      |
| Working voltage<br>acc. to UL/CSA                  | 600 V                                           |

## Contacts

|                      |                          |
|----------------------|--------------------------|
| Material             | copper alloy             |
| Surface              |                          |
| - hard-silver plated | 3 $\mu\text{m}$ Ag       |
| Contact resistance   | $\leq 3 \text{ m}\Omega$ |
| Cage-clamp terminal  |                          |
| - $\text{mm}^2$      | 0.14 - 2.5 $\text{mm}^2$ |
| - AWG                | 26 - 14                  |

## Hoods/Housings

|                                        |                                   |
|----------------------------------------|-----------------------------------|
| Material                               | die cast aluminium                |
| Surface                                | powder-coated<br>RAL 7037         |
| Locking element                        | steel, zinc plated/Han-Easy Lock® |
| Hoods/housings sealing                 | NBR                               |
| Temperature range                      | - 40 °C ... +125 °C               |
| Degree of protection acc. to DIN       |                                   |
| 40 050 for coupled connector           | IP 65                             |
| Further selection<br>of hoods/housings | chapter 30                        |

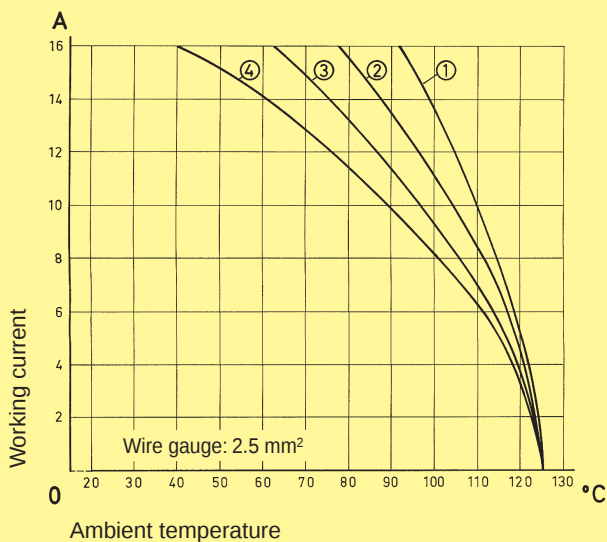
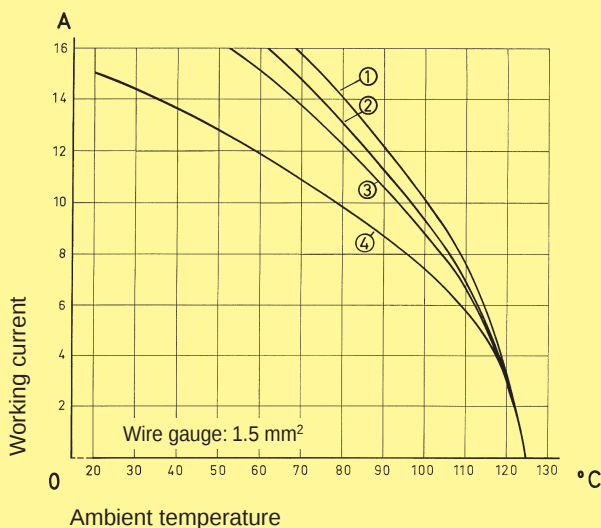
## Accessories

|                              |            |
|------------------------------|------------|
| Cable clamps                 | chapter 40 |
| Coding of hoods/housings     | chapter 40 |
| Label acc. to CSA-approval   | chapter 40 |
| Han-Snap                     | chapter 11 |
| Test connectors              | chapter 20 |
| Special insert fixing screws | chapter 20 |

## Current carrying capacity

The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals. The current capacity-curve is valid for continuous, not interrupted current-loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the maximum temperature.

Control and test procedures according to DIN IEC 60 512-3.



- ① Han 6 ES
- ② Han 10 ES
- ③ Han 16 ES
- ④ Han 24 ES

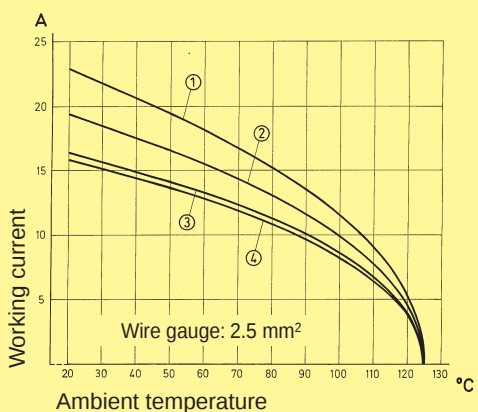
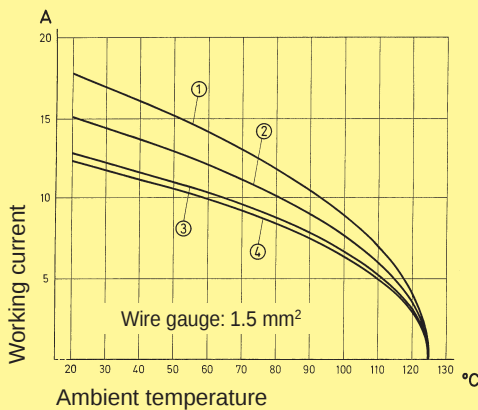
## Features:

- ☐ 2 termination points per contact
- ☐ Termination: Cage-clamp
- ☐ Suitable for standard hoods/housings size B
- ☐ High construction hoods/housings are necessary
- ☐ No special tools necessary
- ☐ Bridges are made by using a simple screw driver
- ☐ Vibration resistant
- ☐ Ideal as motor connector as it offers the possibility to create star and delta bridges

## Current carrying capacity

The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals. The current capacity-curve is valid for continuous, not interrupted current-loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the maximum temperature.

Control and test procedures according to DIN IEC 60 512-3.



- ① Han 6 ESS
- ② Han 10 ESS
- ③ Han 16 ESS
- ④ Han 24 ESS

## Specifications

DIN VDE 0627  
DIN VDE 0110

## Approvals



## Inserts

|                                                    |                                                              |
|----------------------------------------------------|--------------------------------------------------------------|
| Number of contacts                                 | 6, 10, 16, 24, 32 (2 x 16),<br>48 (2 x 24) + PE<br>16 A max. |
| Working current<br>(see current carrying capacity) | 500 V                                                        |
| Working voltage                                    | 3 kV                                                         |
| Test voltage $U_{rms}$                             | 3 (C)                                                        |
| Pollution degree                                   | $\geq 10^{10} \Omega$                                        |
| Insulation resistance                              | Polycarbonate                                                |
| Material                                           | - 40 °C ... +125 °C                                          |
| Temperature range                                  | V 0                                                          |
| Flammability acc. to UL 94                         | - Mating cycles<br>$\geq 500$                                |
| Mechanical working life                            | Working voltage<br>acc. to UL/CSA<br>600 V                   |

## Contacts

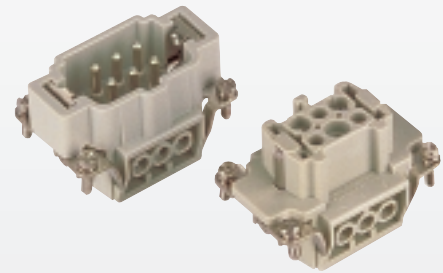
|                     |                                                 |
|---------------------|-------------------------------------------------|
| Material            | copper alloy                                    |
| Surface             | - hard-silver plated<br>3 $\mu\text{m}$ Ag      |
| Contact resistance  | $\leq 3 \text{ m}\Omega$                        |
| Cage-clamp terminal | - mm <sup>2</sup><br>0.14 - 2.5 mm <sup>2</sup> |
|                     | - AWG<br>26 - 14                                |

## Hoods/Housings

|                                                                     |                                   |
|---------------------------------------------------------------------|-----------------------------------|
| Material                                                            | die cast aluminium                |
| Surface                                                             | powder-coated<br>RAL 7037         |
| Locking element                                                     | steel, zinc plated/Han-Easy Lock® |
| Hoods/Housings sealing                                              | NBR                               |
| Temperature range                                                   | - 40 °C ... +125 °C               |
| Degree of protection<br>acc. to DIN 40 050<br>for coupled connector | IP 65                             |
| Further selection<br>of hoods/housings                              | chapter 30                        |

## Accessories

|                              |            |
|------------------------------|------------|
| Cable clamps                 | chapter 40 |
| Coding of hoods/housings     | chapter 40 |
| Label acc. to CSA-approval   | chapter 40 |
| Han-Snap                     | chapter 11 |
| Test connectors              | chapter 20 |
| Special insert fixing screws | chapter 20 |

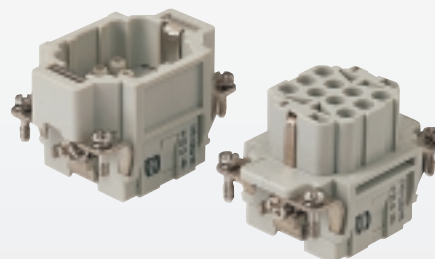
$6 + \textcircled{\text{I}}$ 

Han  
E / EE

03  
14

Number of contacts

10 +

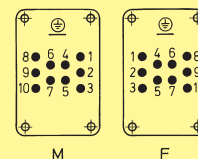
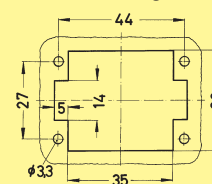


## Inserts

| Identification                              | Series | Part No.        |                   | Drawing | Dimensions in mm |
|---------------------------------------------|--------|-----------------|-------------------|---------|------------------|
|                                             |        | Male insert (M) | Female insert (F) |         |                  |
| Crimp terminal<br>Order contacts separately | Han EE | 09 32 010 3001  | 09 32 010 3101    |         |                  |

<sup>1)</sup> Distance for contact max. 21 mm

Contact arrangement View from termination side

Panel cut out for inserts  
for use without hoods/housings

| Identification | Wire gauge<br>(mm <sup>2</sup> ) | Part No.       |                 | Drawing | Dimensions in mm |
|----------------|----------------------------------|----------------|-----------------|---------|------------------|
|                |                                  | Male contacts  | Female contacts |         |                  |
| Crimp contacts | 0.5                              | 09 33 000 6121 | 09 33 000 6220  |         |                  |
| Power contacts | 0.75                             | 09 33 000 6114 | 09 33 000 6214  |         |                  |
| silver plated  | 1.0                              | 09 33 000 6105 | 09 33 000 6205  |         |                  |
|                | 1.5                              | 09 33 000 6104 | 09 33 000 6204  |         |                  |
|                | 2.5                              | 09 33 000 6102 | 09 33 000 6202  |         |                  |
|                | 3                                | 09 33 000 6106 | 09 33 000 6206  |         |                  |
| gold plated    | 4                                | 09 33 000 6107 | 09 33 000 6207  |         |                  |
|                | 0.5                              | 09 33 000 6122 | 09 33 000 6222  |         |                  |
|                | 0.75                             | 09 33 000 6115 | 09 33 000 6215  |         |                  |
|                | 1.0                              | 09 33 000 6118 | 09 33 000 6218  |         |                  |
| Relay contact  | 1.5                              | 09 33 000 6116 | 09 33 000 6216  |         |                  |
|                | 2.5                              | 09 33 000 6123 | 09 33 000 6223  |         |                  |
|                | 4.0                              | 09 33 000 6119 | 09 33 000 6221  |         |                  |
| Relay contact  | 0.75-1                           | 09 33 000 6109 |                 |         |                  |
| silver plated  | 1.5                              | 09 33 000 6110 |                 |         |                  |
|                | 2.5                              | 09 33 000 6111 |                 |         |                  |

Crimp contact identification

| Identification | Wire gauge           |        | Stripping length |
|----------------|----------------------|--------|------------------|
| no groove      | 0.5 mm <sup>2</sup>  | AWG 20 | 7.5 mm           |
| 1 groove*      | 0.75 mm <sup>2</sup> | AWG 18 | 7.5 mm           |
| 1 groove       | 1 mm <sup>2</sup>    | AWG 18 | 7.5 mm           |
| 2 grooves      | 1.5 mm <sup>2</sup>  | AWG 16 | 7.5 mm           |
| 3 grooves      | 2.5 mm <sup>2</sup>  | AWG 14 | 7.5 mm           |
| wide groove    | 3.0 mm <sup>2</sup>  | AWG 12 | 7.5 mm           |
| no groove      | 4 mm <sup>2</sup>    | AWG 12 | 7.5 mm           |

\* on the back crimp collar

Stock items in bold type

## Part No.

## Identification

## Low construction

## High construction

## Pg

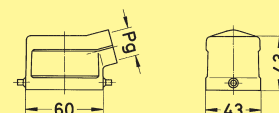
## Drawing

## Dimensions in mm

Hoods  
side-entry**09 30 006 1540****09 30 006 1541**

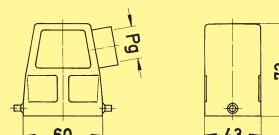
13.5

16

**09 30 006 0542****09 30 006 0543**

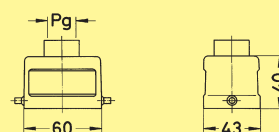
21

29

Hoods  
top-entry**09 30 006 1440****09 30 006 1441**

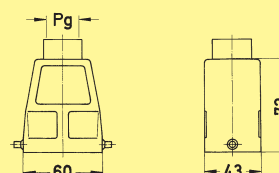
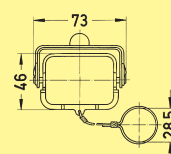
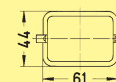
13.5

16

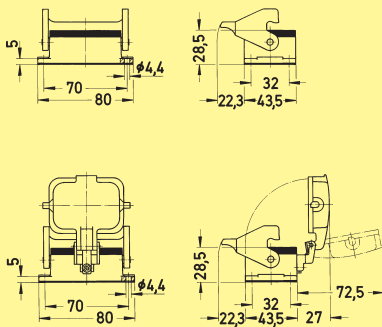
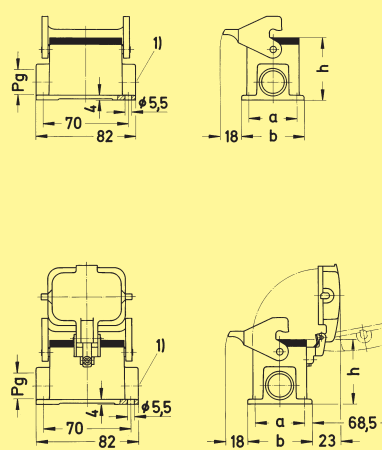
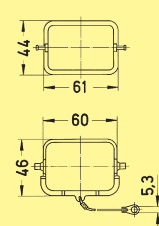
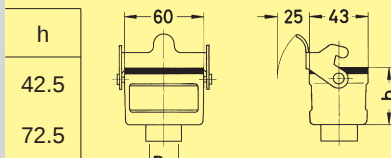
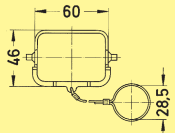
**09 30 006 0442****09 30 006 0443**

21

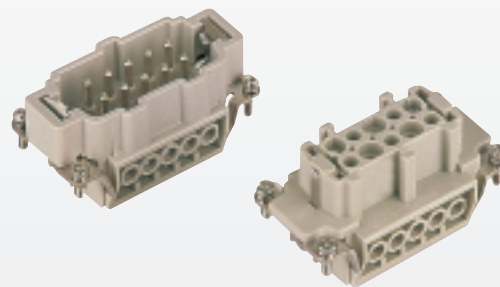
29

Protection covers  
metal**09 30 006 5401****09 30 006 5423**

Hoods

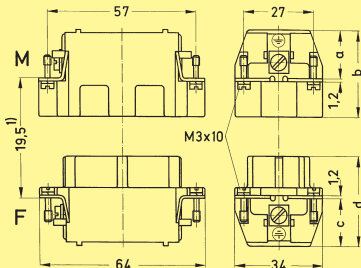
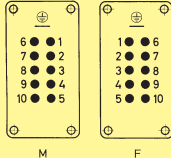
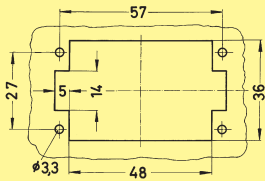
|                                         |                                                | Part No.                                                                                                                         |                                                                                                                                                                                                                                                                      |                      |                                                                                                                 |                  |   |                  |    |    |      |                   |    |    |    |  |
|-----------------------------------------|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------------------------------------------------------------------------------------------------------|------------------|---|------------------|----|----|------|-------------------|----|----|----|--|
| Identification                          |                                                | Low construction                                                                                                                 | High construction                                                                                                                                                                                                                                                    | Pg                   | Drawing                                                                                                         | Dimensions in mm |   |                  |    |    |      |                   |    |    |    |  |
| Housings                                | bulkhead mounting                              | <b>09 30 006 0301</b><br><br>with thermo-plastic cover<br><b>09 30 006 0302</b><br><br>with metal cover<br><b>09 30 006 0318</b> |                                                                                                                                                                                                                                                                      | —<br><br>—<br><br>—  | Panel cut out 48 x 35 cm<br> |                  |   |                  |    |    |      |                   |    |    |    |  |
|                                         | surface mounting                               | 1 side-entry<br><b>09 30 006 1251</b>                                                                                            | <b>09 30 006 0292</b><br><b>09 30 006 0293</b><br><br>with thermo-plastic cover<br><b>09 30 006 1256</b><br><br>with metal cover<br><b>09 30 006 2256</b><br><br>with thermo-plastic cover<br><b>09 30 006 1296</b><br><br>with metal cover<br><b>09 30 006 2296</b> | 16                   |                             |                  |   |                  |    |    |      |                   |    |    |    |  |
|                                         |                                                | 2 side-entries<br><b>09 30 006 1291</b>                                                                                          |                                                                                                                                                                                                                                                                      | 16<br>21<br>29       |                                                                                                                 |                  |   |                  |    |    |      |                   |    |    |    |  |
|                                         |                                                | 1 side-entry<br><b>09 30 006 1256</b>                                                                                            |                                                                                                                                                                                                                                                                      | 16                   |                                                                                                                 |                  |   |                  |    |    |      |                   |    |    |    |  |
|                                         |                                                | 2 side-entries<br><b>09 30 006 1296</b>                                                                                          |                                                                                                                                                                                                                                                                      | 16<br>21<br>29       |                                                                                                                 |                  |   |                  |    |    |      |                   |    |    |    |  |
| 2 side-entries<br><b>09 30 006 2296</b> | <b>09 30 006 2297</b><br><b>09 30 006 2298</b> | 16<br>21<br>29                                                                                                                   | 1)<br><table><tr><td></td><td>a</td><td>b</td><td>h</td></tr><tr><td>Low construction</td><td>40</td><td>52</td><td>51.5</td></tr><tr><td>High construction</td><td>45</td><td>57</td><td>74</td></tr></table>                                                       |                      | a                                                                                                               | b                | h | Low construction | 40 | 52 | 51.5 | High construction | 45 | 57 | 74 |  |
|                                         | a                                              | b                                                                                                                                | h                                                                                                                                                                                                                                                                    |                      |                                                                                                                 |                  |   |                  |    |    |      |                   |    |    |    |  |
| Low construction                        | 40                                             | 52                                                                                                                               | 51.5                                                                                                                                                                                                                                                                 |                      |                                                                                                                 |                  |   |                  |    |    |      |                   |    |    |    |  |
| High construction                       | 45                                             | 57                                                                                                                               | 74                                                                                                                                                                                                                                                                   |                      |                                                                                                                 |                  |   |                  |    |    |      |                   |    |    |    |  |
| Protection covers<br>metal              |                                                | <b>09 30 006 5404</b><br><br><b>09 30 006 5425</b>                                                                               |                                                                                                                                                                                                                                                                      |                      |                            |                  |   |                  |    |    |      |                   |    |    |    |  |
| Hoods<br>cable to cable                 |                                                | <b>09 30 006 1750</b>                                                                                                            | <b>09 30 006 0752</b><br><b>09 30 006 0753</b>                                                                                                                                                                                                                       | 13.5<br><br>21<br>29 |                            |                  |   |                  |    |    |      |                   |    |    |    |  |
| Protection cover<br>metal               |                                                | <b>09 30 006 5427</b>                                                                                                            |                                                                                                                                                                                                                                                                      |                      |                            |                  |   |                  |    |    |      |                   |    |    |    |  |

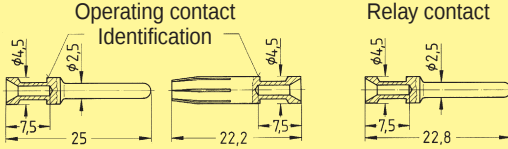
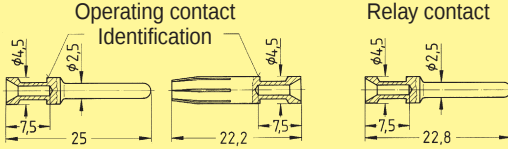
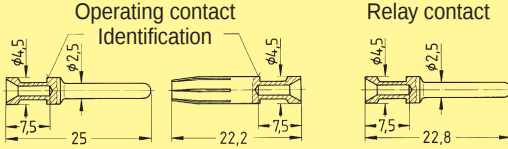
Number of contacts

**10** + 


Inserts

Han  
E / EE

|                                                         |         | Part No.        |                   |                                                                                     |                                                                                                                                                                                                                                                                                       |  |   |   |   |   |       |    |    |    |    |        |    |    |    |    |         |    |    |    |    |
|---------------------------------------------------------|---------|-----------------|-------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---|---|---|---|-------|----|----|----|----|--------|----|----|----|----|---------|----|----|----|----|
| Identification                                          | Series  | Male insert (M) | Female insert (F) | Drawing                                                                             | Dimensions in mm                                                                                                                                                                                                                                                                      |  |   |   |   |   |       |    |    |    |    |        |    |    |    |    |         |    |    |    |    |
| <b>Screw terminal</b><br>with wire protection           | Han E   | 09 33 010 2601  | 09 33 010 2701    |  |                                                                                                                                                                                                                                                                                       |  |   |   |   |   |       |    |    |    |    |        |    |    |    |    |         |    |    |    |    |
| <b>Cage-clamp terminal</b>                              | Han ES  | 09 33 010 2616  | 09 33 010 2716    | <sup>1)</sup> Distance for contact max. 21 mm                                       | <table><tr><td></td><td>a</td><td>b</td><td>c</td><td>d</td></tr><tr><td>Han E</td><td>20</td><td>35</td><td>21</td><td>37</td></tr><tr><td>Han ES</td><td>21</td><td>36</td><td>19</td><td>35</td></tr><tr><td>Han ESS</td><td>34</td><td>49</td><td>32</td><td>49</td></tr></table> |  | a | b | c | d | Han E | 20 | 35 | 21 | 37 | Han ES | 21 | 36 | 19 | 35 | Han ESS | 34 | 49 | 32 | 49 |
|                                                         | a       | b               | c                 | d                                                                                   |                                                                                                                                                                                                                                                                                       |  |   |   |   |   |       |    |    |    |    |        |    |    |    |    |         |    |    |    |    |
| Han E                                                   | 20      | 35              | 21                | 37                                                                                  |                                                                                                                                                                                                                                                                                       |  |   |   |   |   |       |    |    |    |    |        |    |    |    |    |         |    |    |    |    |
| Han ES                                                  | 21      | 36              | 19                | 35                                                                                  |                                                                                                                                                                                                                                                                                       |  |   |   |   |   |       |    |    |    |    |        |    |    |    |    |         |    |    |    |    |
| Han ESS                                                 | 34      | 49              | 32                | 49                                                                                  |                                                                                                                                                                                                                                                                                       |  |   |   |   |   |       |    |    |    |    |        |    |    |    |    |         |    |    |    |    |
| <b>Cage-clamp terminal</b><br>two terminals per contact | Han ESS | 09 33 010 2672  | 09 33 010 2772    | Contact arrangement View from termination side                                      |                                                                                                                                                                                                  |  |   |   |   |   |       |    |    |    |    |        |    |    |    |    |         |    |    |    |    |
| <b>Crimp terminal</b><br>Order contacts separately      | Han E   | 09 33 010 2602  | 09 33 010 2702    | Panel cut out for inserts<br>for use without hoods/housings                         |                                                                                                                                                                                                  |  |   |   |   |   |       |    |    |    |    |        |    |    |    |    |         |    |    |    |    |

| Wire gauge     |        | Part No.       |                 | Drawing                                                                              | Dimensions in mm |
|----------------|--------|----------------|-----------------|--------------------------------------------------------------------------------------|------------------|
| Identification | (mm²)  | Male contacts  | Female contacts |                                                                                      |                  |
| Crimp contacts | 0.5    | 09 33 000 6121 | 09 33 000 6220  |  |                  |
| Power contacts | 0.75   | 09 33 000 6114 | 09 33 000 6214  |                                                                                      |                  |
| silver plated  | 1.0    | 09 33 000 6105 | 09 33 000 6205  |                                                                                      |                  |
|                | 1.5    | 09 33 000 6104 | 09 33 000 6204  |                                                                                      |                  |
|                | 2.5    | 09 33 000 6102 | 09 33 000 6202  |                                                                                      |                  |
|                | 3      | 09 33 000 6106 | 09 33 000 6206  |                                                                                      |                  |
|                | 4      | 09 33 000 6107 | 09 33 000 6207  |                                                                                      |                  |
| gold plated    | 0.5    | 09 33 000 6122 | 09 33 000 6222  |  |                  |
|                | 0.75   | 09 33 000 6115 | 09 33 000 6215  |                                                                                      |                  |
|                | 1.0    | 09 33 000 6118 | 09 33 000 6218  |                                                                                      |                  |
|                | 1.5    | 09 33 000 6116 | 09 33 000 6216  |                                                                                      |                  |
|                | 2.5    | 09 33 000 6123 | 09 33 000 6223  |                                                                                      |                  |
|                | 4.0    | 09 33 000 6119 | 09 33 000 6221  |                                                                                      |                  |
| Relay contact  | 0.75-1 | 09 33 000 6109 |                 |  |                  |
| silver plated  | 1.5    | 09 33 000 6110 |                 |                                                                                      |                  |
|                | 2.5    | 09 33 000 6111 |                 |                                                                                      |                  |

### Crimp contact identification

| Identification | Wire gauge |        | Stripping length |
|----------------|------------|--------|------------------|
| no groove      | 0.5 mm²    | AWG 20 | 7.5 mm           |
| 1 groove*      | 0.75 mm²   | AWG 18 | 7.5 mm           |
| 1 groove       | 1 mm²      | AWG 18 | 7.5 mm           |
| 2 grooves      | 1.5 mm²    | AWG 16 | 7.5 mm           |
| 3 grooves      | 2.5 mm²    | AWG 14 | 7.5 mm           |
| wide groove    | 3.0 mm²    | AWG 12 | 7.5 mm           |
| no groove      | 4 mm²      | AWG 12 | 7.5 mm           |

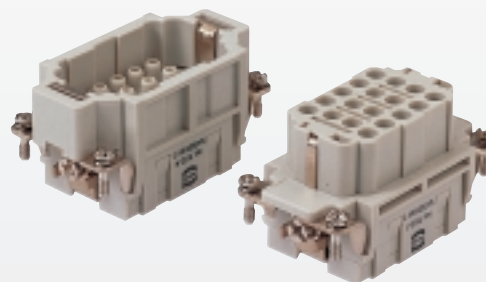
\* on the back crimp collar

Stock items in bold type

Number of contacts

18 +

## Inserts



| Identification                              | Series | Part No.              |                       | Drawing                                                                                                                                                                        | Dimensions in mm |
|---------------------------------------------|--------|-----------------------|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
|                                             |        | Male insert (M)       | Female insert (F)     |                                                                                                                                                                                |                  |
| Crimp terminal<br>Order contacts separately | Han EE | <b>09 32 018 3001</b> | <b>09 32 018 3101</b> | <p><sup>1)</sup> Distance for contact max. 21 mm</p> <p>Contact arrangement View from termination side</p> <p>Panel cut out for inserts<br/>for use without hoods/housings</p> |                  |

| Identification                 | Wire gauge<br>(mm <sup>2</sup> ) | Part No.              |                       | Drawing                                                      | Dimensions in mm |
|--------------------------------|----------------------------------|-----------------------|-----------------------|--------------------------------------------------------------|------------------|
|                                |                                  | Male contacts         | Female contacts       |                                                              |                  |
| Crimp contacts                 | 0.5                              | <b>09 33 000 6121</b> | <b>09 33 000 6220</b> | <p>Operation contact Identification</p> <p>Relay contact</p> |                  |
| Power contacts                 | 0.75                             | <b>09 33 000 6114</b> | <b>09 33 000 6214</b> |                                                              |                  |
| silver plated                  | 1.0                              | <b>09 33 000 6105</b> | <b>09 33 000 6205</b> |                                                              |                  |
|                                | 1.5                              | <b>09 33 000 6104</b> | <b>09 33 000 6204</b> |                                                              |                  |
|                                | 2.5                              | <b>09 33 000 6102</b> | <b>09 33 000 6202</b> |                                                              |                  |
|                                | 3                                | <b>09 33 000 6106</b> | <b>09 33 000 6206</b> |                                                              |                  |
|                                | 4                                | <b>09 33 000 6107</b> | <b>09 33 000 6207</b> |                                                              |                  |
| gold plated                    | 0.5                              | <b>09 33 000 6122</b> | <b>09 33 000 6222</b> |                                                              |                  |
|                                | 0.75                             | <b>09 33 000 6115</b> | <b>09 33 000 6215</b> |                                                              |                  |
|                                | 1.0                              | <b>09 33 000 6118</b> | <b>09 33 000 6218</b> |                                                              |                  |
|                                | 1.5                              | <b>09 33 000 6116</b> | <b>09 33 000 6216</b> |                                                              |                  |
| Relay contact<br>silver plated | 2.5                              | <b>09 33 000 6123</b> | <b>09 33 000 6223</b> |                                                              |                  |
|                                | 4.0                              | <b>09 33 000 6119</b> | <b>09 33 000 6221</b> |                                                              |                  |
|                                | 0.75-1                           | <b>09 33 000 6109</b> |                       |                                                              |                  |
|                                | 1.5                              | <b>09 33 000 6110</b> |                       |                                                              |                  |
|                                | 2.5                              | <b>09 33 000 6111</b> |                       |                                                              |                  |

## Crimp contact identification

| Identification | Wire gauge           |        | Stripping length |
|----------------|----------------------|--------|------------------|
| no groove      | 0.5 mm <sup>2</sup>  | AWG 20 | 7.5 mm           |
| 1 groove*      | 0.75 mm <sup>2</sup> | AWG 18 | 7.5 mm           |
| 1 groove       | 1 mm <sup>2</sup>    | AWG 18 | 7.5 mm           |
| 2 grooves      | 1.5 mm <sup>2</sup>  | AWG 16 | 7.5 mm           |
| 3 grooves      | 2.5 mm <sup>2</sup>  | AWG 14 | 7.5 mm           |
| wide groove    | 3.0 mm <sup>2</sup>  | AWG 12 | 7.5 mm           |
| no groove      | 4 mm <sup>2</sup>    | AWG 12 | 7.5 mm           |

\* on the back crimp collar

Stock items in bold type

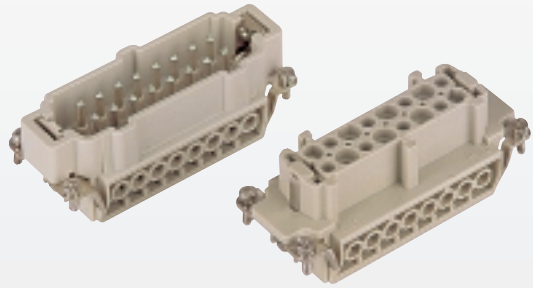
Stock items in bold type

| Identification |                            | Part No.                                           |                                                | Pg             | Drawing                      | Dimensions in mm |
|----------------|----------------------------|----------------------------------------------------|------------------------------------------------|----------------|------------------------------|------------------|
|                |                            | Low construction                                   | High construction                              |                |                              |                  |
| Hoods          | Hoods side-entry           | <b>09 30 010 1541</b>                              |                                                | 16             |                              |                  |
|                |                            |                                                    | <b>09 30 010 0542</b>                          | 21             |                              |                  |
|                |                            |                                                    | <b>09 30 010 0543</b>                          | 29             |                              |                  |
|                | Hoods top-entry            | <b>09 30 010 1441</b>                              |                                                | 16             |                              |                  |
|                |                            |                                                    | <b>09 30 010 0442</b>                          | 21             |                              |                  |
|                |                            |                                                    | <b>09 30 010 0443</b>                          | 29             |                              |                  |
| Housings       | Housings bulkhead mounting | <b>09 30 010 0305</b>                              |                                                | —              | Panel cut out 60 x 35 mm<br> |                  |
|                |                            | with thermo-plastic cover<br><b>09 30 010 0303</b> |                                                | —              |                              |                  |
|                |                            | with metal cover<br><b>09 30 010 0318</b>          |                                                | —              |                              |                  |
|                | Housings surface mounting  | 1 side-entry<br><b>09 30 010 1251</b>              |                                                | 16             |                              |                  |
|                |                            | 2 side-entries<br><b>09 30 010 1291</b>            | <b>09 30 010 0292</b><br><b>09 30 010 0293</b> | 16<br>21<br>29 |                              |                  |
|                |                            | 1 side-entry<br><b>09 30 010 1256</b>              | with thermo-plastic cover                      | 16             |                              |                  |
|                |                            | 2 side-entries<br><b>09 30 010 1296</b>            | with thermo-plastic cover                      | 16<br>21<br>29 |                              |                  |
|                |                            | <b>09 30 010 2296</b>                              | with metal cover                               | 16<br>21       |                              |                  |
|                |                            |                                                    | with thermo-plastic cover                      | 16<br>21<br>29 |                              |                  |
|                | Hoods cable to cable       | <b>09 30 010 1751</b>                              | <b>09 30 010 0752</b><br><b>09 30 010 0753</b> | 16<br>21<br>29 |                              |                  |
|                |                            |                                                    |                                                |                |                              |                  |

<sup>1)</sup> Blind way for one cable entry

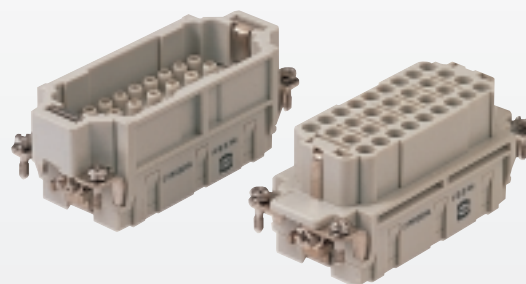
|                   | a  | b  | h  |
|-------------------|----|----|----|
| Low construction  | 40 | 52 | 54 |
| High construction | 45 | 57 | 74 |

|                   | h    |
|-------------------|------|
| Low construction  | 47.5 |
| High construction | 74.5 |

$$16 + \textcircled{\text{⏏}}$$


Han  
E / EE

03  
▪  
22

$32 + \text{Ⓢ}$ 

| Part No.       |        |                 |                   |         |                  |
|----------------|--------|-----------------|-------------------|---------|------------------|
| Identification | Series | Male insert (M) | Female insert (F) | Drawing | Dimensions in mm |

Technical drawing of a bolt. The drawing shows a cross-section of the bolt head on the left, which has a hexagonal shape. The length of the bolt is indicated by a dimension line at the bottom, with a value of 22,8. A smaller dimension line indicates the length of the hexagonal head, with a value of 7,5. The bolt is shown in a perspective view, with the head on the left and the shank extending to the right.

| Identification | Wire gauge           |        | Stripping length |
|----------------|----------------------|--------|------------------|
| no groove      | 0.5 mm <sup>2</sup>  | AWG 20 | 7.5 mm           |
| 1 groove*      | 0.75 mm <sup>2</sup> | AWG 18 | 7.5 mm           |
| 1 groove       | 1 mm <sup>2</sup>    | AWG 18 | 7.5 mm           |
| 2 grooves      | 1.5 mm <sup>2</sup>  | AWG 16 | 7.5 mm           |
| 3 grooves      | 2.5 mm <sup>2</sup>  | AWG 14 | 7.5 mm           |
| wide groove    | 3.0 mm <sup>2</sup>  | AWG 12 | 7.5 mm           |
| no groove      | 4 mm <sup>2</sup>    | AWG 12 | 7.5 mm           |

03  
23

**Stock items in bold type**

## Part No.

## Identification

## Low construction

## High construction

## Pg

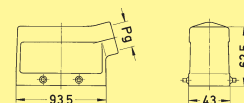
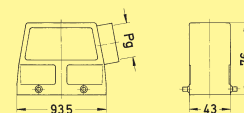
## Drawing

## Dimensions in mm

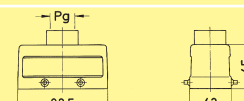
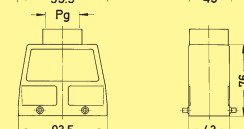
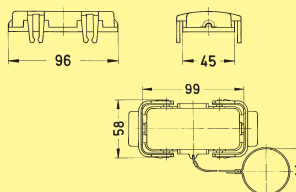
## Hoods

Hoods  
side-entry**09 30 016 1520**

21

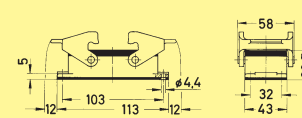
**09 30 016 0520**  
**09 30 016 0521**21  
29Hoods  
top-entry**09 30 016 1420**

21

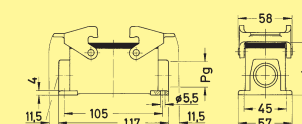
**09 30 016 0420**  
**09 30 016 0421**21  
29Protection covers  
thermoplastic/metal**09 30 016 5401****09 30 016 5422**Housing  
bulkhead  
mounting**09 30 016 0301**

—

Panel cut out 82 x 35 mm

Housings  
surface mounting

1 side-entry

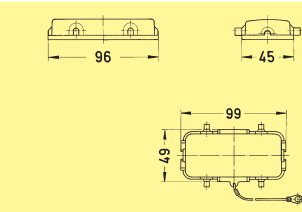
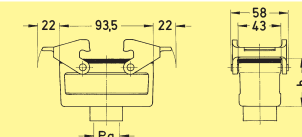
**09 30 016 1230****09 30 016 0230**  
**09 30 016 0231**21  
29

2 side-entries

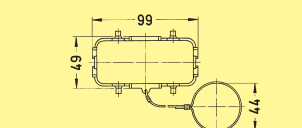
**09 30 016 1270****09 30 016 0270**  
**09 30 016 0271**21  
29

Blind way for one cable entry

|                   | h  |
|-------------------|----|
| Low construction  | 56 |
| High construction | 81 |

Protection covers  
thermoplastic/metal**09 30 016 5405****09 30 016 5425**Hoods  
cable to cable**09 30 016 1730****09 30 016 0730**  
**09 30 016 0731**21  
29

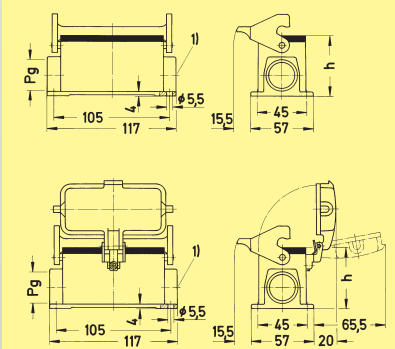
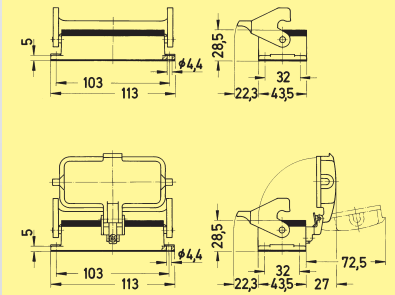
|                   | h    |
|-------------------|------|
| Low construction  | 47.5 |
| High construction | 78.5 |

Protection cover  
metal**09 30 016 5426**

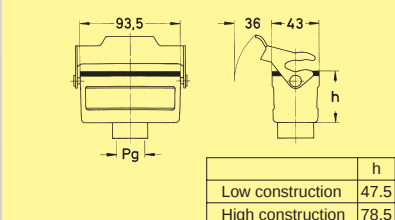
Stock items in bold type

| Identification |                            | Part No.                                                                                                                         |                                                                             | Pg          | Drawing | Dimensions in mm |
|----------------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|-------------|---------|------------------|
|                |                            | Low construction                                                                                                                 | High construction                                                           |             |         |                  |
| Hoods          | Hoods side-entry           | <b>09 30 016 1540</b>                                                                                                            |                                                                             | 21          |         |                  |
|                |                            |                                                                                                                                  | <b>09 30 016 0540</b><br><b>09 30 016 0541</b>                              | 21<br>29    |         |                  |
|                | Hoods top-entry            | <b>09 30 016 1440</b>                                                                                                            |                                                                             | 21          |         |                  |
|                |                            |                                                                                                                                  | <b>09 30 016 0440</b><br><b>09 30 016 0441</b>                              | 21<br>29    |         |                  |
| Housings       | Housings bulkhead mounting | <b>09 30 016 0307</b><br><br>with thermo-plastic cover<br><b>09 30 016 0306</b><br><br>with metal cover<br><b>09 30 016 0318</b> |                                                                             | —<br>—<br>— |         |                  |
|                | Housings surface mounting  | <b>09 30 016 1250</b>                                                                                                            | <b>09 30 016 0250</b><br><b>09 30 016 0251</b>                              | 21<br>29    |         |                  |
|                | 1 side-entry               | <b>09 30 016 1290</b>                                                                                                            | <b>09 30 016 0290</b><br><b>09 30 016 0291</b>                              | 21<br>29    |         |                  |
|                | 2 side-entries             | with thermo-plastic cover<br><b>09 30 016 1255</b>                                                                               | with thermo-plastic cover<br><b>09 30 016 0255</b><br><b>09 30 016 0256</b> | 21<br>29    |         |                  |
|                | 1 side-entry               | with thermo-plastic cover<br><b>09 30 016 1295</b>                                                                               | with thermo-plastic cover<br><b>09 30 016 0295</b><br><b>09 30 016 0296</b> | 21<br>29    |         |                  |
|                | 2 side-entries             | with metal cover<br><b>09 30 016 2295</b>                                                                                        | with metal cover<br><b>09 30 016 2297</b><br><b>09 30 016 2298</b>          | 21<br>29    |         |                  |
|                | 2 side-entries             |                                                                                                                                  |                                                                             |             |         |                  |
|                | Hoods cable to cable       | <b>09 30 016 1750</b>                                                                                                            | <b>09 30 016 0750</b><br><b>09 30 016 0751</b>                              | 21<br>29    |         |                  |

Panel cut out 82 x 35 mm

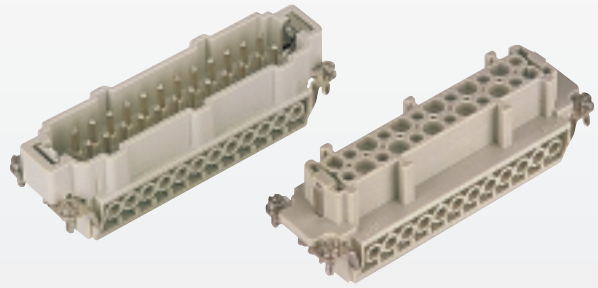

<sup>1)</sup> Blind way for one cable entry

|                   | h  |
|-------------------|----|
| Low construction  | 56 |
| High construction | 81 |



|                   | h    |
|-------------------|------|
| Low construction  | 47.5 |
| High construction | 78.5 |

24 + 

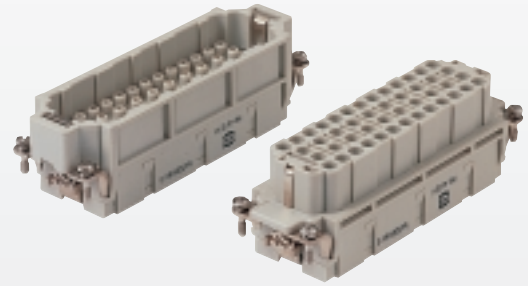


Han  
E / EE

03  
26

Number of contacts

46 +



## Inserts

| Identification                                                                                      | Series | Part No.        |                   | Drawing | Dimensions in mm |
|-----------------------------------------------------------------------------------------------------|--------|-----------------|-------------------|---------|------------------|
|                                                                                                     |        | Male insert (M) | Female insert (F) |         |                  |
| Crimp terminal<br>Order contacts separately                                                         | Han EE | 09 32 046 3001  | 09 32 046 3101    |         |                  |
| <sup>1)</sup> Distance for contact max. 21 mm<br>Contact arrangement View from termination side<br> |        |                 |                   |         |                  |
| Panel cut out for inserts<br>for use without hoods/housings<br>                                     |        |                 |                   |         |                  |

| Identification                 | Wire gauge<br>(mm²) | Part No.       |                 | Drawing | Dimensions in mm                                  |
|--------------------------------|---------------------|----------------|-----------------|---------|---------------------------------------------------|
|                                |                     | Male contacts  | Female contacts |         |                                                   |
| Crimp contacts                 | 0.5                 | 09 33 000 6121 | 09 33 000 6220  |         | Operation contact Identification<br>Relay contact |
| Power contacts                 | 0.75                | 09 33 000 6114 | 09 33 000 6214  |         |                                                   |
| silver plated                  | 1.0                 | 09 33 000 6105 | 09 33 000 6205  |         |                                                   |
|                                | 1.5                 | 09 33 000 6104 | 09 33 000 6204  |         |                                                   |
|                                | 2.5                 | 09 33 000 6102 | 09 33 000 6202  |         |                                                   |
|                                | 3                   | 09 33 000 6106 | 09 33 000 6206  |         |                                                   |
|                                | 4                   | 09 33 000 6107 | 09 33 000 6207  |         |                                                   |
| gold plated                    | 0.5                 | 09 33 000 6122 | 09 33 000 6222  |         |                                                   |
|                                | 0.75                | 09 33 000 6115 | 09 33 000 6215  |         |                                                   |
|                                | 1.0                 | 09 33 000 6118 | 09 33 000 6218  |         |                                                   |
|                                | 1.5                 | 09 33 000 6116 | 09 33 000 6216  |         |                                                   |
| Relay contact<br>silver plated | 2.5                 | 09 33 000 6123 | 09 33 000 6223  |         |                                                   |
|                                | 4.0                 | 09 33 000 6119 | 09 33 000 6221  |         |                                                   |
|                                | 0.75-1              | 09 33 000 6109 |                 |         |                                                   |
|                                | 1.5                 | 09 33 000 6110 |                 |         |                                                   |
|                                | 2.5                 | 09 33 000 6111 |                 |         |                                                   |

## Crimp contact identification

| Identification | Wire gauge |        | Stripping length |
|----------------|------------|--------|------------------|
| no groove      | 0.5 mm²    | AWG 20 | 7.5 mm           |
| 1 groove*      | 0.75 mm²   | AWG 18 | 7.5 mm           |
| 1 groove       | 1 mm²      | AWG 18 | 7.5 mm           |
| 2 grooves      | 1.5 mm²    | AWG 16 | 7.5 mm           |
| 3 grooves      | 2.5 mm²    | AWG 14 | 7.5 mm           |
| wide groove    | 3.0 mm²    | AWG 12 | 7.5 mm           |
| no groove      | 4 mm²      | AWG 12 | 7.5 mm           |

\* on the back crimp collar

Stock items in bold type

## Part No.

## Identification

## Low construction

## High construction

## Pg

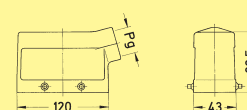
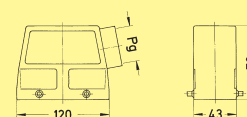
## Drawing

## Dimensions in mm

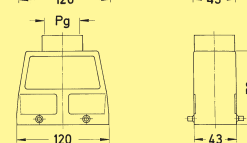
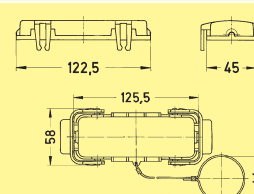
## Hoods

Hoods  
side-entry**09 30 024 1520**

21

**09 30 024 0520**  
**09 30 024 0521**21  
29Hoods  
top-entry**09 30 024 1421**

29

**09 30 024 0420**  
**09 30 024 0421**21  
29Protection covers  
thermoplastic/metal**09 30 024 5401****09 30 024 5422**

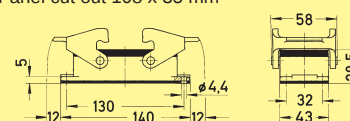
## Housings

## Housing bulkhead mounting

**09 30 024 0301**

—

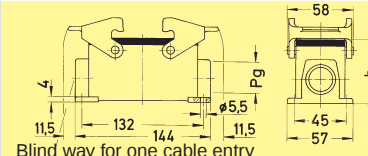
## Panel cut out 108 x 35 mm

Housings  
surface  
mounting

1 side-entry

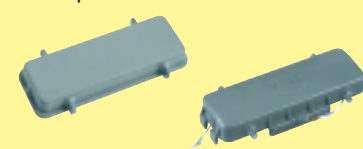
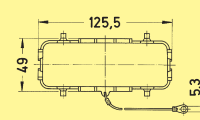
**09 30 024 1230****09 30 024 0230**  
**09 30 024 0231**21  
29

2 side-entries

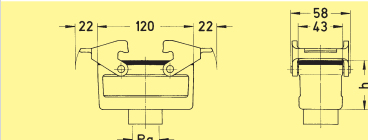
**09 30 024 1270****09 30 024 0270**  
**09 30 024 0271**21  
29

## Blind way for one cable entry

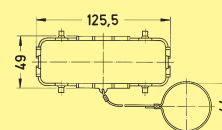
|                   | h  |
|-------------------|----|
| Low construction  | 56 |
| High construction | 81 |

Protection covers  
thermoplastic/metal**09 30 024 5405****09 30 024 5425**

## Hoods cable to cable

**09 30 024 1731****09 30 024 0730**  
**09 30 024 0731**21  
29

|                   | h    |
|-------------------|------|
| Low construction  | 57.5 |
| High construction | 78.5 |

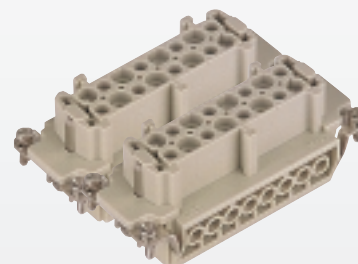
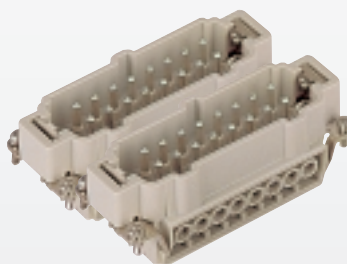
Protection cover  
metal**09 30 024 5426**

Stock items in bold type

| Identification |                                                              | Part No.                                                          |                                  | Pg             | Drawing | Dimensions in mm |
|----------------|--------------------------------------------------------------|-------------------------------------------------------------------|----------------------------------|----------------|---------|------------------|
| Hoods          | Hoods<br>side-entry                                          | 09 30 024 1540                                                    | 09 30 024 0540<br>09 30 024 0541 | 21<br>21<br>29 |         |                  |
|                | Hoods<br>top-entry                                           | 09 30 024 1441                                                    | 09 30 024 0440<br>09 30 024 0441 | 29<br>21<br>29 |         |                  |
|                | Housings<br>bulkhead mounting                                | 09 30 024 0307<br>with thermo-<br>plastic cover<br>09 30 024 0304 | —                                | —              |         |                  |
|                |                                                              | 09 30 024 0318<br>with metal<br>cover                             | —                                | —              |         |                  |
| Housings       | Housings<br>surface mounting                                 | 1 side-entry<br>09 30 024 1250                                    | 09 30 024 0250<br>09 30 024 0251 | 21<br>29       |         |                  |
|                | 2 side-entries<br>09 30 024 1290                             | 09 30 024 0290<br>09 30 024 0291                                  | 21<br>29                         |                |         |                  |
|                | 1 side-entry<br>with thermoplastic cover<br>09 30 024 1255   | with thermoplastic cover<br>09 30 024 0255<br>09 30 024 0256      | 21<br>29                         |                |         |                  |
|                | 2 side-entries<br>with thermoplastic cover<br>09 30 024 1295 | with thermoplastic cover<br>09 30 024 0295<br>09 30 024 0296      | 21<br>29                         |                |         |                  |
|                | 2 side-entries<br>with metal cover<br>09 30 024 2295         | with metal cover<br>09 30 024 2297<br>09 30 024 2298              | 21<br>29                         |                |         |                  |
|                | Hoods<br>cable to cable                                      | 09 30 024 1751                                                    | 09 30 024 0751                   | 29             |         |                  |

Number of contacts

32 +



Inserts

Han  
E / EE

| Identification                                              | Series        | Part No.                                       |                                                | Drawing | Dimensions in mm                                                       |
|-------------------------------------------------------------|---------------|------------------------------------------------|------------------------------------------------|---------|------------------------------------------------------------------------|
|                                                             |               | Male insert (M)                                | Female insert (F)                              |         |                                                                        |
| <b>Screw terminal</b><br>with wire protection<br>           | Han E         |                                                |                                                |         |                                                                        |
|                                                             | 1–16<br>17–32 | <b>09 33 016 2601</b><br><b>09 33 016 2611</b> | <b>09 33 016 2701</b><br><b>09 33 016 2711</b> |         | Dimensions for inserts see page 03.22                                  |
| <b>Cage-clamp terminal</b><br>                              | Han ES        |                                                |                                                |         |                                                                        |
|                                                             | 1–16<br>17–32 | <b>09 33 016 2616</b><br><b>09 33 016 2626</b> | <b>09 33 016 2716</b><br><b>09 33 016 2726</b> |         | <b>Contact arrangement</b> View from termination side<br>              |
| <b>Cage-clamp terminal</b><br>two terminals per contact<br> | Han ESS       |                                                |                                                |         |                                                                        |
|                                                             | 1–16<br>1–16  | <b>09 33 016 2672</b><br><b>09 33 016 2672</b> | <b>09 33 016 2772</b><br><b>09 33 016 2772</b> |         |                                                                        |
| <b>Crimp terminal</b><br>Order contacts separately<br>      | Han E         |                                                |                                                |         |                                                                        |
|                                                             | 1–16<br>17–32 | <b>09 33 016 2602</b><br><b>09 33 016 2612</b> | <b>09 33 016 2702</b><br><b>09 33 016 2712</b> |         | <b>Panel cut out for inserts</b><br>for use without hoods/housings<br> |

| Identification                                     | Wire gauge<br>(mm <sup>2</sup> )           | Part No.                                                                                                                                                                    |                                                                                                                                                                             | Drawing | Dimensions in mm |
|----------------------------------------------------|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|------------------|
|                                                    |                                            | Male contacts                                                                                                                                                               | Female contacts                                                                                                                                                             |         |                  |
| <b>Crimp contacts</b><br><b>Power contacts</b><br> | 0.5<br>0.75<br>1.0<br>1.5<br>2.5<br>3<br>4 | <b>09 33 000 6121</b><br><b>09 33 000 6114</b><br><b>09 33 000 6105</b><br><b>09 33 000 6104</b><br><b>09 33 000 6102</b><br><b>09 33 000 6106</b><br><b>09 33 000 6107</b> | <b>09 33 000 6220</b><br><b>09 33 000 6214</b><br><b>09 33 000 6205</b><br><b>09 33 000 6204</b><br><b>09 33 000 6202</b><br><b>09 33 000 6206</b><br><b>09 33 000 6207</b> |         |                  |
| <b>silver plated</b><br>                           |                                            |                                                                                                                                                                             |                                                                                                                                                                             |         |                  |
| <b>gold plated</b><br>                             | 0.5<br>0.75<br>1.0<br>1.5<br>2.5<br>4.0    | <b>09 33 000 6122</b><br><b>09 33 000 6115</b><br><b>09 33 000 6118</b><br><b>09 33 000 6116</b><br><b>09 33 000 6123</b><br><b>09 33 000 6119</b>                          | <b>09 33 000 6222</b><br><b>09 33 000 6215</b><br><b>09 33 000 6218</b><br><b>09 33 000 6216</b><br><b>09 33 000 6223</b><br><b>09 33 000 6221</b>                          |         |                  |
| <b>Relay contact</b><br>silver plated<br>          | 0.75-1<br>1.5<br>2.5                       | <b>09 33 000 6109</b><br><b>09 33 000 6110</b><br><b>09 33 000 6111</b>                                                                                                     |                                                                                                                                                                             |         |                  |

Crimp contact identification

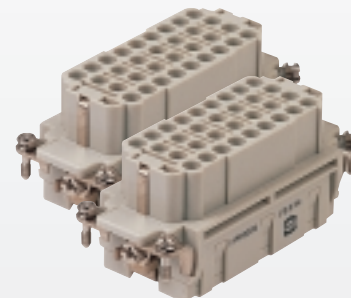
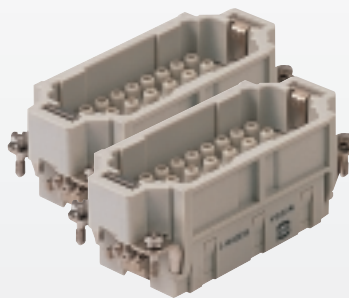
| Identification | Wire gauge           |        | Stripping length |
|----------------|----------------------|--------|------------------|
| no groove      | 0.5 mm <sup>2</sup>  | AWG 20 | 7.5 mm           |
| 1 groove*      | 0.75 mm <sup>2</sup> | AWG 18 | 7.5 mm           |
| 1 groove       | 1 mm <sup>2</sup>    | AWG 18 | 7.5 mm           |
| 2 grooves      | 1.5 mm <sup>2</sup>  | AWG 16 | 7.5 mm           |
| 3 grooves      | 2.5 mm <sup>2</sup>  | AWG 14 | 7.5 mm           |
| wide groove    | 3.0 mm <sup>2</sup>  | AWG 12 | 7.5 mm           |
| no groove      | 4 mm <sup>2</sup>    | AWG 12 | 7.5 mm           |

\* on the back crimp collar

Stock items in bold type

Number of contacts

64 +



Inserts

| Identification                              | Series        | Part No.                                       |                                                | Drawing                                                                                             | Dimensions in mm |
|---------------------------------------------|---------------|------------------------------------------------|------------------------------------------------|-----------------------------------------------------------------------------------------------------|------------------|
|                                             |               | Male insert (M)                                | Female insert (F)                              |                                                                                                     |                  |
| Crimp terminal<br>Order contacts separately | Han EE        |                                                |                                                |                                                                                                     |                  |
|                                             | 1–32<br>33–64 | <b>09 32 032 3001</b><br><b>09 32 032 3011</b> | <b>09 32 032 3101</b><br><b>09 32 032 3111</b> | Dimensions for inserts see page 03.23<br><br>Contact arrangement View from termination side<br><br> |                  |
|                                             |               |                                                |                                                |                                                                                                     |                  |

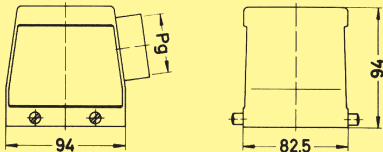
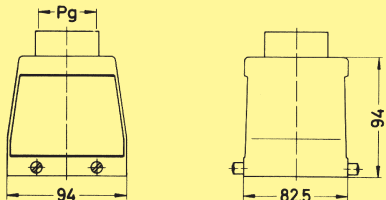
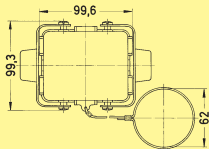
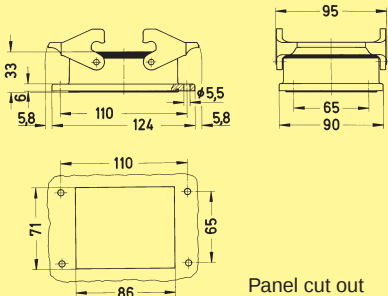
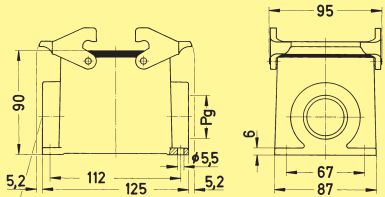
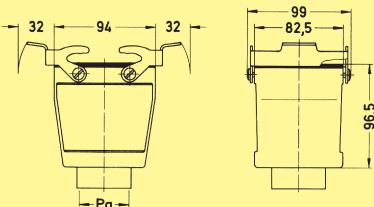
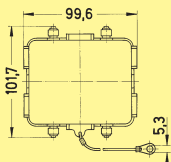
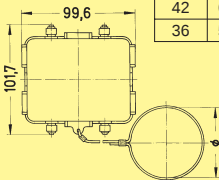
| Identification                                        | Wire gauge<br>(mm <sup>2</sup> ) | Part No.              |                       | Drawing | Dimensions in mm |
|-------------------------------------------------------|----------------------------------|-----------------------|-----------------------|---------|------------------|
|                                                       |                                  | Male contacts         | Female contacts       |         |                  |
| Crimp contacts<br>Power contacts<br><br>silver plated | 0.5                              | <b>09 33 000 6121</b> | <b>09 33 000 6220</b> |         |                  |
|                                                       | 0.75                             | <b>09 33 000 6114</b> | <b>09 33 000 6214</b> |         |                  |
|                                                       | 1.0                              | <b>09 33 000 6105</b> | <b>09 33 000 6205</b> |         |                  |
|                                                       | 1.5                              | <b>09 33 000 6104</b> | <b>09 33 000 6204</b> |         |                  |
|                                                       | 2.5                              | <b>09 33 000 6102</b> | <b>09 33 000 6202</b> |         |                  |
|                                                       | 3                                | <b>09 33 000 6106</b> | <b>09 33 000 6206</b> |         |                  |
|                                                       | 4                                | <b>09 33 000 6107</b> | <b>09 33 000 6207</b> |         |                  |
|                                                       |                                  |                       |                       |         |                  |
| gold plated                                           | 0.5                              | <b>09 33 000 6122</b> | <b>09 33 000 6222</b> |         |                  |
|                                                       | 0.75                             | <b>09 33 000 6115</b> | <b>09 33 000 6215</b> |         |                  |
|                                                       | 1.0                              | <b>09 33 000 6118</b> | <b>09 33 000 6218</b> |         |                  |
|                                                       | 1.5                              | <b>09 33 000 6116</b> | <b>09 33 000 6216</b> |         |                  |
|                                                       | 2.5                              | <b>09 33 000 6123</b> | <b>09 33 000 6223</b> |         |                  |
| Relay contact<br>silver plated                        | 4.0                              | <b>09 33 000 6119</b> | <b>09 33 000 6221</b> |         |                  |
|                                                       | 0.75-1                           | <b>09 33 000 6109</b> |                       |         |                  |
|                                                       | 1.5                              | <b>09 33 000 6110</b> |                       |         |                  |
|                                                       | 2.5                              | <b>09 33 000 6111</b> |                       |         |                  |

Crimp contact identification

| Identification | Wire gauge           |        | Stripping length |
|----------------|----------------------|--------|------------------|
| no groove      | 0.5 mm <sup>2</sup>  | AWG 20 | 7.5 mm           |
| 1 groove*      | 0.75 mm <sup>2</sup> | AWG 18 | 7.5 mm           |
| 1 groove       | 1 mm <sup>2</sup>    | AWG 18 | 7.5 mm           |
| 2 grooves      | 1.5 mm <sup>2</sup>  | AWG 16 | 7.5 mm           |
| 3 grooves      | 2.5 mm <sup>2</sup>  | AWG 14 | 7.5 mm           |
| wide groove    | 3.0 mm <sup>2</sup>  | AWG 12 | 7.5 mm           |
| no groove      | 4 mm <sup>2</sup>    | AWG 12 | 7.5 mm           |

\* on the back crimp collar

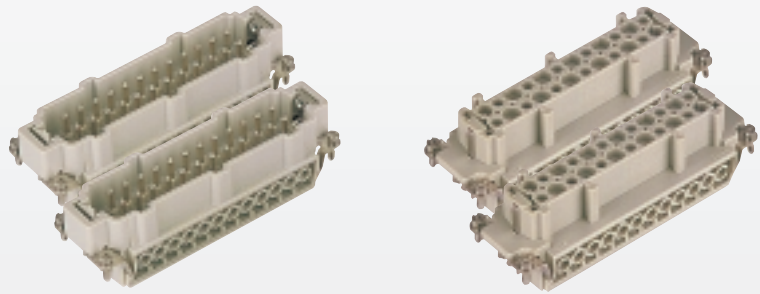
Stock items in bold type

| Identification |                               | Part No.                                                                                                                                                                                                                                      | Pg                                                                          | Drawing                                                                                                                | Dimensions in mm                                                                                                                                                                                                                                                                                |        |   |    |    |    |      |
|----------------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---|----|----|----|------|
| Hoods          | Hoods<br>side-entry           | <br><b>09 30 032 0521</b><br><b>09 30 032 0522</b><br><b>09 30 032 0523</b>                                                                                  | 29<br>36<br>42                                                              |                                     |                                                                                                                                                                                                                                                                                                 |        |   |    |    |    |      |
|                | Hoods<br>top-entry            | <br><b>09 30 032 0421</b><br><b>09 30 032 0422</b><br><b>09 30 032 0423</b>                                                                                  | 29<br>36<br>42                                                              |                                     |                                                                                                                                                                                                                                                                                                 |        |   |    |    |    |      |
|                | Protection cover<br>for hoods | <b>09 30 032 5420</b>                                                                                                                                                                                                                         | —                                                                           |                                     |                                                                                                                                                                                                                                                                                                 |        |   |    |    |    |      |
| Housings       | Housing<br>bulkhead mounting  | <br><b>09 30 032 0301</b>                                                                                                                                  | —                                                                           | <br>Panel cut out                  |                                                                                                                                                                                                                                                                                                 |        |   |    |    |    |      |
|                | Housings<br>surface mounting  | <br><b>09 30 032 0231</b><br><b>09 30 032 0232</b><br><b>09 30 032 0233</b><br><br><b>09 30 032 0271</b><br><b>09 30 032 0272</b><br><b>09 30 032 0273</b> | 1 x 29<br>1 x 36<br>1 x 42<br><br>2 x 29<br>2 x 36<br>2 x 42                | <br>Blind way for one cable entry |                                                                                                                                                                                                                                                                                                 |        |   |    |    |    |      |
|                | Hoods<br>cable to cable       | <br><b>09 30 032 0731</b><br><b>09 30 032 0732</b><br><b>09 30 032 0733</b>                                                                                | 29<br>36<br>42                                                              |                                   |                                                                                                                                                                                                                                                                                                 |        |   |    |    |    |      |
|                | Protection covers             | for housings<br><br>for cable to cable hoods                                                                                                                                                                                                  | <b>09 30 032 5425</b><br><br><b>09 30 032 5426</b><br><b>09 30 032 5427</b> | —<br><br>42<br>36                                                                                                      | <br> <table><tr><td>for PG</td><td>Ø</td></tr><tr><td>42</td><td>64</td></tr><tr><td>36</td><td>55,5</td></tr></table> | for PG | Ø | 42 | 64 | 36 | 55,5 |
| for PG         | Ø                             |                                                                                                                                                                                                                                               |                                                                             |                                                                                                                        |                                                                                                                                                                                                                                                                                                 |        |   |    |    |    |      |
| 42             | 64                            |                                                                                                                                                                                                                                               |                                                                             |                                                                                                                        |                                                                                                                                                                                                                                                                                                 |        |   |    |    |    |      |
| 36             | 55,5                          |                                                                                                                                                                                                                                               |                                                                             |                                                                                                                        |                                                                                                                                                                                                                                                                                                 |        |   |    |    |    |      |

Stock items in bold type

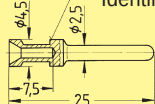
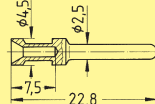
Number of contacts

48 +



Inserts

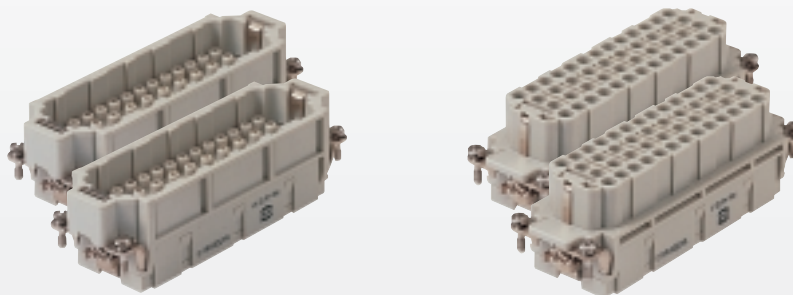
| Identification                                           | Series        | Part No.                                       |                                                | Drawing | Dimensions in mm                                                    |
|----------------------------------------------------------|---------------|------------------------------------------------|------------------------------------------------|---------|---------------------------------------------------------------------|
|                                                          |               | Male insert (M)                                | Female insert (F)                              |         |                                                                     |
| <b>Screw terminal with wire protection</b><br>           | Han E         |                                                |                                                |         |                                                                     |
|                                                          | 1–24<br>25–48 | <b>09 33 024 2601</b><br><b>09 33 024 2611</b> | <b>09 33 024 2701</b><br><b>09 33 024 2711</b> |         | Dimensions for inserts see page 03.26                               |
| <b>Cage-clamp terminal</b><br>                           | Han ES        |                                                |                                                |         | <b>Contact arrangement</b> View from termination side<br>           |
|                                                          | 1–24<br>25–48 | <b>09 33 024 2616</b><br><b>09 33 024 2626</b> | <b>09 33 024 2716</b><br><b>09 33 024 2726</b> |         |                                                                     |
| <b>Cage-clamp terminal two terminals per contact</b><br> | Han ESS       |                                                |                                                |         |                                                                     |
|                                                          | 1–24<br>1–24  | <b>09 33 024 2672</b><br><b>09 33 024 2672</b> | <b>09 33 024 2772</b><br><b>09 33 024 2772</b> |         | <b>Panel cut out for inserts for use without hoods/housings</b><br> |
| <b>Crimp terminal</b><br>Order contacts separately<br>   | Han E         |                                                |                                                |         |                                                                     |
|                                                          | 1–24<br>25–48 | <b>09 33 024 2602</b><br><b>09 33 024 2612</b> | <b>09 33 024 2702</b><br><b>09 33 024 2712</b> |         |                                                                     |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                     | Wire gauge | Part No.         |                 |                                                                                                                             |                                                                                                        |                |            |  |                  |           |         |        |        |           |          |        |        |          |       |        |        |          |         |        |        |          |         |        |        |             |         |        |        |           |       |        |        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------|------------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|----------------|------------|--|------------------|-----------|---------|--------|--------|-----------|----------|--------|--------|----------|-------|--------|--------|----------|---------|--------|--------|----------|---------|--------|--------|-------------|---------|--------|--------|-----------|-------|--------|--------|
| Identification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                     | (mm²)      | Male contacts    | Female contacts | Drawing                                                                                                                     | Dimensions in mm                                                                                       |                |            |  |                  |           |         |        |        |           |          |        |        |          |       |        |        |          |         |        |        |          |         |        |        |             |         |        |        |           |       |        |        |
| Crimp contacts<br>Power contacts<br><br>silver plated                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | 0.5        | 09 33 000 6121   | 09 33 000 6220  | <br>Operating contact<br>Identification | <br>Relay contact |                |            |  |                  |           |         |        |        |           |          |        |        |          |       |        |        |          |         |        |        |          |         |        |        |             |         |        |        |           |       |        |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                     | 0.75       | 09 33 000 6114   | 09 33 000 6214  |                                                                                                                             |                                                                                                        |                |            |  |                  |           |         |        |        |           |          |        |        |          |       |        |        |          |         |        |        |          |         |        |        |             |         |        |        |           |       |        |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                     | 1.0        | 09 33 000 6105   | 09 33 000 6205  |                                                                                                                             |                                                                                                        |                |            |  |                  |           |         |        |        |           |          |        |        |          |       |        |        |          |         |        |        |          |         |        |        |             |         |        |        |           |       |        |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                     | 1.5        | 09 33 000 6104   | 09 33 000 6204  |                                                                                                                             |                                                                                                        |                |            |  |                  |           |         |        |        |           |          |        |        |          |       |        |        |          |         |        |        |          |         |        |        |             |         |        |        |           |       |        |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                     | 2.5        | 09 33 000 6102   | 09 33 000 6202  |                                                                                                                             |                                                                                                        |                |            |  |                  |           |         |        |        |           |          |        |        |          |       |        |        |          |         |        |        |          |         |        |        |             |         |        |        |           |       |        |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                     | 3          | 09 33 000 6106   | 09 33 000 6206  |                                                                                                                             |                                                                                                        |                |            |  |                  |           |         |        |        |           |          |        |        |          |       |        |        |          |         |        |        |          |         |        |        |             |         |        |        |           |       |        |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                     | 4          | 09 33 000 6107   | 09 33 000 6207  |                                                                                                                             |                                                                                                        |                |            |  |                  |           |         |        |        |           |          |        |        |          |       |        |        |          |         |        |        |          |         |        |        |             |         |        |        |           |       |        |        |
| gold plated                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | 0.5        | 09 33 000 6122   | 09 33 000 6222  | Crimp contact identification                                                                                                |                                                                                                        |                |            |  |                  |           |         |        |        |           |          |        |        |          |       |        |        |          |         |        |        |          |         |        |        |             |         |        |        |           |       |        |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                     | 0.75       | 09 33 000 6115   | 09 33 000 6215  |                                                                                                                             |                                                                                                        |                |            |  |                  |           |         |        |        |           |          |        |        |          |       |        |        |          |         |        |        |          |         |        |        |             |         |        |        |           |       |        |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                     | 1.0        | 09 33 000 6118   | 09 33 000 6218  |                                                                                                                             |                                                                                                        |                |            |  |                  |           |         |        |        |           |          |        |        |          |       |        |        |          |         |        |        |          |         |        |        |             |         |        |        |           |       |        |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                     | 1.5        | 09 33 000 6116   | 09 33 000 6216  |                                                                                                                             |                                                                                                        |                |            |  |                  |           |         |        |        |           |          |        |        |          |       |        |        |          |         |        |        |          |         |        |        |             |         |        |        |           |       |        |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                     | 2.5        | 09 33 000 6123   | 09 33 000 6223  |                                                                                                                             |                                                                                                        |                |            |  |                  |           |         |        |        |           |          |        |        |          |       |        |        |          |         |        |        |          |         |        |        |             |         |        |        |           |       |        |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                     | 4.0        | 09 33 000 6119   | 09 33 000 6221  |                                                                                                                             |                                                                                                        |                |            |  |                  |           |         |        |        |           |          |        |        |          |       |        |        |          |         |        |        |          |         |        |        |             |         |        |        |           |       |        |        |
| Relay contact<br>silver plated                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  | 0.75-1     | 09 33 000 6109   |                 |                                                                                                                             |                                                                                                        |                |            |  |                  |           |         |        |        |           |          |        |        |          |       |        |        |          |         |        |        |          |         |        |        |             |         |        |        |           |       |        |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                     | 1.5        | 09 33 000 6110   |                 |                                                                                                                             |                                                                                                        |                |            |  |                  |           |         |        |        |           |          |        |        |          |       |        |        |          |         |        |        |          |         |        |        |             |         |        |        |           |       |        |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                     | 2.5        | 09 33 000 6111   |                 |                                                                                                                             |                                                                                                        |                |            |  |                  |           |         |        |        |           |          |        |        |          |       |        |        |          |         |        |        |          |         |        |        |             |         |        |        |           |       |        |        |
| <table><tr><th>Identification</th><th colspan="2">Wire gauge</th><th>Stripping length</th></tr><tr><td>no groove</td><td>0.5 mm²</td><td>AWG 20</td><td>7.5 mm</td></tr><tr><td>1 groove*</td><td>0.75 mm²</td><td>AWG 18</td><td>7.5 mm</td></tr><tr><td>1 groove</td><td>1 mm²</td><td>AWG 18</td><td>7.5 mm</td></tr><tr><td>2 groove</td><td>1.5 mm²</td><td>AWG 16</td><td>7.5 mm</td></tr><tr><td>3 groove</td><td>2.5 mm²</td><td>AWG 14</td><td>7.5 mm</td></tr><tr><td>wide groove</td><td>3.0 mm²</td><td>AWG 12</td><td>7.5 mm</td></tr><tr><td>no groove</td><td>4 mm²</td><td>AWG 12</td><td>7.5 mm</td></tr></table> |                                                                                     |            |                  |                 |                                                                                                                             |                                                                                                        | Identification | Wire gauge |  | Stripping length | no groove | 0.5 mm² | AWG 20 | 7.5 mm | 1 groove* | 0.75 mm² | AWG 18 | 7.5 mm | 1 groove | 1 mm² | AWG 18 | 7.5 mm | 2 groove | 1.5 mm² | AWG 16 | 7.5 mm | 3 groove | 2.5 mm² | AWG 14 | 7.5 mm | wide groove | 3.0 mm² | AWG 12 | 7.5 mm | no groove | 4 mm² | AWG 12 | 7.5 mm |
| Identification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Wire gauge                                                                          |            | Stripping length |                 |                                                                                                                             |                                                                                                        |                |            |  |                  |           |         |        |        |           |          |        |        |          |       |        |        |          |         |        |        |          |         |        |        |             |         |        |        |           |       |        |        |
| no groove                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0.5 mm²                                                                             | AWG 20     | 7.5 mm           |                 |                                                                                                                             |                                                                                                        |                |            |  |                  |           |         |        |        |           |          |        |        |          |       |        |        |          |         |        |        |          |         |        |        |             |         |        |        |           |       |        |        |
| 1 groove*                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0.75 mm²                                                                            | AWG 18     | 7.5 mm           |                 |                                                                                                                             |                                                                                                        |                |            |  |                  |           |         |        |        |           |          |        |        |          |       |        |        |          |         |        |        |          |         |        |        |             |         |        |        |           |       |        |        |
| 1 groove                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1 mm²                                                                               | AWG 18     | 7.5 mm           |                 |                                                                                                                             |                                                                                                        |                |            |  |                  |           |         |        |        |           |          |        |        |          |       |        |        |          |         |        |        |          |         |        |        |             |         |        |        |           |       |        |        |
| 2 groove                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1.5 mm²                                                                             | AWG 16     | 7.5 mm           |                 |                                                                                                                             |                                                                                                        |                |            |  |                  |           |         |        |        |           |          |        |        |          |       |        |        |          |         |        |        |          |         |        |        |             |         |        |        |           |       |        |        |
| 3 groove                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 2.5 mm²                                                                             | AWG 14     | 7.5 mm           |                 |                                                                                                                             |                                                                                                        |                |            |  |                  |           |         |        |        |           |          |        |        |          |       |        |        |          |         |        |        |          |         |        |        |             |         |        |        |           |       |        |        |
| wide groove                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 3.0 mm²                                                                             | AWG 12     | 7.5 mm           |                 |                                                                                                                             |                                                                                                        |                |            |  |                  |           |         |        |        |           |          |        |        |          |       |        |        |          |         |        |        |          |         |        |        |             |         |        |        |           |       |        |        |
| no groove                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 4 mm²                                                                               | AWG 12     | 7.5 mm           |                 |                                                                                                                             |                                                                                                        |                |            |  |                  |           |         |        |        |           |          |        |        |          |       |        |        |          |         |        |        |          |         |        |        |             |         |        |        |           |       |        |        |
| * on the back crimp collar                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                     |            |                  |                 |                                                                                                                             |                                                                                                        |                |            |  |                  |           |         |        |        |           |          |        |        |          |       |        |        |          |         |        |        |          |         |        |        |             |         |        |        |           |       |        |        |

Stock items in bold type

Number of contacts

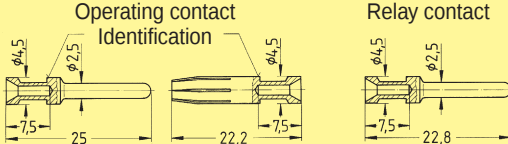
92 +



Inserts

Han  
E / EE

| Identification                                                                                                                                                                                                                                                                                                                                                                   | Series        | Part No.                                |                                         | Drawing | Dimensions in mm |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------------------|-----------------------------------------|---------|------------------|
|                                                                                                                                                                                                                                                                                                                                                                                  |               | Male insert (M)                         | Female insert (F)                       |         |                  |
| Crimp terminal<br>Order contacts<br>separately                                                                                                                                                                                                                                                                                                                                   | Han EE        |                                         |                                         |         |                  |
|                                                                                                                                                                                                                                                                                                                                                                                  | 1–46<br>47–92 | <b>09 32 046 3001</b><br>09 32 046 3011 | <b>09 32 046 3101</b><br>09 32 046 3111 |         |                  |
| <p>Dimensions for inserts see page 03.27</p> <p>Contact arrangement View from termination side</p> <div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;"> <br/>M         </div> <div style="text-align: center;"> <br/>F         </div> </div> <p>Panel cut out for inserts<br/>for use without hoods/housings</p> |               |                                         |                                         |         |                  |

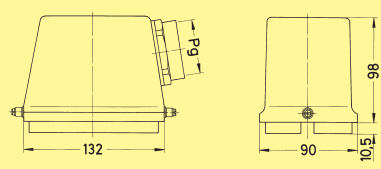
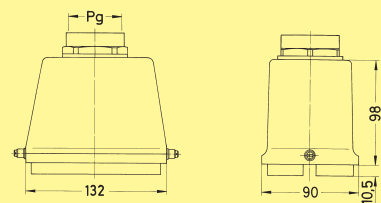
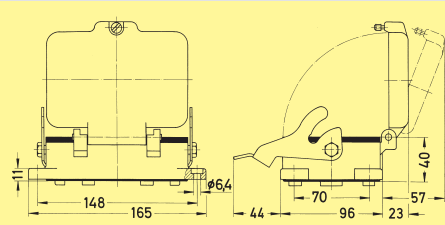
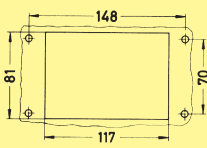
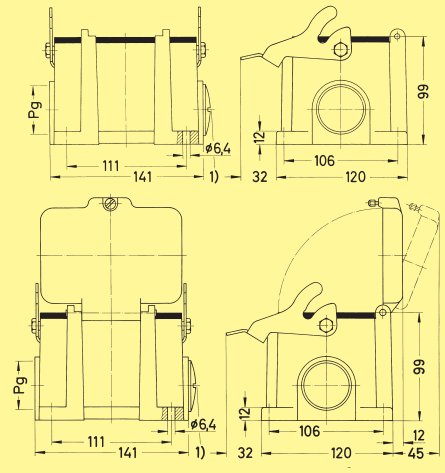
| Wire gauge                                            |        | Part No.       |                 | Drawing                                                                              | Dimensions in mm |
|-------------------------------------------------------|--------|----------------|-----------------|--------------------------------------------------------------------------------------|------------------|
| Identification                                        | (mm²)  | Male contacts  | Female contacts |                                                                                      |                  |
| Crimp contacts<br>Power contacts<br><br>silver plated | 0.5    | 09 33 000 6121 | 09 33 000 6220  |  |                  |
|                                                       | 0.75   | 09 33 000 6114 | 09 33 000 6214  |                                                                                      |                  |
|                                                       | 1.0    | 09 33 000 6105 | 09 33 000 6205  |                                                                                      |                  |
|                                                       | 1.5    | 09 33 000 6104 | 09 33 000 6204  |                                                                                      |                  |
|                                                       | 2.5    | 09 33 000 6102 | 09 33 000 6202  |                                                                                      |                  |
|                                                       | 3      | 09 33 000 6106 | 09 33 000 6206  |                                                                                      |                  |
|                                                       | 4      | 09 33 000 6107 | 09 33 000 6207  |                                                                                      |                  |
| gold plated                                           | 0.5    | 09 33 000 6122 | 09 33 000 6222  |                                                                                      |                  |
|                                                       | 0.75   | 09 33 000 6115 | 09 33 000 6215  |                                                                                      |                  |
|                                                       | 1.0    | 09 33 000 6118 | 09 33 000 6218  |                                                                                      |                  |
|                                                       | 1.5    | 09 33 000 6116 | 09 33 000 6216  |                                                                                      |                  |
|                                                       | 2.5    | 09 33 000 6123 | 09 33 000 6223  |                                                                                      |                  |
|                                                       | 4.0    | 09 33 000 6119 | 09 33 000 6221  |                                                                                      |                  |
| Relay contact<br>silver plated                        | 0.75-1 | 09 33 000 6109 |                 |                                                                                      |                  |
|                                                       | 1.5    | 09 33 000 6110 |                 |                                                                                      |                  |
|                                                       | 2.5    | 09 33 000 6111 |                 |                                                                                      |                  |

Crimp contact identification

| Identification | Wire gauge |        | Stripping length |
|----------------|------------|--------|------------------|
| no groove      | 0.5 mm²    | AWG 20 | 7.5 mm           |
| 1 groove*      | 0.75 mm²   | AWG 18 | 7.5 mm           |
| 1 groove       | 1 mm²      | AWG 18 | 7.5 mm           |
| 2 grooves      | 1.5 mm²    | AWG 16 | 7.5 mm           |
| 3 grooves      | 2.5 mm²    | AWG 14 | 7.5 mm           |
| wide groove    | 3.0 mm²    | AWG 12 | 7.5 mm           |
| no groove      | 4 mm²      | AWG 12 | 7.5 mm           |

\* on the back crimp collar

Stock items in bold type

| Identification |                                                | Part No.                                                                            | Pg                                                                                                                                                                                                              | Drawing                                  | Dimensions in mm                                                                                                                                                                                 |
|----------------|------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hoods          | Hoods<br>side-entry                            |    | <b>09 30 048 0540</b><br><b>09 30 048 0541</b><br><b>09 30 048 0542</b>                                                                                                                                         | 29<br>36<br>42                           |                                                                                                               |
|                | Hoods<br>top-entry                             |   | <b>09 30 048 0440</b><br><b>09 30 048 0441</b><br><b>09 30 048 0442</b>                                                                                                                                         | 29<br>36<br>42                           |                                                                                                              |
| Housings       | Housings<br>bulkhead mounting                  |  | with thermo-<br>plastic cover<br><b>09 30 048 0301</b><br><br>with metal cover<br><b>09 30 048 0317</b>                                                                                                         | —<br><br>—                               |  <p>Panel cut out</p>  |
|                | Housings<br>surface mounting<br>2 side-entries |  | <b>09 30 048 0290</b><br><b>09 30 048 0291</b><br><br>with thermo-<br>plastic cover<br><b>09 30 048 0295</b><br><b>09 30 048 0296</b><br><br>with metal cover<br><b>09 30 048 2295</b><br><b>09 30 048 2296</b> | 29<br>36<br><br>29<br>36<br><br>29<br>36 |  <p><sup>1)</sup> Blind way</p>                                                                             |

## Modified contact arrangement up to 1000 V

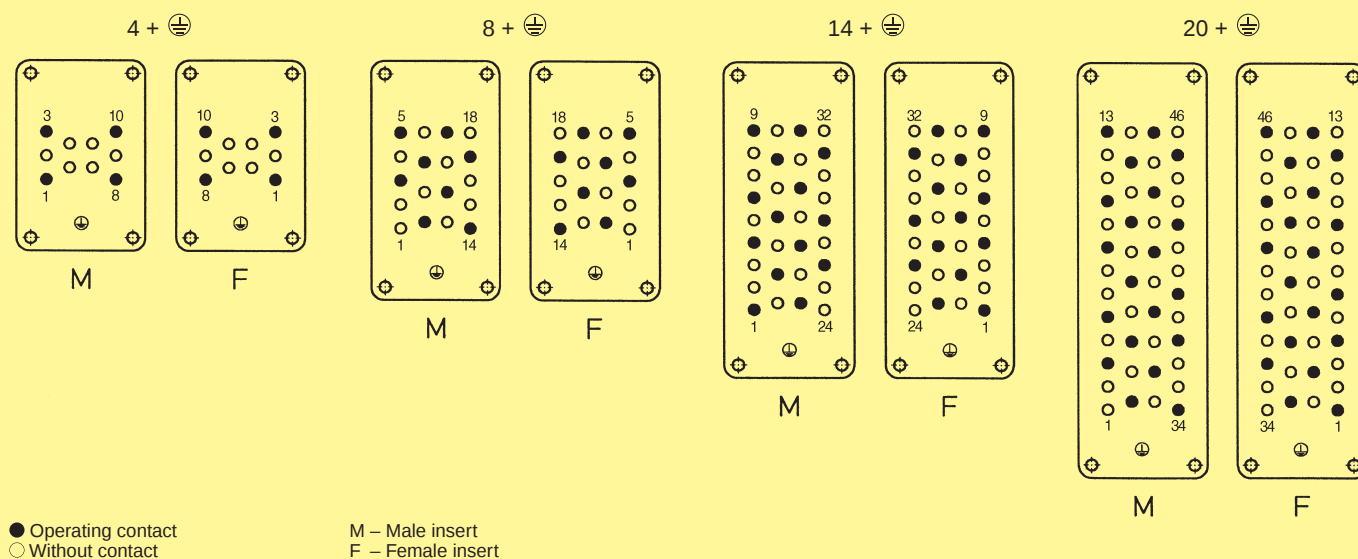
The connector series Han EE equipped with all contacts may be used for voltages up to 500 V ~ insulation group 3 (C). A modified contact loading arrangement permits use up to 1000 V ~ insulation group also in insulation group C.

Fully equipped connectors may also be used up to 1000 V ~ but in a lower insulation group. See page 00.17, chart 4.

According to VDE 0627 connectors should not be coupled or decoupled under electrical load.

### 690 V Insulation group 3 (C)

Contact arrangement View from termination side



### 1 000 V Insulation group 3 (C)

Contact arrangement View from termination side

