

## Contents

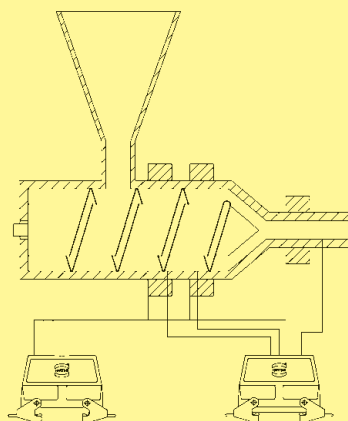
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## Features

- Connector for temperature measurement conductors - Suitable for injection moulding machines
- Iron and constantan contacts according to DIN IEC 584 type J, screw and crimp terminals
- Mixed loading of thermocouple crimp contacts and standard contacts within one insert possible
- Thermocouple crimp contacts can be combined within Han-Modular®
- According to EUROMAP 14, Part 1

## Application



Overview of a heating circuit



Connector at an injection moulding machine

## Technical characteristics

|                |                                  |
|----------------|----------------------------------|
| Specifications | DIN EN 60 664-1<br>DIN EN 61 984 |
|----------------|----------------------------------|

### Inserts

|                                   |                              |
|-----------------------------------|------------------------------|
| Electrical data acc. to EN 61 984 |                              |
| - Han A®                          | <b>16 A 250 V 4 kV 3</b>     |
| Rated current                     | 16 A                         |
| Rated voltage                     | 250 V                        |
| Rated impulse voltage             | 4 kV                         |
| Pollution degree                  | 3                            |
| - Han E®                          | <b>16 A 500 V 6 kV 3</b>     |
| - Han® Q                          | <b>16 A 230/400 V 4 kV 3</b> |
| - Han D®                          | <b>10 A 50 V 4 kV 3</b>      |
| - Han DD®                         | <b>10 A 250 V 4 kV 3</b>     |
| Insulation resistance             | ≥ 10 <sup>10</sup> Ω         |
| Material                          | polycarbonate                |
| Limiting temperatures             | -40 °C ... +125 °C           |
| Mechanical working life           |                              |
| - mating cycles                   | ≥ 500                        |
| Flammability acc. to UL 94        | V 0                          |

### Contacts

|                                |  |
|--------------------------------|--|
| Material                       | constantan                                     |
| Identification acc. to IEC 584 | type J   |
| Surface                        | not coated                                     |
| Contact resistance             | ≤ 1 mΩ   |
| Crimp terminal Han E®          | 0.14 ... 0.5 mm <sup>2</sup><br>AWG 24 ... 20  |
| Crimp terminal Han D®          | 0.14 ... 0.37 mm <sup>2</sup><br>AWG 24 ... 22 |
| Screw terminal                 | 2.5 mm <sup>2</sup> / AWG 14                   |
| - Tightening/test torque       | 0.5 Nm   |
| Material                       | iron   |
| Identification acc. to IEC 584 | type J   |
| Surface                        | gold   |
| Contact resistance             | ≤ 1 mΩ   |
| Crimp terminal Han E®          | 0.14 ... 0.5 mm <sup>2</sup><br>AWG 24 ... 20  |
| Crimp terminal Han D®          | 0.14 ... 0.37 mm <sup>2</sup><br>AWG 24 ... 22 |
| Screw terminal                 | 2.5 mm <sup>2</sup> / AWG 14                   |
| - Tightening/test torque       | 0.5 Nm   |

### Hoods/Housings (see chapter 30 / 31)

|   |                     |
|---|---------------------|
| Material Hoods/Housings                 | aluminium die-cast  |
| Surface                                 | powder-coated, grey |
| Locking                                 | Stainless steel     |
| Hoods/Housings sealing                  | NBR                 |
| Limiting temperatures                   | -40 °C ... +125 °C  |
| Degree of protection acc. to DIN 40 050 | IP 65               |



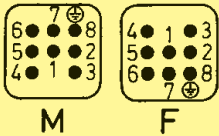
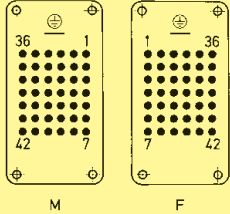
| Identification                         | Series                         | Part number  |  | Contact arrangement<br>view termination side                     | Dimensions in mm |
|--|--------------------------------|--|--|--|------------------|
|  |                                | Male insert (M)                                    | Female insert (F)                                  |  |                  |
| Screw terminal                         | Han A®<br>16 A                 | 09 20 016 2691                                     | 09 20 016 2891                                     | <p>● Contacts FE<br/>○ Contacts CuNi</p>                         |                  |
| Screw terminal<br>with wire protection | Han E®<br>10 E<br>16 E<br>24 E | 09 33 010 2691<br>09 33 016 2691<br>09 33 024 2691 | 09 33 010 2791<br>09 33 016 2791<br>09 33 024 2791 | <p>● Contacts FE<br/>○ Contacts CuNi</p>                         |                  |
| Screw terminal<br>with wire protection | Han E®<br>24 E                 | 09 33 024 2689                                     | 09 33 024 2789                                     | <p>⊗ Standard contacts<br/>● Contacts FE<br/>○ Contacts CuNi</p> |                  |


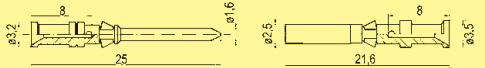
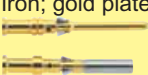
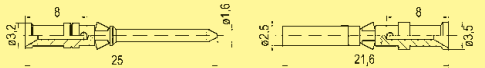

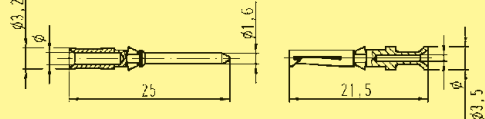
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| Identification                                       | Series | Part number           |                       | Contact arrangement<br>view termination side | Dimensions in mm |                       |
|--|--------|-----------------------|-----------------------|--|------------------|-----------------------|
|  |        | Male insert (M)       | Female insert (F)     |  |                  |                       |
| Crimp terminal<br>Order crimp contacts<br>separately | Han E® |                       |                       |  |                  |                       |
|  | 6 E    | <b>09 33 006 2602</b> | <b>09 33 006 2702</b> |  |                  |                       |
|  | 10 E   | <b>09 33 010 2602</b> | <b>09 33 010 2702</b> |  |                  |                       |
|  | 16 E   | <b>09 33 016 2602</b> | <b>09 33 016 2702</b> |  |                  |                       |
|  | 24 E   | <b>09 33 024 2602</b> | <b>09 33 024 2702</b> |  |                  |                       |
| Crimp terminal<br>Order crimp contacts<br>separately | Han® Q |                       |                       |  |                  |                       |
|  |        | <b>09 12 005 3001</b> | <b>09 12 005 3101</b> |  |                  |                       |
| Crimp terminal<br>Order crimp contacts<br>separately | Han A® |                       |                       |  |                  |                       |
|  |        | 10 A                  | <b>09 20 010 3001</b> |  |                  | <b>09 20 010 3101</b> |
|  |        | 16 A                  | <b>09 20 016 3001</b> |  |                  | <b>09 20 016 3101</b> |

| Identification   | Wire gauge<br>(mm <sup>2</sup> ) | Part number           |                       | Drawing | Dimensions in mm |
|--|----------------------------------|-----------------------|-----------------------|---------|------------------|
|  |                                  | Male contact          | Female contact        |         |                  |
| Crimp contacts<br>Han E®<br><br>Constantan<br><br><br>Iron; gold plated<br><br><br>Standard contacts;<br>silver plated<br> | 0.14-0.37                        | <b>09 33 000 6163</b> | <b>09 33 000 6263</b> |         |                  |
|  |                                  | 0.5                   | <b>09 33 000 6162</b> |         |                  |
|  | 0.14-0.37                        | <b>09 33 000 6173</b> | <b>09 33 000 6273</b> |         |                  |
|  |                                  | 0.5                   | <b>09 33 000 6172</b> |         |                  |
|  | 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                                | <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> |         |                  |
|  | 4                                | <b>09 33 000 6107</b> | <b>09 33 000 6207</b> |         |                  |

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| Identification                                    | Series                                       | Part number  |  | Contact arrangement<br>view termination side                                       | Dimensions in mm |
|---|--|--|--|--|------------------|
|   |  | Male insert (M)  | Female insert (F)  |  |                  |
| Crimp terminal<br>Order crimp contacts separately | Han D®<br>8 D                                | <b>09 36 008 3001</b>  | <b>09 36 008 3101</b>  |  |                  |
| Crimp terminal<br>Order crimp contacts separately | Han DD®<br>24 DD<br>42 DD<br>72 DD<br>108 DD | <b>09 16 024 3001</b><br><b>09 16 042 3001</b><br><b>09 16 072 3001</b><br><b>09 16 108 3001</b> | <b>09 16 024 3101</b><br><b>09 16 042 3101</b><br><b>09 16 072 3101</b><br><b>09 16 108 3101</b> |  |                  |

| Identification  | Wire gauge<br>(mm <sup>2</sup> )            | Part number  |  | Drawing  | Dimensions in mm |
|---|---|--|--|--|------------------|
|   |   | Male contact   | Female contact   |  |                  |
| Crimp contacts<br>Han D®<br>Constantan<br> | 0.14-0.37                                   | <b>09 15 000 6161</b>  | <b>09 15 000 6261</b>  |    |                  |
| Iron; gold plated<br>                    | 0.14-0.37                                   | <b>09 15 000 6171</b>  | <b>09 15 000 6271</b>  |  |                  |
| Standard contacts;<br>silver plated<br>  | 0.14-0.37<br>0.5<br>0.75<br>1<br>1.5<br>2.5 | <b>09 15 000 6104</b><br><b>09 15 000 6103</b><br><b>09 15 000 6105</b><br><b>09 15 000 6102</b><br><b>09 15 000 6101</b><br><b>09 15 000 6106</b> | <b>09 15 000 6204</b><br><b>09 15 000 6203</b><br><b>09 15 000 6205</b><br><b>09 15 000 6202</b><br><b>09 15 000 6201</b><br><b>09 15 000 6206</b> |  |                  |

Dimensions for inserts see chapter of corresponding series

Stock items in bold type

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