

# Han® High Temp



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# Han® High Temp

## Description

Han® High Temp is a new product series that is based on our well-established Han® B and Han® E series. We used high-quality materials with wide temperature ranges to produce connectors that are uniquely suited for a wide variety of applications.

These connectors can withstand temperatures up to 200 °C – so they can be used directly in machines and facilities that would otherwise require cumbersome and complex constructions.

For our users, this delivers direct advantages:

- **The electro-mechanical design process is optimized.**  
Machine parts which are exposed to high temperatures can be designed modularly.
- **The work process is optimized**  
since lower wiring complexity results in reduced maintenance costs.
- **The after-sales phase is optimized**  
because this more service-friendly approach results in less outages and down times.

## Design overview

The basic structure of the Han® High Temp connector consists of a bulkhead mounted housing and a cable-side hood.

**Hoods and housings:**

The aluminium die-cast hoods and housings feature a highly compressed surface with excellent non-stick properties. It also has a special non-stick coating on the bulkhead-side seal which allows easy handling without sticking.

**Inserts:**

The Han® High Temp series features very rugged contact inserts, which are really the heart of any connector. The LCP injection-moulded insert in combination with temperature resistant ground terminal delivers outstanding temperature resistance coupled with excellent mechanical stability.

**Contacts:**

Our new temperature resistant contacts, for either screw or crimp terminations, ensure reliable connections with minimal contact resistance even at extreme temperatures.



Han® High Temp connectors remain robust and reliable for their entire lifespan!

# Han® High Temp inserts

## Features

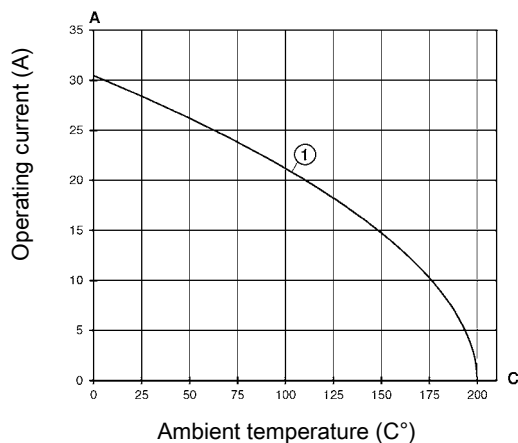
- Reliable also at extreme temperatures up to 200 °C
- All piece parts (contacts, insert material, hoods and housings, seals and grounding elements) are designed in a temperature resistant way
- Developed on the basis of the proven Han® E series

## Derating

### Current carrying capacity

The current carrying capacity of the connectors is limited by the thermal load capability of the contact element material including the connections and the insulating parts. The derating curve is therefore valid for currents which flow constantly (non-intermittent) through each contact element of the connector evenly, without exceeding the allowed maximum temperature.

Measuring and testing techniques acc. to IEC 60512-5-2



① Wire cross section 2.5 mm<sup>2</sup>

## Technical characteristics

Contacts	6, 10, 16, 24
Electrical data acc. to IEC 61984	<b>16 A 400 V 6 kV 3</b>
Rated current	16 A
Rated voltage	400 V
Rated impulse voltage	6 kV
Pollution degree	3
Insulation resistance	≥10 <sup>10</sup> Ohm
Limiting temperatures with High Temp components	-40 °C ... 200 °C
Flammability (insert) acc. to UL 94	V 0
Mating cycles	≥500
Tightening torque	0.5 Nm
Material (insert)	LCP
Colour (insert)	RAL 7032 (light grey)

## Specifications and approvals

IEC 60664-1  
IEC 61984

## Details

Han® High Temp crimp inserts are only for use with the special Han® High Temp crimp contacts.

# Han® High Temp inserts

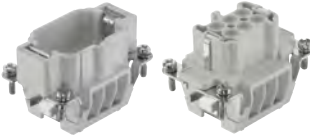
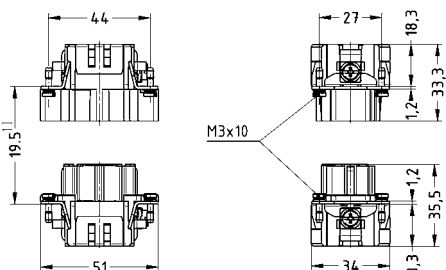
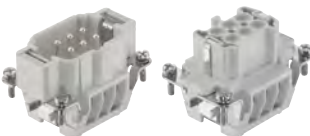
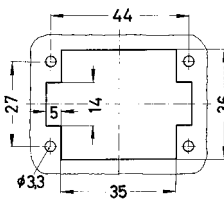
Size 6 B



Number of contacts

6+

400 V  
16 A

Identification	Wire cross section (mm²)	Part number male                  female		Drawing Dimensions in mm
<p>Han® High Temp, Crimp terminal</p>  <p>Please order crimp contacts separately.</p>		09 33 806 2602	09 33 806 2702	 <p>1) Distance for contact max. 21 mm</p>
<p>Han® High Temp, Screw terminal, with wire protection</p> 	0.5–2.5	09 33 806 2601	09 33 806 2701	 <p>Panel cut out</p>

High Temp

# Han® High Temp inserts


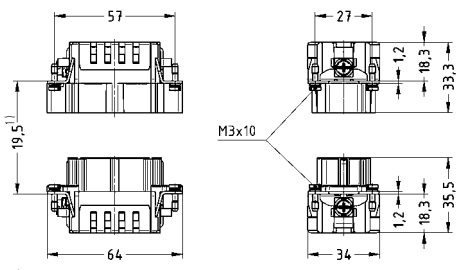

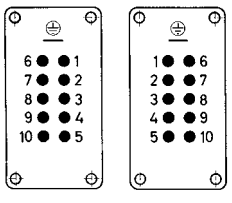
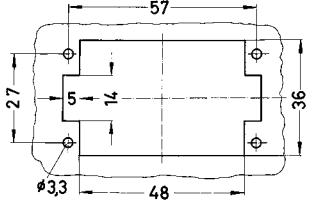
Size 10 B



Number of contacts

10+

400 V  
16 A

Identification	Wire cross section (mm²)	Part number male                  female		Drawing Dimensions in mm
<p>Han® High Temp, Crimp terminal</p>  <p>Please order crimp contacts separately.</p>		09 33 810 2602	09 33 810 2702	 <p>1) Distance for contact max. 21 mm</p>
<p>Han® High Temp, Screw terminal, with wire protection</p> 	0.5 – 2.5	09 33 810 2601	09 33 810 2701	 <p>M                  F</p> <p>Contact arrangement (view from termination side)</p>  <p>Panel cut out</p>

High Temp

# Han® High Temp inserts


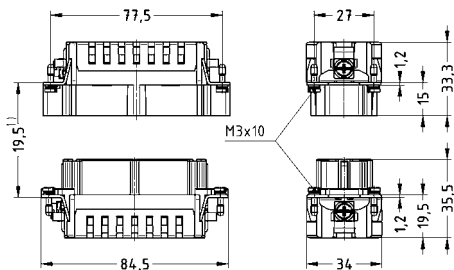

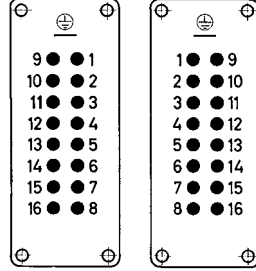
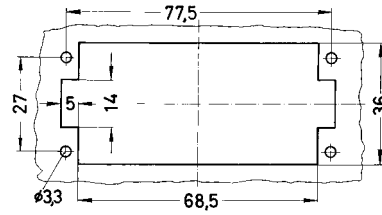
Size 16 B



Number of contacts

16+

400 V  
16 A

Identification	Wire cross section (mm²)	Part number male                  female		Drawing Dimensions in mm
<p>Han® High Temp, Crimp terminal</p>  <p>Please order crimp contacts separately.</p>		09 33 816 2602	09 33 816 2702	 <p>1) Distance for contact max. 21 mm</p>
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High Temp

# Han® High Temp inserts


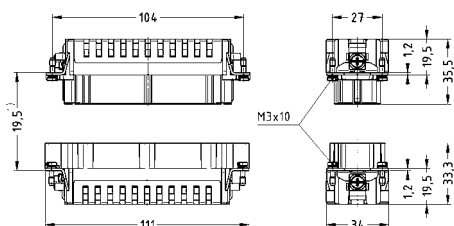

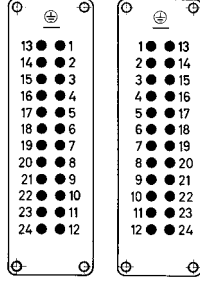
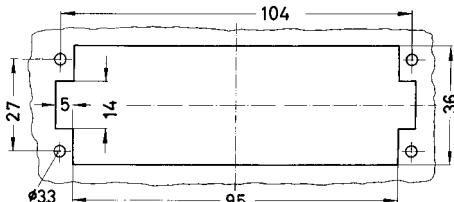
Size 24 B



Number of contacts

24+

400 V  
16 A

Identification	Wire cross section (mm <sup>2</sup> )	Part number male                  female		Drawing Dimensions in mm
<p>Han® High Temp, Crimp terminal</p>  <p>Please order crimp contacts separately.</p>		09 33 824 2602	09 33 824 2702	 <p>1) Distance for contact max. 21 mm</p>
<p>Han® High Temp, Screw terminal, with wire protection</p> 	0.5 – 2.5	09 33 824 2601	09 33 824 2701	 <p>Contact arrangement (view from termination side)</p>  <p>Panel cut out</p>

High Temp

# Han® High Temp contacts



## Technical characteristics


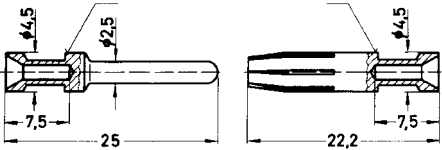
Limiting temperatures with High Temp components -40 °C ... 200 °C  
 Material (contact) copper alloy

## Details

**Crimping tools** see chapter 90

**Remarks on the crimp technique**

The wire gauges mentioned in the catalogue refer to geometric wire gauges of cables.

Identification	Wire cross section (mm²)	Part number		Drawing Dimensions in mm																											
		male	female																												
Crimp contact, silver plated contacts, contact resistance ≤1 mOhm 	0.5	09 33 800 6121	09 33 800 6220																												
	0.75	09 33 800 6114	09 33 800 6214																												
	1	09 33 800 6105	09 33 800 6205																												
	1.5	09 33 800 6104	09 33 800 6204																												
	2.5	09 33 800 6102	09 33 800 6202																												
				<table border="1"> <thead> <tr> <th>Identification</th> <th>Wire gauge</th> <th>Stripping length</th> </tr> </thead> <tbody> <tr> <td>no groove</td> <td>0.14-0.37 mm² AWG 26-22</td> <td>7.5 mm</td> </tr> <tr> <td>no groove</td> <td>0.5 mm² AWG 20</td> <td>7.5 mm</td> </tr> <tr> <td>1 groove*</td> <td>0.75 mm² AWG 18</td> <td>7.5 mm</td> </tr> <tr> <td>1 groove</td> <td>1 mm² AWG 18</td> <td>7.5 mm</td> </tr> <tr> <td>2 grooves</td> <td>1.5 mm² AWG 16</td> <td>7.5 mm</td> </tr> <tr> <td>3 grooves</td> <td>2.5 mm² AWG 14</td> <td>7.5 mm</td> </tr> <tr> <td>wide groove</td> <td>3 mm² AWG 12</td> <td>7.5 mm</td> </tr> <tr> <td>no groove</td> <td>4 mm² AWG 12</td> <td>7.5 mm</td> </tr> </tbody> </table> <p>* on the back crimp collar</p>	Identification	Wire gauge	Stripping length	no groove	0.14-0.37 mm² AWG 26-22	7.5 mm	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 mm² AWG 12	7.5 mm	no groove	4 mm² AWG 12	7.5 mm
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3 grooves	2.5 mm² AWG 14	7.5 mm																													
wide groove	3 mm² AWG 12	7.5 mm																													
no groove	4 mm² AWG 12	7.5 mm																													

High Temp



# Han® High Temp hoods/housings



## Features

- Reliable also at extreme temperatures up to 200 °C
- All piece parts (contacts, insert material, hoods and housings, seals and grounding elements) are designed in a temperature resistant way
- Hoods/Housings, corrosion resistant metal
- Electrically conductive surface

## Technical characteristics

Limiting temperatures	-40 °C ... 125 °C
Limiting temperatures with High Temp components	-40 °C ... 200 °C
Protection class acc. to UL 50	NEMA type 4/4X/12
Degree of protection acc. to IEC 60529	IP65
Material (hoods/housings)	aluminium
Surface (hoods/housings)	unpainted
Material (locking lever)	stainless steel
Material (seal)	FPM (red)

## Specifications and approvals




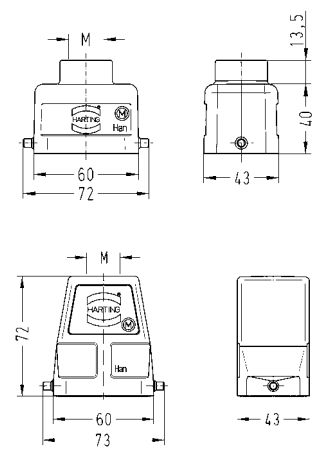

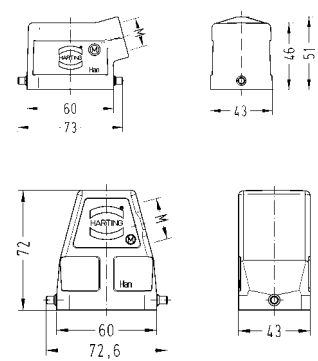

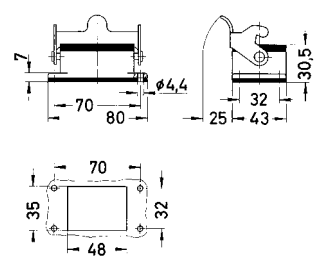
High Temp

# Han® High Temp hoods/housings

Size 6 B



single locking lever

Identification	Cable entry	Part number		Drawing Dimensions in mm
		Low construction	High construction	
Han® EMC/B, Han® High Temp, Hoods, top entry  	1xM20 1xM25 1xM32	19 62 806 1440	19 62 806 0446 19 62 806 0447	
Han® EMC/B, Han® High Temp, Hoods, side entry  	1xM20 1xM25 1xM32	19 62 806 1540	19 62 806 0546 19 62 806 0547	
Han® High Temp, Bulkhead mounted housings  		09 62 806 0391		 <p>Panel cut out</p>


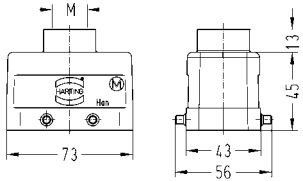
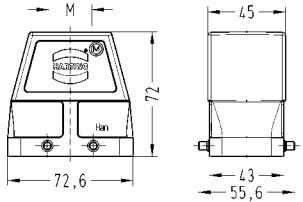

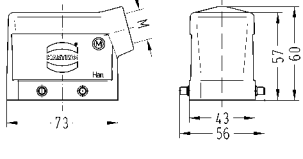
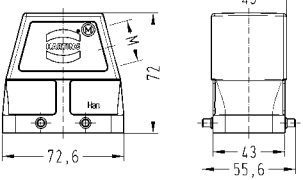

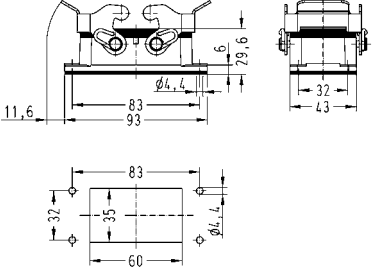
High Temp

# Han® High Temp hoods/housings

Size 10 B



double locking lever

Identification	Cable entry	Part number		Drawing Dimensions in mm
		Low construction	High construction	
Han® EMC/B, Han® High Temp, Hoods, top entry  	1xM20 1xM25 1xM32	19 62 810 1420 19 62 810 1421	19 62 810 0426 19 62 810 0427	 
Han® EMC/B, Han® High Temp, Hoods, side entry  	1xM20 1xM25 1xM32	19 62 810 1520	19 62 810 0526 19 62 810 0527	 
Han® High Temp, Bulkhead mounted housings  		09 62 810 0391		 Panel cut out


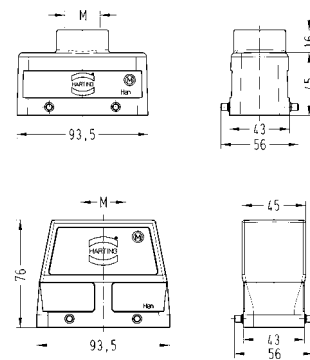

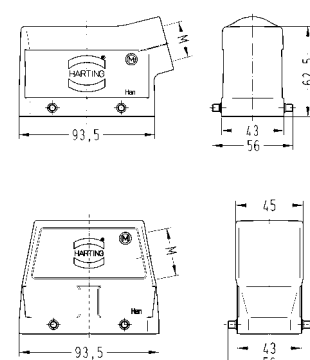

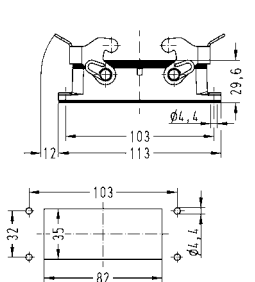
High Temp

# Han® High Temp hoods/housings

Size 16 B



double locking lever

Identification	Cable entry	Part number		Drawing Dimensions in mm
		Low construction	High construction	
Han® EMC/B, Han® High Temp, Hoods, top entry  	1xM25 1xM32	19 62 816 1421	19 62 816 0427	
Han® EMC/B, Han® High Temp, Hoods, side entry  	1xM25 1xM32	19 62 816 1521	19 62 816 0527	
Han® High Temp, Bulkhead mounted housings  		09 62 816 0391		 Panel cut out


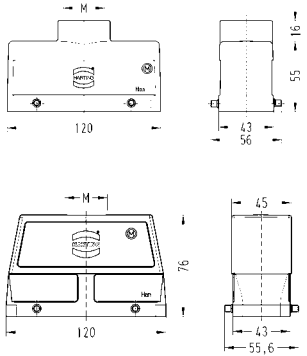

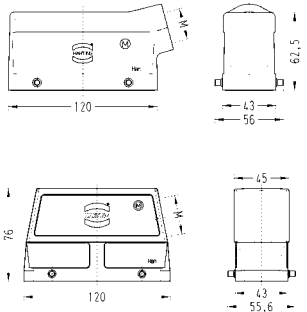

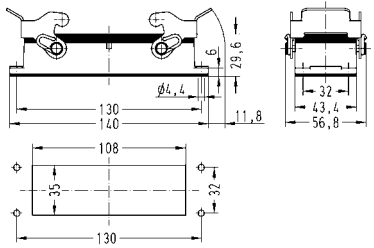
High Temp

# Han® High Temp hoods/housings

Size 24 B



double locking lever

Identification	Cable entry	Part number		Drawing Dimensions in mm
		Low construction	High construction	
Han® EMC/B, Han® High Temp, Hoods, top entry  	1xM32	19 62 824 1422	19 62 824 0427	
Han® EMC/B, Han® High Temp, Hoods, side entry  	1xM25 1xM32 1xM40	19 62 824 1521	19 62 824 0527 19 62 824 0528	
Han® High Temp, Bulkhead mounted housings  		09 62 824 0391		 <p>Panel cut out</p>

High Temp