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## Features

- 6 IDCs + PE for 2.5 mm<sup>2</sup> up to 6 mm<sup>2</sup> wire gauge
- No interruption of the energy supply
- Space-saving and compact design
- Leading protective ground within the insert
- Assembly with standard tools

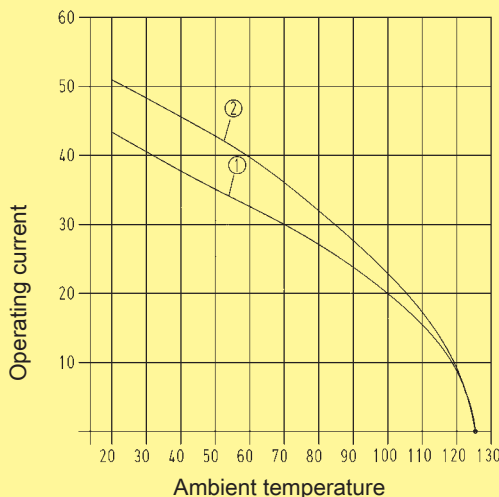
## Description

The Han-Power® S connector is suitable for the assembly of serial power bus. Having assembled the energy supply Han-Power® S can be inserted at any place of the power cable. The cable mantle has to be removed, the conductor is placed without interruption in the IDC. Han-Power® S is suitable for cables with single strands manufactured acc. to DIN VDE 0281/ DIN VDE 0295 with wire gauges of 2.5 mm<sup>2</sup> up to 6 mm<sup>2</sup>. For the distribution of the device Han-Compact® hoods or cable to cable housings are used. The power supply has to be realized with one Han-Compact® cable to cable hood.

## Derating diagram

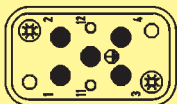
The power rating of the connectors is limited by the thermal load capability of the contact element material including the connections and the insulating parts. The derating curve is therefore valid for currents which flow constantly (non-intermittent) through each contact element of the connector evenly,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

Measuring and testing techniques according to DIN EN 60 512-5



① Han® Q 4/2 Wire gauge: 4 mm<sup>2</sup>

② Han® Q 4/2 Wire gauge: 6 mm<sup>2</sup>



Han® Q 4/2 fully loaded with wire gauge 4x 6 mm<sup>2</sup>

## Technical characteristics

Specifications	DIN EN 61 984 DIN VDE 0110
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### Han-Power® S

Number of contacts	
- Power contacts	4 + PE
- Signal contacts	2
Electrical data	
acc. to EN 61 984	<b>40 A 400/690 V 6 kV 3</b>
Rated current	40 A
Rated voltage conductor - ground	400 V
Rated voltage conductor - conductor	690 V
Rated impulse voltage	6 kV
Pollution degree	3
Rated voltage acc. to UL/CSA	600 V
Material	Polycarbonate
Insulation resistance	≥ 10 <sup>10</sup> kΩ
Limiting temperatures	-40 °C ... 125 °C
Flammability acc. to UL 94	V 0
Degree of protection acc. to EN 60 529	IP 65

### Contacts Han® C

Material	copper alloy
Surface	
- hard-silver plated	5 μm Ag
Contact resistance	≤ 0.3 mΩ
Crimp terminal	
- mm <sup>2</sup>	2.5 - 6 mm <sup>2</sup>
- AWG	AWG 14 - 10
Max. insulation diameter of single strand	5 mm

### Hoods/housings Han-Compact®

Material	Polycarbonate RAL 9005
Hoods/Housings sealing	NBR
Temperature range	
- Connecting temperature	-25 °C ... 40 °C
- Working temperature	-25 °C ... 80 °C
Flammability acc. to UL 94	V 0
Degree of protection acc. to EN 60 529 for coupled connector	IP 65

### cable

Design of conductor acc. to	• DIN VDE 0281 • DIN VDE 0295
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#### Single strand

Wire gauge 2.5 mm <sup>2</sup>	
- Number of single strands	50 x 0.25 mm Ø
- Outer diameter	3.6 mm Ø
Wire gauge 4 mm <sup>2</sup>	
- Number of single strands	56 x 0.3 mm Ø
- Outer diameter	4.2 mm Ø



with 1x Han® Q 4/2

Identification	Part number	Drawing	Dimensions in mm
Han-Power® S Power supply Han® Q 4/2; 1 moulded Han-Compact® Hoods	2.5 - 4 mm <sup>2</sup>	<b>09 12 008 4804</b>	
	4 - 6 mm <sup>2</sup>	<b>09 12 008 4806</b>	

Power Distribution

Identification	Part number	Drawing	Dimensions in mm
System cables in fixed lengths Cable lengths (total length) in m pre-assembled on both sides plastic hood, black top entry cable to cable hood with male insert and hood with female insert cable: 5x 4 mm <sup>2</sup>	1.5 3 5 10 15 30	<b>20 88 641 1015</b> <b>20 88 641 1030</b> <b>20 88 641 1050</b> <b>20 88 641 1100</b> <b>20 88 641 1150</b> <b>20 88 641 1300</b>	

Stock items in bold type

## Features

- 6 IDCs + PE for 2.5 mm<sup>2</sup> up to 6 mm<sup>2</sup> wire gauge
- No interruption of the energy supply
- Space-saving and compact design
- Leading protective ground within the insert
- Assembly with standard tools

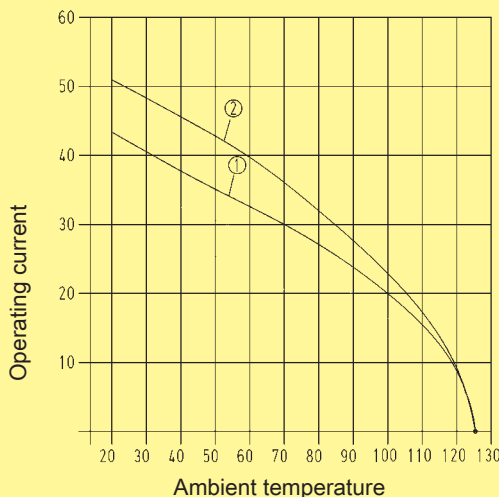
## Description

The Han-Power® S connector is suitable for the assembly of serial power bus. Having assembled the energy supply Han-Power® S can be inserted at any place of the power cable. The cable mantle has to be removed, the conductor is placed without interruption in the IDC. Han-Power® S is suitable for cables with single strands manufactured acc. to DIN VDE 0281/ DIN VDE 0295 with wire gauges of 2.5 mm<sup>2</sup> up to 6 mm<sup>2</sup>. For the distribution of the device Han-Compact® hoods or cable to cable housings are used. The power supply has to be realized with one Han-Compact® cable to cable hood.

## Derating diagram

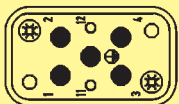
The power rating of the connectors is limited by the thermal load capability of the contact element material including the connections and the insulating parts. The derating curve is therefore valid for currents which flow constantly (non-intermittent) through each contact element of the connector evenly,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

Measuring and testing techniques according to DIN EN 60 512-5



① Han® Q 4/2 Wire gauge: 4 mm<sup>2</sup>

② Han® Q 4/2 Wire gauge: 6 mm<sup>2</sup>



Han® Q 4/2 fully loaded with wire gauge 4x 6 mm<sup>2</sup>

## Technical characteristics

Specifications	DIN EN 61 984 DIN VDE 0110
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### Han-Power® S

Number of contacts	
- Power contacts	4 + PE
- Signal contacts	2
Electrical data	
acc. to EN 61 984	<b>40 A 400/690 kV 6 kV 3</b>
Rated current	40 A
Rated voltage conductor - ground	400 V
Rated voltage conductor - conductor	690 kV
Rated impulse voltage	6 kV
Pollution degree	3
Rated voltage acc. to UL/CSA	600 V
Material	Polycarbonate
Insulation resistance	≥ 10 <sup>10</sup> kΩ
Limiting temperatures	-40 °C ... 125 °C
Flammability acc. to UL 94	V 0
Degree of protection acc. to EN 60 529	IP 65

### Contacts Han® C

Material	copper alloy
Surface	
- hard-silver plated	5 μm Ag
Contact resistance	≤ 0.3 mΩ
Crimp terminal	
- mm <sup>2</sup>	4 - 6 mm <sup>2</sup>
- AWG	AWG 14 - 10
Max. insulation diameter of single strand	5 mm

### Hoods/housings Han-Compact®

Material	Polycarbonate RAL 9005
Hoods/Housings sealing	NBR
Temperature range	
- Connecting temperature	-25 °C ... 40 °C
- Working temperature	-25 °C ... 80 °C
Flammability acc. to UL 94	V 0
Degree of protection acc. to EN 60 529 for coupled connector	IP 65

### cable

Design of conductor acc. to	• DIN VDE 0281 • DIN VDE 0295
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#### Single strand

Wire gauge 2.5 mm <sup>2</sup>	
- Number of single strands	50 x 0.25 mm Ø
- Outer diameter	3.6 mm Ø
Wire gauge 4 mm <sup>2</sup>	
- Number of single strands	56 x 0.3 mm Ø
- Outer diameter	4.2 mm Ø



with 2x Han® Q 4/2

Identification	Part number	Drawing	Dimensions in mm
<p>Han-Power® S</p> <p>Power supply</p> <p>Han® Q 4/2; 2 screwed</p> <p>Han-Compact® Housings, bulkhead mounting</p> <p>4 - 6 mm<sup>2</sup></p>	<p><b>09 12 008 4807</b></p>		

Power Distribution

Identification	Part number	Drawing	Dimensions in mm
<p>System cables in fixed lengths</p> <p>Cable lengths (total length) in m</p> <p>pre-assembled on both sides</p> <p>plastic hood, black</p> <p>top entry</p> <p>cable to cable hood with male insert</p> <p>and hood with female insert</p> <p>cable: 5x 4 mm<sup>2</sup></p>	<p>1.5 <b>20 88 641 1015</b></p> <p>3 <b>20 88 641 1030</b></p> <p>5 <b>20 88 641 1050</b></p> <p>10 <b>20 88 641 1100</b></p> <p>15 <b>20 88 641 1150</b></p> <p>30 <b>20 88 641 1300</b></p>		

Stock items in bold type

## Features

- 6 IDCs + PE for 2.5 mm<sup>2</sup> up to 6 mm<sup>2</sup> wire gauge
- No interruption of the energy supply
- Space-saving and compact design
- Leading protective ground within the insert
- Assembly with standard tools

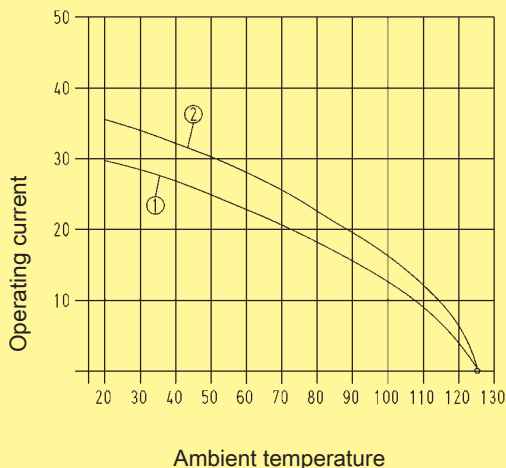
## Description

The Han-Power® S connector is suitable for the assembly of serial power bus. Having assembled the energy supply Han-Power® S can be inserted at any place of the power cable. The cable mantle has to be removed, the conductor is placed without interruption in the IDC. Han-Power® S is suitable for cables with single strands manufactured acc. to DIN VDE 0281/ DIN VDE 0295 with wire gauges of 2.5 mm<sup>2</sup> up to 6 mm<sup>2</sup>. For the distribution of the device Han-Compact® hoods or cable to cable housings are used. The power supply has to be realized with one Han-Compact® cable to cable hood.

## Derating diagram

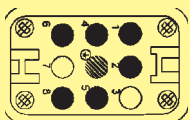
The power rating of the connectors is limited by the thermal load capability of the contact element material including the connections and the insulating parts. The derating curve is therefore valid for currents which flow constantly (non-intermittent) through each contact element of the connector evenly,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

Measuring and testing techniques according to DIN EN 60 512-5



① Han® Q 8/0 Wire gauge: 2.5 mm<sup>2</sup>

② Han® Q 8/0 Wire gauge: 4 mm<sup>2</sup>



Han® Q 8/0 partly loaded with wire gauge 7x 4 mm<sup>2</sup>

## Technical characteristics

Specifications	DIN EN 61 984 DIN VDE 0110
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### Han-Power® S

Number of contacts	
- Power contacts	6 + PE
Electrical data	
acc. to EN 61 984	<b>25 A 500 V 6 kV 3</b>
Rated current	25 A
Rated voltage	500 V
Rated impulse voltage	6 kV
Pollution degree	3
Rated voltage	
acc. to UL/CSA	600 V
Material	Polycarbonate
Insulation resistance	≥ 10 <sup>10</sup> kΩ
Limiting temperatures	-40 °C ... 125 °C
Flammability acc. to UL 94	V 0
Degree of protection acc. to EN 60 529	IP 65

### Contacts Han E®

Material	copper alloy
Surface	
- hard-silver plated	3 μm Ag
Contact resistance	≤ 1 mΩ
Crimp terminal	
- mm <sup>2</sup>	2.5 - 4 mm <sup>2</sup>
- AWG	AWG 14 - 12

### Hoods/housings Han-Compact®

Material	Polycarbonate RAL 9005
Hoods/Housings sealing	NBR
Temperature range	
- Connecting temperature	-25 °C ... 40 °C
- Working temperature	-25 °C ... 80 °C
Flammability acc. to UL 94	V 0
Degree of protection acc. to EN 60 529 for coupled connector	IP 65

### cable

Design of conductor acc. to	• DIN VDE 0281 • DIN VDE 0295
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#### Single strand

Wire gauge 2.5 mm <sup>2</sup>	
- Number of single strands	50 x 0.25 mm Ø
- Outer diameter	3.6 mm Ø
Wire gauge 4 mm <sup>2</sup>	
- Number of single strands	56 x 0.3 mm Ø
- Outer diameter	4.2 mm Ø



with 1x Han® Q 8/0

Identification	Part number	Drawing	Dimensions in mm
<p>Han-Power® S</p> <p>Power supply</p> <p>Han® Q 8/0; 1 moulded</p> <p>Han-Compact® Hoods</p>	<p>2.5 - 4 mm<sup>2</sup>     <b>09 12 008 4801</b></p> <p>4 - 6 mm<sup>2</sup>     <b>09 12 008 4811</b></p>		

Power Distribution

Identification	Part number	Drawing	Dimensions in mm
<p>System cables in fixed lengths</p> <p>Cable lengths (total length) in m</p> <p>pre-assembled on both sides</p> <p>plastic hood, black</p> <p>top entry</p> <p>cable to cable hood with male insert</p> <p>and hood with female insert</p> <p>cable: 7x 2.5 mm<sup>2</sup></p>	<p>1.5     <b>20 88 841 0015</b></p> <p>3     <b>20 88 841 0030</b></p> <p>5     <b>20 88 841 0050</b></p> <p>10     <b>20 88 841 0100</b></p> <p>15     <b>20 88 841 0150</b></p> <p>30     <b>20 88 841 0300</b></p>		

Stock items in bold type

## Features

- 6 IDCs + PE for 2.5 mm<sup>2</sup> up to 6 mm<sup>2</sup> wire gauge
- No interruption of the energy supply
- Space-saving and compact design
- Leading protective ground within the insert
- Assembly with standard tools

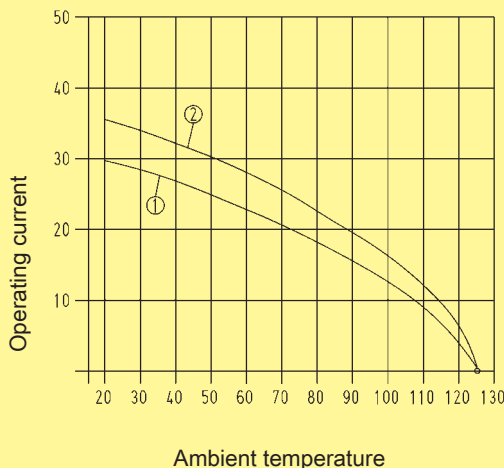
## Description

The Han-Power® S connector is suitable for the assembly of serial power bus. Having assembled the energy supply Han-Power® S can be inserted at any place of the power cable. The cable mantle has to be removed, the conductor is placed without interruption in the IDC. Han-Power® S is suitable for cables with single strands manufactured acc. to DIN VDE 0281/ DIN VDE 0295 with wire gauges of 2.5 mm<sup>2</sup> up to 6 mm<sup>2</sup>. For the distribution of the device Han-Compact® hoods or cable to cable housings are used. The power supply has to be realized with two Han-Compact® hoods.

## Derating diagram

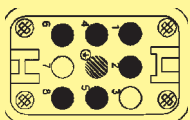
The power rating of the connectors is limited by the thermal load capability of the contact element material including the connections and the insulating parts. The derating curve is therefore valid for currents which flow constantly (non-intermittent) through each contact element of the connector evenly,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

Measuring and testing techniques according to DIN EN 60 512-5



① Han® Q 8/0 Wire gauge: 2.5 mm<sup>2</sup>

② Han® Q 8/0 Wire gauge: 4 mm<sup>2</sup>



Han® Q 8/0 partly loaded with wire gauge 7x 4 mm<sup>2</sup>

## Technical characteristics

Specifications	DIN EN 61 984 DIN VDE 0110
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### Han-Power® S

Number of contacts	
- Power contacts	6 + PE
Electrical data	
acc. to EN 61 984	<b>25 A 500 V 6 kV 3</b>
Rated current	25 A
Rated voltage	500 V
Rated impulse voltage	6 kV
Pollution degree	3
Rated voltage	
acc. to UL/CSA	600 V
Material	Polycarbonate
Insulation resistance	≥ 10 <sup>10</sup> kΩ
Limiting temperatures	-40 °C ... 125 °C
Flammability acc. to UL 94	V 0
Degree of protection acc. to EN 60 529	IP 65

### Contacts Han E®

Material	copper alloy
Surface	
- hard-silver plated	3 μm Ag
Contact resistance	≤ 1 mΩ
Crimp terminal	
- mm <sup>2</sup>	2.5 - 4 mm <sup>2</sup>
- AWG	AWG 14 - 12

### Hoods/housings Han-Compact®

Material	Polycarbonate RAL 9005
Hoods/Housings sealing	NBR
Temperature range	
- Connecting temperature	-25 °C ... 40 °C
- Working temperature	-25 °C ... 80 °C
Flammability acc. to UL 94	V 0
Degree of protection acc. to EN 60 529	IP 65
for coupled connector	IP 65

### cable

Design of conductor acc. to	• DIN VDE 0281 • DIN VDE 0295
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#### Single strand

Wire gauge 2.5 mm <sup>2</sup>	
- Number of single strands	50 x 0.25 mm Ø
- Outer diameter	3.6 mm Ø
Wire gauge 4 mm <sup>2</sup>	
- Number of single strands	56 x 0.3 mm Ø
- Outer diameter	4.2 mm Ø



with 2x Han® Q 8/0

Identification	Part number	Drawing	Dimensions in mm
<p>Han-Power® S</p> <p>Power supply</p> <p>Han® Q 8/0; 2 screwed</p> <p>Han-Compact® Housings, bulkhead mounting</p> <p>2.5 - 4 mm²</p>	<b>09 12 008 4802</b>		

Power Distribution

Identification	Part number	Drawing	Dimensions in mm
<p>System cables in fixed lengths</p> <p>Cable lengths (total length) in m</p> <p>pre-assembled on both sides</p> <p>plastic hood, black</p> <p>top entry</p> <p>hood on both sides</p> <p>cable: 7x 2.5 mm²</p>	<p>1.5 <b>20 88 821 0015</b></p> <p>3 <b>20 88 821 0030</b></p> <p>5 <b>20 88 821 0050</b></p> <p>10 <b>20 88 821 0100</b></p> <p>15 <b>20 88 821 0150</b></p> <p>30 <b>20 88 821 0300</b></p>		

Stock items in bold type

## Features

- 6 IDCs/screw terminals + PE for 2.5 mm<sup>2</sup> up to 6 mm<sup>2</sup> wire gauge; 4 IDCs + PE for 10 mm<sup>2</sup> wire gauge
- No interruption of the energy supply
- Space-saving and compact design
- Leading protective ground within the insert
- Assembly with standard tools

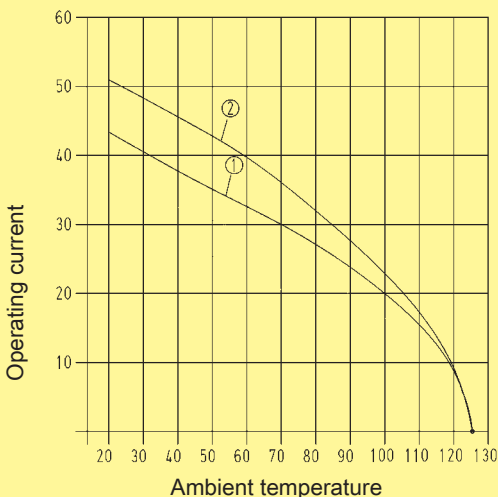
## Description

Han-Power® S metal version allows the realisation of applications where a high degree of protection is required against dust, splashed water and mechanical shock. This new variant continues to support the user in providing simple installation and maintenance practices but now offers greater protection against harsh industrial environments. Han-Power® S metal offers optimal handling characteristics and now features an increased wire gauge range. It is now possible to realise power distribution networks with wire gauge up to 10 mm<sup>2</sup>. The power supply has to be realized with one Han-Compact® cable to cable hood.

## Derating diagram

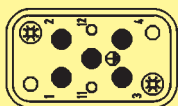
The power rating of the connectors is limited by the thermal load capability of the contact element material including the connections and the insulating parts. The derating curve is therefore valid for currents which flow constantly (non-intermittent) through each contact element of the connector evenly,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

Measuring and testing techniques according to DIN EN 60 512-5



① Han® Q 4/2 Wire gauge: 4 mm<sup>2</sup>

② Han® Q 4/2 Wire gauge: 6 mm<sup>2</sup>



Han® Q 4/2 fully loaded with wire gauge 4x 6 mm<sup>2</sup>

## Technical characteristics

Specifications	DIN EN 61 984 DIN VDE 0110
----------------	-------------------------------

### Han-Power® S

Number of contacts	
- Power contacts	4 + PE
- Signal contacts	2
Electrical data acc. to EN 61 984	<b>40 A 400/690 V 6 kV 3</b>
Rated current	40 A
Rated voltage conductor - ground	400 V
Rated voltage conductor - conductor	690 V
Rated impulse voltage	6 kV
Pollution degree	3
Rated voltage acc. to UL/CSA	600 V
Material	aluminium die-cast
Insulation resistance	≥ 10 <sup>10</sup> kΩ
Limiting temperatures	-40 °C ... 125 °C
Flammability acc. to UL 94	V 0
Degree of protection acc. to EN 60 529	IP 65

### Contacts Han® C

Material	copper alloy
Surface	
- hard-silver plated	5 µm Ag
Contact resistance	≤ 0.3 mΩ
Crimp terminal	
- mm <sup>2</sup>	4 - 10 mm <sup>2</sup>
- AWG	AWG 12 - 8

### Hoods/housings Han-Compact®

Material	zinc die-cast RAL 9005
Hoods/Housings sealing	NBR
Limiting temperature range	-40 °C ... 125 °C
Degree of protection acc. to EN 60 529 for coupled connector	IP 65

### cable

Design of conductor acc. to	• DIN VDE 0281 • DIN VDE 0295
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#### Single strand

Wire gauge 2.5 mm <sup>2</sup>	
- Number of single strands	50 x 0.25 mm Ø
- Outer diameter	3.6 mm Ø
Wire gauge 4 mm <sup>2</sup>	
- Number of single strands	56 x 0.3 mm Ø
- Outer diameter	4.2 mm Ø



with 1x Han® Q 4/2, metal

Identification	Part number	Drawing	Dimensions in mm
<p>Han-Power® S</p> <p>Power supply</p> <p>Han® Q 4/2; 1 moulded</p> <p>Han-Compact® Housings, bulkhead mounting</p> <p>4 - 6 mm<sup>2</sup></p>	<p><b>09 12 008 4901</b></p>		
<p>10 mm<sup>2</sup></p>	<p><b>09 12 008 4951</b></p>		

Power Distribution

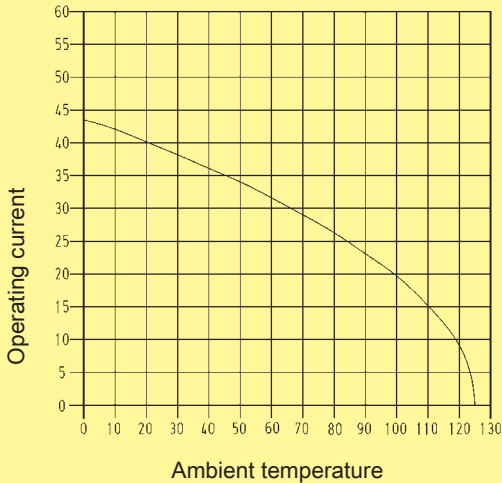
## Features

- Per 1 connection for power input, power output and to device
- Male and female inserts finger protected
- 4 power contacts; 2 signal contacts
- Metal housing
- Locking lever stainless steel

## Derating diagram

The power rating 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 according to DIN EN 60 512-5



Wire gauge: 4 mm<sup>2</sup>

## Technical characteristics

Specifications	DIN EN 61 984 DIN VDE 0110
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### Han-Power® T

Number of contacts	
- Power contacts	4 + PE / ≤ 6 mm <sup>2</sup>
- Signal contacts	2 / ≤ 2.5 mm <sup>2</sup>

Electrical data	
acc. to EN 61 984	<b>40 A 400/690 V 6 kV 3</b>
Rated current	40 A
Rated voltage conductor - ground	400 V
Rated voltage conductor - conductor	690 V
Rated impulse voltage	6 kV
Pollution degree	3
Rated current Signal contacts	10 A


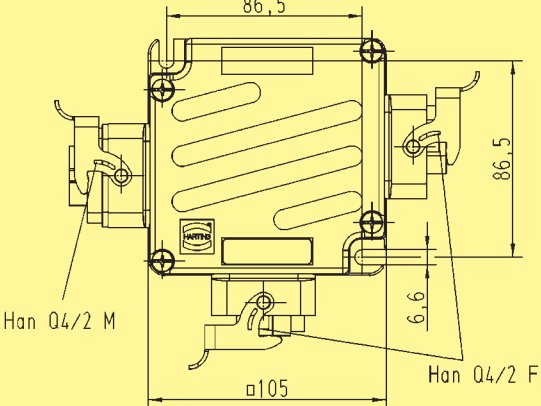
Rated voltage	
acc. to UL/CSA	600 V
Material	zinc die-cast
Limiting temperatures	-40 °C ... 125 °C
Flammability acc. to UL 94	V 0
Degree of protection acc. to EN 60 529	IP 65

### Hoods/housings Han-Compact®

Material	zinc die-cast
Surface	powder-coated RAL 9005
Hoods/Housings sealing	NBR
Limiting temperatures	-40 °C ... 125 °C
Degree of protection acc. to EN 60 529	IP 65
for coupled connector	IP 65



with 3x Han® Q 4/2

Identification	Part number	Drawing	Dimensions in mm
<p>Han-Power® T Power supply with 3x Han® Q 4/2 in Han-Compact® Housings, bulkhead mounting</p> <p>4 mm<sup>2</sup></p> 	<p><b>09 12 008 4720</b></p>	 <p>Han Q4/2 M</p> <p>Han Q4/2 F</p>	<p>Power Distribution</p>

Stock items in bold type

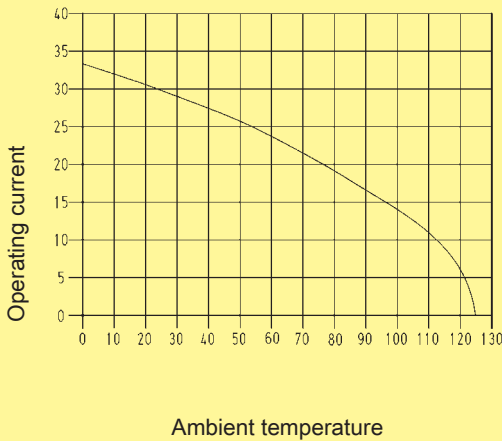
## Features

- Per 1 connection for power input, power output and to device
- 4 power contacts
- Plastic housings are integrated in the moulding
- Compact design

## Derating diagram

The power rating 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 according to DIN EN 60 512-5



Wire gauge: 2.5 mm<sup>2</sup>

## Technical characteristics

Specifications DIN EN 61 984  
DIN VDE 0110

### Han-Power<sup>®</sup> T

Number of contacts  
- Power contacts 5 + PE / ≤ 4 mm<sup>2</sup>

Electrical data  
acc. to EN 61 984 **16 A 230/400 V 4 kV 3**  
Rated current 16 A  
Rated voltage conductor - ground 230 V  
Rated voltage conductor - conductor 400 V  
Rated impulse voltage 4 kV  
Pollution degree 3


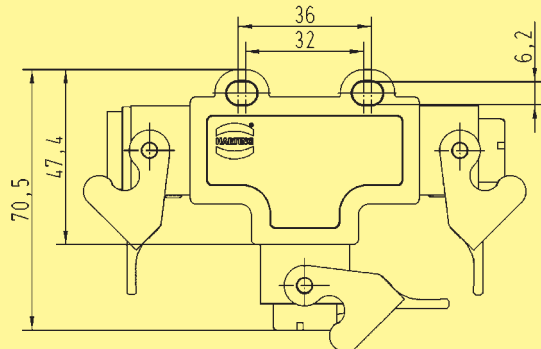
Rated voltage  
acc. to UL/CSA 600 V  
Material Polycarbonate  
Limiting temperatures -40 °C ... 125 °C  
Flammability acc. to UL 94 V 0  
Degree of protection acc. to EN 60 529 IP 65 / IP 67

### Hoods/housings Han A<sup>®</sup>

Material Polycarbonate  
Surface RAL 9005  
Hoods/Housings sealing NBR  
Limiting temperatures -40 °C ... 125 °C  
Degree of protection acc. to EN 60 529  
for coupled connector IP 67



with 3x Han® Q 5/0

Identification	Part number	Drawing	Dimensions in mm
<p>Han-Power® T Power supply with 3x Han® Q 5/0 in Han A® Housings, bulkhead mounting</p> <p>2,5 mm<sup>2</sup></p> 	<p><b>09 12 008 4751</b></p>		<p>Power Distribution</p> <p><b>15</b> <b>15</b></p>

Stock items in bold type

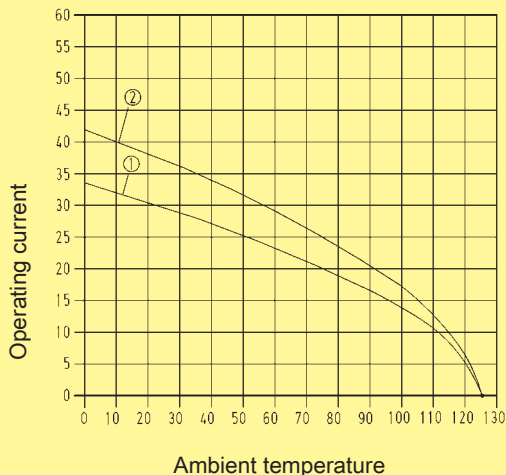
## Features

- 4 power contacts Han® C and 2 signal contacts Han D®
- Finger protection
- Leading protective ground with crimp terminal
- Inserts suitable for metal and plastic hoods and housings of Han-Compact® series (not suitable for 19 12 008 0501)
- Coding possibilities by using a coding pin instead of fixing screw

## Derating diagram

The power rating 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 according to DIN EN 60 512-5



Wire gauge:

① 2.5 mm<sup>2</sup>

② 4 mm<sup>2</sup>

## Technical characteristics

Specifications DIN EN 61 984  
DIN VDE 0110

Approvals 

### Inserts

Number of contacts	4 + PE
Electrical data acc. to EN 61 984	
Power side	<b>40 A 400/690 V 6 kV 3</b>
Rated current	40 A
Rated voltage conductor - ground	400 V
Rated voltage conductor - conductor	690 V
Rated impulse voltage	6 kV
Pollution degree	3
Signal side	<b>10 A 250 V 4 kV 3</b>
Rated current	10 A
Rated voltage	250 V
Rated impulse voltage	4 kV
Pollution degree	3

Rated voltage acc. to UL/CSA	600 / 250 V
Insulation resistance	≥ 10 <sup>10</sup> Ω
Material	Polycarbonate
Limiting temperatures	-40 °C ... 125 °C
Flammability acc. to UL 94	V 0
Mechanical working life - mating cycles	≥ 500

### Contacts

Material	copper alloy
Surface	
- hard-silver plated	3 μm Ag
- hard-gold plated	2 μm Au over 3 μm Ni
Contact resistance	≤ 0.3 mΩ
Crimp terminal	
- mm <sup>2</sup>	1.5 ... 6 mm <sup>2</sup> / 0.14 ... 2.5 mm <sup>2</sup>
- AWG	16 ... 10 / 26 ... 14
Max. insulation diameter - Power contacts	5 mm

### Plastic hoods/housings

Material	Polycarbonate
Locking element	Polyamide
Flammability acc. to UL 94	V 0
Hoods/Housings sealing	NBR
Limiting temperatures	-40 °C ... 125 °C
Degree of protection acc. to EN 60 529 for coupled connector	IP 65

### Accessories

Crimping tools	chapter 99
----------------	------------

Number of contacts

4/2 +



Identification	Part number		Drawing	Dimensions in mm
	Male insert (M)	Female insert (F)		
Crimp terminal Order crimp contacts separately	<b>09 12 006 3041</b>	<b>09 12 006 3141</b>	<p>Contact arrangement View from termination side</p>	

Identification	Wire gauge (mm²)	Part number		Drawing	Dimensions in mm																																			
		Male contact	Female contact																																					
Crimp contacts Han® C contacts Power contacts silver plated	1.5 2.5 4 6	<b>09 32 000 6104</b> <b>09 32 000 6105</b> <b>09 32 000 6107</b> <b>09 32 000 6108</b>	<b>09 32 000 6204</b> <b>09 32 000 6205</b> <b>09 32 000 6207</b> <b>09 32 000 6208</b>		<table border="1"> <thead> <tr> <th colspan="3">Wire gauge</th> <th>∅</th> <th>Stripping length</th> </tr> </thead> <tbody> <tr> <td>1.5</td> <td>mm²</td> <td>AWG 16</td> <td>1.75</td> <td>9 mm</td> </tr> <tr> <td>2.5</td> <td>mm²</td> <td>AWG 14</td> <td>2.25</td> <td>9 mm</td> </tr> <tr> <td>4</td> <td>mm²</td> <td>AWG 12</td> <td>2.85</td> <td>9.6 mm</td> </tr> <tr> <td>6</td> <td>mm²</td> <td>AWG 10</td> <td>3.5</td> <td>9.6 mm</td> </tr> </tbody> </table>	Wire gauge			∅	Stripping length	1.5	mm²	AWG 16	1.75	9 mm	2.5	mm²	AWG 14	2.25	9 mm	4	mm²	AWG 12	2.85	9.6 mm	6	mm²	AWG 10	3.5	9.6 mm										
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6	mm²	AWG 10	3.5	9.6 mm																																				
Han D® contacts Signal contacts silver plated	0.14-0.37 0.5 0.75 1 1.5 2.5	<b>09 15 000 6104</b> <b>09 15 000 6103</b> <b>09 15 000 6105</b> <b>09 15 000 6102</b> <b>09 15 000 6101</b> <b>09 15 000 6106</b>	<b>09 15 000 6204</b> <b>09 15 000 6203</b> <b>09 15 000 6205</b> <b>09 15 000 6202</b> <b>09 15 000 6201</b> <b>09 15 000 6206</b>		<table border="1"> <thead> <tr> <th colspan="3">Wire gauge</th> <th>∅</th> <th>Stripping length</th> </tr> </thead> <tbody> <tr> <td>0.14-0.37</td> <td>mm²</td> <td>AWG 26-22</td> <td>0.9</td> <td>8 mm</td> </tr> <tr> <td>0.5</td> <td>mm²</td> <td>AWG 20</td> <td>1.1</td> <td>8 mm</td> </tr> <tr> <td>0.75</td> <td>mm²</td> <td>AWG 18</td> <td>1.3</td> <td>8 mm</td> </tr> <tr> <td>1</td> <td>mm²</td> <td>AWG 18</td> <td>1.45</td> <td>8 mm</td> </tr> <tr> <td>1.5</td> <td>mm²</td> <td>AWG 16</td> <td>1.75</td> <td>8 mm</td> </tr> <tr> <td>2.5</td> <td>mm²</td> <td>AWG 14</td> <td>2.25</td> <td>6 mm</td> </tr> </tbody> </table>	Wire gauge			∅	Stripping length	0.14-0.37	mm²	AWG 26-22	0.9	8 mm	0.5	mm²	AWG 20	1.1	8 mm	0.75	mm²	AWG 18	1.3	8 mm	1	mm²	AWG 18	1.45	8 mm	1.5	mm²	AWG 16	1.75	8 mm	2.5	mm²	AWG 14	2.25	6 mm
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gold plated	0.14-0.37 0.5 0.75 1 1.5 2.5	<b>09 15 000 6124</b> <b>09 15 000 6123</b> <b>09 15 000 6125</b> <b>09 15 000 6122</b> <b>09 15 000 6121</b> <b>09 15 000 6126</b>	<b>09 15 000 6224</b> <b>09 15 000 6223</b> <b>09 15 000 6225</b> <b>09 15 000 6222</b> <b>09 15 000 6221</b> <b>09 15 000 6226</b>		<table border="1"> <thead> <tr> <th colspan="3">Wire gauge</th> <th>∅</th> <th>Stripping length</th> </tr> </thead> <tbody> <tr> <td>0.14-0.37</td> <td>mm²</td> <td>AWG 26-22</td> <td>0.9</td> <td>8 mm</td> </tr> <tr> <td>0.5</td> <td>mm²</td> <td>AWG 20</td> <td>1.1</td> <td>8 mm</td> </tr> <tr> <td>0.75</td> <td>mm²</td> <td>AWG 18</td> <td>1.3</td> <td>8 mm</td> </tr> <tr> <td>1</td> <td>mm²</td> <td>AWG 18</td> <td>1.45</td> <td>8 mm</td> </tr> <tr> <td>1.5</td> <td>mm²</td> <td>AWG 16</td> <td>1.75</td> <td>8 mm</td> </tr> <tr> <td>2.5</td> <td>mm²</td> <td>AWG 14</td> <td>2.25</td> <td>6 mm</td> </tr> </tbody> </table>	Wire gauge			∅	Stripping length	0.14-0.37	mm²	AWG 26-22	0.9	8 mm	0.5	mm²	AWG 20	1.1	8 mm	0.75	mm²	AWG 18	1.3	8 mm	1	mm²	AWG 18	1.45	8 mm	1.5	mm²	AWG 16	1.75	8 mm	2.5	mm²	AWG 14	2.25	6 mm
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Power Distribution

## Features

- 8 contact chambers for crimp contacts of Han E® series
- Space-saving and compact design
- Leading protective ground with crimp terminal
- Inserts suitable for metal and plastic hoods and housings of Han-Compact® series
- ISO 23 570 / DESINA conform product



## Technical characteristics

Specifications DIN EN 61 984  
DIN VDE 0110

Approvals

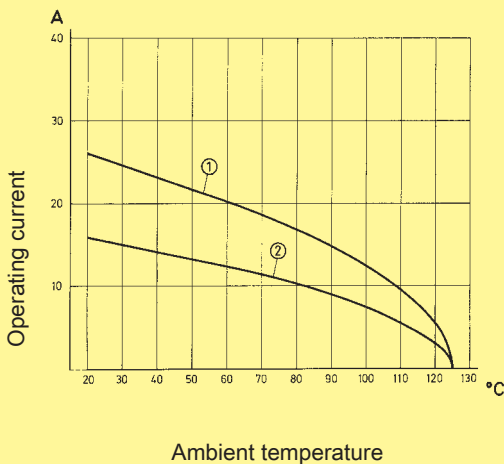
### Inserts

Number of contacts	8 + PE
Electrical data acc. to EN 61 984	
Mounted plastic hood	<b>16 A 500 V 6 kV 3</b>
Rated current	16 A
Rated voltage	500 V
Rated impulse voltage	6 kV
Pollution degree	3
Pollution degree 2 also	16 A 400/690 V 6 kV 2
Mounted metal hood	16 A 230/400 V 4 kV 3
Rated voltage acc. to UL/CSA	500 V
Insulation resistance	≥ 10 <sup>10</sup> Ω
Material	Polycarbonate
Limiting temperatures	-40 °C ... 125 °C
Flammability acc. to UL 94	V 0
Mechanical working life - mating cycles	≥ 500

### Derating diagram

The power rating 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 according to DIN EN 60 512-5



Wire gauge:                    ① 2.5 mm<sup>2</sup>  
    ② 1.5 mm<sup>2</sup>

### Contacts

Material	copper alloy
Surface	
- hard-silver plated	3 µm Ag
- hard-gold plated	2 µm Au over 3 µm Ni
Contact resistance	≤ 1 mΩ
Crimp terminal	
- mm <sup>2</sup>	0.14 ... 4 mm <sup>2</sup> partly loaded up to 4 mm <sup>2</sup> is possible
- AWG	26 ... 12

### Plastic hoods/housings

Material	Polycarbonate
Locking element	Polyamide
Flammability acc. to UL 94	V 0
Hoods/Housings sealing	NBR
Limiting temperatures	-40 °C ... 125 °C
Degree of protection acc. to EN 60 529 for coupled connector	IP 65

### Hoods/Housings, metal

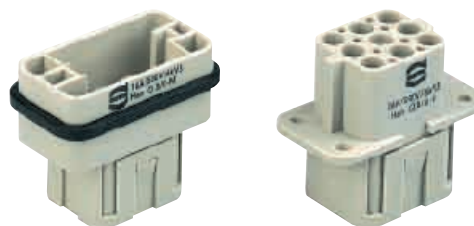
Material	zinc die-cast
Locking element	V2A steel
Hoods/Housings sealing	NBR
Limiting temperatures	-40 °C ... 125 °C
Degree of protection acc. to EN 60 529 for coupled connector	IP 65

### Accessories

Crimping tools chapter 99

Number of contacts

8 +



Identification	Part number		Drawing	Dimensions in mm
	Male insert (M)	Female insert (F)		
Crimp terminal Order crimp contacts separately	<b>09 12 008 3001</b>	<b>09 12 008 3101</b>		Contact arrangement View from termination side
Coding pin 	09 33 000 9954	09 33 000 9954		Use of the coding pin prevents incorrect mating to other connectors of the same type. The male pin should be omitted from the opposing cavity in the male insert.

Identification	Wire gauge (mm²)	Part number		Drawing	Dimensions in mm
		Male contact	Female contact		
Crimp contacts Power contacts silver plated 	0.14-0.37	<b>09 33 000 6127</b> <b>09 33 000 6121</b> <b>09 33 000 6114</b> <b>09 33 000 6105</b> <b>09 33 000 6104</b> <b>09 33 000 6102</b> <b>09 33 000 6107</b>	<b>09 33 000 6227</b> <b>09 33 000 6220</b> <b>09 33 000 6214</b> <b>09 33 000 6205</b> <b>09 33 000 6204</b> <b>09 33 000 6202</b> <b>09 33 000 6207</b>		Power Distribution
gold plated 	0.14-0.37	<b>09 33 000 6117</b> <b>09 33 000 6122</b> <b>09 33 000 6115</b> <b>09 33 000 6118</b> <b>09 33 000 6116</b> <b>09 33 000 6123</b> 09 33 000 6119	<b>09 33 000 6217</b> <b>09 33 000 6222</b> <b>09 33 000 6215</b> <b>09 33 000 6218</b> <b>09 33 000 6216</b> <b>09 33 000 6223</b> 09 33 000 6221		
Relay contact silver plated 	0.75-1 1.5 2.5	09 33 000 6109 09 33 000 6110 09 33 000 6111			
F.O. contacts for 1 mm plastic fibre		20 10 001 3311	20 10 001 3321		

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 Rille	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
no groove	4 mm²	AWG 12	7.5 mm

\* on the back crimp collar

Crimp contacts 0.14 ... 0.37 mm² only used with BUCHANAN crimping tool 09 99 000 0001 and adjustment gauge 09 99 000 0203

Stock items in bold type

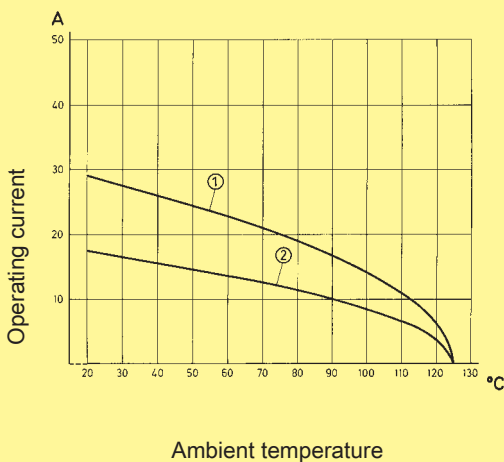
## Features

- 5 contact chambers for crimp contacts of Han E® series
- Space-saving and compact design
- Leading protective ground with screw terminal
- Compatible with plastic and metal hoods of series Han® 3 A

### Derating diagram

The power rating 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 according to DIN EN 60 512-5



Wire gauge:                      ① 2.5 mm<sup>2</sup>  
    ② 1.5 mm<sup>2</sup>

## Technical characteristics

Specifications                      DIN EN 61 984  
    DIN VDE 0110

Approvals                             

### Inserts

Number of contacts                      5 + PE  
 Electrical data  
 acc. to EN 61 984                      **16 A 230/400 V 4 kV 3**  
 Rated current                              16 A  
 Rated voltage conductor - ground      230 V  
 Rated voltage conductor - conductor    400 V  
 Rated impulse voltage                      4 kV  
 Pollution degree                              3  
 Pollution degree 2 also                      16 A 320/500 V 4 kV 2  
 Rated voltage  
 acc. to UL/CSA                              600 V  
 Insulation resistance                        ≥ 10<sup>10</sup> Ω  
 Material                                      Polycarbonate  
 Limiting temperatures                        -40 °C ... 125 °C  
 Flammability acc. to UL 94                      V 0  
 Mechanical working life  
   - mating cycles                              ≥ 500

### Contacts

Material                                      copper alloy  
 Surface  
   - hard-silver plated                              3 µm Ag  
   - hard-gold plated                              2 µm Au over 3 µm Ni  
 Contact resistance                              ≤ 1 mΩ  
 Crimp terminal  
   - mm<sup>2</sup>    0.14 ... 2.5 mm<sup>2</sup>  
   - AWG    26 ... 14

### Plastic hoods/housings

Material                                      Polycarbonate  
 Locking element                              Polyamide  
 Flammability acc. to UL 94                      V 0  
 Hoods/Housings sealing                        NBR  
 Limiting temperatures                        -40 °C ... 125 °C  
 Degree of protection acc. to EN 60 529  
 for coupled connector                              IP 67

### Hoods/Housings, metal

Material                                      zinc die-cast  
 Locking element                              steel, zinc-plated  
 Hoods/Housings sealing                        NBR  
 Limiting temperatures                        -40 °C ... 125 °C  
 Degree of protection acc. to EN 60 529  
 for coupled connector                              IP 44 /  
    IP 67 is achieved with seal  
    screw 09 20 000 9918

### Accessories

Crimping tools                              chapter 99  
 Cable clamps                                  chapter 40  
 Sealing screw                                  chapter 40

Number of contacts

5 +



Identification	Part number		Drawing	Dimensions in mm
	Male insert (M)	Female insert (F)		
<b>Crimp terminal</b> Order crimp contacts separately	<b>09 12 005 3001</b>	<b>09 12 005 3101</b>	<p>Contact arrangement View from termination side</p>	
<b>Coding pin</b> 	09 33 000 9954	09 33 000 9954		Use of the coding pin prevents incorrect mating to other connectors of the same type. The male pin should be omitted from the opposing cavity in the male insert.

Identification	Wire gauge (mm <sup>2</sup> )	Part number		Drawing	Dimensions in mm
		Male contact	Female contact		
<b>Crimp contacts</b> Power contacts silver plated 	0.14-0.37	09 33 000 6127	09 33 000 6227		
	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>		
gold plated 	0.14-0.37	09 33 000 6117	09 33 000 6217		
	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	<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 silver plated 	0.75-1	09 33 000 6109			
	1.5	09 33 000 6110			
	2.5	09 33 000 6111			
<b>F.O. contacts</b> for 1 mm plastic fibre		20 10 001 3311	20 10 001 3321		

Power Distribution

Identification	Wire gauge		Stripping length
no groove	0.14-0.37 mm <sup>2</sup>	AWG 26-22	7.5 mm
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 Rille	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

\* on the back crimp collar

Crimp contacts 0.14 ... 0.37 mm<sup>2</sup> only used with BUCHANAN crimping tool 09 99 000 0001 and adjustment gauge 09 99 000 0203

Stock items in bold type


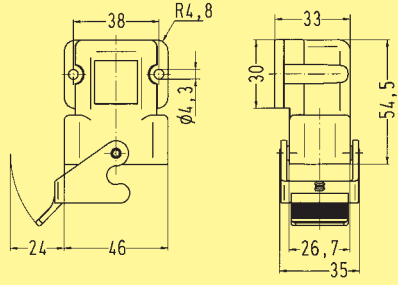

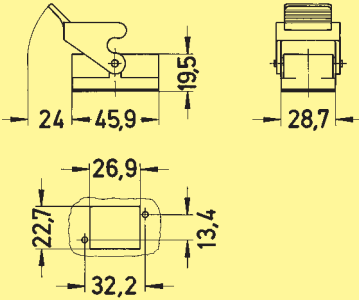

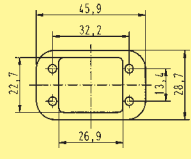

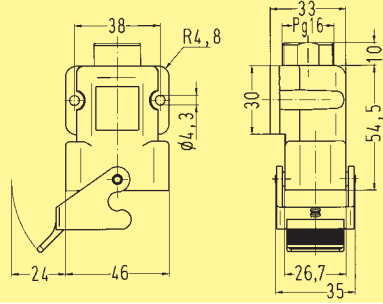

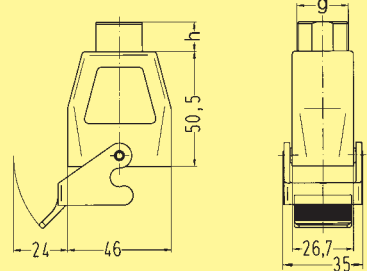


thermoplastic / metal

Identification	Part number	Drawing	Dimensions in mm											
<b>Hoods</b>  Hoods Metal side-entry Cable gland order separately	<b>19 12 008 0526</b>													
<b>Hoods</b>  Metal side-entry Cable gland order separately	black chromated <b>19 12 008 0501</b>  black powder coated <b>19 12 708 0501</b>  matt nickel plated <b>19 12 008 0502</b>													
<b>Hoods</b>  Metal top-entry Cable gland order separately	<b>19 12 008 0426</b>													
<b>Cable seal</b>  Metal for hoods Thrust bolt and insert	<b>19 12 000 5057</b> <b>19 12 000 5058</b>		<table border="1"> <thead> <tr> <th rowspan="2"></th> <th colspan="2">cable</th> </tr> <tr> <th>min.</th> <th>max.</th> </tr> </thead> <tbody> <tr> <td><b>19 12 000 5057</b></td> <td>10.5 mm</td> <td>14 mm</td> </tr> <tr> <td><b>19 12 000 5058</b></td> <td>14 mm</td> <td>17 mm</td> </tr> </tbody> </table>		cable		min.	max.	<b>19 12 000 5057</b>	10.5 mm	14 mm	<b>19 12 000 5058</b>	14 mm	17 mm
	cable													
	min.	max.												
<b>19 12 000 5057</b>	10.5 mm	14 mm												
<b>19 12 000 5058</b>	14 mm	17 mm												
<b>Protection covers</b>  Thermoplastic for male insert	without sealing <b>09 12 008 5407</b>	with sealing <b>09 12 008 5408</b>												

Power Distribution

thermoplastic / metal

Identification	Part number	Drawing	Dimensions in mm						
<p><b>Housings</b></p> <p>Housings, bulkhead mounting</p> <p>Thermoplastic angled</p> 	<b>09 12 008 0902</b>	Pg 16							
<p>Housings, bulkhead mounting</p> <p>Thermoplastic</p> 	<b>09 12 008 0327</b>	Pg 16							
<p>Gasket for housings bulkhead mounting</p> <p>Han® Q 8/0</p> 	<b>09 12 000 9912</b>								
<p><b>Housings, surface mounting</b></p> <p>Thermoplastic angled</p> <p>Cable gland order separately</p> 	<b>09 12 008 0901</b>	Pg 16							
<p><b>Hoods, cable to cable</b></p> <p>Thermoplastic</p> <p>Cable gland order separately</p> 	<b>09 12 008 0727</b> <b>19 12 008 0729</b>	Pg 16 M 25	 <table border="1" data-bbox="973 1960 1165 2060"> <tr> <td>h</td> <td>g</td> </tr> <tr> <td>13</td> <td>Pg 16</td> </tr> <tr> <td>14</td> <td>M 25x1.5</td> </tr> </table>	h	g	13	Pg 16	14	M 25x1.5
h	g								
13	Pg 16								
14	M 25x1.5								



Identification

Part number

Drawing

Dimensions in mm

Panel feed through sealings

Cable diameter

7 - 10 mm<sup>2</sup>

10 - 13 mm<sup>2</sup>

13 - 16 mm<sup>2</sup>

16 - 19 mm<sup>2</sup>

19 - 22 mm<sup>2</sup>



blind grommet

**09 12 000 9969**

**09 12 000 9970**

**09 12 000 9971**

**09 12 000 9972**

**09 12 000 9973**

**09 12 000 9974**

