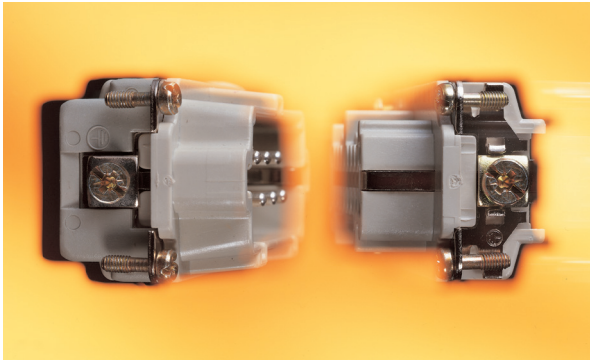


## EPIC® HBE Series



EPIC® HBE series inserts provide reliable termination and performance in the vast majority of medium power and control applications. Methods of termination include screw, crimp, and “spring” cage clamp.

### ■ Technical Data

**Number of Contacts:** 6, 10, 16, 24, 32, 48 (+PE)

**Temperature Range:** -40°C to +100°C  
- Short-term: up to +125°C

**Pollution Level:** 3

**Dimensioning Transient:** 6 kV

**Mating Cycles:**  
- Per DIN EN 61984:2008  
Service Life Test: Tested to 100 cycles and passed  
- Per Contact Thermal Test:  
Useful service in excess of 500 cycles is possible at rated voltage and current\*

#### Screw Termination:

**Rated Voltage:**  
- UL: 600V  
- CSA: 600V  
- IEC: 500V

**Rated Current:**  
- UL: 16A  
- CSA: 16A  
- IEC: 16A

**Wire Size:** 20- 14 AWG (0.5-2.5 mm<sup>2</sup>)

**Contact Material:** Silver-plated copper alloy

**Contact Resistance:** < 2 mΩ

#### Crimp Termination:

**Rated Voltage:**  
- UL: 600V  
- CSA: 600V  
- IEC: 500V

**Rated Current:**  
- UL: 16A  
- CSA: 16A  
- IEC: 16A

**Wire Size:** 20- 12 AWG (0.5-4 mm<sup>2</sup>)

**Contact Material:** Silver- or gold-plated copper alloy

**Contact Resistance:** < 2 mΩ

#### Cage Clamp Termination:

**Rated Voltage:**  
- UL: 600V  
- CSA: 600V  
- IEC: 500V

**Rated Current:**  
- UL: 16A  
- CSA: 16A  
- IEC: 16A

**Wire Size:** 20- 14 AWG (0.5-2.5 mm<sup>2</sup>)

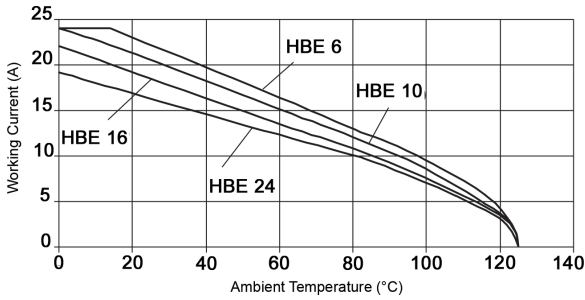
**Contact Material:** Silver-plated copper alloy

**Contact Resistance:** 1.5-4 mΩ

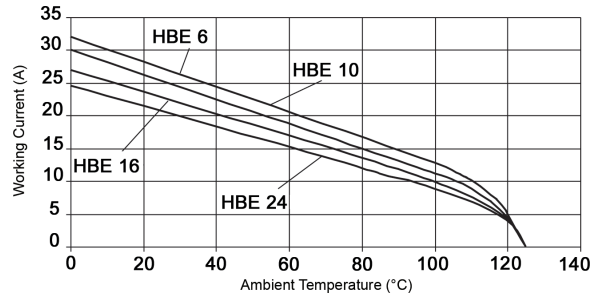
\* In dry, non-conductive, non-corrosive environments when protected in a housing rated at least IP54 and disconnected for cycling and maintenance only.

# EPIC® HBE Inserts: Derating Curves

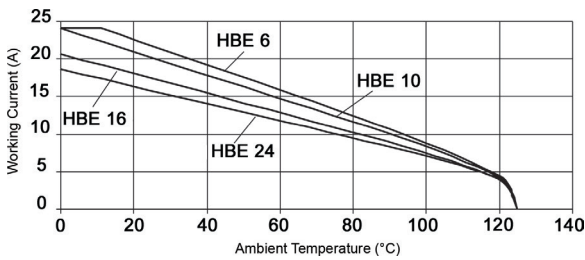
**EPIC® HBE Screw-Terminated  
16 AWG (1.5 mm<sup>2</sup>)**



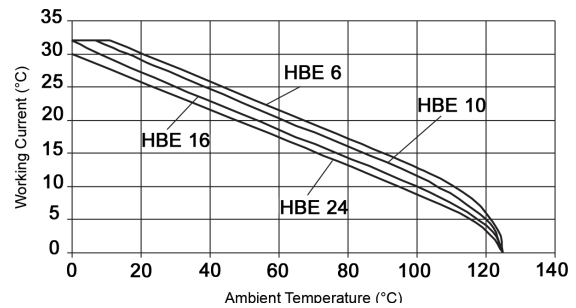
**EPIC® HBE Screw-Terminated  
14 AWG (2.5 mm<sup>2</sup>)**



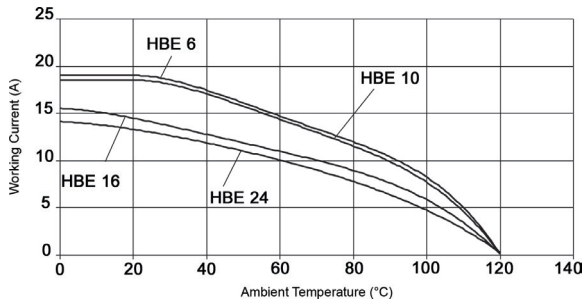
**EPIC® HBE Crimp-Terminated  
16 AWG (1.5 mm<sup>2</sup>)**



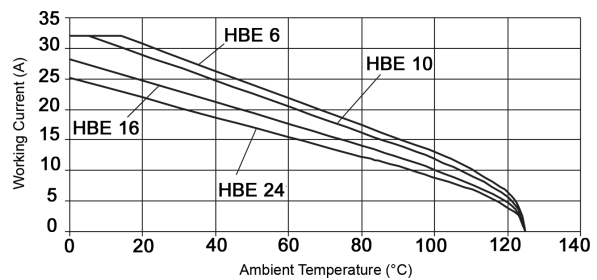
**EPIC® HBE Crimp-Terminated  
14 AWG (2.5 mm<sup>2</sup>)**



**EPIC® HBE Cage Clamp  
16 AWG (1.5 mm<sup>2</sup>)**

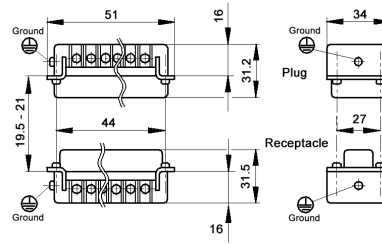
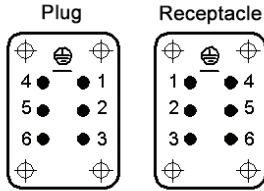


**EPIC® HBE Cage Clamp  
14 AWG (2.5 mm<sup>2</sup>)**



EPIC® HBE 6 Inserts  
Screw-Terminated

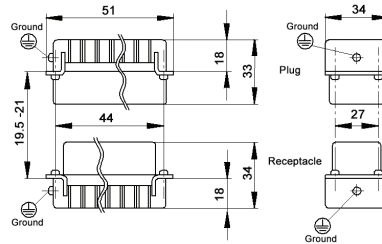
View from Cable Side



Crimp-Terminated

Crimp contacts sold separately, see below

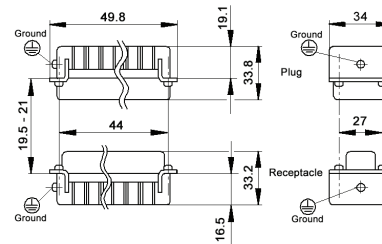
All dimensions are in mm.



Screwless Cage Clamp

**Compatible Housing**

HB 6:  
page 369



Approvals

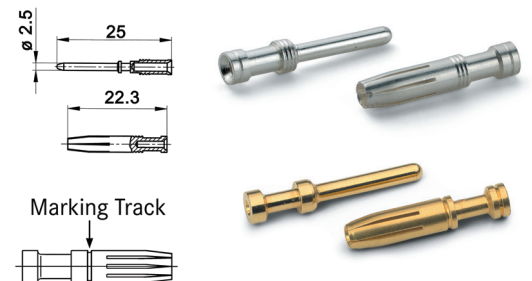


Description	Plug	Receptacle
Screw-Terminated with Wire Protection	10190000	10191000
Screw-Terminated without Wire Protection	10190100	10191100
Crimp-Terminated: Machined Contacts	10180000	10181000
Screwless Spring Cage Clamp	10400000	10401000

Machined Contacts  
2.5 mm Diameter

Contact Size mm <sup>2</sup>	AWG	Stripping Length (mm)		# of Marking Tracks	Silver Contacts		Gold Contacts	
		Pin	Socket		Pin	Socket	Pin	Socket
0.5	20	7.4	7.3	—	11190000	11195000	11192000	11197000
0.75 - 1.0	18	7.4	7.3	1	11190100	11195100	11192100	11197100
1.5	16	7.4	7.3	2	11190200	11195200	11192200	11197200
2.5	14	7.4	7.3	3	11190300	11195300	—	—
4.0	12	7.4	7.3	—	11190400	11195400	—	—

Part number = 1 contact, sold in bags of 100



Marking Track

For removal of contacts, use a slotted screwdriver. No special tool is necessary.

**Complete the Installation**

Crimp Tool: 11147000

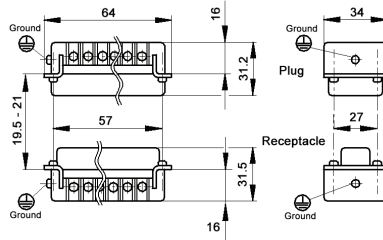
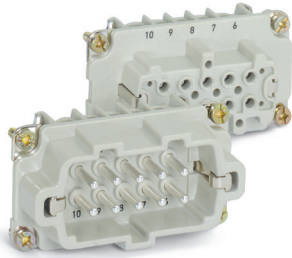
Crimp Dies: 11147100

Locator: 11147200

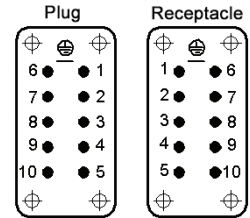
Photographs are not to scale and are not true representations of the products in question. For current information go to our website. If not otherwise specified, all values relating to the product are nominal values.

# EPIC® HBE 10 Inserts

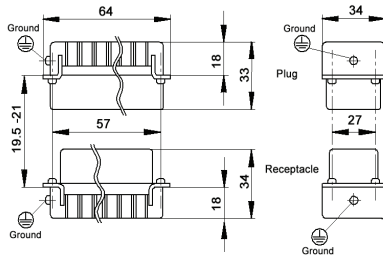
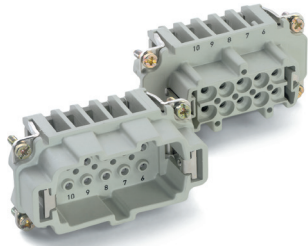
## Screw-Terminated



View from Cable Side

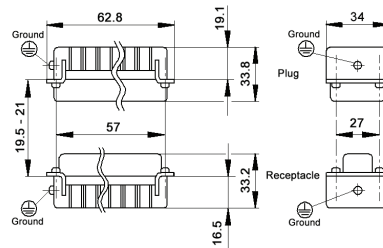


## Crimp-Terminated



Crimp contacts sold separately, see below  
All dimensions are in mm.

## Screwless Cage Clamp



**Compatible Housing**

HB 10:  
page 372

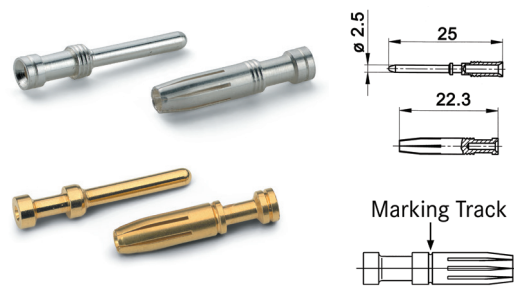
Description	Plug	Receptacle
Screw-Terminated with Wire Protection	10192000	10193000
Screw-Terminated without Wire Protection	10192100	10193100
Crimp-Terminated: Machined Contacts	10182000	10183000
Screwless Cage Clamp	10400100	10401100

## Approvals



# Machined Contacts

## 2.5 mm Diameter



Contact Size	Stripping Length (mm)	# of Marking Tracks	Silver Contacts		Gold Contacts	
			Pin	Socket	Pin	Socket
0.5	20	—	11190000	11195000	11192000	11197000
0.75 - 1.0	18	1	11190100	11195100	11192100	11197100
1.5	16	2	11190200	11195200	11192200	11197200
2.5	14	3	11190300	11195300	—	—
4.0	12	—	11190400	11195400	—	—

Part number = 1 contact, sold in bags of 100

For removal of contacts, use a slotted screwdriver.  
No special tool is necessary.

**Complete the Installation**

Crimp Tool: 11147000

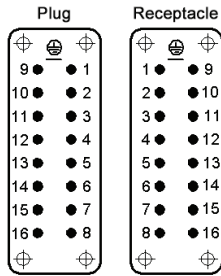
Crimp Dies: 11147100

Locator: 11147200

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For current information go to our website. If not otherwise specified, all values relating to the product are nominal values.

EPIC® HBE 16 Inserts  
Screw-Terminated

View from Cable Side

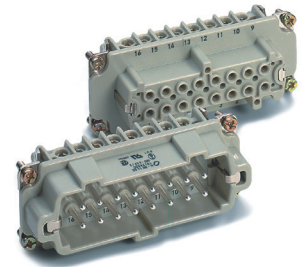
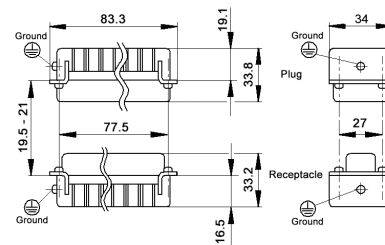
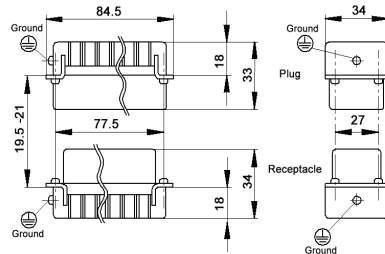
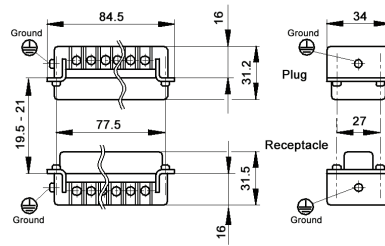


Crimp contacts sold separately, see below

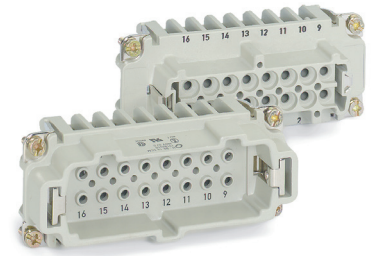
All dimensions are in mm.

**Compatible Housing**

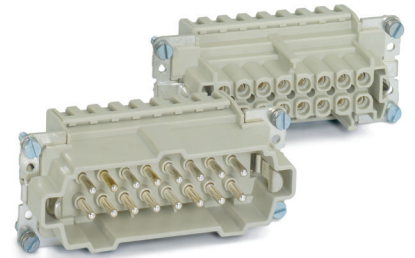
HB 16:  
page 378



Crimp-Terminated



Screwless Cage Clamp



Approvals

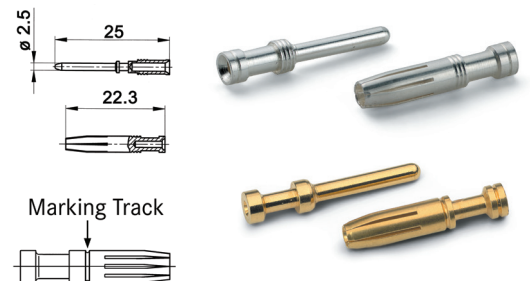


Description	Plug	Receptacle
Screw-Terminated with Wire Protection	10194000	10195000
Screw-Terminated without Wire Protection	10194100	10195100
Crimp-Terminated: Machined Contacts	10184000	10185000
Screwless Cage Clamp	10400200	10401200

Machined Contacts  
2.5 mm Diameter

Contact Size mm <sup>2</sup>	AWG	Stripping Length (mm)		# of Marking Tracks	Silver Contacts		Gold Contacts	
		Pin	Socket		Pin	Socket	Pin	Socket
0.5	20	7.4	7.3	—	11190000	11195000	11192000	11197000
0.75 - 1.0	18	7.4	7.3	1	11190100	11195100	11192100	11197100
1.5	16	7.4	7.3	2	11190200	11195200	11192200	11197200
2.5	14	7.4	7.3	3	11190300	11195300	—	—
4.0	12	7.4	7.3	—	11190400	11195400	—	—

Part number = 1 contact, sold in bags of 100



For removal of contacts, use a slotted screwdriver. No special tool is necessary.

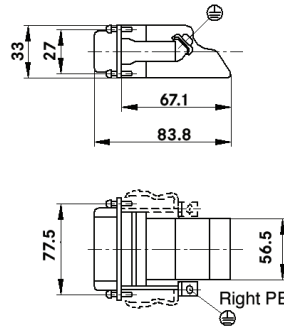
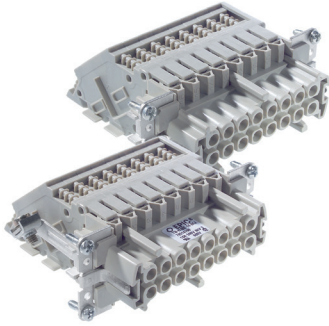
**Complete the Installation**

	Crimp Tool: 11147000		Crimp Dies: 11147100		Locator: 11147200
--	-------------------------	--	-------------------------	--	----------------------

Photographs are not to scale and are not true representations of the products in question. For current information go to our website. If not otherwise specified, all values relating to the product are nominal values.

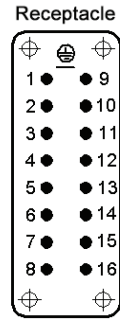
# EPIC® HBE 16 Inserts

## Terminal Block Receptacle



All dimensions are in mm.


View from Cable Side



Description	Receptacle
Terminal Block: Right Ground	70315100
Terminal Block: Left Ground	70314100

- Terminal block inserts only fit into HBE panel mount bases.
- One terminal block insert mates with one screw-terminated insert.

**Compatible Housing**



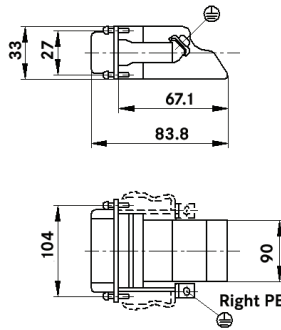
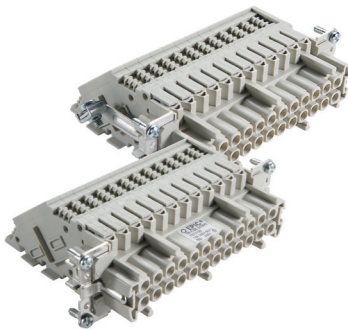
HB 16  
Panel Mount:  
page 379

**Approvals**



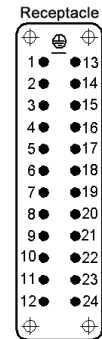
# EPIC® HBE 24 Inserts

## Terminal Block Receptacle



All dimensions are in mm.

View from Cable Side



Description	Receptacle
Terminal Block: Right Ground	70317100
Terminal Block: Left Ground	70316100

- Terminal block inserts only fit into HBE panel mount bases.
- One terminal block insert mates with one screw-terminated insert.

**Compatible Housing**



HB 24  
Panel Mount:  
page 385

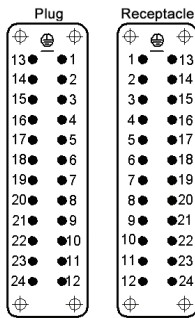
**Approvals**



Photographs are not to scale and are not true representations of the products in question. For current information go to our website. If not otherwise specified, all values relating to the product are nominal values.

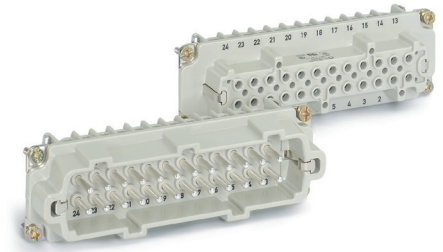
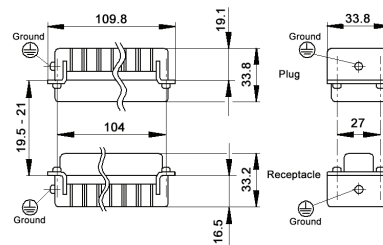
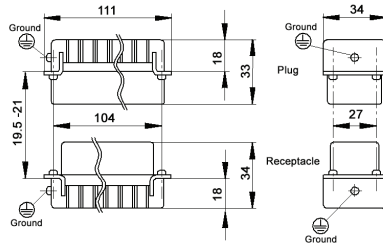
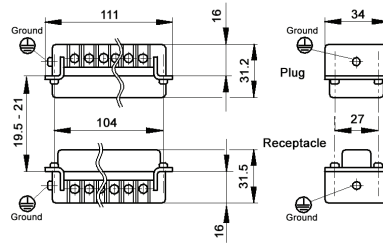
EPIC® HBE 24 Inserts  
Screw-Terminated

View from Cable Side

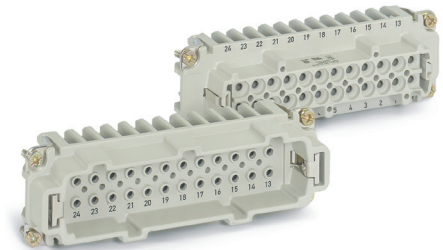


Crimp contacts sold separately, see below

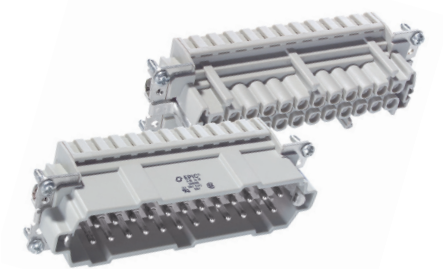
All dimensions are in mm.



Crimp-Terminated



Screwless Cage Clamp



**Compatible Housing**

HB 24:  
page 384

Approvals



Description	Plug	Receptacle
Screw-Terminated with Wire Protection	10196000	10197000
Screw-Terminated without Wire Protection	10196100	10197100
Crimp-Terminated: Machined Contacts	10186000	10187000
Screwless Cage Clamp	10400300	10401300

Machined Contacts  
2.5 mm Diameter

Contact Size mm <sup>2</sup>	AWG	Stripping Length (mm)		# of Marking Tracks	Silver Contacts		Gold Contacts	
		Pin	Socket		Pin	Socket	Pin	Socket
0.5	20	7.4	7.3	—	11190000	11195000	11192000	11197000
0.75 - 1.0	18	7.4	7.3	1	11190100	11195100	11192100	11197100
1.5	16	7.4	7.3	2	11190200	11195200	11192200	11197200
2.5	14	7.4	7.3	3	11190300	11195300	—	—
4.0	12	7.4	7.3	—	11190400	11195400	—	—

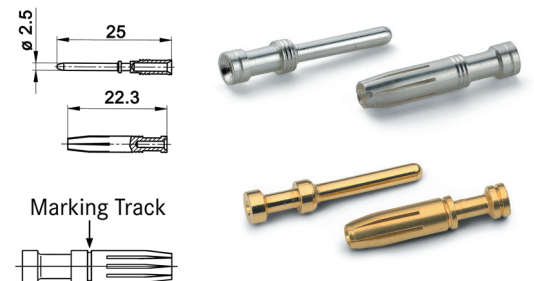
Part number = 1 contact, sold in bags of 100

**Complete the Installation**

Crimp Tool: 11147000

Crimp Dies: 11147100

Locator: 11147200

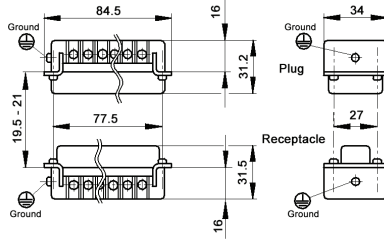
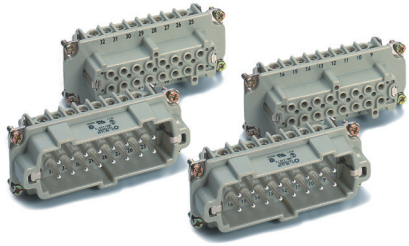


For removal of contacts, use a slotted screwdriver. No special tool is necessary.

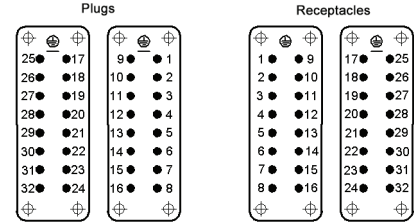
Photographs are not to scale and are not true representations of the products in question. For current information go to our website. If not otherwise specified, all values relating to the product are nominal values.

# EPIC® HBE 32 Inserts

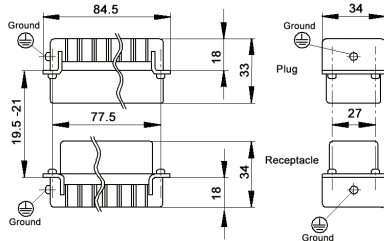
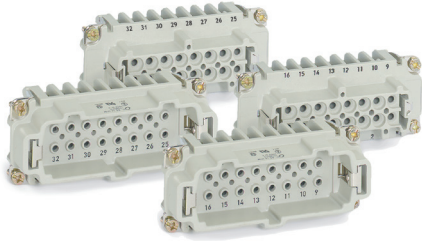
## Screw-Terminated



View from Cable Side

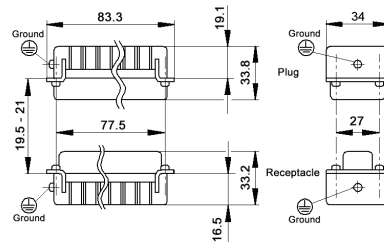
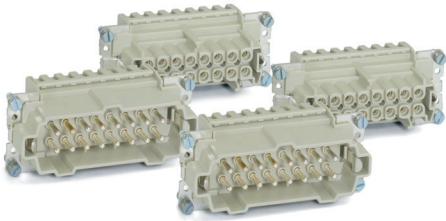


## Crimp-Terminated



Crimp contacts sold separately, see below  
All dimensions are in mm.

## Screwless Spring Cage Clamp



**Compatible Housing**

HB 32:  
page 390

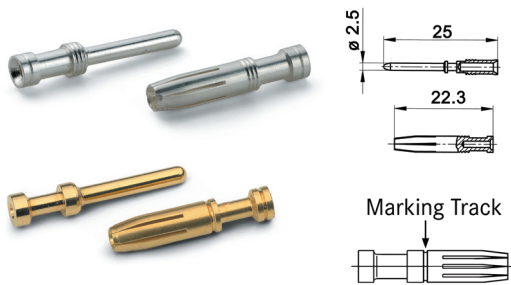
Description	Contacts	Plug	Receptacle
Screw-Terminated with Wire Protection	#1 - 16	10194000	10195000
	#17 - 32	10202000	10203000
Screw-Terminated without Wire Protection	#1 - 16	10194100	10195100
	#17 - 32	10202100	10203100
Crimp-Terminated: Machined Contacts	#1 - 16	10184000	10185000
	#17 - 32	10184200	10185200
Screwless Cage Clamp	#1 - 16	10400200	10401200
	#17 - 32	10400400	10401400

## Approvals



# Machined Contacts

## 2.5 mm Diameter



Contact Size	Stripping Length (mm)	# of Marking Tracks	Silver Contacts		Gold Contacts	
			Pin	Socket	Pin	Socket
0.5	20	—	11190000	11195000	11192000	11197000
0.75 - 1.0	18	1	11190100	11195100	11192100	11197100
1.5	16	2	11190200	11195200	11192200	11197200
2.5	14	3	11190300	11195300	—	—
4.0	12	—	11190400	11195400	—	—

Part number = 1 contact, sold in bags of 100

For removal of contacts, use a slotted screwdriver.  
No special tool is necessary.

**Complete the Installation**

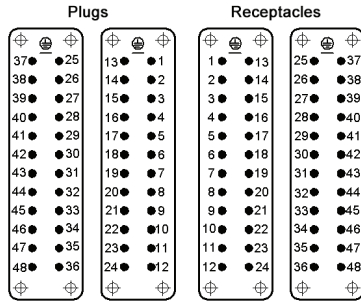
 Crimp Tool: 11147000
 Crimp Dies: 11147100
 Locator: 11147200

Photographs are not to scale and are not true representations of the products in question.  
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EPIC® HBE 48 Inserts  
Screw-Terminated

View from Cable Side

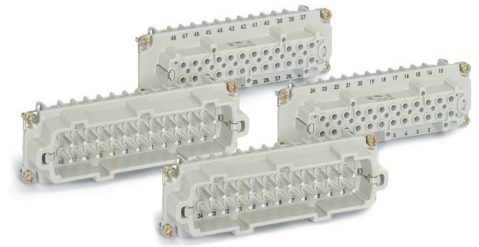
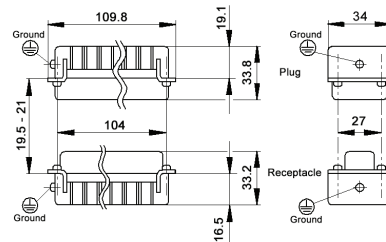
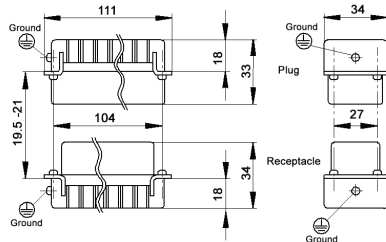
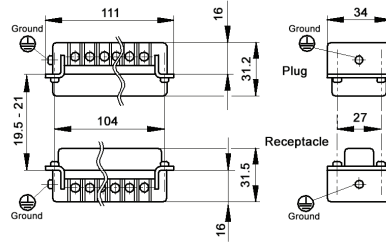


Crimp contacts sold separately, see below

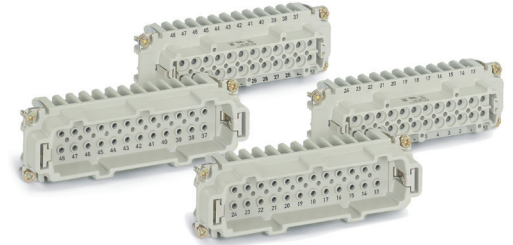
All dimensions are in mm.

**Compatible Housing**

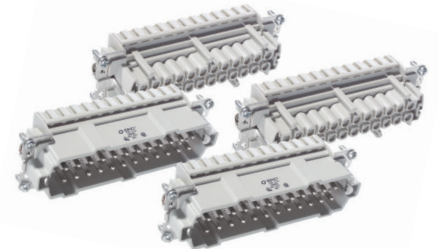
HB 48:  
page 392



Crimp-Terminated



Screwless Spring Cage Clamp



Approvals



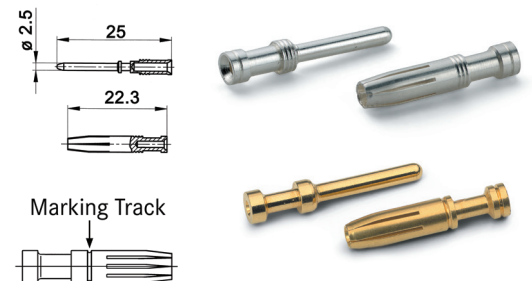
Description	Contacts	Plug	Receptacle
Screw-Terminated with Wire Protection	#1-24 #25-48	10196000 10204000	10197000 10205000
Screw-Terminated without Wire Protection	#1-24 #25-48	10196100 10204100	10197100 10205100
Crimp-Terminated: Machined Contacts	#1-24 #25-48	10186000 10186200	10187000 10187200
Screwless Cage Clamp	#1-24 #25-48	10400300 10400500	10401300 10401500

Machined Contacts  
2.5 mm Diameter

Contact Size mm <sup>2</sup>	AWG	Stripping Length (mm)		# of Marking Tracks	Silver Contacts		Gold Contacts	
		Pin	Socket		Pin	Socket	Pin	Socket
0.5	20	7.4	7.3	—	11190000	11195000	11192000	11197000
0.75 - 1.0	18	7.4	7.3	1	11190100	11195100	11192100	11197100
1.5	16	7.4	7.3	2	11190200	11195200	11192200	11197200
2.5	14	7.4	7.3	3	11190300	11195300	—	—
4.0	12	7.4	7.3	—	11190400	11195400	—	—

Part number = 1 contact, sold in bags of 100

**Complete the Installation**



For removal of contacts, use a slotted screwdriver. No special tool is necessary.

Photographs are not to scale and are not true representations of the products in question. For current information go to our website. If not otherwise specified, all values relating to the product are nominal values.