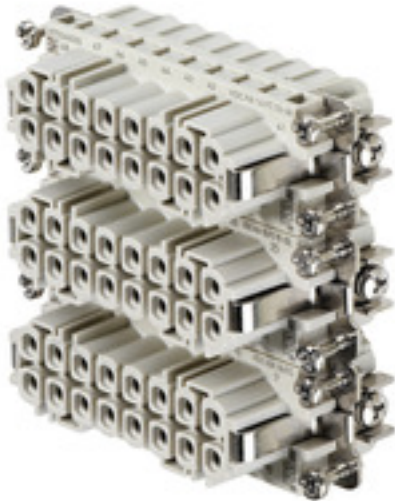


**HDC HA 16 FC 33 - 48****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)

The small and slim HA series can be used wherever space is limited.

The wire connection level is designed for crimp contacts. The proven crimp connection method has been in standard use for decades.

Crimp contacts are not included in the scope of delivery of inserts.

Crimp connection

**General ordering data**

Version	HDC insert, Female, 250 V, 16 A, Number of poles: 16, Crimp connection, Size: 5
Order No.	<a href="#">1875540000</a>
Type	HDC HA 16 FC 33 - 48
GTIN (EAN)	4032248465774
Qty.	1 pc(s).

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## Technical data

## Dimensions and weights

Depth	73 mm	Depth (inches)	2.874 inch
Height	31.1 mm	Height (inches)	1.224 inch
Width	23 mm	Width (inches)	0.906 inch
Net weight	36 g		

## Temperatures

Limit temperature	-40 °C ... 125 °C
-------------------	-------------------

## Dimensions

Height of socket	31.1 mm	Total length base	73 mm
Width	23 mm		

## General data

BG	5	Colour	beige
Conductor cross-section	2.5 mm <sup>2</sup>	Free from halogens	true
Insulating material	PC glass-fibre reinforced (UL-listed and railway-certified)	Insulating material group	IIIa
Insulation strength	10 <sup>10</sup> Ω	Low smoke acc. DIN EN 45545-2	Yes
Material	Copper alloy	Number of poles	16
Plugging cycles, gold	≥ 500	Plugging cycles, silver	≥ 500
Pollution severity	3	Rated current (DIN EN 61984)	16 A
Rated impulse voltage (DIN EN 61984)	4 kV	Rated voltage (DIN EN 61984)	250 V
Rated voltage according to UL/CSA	600 V AC/DC	Series	HA
Size	5	Type	Female
Type of connection	Crimp connection	UL 94 flammability rating	V-0
Volume resistance	≤2 mΩ		

## Connection data PE

Blade size, slotted (PE connection)	SD 0.8 x 4.0	Connection type PE	Screw connection
Fixing screw	M 4	Rated cross-section	2.5 mm <sup>2</sup>
Stripping length PE connection	10 mm	Tightening torque, max. PE connection	1.5 Nm
Tightening torque, min. PE connection	1.2 Nm	Wire cross section, AWG (PE), max.	AWG 14
Wire cross section, AWG (PE), min.	AWG 20		

## Version

BG	5	Conductor cross-section, max.	4 mm <sup>2</sup>
Conductor cross-section, min.	0.5 mm <sup>2</sup>	Material	Copper alloy
Size	5	Stripping length, rated connection	8 mm
Type of connection	Crimp connection	Volume resistance	≤2 mΩ
Wire connection cross section AWG, max.	AWG 12	Wire connection cross section AWG, min.	AWG 20
Wire connection cross section, finely stranded, max.	2.5 mm <sup>2</sup>	Wire connection cross section, finely stranded, min.	0.5 mm <sup>2</sup>
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	2.5 mm <sup>2</sup>	Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min.	0.5 mm <sup>2</sup>
Wire cross-section, solid, max.	2.5 mm <sup>2</sup>	Wire cross-section, solid, min.	0.5 mm <sup>2</sup>

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## Technical data

## Classifications

ETIM 6.0	EC000438	ETIM 7.0	EC000438
ETIM 8.0	EC000438	ETIM 9.0	EC000438
ECLASS 9.0	27-44-02-05	ECLASS 9.1	27-44-02-05
ECLASS 10.0	27-44-02-05	ECLASS 11.0	27-44-02-05
ECLASS 12.0	27-44-02-05	ECLASS 13.0	27-44-02-05

Substance	Acetone
Chemical resistance	Resistant
Substance	Ammonia, watery
Chemical resistance	Conditionally resistant
Substance	Petrol
Chemical resistance	Resistant
Substance	Benzene
Chemical resistance	Resistant
Substance	Diesel oil
Chemical resistance	Conditionally resistant
Substance	Acetic acid, concentrated
Chemical resistance	Resistant
Substance	Potassium hydroxide
Chemical resistance	Conditionally resistant
Substance	Methanol
Chemical resistance	Conditionally resistant
Substance	Motor oil
Chemical resistance	Conditionally resistant
Substance	Lye, diluted
Chemical resistance	Resistant
Substance	Hydrochlorofluorocarbons
Chemical resistance	Conditionally resistant
Substance	Outdoor use
Chemical resistance	Conditionally resistant

## Environmental Product Compliance

REACH SVHC	Lead 7439-92-1 Potassium perfluorobutane sulfonate 29420-49-3
SCIP	b67daa31-7dca-434d-8290-da7fb52f83a2
Chemical resistance	de.myview.objectmodel.impl.BlockImpl@31f94dd5 de.myview.objectmodel.impl.BlockImpl@29d051a2 de.myview.objectmodel.impl.BlockImpl@7724d105 de.myview.objectmodel.impl.BlockImpl@6e124d5 de.myview.objectmodel.impl.BlockImpl@7d0d4639 de.myview.objectmodel.impl.BlockImpl@56fb457b de.myview.objectmodel.impl.BlockImpl@7861a58 de.myview.objectmodel.impl.BlockImpl@8ce41f1 de.myview.objectmodel.impl.BlockImpl@1f65f25f de.myview.objectmodel.impl.BlockImpl@1339ac55 de.myview.objectmodel.impl.BlockImpl@24da20b0 de.myview.objectmodel.impl.BlockImpl@5e613c13

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## Technical data

### Approvals

Approvals



ROHS

Conform

### Downloads

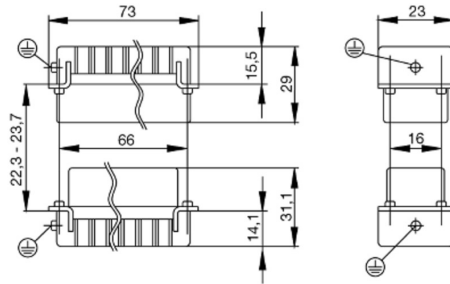
Engineering Data	<a href="#">CAD data – STEP</a>
Technical Documentation	<a href="#">1875540000 HDC HA 16 FC 33-48 STP Blatt 1.pdf</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>
Brochures	<a href="#">FL FIELDWIRING EN</a> <a href="#">FL FIELDWIRING EN</a>

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# Drawings



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[www.weidmueller.com](http://www.weidmueller.com)**Accessories****Contact removal tools**

Weidmüller offers a variety of crimping tools, contact removal tools, and fibre optic tools.

**General ordering data**

Type	REMOVAL TOOL HE	Version
Order No.	<a href="#">1866750000</a>	Tools, Contact Removal Tool
GTIN (EAN)	4032248437078	
Qty.	1 pc(s).	

**DSTV**

Various accessories are available for our inserts. This includes coding elements for the inserts.

**General ordering data**

Type	DSTV COBU5	Version
Order No.	<a href="#">1471500000</a>	Heavy-duty connectors, Accessories, Coding element
GTIN (EAN)	4008190178543	
Qty.	100 pc(s).	
Type	DSTV COST4	Version
Order No.	<a href="#">1471300000</a>	Heavy-duty connectors, Accessories, Coding System
GTIN (EAN)	4008190017354	
Qty.	100 pc(s).	

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[www.weidmueller.com](http://www.weidmueller.com)**Accessories****Slotted screwdriver**

VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip

**General ordering data**

Type	SDIS 0.6X3.5X100	Version
Order No.	<a href="#">9008390000</a>	Screwdriver, Screwdriver
GTIN (EAN)	4032248056354	
Qty.	1 pc(s).	
Type	SDIS 0.8X4.0X100	Version
Order No.	<a href="#">9008400000</a>	Screwdriver, Screwdriver
GTIN (EAN)	4032248056361	
Qty.	1 pc(s).	

**Crosshead screwdriver Phillips**

Crosshead screwdriver, Phillips, SDK PH DIN 5262, ISO 8764/2-PH, output to ISO 8764-PH, ChromTop tip, SoftFinish grip

**General ordering data**

Type	SDK PH1	Version
Order No.	<a href="#">9008480000</a>	Screwdriver, Screwdriver
GTIN (EAN)	4032248056477	
Qty.	1 pc(s).	

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[www.weidmueller.com](http://www.weidmueller.com)**Accessories****HE**

Various accessories are available for our inserts. This includes coding elements for the inserts.

**General ordering data**

Type	HDC HE CP	Version
Order No.	<a href="#">1003240000</a>	Heavy-duty connectors, Accessories, Coding System
GTIN (EAN)	4032248698233	
Qty.	100 pc(s).	

**Slotted screwdriver**

Slotted screwdriver with rounded blade SD DIN 5265, ISO 2380/2, output to DIN 5264, ISO 2380/1. ChromTop tip, SoftFinish grip

**General ordering data**

Type	SDS 0.6X3.5X100	Version
Order No.	<a href="#">9008330000</a>	Screwdriver, Screwdriver
GTIN (EAN)	4032248056286	
Qty.	1 pc(s).	

Type	SDS 0.8X4.0X100	Version
Order No.	<a href="#">9008340000</a>	Screwdriver, Screwdriver
GTIN (EAN)	4032248056293	
Qty.	1 pc(s).	



## HDC HA 16 FC 33 - 48

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## Accessories

## Crimp contacts HE



Crimps provide a electrical and mechanical connection between wire and contact that is both secure and reliable. The optimal crimp connection is gas-tight and corrosion-resistant.

## General ordering data

Type	HDC-C-HE-BM1.5AU	Version
Order No.	<a href="#">1651490000</a>	Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate,
GTIN (EAN)	4008190400163	Female, Conductor cross-section, max.: 1.5, turned, Copper alloy
Qty.	100 pc(s).	
Type	HDC-C-HE-BM0.75-1.00AG	Version
Order No.	<a href="#">1201200000</a>	Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate,
GTIN (EAN)	4008190044480	Female, Conductor cross-section, max.: 1, turned, Copper alloy
Qty.	100 pc(s).	
Type	HDC-C-HE-BM2.5AU	Version
Order No.	<a href="#">1651500000</a>	Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate,
GTIN (EAN)	4008190400170	Female, Conductor cross-section, max.: 2.5, turned, Copper alloy
Qty.	100 pc(s).	
Type	HDC-C-HE-BM4.0AU	Version
Order No.	<a href="#">1651510000</a>	Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate,
GTIN (EAN)	4008190400187	Female, Conductor cross-section, max.: 4, turned, Copper alloy
Qty.	100 pc(s).	
Type	HDC-C-HE-BM4.0AG	Version
Order No.	<a href="#">1201500000</a>	Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate,
GTIN (EAN)	4008190148096	Female, Conductor cross-section, max.: 4, turned, Copper alloy
Qty.	100 pc(s).	
Type	HDC-C-HE-BM1.5AG	Version
Order No.	<a href="#">1201300000</a>	Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate,
GTIN (EAN)	4008190100346	Female, Conductor cross-section, max.: 1.5, turned, Copper alloy
Qty.	100 pc(s).	
Type	HDC-C-HE-BM0.75-1.00AU	Version
Order No.	<a href="#">1651480000</a>	Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate,
GTIN (EAN)	4008190400156	Female, Conductor cross-section, max.: 1, turned, Copper alloy
Qty.	100 pc(s).	
Type	HDC-C-HE-BM0.5AG	Version
Order No.	<a href="#">1201100000</a>	Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate,
GTIN (EAN)	4008190142698	Female, Conductor cross-section, max.: 0.5, turned, Copper alloy
Qty.	100 pc(s).	
Type	HDC-C-HE-BM2.5AG	Version
Order No.	<a href="#">1201400000</a>	Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate,
GTIN (EAN)	4008190047078	Female, Conductor cross-section, max.: 2.5, turned, Copper alloy
Qty.	100 pc(s).	

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## Accessories

Type	HDC-C-HE-BM0.5AU	Version
Order No.	<a href="#">1651470000</a>	Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate,
GTIN (EAN)	4008190400149	Female, Conductor cross-section, max.: 0.5, turned, Copper alloy
Qty.	100 pc(s).	

## Crimping tools



## Crimping tools for turned contacts

- Ratchet guarantees precise crimping
- Release option in the event of incorrect operation
- With stop for exact positioning of the contacts.

## General ordering data

Type	CTX CM 1.6/2.5	Version
Order No.	<a href="#">9018490000</a>	Pressing tool, Crimping tool for contacts, 0.14mm <sup>2</sup> , 4mm <sup>2</sup> , W crimp
GTIN (EAN)	4008190884598	
Qty.	1 pc(s).	
Type	CTIN CM 1.6/2.5	Version
Order No.	<a href="#">9205430000</a>	Pressing tool, Crimping tool for contacts, 0.14mm <sup>2</sup> , 6mm <sup>2</sup> , 4-indent
GTIN (EAN)	4032248733446	crimp
Qty.	1 pc(s).	

## Crosshead screwdriver Phillips



VDE insulated crosshead screwdriver, for Phillips screws, SDIK PH DIN 7438, ISO 8764/2-PH, output to ISO 8764-PH, SoftFinish grip

## General ordering data

Type	SDIK PH1	Version
Order No.	<a href="#">9008570000</a>	Screwdriver, Screwdriver
GTIN (EAN)	4032248056569	
Qty.	1 pc(s).	

# Tightening torques and screwing tools

Screw size	Connector type	Dia. tightening torque in Nm	Recommended blade inserts and AF size for hexagon socket
<b>M 2.5</b>	<b>Signal contacts</b>		
	S 6/6	0.5 - 0.55	SD 0.6 x 3.5 mm or PZ0
	S 6/12	0.5 - 0.55	SD 0.6 x 3.5 mm or PZ0
<b>M 2.9 x 0.5</b>	<b>Fastening screws</b>		
	HQ 4/2	0.8 (plastic) / 1.1 (metal)	SD 0.6 x 3.5 mm or PH0
	HQ 8	0.8 (plastic) / 1.1 (metal)	SD 0.6 x 3.5 mm or PH0
	HQ 17	0.8 (plastic) / 1.1 (metal)	SD 0.6 x 3.5 mm or PH0
<b>M 3</b>	<b>Contact screws</b>		
	HA 3	0.5 - 0.55	SD 0.5 x 3.0 mm
	HA 4	0.5 - 0.55	SD 0.5 x 3.0 mm
	HA 10 bis HA 48	0.5 - 0.55	SD 0.6 x 3.5 mm or PH0
	HE	0.5 - 0.55	SD 0.6 x 3.5 mm or PZ0
	HVE	0.5 - 0.55	SD 0.6 x 3.5 mm or PZ0
	<b>Signal contacts:</b>		
	S 4/2	0.5 - 0.55	SD 0.6 x 3.5 mm or PZ0
	S 4/8	0.5 - 0.55	SD 0.6 x 3.5 mm or PZ0
	<b>PE connection via female contact</b>		
	S 4	0.5 - 0.8	SD 0.6 x 3.5 mm
	ConCept modular frame, metal	0.5 - 0.55	SD 0.6 x 3.5 mm
	<b>PE terminal</b>		
	HQ 5	0.5 - 0.55	SD 0.6 x 3.5 or 0.8 x 4 mm
	HQ 7	0.5 - 0.55	SD 0.6 x 3.5 or 0.8 x 4 mm
	<b>Fastening screws</b>	0.5 - 0.55	SD 0.6 x 3.5 mm or PZ0
	<b>Guide pin</b>	0.5 - 0.55	SD 0.6 x 3.5 mm or PZ0
	<b>Guide bush</b>	0.5 - 0.55	SD 0.6 x 3.5 mm or PZ0
	<b>Coding pins</b>	0.5 - 0.55	SD 0.6 x 3.5 mm or PZ0
<b>M 4</b>	<b>Contact screws</b>		
	HSB	1.2 - 1.5	SD 0.6 x 3.5 or 0.8 x 4 mm or PZ1
	<b>PE connection via male contact</b>		
	S 4	0.5 - 0.8	SD 0.6 x 3.5 mm
	ConCept modular frame, metal	1.2 - 1.5	SD 0.6 x 3.5 mm
	<b>PE terminal</b>		
	HA	1.2 - 1.5	SD 0.6 x 3.5 or 0.8 x 4 mm or PH1
	HE	1.2 - 1.5	SD 0.6 x 3.5 or 0.8 x 4 mm or PH1
	HEE	1.2 - 1.5	SD 0.6 x 3.5 or 0.8 x 4 mm or PH1
	HVE	1.2 - 1.5	SD 0.6 x 3.5 or 0.8 x 4 mm or PH1
	HD	1.2 - 1.5	SD 0.6 x 3.5 or 0.8 x 4 mm or PZ1
	HDD	1.2 - 1.5	SD 0.6 x 3.5 or 0.8 x 4 mm or PZ1
	S 6/6 (for signal contacts)	1.2 - 1.5	0.8 x 4 mm or PZ1
	ConCept modular frame, plastic	1.2 - 1.5	0.8 x 4 mm or PZ1
<b>M 5</b>	<b>PE terminal</b>		
	HSB	2 - 2.5	SD 1 x 5.5 mm or PZ2
	S 4/0 (Screw connection)	2 - 2.5	SD 1.2 x 6.5 mm or PH2
	S 4/0 (Axial screw connection)	2 - 2.5	SD 0.8 x 4 mm or PZ 2
	S 4/2	2 - 2.5	SD 1.2 x 6.5 mm or PH2
	S 4/8	2 - 2.5	SD 1.2 x 6.5 mm or PH2
	S 6/12	2 - 2.5	SD 0.8 x 4 mm or PZ 2
	S 6/36	2 - 2.5	SD 1.2 x 6.5 mm or PH2
	S 8/24	2 - 2.5	SD 1.2 x 6.5 mm or PH2
	S 12/2	2 - 2.5	SD 1.2 x 6.5 mm or PH2
<b>M 6</b>	<b>Power contacts</b>		
	S 4/0 (Screw connection)	1.2 (1.5 mm <sup>2</sup> ) / 2 (2.5 mm <sup>2</sup> ) / 3 (4-16 mm <sup>2</sup> )	SD 0.8 x 4 mm
	S 4/2	1.2 (1.5 mm <sup>2</sup> ) / 2 (2.5 mm <sup>2</sup> ) / 3 (4-16 mm <sup>2</sup> )	SD 0.8 x 4 mm
	S 4/8	1.2 (1.5 mm <sup>2</sup> ) / 2 (2.5 mm <sup>2</sup> ) / 3 (4-16 mm <sup>2</sup> )	SD 0.8 x 4 mm
<b>M 7 x 0.75</b>	<b>Power contacts</b>		
	S 4	1.1 - 1.7	SW 2
	S 6/6 (+ PE)	6 - 8	SW 4
<b>M 8 x 0.75</b>	<b>Power contacts</b>		
	S 6/12	1.1 - 1.7	SW 2
	S 8/0 (+ PE)	6 (10-16 mm <sup>2</sup> ) - 7 (25 mm <sup>2</sup> )	SW 4
<b>M10 x 1</b>	<b>Power contacts</b>		
	S 4/0 (Axial connection)	2 - 3	SW 3

Increasing the tightening torque does not improve the contact resistance. The stated torque settings offer optimal mechanical, thermal and electrical conditions. Exceeding the recommended values may even damage the conductor and terminal.