

**HDC HA 16 MC****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

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

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

The wire connection level is designed as a crimp contact. The established crimp connection has been used as a standard for decades.

Crimp contacts are not delivered with the inserts.

Pole count: 16

Rated current: 22 A

Rated voltage 250 V

Nominal voltage acc. to UL/CSA: 600 V AC/DC

Crimp connection

**General ordering data**

Version	HDC insert, Male, 250 V, 16 A, Number of poles: 16, Crimp connection, Size: 5
Order No.	<a href="#">1873890000</a>
Type	HDC HA 16 MC
GTIN (EAN)	4032248458400
Qty.	1 pc(s).

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## Technical data

## Dimensions and weights

Depth	73 mm	Depth (inches)	2.874 inch
Height	29 mm	Height (inches)	1.142 inch
Width	23 mm	Width (inches)	0.906 inch
Net weight	34 g		

## Temperatures

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

Height of plug	29 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	Male
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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## 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	Potassium perfluorobutane sulfonate 29420-49-3
SCIP	1609748e-c278-4c9b-b3d1-e6215d2988cd
Chemical resistance	de.myview.objectmodel.impl.BlockImpl@32ad3f12 de.myview.objectmodel.impl.BlockImpl@12744f80 de.myview.objectmodel.impl.BlockImpl@6f501076 de.myview.objectmodel.impl.BlockImpl@4a92fd4 de.myview.objectmodel.impl.BlockImpl@5f27c5fc de.myview.objectmodel.impl.BlockImpl@6f9f89d7 de.myview.objectmodel.impl.BlockImpl@23e7f2 de.myview.objectmodel.impl.BlockImpl@4d39afad de.myview.objectmodel.impl.BlockImpl@2c508bd3 de.myview.objectmodel.impl.BlockImpl@3f926ebf de.myview.objectmodel.impl.BlockImpl@201102c8 de.myview.objectmodel.impl.BlockImpl@20d595a0

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[www.weidmueller.com](http://www.weidmueller.com)**Technical data****Approvals**

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cURus)	E92202

**Downloads**

Engineering Data	<a href="#">CAD data – STEP</a>
Technical Documentation	<a href="#">1873890000_HDC_HA_16_MC_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>

## HDC HA 16 MC

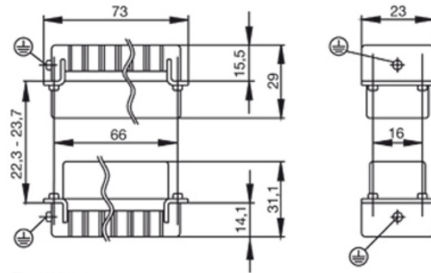
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## Drawings

### Abmessungen

Stift



Buchse

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

**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****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).	

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## 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).	

## 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-SM2.5AU	Version
Order No.	<a href="#">1651450000</a>	Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate, Male,
GTIN (EAN)	4008190400125	Conductor cross-section, max.: 2.5, turned, Copper alloy
Qty.	100 pc(s).	
Type	HDC-C-HE-SM0.75-1.00AU	Version
Order No.	<a href="#">1651430000</a>	Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate, Male,
GTIN (EAN)	4008190400101	Conductor cross-section, max.: 1, turned, Copper alloy
Qty.	100 pc(s).	
Type	HDC-C-HE-SM4.65AU	Version
Order No.	<a href="#">1116540000</a>	Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate, Male,
GTIN (EAN)	4032248897261	Conductor cross-section, max.: 4.65, turned, Copper alloy
Qty.	100 pc(s).	
Type	HDC-C-HE-SM1.5AG	Version
Order No.	<a href="#">1200700000</a>	Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate, Male,
GTIN (EAN)	4008190074920	Conductor cross-section, max.: 1.5, turned, Copper alloy
Qty.	100 pc(s).	
Type	HDC-C-HE-SM1.5AU	Version
Order No.	<a href="#">1651440000</a>	Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate, Male,
GTIN (EAN)	4008190400118	Conductor cross-section, max.: 1.5, turned, Copper alloy
Qty.	100 pc(s).	



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## Accessories

Type	HDC-C-HE-SM0.5AG	Version
Order No.	<a href="#">1200500000</a>	Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate, Male,
GTIN (EAN)	4008190159627	Conductor cross-section, max.: 0.5, turned, Copper alloy
Qty.	100 pc(s).	
Type	HDC-C-HE-SM0.75-1.00AG	Version
Order No.	<a href="#">1200600000</a>	Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate, Male,
GTIN (EAN)	4008190171308	Conductor cross-section, max.: 1, turned, Copper alloy
Qty.	100 pc(s).	
Type	HDC-C-HE-SM4.0AG	Version
Order No.	<a href="#">1200900000</a>	Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate, Male,
GTIN (EAN)	4008190115906	Conductor cross-section, max.: 4, turned, Copper alloy
Qty.	100 pc(s).	
Type	HDC-C-HE-SM2.5AG	Version
Order No.	<a href="#">1200800000</a>	Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate, Male,
GTIN (EAN)	4008190131913	Conductor cross-section, max.: 2.5, turned, Copper alloy
Qty.	100 pc(s).	
Type	HDC-C-HE-SM0.5AU	Version
Order No.	<a href="#">1651420000</a>	Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate, Male,
GTIN (EAN)	4008190400095	Conductor cross-section, max.: 0.5, turned, Copper alloy
Qty.	100 pc(s).	
Type	HDC-C-HE-SM4.0AU	Version
Order No.	<a href="#">1651460000</a>	Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate, Male,
GTIN (EAN)	4008190400132	Conductor cross-section, max.: 4, turned, Copper alloy
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).	

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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).	

**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).	

# 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.