

**HDC insert  
HDC HQ 7 FC**

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 16  
 D-32758 Detmold  
 Germany  
 Fon: +49 5231 14-0  
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The HQ series - big features in a compact design The electrical values speak for themselves. The standard HE crimp contacts can also be used here. 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: **7 (+PE)**  
 Rated current: **10 A**  
 Rated voltage: **400 V**  
 Nominal voltage acc. to UL/CSA: **600 V AC/DC**  
 Crimp connection

**General ordering data**

Type	HDC HQ 7 FC
Order No.	<a href="#">1003180000</a>
Version	HDC insert, Female, 400 V, 10 A, No. of poles: 7, Crimp connection, Size: 1
GTIN (EAN)	4032248698172
Qty.	1 pc(s).

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**Technical data****Dimensions and weights**

Length	21 mm	Length (inches)	0.827 inch
Width	21 mm	Width (inches)	0.827 inch
Height	40.2 mm	Height (inches)	1.583 inch
Net weight	17 g		

**Temperatures**

Limit temperature	-40 °C ... 125 °C
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**Environmental Product Compliance**

REACH SVHC	Lead 7439-92-1
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**Dimensions**

Height of socket	40.2 mm	Total length base	21 mm
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**General data**

Insulating material	PC glass-fibre reinforced (UL-listed and railway-certified)	Insulating material group	IIIa
Insulation resistance	$10^{10} \Omega$	Material	Copper alloy
No. of poles	7	Plugging cycles, gold	$\geq 500$
Plugging cycles, silver	$\geq 500$	Pollution severity	3
Rated current (DIN EN 61984)	10 A	Rated impulse voltage (DIN EN 61984)	6 kV
Rated voltage (DIN EN 61984)	400 V	Rated voltage according to UL/CSA	600 V AC/DC
Series	HQ	Size	1
Surface finish	Silver passivated, gold	Type	Female
UL 94 flammability rating	V-0	Volume resistance	$\leq 4m\Omega$

**Connection data PE**

Blade size, slotted (PE connection)	SD 0.6 x 3.5	Connection type PE	Screw connection
Fixing screw	M 3	Rated cross-section	2.5 mm <sup>2</sup>
Stripping length PE connection	5 mm	Tightening torque, max. PE connection	0.55 Nm
Tightening torque, min. PE connection	0.5 Nm	Wire connection cross section, finely stranded, max.	2.5 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.	0.14 mm <sup>2</sup>
Wire connection cross-section, finely stranded, min.	0.14 mm <sup>2</sup>	Wire cross section, AWG (PE), max.	AWG 14
Wire cross section, AWG (PE), min.	AWG 26		

## Data sheet

### HDC insert HDC HQ 7 FC

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## Technical data

### Version

Conductor cross-section, max.	2.5 mm <sup>2</sup>	Conductor cross-section, min.	0.14 mm <sup>2</sup>
Material	Copper alloy	Size	1
Stripping length, rated connection	8 mm	Surface finish	Silver passivated, gold
Type of connection	Crimp connection	Volume resistance	≤ 4mΩ
Wire connection cross section AWG, max.	AWG 14	Wire connection cross section AWG, min.	AWG 26
Wire connection cross section, finely stranded, max.	2.5 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.	0.14 mm <sup>2</sup>	Wire connection cross-section, finely stranded, min.	0.14 mm <sup>2</sup>

### Classifications

ETIM 3.0	EC001121	ETIM 4.0	EC001121
ETIM 5.0	EC001121	ETIM 6.0	EC000438
UNSPSC	30-21-18-01	eClass 5.1	27-14-34-19
eClass 6.2	27-14-34-19	eClass 7.1	27-44-02-05
eClass 8.1	27-44-02-05	eClass 9.0	27-44-02-05
eClass 9.1	27-44-02-05		

### Product information

Descriptive text technical data	Earth with same conductor cross-sections as crimp connections via plug and socket contact.
Instructions for accessories	Accessories, see chapter J - Tools, see chapter K

### Approvals

Approvals



ROHS	Conform
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### Downloads

Brochure/Catalogue	<a href="#">CAT 3 HDC 17/18 EN</a> <a href="#">FL FIELDWIRING EN</a>
Engineering Data	<a href="#">EPLAN, WSCAD</a>
Engineering Data	<a href="#">STEP</a>

Creation date September 27, 2018 11:45:05 PM CEST

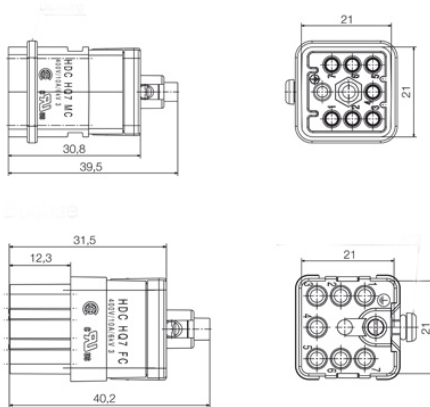
Catalogue status 14.09.2018 / We reserve the right to make technical changes.

**Data sheet**

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**Drawings**



# 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.