

**HDC S12/2 FC****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com



The MixMate series of connectors can simultaneously transmit high rated currents and voltages as well as signals.

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.

Crimp connection

**General ordering data**

Version	HDC insert, Female, 690 V, 40 A, Number of poles: 14, Crimp connection, Size: 6
Order No.	<a href="#">1023330000</a>
Type	HDC S12/2 FC
GTIN (EAN)	4032248739479
Qty.	1 pc(s).

Creation date March 22, 2021 3:01:19 PM CET

Catalogue status 12.03.2021 / We reserve the right to make technical changes.

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## Technical data

## Dimensions and weights

Depth	84.5 mm	Depth (inches)	3.327 inch
Height	40.6 mm	Height (inches)	1.598 inch
Net weight	69 g	Width	34 mm
Width (inches)	1.339 inch		

## Temperatures

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

REACH SVHC	Potassium perfluorobutane sulfonate 29420-49-3	
Chemical resistance	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	

## Dimensions

Height of socket	40.6 mm	Total length base	84.5 mm
Width	34 mm		

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## General data

Insulating material	PC glass-fibre reinforced (UL-listed and railway-certified)	Insulating material group	IIIa
Insulation strength	$10^{10} \Omega$	Number of poles	14
Number of power contacts	12	Number of signal contacts	2
Plugging cycles, gold	$\geq 500$	Plugging cycles, silver	$\geq 500$
Pollution severity	3	Power contact, type	HX
Rated current (DIN EN 61984)	40 A	Rated impulse voltage (DIN EN 61984)	8 kV
Rated voltage (DIN EN 61984)	690 V	Rated voltage according to UL/CSA	600 V AC/DC
Series	MixMate	Signal contact, type	HD
Size	6	Type	Female
UL 94 flammability rating	V-0	Volume resistance	$\leq 2 \text{ m}\Omega$

## Connection data PE

Blade size, crosshead	Gr. PH2	Blade size, slotted (PE connection)	SD 1.2 x 6.5
Connection type PE	Screw connection	Fixing screw	M 5
Rated cross-section	6 mm <sup>2</sup>	Stripping length PE connection	13 mm
Tightening torque, max. PE connection	2.5 Nm	Tightening torque, min. PE connection	2 Nm
Wire cross section, AWG (PE), max.	AWG 10	Wire cross section, AWG (PE), min.	AWG 20

## Power contact

Clamping range, power contact, max.	6 mm <sup>2</sup>	Clamping range, power contact, min.	1.5 mm <sup>2</sup>
Number of poles, performance contact	12	Rated current (DIN EN 61984), power contact	40 A
Rated impulse voltage (DIN EN 61984), power contact	8 kV	Rated voltage (DIN EN 61984), power contact	690 V
Stripping length, performance contact	9 mm	Type of connection, power contact	Crimp connection

## Signal contact

Clamping range, signal contact, max.	2.5 mm <sup>2</sup>	Clamping range, signal contact, min.	0.5 mm <sup>2</sup>
Number of poles, signal	2	Rated current (DIN EN 61984), signal	10 A
Rated impulse voltage (DIN EN 61984), signal	4 kV	Rated voltage (DIN EN 61984), signal contact	250 V
Stripping length, signal	8 mm	Type of connection, signal	Crimp connection

## Version

Conductor cross-section, max.	6 mm <sup>2</sup>	Conductor cross-section, min.	1.5 mm <sup>2</sup>
Size	6	Stripping length, rated connection	9 mm
Type of connection	Crimp connection	Volume resistance	$\leq 2 \text{ m}\Omega$
Wire connection cross section AWG, max.	AWG 10	Wire connection cross section AWG, min.	AWG 16
Wire connection cross section, finely stranded, max.	6 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.	6 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.	6 mm <sup>2</sup>	Wire cross-section, solid, min.	0.5 mm <sup>2</sup>

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**Data sheet**

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**Technical data**

**Classifications**

ETIM 6.0	EC000438	ETIM 7.0	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

**Approvals**

Approvals



ROHS	Conform
UL File Number Search	E92202

**Downloads**

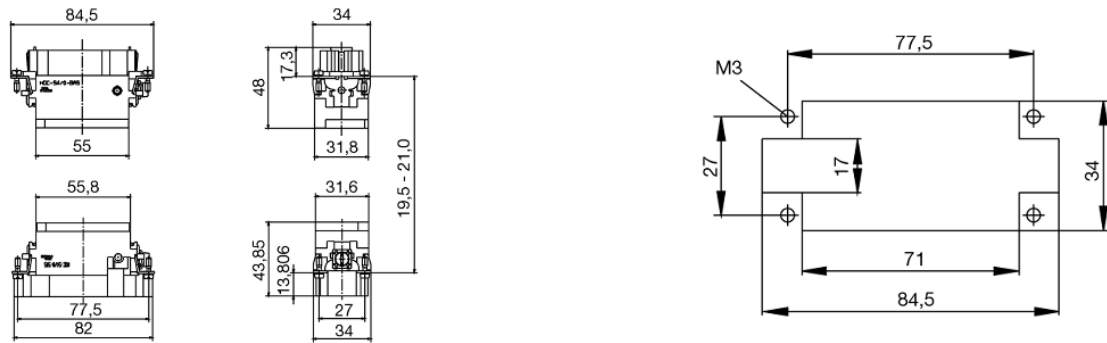
Approval/Certificate/Document of Conformity	<a href="#">Manufacturer's declaration</a>
Engineering Data	<a href="#">STEP</a>
Engineering Data	<a href="#">EPLAN, WSCAD</a>

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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.