

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.	1023330000
Type	HDC S12/2 FC
GTIN (EAN)	4032248739479
Qty.	1 pc(s).

Creation date March 7, 2023 2:31:03 PM CET

Catalogue status 03.03.2023 / 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
Width	34 mm	Width (inches)	1.339 inch
Net weight	69 g		

Temperatures

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

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

General data

BG	6	Free from halogens	true
Insulating material	PC glass-fibre reinforced (UL-listed and railway-certified)	Insulating material group	IIIa
Insulation strength	10 ¹⁰ Ω	Low smoke acc. DIN EN 45545-2	Yes
Material	Copper alloy	Number of poles	14
Number of power contacts	12	Number of signal contacts	2
Plugging cycles, gold	≥ 500	Plugging cycles, silver	≥ 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	≤2 mΩ

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 ²	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 ²	Clamping range, power contact, min.	1.5 mm ²
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 ²	Clamping range, signal contact, min.	0.5 mm ²
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

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Version

BG	6	Conductor cross-section, max.	6 mm ²
Conductor cross-section, min.	1.5 mm ²	Material	Copper alloy
Size	6	Stripping length, rated connection	9 mm
Type of connection	Crimp connection	Volume resistance	≤2 mΩ
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 ²	Wire connection cross section, finely stranded, min.	0.5 mm ²
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	6 mm ²	Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min.	0.5 mm ²
Wire cross-section, solid, max.	6 mm ²	Wire cross-section, solid, min.	0.5 mm ²

Classifications

ETIM 6.0	EC000438	ETIM 7.0	EC000438
ETIM 8.0	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

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

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Data sheet

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Environmental Product Compliance

REACH SVHC	Potassium perfluorobutane sulfonate 29420-49-3
SCIP	1609748e-c278-4c9b-b3d1-e6215d2988cd
Chemical resistance	de.myview.objectmodel.impl.BlockImpl@d3d7715 de.myview.objectmodel.impl.BlockImpl@31859 de.myview.objectmodel.impl.BlockImpl@555c657d de.myview.objectmodel.impl.BlockImpl@27f0450 de.myview.objectmodel.impl.BlockImpl@649c4ed5 de.myview.objectmodel.impl.BlockImpl@7c4543cf de.myview.objectmodel.impl.BlockImpl@4a04a6b7 de.myview.objectmodel.impl.BlockImpl@30236623 de.myview.objectmodel.impl.BlockImpl@36cf7c14 de.myview.objectmodel.impl.BlockImpl@60420a39 de.myview.objectmodel.impl.BlockImpl@f9c2998 de.myview.objectmodel.impl.BlockImpl@24255436

Approvals

Approvals



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

Downloads

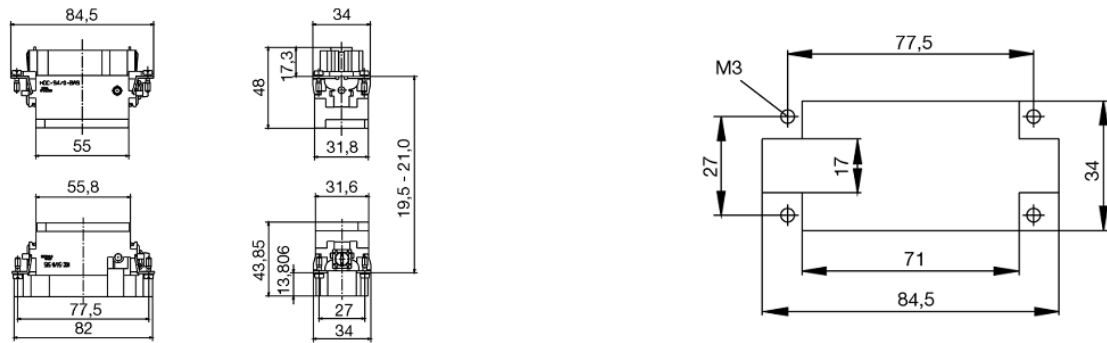
Approval/Certificate/Document of Conformity	Manufacturer's declaration
Engineering Data	CAD data – STEP
Engineering Data	WSCAD
Catalogues	Catalogues in PDF-format
Brochures	FL FIELDWIRING EN FL FIELDWIRING EN

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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
M 2.5	Signal contacts		
	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
M 2.9 x 0.5	Fastening screws		
	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
M 3	Contact screws		
	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
	Signal contacts:		
	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
	PE connection via female contact		
	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
	PE terminal		
	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
	Fastening screws	0.5 - 0.55	SD 0.6 x 3.5 mm or PZ0
	Guide pin	0.5 - 0.55	SD 0.6 x 3.5 mm or PZ0
	Guide bush	0.5 - 0.55	SD 0.6 x 3.5 mm or PZ0
	Coding pins	0.5 - 0.55	SD 0.6 x 3.5 mm or PZ0
	M 4	Contact screws	
HSB		1.2 - 1.5	SD 0.6 x 3.5 or 0.8 x 4 mm or PZ1
PE connection via male contact			
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
PE terminal			
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
M 5		PE terminal	
	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
	M 6	Power contacts	
S 4/0 (Screw connection)		1.2 (1.5 mm ²) / 2 (2.5 mm ²) / 3 (4-16 mm ²)	SD 0.8 x 4 mm
S 4/2		1.2 (1.5 mm ²) / 2 (2.5 mm ²) / 3 (4-16 mm ²)	SD 0.8 x 4 mm
S 4/8		1.2 (1.5 mm ²) / 2 (2.5 mm ²) / 3 (4-16 mm ²)	SD 0.8 x 4 mm
M 7 x 0.75	Power contacts		
	S 4	1.1 - 1.7	SW 2
	S 6/6 (+ PE)	6 - 8	SW 4
M 8 x 0.75	Power contacts		
	S 6/12	1.1 - 1.7	SW 2
	S 8/0 (+ PE)	6 (10-16 mm ²) - 7 (25 mm ²)	SW 4
M10 x 1	Power contacts		
	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.