

**HDC S6 6 SAS****Weidmüller Interfaces GmbH & Co. KG**

Postfach 3030

32760 Detmold

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The MixMate series of connectors can simultaneously transmit high rated currents and voltages as well as signals. An axial screw can be used to secure the wire.  
Axial screw connection TOP connection

**General ordering data**

Version	HDC insert, Pin, 690 V, 100 A, Number of poles: 12, Axial screw connection, Size: 8
Order No.	<a href="#">1790030000</a>
Type	HDC S6 6 SAS
GTIN (EAN)	4032248212095
Qty.	1 pc(s).

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## Technical data

## Dimensions and weights

Depth	111 mm	Depth (inches)	4.37 inch
Height	47.8 mm	Height (inches)	1.882 inch
Width	34 mm	Width (inches)	1.339 inch
Net weight	286 g		

## Temperatures

Limit temperature -40 °C ... 125 °C

## Environmental Product Compliance

REACH SVHC Lead 7439-92-1  
 SCIP d447edfa-0214-4f34-b5ba-82eae491b46a

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

## Dimensions

Height of plug	47.8 mm	Total length base	111 mm
Width	34 mm		

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PC glass-fibre reinforced  
(UL-listed and railway-  
certified)

## Technical data

## General data

BG	8	Insulating material	PC glass-fibre reinforced (UL-listed and railway-certified)
Insulating material group	IIIa	Insulation strength	10 <sup>10</sup> Ω
Material	Copper alloy	Number of poles	12
Number of power contacts	6	Number of signal contacts	6
Plugging cycles, silver	≥ 500	Pollution severity	3
Rated current (DIN EN 61984)	100 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	Size	8
Surface finish	Silver passivated	Type	Pin
UL 94 flammability rating	V-0	Volume resistance	≤1 mΩ

## Connection data PE

Connection type PE	Screw connection	Rated cross-section	35 mm <sup>2</sup>
Stripping length PE connection	8 mm	Tightening torque, max. PE connection	8 Nm
Tightening torque, min. PE connection	6 Nm	Wire cross section, AWG (PE), max.	AWG 2
Wire cross section, AWG (PE), min.	AWG 6		

## Power contact

Clamping range, power contact, max.	35 mm <sup>2</sup>	Clamping range, power contact, min.	16 mm <sup>2</sup>
Hexagon socket	4 mm	Number of poles, performance contact	6
Rated current (DIN EN 61984), power contact	100 A	Rated impulse voltage (DIN EN 61984), power contact	8 kV
Rated voltage (DIN EN 61984), power contact	690 V	Stripping length, performance contact	13 mm
Tightening torque, max.	0.9 Nm	Tightening torque, min.	0.45 Nm
Tightening torque, power contact, max.	8 Nm	Tightening torque, power contact, min.	6 Nm
Type of connection, power contact	Axial screw connection		

## Signal contact

AF size	SD 0.6 x 3.5	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	6
Rated current (DIN EN 61984), signal	16 A	Rated impulse voltage (DIN EN 61984), signal	6 kV
Rated voltage (DIN EN 61984), signal contact	400 V	Stripping length, signal	12 mm
Tightening torque, max.	0.9 Nm	Tightening torque, min.	0.45 Nm
Tightening torque, signal contact, max.	0.8 Nm	Tightening torque, signal contact, min.	0.4 Nm
Type of connection, signal	Screw connection		

## Version

BG	8	Clamping screw	M 7 x 0.75 mm
Conductor cross-section, max.	35 mm <sup>2</sup>	Conductor cross-section, min.	16 mm <sup>2</sup>
Material	Copper alloy	Size	8
Stripping length, rated connection	13 mm	Surface finish	Silver passivated
Type of connection	Axial screw connection	Volume resistance	≤1 mΩ
Wire connection cross section AWG, max.	AWG 2	Wire connection cross section AWG, min.	AWG 6
Wire connection cross section, finely stranded, max.	35 mm <sup>2</sup>	Wire connection cross section, finely stranded, min.	16 mm <sup>2</sup>

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Catalogue status 23.09.2022 / We reserve the right to make technical changes.

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**Technical data**

**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

**Approvals**

Approvals



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

**Downloads**

Engineering Data	<a href="#">CAD data – STEP</a>
Engineering Data	<a href="#">EPLAN, WSCAD, Zuken E3.S</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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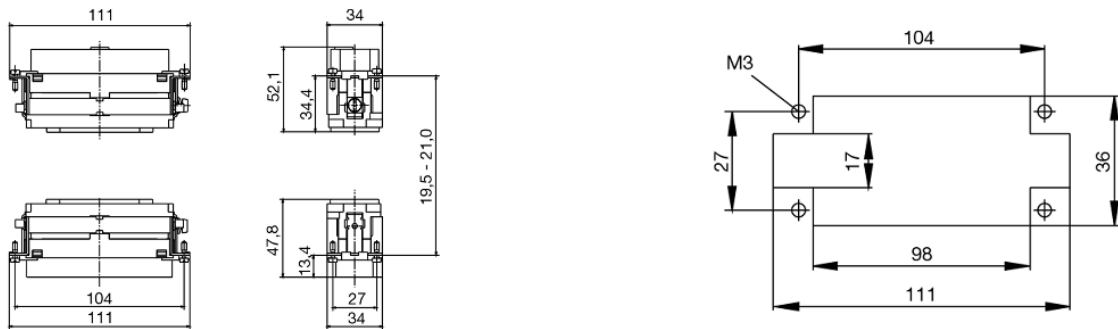
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**Drawings**

# 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.