HDC S4 SAS

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. An axial screw can be used to secure the wire.
Axial screw connection / TOP connection

General ordering data

Version	HDC insert, Male, 1000 V, 40 A, Number of poles: 4, Axial screw connection, Size: 3
Order No.	1789990000
Type	HDC S4 SAS
GTIN (EAN)	4032248212057
Qty.	1 pc(s).

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Technical data

Dimensions and weights

Depth	51 mm	Depth (inches)	2.008 inch
Height	41.3 mm	Height (inches)	1.626 inch
Width	34 mm	Width (inches)	1.339 inch
Net weight	78.7 g		

Temperatures

Limit temperature	-40 °C ... 125 °C

Dimensions

Height of plug	41.3 mm	Total length base	51 mm
Width	34 mm		

General data

BG	3	
Colour	beige	
Conductor cross-section	10 mm²	
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	4	
Number of power contacts	4	
Plugging cycles, silver	≥ 500	
Pollution severity	3	
Rated current (DIN EN 61984)	40 A	
Rated current (UR)	Wire connection cross section AWG	AWG 8
	Rated current	10 A
Rated current (cUR)	Wire connection cross section AWG	AWG 8
	Rated current	40 A
Rated impulse voltage (DIN EN 61984)	8 kV	
Rated voltage (DIN EN 61984)	1,000 V	
Rated voltage according to UL/CSA	600 V AC/DC	
Series	MixMate	
Size	3	
Surface finish	Silver passivated	
Type	Male	
Type of connection	Axial screw connection	
UL 94 flammability rating	V-0	
Volume resistance	≤1 mΩ	

Connection data PE

Blade size, slotted (PE connection)	SD 0.6 x 3.5	Connection type PE	Screw connection
Fixing screw	M 4	Rated cross-section	10 mm²
Stripping length PE connection	8 mm	Tightening torque, max. PE connection	0.8 Nm
Tightening torque, min. PE connection	0.5 Nm	Wire cross section, AWG (PE), max.	AWG 11
Wire cross section, AWG (PE), min.	AWG 14		

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Power contact

Clamping range, power contact, max.	10 mm²	Clamping range, power contact, min.	2.5 mm²
Hexagon socket	2 mm	Number of poles, performance contact	4
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	1,000 V	Stripping length, performance contact	8 mm
Tightening torque, power contact, max.	1.7 Nm	Tightening torque, power contact, min.	1.1 Nm
Type of connection, power contact	Axial screw connection		

Version

BG	3	Conductor cross-section, max.	10 mm²
Conductor cross-section, min.	2.5 mm²	Material	Copper alloy
Size	3	Stripping length, rated connection	8 mm
Surface finish	Silver passivated	Type of connection	Axial screw connection
Volume resistance	≤1 mΩ	Wire connection cross section AWG, max.	AWG 11
Wire connection cross section AWG, min.	AWG 14	Wire connection cross section, finely stranded, max.	10 mm²
Wire connection cross section, finely stranded, min.	2.5 mm²	Wire cross-section, solid, max.	10 mm²
Wire cross-section, solid, min.	2.5 mm²		

Classifications

ETIM 6.0	EC000438	ETIM 7.0	EC000438
ETIM 8.0	EC000438	ETIM 9.0	EC000438
ETIM 10.0	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	ECLASS 14.0	27-44-02-05
ECLASS 15.0	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

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Technical data

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

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	6c
REACH SVHC	Lead 7439-92-1
SCIP	c4c4c9fc-7957-49de-b5fd-516c2623a8c3
Chemical resistance	de.myview.objectmodel.impl.BlockImpl@7a4f609d de.myview.objectmodel.impl.BlockImpl@73b717f4 de.myview.objectmodel.impl.BlockImpl@67517620 de.myview.objectmodel.impl.BlockImpl@14a396dc de.myview.objectmodel.impl.BlockImpl@15e9575d de.myview.objectmodel.impl.BlockImpl@5eaaeaa3 de.myview.objectmodel.impl.BlockImpl@32267720 de.myview.objectmodel.impl.BlockImpl@3a3b12ce de.myview.objectmodel.impl.BlockImpl@6537f96b de.myview.objectmodel.impl.BlockImpl@6cc1f89c de.myview.objectmodel.impl.BlockImpl@6d5f1d53 de.myview.objectmodel.impl.BlockImpl@f10df54

Approvals

Approvals	
Approvals MAMID	https://mdcop.weidmueller.com/mediadelivery/rendition/900_319230/-T1z1mm-S800/
ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cURus)	E310075

Downloads

Engineering Data	CAD data – STEP
Catalogues	Catalogues in PDF-format
Brochures	FL FIELDWIRING EN FL FIELDWIRING EN

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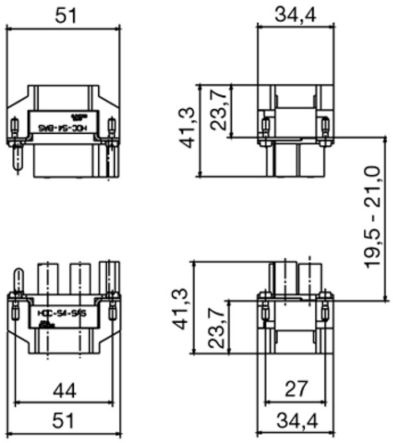
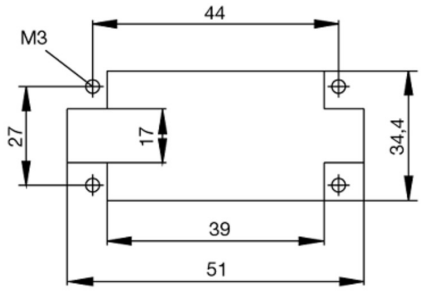
Drawings





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.