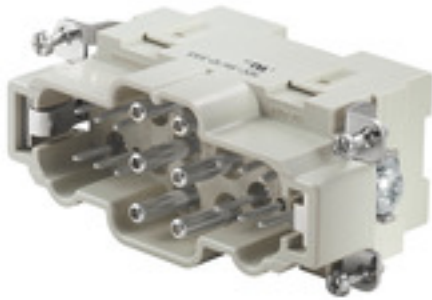


**HDC S6 12 SAS****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://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, 690 V, 48 A, Number of poles: 18, Axial screw connection, Size: 6
Order No.	<a href="#">1790000000</a>
Type	HDC S6 12 SAS
GTIN (EAN)	4032248212064
Qty.	1 pc(s).

## HDC S6 12 SAS

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## Technical data

## Dimensions and weights

Depth	84.5 mm	Depth (inches)	3.327 inch
Height	47.3 mm	Height (inches)	1.862 inch
Width	34 mm	Width (inches)	1.339 inch
Net weight	147 g		

## Temperatures

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

Height of plug	47.3 mm	Total length base	84.5 mm
Width	34 mm		

## General data

BG	6	Colour	beige
Free from halogens	true	Insulating material	PC glass-fibre reinforced (UL-listed and railway-certified)
Insulating material group	IIIa	Insulation strength	10 <sup>10</sup> Ω
Low smoke acc. DIN EN 45545-2	Yes	Material	Copper alloy
Number of poles	18	Number of power contacts	6
Number of signal contacts	12	Plugging cycles, silver	≥ 500
Pollution severity	3	Rated current (DIN EN 61984)	48 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	6	Surface finish	Silver passivated
Type	Male	Type of connection	Axial screw connection
UL 94 flammability rating	V-0	Volume resistance	≤2 mΩ

## Connection data PE

Blade size, slotted (PE connection)	SD 0.8 x 4.0	Connection type PE	Screw connection
Fixing screw	M 5	Rated cross-section	10 mm <sup>2</sup>
Stripping length PE connection	8 mm	Tightening torque, max. PE connection	2.5 Nm
Tightening torque, min. PE connection	2 Nm	Wire cross section, AWG (PE), max.	AWG 8
Wire cross section, AWG (PE), min.	AWG 14		

## Power contact

Clamping range, power contact, max.	10 mm <sup>2</sup>	Clamping range, power contact, min.	2.5 mm <sup>2</sup>
Hexagon socket	2 mm	Number of poles, performance contact	6
Rated current (DIN EN 61984), power contact	48 A	Rated impulse voltage (DIN EN 61984), power contact	8 kV
Rated voltage (DIN EN 61984), power contact	690 V	Stripping length, performance contact	8 mm
Tightening torque, max.	0.9 Nm	Tightening torque, min.	0.45 Nm
Tightening torque, power contact, max.	1.7 Nm	Tightening torque, power contact, min.	1.1 Nm
Type of connection, power contact	Axial screw connection		

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## Technical data

## 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	12
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	6	Clamping screw	M 8 x 0.75 mm
Conductor cross-section, max.	10 mm <sup>2</sup>	Conductor cross-section, min.	2.5 mm <sup>2</sup>
Material	Copper alloy	Size	6
Stripping length, rated connection	8 mm	Surface finish	Silver passivated
Type of connection	Axial screw connection	Volume resistance	≤2 mΩ
Wire connection cross section AWG, max.	AWG 8	Wire connection cross section AWG, min.	AWG 14
Wire connection cross section, finely stranded, max.	10 mm <sup>2</sup>	Wire connection cross section, finely stranded, min.	2.5 mm <sup>2</sup>
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	10 mm <sup>2</sup>	Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min.	2.5 mm <sup>2</sup>
Wire cross-section, solid, max.	10 mm <sup>2</sup>	Wire cross-section, solid, min.	2.5 mm <sup>2</sup>

## Classifications

ETIM 6.0	EC000438	ETIM 7.0	EC000438
ETIM 8.0	EC000438	ETIM 9.0	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		

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

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## Technical data

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

## 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@3efd439a de.myview.objectmodel.impl.BlockImpl@1025a492 de.myview.objectmodel.impl.BlockImpl@27aa7e36 de.myview.objectmodel.impl.BlockImpl@65b09dfa de.myview.objectmodel.impl.BlockImpl@3105e345 de.myview.objectmodel.impl.BlockImpl@c39d0c3 de.myview.objectmodel.impl.BlockImpl@789644bc de.myview.objectmodel.impl.BlockImpl@19284919 de.myview.objectmodel.impl.BlockImpl@7299eb2 de.myview.objectmodel.impl.BlockImpl@4554e95c de.myview.objectmodel.impl.BlockImpl@fade6ee de.myview.objectmodel.impl.BlockImpl@54961683

## Approvals

Approvals



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

## Downloads

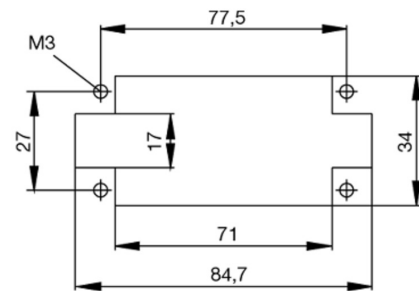
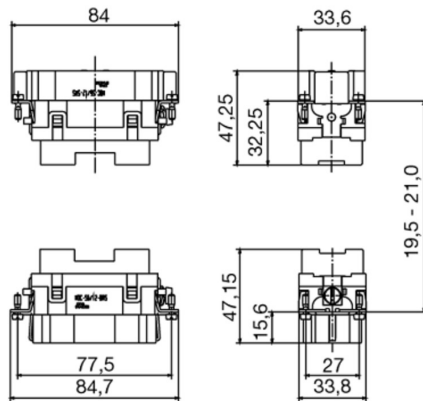
Engineering Data	<a href="#">CAD data – STEP</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>
Brochures	<a href="#">FL FIELDWIRING EN</a> <a href="#">FL FIELDWIRING EN</a>

## HDC S6 12 SAS

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## Drawings



**HDC S6 12 SAS****Weidmüller Interface GmbH & Co. KG**

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[www.weidmueller.com](http://www.weidmueller.com)**Accessories****Slotted screwdriver**

VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip

**General ordering data**

Type	SDIS 0.6X3.5X100	Version
Order No.	<a href="#">9008390000</a>	Screwdriver, Screwdriver
GTIN (EAN)	4032248056354	
Qty.	1 pc(s).	

**Socket wrench sets**

Allen key made from fully hardened, high-alloy chromium-vanadium- steel, acc. to DIN ISO 2936 L (DIN 911), high-quality refined surface.

**General ordering data**

Type	SK WSD-S 1,5-10,0	Version
Order No.	<a href="#">9008850000</a>	Mounting tool
GTIN (EAN)	4032248266609	
Qty.	1 pc(s).	

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[www.weidmueller.com](http://www.weidmueller.com)**Accessories****Slotted screwdriver**

Slotted screwdriver with rounded blade SD DIN 5265,  
ISO 2380/2, output to DIN 5264, ISO 2380/1.  
ChromTop tip, SoftFinish grip

**General ordering data**

Type	SDS 0.6X3.5X100	Version
Order No.	<a href="#">9008330000</a>	Screwdriver, Screwdriver
GTIN (EAN)	4032248056286	
Qty.	1 pc(s).	

# 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.