

Heavy-duty connectors Catalogue 2014/2015

Let's connect.

RockStar® - connectivity



Weidmüller 

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- Internal page links
- Links to the online catalogue

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 RockStar® ConCept modular system

 RockStar® Housings IP66 / NEMA Type 4X

 RockStar® Housings IP68

 RockStar® Heat Trace Connector

 RockStar® Data Connectors

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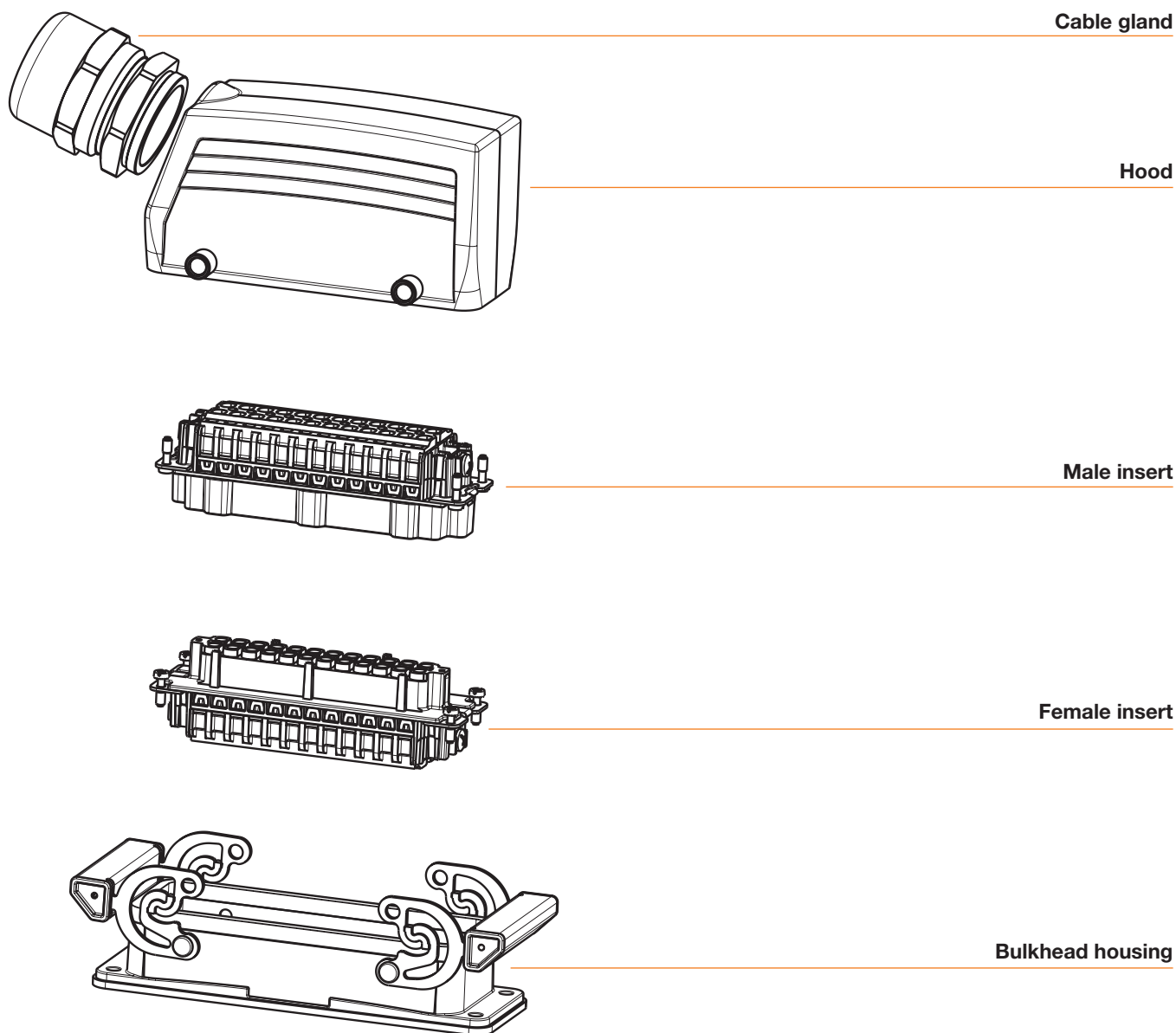
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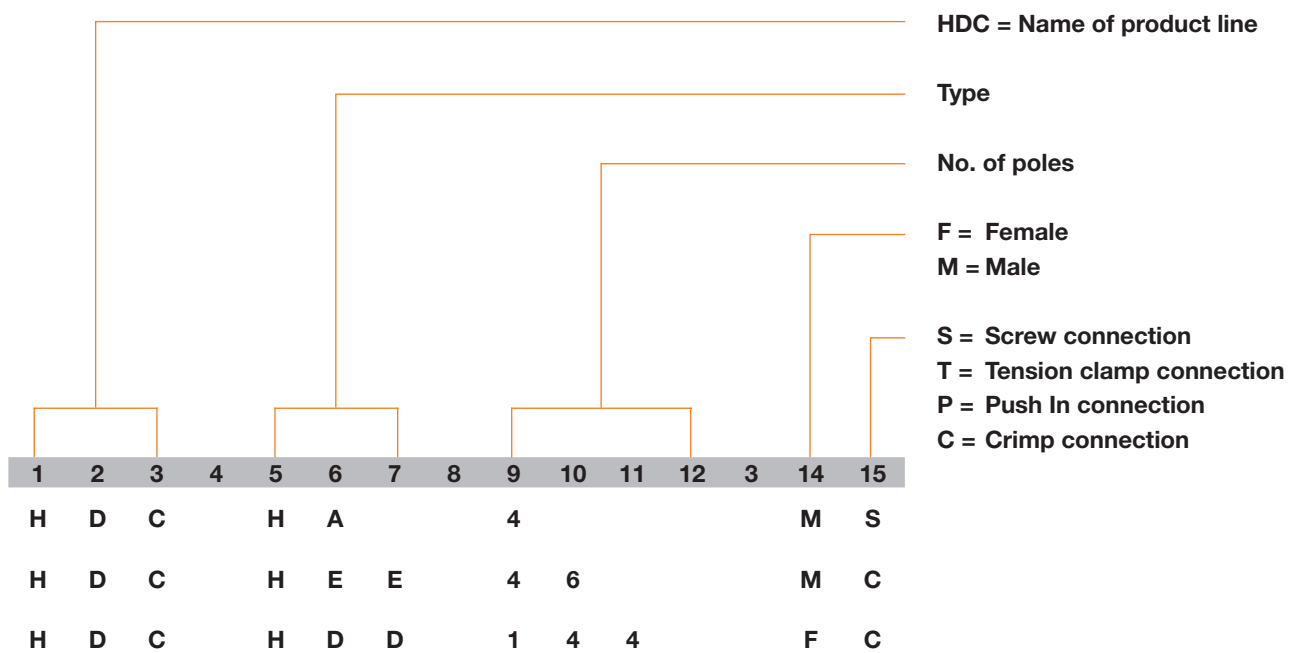
Overview HDC

Overview HDC	
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Construction of heavy-duty connectors – fixed pole



Part codes for inserts

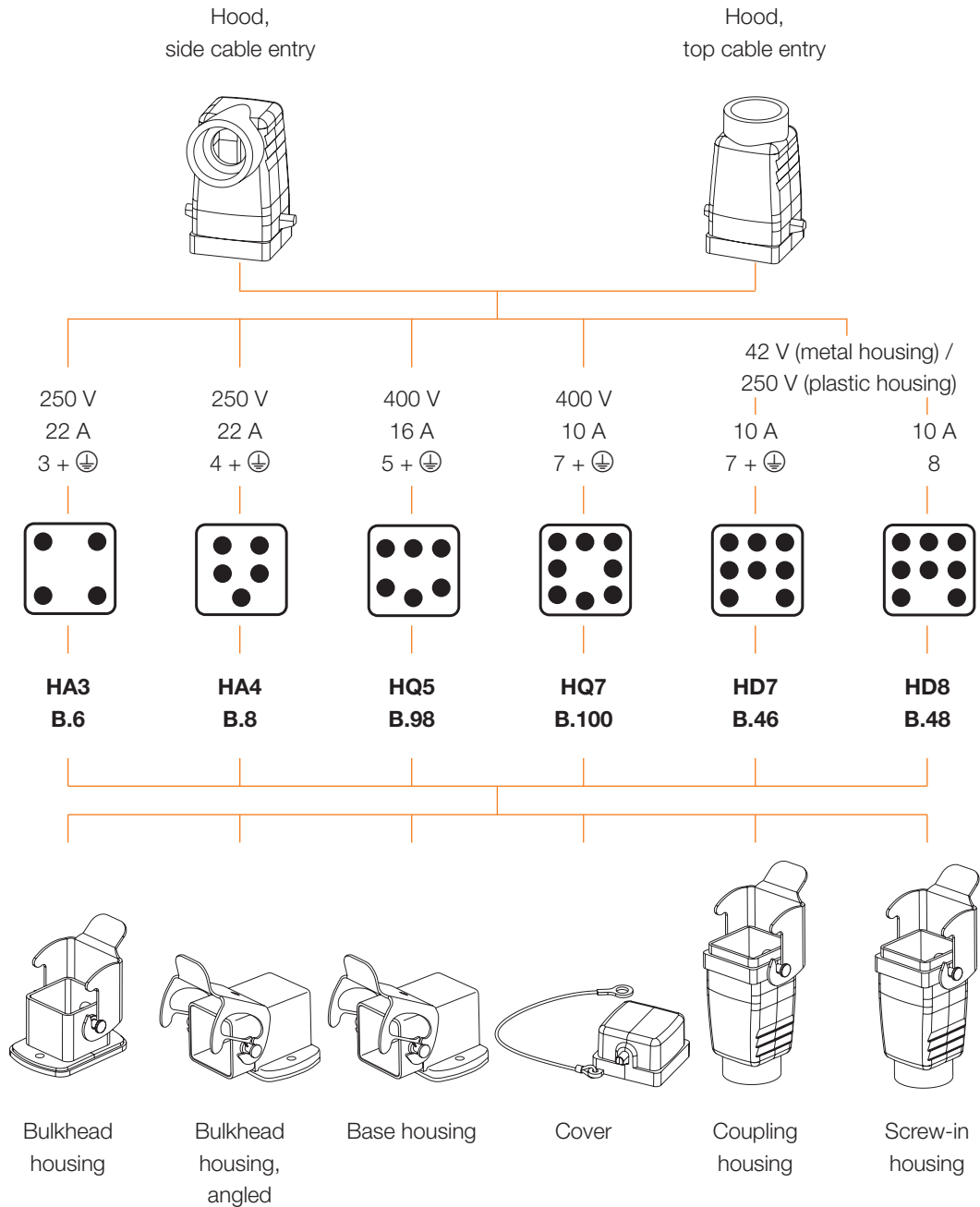


Overview of size 1 – fixed pole

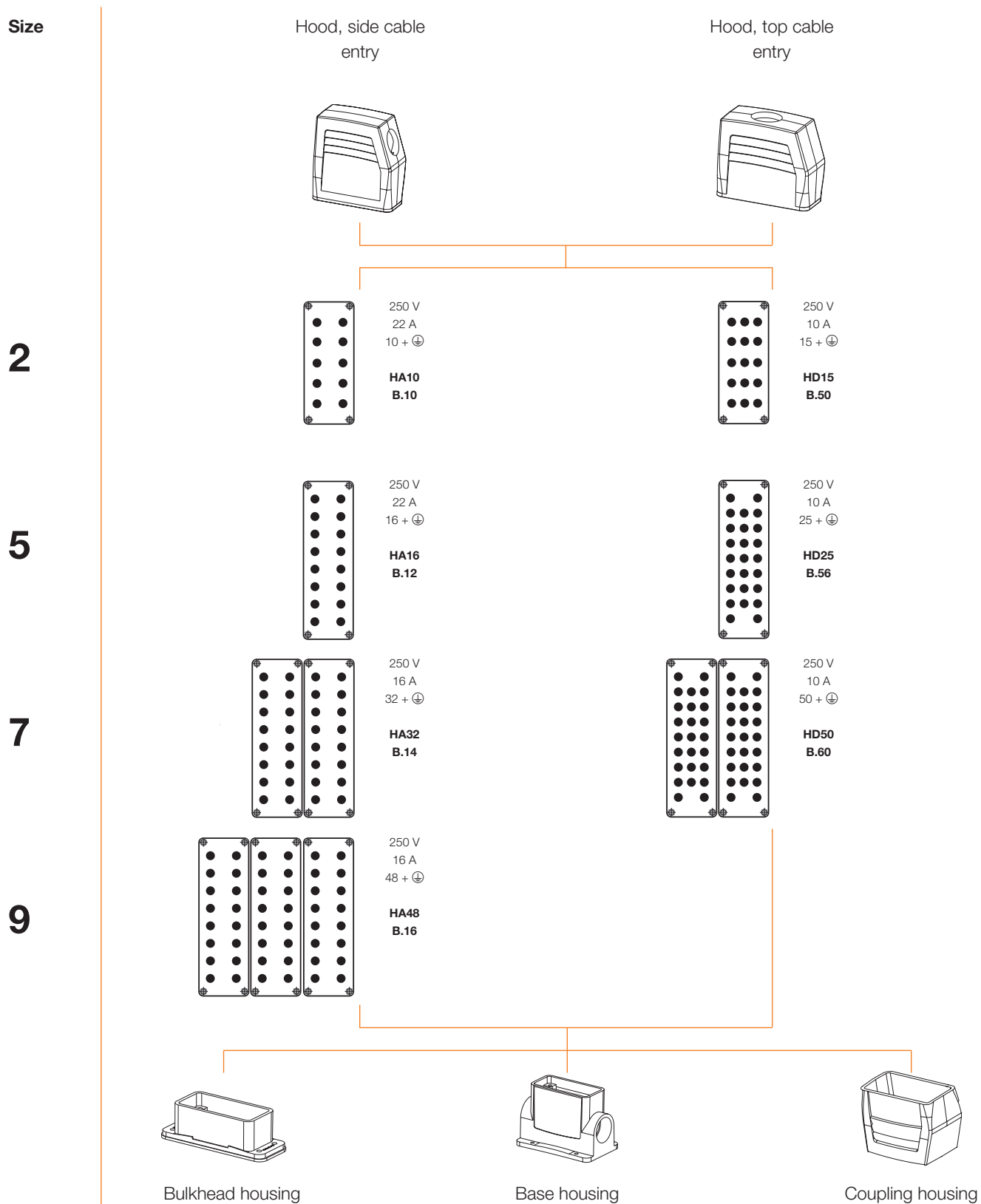
A

Size

1



Overview of sizes 2, 5, 7, 9 – fixed pole



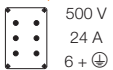
Overview of sizes 3, 4, 6, 8, 10, 12 – fixed pole

Size

Hood, side cable entry

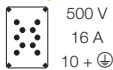
Hood, top cable entry

3



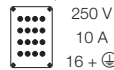
500 V
24 A
6 + ⊕

HE6
B.20



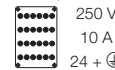
500 V
16 A
10 + ⊕

HEE10
B.34



250 V
10 A
16 + ⊕

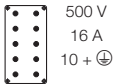
HD16
B.52



250 V
10 A
24 + ⊕

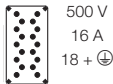
HDD24
B.70

4



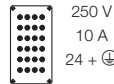
500 V
16 A
10 + ⊕

HE10
B.22



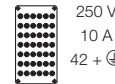
500 V
16 A
18 + ⊕

HEE18
B.36



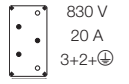
250 V
10 A
24 + ⊕

HD24
B.54



250 V
10 A
42 + ⊕

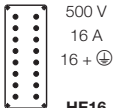
HDD42
B.72



830 V
20 A
3+2+⊕

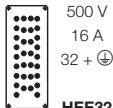
HVE3
B.84

6



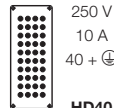
500 V
16 A
16 + ⊕

HE16
B.24



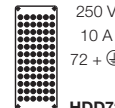
500 V
16 A
32 + ⊕

HEE32
B.38



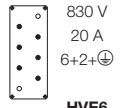
250 V
10 A
40 + ⊕

HD40
B.58



250 V
10 A
72 + ⊕

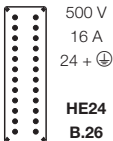
HDD72
B.74



830 V
20 A
6+2+⊕

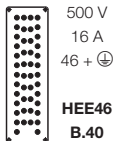
HVE6
B.86

8



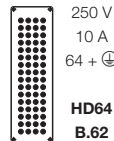
500 V
16 A
24 + ⊕

HE24
B.26



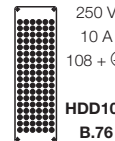
500 V
16 A
46 + ⊕

HEE46
B.40



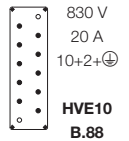
250 V
10 A
64 + ⊕

HD64
B.62



250 V
10 A
108 + ⊕

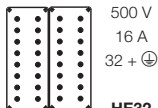
HDD108
B.76



830 V
20 A
10+2+⊕

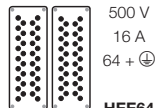
HVE10
B.88

10



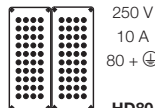
500 V
16 A
32 + ⊕

HE32
B.28



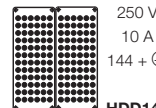
500 V
16 A
64 + ⊕

HEE64
B.42



250 V
10 A
80 + ⊕

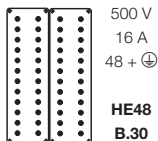
HD80
B.64



250 V
10 A
144 + ⊕

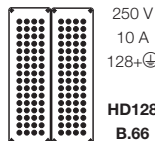
HDD144
B.78

12



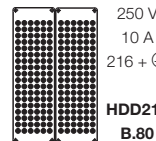
500 V
16 A
48 + ⊕

HE48
B.30



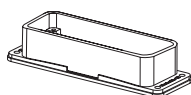
250 V
10 A
128+⊕

HD128
B.66

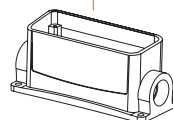


250 V
10 A
216 + ⊕

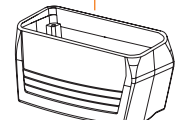
HDD216
B.80



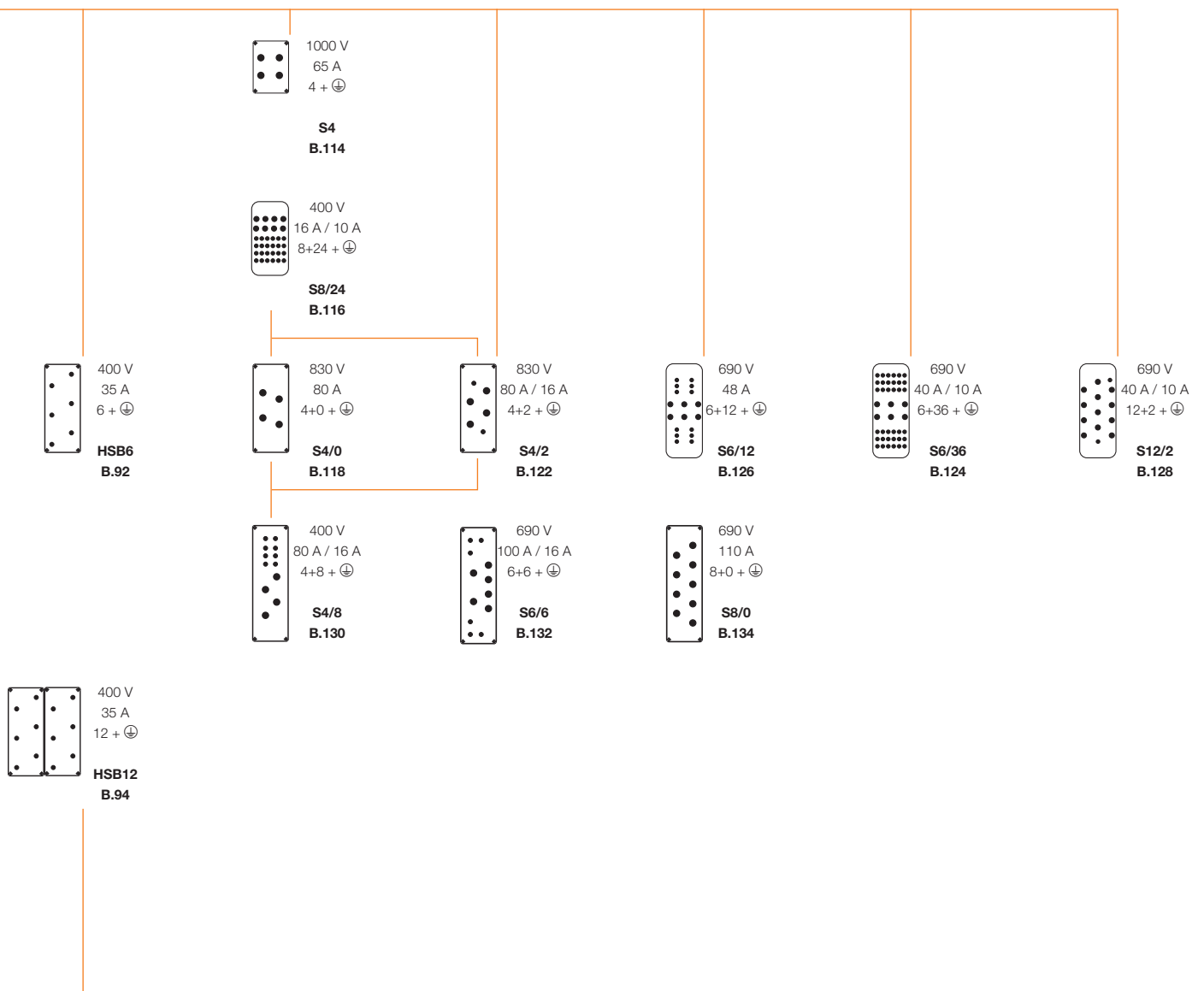
Bulkhead housing



Base housing



Coupling housing

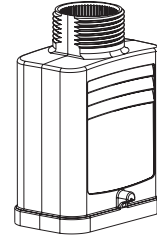
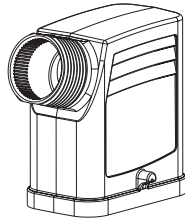


Overview of size HQ – fixed-pole

Size

Hood, side cable entry

Hood, top cable entry



500 V
16 A
8 + ⊕

250 V
10 A
17 + ⊕

630 V
40 A
4+2 + ⊕

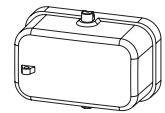
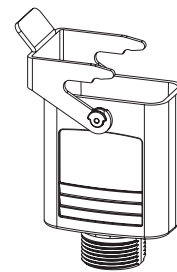
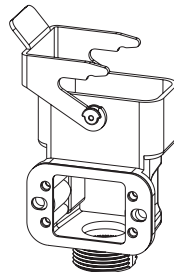
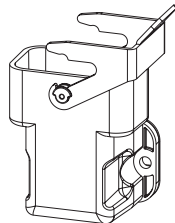
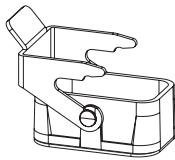


HQ8
B.102

HQ17
B.104

HQ4/2
B.106

HQ



Bulkhead housing

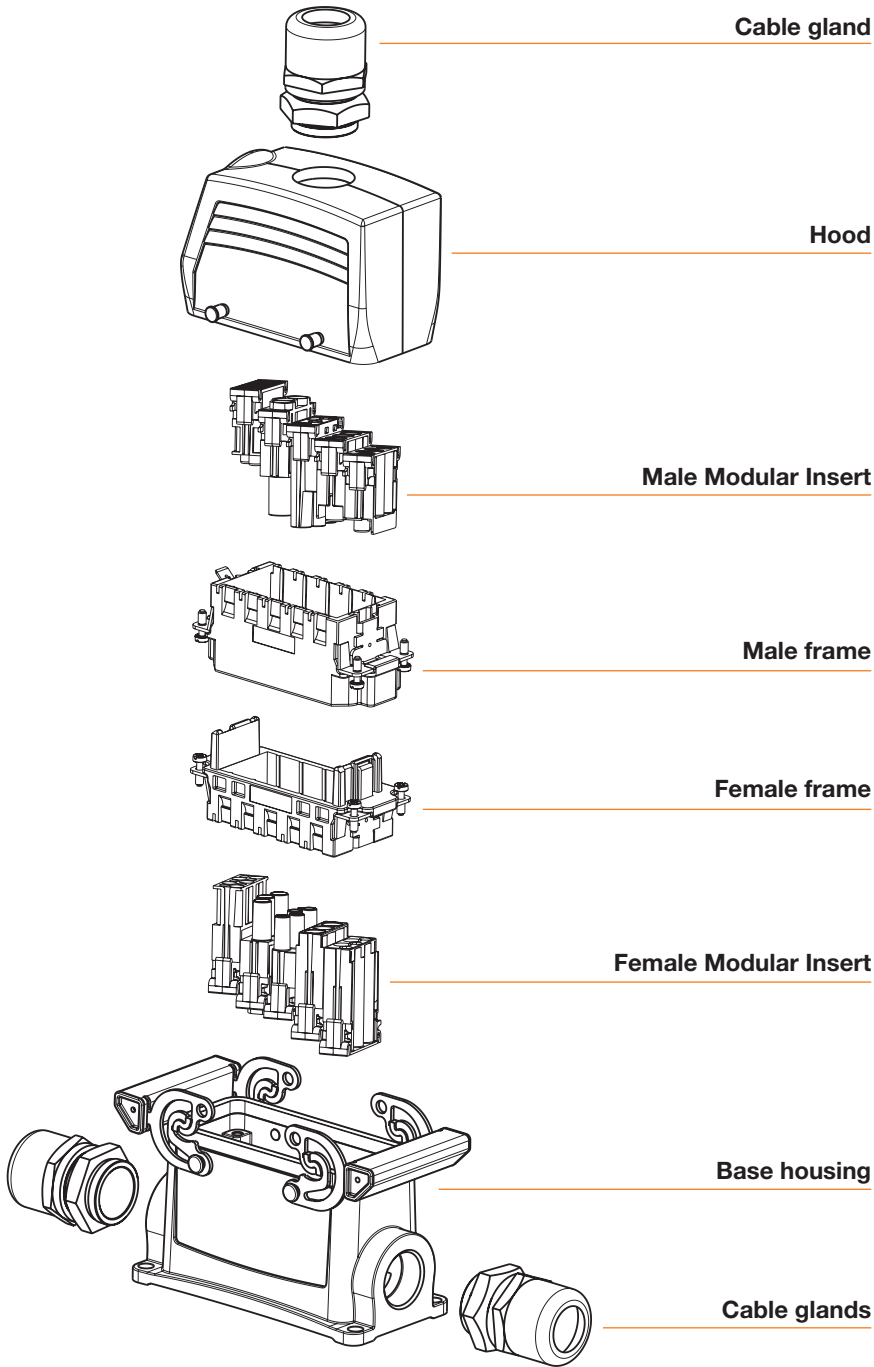
Bulkhead housing,
angled

Base housing

Coupling housing

Cover

Construction of heavy-duty connectors – modular

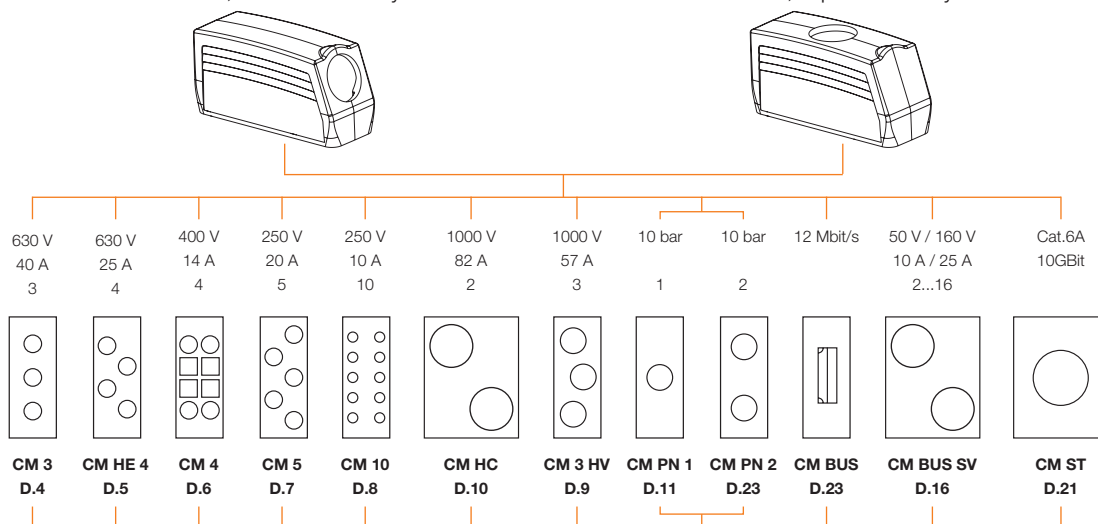


Overview of sizes 3, 4, 6, 8, 10, 12 – modular

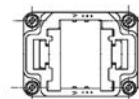
Size

Hood, side cable entry

Hood, top cable entry

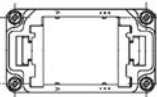


3



CR6/CFM6 for 2 modules
D.24/D.26

4



CR10/CFM10 for 3 modules
D.28/D.30

6



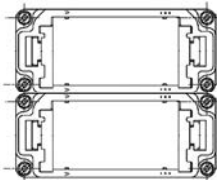
CR16/CFM16 for 5 modules
D.32/D.34

8



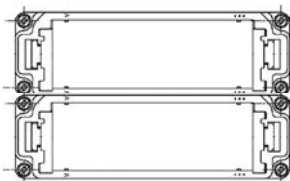
CR24/CFM24 for 7 modules
D.36/D.38

10

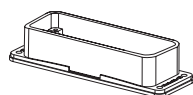


2 x CR16/CFM16 for 10 modules
D.40/D.34

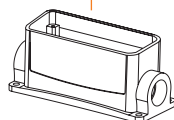
12



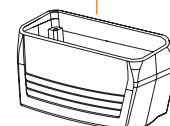
2 x CR24/CFM24 for 14 modules
D.42/D.38



Bulkhead housing



Base housing



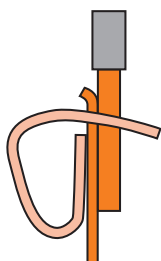
Coupling housing

Connection systems

A

Weidmüller offers RockStar® connectors with five different connection systems:

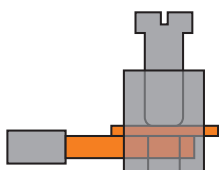
Tension clamp, screw, crimp, axial screw and PUSH IN wire connections



Tension clamp connection

The **Weidmüller tension clamp system** functions similarly to the tried-and-tested clamping yoke. Here again, the mechanical and electrical functions are kept separate. The tension spring, made from high-quality rustproof and acid-proof steel, pulls the conductor

against the tin-plated copper current bar. Treating the copper in this way ensures low contact resistance and high corrosion resistance. The compensating effect of the tension spring ensures a secure contact for the lifetime of the terminal. The tension-clamp wire connections are resistant to vibrations and have a high wire pull-out force.



Screw connection

Screw connection systems are easy to handle and are known worldwide; this is an important point to consider for mounting and maintenance tasks which are spread throughout the

world. Screw connections which are based on a clamping-type body offer a gas-tight, vibration-proof connection for connected wires. They also feature excellent contact force. This system is therefore perfectly suited for use in corrosive environments. The passivated silver surfaces ensure even more resistance against corrosion. The Weidmüller clamping-style body is perfectly suited for connecting solid-core and flexible stranded conductors. A wire-protection frame ensures that finely-stranded wires will not splice off.



In the **crimping** method, the wires are fed into a metal sleeve, which is then squeezed together with a special tool.

This means the connection is now corrosion and vibration proof. The contacts can be crimped on the conductor outside of the connector and then inserted into the connector.



The advantage of the axial screw connection

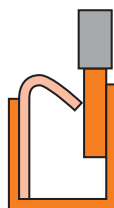
is the small space taken up by the contact. The axial screw connection is also extremely easy to

use. To make up the connection, the tool and conductor are held in a line. Just three steps are needed for a secure connection: strip the conductor, insert the wire into the contact chamber, screw in the contact – that's all!



PUSH IN connection technology

With the **PUSH IN connection system**, the stripped solid-core conductor is simply inserted into the terminal point until it butts against the end stop. And then it is ready. No tool is required and the result is a reliable,



vibration-resistant and gas-tight connection. Even flexible conductors with crimped wire end ferrules or ultrasonic-welded conductors can be connected without any problems. A stainless steel compression spring, which is fitted in a separate housing, guarantees a high contact force between the conductor and the current bar (tin-plated copper). The pull-out force for this system is even higher than that for the tension clamp system. Spring and conductor stops in a steel housing ensure optimum connection conditions and a guide for the screwdriver needed to detach the conductor.

An overview of the wire connection types for our fixed-pole connector inserts

Products	Tension clamp connection	PUSH IN connection	Axial screw connection	Screw connection	Screw connection with wire protection mechanism	Crimp connection
HDC HA (3-4 pole)				✓		
HDC HA (10-48 pole)	✓				✓	✓
HDC HE	✓	✓			✓	✓
HDC HEE						✓
HDC HD						✓
HDC HDD						✓
HDC HVE	✓				✓	
HDC HSB					✓	
HDC HQ						✓
HDC S4			✓			
HDC S4/0			✓	✓		
HDC S4/2				✓		
HDC S6/12			✓			
HDC S4/8				✓		
HDC S3/36						✓
HDC S8/24						✓
HDC S12/2						✓
HDC S6/6			✓			
HDC S8/0			✓			
HDC HighPower 250 A						✓
HDC HighPower 550 A						✓

Crimp contacts

A

Crimp contacts

Whereas the contacts for screw, axial screw, tension clamp and PUSH IN connections are already built in, you can choose the appropriate contact for a crimp connection.



The heart of a connector is its contacts. They make up the actual connection between two conductors. Two types of contacts make this possible: pins and sockets (male and female). The pin conducts the electrical current on its outer surface and is introduced into the socket, which conducts the electrical current on its inner surface. Heavy-duty connectors have copper alloy contacts and the contact surfaces are plated with gold or silver: silver improves conductivity, gold is corrosion-proof.

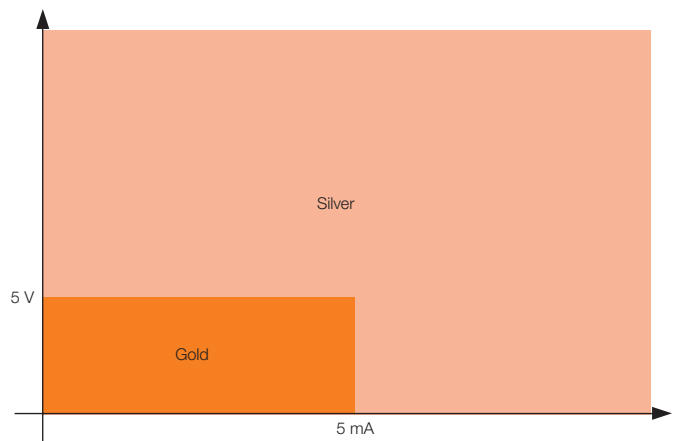
Crimp contacts are available in turned, solid form.

Selection of silver or gold-plated contacts







When using plug-in connectors under standard conditions, the resistance between the contacts has little effect. Even heavily corroded silver-coated contact pins and sockets do not exhibit any contact problems.

The situation is different where there are very small currents in extreme applications such as those in electroplating shops, tunnels or in cellulose processing. The silver oxide layer on the surface of the contacts forms an electrical resistance with capacitive, inductive and ohmic components. As a result, the original signal is distorted so much that the recipient is unable to detect it properly and interprets it incorrectly. This results in faults and, indirectly, to damage to machines and processes. Gold-plated contacts should be used in such cases.

The rule of thumb is: use gold-coated contacts for currents < 5 mA and voltages of up to 5 V.



Overview of crimp contacts

	Article	Properties	Usage
	HD-, HDD contacts	Rated current: 10 A Cross-section: 0.14-2.50 mm ² AWG: 26...14 Surface finish: gold-plated, silver-plated	HD Series HDD Series CM 10 CM BUS SV
	HE-, HEE contacts	Rated current: 16 A Cross-section: 0.5-4.00 mm ² AWG: 20...12 Surface finish: gold-plated, silver-plated	HA Series HE Series HEE Series HQ - Series MixMate Series CM HE 4 CM BUS SV
	CM-5 contacts	Rated current: 20 A Cross-section: 0.75-4.00 mm ² AWG: 20...12 Surface finish: silver-plated	CM 5
	HX contacts	Rated current: 40 A Cross-section: 1.5-6.00 mm ² AWG: 16...10 Surface finish: silver-plated	HQ Series MixMate Series
	CM-3 contacts	Rated current: 57 A Cross-section: 1.5-10.00 mm ² AWG: 16...7 Surface finish: silver-plated	CM 3 CM 3 HV
	HP contacts	Rated current: 250 A / 550 A Cross-section: 25-240 mm ² Surface finish: silver-plated	HighPower Series

Using wire-end ferrules

A

Type of connection	Series	HA	HE	HVE	HSB	
Screw	Clamping range [mm ²]	0.5 – 2.5	0.5 – 2.5	0.5 – 2.5	–	
	Clamping range [AWG]	20 – 12	20 – 14 (12) ¹⁾	20 – 14 (12) ¹⁾	–	
	Ferrules with collars	H0.5/14 – H2.5/14	H0.5/14 – H2.5/14 ²⁾	H0.5/14 – H2.5/14 ²⁾	H0.5/14 – H2.5/14 ²⁾	–
		H0.5/16 – H2.5/16	H0.5/16 – H2.5/16 ²⁾	H0.5/16 – H2.5/16 ²⁾	H0.5/16 – H2.5/16 ²⁾	–
	Ferrules without collars	H0.5/10 – H2.5/10	H0.5/10 – H2.5/10	H0.5/10 – H2.5/10	–	
	Twin wire-end ferrules with collars	H0.5/16.5 (ZH)	H0.5/18.5 (ZH)	–	–	H0.5/15 (ZH)
		H0.5/18.5 (ZH)	H1.0/20 (ZH) ³⁾	–	–	H0.5/16.5 (ZH)
		H0.75/17 (ZH)	H1.5/20 (ZH) ³⁾	–	–	H0.5/18.5 (ZH)
		H1.0/20 (ZH)	–	–	–	H0.75/15 (ZH)
		H1.5/20 (ZH)	–	–	–	H0.75/17 (ZH)
Tension clamp	Clamping range [mm ²]	0.25 – 1.5	0.25 – 2.5	0.25 – 2.5	–	
		2.5 solid core	–	–	–	
	Clamping range [AWG]	24 – 14 ⁴⁾	24 – 14	24 – 14	–	
	Ferrules with collars	H0.5/14 – H1.5/14 ⁴⁾	H0.5/14 – H2.5/14 ²⁾	H0.5/14 – H2.5/14 ²⁾	–	
		H0.5/16 – H1.5/16 ⁴⁾	–	–	–	
	Ferrules without collars	H0.5/10 – H1.5/10 ⁴⁾	–	–	–	
	Twin wire-end ferrules with collars	–	H0.5/15 (ZH) ^{5) or 6)}	–	–	
		–	H0.75/15 (ZH) ^{5) or 6)}	–	–	
		–	H1.0/15 (ZH) ^{5) or 6)}	–	–	
		–	H1.5/16 (ZH) ^{5) or 6)}	–	–	
Crimp tool	PZ4, PZ6, PZ6/5	PZ4 ⁷⁾ , PZ6, PZ6/5	PZ4 ⁷⁾ , PZ6, PZ6/5	–		
Screwdriver	SD 0.5x 3.0	SD 0.6x 3.5	SD 0.6x 3.5	–		
Tightening torque	0.5 Nm	0.5 Nm	0.5 Nm	–		
PUSH IN	Clamping range [mm ²]	–	solid 0.5 – 4 mm ² flexible with ferrule 0.5 – 2.5 mm ²	–	–	
		–	–	–	–	
	Clamping range [mm ²]	–	20 – 12	–	–	
	Ferrules with collars	–	H0.5/14 – H1.5/14	–	–	
		–	H0.5/16 – H1.5/16	–	–	
		–	H0.75/18 – H2.5/18 ²⁾	–	–	
	Ferrules without collars	–	H0.5/10 – H2.5/10 ²⁾	–	–	
		–	H1.5/12 – H2.5/12 ²⁾	–	–	
	Twin wire-end ferrules with collars	–	H0.5/18.4 ZH	500 V / 6 kV / 3	–	
		–	H1/20 ZH	400 V / 6 kV / 3	–	
–		–	500 V / 6 kV / 3 only with protection degree of at least IP54	–		
–		H1.5/20 ZH	400 V / 6 kV / 3	–		
Ferrules crimped with	–	–	500 V / 6 kV / 3 only with protection degree of at least IP54	–		
	–	PZ4, PZ6, PZ6/5, PZ6 Hex	–	–		
PE contact	Clamping range [mm ²]	0.5 – 4.0	0.5 – 4	0.5 – 4	–	
		0.5 – 2.5 flexible	–	–	–	
	Clamping range [AWG]	20 – 12	20 – 12	20 – 12	–	
	Ferrules with collars	H0.5/16 – H2.5/16	H0.5/16 – H4/16	H0.5/16 – H4/16	–	
	Ferrules without collars	H0.5/10 – H2.5/10	H0.5/10 – H4/10	H0.5/10 – H4/10	–	
	Ferrules crimped with	PZ4 ²⁾ , PZ6, PZ6/5	PZ4, PZ6, PZ6/5, PZ6 Hex	PZ4, PZ6, PZ6/5,	–	
				PZ6 Hex	–	
	Screwdriver	PH 1	PH 1	PH 1	–	
Tightening torque	1.2 Nm	1.2 Nm	1.2 Nm	–		

¹⁾ Depending on the diameter of the insulation, the max. AWG wire may need to be pushed in with some force.

²⁾ The 2.5mm² wire must be inserted with some force.

³⁾ When the rated voltage is reduced to 400 V / 6 kV / 3 or with a protection degree of at least IP54.

⁴⁾ Only by tilting the screwdriver can the clamping point be opened all the way.

⁵⁾ Wire-end ferrules may be used when the rated voltage is reduced to 400 V / 6 kV / 3.

⁶⁾ When the protection degree is at least IP54, the creepage and clearance distances within the encapsulation may be rated for a lower pollution degree. (DIN EN 61984) For this encapsulation, the use of wire-end ferrules is possible with 500 V / 6 kV / 3.

⁷⁾ The PZ4 crimping tool should not be used with the max. wire size.

The connector inserts can be combined with wire-end ferrules in other ways depending on the available clamping range and the type of cable being used. We would be happy to take a look at the technical feasibility of your specific application.

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 PZO
	S 6/12	0.5 - 0.55	SD 0.6 x 3.5 mm or PZO
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 PZO
	HVE	0.5 - 0.55	SD 0.6 x 3.5 mm or PZO
	Signal contacts:		
	S 4/2	0.5 - 0.55	SD 0.6 x 3.5 mm or PZO
	S 4/8	0.5 - 0.55	SD 0.6 x 3.5 mm or PZO
	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 PZO
	Guide pin	0.5 - 0.55	SD 0.6 x 3.5 mm or PZO
	Guide bush	0.5 - 0.55	SD 0.6 x 3.5 mm or PZO
	Coding pins	0.5 - 0.55	SD 0.6 x 3.5 mm or PZO
	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
M 8 x 0.75	Power contacts		
	S 6/6 (+ PE)	6 - 8	SW 4
M10 x 1	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.

RockStar® Housing types

Housing IP66 / NEMA Type 4X



The housing and the interlock mechanism on a connector protect the contacts from exterior mechanical influences (ie. shock, contamination, dust, accidental touching, moisture penetration, water and liquids such as cleaning solvents, coolants and oils). The durable RockStar® housings are produced with the highest quality standards; they provide IP66 protection and are resistant to corrosion and impacts. All housings come standard with a stainless steel interlock. A special die-cast alloy and the multi-level surface finish combine to deliver the ultimate protection against extreme conditions and ensure that the housings keep their visual appeal.

Applications:

- General mechanical engineering
- Materials handling and factory construction
- Packaging machines
- Transport and traffic engineering
- Energy technology
- Lighting and stage equipment
- Fairground rides
- Process engineering

Features:

- Tightness at least IP66 to IEC 60529
- Tightness NEMA Type 4X
- Scratch-resistant, corrosion-proof, long-lasting

Design:

- Cast aluminium alloy
- Multistage surface coating
- Colour: grey, similar to RAL 9006
- 2 versions, standard and high
- 11 sizes

Interlock system

- Clamp lock in different versions of rustproof stainless steel

HQ Series Housings, IP66 / NEMA Type 4X



The HQ connector series has a very compact housing with IP66 protection. It is available in either plastic or metal. The full industrial capability of these products makes them a perfect match for the main usage in materials handling applications. The HQ housing series is particularly important for connecting motor starters and frequency converters. It is also the ideal extension for setting up a decentralised power distribution system based on FieldPower®.

Applications:

- General machine construction
- Materials handling and factory construction
- Decentralised automation

Features:

- Tightness: at least IP66, acc. to IEC 60529
- Tightness: NEMA Type 4X
- Complies with VDE and ISO 23570 (DESINA)
- Scratch-proof, corrosion resistant and durable

Design:

- Plastic housing: polycarbonate, glass-fibre reinforced; Colour: grey, similar to RAL 7032
- Metal housing: die-cast zinc, nickel-plated, multi-level surface coating, EMC properties
- Cable outlet is straight or angled

Interlock system

- Clamp interlock made from rust-free stainless steel

Housing IP68 – the highest degree of sealing



The IP68 housings have been developed for use under extreme environmental conditions. The high degree of protection (IP68 and IP69K) and the excellent resistance to vibration and shock guarantee fail-safe operation when heavy-duty connectors are used in vehicles and under tough climatic conditions. If you want to protect your delicate interfaces from EMC emissions, these connectors are the right choice for you.

Applications:

- Transport and traffic engineering
- Energy technology
- Applications with extreme protection class requirements

Features:

- Tightness IP68 / 5 bar to IEC 60529
- IP69K impermeability according to DIN 40050-9
- Scratch-proof, corrosion resistant, impact resistant and durable

Design:

- Cast aluminium alloy
- Multistage surface coating
- Optimised construction for high impact resistance and EMC
- Colour: black RAL 9005
- 5 sizes; size 8 also in XXL

Interlock system

- Screw cap with internal/external hex drive

Locking systems

One longitudinal locking clamp on housing bottom



- Manual operation – no tools required
- 2 locking points – along the longitudinal axis
- Good for lengthwise alignment
- Interlock system made from rust-free stainless steel

One central locking clamp on housing top



- Manual operation – no tools required
- 2 locking points along the transverse axis
- Easily accessible from above where space is limited
- Made from rust-free stainless steel

Two transverse locking clamps on housing bottom



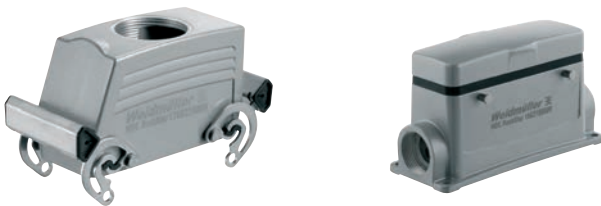
- Manual operation – no tools required
- 4 locking points – good sealing effect
- Easily accessible when the cable inlet is in the plugging direction
- Good for aligning side by side
- Made from rust-free stainless steel

Screw fastening



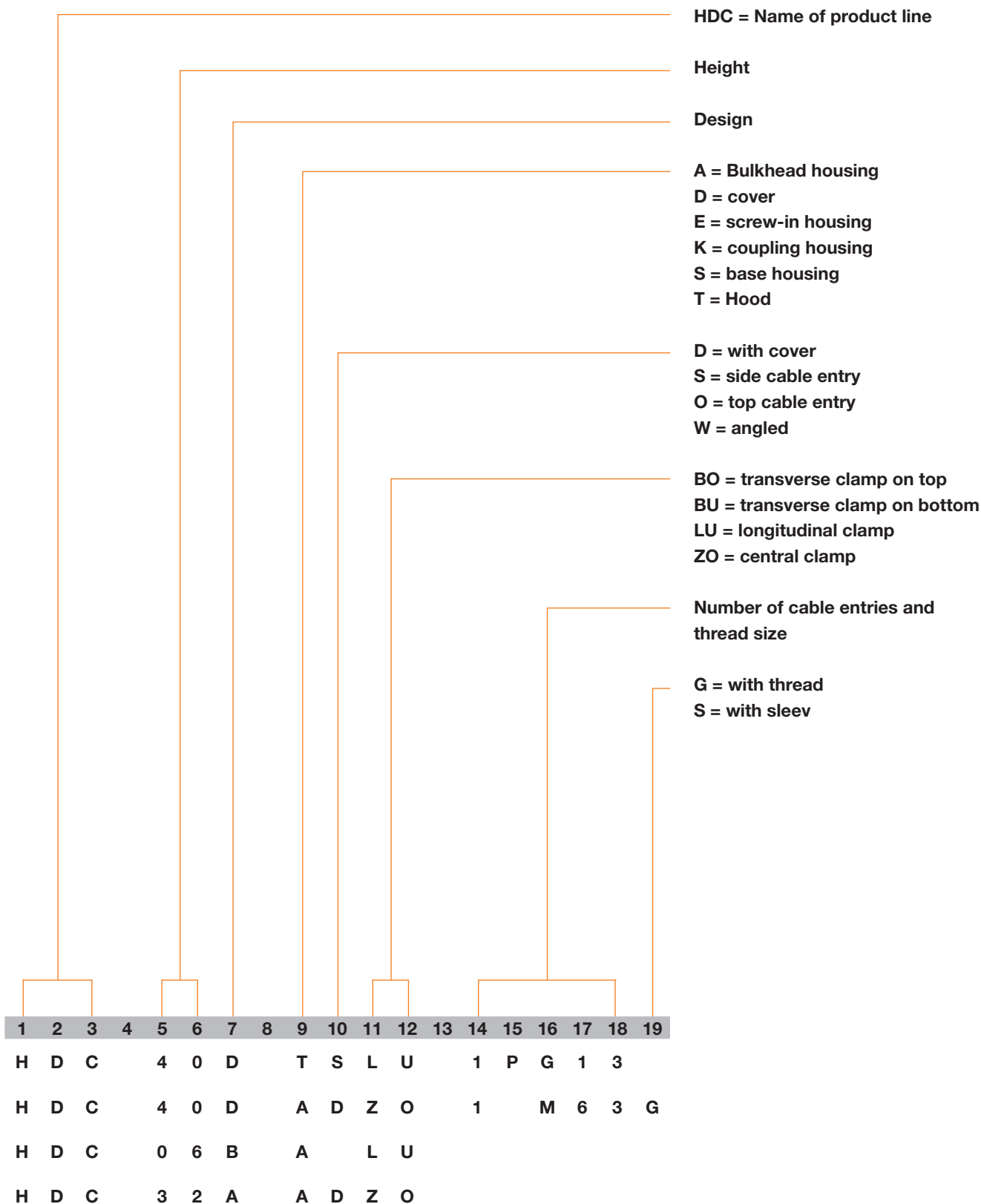
- Uses internal/external hex drive
- Most effective seal
- The two interlock points are arranged diagonally
- Easily accessible when space is tight
- Screws made from rust-free stainless steel

Two transverse locking clamps on housing top



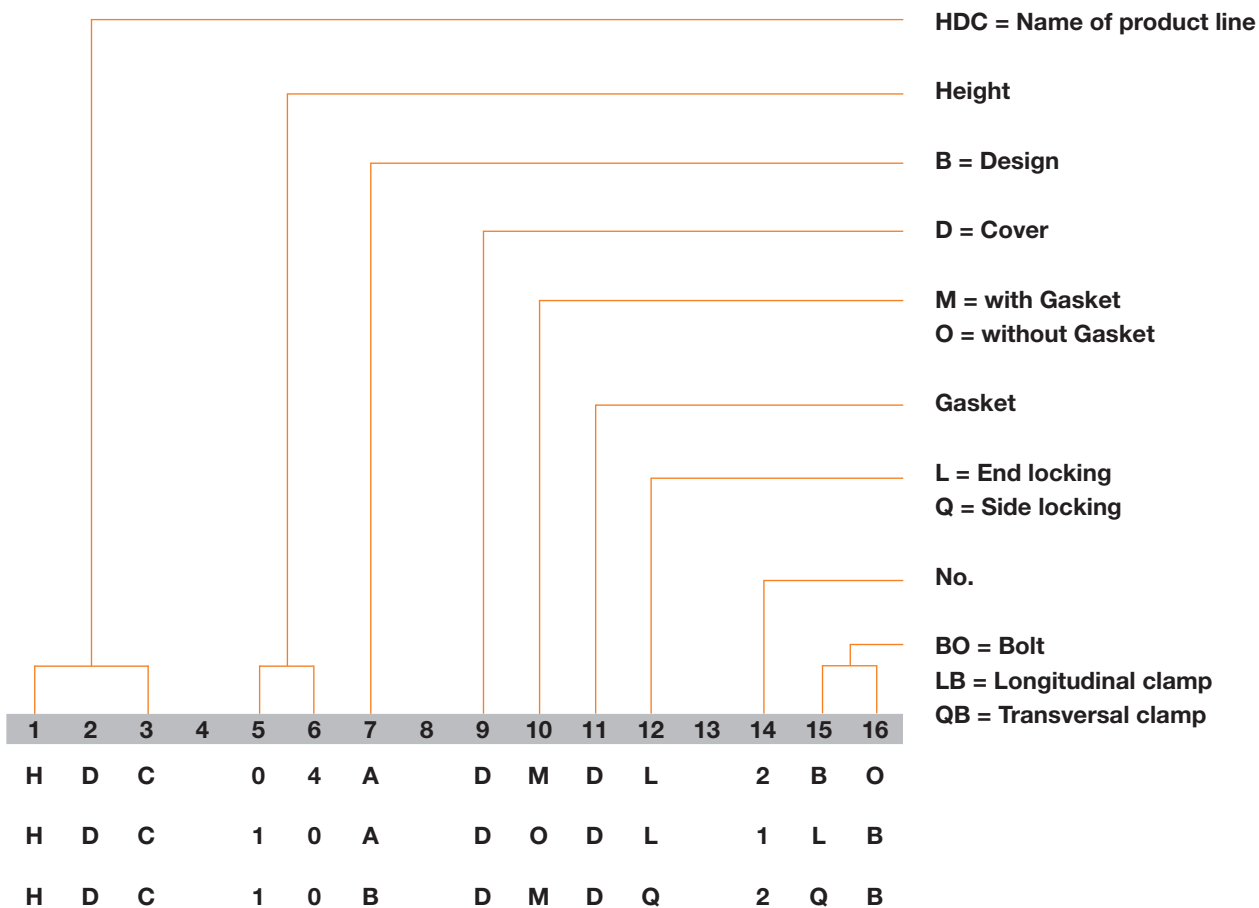
- Manual operation – no tools required
- 4 locking points – good sealing effect
- Easily accessible when the cable inlet is in the plugging direction
- Good for aligning side by side
- Interlock system made from rust-free stainless steel

Part codes for housings IP66

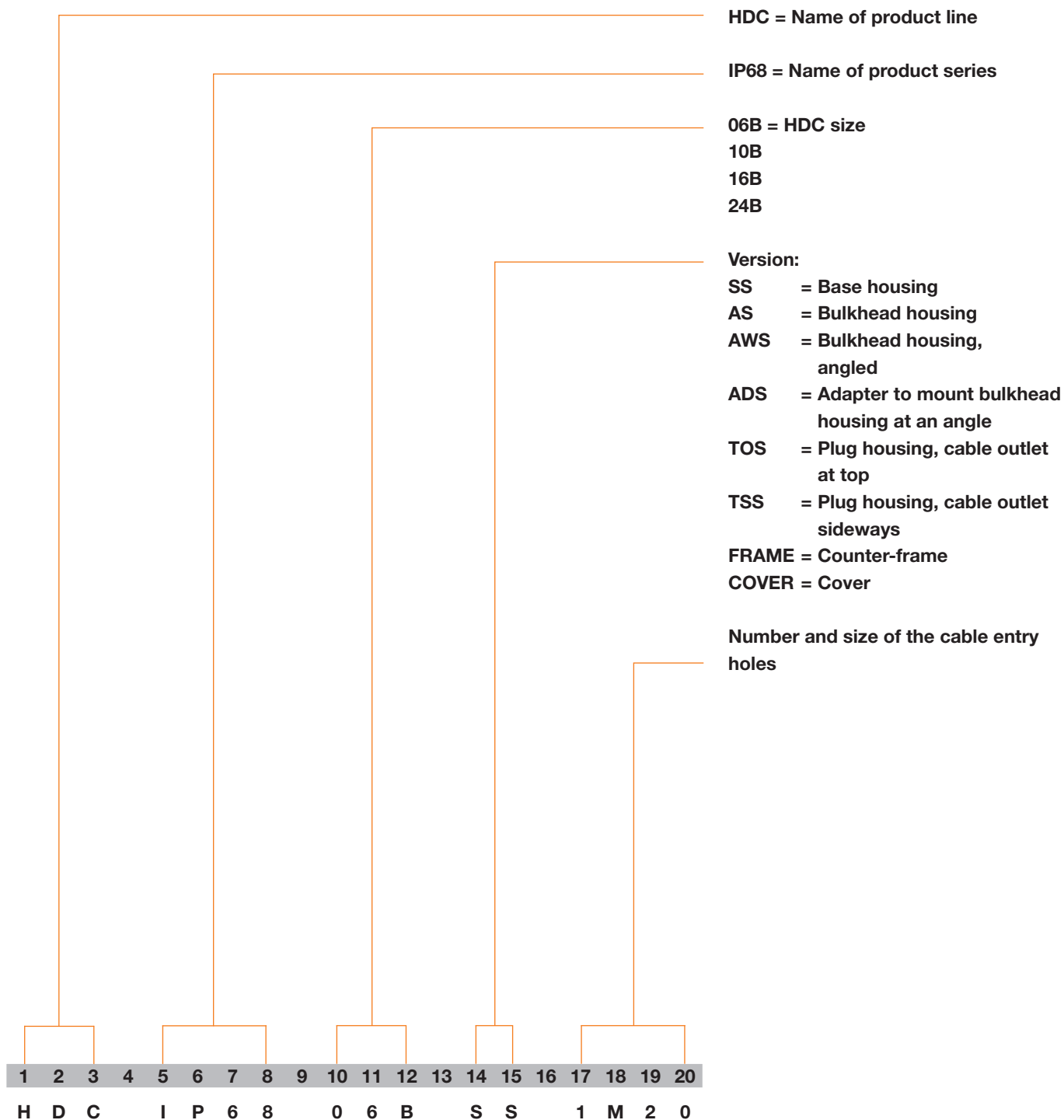


Part codes for covers

A



Part codes for housings IP68

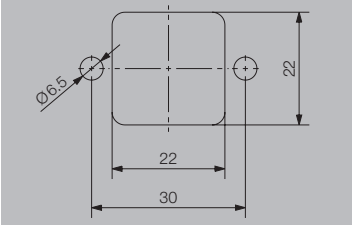
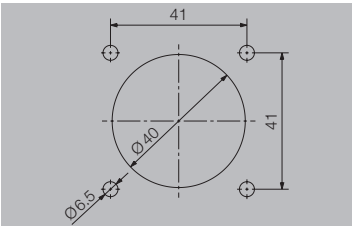
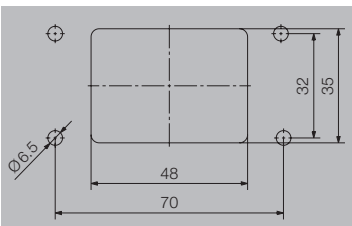
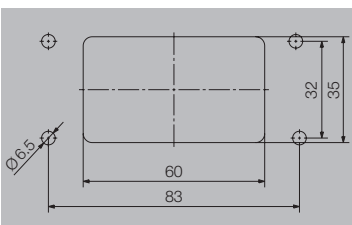
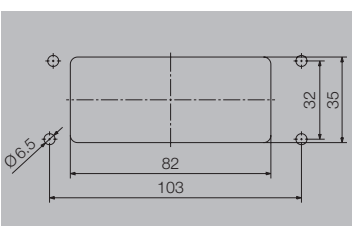
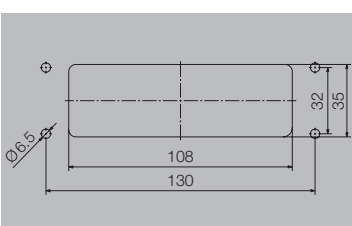


Panel cut-out Housings IP66

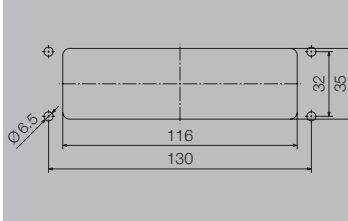
Size	Designation	
BG1	04A/07A	
BG2	10A	
BG3	06B	
BG4	10B	
BG5	16A	
BG6	16B	

Size	Designation					
BG7	32A					
BG8	24B					
BG9	48A					
BG10	32B					
BG12	48B					
HQ		<table border="0"> <tr> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">AWLU/SLU</td> <td style="text-align: center;">ALU</td> </tr> </table>			AWLU/SLU	ALU
AWLU/SLU	ALU					

Panel cut-out Housings IP68

Size	Designation	
BG1	04A	
BG1	04A AWS	
BG3	06B	
BG4	10B	
BG6	16B	
BG8	24B	

Housings IP68 XXL

Size	Designation	
BG8	HB24	

Electrical data

A

Design of clearances and creepage distances in electrical equipment

General

Since April 2003, the rules of DIN EN 60664-1 / 11.03 in conjunction with DIN 61984 / 09.02 apply to the dimensioning of clearances and creepage distances.

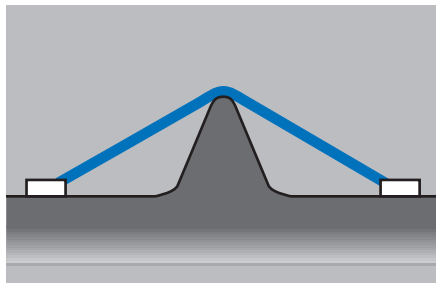
The design data resulting from these provisions is – if applicable – specified in this catalogue for each product.

For the design of clearances and creepage distances, application of the regulations for insulation coordination produces the following interrelationships:

Clearances

Clearances are rated in accordance with the following factors:

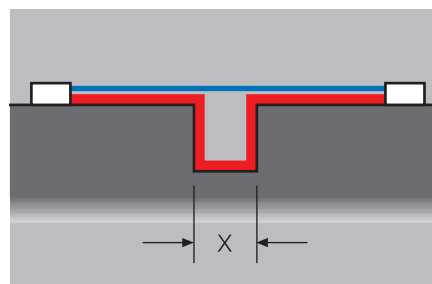
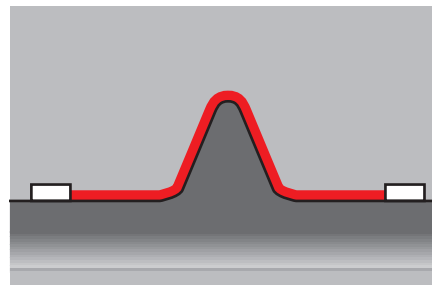
- Anticipated surge
rated impulse withstand voltage
- Used
surge protection precaution
- Measures to prevent pollution
pollution severity



Creepage distances

Creepage distances are rated in accordance with the following factors:

- Planned
rated voltage
- Insulation materials used
insulation group
- Measures to prevent pollution
pollution severity



Slots are taken into account when measuring creepage distances if their minimum width X is dimensioned according to the following table:

Pollution severity	Minimum width X in mm
1	0.25
2	1.0
3	1.5
4	2.5

If the associated clearance in air is less than 3 mm, the minimum slot width can be reduced to 1/3 of the clearance.

Influencing factors:

Rated impulse withstand voltage

The rated impulse withstand voltage is derived from:

- **Phase-to-earth voltage** (the nominal voltage of the network, taking all networks into account)
- **Surge category**

The surge categories are defined

in accordance with international standard DIN EN 60664-1 (for electrical equipment fed directly from the low voltage network).

Surge category I

- Equipment that is intended to be connected to the permanent electrical installation of a building. Measures to limit transient surges to the specific level are taken outside the equipment, either in the permanent installation or between the permanent installation and the equipment.

Surge category II

- equipment to be connected to the permanent electrical installation of a building e.g. household appliances, portable tools and similar loads.

Surge category III

- equipment that is part of the permanent electrical installation and other equipment where a higher degree of availability is expected e.g. distribution boards, circuit-breakers, wiring systems (IEV 826-06-01, including cables, busbars, junction boxes, switches, power sockets) in the permanent installation, and equipment for industrial use and some other equipment, e.g. stationary motors with permanent connections to the permanent installation.

Surge category IV

- Equipment for use at or in the proximity of the incoming supply point of the electrical installations of buildings upstream of the main distribution board e.g. electricity meters, circuit-breakers and ripple control units.

Pollution severity categories:

Pollution severity category 1

- No pollution, or only dry, non-conductive pollution that has no influence.

Pollution severity category 2

- Non-conductive pollution only; occasional condensation may cause temporary conductivity.

Pollution severity category 3

- Conductive pollution, or dry, non-conductive pollution that is liable to be rendered conductive through condensation.

Pollution severity category 4

- Contamination results in constant conductivity, e.g. caused by conductive dust, rain or snow.

The dimensioning of clearances and creepage distances, and hence the rating data for electromechanical products (terminals, terminal strips, PCB terminals and plug-in connectors) is based on pollution severity 3 and surge category III, taking account of all network types.

Table 1: Three-phase 4 or 3-conductor a.c. systems

Nominal voltage of power supply systems [V]	for conductor-cond. insulat.	for conductor-earth insulation	
	all Systems [V]	3-phase 4-conductor systems with earthed neutral cond. [V]	3-phase 4-conductor systems un-earthed or cond. earthed [V]
60	63	32	63
110			
120	125	80	125
127			
150	160	–	160
208	200	125	200
220			
230	250	160	250
240			
300	320	–	320
380			
400	400	250	400
415			
440	500	250	500
480			
500	500	320	500
575	630	400	630
600	630	–	630
660			
690	630	400	630
720			
830	800	500	800
960	1000	630	1000
1000	1000	–	1000

Electrical data

A

Design of clearances and creepage distances in electrical equipment, influencing factors:

Rated voltage

The rated voltage is derived from the nominal voltage of the power supply and the corresponding network type.

Single-phase 2- or 3-wire AC or DC systems

Rated voltage of the power supply (mains) *)	Voltages for table 4	
	For insulation phase-to-phase ¹⁾	For insulation phase-to-earth ¹⁾
	All systems	3-wire systems neutr. point earthing
V	V	V
12.5	12.5	–
24 / 25	25	–
30	32	–
42 / 48 / 50**)	50	–
60	63	–
30–60	63	32
100**)	100	–
110 / 120	125	–
150**)	160	–
220	250	–
110–220	250	125
120–240	–	–
300**)	320	–
220–440	500	250
600**)	630	–
480–960	1000	500
1000**)	1000	–

3-phase 3- or 4-wire AC systems

Rated voltage of the power supply (mains) *)	Voltages for table 4		
	For insulation phase-to-phase	For insulation phase-to-earth	
	All systems	3-phase 4-wire systems with earthed-neutral wire ²⁾	3-phase 3-wire systems unearthed ¹⁾ or phase-earthed
V	V	V	V
60	63	32	63
110/120/127	125	80	125
150**)	160	–	160
208	200	125	200
220/230/240	250	160	250
300**)	320	–	320
380/400/415	400	250	400
440	500	250	500
480/500	500	320	500
575	630	400	630
600**)	630	–	630
660/690	630	400	630
720/830	800	500	800
960	1000	630	1000
1000**)	1000	–	1000

1) Phase-to-earth insulation levels for unearthed or impedance-earthed systems are equal to those of phase-to-phase because the operating voltage to earth of any phase can, in practice, reach full phase-to-phase voltage. This is because the actual voltage to earth is determined by the insulation resistance and capacitive reactance of each phase to earth; thus, a low (but acceptable) insulation resistance of one phase can earth it and raise the other two to full phase-to-phase voltage to earth.

2) For electrical equipment for use in both 3-phase 4-wire and 3-phase 3-wire supplies, earthed and unearthed, use the values for 3-wire systems only.

*) It is assumed that the rated voltage of the electrical equipment is not lower than the nominal voltage of the power supply.

**) Because of the common changes, the meaning of the ** symbol has not been used in table 1; i.e. the / symbol indicates a 4-wire 3-phase distribution system. The lower value is the phase-to-neutral voltage, while the higher value is the phase-to-phase voltage. Where only one value is indicated, it refers to 3-wire 3-phase systems and specifies the value phase-to-phase. The values given in table 1 are still taken into account in tables 3a and 3b by the ** symbol.

Insulating material

The insulating materials are subdivided into four groups according to their CTI (Comparative Tracking Index):

Insulating material

I	$600 \leq CTI$
II	$400 \leq CTI < 600$
III a	$175 \leq CTI < 400$
III b	$100 \leq CTI < 175$

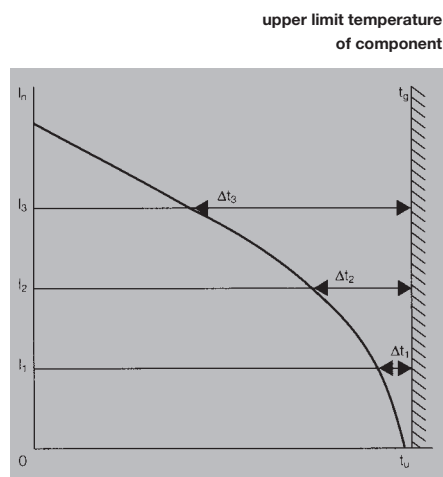
The comparative tracking index must be determined according to DIN IEC 112/VDE 0303 part 1 on the basis of specially prepared samples with test solution A

The **derating curve** shows which currents may flow continuously and simultaneously via all possible connections when the component is subjected to various ambient temperatures below its upper limit temperature.

The **upper limit temperature** of a component is the rated value determined by the materials used. The total of the ambient temperature plus the temperature rise caused by the current load (power loss at contact resistance) may not exceed the upper limit temperature of the component, otherwise it will be damaged or even completely ruined. The current-carrying capacity is hence not a constant value, but rather decreases as the component ambient temperature increases. Furthermore, the current-carrying capacity is influenced by the geometry of the component, the number of poles and the conductor(s) connected to it.

The current-carrying capacity is determined empirically according to DIN IEC 60512-3. To do this, the resulting component temperatures t_{b1} , t_{b2} ... and the ambient temperatures t_{u1} , t_{u2} are measured for three different currents I_1 , I_2 , I_3 The values are entered on a graph with a system of linear coordinates to illustrate the relationships between the currents, the ambient temperatures and the temperature rise in the component.

Base curve

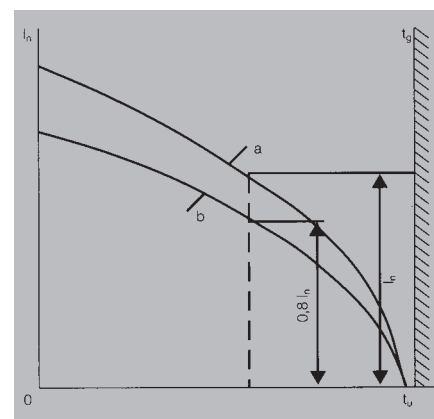


t_g = upper limit temperature of component
 t_u = ambient temperature
 I_n = current

The loading currents are plotted on the y-axis, the **component ambient temperatures** on the x-axis. A line drawn perpendicular to the x-axis at the upper limit temperature t_g of the component completes the system of coordinates. The associated average values of the temperature rise in the component, $\Delta t_1 = t_{b1} - t_{u1}$, $\Delta t_2 = t_{b2} - t_{u2}$, ... are plotted for every current I_1 , I_2 , ... to the left of the perpendicular line. The points generated in this way are joined to form a roughly parabolic curve.

As it is practically impossible to choose components with the maximum permissible contact resistances for the measurements, the base curve must be reduced. Reducing the currents to 80% results in the **“derating curve”** in which

Derating curve



t_g = upper limit temperature of component
 t_u = ambient temperature
 I_n = current
 a = Base curve
 b = Reduced base curve (derating curve)

the maximum permissible contact resistances and the measuring uncertainties in the temperature measurements are taken into account in such a way that they are suitable for practical applications, as experience has shown. If the derating curve exceeds the currents in the low ambient temperature zone, which is given by the current-carrying capacity of the conductor cross-sections to be connected, then the derating curve should be limited to the smaller current in this zone.

EMC

A

Many interfaces require the use of a connector that is EMC-compliant.

What is meant by the phrase EMC-compliant?

Electro-magnetic compatibility (EMC) refers to the ability of electrical equipment to function satisfactorily in its electromagnetic environment without introducing intolerable electromagnetic disturbances to anything in that environment. (DIN VDE 0870). An electrical component or electrical equipment is considered to be compatible when their emissions and sensitivity levels are within a tolerable range (i.e., when there is sufficient interference immunity).

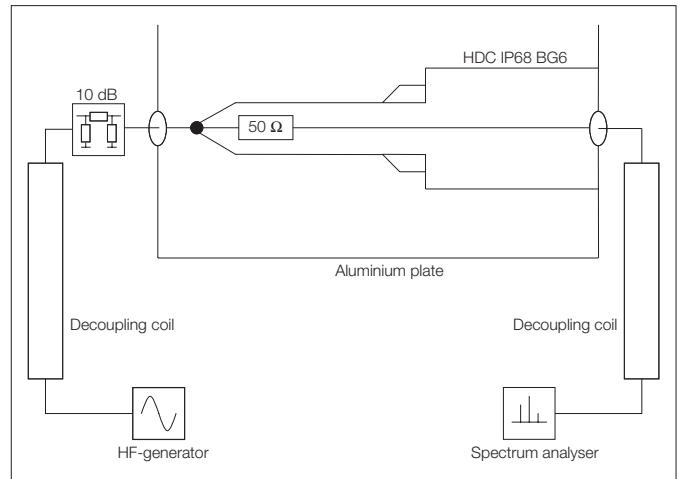
The basics

There are several types of measurements that can be used to determine the effectiveness of a cable shield. The method used here is the KS 04 B measurement from VG 95 373-41 "Electromagnetic compatibility of devices – methods for measuring shielded cable and shielded protective cable hoses". This method enables the quality of the shield to be evaluated. It also assesses the influence of the contact points of the shielding braid as well as the male and female plug components. A standardised test cable with a length of one metre is used. This, and the fact that this measurement is carried out in a 50-ohm system which does not take the actual line impedance into account, leads to characteristic resonance effects. This means that this measurement process only delivers meaningful results up to a frequency of 30 to 100 MHz. It is, however, well suited for evaluating and comparing the effectiveness of various shielding and shield-contacting methods. It does not deliver an absolute value that would enable the limiting of voltages coupled in a cable, using an imposed HF electromagnetic field. The user should always consider the measurement results relative to the laboratory operational situation. Your actual, real-world shield attenuation values will normally be less than the values achieved in the lab because of different cable lengths, impedance behaviour and non-optimal earthing.

Testing methods

The method applied does not use the normative tri-axial measuring platform, but instead uses an aluminium plate (with dimensions 500 x 380 x 10 mm). This plate serves as the test's reference earth. HF sockets (N-standard) are mounted on two standing angular panels and are used to connect the measuring device. The flange along with the plug are mounted to one of the angular panels.

The limit value of the shield attenuation S_a is
 $f < 1 \text{ MHz}$: 60 dB
 $1 \text{ MHz} < f < 100 \text{ MHz}$: 60 – 30 dB with 15 dB per decreasing decade
 $f = 100 \text{ MHz}$: 30 dB

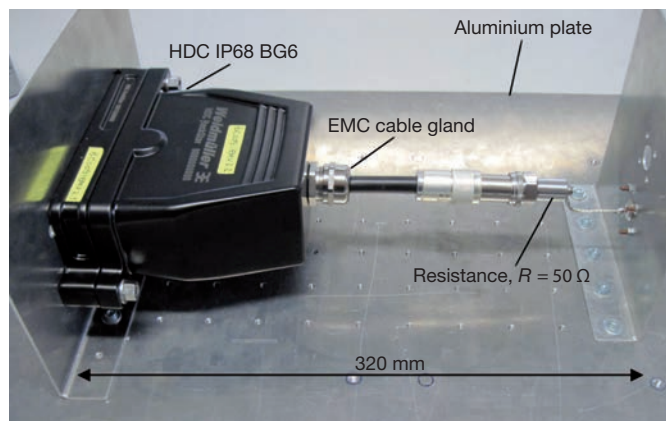


According to VG 95373-41, a frequency range up to 30 MHz is specified for the measurement process. However the range can be extended to about 100 MHz for information purposes. The insertion loss a_s of the test object is determined by the relationship between the voltage on the interior wire and the supplied voltage. The VG95373-41 also refers to the insertion loss as the shield attenuation factor. The relationship between insertion loss a_s and coupling resistance Z_k is characterised as follows:

Insertion loss: $a_s \approx 20 \lg 50 \Omega / |Z_k|$ in dB
 Coupling resistance: $Z_k \approx 50 \Omega \times 10 \text{ as } / 20 \text{ in } \Omega$

According to VG 95373-41, this relationship has sufficient precision when $Z_k < 500 \text{ m}\Omega$.

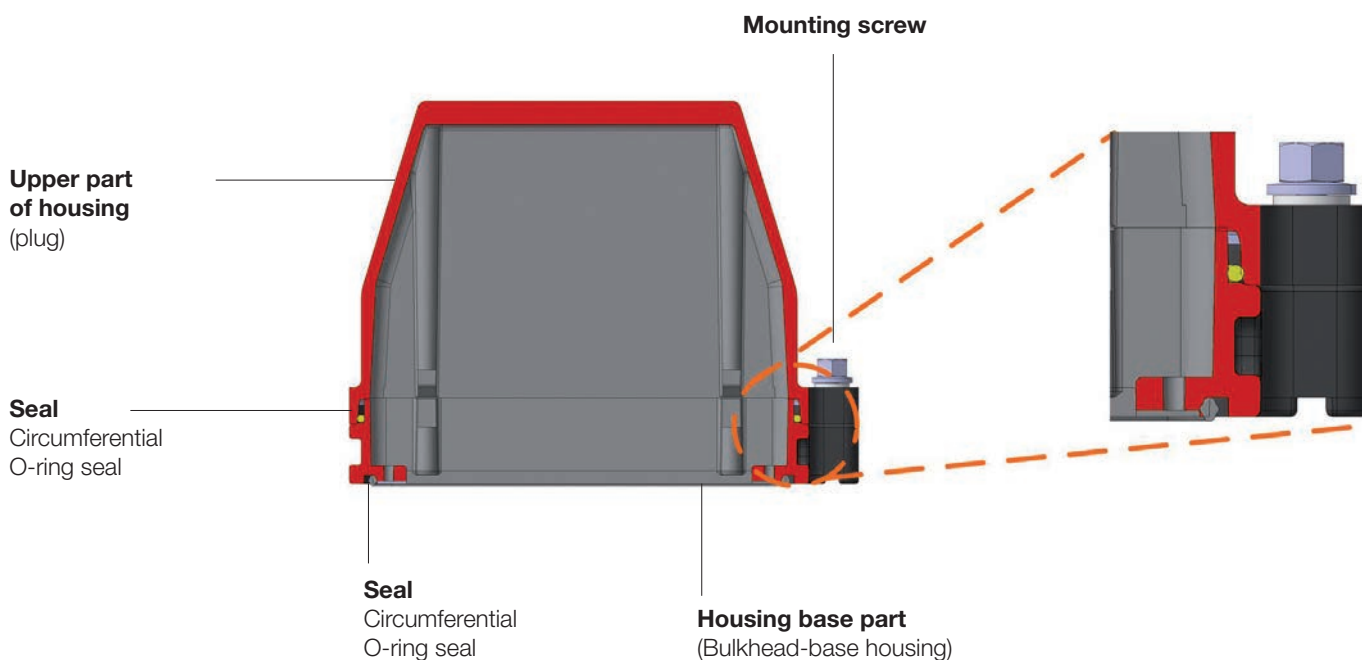
In order to test plug-in connectors, a reference shield cable is used that is separated in the middle. The cable can be connected with a corresponding connector pair and measured as described above. In order to evaluate the shield (the resistance between the cable shield and the reference earth), the connector frame and its reference earth are mounted directly to the cover of the testing equipment.



Housing must have very good EMC characteristics in order to meet these requirements.

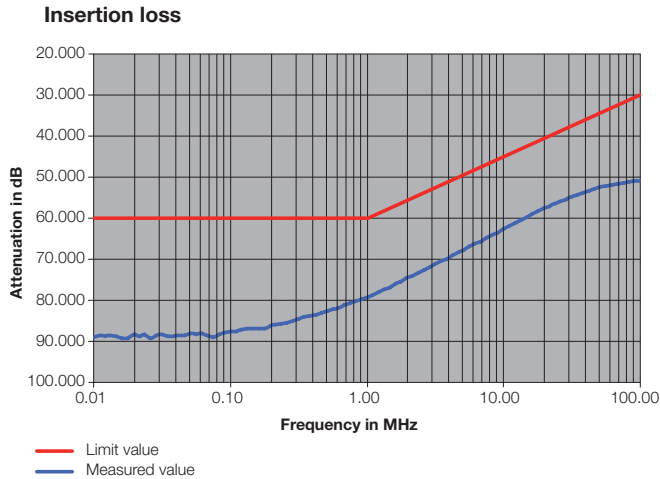
Weidmüller has designed the RockStar® IP68 housing with built-in features that ensure outstanding EMC and resistance to interference.

The bulkhead or base housing, combined with the plug housing, produces a labyrinth structure which ensures high EMC shield attenuation. In addition to providing the required EMC protection, this housing series features IP68/IP69K protection and excellent resistance to impacts and vibration. This combination of features permits the RockStar® IP68 housing to be used anywhere.

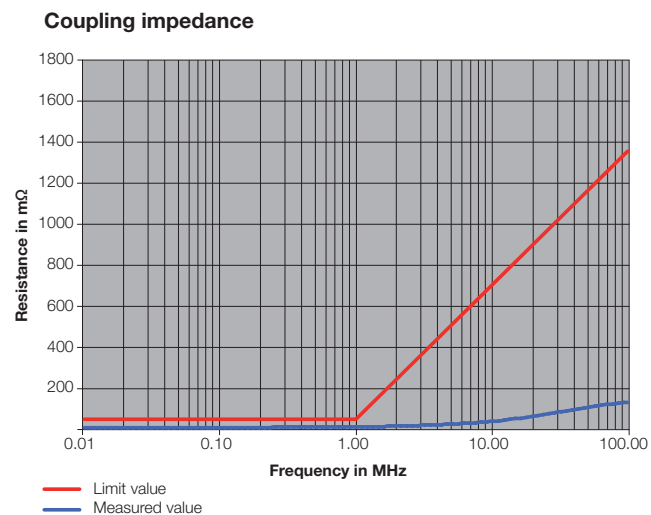


Technical data

The requirements for an EMC-compliant interface stipulate that the interference immunity level or shield attenuation potential should be rated high enough so that the electromagnetic fields in the vicinity of the transmitted signals cannot exert influence within the connector. The capacity for active interference must be low enough to ensure that surrounding devices or components are not affected by interference. The following diagrams illustrate the insertion loss and the coupling impedance for the adjacent housing.



HDC IP68 16B TSS 1M50

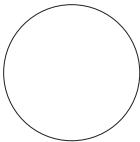








IP class of protection to IEC 60529

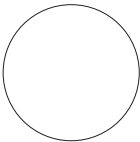
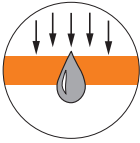

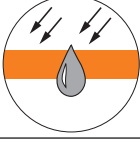
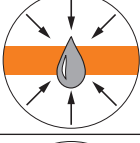

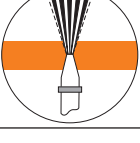
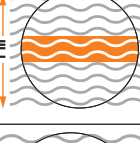

The class of protection is indicated by a code consisting of the two letters IP and two digits representing the class of protection.

Example: **I P 6 6**
 | | 2nd digit: protection from liquids
 | | 1st digit: protection from solid bodies

Protection against intrusion of external particle matter (1st digit)

Digit		
0		No protection
1		Protection against ingress of large solid bodies with diameter > 50 mm. (Protection to prevent dangerous parts being touched with the back of the hand.)
2		Protection against ingress of large solid bodies with diameter > 12.5 mm. (Protection to prevent dangerous parts being touched with the fingers.)
3		Protection against ingress of large solid bodies with diameter > 2.5 mm. (Protection to prevent dangerous parts being touched with a tool.)
4		Protection against ingress of large solid bodies with diameter > 1 mm. (Protection to prevent dangerous parts being touched with a piece of wire.)
5		Protection against harmful deposits of dust, which cannot enter in an amount sufficient to interfere with satisfactory operation.
6		Complete protection against ingress of dust.

Protection against penetration of liquids (2nd digit)

Digit		
0		No protection
1		Protection against drops of condensed water falling vertically.
2		Protection against drops of liquid falling at an angle of 15° with respect to the vertical.
3		Protection against drops of liquid falling at an angle of 60° with respect to the vertical.
4		Protection against liquids splashed from any direction.
5		Protection against water jets projected by a nozzle from any direction.
6		Protection against water from heavy sea on ships' decks.
7		Protection against immersion in water under defined conditions of pressure and time.
8		Protection against indefinite immersion in water under defined conditions of pressure (which must be agreed between manufacturer and user and must be more adverse than number 7).

Class of protection to NEMA

National Electrical Manufacturers Association NEMA 250-1991

Digit	
Type 1	Housing primarily for use in inside rooms. Protects from penetration of solid bodies.
Type 2	Housing primarily for use in inside rooms. Protects from penetration of solid bodies and water.
Type 3	Housing primarily for outdoor use. Protection against penetration by rainfall and dust as well as damage due to ice formation.
Type 3R	Housing primarily for outdoor use. Protection against rain and snow as damage due to ice-formation.
Type 3S	Housing primarily for outdoor use. Protection against rain, snow and foreign bodies. External mechanisms can be operated despite ice accumulation.
Type 4	Housing for inside and outside rooms. Protects from rain, foreign bodies, water spray and water jets as well as damage through ice formation on the outside of the housing.
Type 4X	Housing for inside and outside rooms. Protects from corrosion, rain, foreign bodies, water spray and water jets as well as damage through ice formation on the outside of the housing.
Type 6	Housing for inside and outside rooms. Protects from water jets as well as penetration of water when submerged; protects from damage through ice formation on the outside of the housing.

Digit	
Type 12	Housing for use in inside rooms. Protects from dust deposits and non-corrosive dripping liquids.
Type 13	Housing for use in inside rooms. Protects from dust deposits, water spray, oil and non-corrosive coolants.

Chemical resistance

Chemical resistance of inserts (material PC, 20 % GF)

Acetone	+
Ammonia, aqueous	-
Petrol	+
Benzine	+
Diesel oil	-
Acetic acid, concentrated	+
Aqueous potassium hydroxide	-
Methanol	-
Engine oil	-
Alkaline solution, diluted	+
Chlorinated hydrocarbons	-
Use in open air	-

Chemical resistance of standard housing seal (material NBR)

Acetone	-
Drilling oil	+
Diesel oil	+
Ethyl alcohol	+
Gear oil	+
Hydraulic oil	+
Cooling lubricant	+
Petrol	+
Sweat	+
High-octane petrol	-
Water	+
UV	-
Ozone	-

- + resistant
- partially resistant
- o not resistant

Safety information / standards

A

Please note the following safety information:

- Never plug or unplug connectors under load or during operations.
- We can only guarantee the technical and electro-technical characteristics promised in this catalogue if all the components were supplied by Weidmüller.

The following standards apply in the vicinity of heavy-duty connectors:

- DIN EN 60664-1 or IEC 60664-1: Insulation coordination for equipment within low-voltage systems; principles, requirements and tests (replaces DIN VDE 0110-1)
- DIN EN 61984 or IEC 61984:
Plug-in connectors – safety requirements and tests
- DIN EN 175301-801:
Detail Specification: High-density rectangular plug-in connectors, round removable crimp contacts; (replaces DIN 43652)
- DIN EN 60352 or IEC 60352:
Solderless connections
- DIN EN 60529 or IEC 60529:
Classes of protection provided by enclosures (IP code)
- DIN VDE 0870:
Electromagnetic influence
- DIN EN 60999-1:
Connecting devices, safety requirements for screw terminal connections and screwless terminal connections for electrical copper conductors
- DIN 40050-9:
Road vehicles; classes of protection (IP-code)

RockStar® inserts

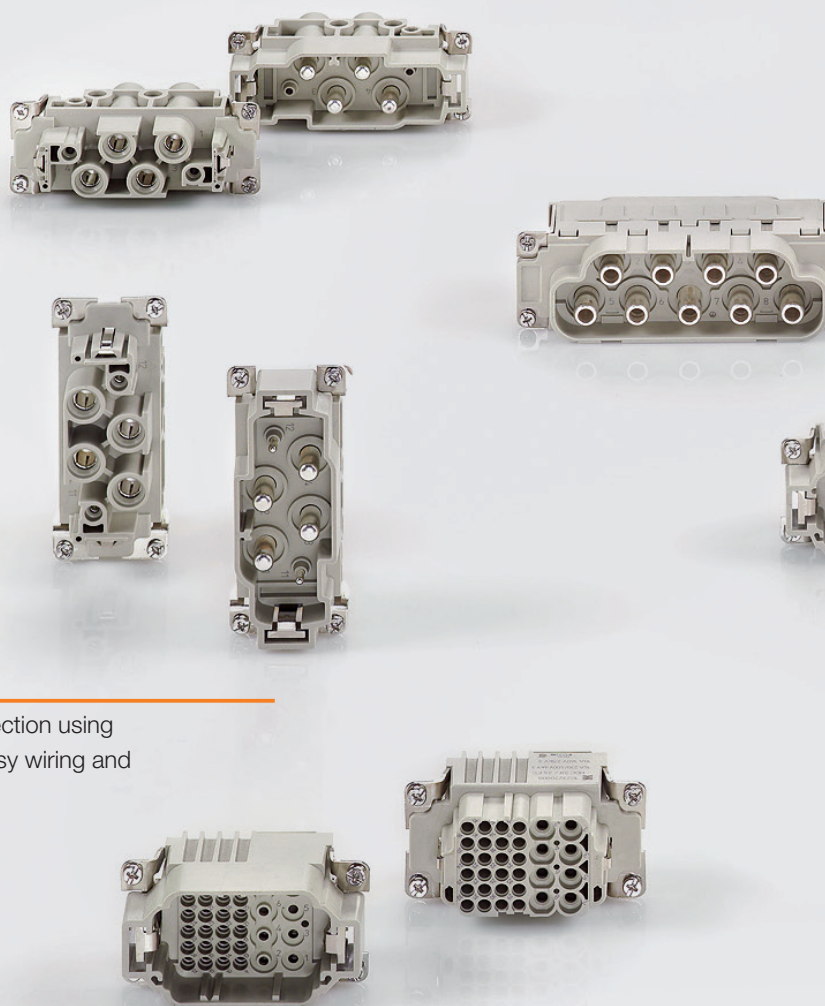
RockStar® inserts	Introduction	B.2
	HA series – the slim connectors	B.4
	250 V	
	22 A	
	3 – 48 poles	
	HE series – the universal connectors	B.18
	500 V	
	24 A	
	6 – 48 poles	
	HEE series – high contact density	B.32
	500 V	
	16 A	
	10 – 46 poles	
	HD series – the flexible connectors	B.44
	250 V	
	10 A	
	7 – 128 poles	
	HDD series – the compact connectors	B.68
	250 V	
	10 A	
	24 – 216 poles	
	HVE series – exciting voltage	B.82
	830 V	
	23 A	
	3 + 2; 6 + 2; 10 + 2 poles	
	HSB series – the heavy-duty connectors	B.90
	400 V	
	35 A	
	6 – 12 poles	
	HQ series – the powerful little connectors	B.96
	400 V / 690 V	
	16 A, 10/40 A	
	4/2, 5, 7, 8, 17 poles	
	MixMate series – the high-capacity connectors	B.108
	1000 V / 690 V	
	100 A	
	4, 4/0, 4/2, 4/8, 6/6, 6/12, 6/36, 8/0, 8/24, 12/2 poles	

RockStar® inserts

You can use Weidmüller's RockStar® products for a wide variety of industrial applications. This gives you access to the widest range of products available on the market for your cabling systems. The connector insert, or contact insert, forms the heart of a heavy-duty connector – and Weidmüller offers them in many different variants.

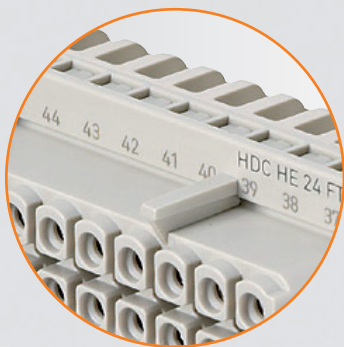
RockStar® inserts are fixed-pole inserts which consist of an insulating body and contact elements. The application-based design of a contact insert is determined by the electrical characteristics, mechanical specifications and the material used to make the insert.

All RockStar® inserts are made from glass-fibre-reinforced polycarbonate. This material is distinguished by its low water absorption and the high levels of dimensional stability made possible by the added glass fibres. So our rugged RockStar® inserts are the ideal choice for solutions of up to 216 poles and a maximum of 110 A / 1000 V.



Simple

A quick and safe wire connection using the PUSH IN connection. Easy wiring and maintenance - with no tools!



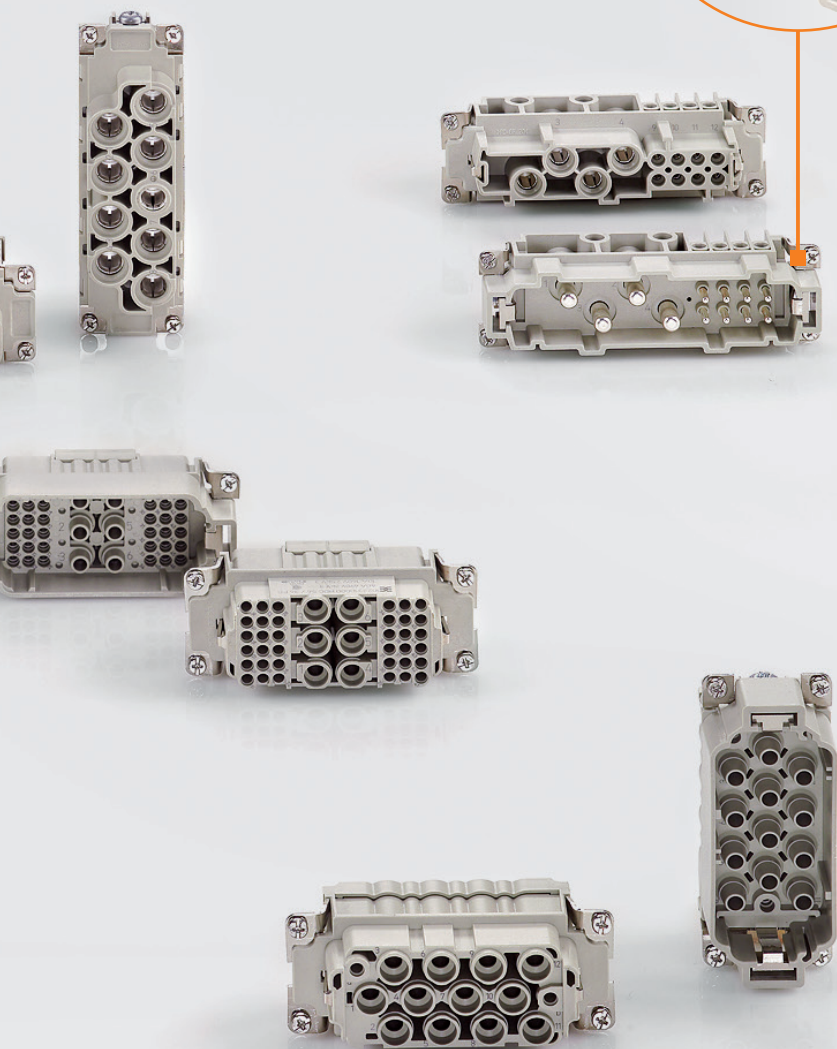
Consistency

One plastic material – with all approvals. This expands your range of choices. It also helps you to have simple documentation and reliable planning processes.



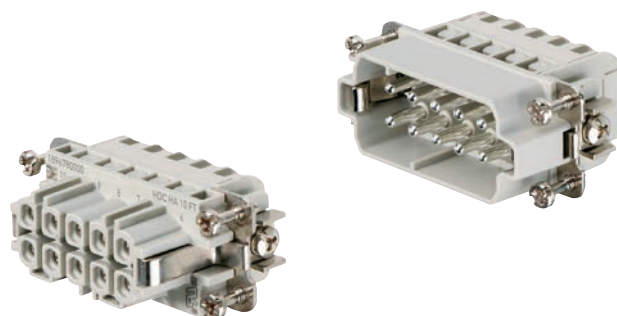
Suitable

Always according to your needs: including a space-saving combination of power and signals in one connector.



HA series – the slim connectors

When space is tight, the small and narrow HA series comes into its own.



Technical data

Standards / approvals	
Standards	DIN EN 61984 DIN EN 60664-1
Approvals	UL/CSA**
Inserts	
No. of poles	3, 4, 10, 16, 32, 48
Rated voltage	250 V (400 V - HA3, HA4)
Rated voltage to UL/CSA	600 V
Rated current	16 A
Rated impulse withstand voltage	4 kV
Pollution severity	3 (320 V / 4 kV / 2) (HA10,16, 32, 48)
Insulation resistance	$\geq 10^{10} \Omega$
Material	Glass-fibre reinforced PC (in UL list and approved for railway applications)
Temperature range	-40 °C ... +125 °C
Flammability to UL 94	V-0
Mechanical service life	
- Plugging cycles Ag - Surface	≥ 500
- Plugging cycles Au - Surface	≥ 500
Contact resistance	
Crimp connection	$\leq 2 \text{ m}\Omega$
Screw connection, Tension clamp connection	$\leq 2 \text{ m}\Omega$
Contacts / Material	
Sockets and plug-in contact	Copper alloy
Surface	Passivated silver, or gold-plated
Clamping unit / Screw connection	Copper alloy / Passivated silver
Clamping range / Stripping length	
- Crimp connection*	0.5 - 2.5 mm ² (AWG 20 ... 14) 7.5 mm
- Screw connection	0.5 - 2.5 mm ² (AWG 20 ... 14) / 9 mm***
- Tension clamp connection	0.25 - 2.5 mm ² (AWG 24 ... 14) / 8 mm
Clamping torque	
- Screw connection	0.5 - 0.55 Nm
SD blades	
- Screw connection	0.6 x 3.5 or PZ 0
- Tension clamp connection	0.5 x 3 or 0.6 x 3.5
PE connection	
- Clamping range	0.5 ... 2.5 mm ²
- solid / stranded	0.5 ... 2.5 mm ² / 0.5 ... 2.5 mm ²
- flexible / flexible with wire end ferrule, DIN 46228 pt. 1	0.5 ... 2.5 mm ² / 0.5 ... 2.5 mm ²
- AWG conductor	AWG 20 ... 14
- Stripping length	10 mm
- Clamping torque	1.2 ... 1.5 Nm
- Blade dimensions	SD 0.8 x 4 mm or PZ 1

Note:

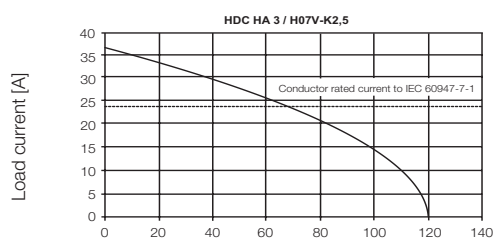
When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load!

* Crimping with flexible conductors.

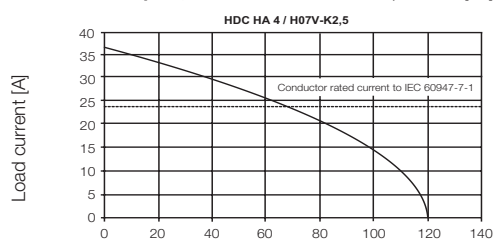
** For screw and crimp connections.

*** Stripping length of 15 mm for the 3- and 4-pole HA

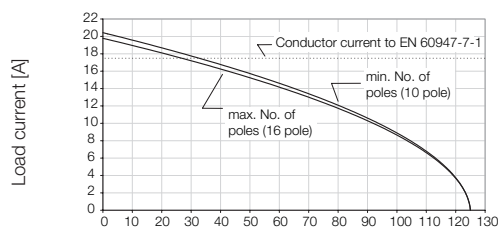
Derating curves



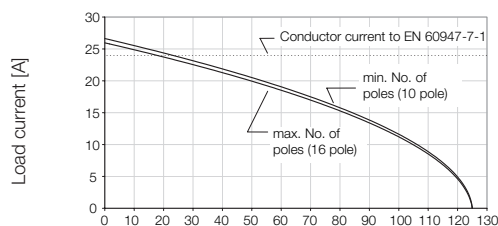
3 + 4-pole, 1.5 mm² Ambient temperature [°C]



3 + 4-pole, 2.5 mm² Ambient temperature [°C]















10 ... 48-pole, 1.5 mm² Ambient temperature [°C]



10 ... 48-pole, 2.5 mm² Ambient temperature [°C]

Overview

		Size	Rated voltage	Rated current	No. of poles	Tension clamp connection	Screw conn. with wire guard spring	Crimp connection	PUSH IN connection	TOP connection	Page
		1	400 V	16 A	3 + ⊕					•	B.6
		1	400 V	16 A	4 + ⊕					•	B.8
		2	250 V	16 A	10 + ⊕	•	•	•			B.10
		5	250 V	16 A	16 + ⊕	•	•	•			B.12
		7	250 V	16 A	32 + ⊕	•	•	•			B.14
		9	250 V	16 A	48 + ⊕	•	•	•			B.16

HA series - the slim connectors

400 V, 16 A, Size 1

3 + ⊕

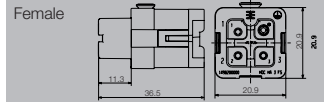
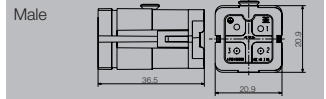
Inserts

Screw connection



Insert	Type	Order No.
Male	HDC HA 3 MS	1498100000
Female	HDC HA 3 FS	1498200000

Dimensions



Arrangements of contacts



Housing selection RockStar® IP66
Size 1



Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

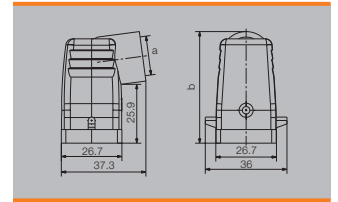
Hood

Plug housing, cable entry sideways



Material: diecast aluminium

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		49.2	HDC 04A TWLU 1M20G	1788810000

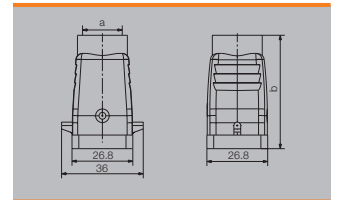


Plug housing, cable entry at top



Material: diecast aluminium

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		50	HDC 04A TOLU 1M20G	1788820000



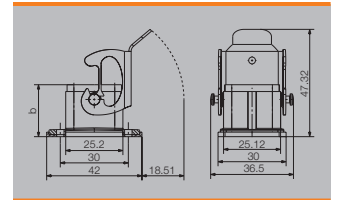
Base

Bulkhead housing



Material: diecast aluminium

Version	Cover	b (mm)	Type	Order No.
		23	HDC 04A ALU	1497600000

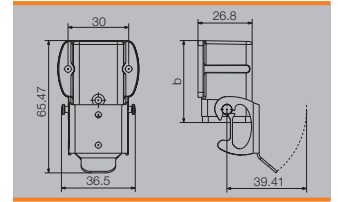


Base housing



Material: diecast aluminium

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		41.5	HDC 04A SLU 1M20G	1788830000

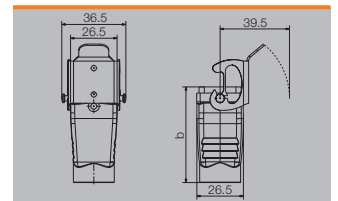


Coupling housing



Material: diecast aluminium

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		53.5	HDC 04A KOLU 1M20G	1788840000

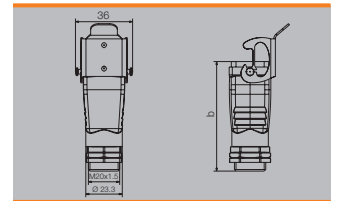


Screw mounting housing



Material: diecast aluminium

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		54	HDC 04A ELU 1M20G	1900320000

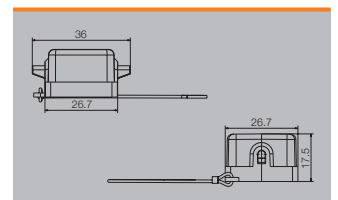


Cover



Material: diecast aluminium

Version	Type	Order No.
for female insert	HDC 04A DMDL 2BO	1665750000
for male insert	HDC 04A DODL 2BO	1665740000



HA series - the slim connectors

400 V, 16 A, Size 1

4 + ⊕

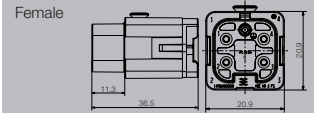
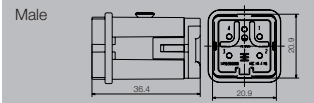
Inserts

Screw connection

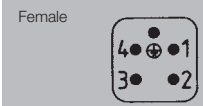


Insert	Type	Order No.
Male	HDC HA 4 MS	1498300000
Female	HDC HA 4 FS	1498400000

Dimensions



Arrangement of contacts



Housing selection RockStar® IP66
Size 1



Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

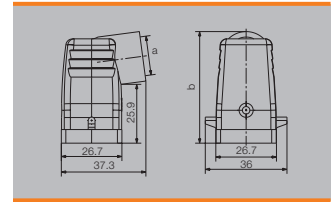
Hood

Plug housing, cable entry sideways



Material: diecast aluminium

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		49.2	HDC 04A TWLU 1M20G	1788810000

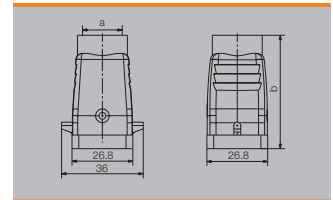


Plug housing, cable entry at top



Material: diecast aluminium

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		50	HDC 04A TOLU 1M20G	1788820000



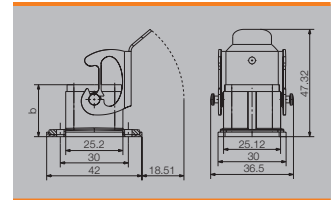
Base

Bulkhead housing



Material: diecast aluminium

Version	Cover	b (mm)	Type	Order No.
		23	HDC 04A ALU	1497600000

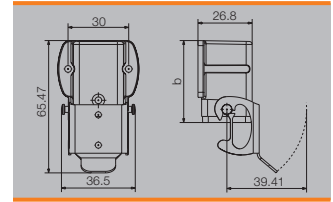


Base housing



Material: diecast aluminium

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		41.5	HDC 04A SLU 1M20G	1788830000

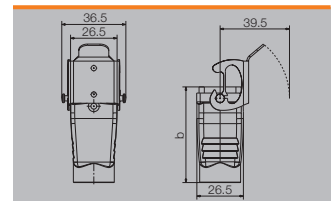


Coupling housing



Material: diecast aluminium

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		53.5	HDC 04A KOLU 1M20G	1788840000

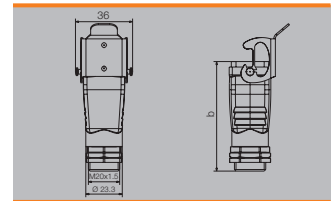


Screw mounting housing



Material: diecast aluminium

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		54	HDC 04A ELU 1M20G	1900320000

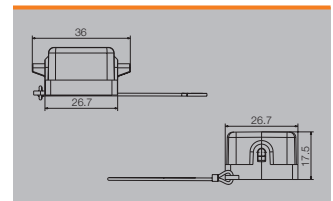


Cover



Material: diecast aluminium

Version	Type	Order No.
for female insert	HDC 04A DMDL 2BO	1665750000
for male insert	HDC 04A DODL 2BO	1665740000



HA series - the slim connectors

250 V, 16 A, Size 2

10 + ⊕

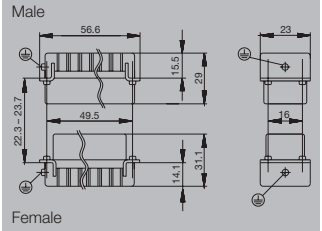
Inserts

Tension clamp connection



Insert	Type	Order No.
Male	HDC HA 10 MT	1896790000
Female	HDC HA 10 FT	1896780000

Dimensions

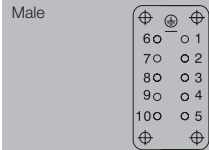


Screw connection

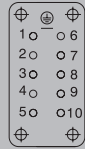


Insert	Type	Order No.
Male	HDC HA 10 MS	1650610000
Female	HDC HA 10 FS	1650620000

Arrangement of contacts



Female

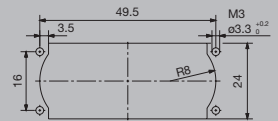


Crimp connection



Insert	Type	Order No.
Male	HDC HA 10 MC	1873870000
Female	HDC HA 10 FC	1873860000

Mounting cut-out



Accessories

Crimp contacts

Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HE-SM0.5AU	1651420000	HDC-C-HE-BM0.5AU	1651470000	
100	HDC-C-HE-SM0.75-1.00AU	1651430000	HDC-C-HE-BM0.75-1.00AU	1651480000	
100	HDC-C-HE-SM1.5AU	1651440000	HDC-C-HE-BM1.5AU	1651490000	
100	HDC-C-HE-SM2.5AU	1651450000	HDC-C-HE-BM2.5AU	1651500000	
100	HDC-C-HE-SM4.0AU	1651460000	HDC-C-HE-BM4.0AU	1651510000	
100	HDC-C-HE-SM0.5AG	1200500000	HDC-C-HE-BM0.5AG	1201100000	
100	HDC-C-HE-SM0.75-1.00AG	1200600000	HDC-C-HE-BM0.75-1.00AG	1201200000	
100	HDC-C-HE-SM1.5AG	1200700000	HDC-C-HE-BM1.5AG	1201300000	
100	HDC-C-HE-SM2.5AG	1200800000	HDC-C-HE-BM2.5AG	1201400000	
100	HDC-C-HE-SM4.0AG	1200900000	HDC-C-HE-BM4.0AG	1201500000	



Conductor cross-section	Insulation stripping length
0.50 mm ²	AWG 20 7.5 mm
0.75 – 1.00 mm ²	AWG 18 7.5 mm
1.50 mm ²	AWG 16 7.5 mm
2.50 mm ²	AWG 14 7.5 mm
4.00 mm ²	AWG 12 7.5 mm

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
Removal Tool HE	1866750000

Housing selection RockStar® IP66
Size 2



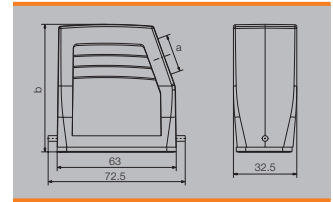
Further housings are available, see
Chapter E for IP66

Hood

Plug housing, cable entry sideways



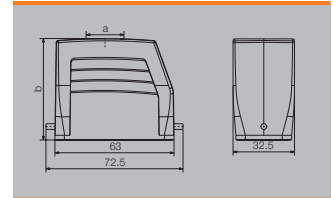
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		68	HDC 15A TSLU 1M20G	1788860000
M 25	w. threading		68	HDC 15A TSLU 1M25G	1788850000



Plug housing, cable entry at top



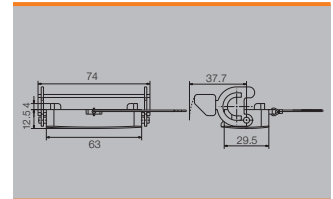
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		54	HDC 10A TOLU 1M20G	1788620000
M 25	w. threading		54	HDC 10A TOLU 1M25G	1788610000



Cover



Version	Type	Order No.
For hoods	HDC 10A DODL 1LB	1665890000

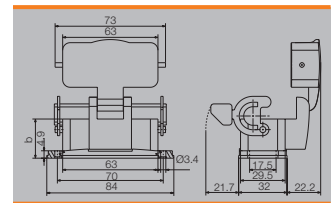


Base

Bulkhead housing



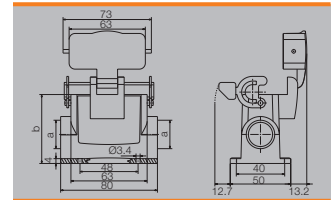
Version	Cover	b (mm)	Type	Order No.
		25	HDC 10A ALU	1664040000
	with cover	37.5	HDC 10A ADLU	1664060000



Base housing



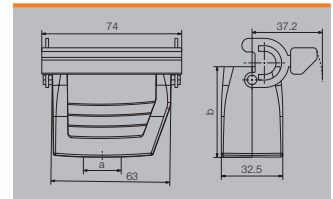
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		57	HDC 10A SLU 2M20G	1788640000
M 20	w. threading	with cover	69.5	HDC 10A SDLU 2M20G	1788660000
M 25	w. threading		57	HDC 10A SLU 2M25G	1788630000
M 25	w. threading	with cover	69.5	HDC 10A SDLU 2M25G	1788650000



Coupling housing



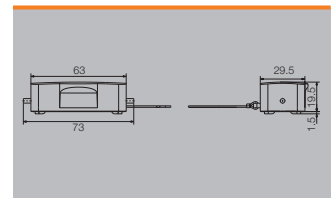
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		48	HDC 10A KLU 1M25G	1788670000



Cover



Version	Type	Order No.
For bases	HDC 10A DMDL 2B0	1665880000



HA series - the slim connectors

250 V, 16 A, Size 5

16 + ⊕

Inserts

Tension clamp connection



Insert	Type	Order No.
Male	HDC HA 16 MT	1896830000
Female	HDC HA 16 FT	1896800000

Screw connection



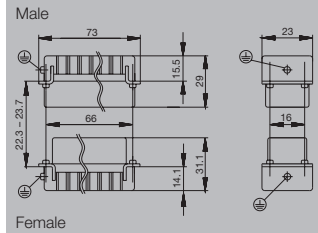
Insert	Type	Order No.
Male	HDC HA 16 MS	1650770000
Female	HDC HA 16 FS	1650780000

Crimp connection

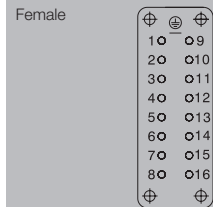
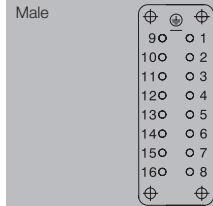


Insert	Type	Order No.
Male	HDC HA 16 MC	1873890000
Female	HDC HA 16 FC	1873880000

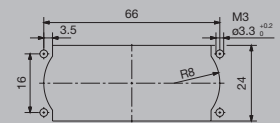
Dimensions



Arrangement of contacts



Mounting cut-out



Accessories

Crimp contacts

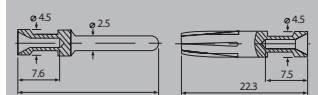
Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HE-SM0.5AU	1651420000	HDC-C-HE-BM0.5AU	1651470000	
100	HDC-C-HE-SM0.75-1.00AU	1651430000	HDC-C-HE-BM0.75-1.00AU	1651480000	
100	HDC-C-HE-SM1.5AU	1651440000	HDC-C-HE-BM1.5AU	1651490000	
100	HDC-C-HE-SM2.5AU	1651450000	HDC-C-HE-BM2.5AU	1651500000	
100	HDC-C-HE-SM4.0AU	1651460000	HDC-C-HE-BM4.0AU	1651510000	
100	HDC-C-HE-SM0.5AG	1200500000	HDC-C-HE-BM0.5AG	1201100000	
100	HDC-C-HE-SM0.75-1.00AG	1200600000	HDC-C-HE-BM0.75-1.00AG	1201200000	
100	HDC-C-HE-SM1.5AG	1200700000	HDC-C-HE-BM1.5AG	1201300000	
100	HDC-C-HE-SM2.5AG	1200800000	HDC-C-HE-BM2.5AG	1201400000	
100	HDC-C-HE-SM4.0AG	1200900000	HDC-C-HE-BM4.0AG	1201500000	



Conductor cross-section	Insulation stripping length
0.50 mm ²	AWG 20 7.5 mm
0.75 – 1.00 mm ²	AWG 18 7.5 mm
1.50 mm ²	AWG 16 7.5 mm
2.50 mm ²	AWG 14 7.5 mm
4.00 mm ²	AWG 12 7.5 mm

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
Removal Tool HE	1866750000

Housing selection RockStar® IP66
Size 5



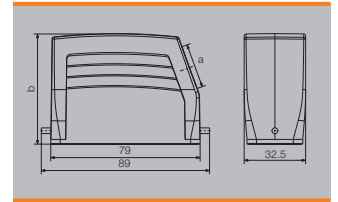
Further housings are available, see
Chapter E for IP66

Hood

Plug housing, cable entry sideways



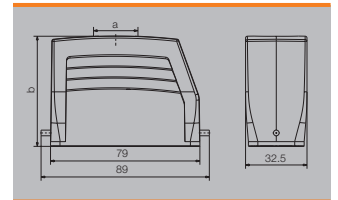
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		72	HDC 25A TSLU 1M20G	1788680000
M 25	w. threading		58	HDC 16A TSLU 1M25G	1788740000
M 25	w. threading		72	HDC 25A TSLU 1M25G	1788690000



Plug housing, cable entry at top



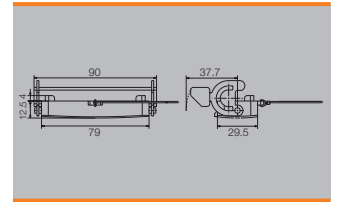
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		72	HDC 25A TOLU 1M20G	1788710000
M 25	w. threading		58	HDC 16A TOLU 1M25G	1788750000
M 25	w. threading		72	HDC 25A TOLU 1M25G	1788700000



Cover



Version	Type	Order No.
For hoods	HDC 16A DODL 1LB	1665900000

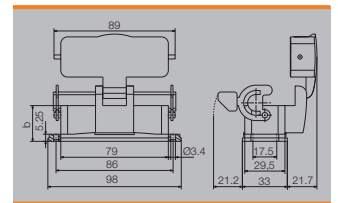


Base

Bulkhead housing



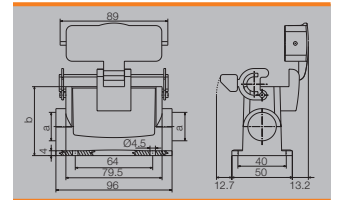
Version	Cover	b (mm)	Type	Order No.
		25	HDC 16A ALU	1664920000
	with cover	44,5	HDC 16A ADLU	1664940000



Base housing



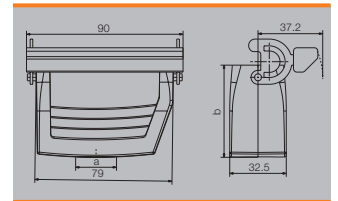
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		57	HDC 16A SLU 2M20G	1788770000
M 20	w. threading	with cover	76,5	HDC 16A SDLU 2M20G	1788790000
M 25	w. threading		57	HDC 16A SLU 2M25G	1788760000
M 25	w. threading	with cover	76,5	HDC 16A SDLU 2M25G	1788780000



Coupling housing



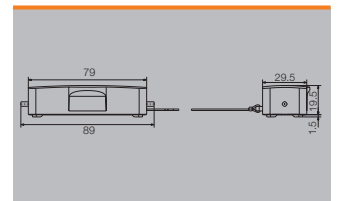
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		53	HDC 16A KLU 1M25G	1788800000



Cover



Version	Type	Order No.
For bases	HDC 16A DMDL 2B0	1665910000



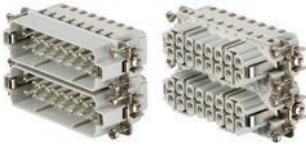
HA series - the slim connectors

250 V, 16 A, Size 7

32 + ⊕

Inserts

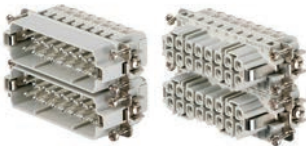
Tension clamp connection



Insert	Type	Order No.
Male	HDC HA 16 MT	1896830000
Female	HDC HA 16 FT	1896800000
Male	HDC HA 16 MT 17-32	1896840000
Female	HDC HA 16 FT 17-32	1896810000

Note To complete the assembly of the plug-in connector, two inserts are required

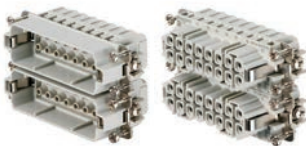
Screw connection



Insert	Type	Order No.
Male	HDC HA 16 MS	1650770000
Female	HDC HA 16 FS	1650780000
Male	HDC HA 16 MS 17-32	1650880000
Female	HDC HA 16 FS 17-32	1650900000

Note To complete the assembly of the plug-in connector, two inserts are required

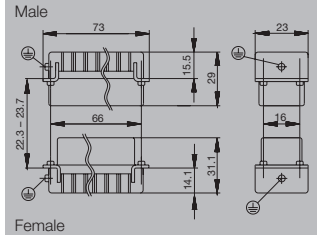
Crimp connection



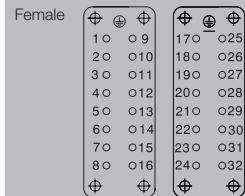
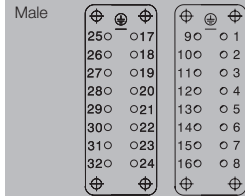
Insert	Type	Order No.
Male	HDC HA 16 MC	1873890000
Female	HDC HA 16 FC	1873880000
Male	HDC HA 16 MC 17 - 32	1875620000
Female	HDC HA 16 FC 17 - 32	1876040000

Note To complete the assembly of the plug-in connector, two inserts are required

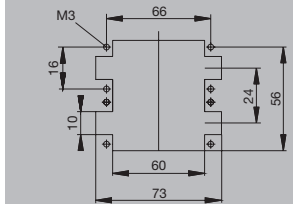
Dimensions



Arrangement of contacts



Mounting cut-out



Accessories

Crimp contacts

Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HE-SM0.5AU	1651420000	HDC-C-HE-BM0.5AU	1651470000	
100	HDC-C-HE-SM0.75-1.00AU	1651430000	HDC-C-HE-BM0.75-1.00AU	1651480000	
100	HDC-C-HE-SM1.5AU	1651440000	HDC-C-HE-BM1.5AU	1651490000	
100	HDC-C-HE-SM2.5AU	1651450000	HDC-C-HE-BM2.5AU	1651500000	
100	HDC-C-HE-SM4.0AU	1651460000	HDC-C-HE-BM4.0AU	1651510000	
100	HDC-C-HE-SM0.5AG	1200500000	HDC-C-HE-BM0.5AG	1201100000	
100	HDC-C-HE-SM0.75-1.00AG	1200600000	HDC-C-HE-BM0.75-1.00AG	1201200000	
100	HDC-C-HE-SM1.5AG	1200700000	HDC-C-HE-BM1.5AG	1201300000	
100	HDC-C-HE-SM2.5AG	1200800000	HDC-C-HE-BM2.5AG	1201400000	
100	HDC-C-HE-SM4.0AG	1200900000	HDC-C-HE-BM4.0AG	1201500000	



Conductor cross-section	Insulation stripping length
0.50 mm ²	AWG 20 7.5 mm
0.75 - 1.00 mm ²	AWG 18 7.5 mm
1.50 mm ²	AWG 16 7.5 mm
2.50 mm ²	AWG 14 7.5 mm
4.00 mm ²	AWG 12 7.5 mm

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
Removal Tool HE	1866750000

Housing selection RockStar® IP66
Size 7



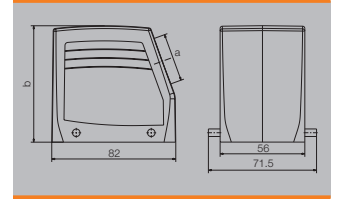
Further housings are available, see
Chapter E for IP66

Hood

Plug housing, cable entry sideways



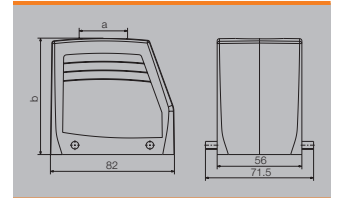
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		75	HDC 32A TSBU 1M25G	1787960000
M 32	w. threading		75	HDC 32A TSBU 1M32G	1787950000



Plug housing, cable entry at top



a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		75	HDC 32A TOBU 1M32G	1787990000

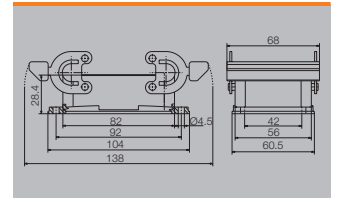


Base

Bulkhead housing



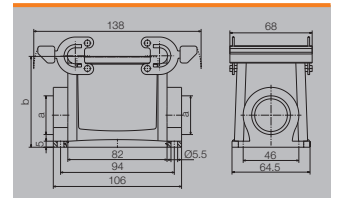
Version	Cover	b (mm)	Type	Order No.
		28.4	HDC 32A ABU	1665860000



Base housing



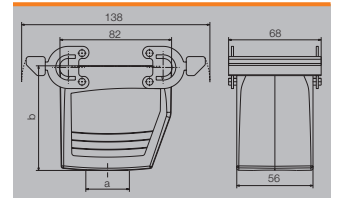
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		75	HDC 32A SBU 2M25G	1788040000



Coupling housing



a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		76.5	HDC 32A KBU 1M25G	1788080000
M 32	w. threading		76.5	HDC 32A KBU 1M32G	1788070000



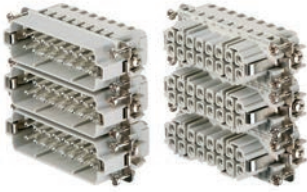
HA series - the slim connectors

250 V, 16 A, Size 9

48 + ⊕

Inserts

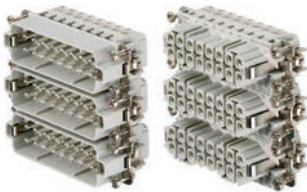
Tension clamp connection



Insert	Type	Order No.
Male	HDC HA 16 MT	1896830000
Female	HDC HA 16 FT	1896800000
Male	HDC HA 16 MT 17-32	1896840000
Female	HDC HA 16 FT 17-32	1896810000
Male	HDC HA 16 MT 33-48	1896850000
Female	HDC HA 16 FT 33-48	1896820000

Note To complete the assembly of the plug-in connector, three inserts are required

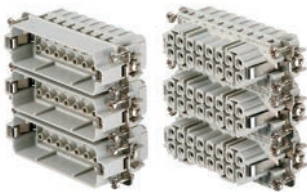
Screw connection



Insert	Type	Order No.
Male	HDC HA 16 MS	1650770000
Female	HDC HA 16 FS	1650780000
Male	HDC HA 16 MS 17-32	1650880000
Female	HDC HA 16 FS 17-32	1650900000
Male	HDC HA 16 MS 33-48	1650990000
Female	HDC HA 16 FS 33-48	1651020000

Note To complete the assembly of the plug-in connector, three inserts are required

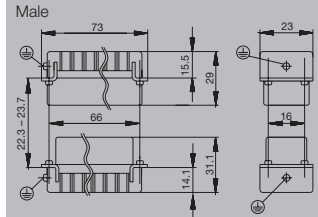
Crimp connection



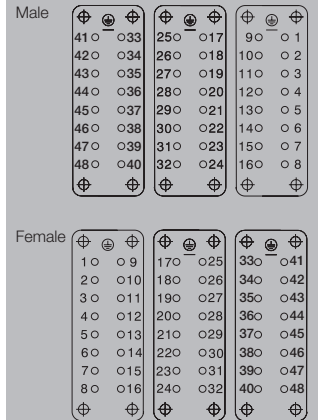
Insert	Type	Order No.
Male	HDC HA 16 MC	1873890000
Female	HDC HA 16 FC	1873880000
Male	HDC HA 16 MC 17 - 32	1875620000
Female	HDC HA 16 FC 17 - 32	1876040000
Male	HDC HA 16 MC 33 - 48	1875630000
Female	HDC HA 16 FC 33 - 48	1875540000

Note To complete the assembly of the plug-in connector, three inserts are required

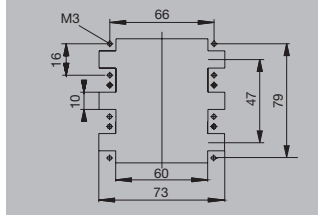
Dimensions



Arrangement of contacts



Mounting cut-out



Accessories

Crimp contacts

Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HE-SM0.5AU	1651420000	HDC-C-HE-BM0.5AU	1651470000	
100	HDC-C-HE-SM0.75-1.00AU	1651430000	HDC-C-HE-BM0.75-1.00AU	1651480000	
100	HDC-C-HE-SM1.5AU	1651440000	HDC-C-HE-BM1.5AU	1651490000	
100	HDC-C-HE-SM2.5AU	1651450000	HDC-C-HE-BM2.5AU	1651500000	
100	HDC-C-HE-SM4.0AU	1651460000	HDC-C-HE-BM4.0AU	1651510000	
100	HDC-C-HE-SM0.5AG	1200500000	HDC-C-HE-BM0.5AG	1201100000	
100	HDC-C-HE-SM0.75-1.00AG	1200600000	HDC-C-HE-BM0.75-1.00AG	1201200000	
100	HDC-C-HE-SM1.5AG	1200700000	HDC-C-HE-BM1.5AG	1201300000	
100	HDC-C-HE-SM2.5AG	1200800000	HDC-C-HE-BM2.5AG	1201400000	
100	HDC-C-HE-SM4.0AG	1200900000	HDC-C-HE-BM4.0AG	1201500000	

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
Removal Tool HE	1866750000



Conductor cross-section	Insulation stripping length
0.50 mm ²	AWG 20 7.5 mm
0.75 - 1.00 mm ²	AWG 18 7.5 mm
1.50 mm ²	AWG 16 7.5 mm
2.50 mm ²	AWG 14 7.5 mm
4.00 mm ²	AWG 12 7.5 mm

Housing selection RockStar® IP66
Size 9



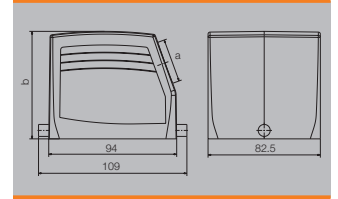
Further housings are available, see
Chapter E for IP66

Hood

Plug housing, cable entry sideways



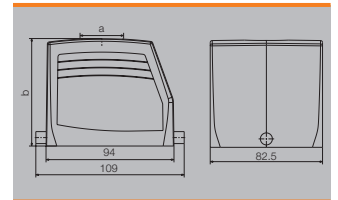
a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		79	HDC 48A TSLU 1M32G	1788550000



Plug housing, cable entry at top



a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		79	HDC 48A TOLU 1M32G	1788560000

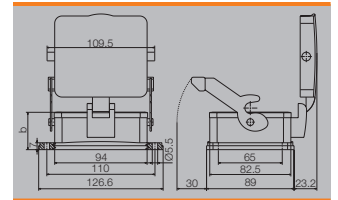


Base

Bulkhead housing



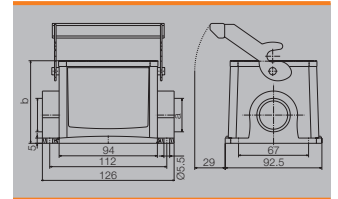
Version	Cover	b (mm)	Type	Order No.
		38	HDC 48A ALU	1666740000
	with cover	55	HDC 48A ADLU	1666750000



Base housing



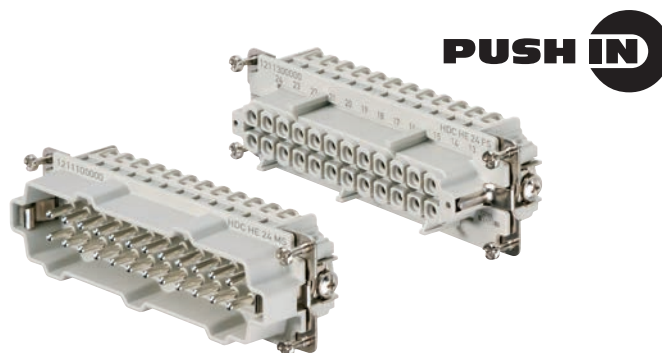
a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		79	HDC 48A SLU 2M32G	1788570000



HE series – the universal connectors

With the HE range, you can choose the wire connection method. In addition to our proven tension-clamp connection, we can also deliver with screw, crimp or PUSH IN wire connection.

You choose the connection method which you need.



Technical data

Standards / approvals	
Standards	DIN EN 61984 DIN EN 60664-1
Approvals	UL/CSA**, ISO 23570 (DESINA)*
Inserts	
No. of poles	6, 10, 16, 24, 32, 48
Rated voltage	500 V
Rated voltage to UL/CSA	600 V
Rated current	16 A (6 poles 24 A)
Rated impulse withstand voltage	6 kV
Pollution severity	3 (630 V / 6 kV / 2)
Insulation resistance	$\geq 10^{10} \Omega$
Material	Glass-fibre reinforced PC (in UL list and approved for railway applications)
Temperature range	-40 °C ... +125 °C
Flammability to UL 94	V-0
Mechanical service life	
- Plugging cycles Ag - Surface	≥ 500
- Plugging cycles Au - Surface	≥ 500
Contact resistance	$\leq 2 \text{ m}\Omega$
Contacts / Material	
Contacts	Copper alloy
Surface	Passivated silver, or gold-plated
Clamping range/Stripping length	
- Crimp connection	
- stranded/flexible	0.5...4.0 mm ² /0.5...4.0 mm ² (AWG 20...12) / 7.5 mm
- Screw connection	
- solid/stranded	0.5...2.5 mm ² /0.5...2.5 mm ² (AWG 20...14) / 9 mm
- flexible/flexible with wire end ferrule	0.5...2.5 mm ² /0.5...2.5 mm ² (AWG 20...14) / 9 mm
- Tension clamp connection	
- solid/stranded	0.25...2.5 mm ² / (AWG 24...14) / 8 mm
- flexible/flexible with wire end ferrule	0.25...2.5 mm ² / (AWG 24...14) / 8 mm
- PUSH IN	
- solid	0.5...4 mm ² (AWG 20...12) / 10 mm
- flexible with wire end ferrule	0.5...2.5 mm ² (AWG 20...14) / 10 mm
Clamping torque	
- Screw connection	0.5 - 0.55 Nm
SD blades	
- Screw connection	0.6 x 3.5 or PZ 0
- PUSH IN	0.4 x 2.5
- Tension clamp connection	0.5 x 3 or 0.6 x 3.5

* The HE 10 inserts are included in the ISO 23570 as motor terminal connectors.

** For screw, crimp, and PUSH IN connections

Contacts / Material

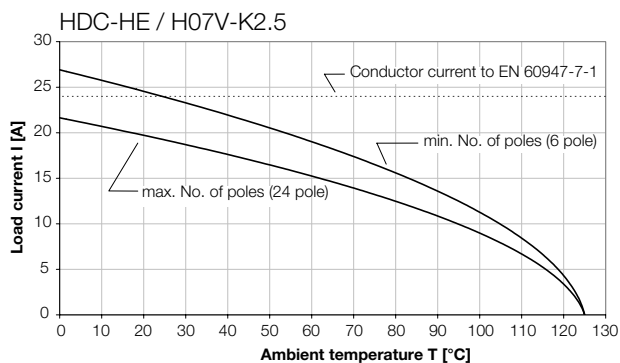
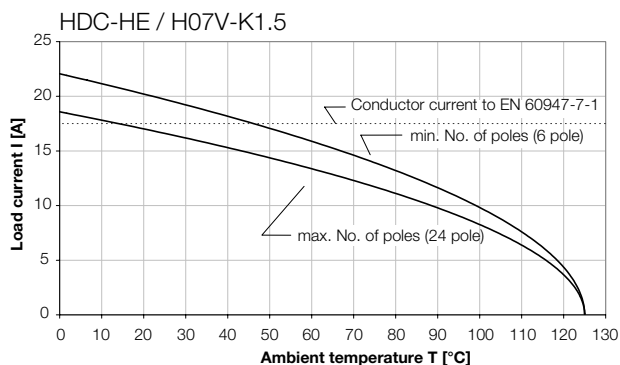
PE connection

- Clamping range	0.5 ... 4 mm ²
- solid / stranded	0.5 ... 4 mm ² / 0.5 ... 4 mm ²
- flexible / flexible with wire end ferrule, DIN 46228 pt. 1	0.5 ... 4 mm ² / 0.5 ... 4 mm ²
- AWG conductor	AWG 20 ... 12
- Stripping length	10 mm
- Clamping torque	1.2 ... 1.5 Nm
- Blade dimensions	SD 0.8 x 4 mm or PZ 1








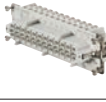



Note: When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load!

Inserts with PUSH IN connection can be connected to the H07V-U4 conductor.

Derating curves



Overview

		Size	Rated voltage	Rated current	No. of poles	Tension clamp connection	Screw conn. with wire guard spring	Crimp connection	PUSH IN connection	Axial screw connection	Page
		3	500 V	24 A	6 + ⊕	•	•	•	•		B.20
		4	500 V	16 A	10 + ⊕	•	•	•	•		B.22
		6	500 V	16 A	16 + ⊕	•	•	•	•		B.24
		8	500 V	16 A	24 + ⊕	•	•	•	•		B.26
		10	500 V	16 A	32 + ⊕	•	•	•	•		B.28
		12	500 V	16 A	48 + ⊕	•	•	•	•		B.30

HE series - the universal connectors

500 V, 24 A, Size 3

6 + ⊕

Inserts

Tension clamp connection



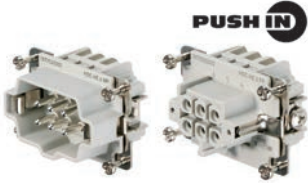
Insert	Type	Order No.
Male	HDC HE 6 MT	1745820000
Female	HDC HE 6 FT	1745760000

Screw connection



Insert	Type	Order No.
Male	HDC HE 6 MS	1200000000
Female	HDC HE 6 FS	1200200000

PUSH IN connection



Insert	Type	Order No.
Male	HDC HE 6 MP	1873530000
Female	HDC HE 6 FP	1873520000

Crimp connection



Insert	Type	Order No.
Male	HDC HE 6 MC	1200400000
Female	HDC HE 6 FC	1201000000

Dimensions

A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
51.00	33.80	33.20	19.10	16.50

Arrangement of contacts

Male

Female

Mounting cut-out

Accessories

Crimp contacts

Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HE-SM0.5AU	1651420000	HDC-C-HE-BM0.5AU	1651470000	
100	HDC-C-HE-SM0.75-1.00AU	1651430000	HDC-C-HE-BM0.75-1.00AU	1651480000	
100	HDC-C-HE-SM1.5AU	1651440000	HDC-C-HE-BM1.5AU	1651490000	
100	HDC-C-HE-SM2.5AU	1651450000	HDC-C-HE-BM2.5AU	1651500000	
100	HDC-C-HE-SM4.0AU	1651460000	HDC-C-HE-BM4.0AU	1651510000	
100	HDC-C-HE-SM0.5AG	1200500000	HDC-C-HE-BM0.5AG	1201100000	
100	HDC-C-HE-SM0.75-1.00AG	1200600000	HDC-C-HE-BM0.75-1.00AG	1201200000	
100	HDC-C-HE-SM1.5AG	1200700000	HDC-C-HE-BM1.5AG	1201300000	
100	HDC-C-HE-SM2.5AG	1200800000	HDC-C-HE-BM2.5AG	1201400000	
100	HDC-C-HE-SM4.0AG	1200900000	HDC-C-HE-BM4.0AG	1201500000	

Conductor cross-section	Insulation stripping length
0.50 mm ²	AWG 20 7.5 mm
0.75 – 1.00 mm ²	AWG 18 7.5 mm
1.50 mm ²	AWG 16 7.5 mm
2.50 mm ²	AWG 14 7.5 mm
4.00 mm ²	AWG 12 7.5 mm

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
Removal Tool HE	1866750000

Housing selection RockStar® IP66
Size 3



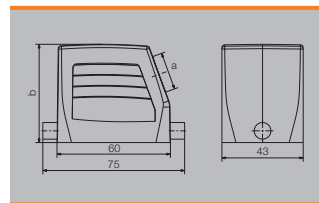
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



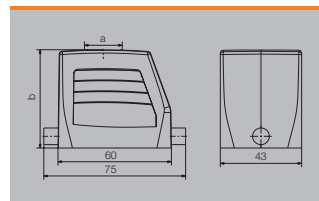
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 06B TSLU 1M20G	1788100000
M 25	w. threading		52	HDC 06B TSLU 1M25G	1788090000
M 25	w. threading		72	HDC 16D TSLU 1M25G	1787480000



Plug housing, cable entry at top



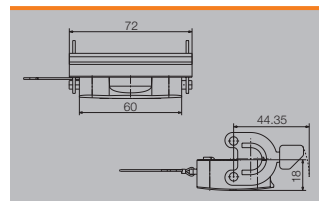
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 06B TOLU 1M20G	1788120000
M 25	w. threading		52	HDC 06B TOLU 1M25G	1788110000
M 25	w. threading		72	HDC 16D TOLU 1M25G	1787500000
M 32	w. threading		72	HDC 16D TOLU 1M32G	1787490000



Cover



Version	Type	Order No.
For hoods	HDC 06B DMDL 1LB	1665210000

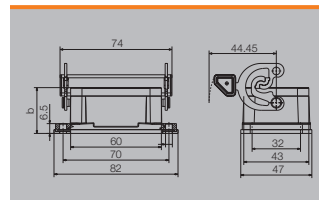


Base

Bulkhead housing



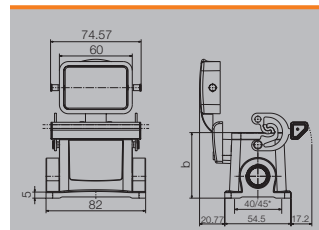
Version	Cover	b (mm)	Type	Order No.
		29	HDC 06B ALU	1202100000
	with cover	47	HDC 06B ADLU	1202500000



Base housing



a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		54	HDC 06B SLU 2M20G	1788140000
M 20	w. threading	with cover	72	HDC 06B SDLU 2M20G	1788170000
M 25	w. threading		54	HDC 06B SLU 2M25G	1788130000
M 25	w. threading	with cover	72	HDC 06B SDLU 2M25G	1788160000

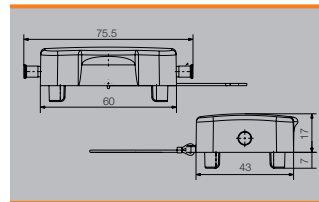


* Mounting dimensions for size-3 base housings, tall shape (16D)

Cover



Version	Type	Order No.
For bases	HDC 06B DODL 2B0	1665200000



HE series - the universal connectors

500 V, 16 A, Size 4

10 + ⊕

Inserts

Tension clamp connection



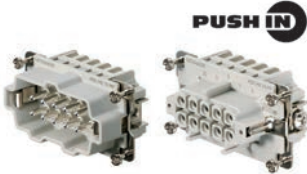
Insert	Type	Order No.
Male	HDC HE 10 MT	1745830000
Female	HDC HE 10 FT	1745770000

Screw connection



Insert	Type	Order No.
Male	HDC HE 10 MS	1203900000
Female	HDC HE 10 FS	1204100000

PUSH IN connection



Insert	Type	Order No.
Male	HDC HE 10 MP	1873550000
Female	HDC HE 10 FP	1873540000

Crimp connection



Insert	Type	Order No.
Male	HDC HE 10 MC	1204300000
Female	HDC HE 10 FC	1204400000

Dimensions

A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
64.00	33.80	33.20	19.10	16.50

Arrangement of contacts

Male

Female

Mounting cut-out

Accessories

Crimp contacts

Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HE-SM0.5AU	1651420000	HDC-C-HE-BM0.5AU	1651470000	
100	HDC-C-HE-SM0.75-1.00AU	1651430000	HDC-C-HE-BM0.75-1.00AU	1651480000	
100	HDC-C-HE-SM1.5AU	1651440000	HDC-C-HE-BM1.5AU	1651490000	
100	HDC-C-HE-SM2.5AU	1651450000	HDC-C-HE-BM2.5AU	1651500000	
100	HDC-C-HE-SM4.0AU	1651460000	HDC-C-HE-BM4.0AU	1651510000	
100	HDC-C-HE-SM0.5AG	1200500000	HDC-C-HE-BM0.5AG	1201100000	
100	HDC-C-HE-SM0.75-1.00AG	1200600000	HDC-C-HE-BM0.75-1.00AG	1201200000	
100	HDC-C-HE-SM1.5AG	1200700000	HDC-C-HE-BM1.5AG	1201300000	
100	HDC-C-HE-SM2.5AG	1200800000	HDC-C-HE-BM2.5AG	1201400000	
100	HDC-C-HE-SM4.0AG	1200900000	HDC-C-HE-BM4.0AG	1201500000	

Conductor cross-section	Insulation stripping length
0.50 mm ²	AWG 20 7.5 mm
0.75 – 1.00 mm ²	AWG 18 7.5 mm
1.50 mm ²	AWG 16 7.5 mm
2.50 mm ²	AWG 14 7.5 mm
4.00 mm ²	AWG 12 7.5 mm

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
Removal Tool HE	1866750000

Housing selection RockStar® IP66
Size 4



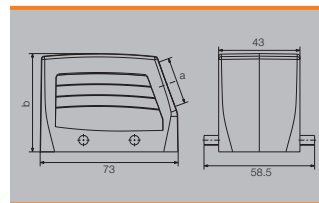
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



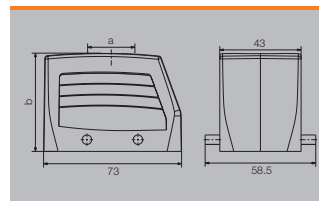
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 10B TSBU 1M20G	1787560000
M 25	w. threading		52	HDC 10B TSBU 1M25G	1787550000
M 25	w. threading		72	HDC 24D TSBU 1M25G	1787240000
M 32	w. threading		72	HDC 24D TSBU 1M32G	1787230000



Plug housing, cable entry at top



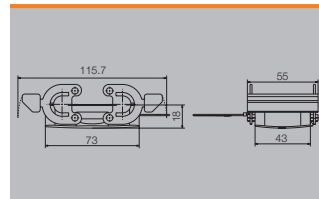
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 10B TOBU 1M20G	1787600000
M 25	w. threading		52	HDC 10B TOBU 1M25G	1787590000
M 25	w. threading		72	HDC 24D TOBU 1M25G	1787300000
M 32	w. threading		72	HDC 24D TOBU 1M32G	1787290000



Cover



Version	Type	Order No.
For hoods	HDC 10B DMDQ 2QB	1665240000

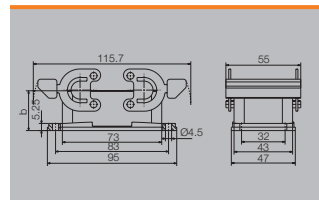


Base

Bulkhead housing



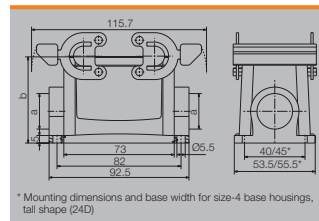
Version	Cover	b (mm)	Type	Order No.
		29.3	HDC 10B ABU	1205000000



Base housing



a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		57	HDC 10B SBU 2M20G	1787640000
M 25	w. threading		57	HDC 10B SBU 2M25G	1787630000

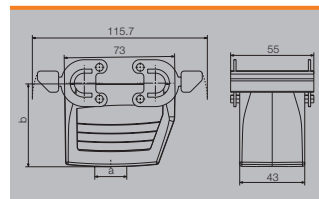


* Mounting dimensions and base width for size-4 base housings, tall shape (24D)

Coupling housing



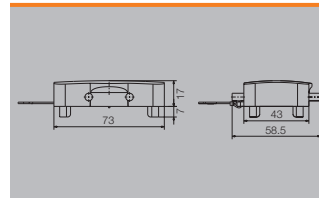
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		55	HDC 10B KBU 1M20G	1787720000



Cover



Version	Type	Order No.
For bases	HDC 10B DODQ 4B0	1665230000



HE series - the universal connectors

500 V, 16 A, Size 6

16 + ⊕

Inserts

Tension clamp connection



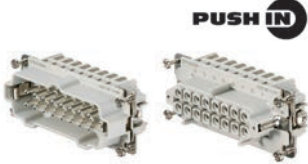
Insert	Type	Order No.
Male	HDC HE 16 MT	1745840000
Female	HDC HE 16 FT	1745780000

Screw connection



Insert	Type	Order No.
Male	HDC HE 16 MS	1207500000
Female	HDC HE 16 FS	1207700000

PUSH IN connection



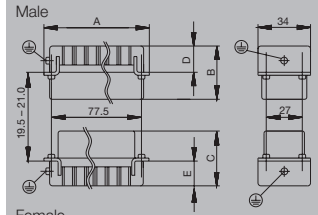
Insert	Type	Order No.
Male	HDC HE 16 MP	1873570000
Female	HDC HE 16 FP	1873560000

Crimp connection



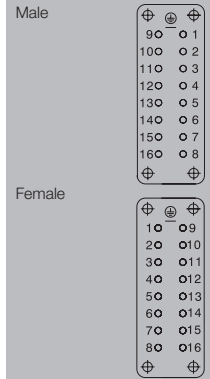
Insert	Type	Order No.
Male	HDC HE 16 MC	1207900000
Female	HDC HE 16 FC	1208000000

Dimensions

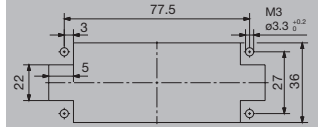


A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
84.50	33.80	33.20	19.10	16.50

Arrangement of contacts



Mounting cut-out



Accessories

Crimp contacts

Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HE-SM0.5AU	1651420000	HDC-C-HE-BM0.5AU	1651470000	
100	HDC-C-HE-SM0.75-1.00AU	1651430000	HDC-C-HE-BM0.75-1.00AU	1651480000	
100	HDC-C-HE-SM1.5AU	1651440000	HDC-C-HE-BM1.5AU	1651490000	
100	HDC-C-HE-SM2.5AU	1651450000	HDC-C-HE-BM2.5AU	1651500000	
100	HDC-C-HE-SM4.0AU	1651460000	HDC-C-HE-BM4.0AU	1651510000	
100	HDC-C-HE-SM0.5AG	1200500000	HDC-C-HE-BM0.5AG	1201100000	
100	HDC-C-HE-SM0.75-1.00AG	1200600000	HDC-C-HE-BM0.75-1.00AG	1201200000	
100	HDC-C-HE-SM1.5AG	1200700000	HDC-C-HE-BM1.5AG	1201300000	
100	HDC-C-HE-SM2.5AG	1200800000	HDC-C-HE-BM2.5AG	1201400000	
100	HDC-C-HE-SM4.0AG	1200900000	HDC-C-HE-BM4.0AG	1201500000	



Conductor cross-section	Insulation stripping length
0.50 mm ²	AWG 20 7.5 mm
0.75 - 1.00 mm ²	AWG 18 7.5 mm
1.50 mm ²	AWG 16 7.5 mm
2.50 mm ²	AWG 14 7.5 mm
4.00 mm ²	AWG 12 7.5 mm

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
Removal Tool HE	1866750000

Housing selection RockStar® IP66
Size 6



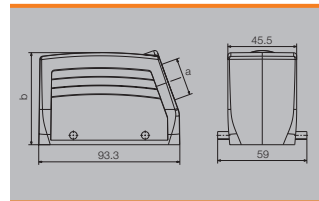
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



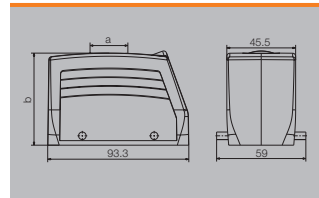
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TSBU 1M25G	1788180000
M 25	w. threading		76	HDC 40D TSBU 1M25G	1787010000
M 32	w. threading		76	HDC 40D TSBU 1M32G	1787000000



Plug housing, cable entry at top



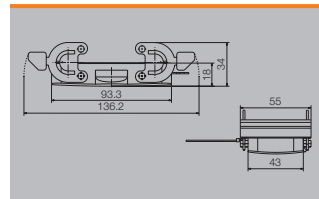
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TOBU 1M25G	1788210000
M 25	w. threading		76	HDC 40D TOBU 1M25G	1787070000
M 32	w. threading		76	HDC 40D TOBU 1M32G	1787060000



Cover



Version	Type	Order No.
For hoods	HDC 16B DMDQ 2QB	1665270000

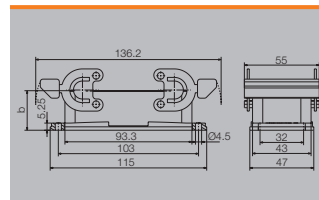


Base

Bulkhead housing



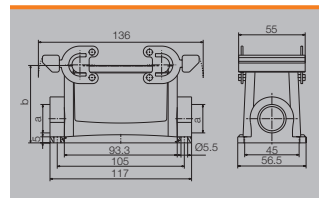
Version	Cover	b (mm)	Type	Order No.
		29	HDC 16B ABU	1208600000



Base housing



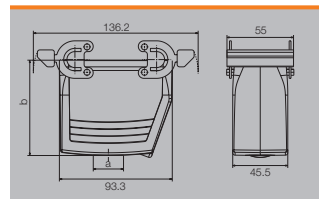
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		64	HDC 16B SBU 2M25G	1788240000
M 25	w. threading		84	HDC 40D SBU 2M25G	1787120000
M 32	w. threading		84	HDC 40D SBU 2M32G	1787110000



Coupling housing



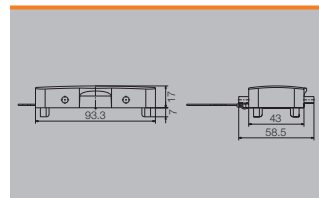
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		79	HDC 40D KBU 1M25G	1787200000
M 32	w. threading		79	HDC 40D KBU 1M32G	1787190000



Cover



Version	Type	Order No.
For bases	HDC 16B DODQ 4B0	1665260000



HE series - the universal connectors

500 V, 16 A, Size 8

24 + ⊕

Inserts

Tension clamp connection



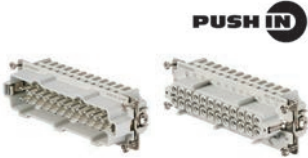
Insert	Type	Order No.
Male	HDC HE 24 MT	1745850000
Female	HDC HE 24 FT	1745790000

Screw connection



Insert	Type	Order No.
Male	HDC HE 24 MS	1211100000
Female	HDC HE 24 FS	1211300000

PUSH IN connection



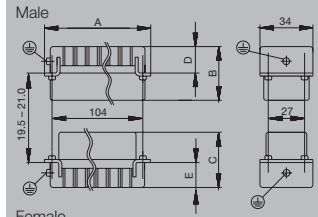
Insert	Type	Order No.
Male	HDC HE 24 MP	1873590000
Female	HDC HE 24 FP	1873580000

Crimp connection



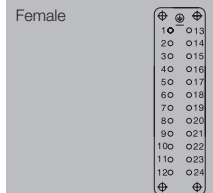
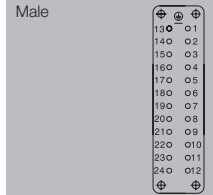
Insert	Type	Order No.
Male	HDC HE 24 MC	1211500000
Female	HDC HE 24 FC	1211600000

Dimensions

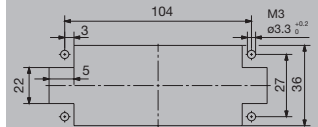


A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
111.00	33.80	33.20	19.10	16.50

Arrangement of contacts



Mounting cut-out



Accessories

Crimp contacts

Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HE-SM0.5AU	1651420000	HDC-C-HE-BM0.5AU	1651470000	
100	HDC-C-HE-SM0.75-1.00AU	1651430000	HDC-C-HE-BM0.75-1.00AU	1651480000	
100	HDC-C-HE-SM1.5AU	1651440000	HDC-C-HE-BM1.5AU	1651490000	
100	HDC-C-HE-SM2.5AU	1651450000	HDC-C-HE-BM2.5AU	1651500000	
100	HDC-C-HE-SM4.0AU	1651460000	HDC-C-HE-BM4.0AU	1651510000	
100	HDC-C-HE-SM0.5AG	1200500000	HDC-C-HE-BM0.5AG	1201100000	
100	HDC-C-HE-SM0.75-1.00AG	1200600000	HDC-C-HE-BM0.75-1.00AG	1201200000	
100	HDC-C-HE-SM1.5AG	1200700000	HDC-C-HE-BM1.5AG	1201300000	
100	HDC-C-HE-SM2.5AG	1200800000	HDC-C-HE-BM2.5AG	1201400000	
100	HDC-C-HE-SM4.0AG	1200900000	HDC-C-HE-BM4.0AG	1201500000	



Conductor cross-section	Insulation stripping length
0.50 mm ²	AWG 20 7.5 mm
0.75 - 1.00 mm ²	AWG 18 7.5 mm
1.50 mm ²	AWG 16 7.5 mm
2.50 mm ²	AWG 14 7.5 mm
4.00 mm ²	AWG 12 7.5 mm

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
Removal Tool HE	1866750000

Housing selection RockStar® IP66
Size 8



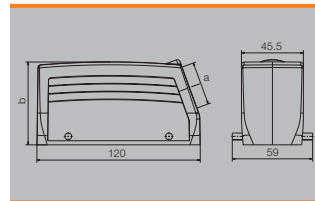
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



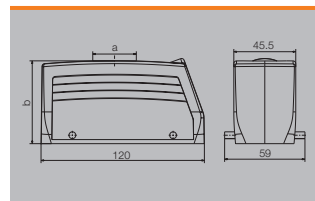
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 24B TSBU 1M25G	1787760000
M 25	w. threading		76	HDC 64D TSBU 1M25G	1786780000
M 32	w. threading		61	HDC 24B TSBU 1M32G	1787750000
M 32	w. threading		76	HDC 64D TSBU 1M32G	1786770000



Plug housing, cable entry at top



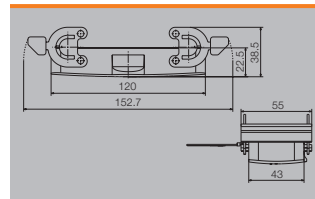
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 24B TOBU 1M25G	1787820000
M 32	w. threading		61	HDC 24B TOBU 1M32G	1787810000
M 32	w. threading		76	HDC 64D TOBU 1M32G	1786830000



Cover



Version	Type	Order No.
For hoods	HDC 24B DMDQ 2QB	1665640000

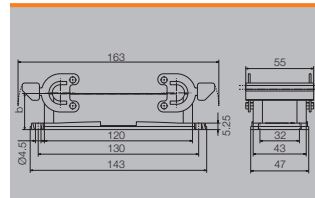


Base

Bulkhead housing



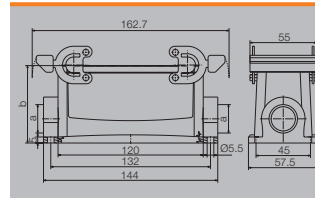
Version	Cover	b (mm)	Type	Order No.
		29.3	HDC 24B ABU	1212400000



Base housing



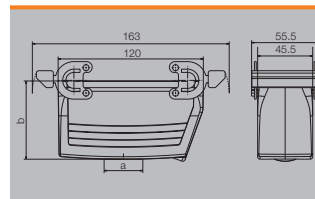
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		64	HDC 24B SBU 2M25G	1787870000
M 25	w. threading		84	HDC 64D SBU 2M25G	1786890000
M 32	w. threading		84	HDC 64D SBU 2M32G	1786880000



Coupling housing



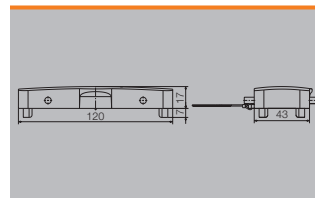
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		65	HDC 24B KBU 1M25G	1787920000
M 32	w. threading		79	HDC 64D KBU 1M32G	1786960000



Cover



Version	Type	Order No.
For bases	HDC 24B DODQ 4B0	1665630000



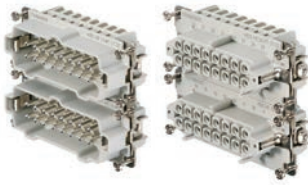
HE series - the universal connectors

500 V, 16 A, Size 10

32 + ⊕

Inserts

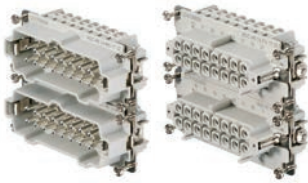
Tension clamp connection



Insert	Type	Order No.
Male	HDC HE 16 MT	1745840000
Female	HDC HE 16 FT	1745780000
Male	HDC HE 16 MT 17-32	1745860000
Female	HDC HE 16 FT 17-32	1745800000

Note To complete the assembly of the plug-in connector, two inserts are required

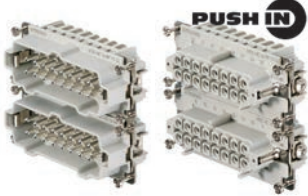
Screw connection



Insert	Type	Order No.
Male	HDC HE 16 MS	1207500000
Female	HDC HE 16 FS	1207700000
Male	HDC HE 16 MS 17-32	1215700000
Female	HDC HE 16 FS 17-32	1216100000

Note To complete the assembly of the plug-in connector, two inserts are required

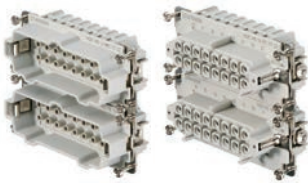
PUSH IN connection



Insert	Type	Order No.
Male	HDC HE 16 MP	1873570000
Female	HDC HE 16 FP	1873560000
Male	HDC HE 16 MP 17-32	1875800000
Female	HDC HE 16 FP 17-32	1875740000

Note To complete the assembly of the plug-in connector, two inserts are required

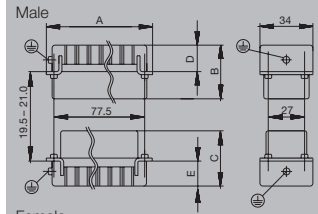
Crimp connection



Insert	Type	Order No.
Male	HDC HE 16 MC	1207900000
Female	HDC HE 16 FC	1208000000
Male	HDC HE 16 MC 17-32	1216500000
Female	HDC HE 16 FC 17-32	1216700000

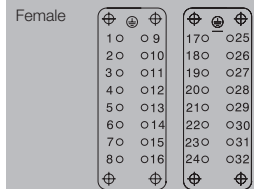
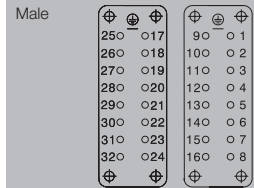
Note To complete the assembly of the plug-in connector, two inserts are required

Dimensions

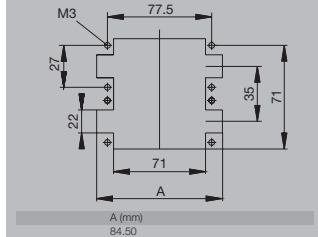


A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
84.50	33.80	33.20	19.10	16.50

Arrangement of contacts



Mounting cut-out



Accessories

Crimp contacts

Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HE-SM0.5AU	1651420000	HDC-C-HE-BM0.5AU	1651470000	
100	HDC-C-HE-SM0.75-1.00AU	1651430000	HDC-C-HE-BM0.75-1.00AU	1651480000	
100	HDC-C-HE-SM1.5AU	1651440000	HDC-C-HE-BM1.5AU	1651490000	
100	HDC-C-HE-SM2.5AU	1651450000	HDC-C-HE-BM2.5AU	1651500000	
100	HDC-C-HE-SM4.0AU	1651460000	HDC-C-HE-BM4.0AU	1651510000	
100	HDC-C-HE-SM0.5AG	1200500000	HDC-C-HE-BM0.5AG	1201100000	
100	HDC-C-HE-SM0.75-1.00AG	1200600000	HDC-C-HE-BM0.75-1.00AG	1201200000	
100	HDC-C-HE-SM1.5AG	1200700000	HDC-C-HE-BM1.5AG	1201300000	
100	HDC-C-HE-SM2.5AG	1200800000	HDC-C-HE-BM2.5AG	1201400000	
100	HDC-C-HE-SM4.0AG	1200900000	HDC-C-HE-BM4.0AG	1201500000	

Tools



Crimping tool		Order No.
CTX CM 1.6/2.5		9018490000
Contact Removal Tool		Order No.
Removal Tool HE		1866750000



Conductor cross-section	Insulation stripping length
0.50 mm ²	AWG 20 7.5 mm
0.75 - 1.00 mm ²	AWG 18 7.5 mm
1.50 mm ²	AWG 16 7.5 mm
2.50 mm ²	AWG 14 7.5 mm
4.00 mm ²	AWG 12 7.5 mm

Housing selection RockStar® IP66
Size 10



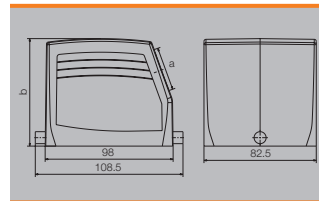
Further housings are available, see
Chapter E for IP66

Hood

Plug housing, cable entry sideways



a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		79	HDC 32B TSLU 1M32G	1788420000

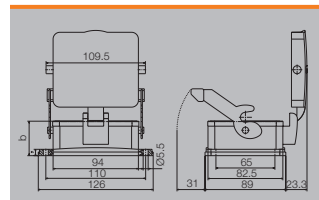


Base

Bulkhead housing



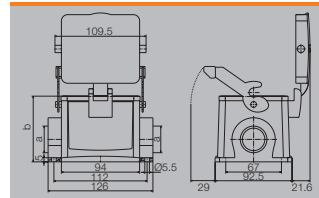
Version	Cover	b (mm)	Type	Order No.
		38	HDC 32B ALU	1219500000
	with cover	55	HDC 32B ADLU	1219800000



Base housing



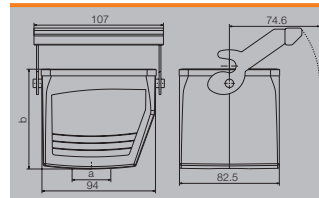
a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		79	HDC 32B SLU 2M32G	1788470000
M 32	w. threading	with cover	96	HDC 32B SDLU 2M32G	1788490000



Coupling housing



a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		83	HDC 32B KLU 1M32G	1788500000



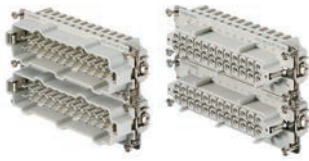
HE series - the universal connectors

500 V, 16 A, Size 12

48 + ⊕

Inserts

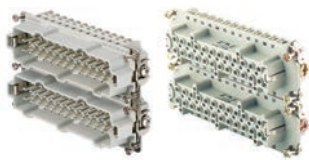
Tension clamp connection



Insert	Type	Order No.
Male	HDC HE 24 MT	1745850000
Female	HDC HE 24 FT	1745790000
Male	HDC HE 24 MT 25-48	1745870000
Female	HDC HE 24 FT 25-48	1745810000

Note To complete the assembly of the plug-in connector, two inserts are required

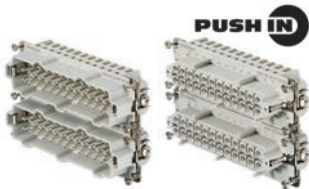
Screw connection



Insert	Type	Order No.
Male	HDC HE 24 MS	1211100000
Female	HDC HE 24 FS	1211300000
Male	HDC HE 24 MS 25-48	1220800000
Female	HDC HE 24 FS 25-48	1221200000

Note To complete the assembly of the plug-in connector, two inserts are required

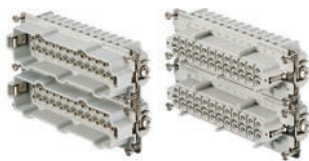
PUSH IN connection



Insert	Type	Order No.
Male	HDC HE 24 MP	1873590000
Female	HDC HE 24 FP	1873580000
Male	HDC HE 24 MP 25-48	1875890000
Female	HDC HE 24 FP 25-48	1875850000

Note To complete the assembly of the plug-in connector, two inserts are required

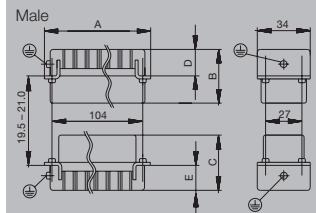
Crimp connection



Insert	Type	Order No.
Male	HDC HE 24 MC	1211500000
Female	HDC HE 24 FC	1211600000
Male	HDC HE 24 MC 25-48	1226400000
Female	HDC HE 24 FC 25-48	1226600000

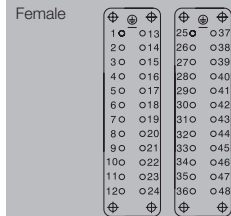
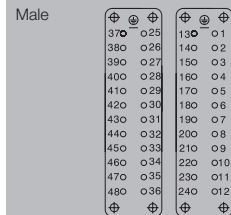
Note To complete the assembly of the plug-in connector, two inserts are required

Dimensions

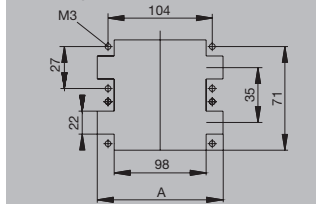


Male	Female
A (mm)	111.00
B (mm)	33.80
C (mm)	33.20
D (mm)	19.10
E (mm)	16.50

Arrangement of contacts



Mounting cut-out



A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
111.00				

Accessories

Crimp contacts

Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HE-SM0.5AU	1651420000	HDC-C-HE-BM0.5AU	1651470000	
100	HDC-C-HE-SM0.75-1.00AU	1651430000	HDC-C-HE-BM0.75-1.00AU	1651480000	
100	HDC-C-HE-SM1.5AU	1651440000	HDC-C-HE-BM1.5AU	1651490000	
100	HDC-C-HE-SM2.5AU	1651450000	HDC-C-HE-BM2.5AU	1651500000	
100	HDC-C-HE-SM4.0AU	1651460000	HDC-C-HE-BM4.0AU	1651510000	
100	HDC-C-HE-SM0.5AG	1200500000	HDC-C-HE-BM0.5AG	1201100000	
100	HDC-C-HE-SM0.75-1.00AG	1200600000	HDC-C-HE-BM0.75-1.00AG	1201200000	
100	HDC-C-HE-SM1.5AG	1200700000	HDC-C-HE-BM1.5AG	1201300000	
100	HDC-C-HE-SM2.5AG	1200800000	HDC-C-HE-BM2.5AG	1201400000	
100	HDC-C-HE-SM4.0AG	1200900000	HDC-C-HE-BM4.0AG	1201500000	

Tools



Crimping tool		Order No.
CTX CM 1.6/2.5		9018490000
Contact Removal Tool		Order No.
Removal Tool HE		1866750000



Conductor cross-section	Insulation stripping length
0.50 mm ²	AWG 20 7.5 mm
0.75 - 1.00 mm ²	AWG 18 7.5 mm
1.50 mm ²	AWG 16 7.5 mm
2.50 mm ²	AWG 14 7.5 mm
4.00 mm ²	AWG 12 7.5 mm

Housing selection RockStar® IP66
Size 12



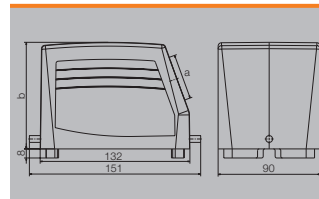
Further housings are available, see Chapter E for IP66

Hood

Plug housing, cable entry sideways



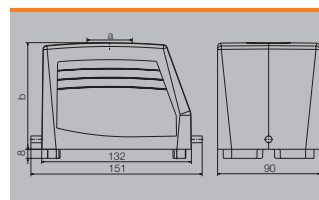
a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		94	HDC 48B TSLU 1M32G	1788320000
M 40	w. threading		94	HDC 48B TSLU 1M40G	1788310000
M 50	w. threading		94	HDC 48B TSLU 1M50G	1788300000



Plug housing, cable entry at top



a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		94	HDC 48B TOLU 1M32G	1788350000
M 50	w. threading		94	HDC 48B TOLU 1M50G	1788330000

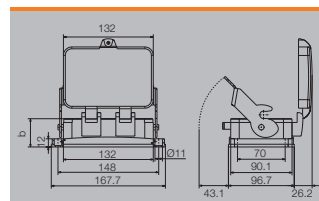


Base

Bulkhead housing



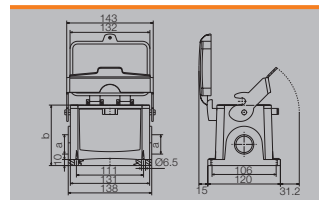
Version	Cover	b (mm)	Type	Order No.
	with cover	62	HDC 48B ADLU	1222900000



Base housing

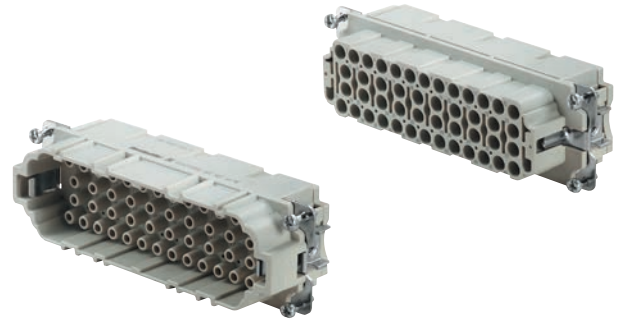


a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		100	HDC 48B SLU 2M32G	1788370000
M 32	w. threading	with cover	120	HDC 48B SDLU 2M32G	1788390000
M 40	w. threading		100	HDC 48B SLU 2M40G	1788360000



HEE series – high contact density

The HEE series has a high contact density and its design is based on the proven HE inserts.

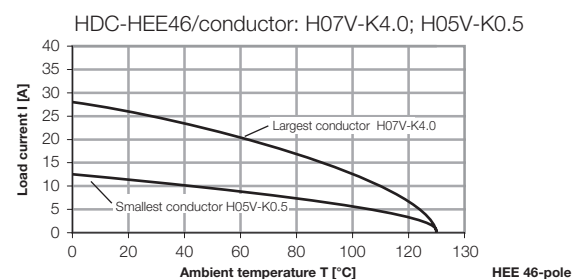
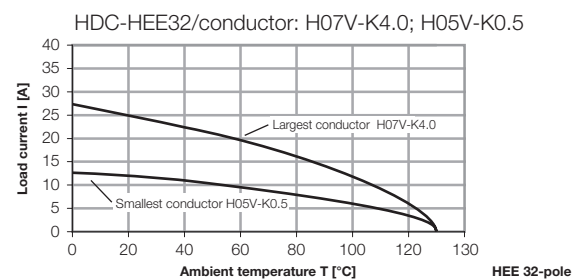
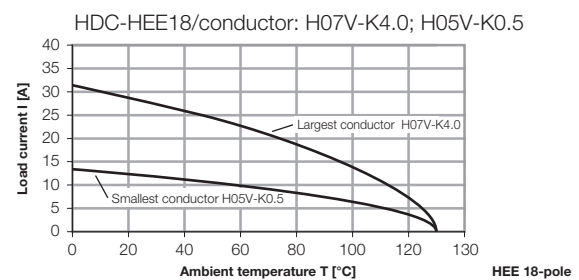
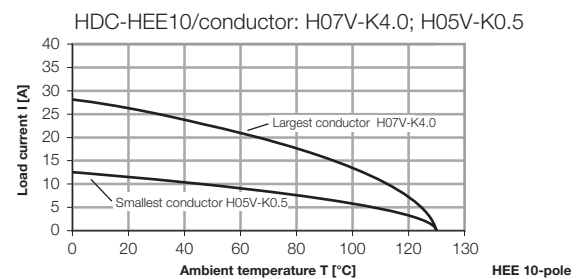


Technical data











Standards / approvals	
Standards	DIN EN 61984 DIN EN 60664-1
Approvals	UL/CSA
Inserts	
No. of poles	10, 18, 32, 46, 64 (+PE)
Rated voltage	500 V
Rated voltage to UL/CSA	600 V
Rated current	16 A
Rated impulse withstand voltage	6 kV
Pollution severity	3 (630 V / 6 kV / 2)
Insulation resistance	$\geq 10^{10} \Omega$
Material	Glass-fibre reinforced PC (in UL list and approved for railway applications)
Temperature range	-40 °C ... +125 °C
Flammability to UL 94	V-0
Mechanical service life	
- Plugging cycles Ag - Surface	≥ 500
- Plugging cycles Au - Surface	≥ 500
Contact resistance	
Crimp connection	$\leq 2 \text{ m}\Omega$
Contacts / Material	
Contacts	Copper alloy
Surface	Passivated silver, or gold-plated
Crimp connection	
- Flexible conductor connection	0.5 - 4 mm ² (AWG 20 ... 12)
- Stripping length	7.5 mm
PE connection	
- Clamping range	0.5 ... 4 mm ²
- solid / stranded	0.5 ... 4 mm ² / 0.5 ... 4 mm ²
- flexible / flexible with wire end ferrule, DIN 46228 pt. 1	0.5 ... 4 mm ² / 0.5 ... 4 mm ²
- AWG conductor	AWG 20 ... 12
- Stripping length	10 mm
- Clamping torque	1.2 ... 1.5 Nm
- Blade dimensions	SD 0.8 x 4 mm or PZ 1

Note: When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load!

Derating curves



Overview

		Size	Rated voltage	Rated current	No. of poles	Tension clamp connection	Screw conn. with wire guard spring	Crimp connection	PUSH IN connection	Axial screw connection	Page
		3	500 V	16 A	10 + ⊕			•			B.34
		4	500 V	16 A	18 + ⊕			•			B.36
		6	500 V	16 A	32 + ⊕			•			B.38
		8	500 V	16 A	46 + ⊕			•			B.40
		10	500 V	16 A	64 + ⊕			•			B.42

HEE series - high contact density

500 V, 16 A, Size 3

10 + ⊕

Inserts

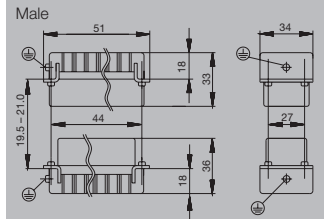
Crimp connection



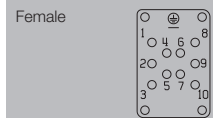
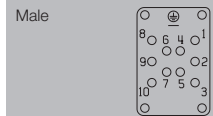
Insert	Type	Order No.
Male	HDC HEE 10 MC	1826830000
Female	HDC HEE 10 FC	1826840000

Note When using connectors with high contact density, we recommend the use of guide pins and sockets; see Chapter J

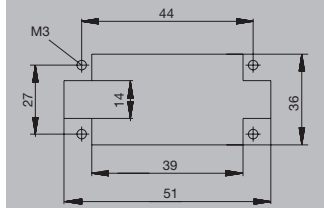
Dimensions



Arrangement of contacts



Mounting cut-out



Accessories

Crimp contacts

Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HE-SM0.5AU	1651420000	HDC-C-HE-BM0.5AU	1651470000	
100	HDC-C-HE-SM0.75-1.00AU	1651430000	HDC-C-HE-BM0.75-1.00AU	1651480000	
100	HDC-C-HE-SM1.5AU	1651440000	HDC-C-HE-BM1.5AU	1651490000	
100	HDC-C-HE-SM2.5AU	1651450000	HDC-C-HE-BM2.5AU	1651500000	
100	HDC-C-HE-SM4.0AU	1651460000	HDC-C-HE-BM4.0AU	1651510000	
<hr/>					
100	HDC-C-HE-SM0.5AG	1200500000	HDC-C-HE-BM0.5AG	1201100000	
100	HDC-C-HE-SM0.75-1.00AG	1200600000	HDC-C-HE-BM0.75-1.00AG	1201200000	
100	HDC-C-HE-SM1.5AG	1200700000	HDC-C-HE-BM1.5AG	1201300000	
100	HDC-C-HE-SM2.5AG	1200800000	HDC-C-HE-BM2.5AG	1201400000	
100	HDC-C-HE-SM4.0AG	1200900000	HDC-C-HE-BM4.0AG	1201500000	



Conductor cross-section	Insulation stripping length
0.50 mm ²	AWG 20 7.5 mm
0.75 – 1.00 mm ²	AWG 18 7.5 mm
1.50 mm ²	AWG 16 7.5 mm
2.50 mm ²	AWG 14 7.5 mm
4.00 mm ²	AWG 12 7.5 mm

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
Removal Tool HE	1866750000

Housing selection RockStar® IP66
Size 3



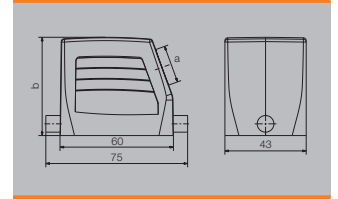
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



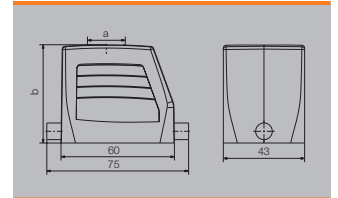
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 06B TSLU 1M20G	1788100000
M 25	w. threading		52	HDC 06B TSLU 1M25G	1788090000
M 25	w. threading		72	HDC 16D TSLU 1M25G	1787480000



Plug housing, cable entry at top



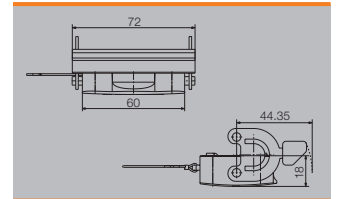
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 06B TOLU 1M20G	1788120000
M 25	w. threading		52	HDC 06B TOLU 1M25G	1788110000
M 25	w. threading		72	HDC 16D TOLU 1M25G	1787500000
M 32	w. threading		72	HDC 16D TOLU 1M32G	1787490000



Cover



Version	Type	Order No.
For hoods	HDC 06B DMDL 1LB	1665210000

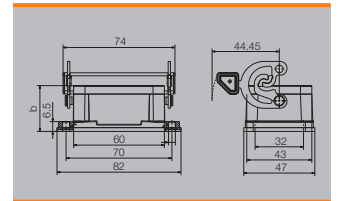


Base

Bulkhead housing



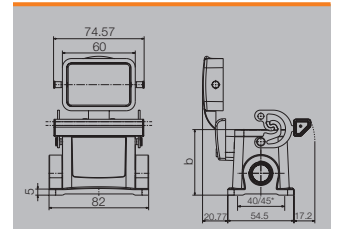
Version	Cover	b (mm)	Type	Order No.
		29	HDC 06B ALU	1202100000
	with cover	47	HDC 06B ADLU	1202500000



Base housing



a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		54	HDC 06B SLU 2M20G	1788140000
M 20	w. threading	with cover	72	HDC 06B SDLU 2M20G	1788170000
M 25	w. threading		54	HDC 06B SLU 2M25G	1788130000
M 25	w. threading	with cover	72	HDC 06B SDLU 2M25G	1788160000

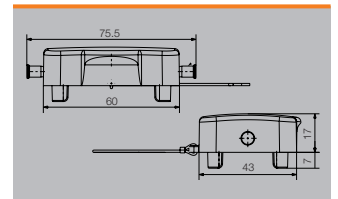


* Mounting dimensions for size-3 base housings, tall shape (16D)

Cover



Version	Type	Order No.
For bases	HDC 06B DODL 2B0	1665200000



HEE series - high contact density

500 V, 16 A, Size 4

18 + ⊕

Inserts

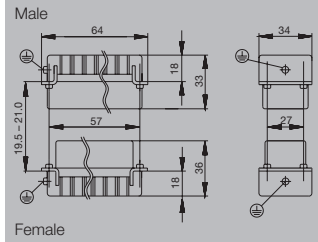
Crimp connection



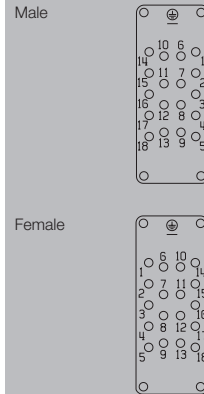
Insert	Type	Order No.
Male	HDC HEE 18 MC	1826810000
Female	HDC HEE 18 FC	1826820000

Note When using connectors with high contact density, we recommend the use of guide pins and sockets; see Chapter J

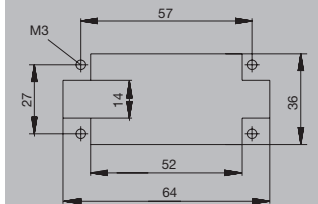
Dimensions



Arrangement of contacts



Mounting cut-out



Accessories

Crimp contacts

Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HE-SM0.5AU	1651420000	HDC-C-HE-BM0.5AU	1651470000	
100	HDC-C-HE-SM0.75-1.00AU	1651430000	HDC-C-HE-BM0.75-1.00AU	1651480000	
100	HDC-C-HE-SM1.5AU	1651440000	HDC-C-HE-BM1.5AU	1651490000	
100	HDC-C-HE-SM2.5AU	1651450000	HDC-C-HE-BM2.5AU	1651500000	
100	HDC-C-HE-SM4.0AU	1651460000	HDC-C-HE-BM4.0AU	1651510000	
100	HDC-C-HE-SM0.5AG	1200500000	HDC-C-HE-BM0.5AG	1201100000	
100	HDC-C-HE-SM0.75-1.00AG	1200600000	HDC-C-HE-BM0.75-1.00AG	1201200000	
100	HDC-C-HE-SM1.5AG	1200700000	HDC-C-HE-BM1.5AG	1201300000	
100	HDC-C-HE-SM2.5AG	1200800000	HDC-C-HE-BM2.5AG	1201400000	
100	HDC-C-HE-SM4.0AG	1200900000	HDC-C-HE-BM4.0AG	1201500000	



Conductor cross-section	Insulation stripping length
0.50 mm ²	AWG 20 7.5 mm
0.75 - 1.00 mm ²	AWG 18 7.5 mm
1.50 mm ²	AWG 16 7.5 mm
2.50 mm ²	AWG 14 7.5 mm
4.00 mm ²	AWG 12 7.5 mm

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
Removal Tool HE	1866750000

Housing selection RockStar® IP66
Size 4



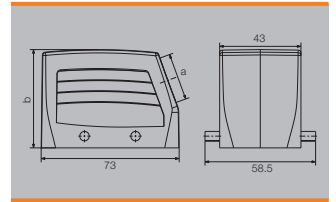
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



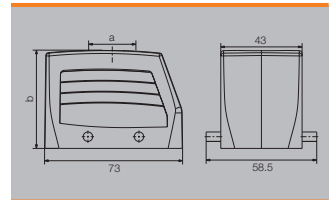
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 10B TSBU 1M20G	1787560000
M 25	w. threading		52	HDC 10B TSBU 1M25G	1787550000
M 25	w. threading		72	HDC 24D TSBU 1M25G	1787240000
M 32	w. threading		72	HDC 24D TSBU 1M32G	1787230000



Plug housing, cable entry at top



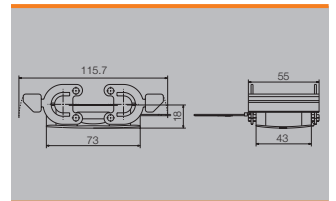
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 10B TOBU 1M20G	1787600000
M 25	w. threading		52	HDC 10B TOBU 1M25G	1787590000
M 25	w. threading		72	HDC 24D TOBU 1M25G	1787300000
M 32	w. threading		72	HDC 24D TOBU 1M32G	1787290000



Cover



Version	Type	Order No.
For hoods	HDC 10B DMDQ 2QB	1665240000

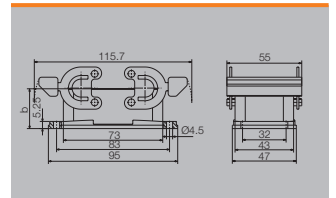


Base

Bulkhead housing



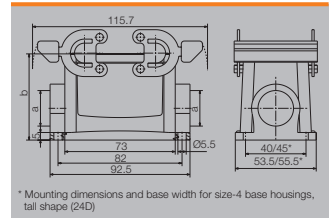
Version	Cover	b (mm)	Type	Order No.
		29.3	HDC 10B ABU	1205000000



Base housing



a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		57	HDC 10B SBU 2M20G	1787640000
M 25	w. threading		57	HDC 10B SBU 2M25G	1787630000

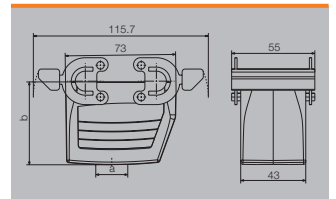


* Mounting dimensions and base width for size-4 base housings, tall shape (24D)

Coupling housing



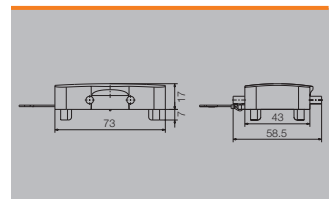
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		55	HDC 10B KBU 1M20G	1787720000



Cover



Version	Type	Order No.
For bases	HDC 10B DODQ 4B0	1665230000



HEE series - high contact density

500 V, 16 A, Size 6

32 + ⊕

Inserts

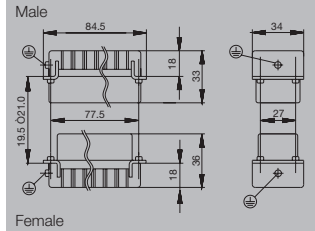
Crimp connection



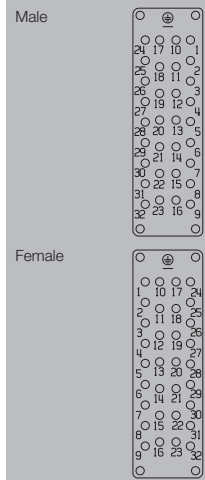
Insert	Type	Order No.
Male	HDC HEE 32 MC	1826790000
Female	HDC HEE 32 FC	1826800000

Note When using connectors with high contact density, we recommend the use of guide pins and sockets; see Chapter J

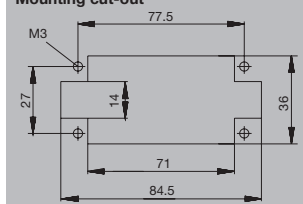
Dimensions



Arrangement of contacts



Mounting cut-out



Accessories

Crimp contacts

Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HE-SM0.5AU	1651420000	HDC-C-HE-BM0.5AU	1651470000	
100	HDC-C-HE-SM0.75-1.00AU	1651430000	HDC-C-HE-BM0.75-1.00AU	1651480000	
100	HDC-C-HE-SM1.5AU	1651440000	HDC-C-HE-BM1.5AU	1651490000	
100	HDC-C-HE-SM2.5AU	1651450000	HDC-C-HE-BM2.5AU	1651500000	
100	HDC-C-HE-SM4.0AU	1651460000	HDC-C-HE-BM4.0AU	1651510000	
100	HDC-C-HE-SM0.5AG	1200500000	HDC-C-HE-BM0.5AG	1201100000	
100	HDC-C-HE-SM0.75-1.00AG	1200600000	HDC-C-HE-BM0.75-1.00AG	1201200000	
100	HDC-C-HE-SM1.5AG	1200700000	HDC-C-HE-BM1.5AG	1201300000	
100	HDC-C-HE-SM2.5AG	1200800000	HDC-C-HE-BM2.5AG	1201400000	
100	HDC-C-HE-SM4.0AG	1200900000	HDC-C-HE-BM4.0AG	1201500000	



Conductor cross-section	Insulation stripping length
0.50 mm ²	AWG 20 7.5 mm
0.75 – 1.00 mm ²	AWG 18 7.5 mm
1.50 mm ²	AWG 16 7.5 mm
2.50 mm ²	AWG 14 7.5 mm
4.00 mm ²	AWG 12 7.5 mm

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
Removal Tool HE	1866750000

Housing selection RockStar® IP66
Size 6



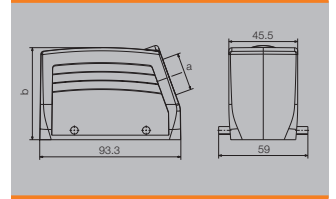
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



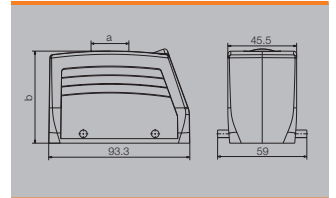
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TSBU 1M25G	1788180000
M 25	w. threading		76	HDC 40D TSBU 1M25G	1787010000
M 32	w. threading		76	HDC 40D TSBU 1M32G	1787000000



Plug housing, cable entry at top



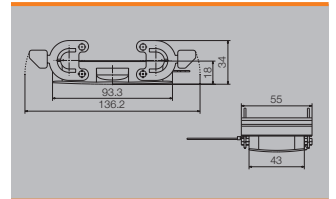
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TOBU 1M25G	1788210000
M 25	w. threading		76	HDC 40D TOBU 1M25G	1787070000
M 32	w. threading		76	HDC 40D TOBU 1M32G	1787060000



Cover



Version	Type	Order No.
For hoods	HDC 16B DMDQ 2QB	1665270000

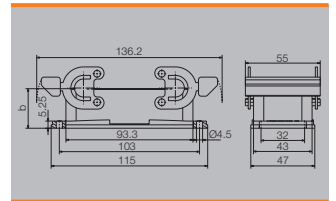


Base

Bulkhead housing



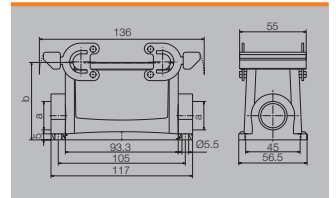
Version	Cover	b (mm)	Type	Order No.
		29	HDC 16B ABU	1208600000



Base housing



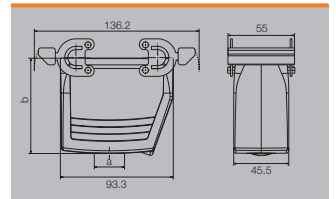
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		64	HDC 16B SBU 2M25G	1788240000
M 25	w. threading		84	HDC 40D SBU 2M25G	1787120000
M 32	w. threading		84	HDC 40D SBU 2M32G	1787110000



Coupling housing



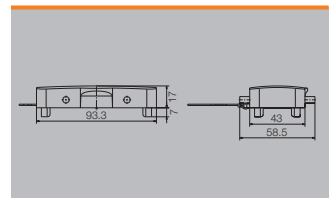
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		79	HDC 40D KBU 1M25G	1787200000
M 32	w. threading		79	HDC 40D KBU 1M32G	1787190000



Cover



Version	Type	Order No.
For bases	HDC 16B DODQ 4B0	1665260000



HEE series - high contact density

500 V, 16 A, Size 8

46 + ⊕

Inserts

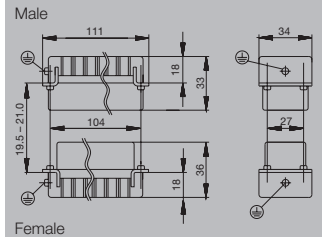
Crimp connection



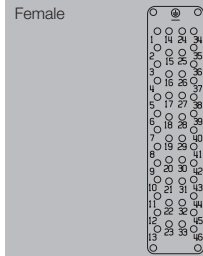
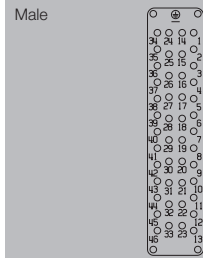
Insert	Type	Order No.
Male	HDC HEE 46 MC	1826770000
Female	HDC HEE 46 FC	1826780000

Note When using connectors with high contact density, we recommend the use of guide pins and sockets; see Chapter J

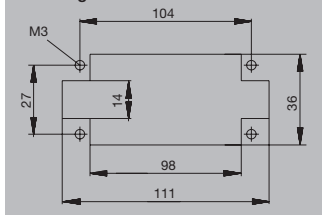
Dimensions



Arrangement of contacts



Mounting cut-out



Accessories

Crimp contacts

Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HE-SM0.5AU	1651420000	HDC-C-HE-BM0.5AU	1651470000	
100	HDC-C-HE-SM0.75-1.00AU	1651430000	HDC-C-HE-BM0.75-1.00AU	1651480000	
100	HDC-C-HE-SM1.5AU	1651440000	HDC-C-HE-BM1.5AU	1651490000	
100	HDC-C-HE-SM2.5AU	1651450000	HDC-C-HE-BM2.5AU	1651500000	
100	HDC-C-HE-SM4.0AU	1651460000	HDC-C-HE-BM4.0AU	1651510000	
100	HDC-C-HE-SM0.5AG	1200500000	HDC-C-HE-BM0.5AG	1201100000	
100	HDC-C-HE-SM0.75-1.00AG	1200600000	HDC-C-HE-BM0.75-1.00AG	1201200000	
100	HDC-C-HE-SM1.5AG	1200700000	HDC-C-HE-BM1.5AG	1201300000	
100	HDC-C-HE-SM2.5AG	1200800000	HDC-C-HE-BM2.5AG	1201400000	
100	HDC-C-HE-SM4.0AG	1200900000	HDC-C-HE-BM4.0AG	1201500000	

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
Removal Tool HE	1866750000



Conductor cross-section	Insulation stripping length
0.50 mm ²	AWG 20 7.5 mm
0.75 - 1.00 mm ²	AWG 18 7.5 mm
1.50 mm ²	AWG 16 7.5 mm
2.50 mm ²	AWG 14 7.5 mm
4.00 mm ²	AWG 12 7.5 mm

Housing selection RockStar® IP66
Size 8



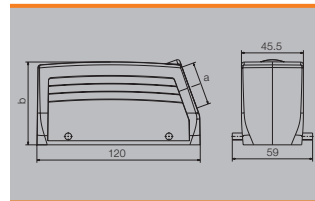
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



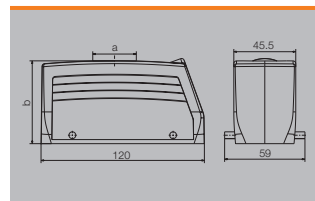
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 24B TSBU 1M25G	1787760000
M 25	w. threading		76	HDC 64D TSBU 1M25G	1786780000
M 32	w. threading		61	HDC 24B TSBU 1M32G	1787750000
M 32	w. threading		76	HDC 64D TSBU 1M32G	1786770000



Plug housing, cable entry at top



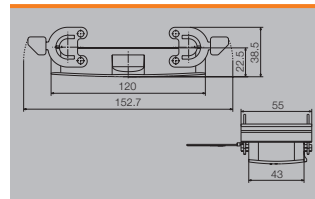
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 24B TOBU 1M25G	1787820000
M 32	w. threading		61	HDC 24B TOBU 1M32G	1787810000
M 32	w. threading		76	HDC 64D TOBU 1M32G	1786830000



Cover



Version	Type	Order No.
For hoods	HDC 24B DMDQ 2QB	1665640000

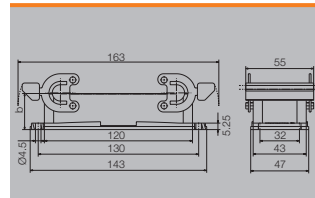


Base

Bulkhead housing



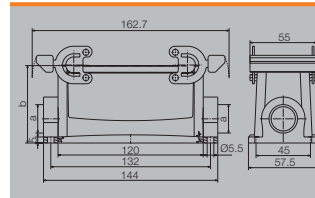
Version	Cover	b (mm)	Type	Order No.
		29.3	HDC 24B ABU	1212400000



Base housing



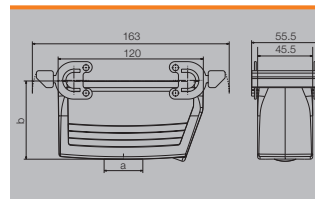
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		64	HDC 24B SBU 2M25G	1787870000
M 25	w. threading		84	HDC 64D SBU 2M25G	1786890000
M 32	w. threading		84	HDC 64D SBU 2M32G	1786880000



Coupling housing



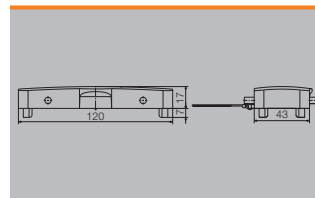
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		65	HDC 24B KBU 1M25G	1787920000
M 32	w. threading		79	HDC 64D KBU 1M32G	1786960000



Cover



Version	Type	Order No.
For bases	HDC 24B DODQ 4B0	1665630000



HEE series - high contact density

500 V, 16 A, Size 10

64 + ⊕

Inserts

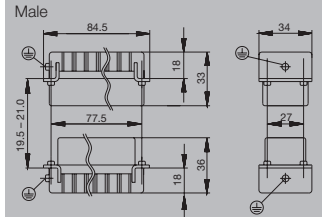
Crimp connection



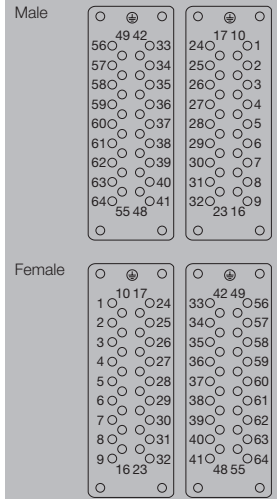
Insert	Type	Order No.
Male	HDC HEE 32 MC	1826790000
Female	HDC HEE 32 FC	1826800000
Male	HDC HEE 32 MC 33-64	1018950000
Female	HDC HEE 32 FC 33-64	1018960000

Note To complete the assembly of the plug-in connector, two inserts are required. We recommend the use of guide pins

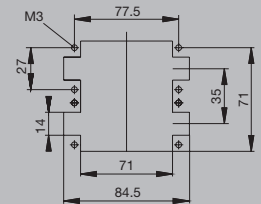
Dimensions



Arrangement of contacts



Mounting cut-out



Accessories

Crimp contacts

Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HE-SM0.5AU	1651420000	HDC-C-HE-BM0.5AU	1651470000	
100	HDC-C-HE-SM0.75-1.00AU	1651430000	HDC-C-HE-BM0.75-1.00AU	1651480000	
100	HDC-C-HE-SM1.5AU	1651440000	HDC-C-HE-BM1.5AU	1651490000	
100	HDC-C-HE-SM2.5AU	1651450000	HDC-C-HE-BM2.5AU	1651500000	
100	HDC-C-HE-SM4.0AU	1651460000	HDC-C-HE-BM4.0AU	1651510000	
100	HDC-C-HE-SM0.5AG	1200500000	HDC-C-HE-BM0.5AG	1201100000	
100	HDC-C-HE-SM0.75-1.00AG	1200600000	HDC-C-HE-BM0.75-1.00AG	1201200000	
100	HDC-C-HE-SM1.5AG	1200700000	HDC-C-HE-BM1.5AG	1201300000	
100	HDC-C-HE-SM2.5AG	1200800000	HDC-C-HE-BM2.5AG	1201400000	
100	HDC-C-HE-SM4.0AG	1200900000	HDC-C-HE-BM4.0AG	1201500000	



Conductor cross-section	Insulation stripping length
0.50 mm ²	AWG 20 7.5 mm
0.75 - 1.00 mm ²	AWG 18 7.5 mm
1.50 mm ²	AWG 16 7.5 mm
2.50 mm ²	AWG 14 7.5 mm
4.00 mm ²	AWG 12 7.5 mm

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
Removal Tool HE	1866750000

Housing selection RockStar® IP66
Size 10



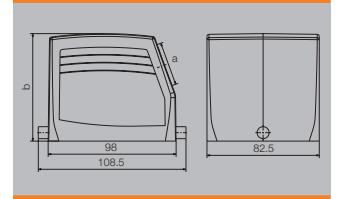
Further housings are available, see
Chapter E for IP66

Hood

Plug housing, cable entry sideways



a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		79	HDC 32B TSLU 1M32G	1788420000

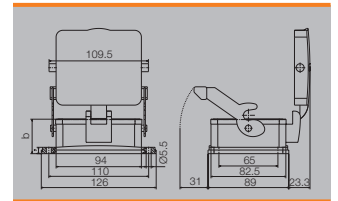


Base

Bulkhead housing



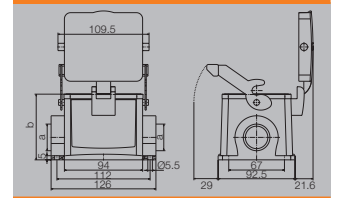
Version	Cover	b (mm)	Type	Order No.
		38	HDC 32B ALU	1219500000
	with cover	55	HDC 32B ADLU	1219800000



Base housing



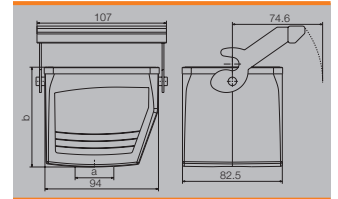
a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		79	HDC 32B SLU 2M32G	1788470000
M 32	w. threading	with cover	96	HDC 32B SDLU 2M32G	1788490000



Coupling housing

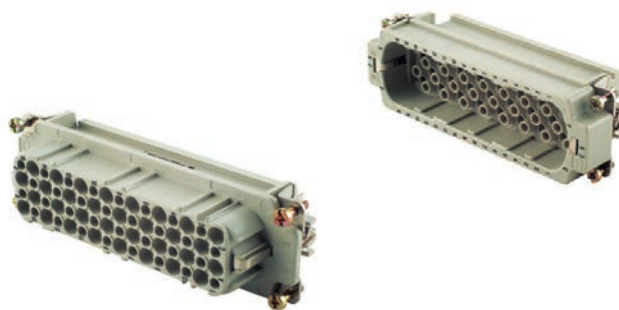


a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		83	HDC 32B KLU 1M32G	1788500000



HD series – the flexible connectors

The HD series has a high contact density and is therefore particularly suitable for signal processing. The HD insert can be fitted with turned crimp contacts or fibre optic contacts – impressive flexibility.



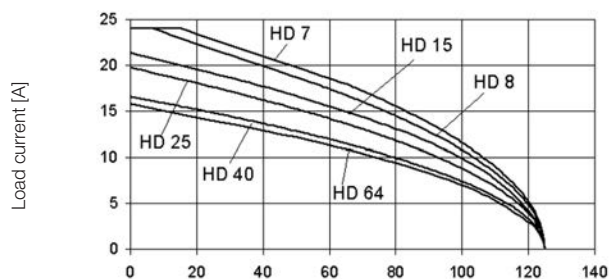
Technical data

Standards / approvals	
Standards	DIN EN 61984 DIN EN 60664-1 DIN EN 175301-801
Approvals	UL/CSA
Inserts	
No. of poles	7, 15, 16, 24, 25, 40, 50, 64, 80, 124 (+PE) 8
Rated voltage	250 V
Rated voltage to UL/CSA	600 V
Rated current	10 A
Rated impulse withstand voltage	4 kV
Pollution severity	3
Insulation resistance	$\geq 10^{10} \Omega$
Material	Glass-fibre reinforced PC (in UL list and approved for railway applications)
Temperature range	-40 °C ... +125 °C
Flammability to UL 94	V-0
Mechanical service life	
- Plugging cycles Ag - Surface	≥ 500
- Plugging cycles Au - Surface	≥ 500
Contact resistance	
Crimp connection	$\leq 4 \text{ m}\Omega$
Contacts / Material	
Sockets and plug-in contact	Copper alloy
Surface	Passivated silver, or gold-plated
Crimp connection	
- Flexible conductor connection	0.14 - 2.5 mm ² (AWG 26 ... 14)
- Stripping length	8.0 mm
PE connection	
- Clamping range	0.5 ... 2.5 mm ²
- solid / stranded	0.5 ... 2.5 mm ² / 0.5 ... 2.5 mm ²
- flexible / flexible with wire end ferrule, DIN 46228 pt. 1	0.5 ... 2.5 mm ² / 0.5 ... 2.5 mm ²
- AWG conductor	AWG 20 ... 14
- Stripping length	10 mm
- Clamping torque	1.2 ... 1.5 Nm
- Blade dimensions	SD 0.8 x 4 mm or PZ 1

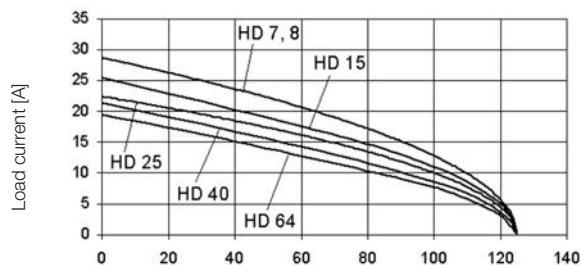
Note: for inserts with 15 or more poles, the earthing (ground) is made with a screw connection. When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load! When metal housings are used in conjunction with the HD 7 and HD 8 inserts, the rated voltage must be limited to 42 V. The HD 8 does not feature an earthing connection

When using connectors with high contact density, we recommend the use of guide pins and sockets; see Chapter J.

Derating curves



HD crimp turned 1.5 mm² Ambient temperature [°C]



HD crimp turned 1.5 mm² Ambient temperature [°C]

Overview

		Size	Rated voltage	Rated current	No. of poles	Tension clamp connection	Screw conn. with wire guard spring	Crimp connection	PUSH IN connection	Axial screw connection	Page
		1	250 V	10 A	7 + ⊕			•			B.46
		1	42 V	10 A	8			•			B.48
		2	250 V	10 A	15 + ⊕			•			B.50
		3	250 V	10 A	16 + ⊕			•			B.52
		4	250 V	10 A	24 + ⊕			•			B.54
		5	250 V	10 A	25 + ⊕			•			B.56
		6	250 V	10 A	40 + ⊕			•			B.58
		7	250 V	10 A	50 + ⊕			•			B.60
		8	250 V	10 A	64 + ⊕			•			B.62
		10	250 V	10 A	80 + ⊕			•			B.64
		12	250 V	10 A	128 + ⊕			•			B.66

HD series - the flexible connectors

250 V, 10 A, Size 1

7 + ⊕

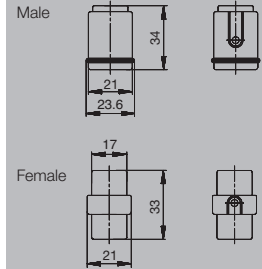
Inserts

Crimp connection

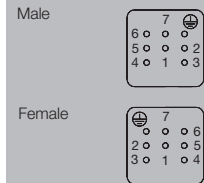


Insert	Type	Order No.
Male	HDC HD 7 MC	1650570000
Female	HDC HD 7 FC	1650580000

Dimensions



Arrangement of contacts



Accessories

Crimp contacts

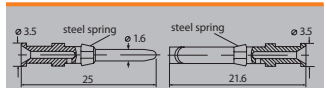
Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HD-SM0.14-0.37AU	1651620000	HDC-C-HD-BM0.14-0.37AU	1651670000	
100	HDC-C-HD-SM0.5AU	1651630000	HDC-C-HD-BM0.5AU	1651680000	
100	HDC-C-HD-SM0.75-1.00AU	1651640000	HDC-C-HD-BM0.75-1.00AU	1651690000	
100	HDC-C-HD-SM1.5AU	1651650000	HDC-C-HD-BM1.5AU	1651700000	
100	HDC-C-HD-SM2.5AU	1651660000	HDC-C-HD-BM2.5AU	1651710000	
100	HDC-C-HD-SM0.14-0.37AG	1651520000	HDC-C-HD-BM0.14-0.37AG	1651570000	
100	HDC-C-HD-SM0.5AG	1651530000	HDC-C-HD-BM0.5AG	1651580000	
100	HDC-C-HD-SM0.75-1.00AG	1601750000	HDC-C-HD-BM0.75-1.00AG	1601760000	
100	HDC-C-HD-SM1.5AG	1651550000	HDC-C-HD-BM1.5AG	1651600000	
100	HDC-C-HD-SM2.5AG	1651560000	HDC-C-HD-BM2.5AG	1651610000	



Conductor cross-section	Insulation stripping length
0.14 – 0.37 mm ²	AWG 26-22 8 mm
0.50 mm ²	AWG 20 8 mm
0.75 – 1.00 mm ²	AWG 18 8 mm
1.50 mm ²	AWG 16 8 mm
2.50 mm ²	AWG 14 6 mm

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
REMOVAL TOOL HD	1866730000

Housing selection RockStar® IP66
Size 1



Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

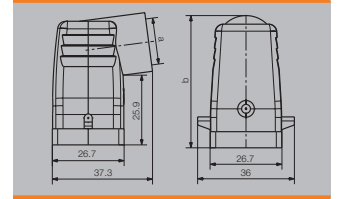
Hood

Plug housing, cable entry sideways



Material: Plastic

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		49.2	HDC 07A TWLU 1M20G	1788510000

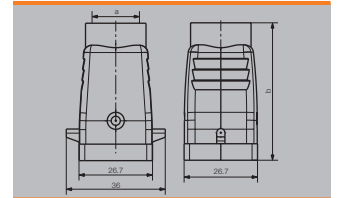


Plug housing, cable entry at top



Material: Plastic

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		50	HDC 07A TOLU 1M20G	1788520000



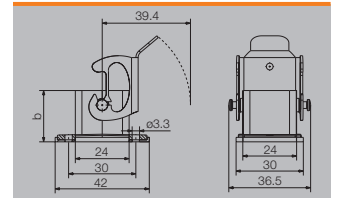
Base

Bulkhead housing



Material: Plastic

Version	Cover	b (mm)	Type	Order No.
		23	HDC 07A ALU	1652410000

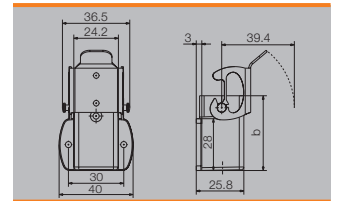


Base housing



Material: Plastic

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		41.5	HDC 07A SLU 1M20G	1788530000

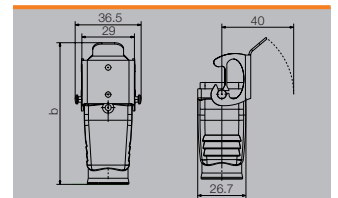


Coupling housing



Material: Plastic

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		53.5	HDC 07A KOLU 1M20G	1788540000

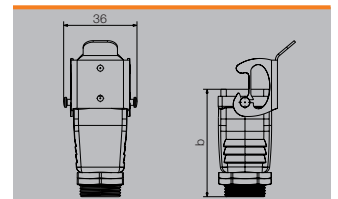


Screw mounting housing



Material: Plastic

a	Version	Cover	b (mm)	Type	Order No.
PG 13.5	w. threading		54	HDC 07A ELU 1PG13G	1900990000

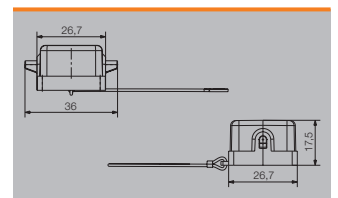


Cover



Material: Plastic

Version	Type	Order No.
for female insert	HDC 07A DMDL 2BO	1665770000
for male insert	HDC 07A DODL 2BO	1665760000



HD series - the flexible connectors

42 V, 10 A, Size 1

8

Inserts

Crimp connection



Insert	Type	Order No.
Male	HDC HD 8 MC	1650590000
Female	HDC HD 8 FC	1650600000

Note Reduce the voltage to 42 V when using metal housings

Dimensions

Arrangement of contacts

Accessories

Crimp contacts

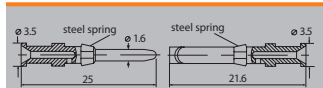
Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HD-SM0.14-0.37AU	1651620000	HDC-C-HD-BM0.14-0.37AU	1651670000	
100	HDC-C-HD-SM0.5AU	1651630000	HDC-C-HD-BM0.5AU	1651680000	
100	HDC-C-HD-SM0.75-1.00AU	1651640000	HDC-C-HD-BM0.75-1.00AU	1651690000	
100	HDC-C-HD-SM1.5AU	1651650000	HDC-C-HD-BM1.5AU	1651700000	
100	HDC-C-HD-SM2.5AU	1651660000	HDC-C-HD-BM2.5AU	1651710000	
100	HDC-C-HD-SM0.14-0.37AG	1651520000	HDC-C-HD-BM0.14-0.37AG	1651570000	
100	HDC-C-HD-SM0.5AG	1651530000	HDC-C-HD-BM0.5AG	1651580000	
100	HDC-C-HD-SM0.75-1.00AG	1601750000	HDC-C-HD-BM0.75-1.00AG	1601760000	
100	HDC-C-HD-SM1.5AG	1651550000	HDC-C-HD-BM1.5AG	1651600000	
100	HDC-C-HD-SM2.5AG	1651560000	HDC-C-HD-BM2.5AG	1651610000	



Conductor cross-section	Insulation stripping length
0.14 – 0.37 mm ²	AWG 26-22 8 mm
0.50 mm ²	AWG 20 8 mm
0.75 – 1.00 mm ²	AWG 18 8 mm
1.50 mm ²	AWG 16 8 mm
2.50 mm ²	AWG 14 6 mm

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
REMOVAL TOOL HD	1866730000

Housing selection RockStar® IP66
Size 1



Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

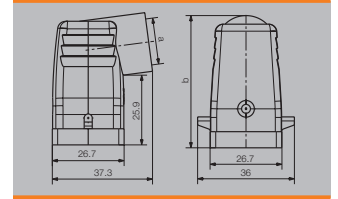
Hood

Plug housing, cable entry sideways



Material: Plastic

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		49.2	HDC 07A TWLU 1M20G	1788510000

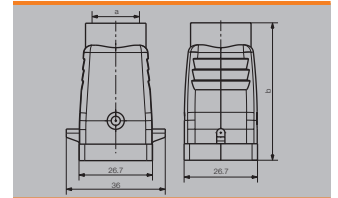


Plug housing, cable entry at top



Material: Plastic

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		50	HDC 07A TOLU 1M20G	1788520000



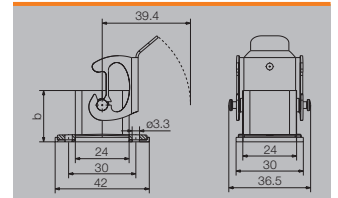
Base

Bulkhead housing



Material: Plastic

Version	Cover	b (mm)	Type	Order No.
		23	HDC 07A ALU	1652410000

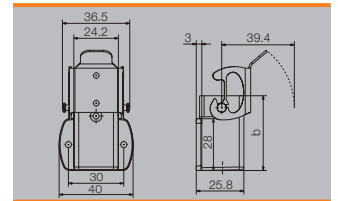


Base housing



Material: Plastic

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		41.5	HDC 07A SLU 1M20G	1788530000

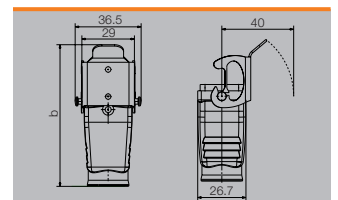


Coupling housing



Material: Plastic

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		53.5	HDC 07A KOLU 1M20G	1788540000

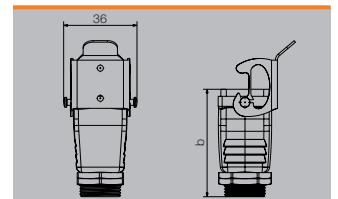


Screw mounting housing



Material: Plastic

a	Version	Cover	b (mm)	Type	Order No.
PG 13.5	w. threading		54	HDC 07A ELU 1PG13G	1900990000

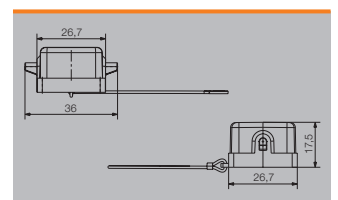


Cover



Material: Plastic

Version	Type	Order No.
for female insert	HDC 07A DMDL 2BO	1665770000
for male insert	HDC 07A DODL 2BO	1665760000



HD series - the flexible connectors

250 V, 10 A, Size 2

15 + ⊕

Inserts

Crimp connection



Insert	Type	Order No.
Male	HDC HD 15 MC	1650650000
Female	HDC HD 15 FC	1650660000

Note When using connectors with high contact density, we recommend the use of guide pins and sockets; see Chapter J

Dimensions

Arrangement of contacts

Male

⊕	A	⊕
1c	B	1
2c	⊖	2
3c	⊖	3
4c	⊖	4
5c	⊖	5
⊕		⊕

Female

⊕	C	⊕
1c	B	A
2c	⊖	1
3c	⊖	2
4c	⊖	3
5c	⊖	4
⊕		⊕

Mounting cut-out

Accessories

Crimp contacts

Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HD-SM0.14-0.37AU	1651620000	HDC-C-HD-BM0.14-0.37AU	1651670000	
100	HDC-C-HD-SM0.5AU	1651630000	HDC-C-HD-BM0.5AU	1651680000	
100	HDC-C-HD-SM0.75-1.00AU	1651640000	HDC-C-HD-BM0.75-1.00AU	1651690000	
100	HDC-C-HD-SM1.5AU	1651650000	HDC-C-HD-BM1.5AU	1651700000	
100	HDC-C-HD-SM2.5AU	1651660000	HDC-C-HD-BM2.5AU	1651710000	
100	HDC-C-HD-SM0.14-0.37AG	1651520000	HDC-C-HD-BM0.14-0.37AG	1651570000	
100	HDC-C-HD-SM0.5AG	1651530000	HDC-C-HD-BM0.5AG	1651580000	
100	HDC-C-HD-SM0.75-1.00AG	1601750000	HDC-C-HD-BM0.75-1.00AG	1601760000	
100	HDC-C-HD-SM1.5AG	1651550000	HDC-C-HD-BM1.5AG	1651600000	
100	HDC-C-HD-SM2.5AG	1651560000	HDC-C-HD-BM2.5AG	1651610000	

Conductor cross-section	Insulation stripping length
0.14 – 0.37 mm ²	AWG 26-22 8 mm
0.50 mm ²	AWG 20 8 mm
0.75 – 1.00 mm ²	AWG 18 8 mm
1.50 mm ²	AWG 16 8 mm
2.50 mm ²	AWG 14 6 mm

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
REMOVAL TOOL HD	1866730000

Housing selection RockStar® IP66
Size 2



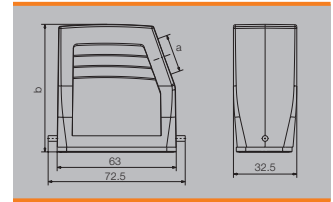
Further housings are available, see
Chapter E for IP66

Hood

Plug housing, cable entry sideways



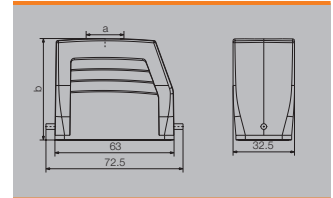
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		68	HDC 15A TSLU 1M20G	1788860000
M 25	w. threading		68	HDC 15A TSLU 1M25G	1788850000



Plug housing, cable entry at top



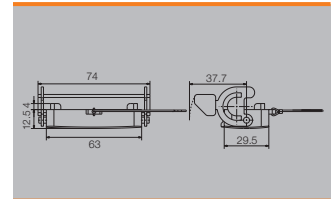
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		54	HDC 10A TOLU 1M20G	1788620000
M 25	w. threading		54	HDC 10A TOLU 1M25G	1788610000



Cover



Version	Type	Order No.
For hoods	HDC 10A DODL 1LB	1665890000

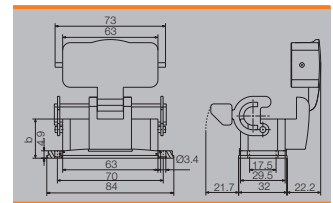


Base

Bulkhead housing



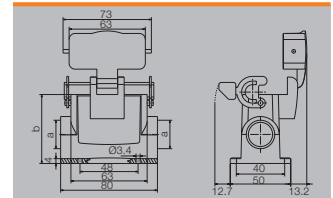
Version	Cover	b (mm)	Type	Order No.
		25	HDC 10A ALU	1664040000
	with cover	37.5	HDC 10A ADLU	1664060000



Base housing



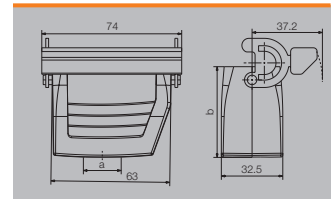
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		57	HDC 10A SLU 2M20G	1788640000
M 20	w. threading	with cover	69.5	HDC 10A SDLU 2M20G	1788660000
M 25	w. threading		57	HDC 10A SLU 2M25G	1788630000
M 25	w. threading	with cover	69.5	HDC 10A SDLU 2M25G	1788650000



Coupling housing



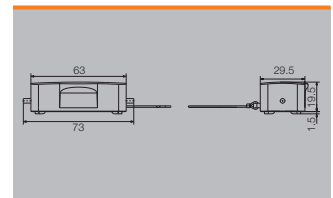
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		48	HDC 10A KLU 1M25G	1788670000



Cover



Version	Type	Order No.
For bases	HDC 10A DMDL 2B0	1665880000



HD series - the flexible connectors

250 V, 10 A, Size 3

16 + ⊕

Inserts

Crimp connection



Insert	Type	Order No.
Male	HDC HD 16 MC	1650710000
Female	HDC HD 16 FC	1650720000

Note When using connectors with high contact density, we recommend the use of guide pins and sockets; see Chapter J

Dimensions

Arrangement of contacts

Male

⊕	A	⊖	⊕
1	O	O	O
2	O	O	O
3	O	O	O
4	O	O	O
⊕			⊕

Female

⊕	D	C	B	A	⊕
1	O	O	O	O	
2	O	O	O	O	
3	O	O	O	O	
4	O	O	O	O	
⊕					⊕

Mounting cut-out

Accessories

Crimp contacts

Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HD-SM0.14-0.37AU	1651620000	HDC-C-HD-BM0.14-0.37AU	1651670000	
100	HDC-C-HD-SM0.5AU	1651630000	HDC-C-HD-BM0.5AU	1651680000	
100	HDC-C-HD-SM0.75-1.00AU	1651640000	HDC-C-HD-BM0.75-1.00AU	1651690000	
100	HDC-C-HD-SM1.5AU	1651650000	HDC-C-HD-BM1.5AU	1651700000	
100	HDC-C-HD-SM2.5AU	1651660000	HDC-C-HD-BM2.5AU	1651710000	
100	HDC-C-HD-SM0.14-0.37AG	1651520000	HDC-C-HD-BM0.14-0.37AG	1651570000	
100	HDC-C-HD-SM0.5AG	1651530000	HDC-C-HD-BM0.5AG	1651580000	
100	HDC-C-HD-SM0.75-1.00AG	1601750000	HDC-C-HD-BM0.75-1.00AG	1601760000	
100	HDC-C-HD-SM1.5AG	1651550000	HDC-C-HD-BM1.5AG	1651600000	
100	HDC-C-HD-SM2.5AG	1651560000	HDC-C-HD-BM2.5AG	1651610000	

Conductor cross-section	Insulation stripping length
0.14 – 0.37 mm ²	AWG 26-22 8 mm
0.50 mm ²	AWG 20 8 mm
0.75 – 1.00 mm ²	AWG 18 8 mm
1.50 mm ²	AWG 16 8 mm
2.50 mm ²	AWG 14 6 mm

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
REMOVAL TOOL HD	1866730000

Housing selection RockStar® IP66
Size 3



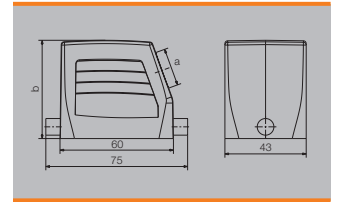
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



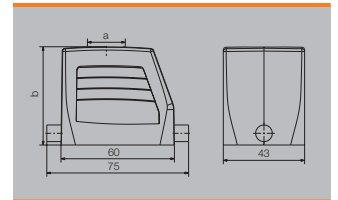
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 06B TSLU 1M20G	1788100000
M 25	w. threading		52	HDC 06B TSLU 1M25G	1788090000
M 25	w. threading		72	HDC 16D TSLU 1M25G	1787480000



Plug housing, cable entry at top



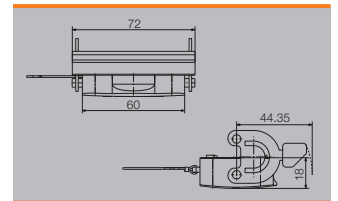
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 06B TOLU 1M20G	1788120000
M 25	w. threading		52	HDC 06B TOLU 1M25G	1788110000
M 25	w. threading		72	HDC 16D TOLU 1M25G	1787500000
M 32	w. threading		72	HDC 16D TOLU 1M32G	1787490000



Cover



Version	Type	Order No.
For hoods	HDC 06B DMDL 1LB	1665210000

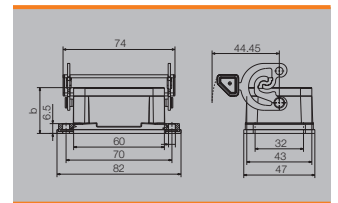


Base

Bulkhead housing



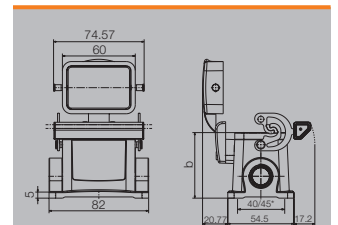
Version	Cover	b (mm)	Type	Order No.
		29	HDC 06B ALU	1202100000
	with cover	47	HDC 06B ADLU	1202500000



Base housing



a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		54	HDC 06B SLU 2M20G	1788140000
M 20	w. threading	with cover	72	HDC 06B SDLU 2M20G	1788170000
M 25	w. threading		54	HDC 06B SLU 2M25G	1788130000
M 25	w. threading	with cover	72	HDC 06B SDLU 2M25G	1788160000

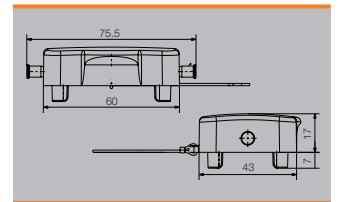


* Mounting dimensions for size-3 base housings, tall shape (16D)

Cover



Version	Type	Order No.
For bases	HDC 06B DODL 2B0	1665200000



HD series - the flexible connectors

250 V, 10 A, Size 4

24 + ⊕

Inserts

Crimp connection



Insert	Type	Order No.
Male	HDC HD 24 MC	1650870000
Female	HDC HD 24 FC	1650890000

Note When using connectors with high contact density, we recommend the use of guide pins and sockets; see Chapter J

Dimensions

Arrangement of contacts

Mounting cut-out

Accessories

Crimp contacts

Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HD-SM0.14-0.37AU	1651620000	HDC-C-HD-BM0.14-0.37AU	1651670000	
100	HDC-C-HD-SM0.5AU	1651630000	HDC-C-HD-BM0.5AU	1651680000	
100	HDC-C-HD-SM0.75-1.00AU	1651640000	HDC-C-HD-BM0.75-1.00AU	1651690000	
100	HDC-C-HD-SM1.5AU	1651650000	HDC-C-HD-BM1.5AU	1651700000	
100	HDC-C-HD-SM2.5AU	1651660000	HDC-C-HD-BM2.5AU	1651710000	
100	HDC-C-HD-SM0.14-0.37AG	1651520000	HDC-C-HD-BM0.14-0.37AG	1651570000	
100	HDC-C-HD-SM0.5AG	1651530000	HDC-C-HD-BM0.5AG	1651580000	
100	HDC-C-HD-SM0.75-1.00AG	1601750000	HDC-C-HD-BM0.75-1.00AG	1601760000	
100	HDC-C-HD-SM1.5AG	1651550000	HDC-C-HD-BM1.5AG	1651600000	
100	HDC-C-HD-SM2.5AG	1651560000	HDC-C-HD-BM2.5AG	1651610000	

Conductor cross-section	Insulation stripping length
0.14 – 0.37 mm ²	AWG 26-22 8 mm
0.50 mm ²	AWG 20 8 mm
0.75 – 1.00 mm ²	AWG 18 8 mm
1.50 mm ²	AWG 16 8 mm
2.50 mm ²	AWG 14 6 mm

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
REMOVAL TOOL HD	1866730000

Housing selection RockStar® IP66
Size 4



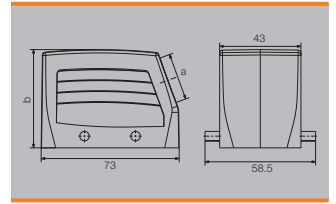
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



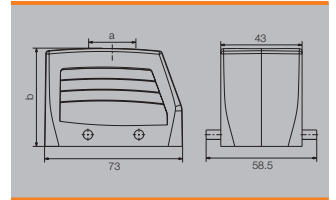
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 10B TSBU 1M20G	1787560000
M 25	w. threading		52	HDC 10B TSBU 1M25G	1787550000
M 25	w. threading		72	HDC 24D TSBU 1M25G	1787240000
M 32	w. threading		72	HDC 24D TSBU 1M32G	1787230000



Plug housing, cable entry at top



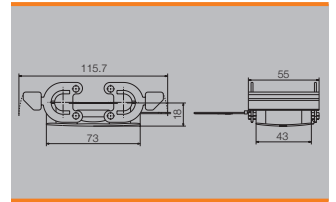
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 10B TOBU 1M20G	1787600000
M 25	w. threading		52	HDC 10B TOBU 1M25G	1787590000
M 25	w. threading		72	HDC 24D TOBU 1M25G	1787300000
M 32	w. threading		72	HDC 24D TOBU 1M32G	1787290000



Cover



Version	Type	Order No.
For hoods	HDC 10B DMDQ 2QB	1665240000

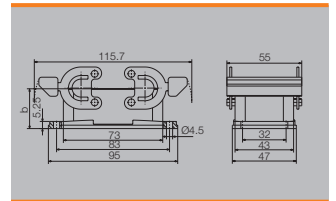


Base

Bulkhead housing



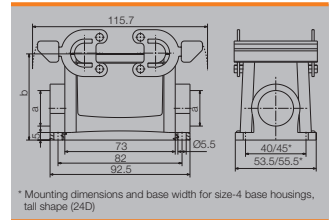
Version	Cover	b (mm)	Type	Order No.
		29.3	HDC 10B ABU	1205000000



Base housing



a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		57	HDC 10B SBU 2M20G	1787640000
M 25	w. threading		57	HDC 10B SBU 2M25G	1787630000

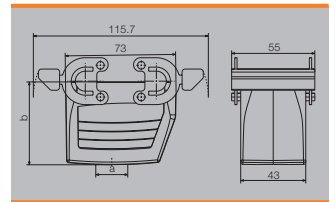


* Mounting dimensions and base width for size-4 base housings, tall shape (24D)

Coupling housing



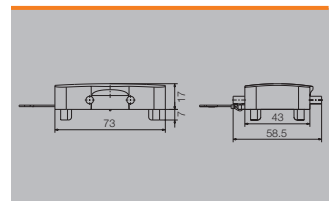
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		55	HDC 10B KBU 1M20G	1787720000



Cover



Version	Type	Order No.
For bases	HDC 10B DODQ 4B0	1665230000



HD series - the flexible connectors

250 V, 10 A, Size 5

25 + ⊕

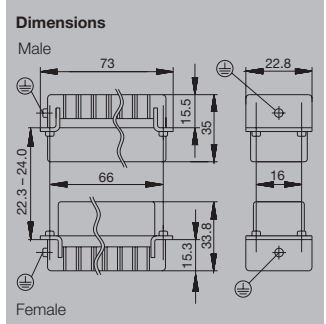
Inserts

Crimp connection

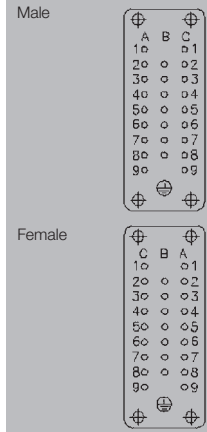


Insert	Type	Order No.
Male	HDC HD 25 MC	1650810000
Female	HDC HD 25 FC	1650820000
Male	HDC HD 25 MC „Z“	1023040000
Female	HDC HD 25 FC „Z“	1023050000

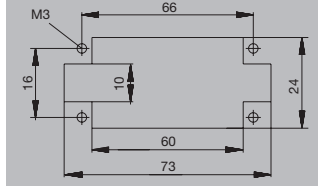
Note We recommend the use of guide pins and sockets.



Arrangement of contacts



Mounting cut-out

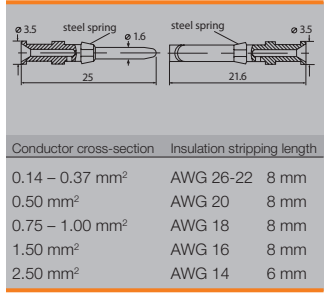


Accessories

Crimp contacts



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HD-SM0.14-0.37AU	1651620000	HDC-C-HD-BM0.14-0.37AU	1651670000	
100	HDC-C-HD-SM0.5AU	1651630000	HDC-C-HD-BM0.5AU	1651680000	
100	HDC-C-HD-SM0.75-1.00AU	1651640000	HDC-C-HD-BM0.75-1.00AU	1651690000	
100	HDC-C-HD-SM1.5AU	1651650000	HDC-C-HD-BM1.5AU	1651700000	
100	HDC-C-HD-SM2.5AU	1651660000	HDC-C-HD-BM2.5AU	1651710000	
100	HDC-C-HD-SM0.14-0.37AG	1651520000	HDC-C-HD-BM0.14-0.37AG	1651570000	
100	HDC-C-HD-SM0.5AG	1651530000	HDC-C-HD-BM0.5AG	1651580000	
100	HDC-C-HD-SM0.75-1.00AG	1601750000	HDC-C-HD-BM0.75-1.00AG	1601760000	
100	HDC-C-HD-SM1.5AG	1651550000	HDC-C-HD-BM1.5AG	1651600000	
100	HDC-C-HD-SM2.5AG	1651560000	HDC-C-HD-BM2.5AG	1651610000	



Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
REMOVAL TOOL HD	1866730000

Housing selection RockStar® IP66
Size 5



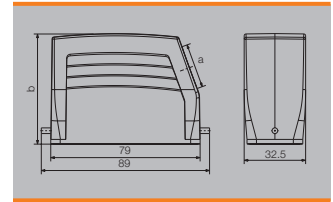
Further housings are available, see
Chapter E for IP66

Hood

Plug housing, cable entry sideways



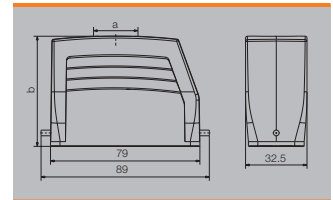
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		72	HDC 25A TSLU 1M20G	1788680000
M 25	w. threading		58	HDC 16A TSLU 1M25G	1788740000
M 25	w. threading		72	HDC 25A TSLU 1M25G	1788690000



Plug housing, cable entry at top



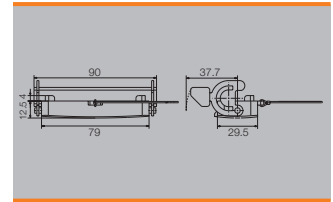
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		72	HDC 25A TOLU 1M20G	1788710000
M 25	w. threading		58	HDC 16A TOLU 1M25G	1788750000
M 25	w. threading		72	HDC 25A TOLU 1M25G	1788700000



Cover



Version	Type	Order No.
For hoods	HDC 16A DODL 1LB	1665900000

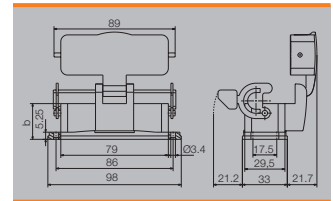


Base

Bulkhead housing



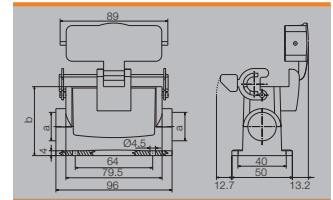
Version	Cover	b (mm)	Type	Order No.
		25	HDC 16A ALU	1664920000
	with cover	44.5	HDC 16A ADLU	1664940000



Base housing



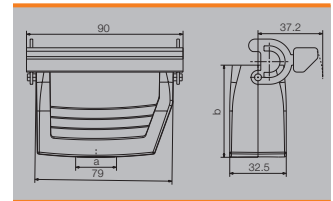
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		57	HDC 16A SLU 2M20G	1788770000
M 20	w. threading	with cover	76.5	HDC 16A SDLU 2M20G	1788790000
M 25	w. threading		57	HDC 16A SLU 2M25G	1788760000
M 25	w. threading	with cover	76.5	HDC 16A SDLU 2M25G	1788780000



Coupling housing



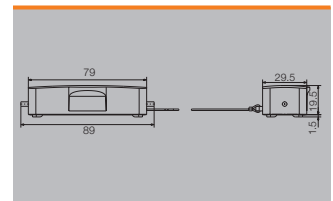
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		53	HDC 16A KLU 1M25G	1788800000



Cover



Version	Type	Order No.
For bases	HDC 16A DMDL 2B0	1665910000



HD series - the flexible connectors

250 V, 10 A, Size 6

40 + ⊕

Inserts

Crimp connection



Insert	Type	Order No.
Male	HDC HD 40 MC	1601710000
Female	HDC HD 40 FC	1601730000

Note Please use this insert type doubled for size 10 (80-pole). We recommend the use of guide pins and sockets.

Dimensions

Arrangement of contacts

Mounting cut-out

Accessories

Crimp contacts

Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HD-SM0.14-0.37AU	1651620000	HDC-C-HD-BM0.14-0.37AU	1651670000	
100	HDC-C-HD-SM0.5AU	1651630000	HDC-C-HD-BM0.5AU	1651680000	
100	HDC-C-HD-SM0.75-1.00AU	1651640000	HDC-C-HD-BM0.75-1.00AU	1651690000	
100	HDC-C-HD-SM1.5AU	1651650000	HDC-C-HD-BM1.5AU	1651700000	
100	HDC-C-HD-SM2.5AU	1651660000	HDC-C-HD-BM2.5AU	1651710000	
100	HDC-C-HD-SM0.14-0.37AG	1651520000	HDC-C-HD-BM0.14-0.37AG	1651570000	
100	HDC-C-HD-SM0.5AG	1651530000	HDC-C-HD-BM0.5AG	1651580000	
100	HDC-C-HD-SM0.75-1.00AG	1601750000	HDC-C-HD-BM0.75-1.00AG	1601760000	
100	HDC-C-HD-SM1.5AG	1651550000	HDC-C-HD-BM1.5AG	1651600000	
100	HDC-C-HD-SM2.5AG	1651560000	HDC-C-HD-BM2.5AG	1651610000	

Conductor cross-section	Insulation stripping length
0.14 – 0.37 mm ²	AWG 26-22 8 mm
0.50 mm ²	AWG 20 8 mm
0.75 – 1.00 mm ²	AWG 18 8 mm
1.50 mm ²	AWG 16 8 mm
2.50 mm ²	AWG 14 6 mm

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
REMOVAL TOOL HD	1866730000

Housing selection RockStar® IP66
Size 6



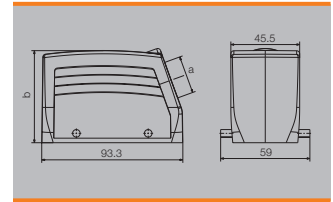
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



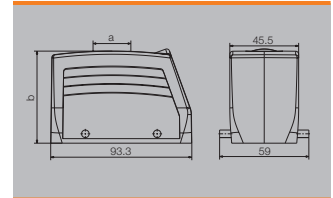
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TSBU 1M25G	1788180000
M 25	w. threading		76	HDC 40D TSBU 1M25G	1787010000
M 32	w. threading		76	HDC 40D TSBU 1M32G	1787000000



Plug housing, cable entry at top



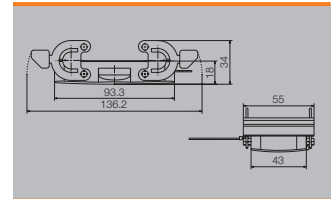
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TOBU 1M25G	1788210000
M 25	w. threading		76	HDC 40D TOBU 1M25G	1787070000
M 32	w. threading		76	HDC 40D TOBU 1M32G	1787060000



Cover



Version	Type	Order No.
For hoods	HDC 16B DMDQ 2QB	1665270000

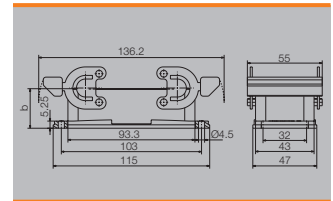


Base

Bulkhead housing



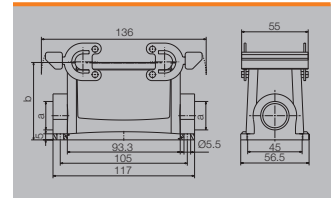
Version	Cover	b (mm)	Type	Order No.
		29	HDC 16B ABU	1208600000



Base housing



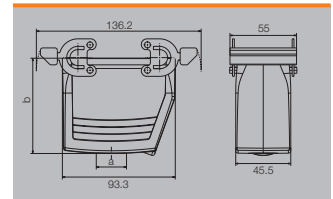
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		64	HDC 16B SBU 2M25G	1788240000
M 25	w. threading		84	HDC 40D SBU 2M25G	1787120000
M 32	w. threading		84	HDC 40D SBU 2M32G	1787110000



Coupling housing



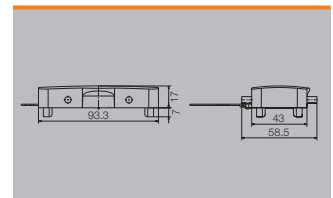
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		79	HDC 40D KBU 1M25G	1787200000
M 32	w. threading		79	HDC 40D KBU 1M32G	1787190000



Cover



Version	Type	Order No.
For bases	HDC 16B DODQ 4B0	1665260000



HD series - the flexible connectors

250 V, 10 A, Size 7

50 + ⊕

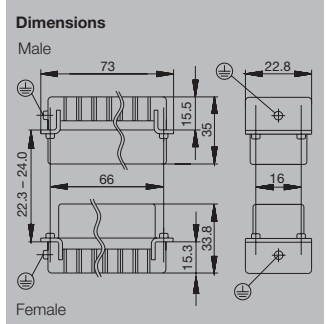
Inserts

Crimp connection

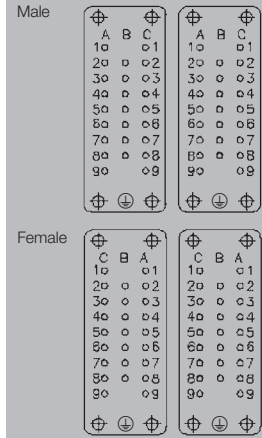


Insert	Type	Order No.
Male	HDC HD 25 MC	1650810000
Female	HDC HD 25 FC	1650820000

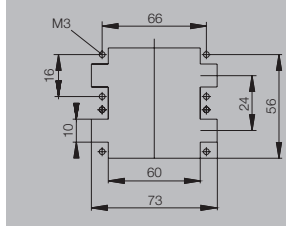
Note Please use this insert type doubled for size 7 (50-pole). We recommend the use of guide pins and sockets.



Arrangement of contacts



Mounting cut-out

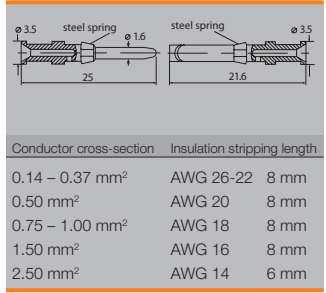


Accessories

Crimp contacts



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HD-SM0.14-0.37AU	1651620000	HDC-C-HD-BM0.14-0.37AU	1651670000	
100	HDC-C-HD-SM0.5AU	1651630000	HDC-C-HD-BM0.5AU	1651680000	
100	HDC-C-HD-SM0.75-1.00AU	1651640000	HDC-C-HD-BM0.75-1.00AU	1651690000	
100	HDC-C-HD-SM1.5AU	1651650000	HDC-C-HD-BM1.5AU	1651700000	
100	HDC-C-HD-SM2.5AU	1651660000	HDC-C-HD-BM2.5AU	1651710000	
100	HDC-C-HD-SM0.14-0.37AG	1651520000	HDC-C-HD-BM0.14-0.37AG	1651570000	
100	HDC-C-HD-SM0.5AG	1651530000	HDC-C-HD-BM0.5AG	1651580000	
100	HDC-C-HD-SM0.75-1.00AG	1601750000	HDC-C-HD-BM0.75-1.00AG	1601760000	
100	HDC-C-HD-SM1.5AG	1651550000	HDC-C-HD-BM1.5AG	1651600000	
100	HDC-C-HD-SM2.5AG	1651560000	HDC-C-HD-BM2.5AG	1651610000	



Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
REMOVAL TOOL HD	1866730000

Housing selection RockStar® IP66
Size 7



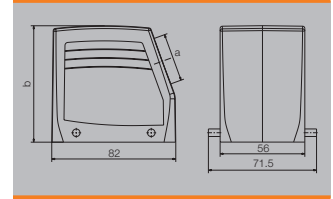
Further housings are available, see
Chapter E for IP66

Hood

Plug housing, cable entry sideways



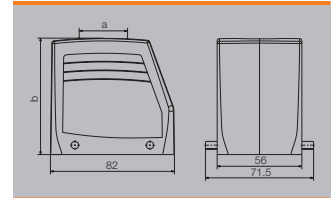
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		75	HDC 32A TSBU 1M25G	1787960000
M 32	w. threading		75	HDC 32A TSBU 1M32G	1787950000



Plug housing, cable entry at top



a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		75	HDC 32A TOBU 1M32G	1787990000

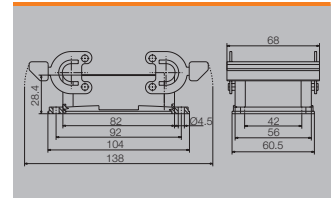


Base

Bulkhead housing



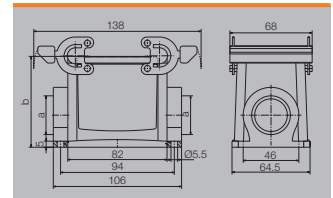
Version	Cover	b (mm)	Type	Order No.
		28.4	HDC 32A ABU	1665860000



Base housing



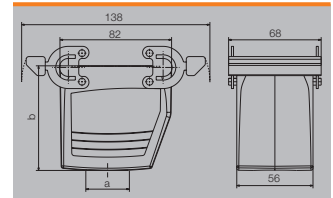
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		75	HDC 32A SBU 2M25G	1788040000



Coupling housing



a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		76.5	HDC 32A KBU 1M25G	1788080000
M 32	w. threading		76.5	HDC 32A KBU 1M32G	1788070000



HD series - the flexible connectors

250 V, 10 A, Size 8

64 + ⊕

Inserts

Crimp connection



Insert	Type	Order No.
Male	HDC HD 64 MC	1601720000
Female	HDC HD 64 FC	1601740000

Note Please use this insert type doubled for size 12 (128-pole). We recommend the use of guide pins and sockets.

Dimensions

Arrangement of contacts

Male

Female

Mounting cut-out

Accessories

Crimp contacts

Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HD-SM0.14-0.37AU	1651620000	HDC-C-HD-BM0.14-0.37AU	1651670000	
100	HDC-C-HD-SM0.5AU	1651630000	HDC-C-HD-BM0.5AU	1651680000	
100	HDC-C-HD-SM0.75-1.00AU	1651640000	HDC-C-HD-BM0.75-1.00AU	1651690000	
100	HDC-C-HD-SM1.5AU	1651650000	HDC-C-HD-BM1.5AU	1651700000	
100	HDC-C-HD-SM2.5AU	1651660000	HDC-C-HD-BM2.5AU	1651710000	
100	HDC-C-HD-SM0.14-0.37AG	1651520000	HDC-C-HD-BM0.14-0.37AG	1651570000	
100	HDC-C-HD-SM0.5AG	1651530000	HDC-C-HD-BM0.5AG	1651580000	
100	HDC-C-HD-SM0.75-1.00AG	1601750000	HDC-C-HD-BM0.75-1.00AG	1601760000	
100	HDC-C-HD-SM1.5AG	1651550000	HDC-C-HD-BM1.5AG	1651600000	
100	HDC-C-HD-SM2.5AG	1651560000	HDC-C-HD-BM2.5AG	1651610000	

Conductor cross-section	Insulation stripping length
0.14 – 0.37 mm ²	AWG 26-22 8 mm
0.50 mm ²	AWG 20 8 mm
0.75 – 1.00 mm ²	AWG 18 8 mm
1.50 mm ²	AWG 16 8 mm
2.50 mm ²	AWG 14 6 mm

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
REMOVAL TOOL HD	1866730000

Housing selection RockStar® IP66
Size 8



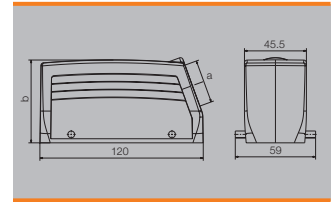
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



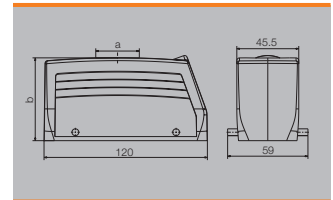
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 24B TSBU 1M25G	1787760000
M 25	w. threading		76	HDC 64D TSBU 1M25G	1786780000
M 32	w. threading		61	HDC 24B TSBU 1M32G	1787750000
M 32	w. threading		76	HDC 64D TSBU 1M32G	1786770000



Plug housing, cable entry at top



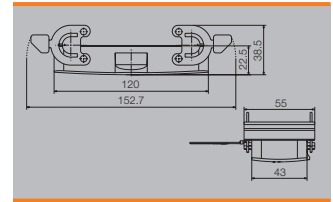
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 24B TOBU 1M25G	1787820000
M 32	w. threading		61	HDC 24B TOBU 1M32G	1787810000
M 32	w. threading		76	HDC 64D TOBU 1M32G	1786830000



Cover



Version	Type	Order No.
For hoods	HDC 24B DMDQ 2QB	1665640000

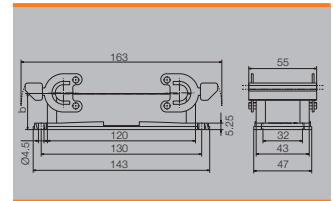


Base

Bulkhead housing



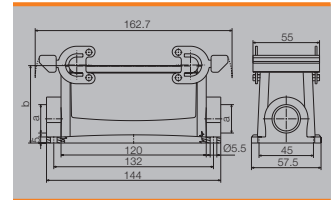
Version	Cover	b (mm)	Type	Order No.
		29.3	HDC 24B ABU	1212400000



Base housing



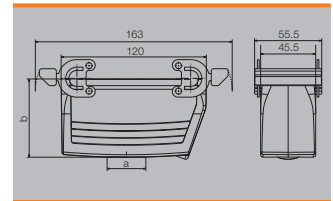
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		64	HDC 24B SBU 2M25G	1787870000
M 25	w. threading		84	HDC 64D SBU 2M25G	1786890000
M 32	w. threading		84	HDC 64D SBU 2M32G	1786880000



Coupling housing



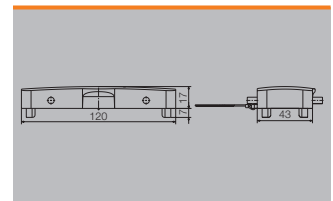
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		65	HDC 24B KBU 1M25G	1787920000
M 32	w. threading		79	HDC 64D KBU 1M32G	1786960000



Cover



Version	Type	Order No.
For bases	HDC 24B DODQ 4B0	1665630000



HD series - the flexible connectors

250 V, 10 A, Size 10

80 + ⊕

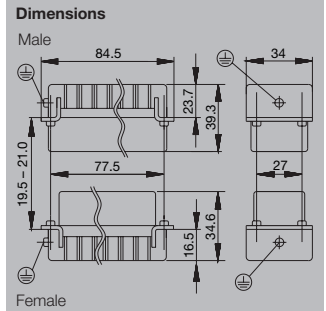
Inserts

Crimp connection

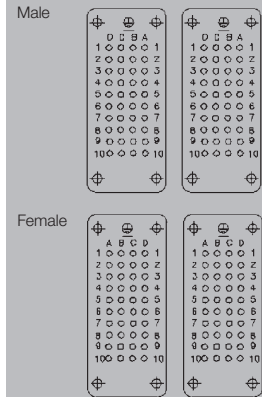


Insert	Type	Order No.
Male	HDC HD 40 MC	1601710000
Female	HDC HD 40 FC	1601730000

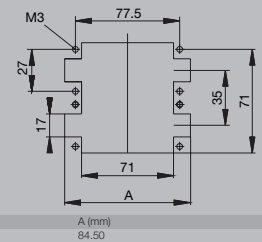
Note Please use this insert type doubled for size 10 (80-pole). We recommend the use of guide pins and sockets.



Arrangement of contacts



Mounting cut-out



Accessories

Crimp contacts

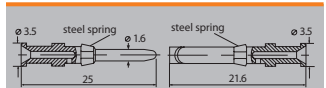
Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HD-SM0.14-0.37AU	1651620000	HDC-C-HD-BM0.14-0.37AU	1651670000	
100	HDC-C-HD-SM0.5AU	1651630000	HDC-C-HD-BM0.5AU	1651680000	
100	HDC-C-HD-SM0.75-1.00AU	1651640000	HDC-C-HD-BM0.75-1.00AU	1651690000	
100	HDC-C-HD-SM1.5AU	1651650000	HDC-C-HD-BM1.5AU	1651700000	
100	HDC-C-HD-SM2.5AU	1651660000	HDC-C-HD-BM2.5AU	1651710000	
100	HDC-C-HD-SM0.14-0.37AG	1651520000	HDC-C-HD-BM0.14-0.37AG	1651570000	
100	HDC-C-HD-SM0.5AG	1651530000	HDC-C-HD-BM0.5AG	1651580000	
100	HDC-C-HD-SM0.75-1.00AG	1601750000	HDC-C-HD-BM0.75-1.00AG	1601760000	
100	HDC-C-HD-SM1.5AG	1651550000	HDC-C-HD-BM1.5AG	1651600000	
100	HDC-C-HD-SM2.5AG	1651560000	HDC-C-HD-BM2.5AG	1651610000	



Conductor cross-section	Insulation stripping length
0.14 – 0.37 mm ²	AWG 26-22 8 mm
0.50 mm ²	AWG 20 8 mm
0.75 – 1.00 mm ²	AWG 18 8 mm
1.50 mm ²	AWG 16 8 mm
2.50 mm ²	AWG 14 6 mm

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
REMOVAL TOOL HD	1866730000

Housing selection RockStar® IP66
Size 10



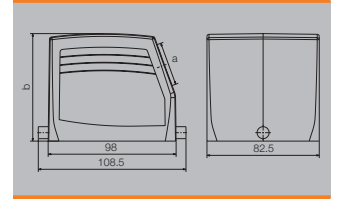
Further housings are available, see
Chapter E for IP66

Hood

Plug housing, cable entry sideways



a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		79	HDC 32B TSLU 1M32G	1788420000

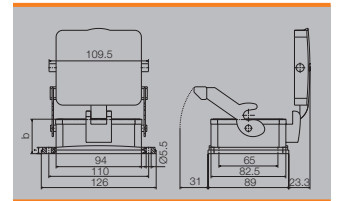


Base

Bulkhead housing



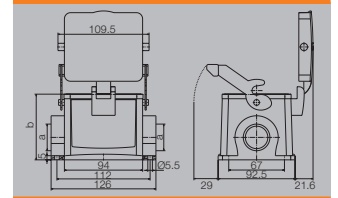
Version	Cover	b (mm)	Type	Order No.
		38	HDC 32B ALU	1219500000
	with cover	55	HDC 32B ADLU	1219800000



Base housing



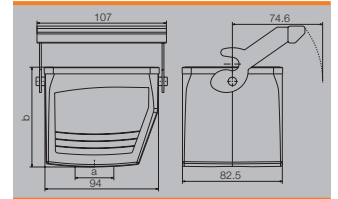
a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		79	HDC 32B SLU 2M32G	1788470000
M 32	w. threading	with cover	96	HDC 32B SDLU 2M32G	1788490000



Coupling housing



a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		83	HDC 32B KLU 1M32G	1788500000



HD series - the flexible connectors

250 V, 10 A, Size 12

128 + ⊕

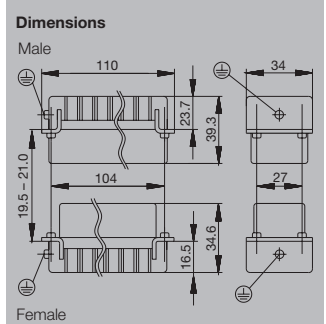
Inserts

Crimp connection

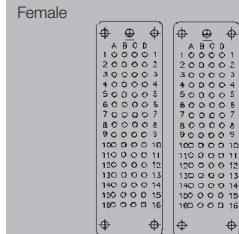
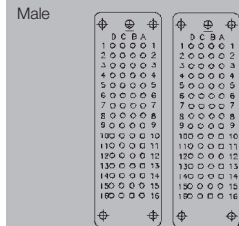


Insert	Type	Order No.
Male	HDC HD 64 MC	1601720000
Female	HDC HD 64 FC	1601740000

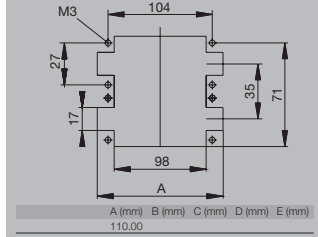
Note Please use this insert type doubled for size 12 (128-pole). We recommend the use of guide pins and sockets.



Arrangement of contacts



Mounting cut-out



Accessories

Crimp contacts

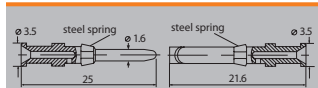
Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HD-SM0.14-0.37AU	1651620000	HDC-C-HD-BM0.14-0.37AU	1651670000	
100	HDC-C-HD-SM0.5AU	1651630000	HDC-C-HD-BM0.5AU	1651680000	
100	HDC-C-HD-SM0.75-1.00AU	1651640000	HDC-C-HD-BM0.75-1.00AU	1651690000	
100	HDC-C-HD-SM1.5AU	1651650000	HDC-C-HD-BM1.5AU	1651700000	
100	HDC-C-HD-SM2.5AU	1651660000	HDC-C-HD-BM2.5AU	1651710000	
100	HDC-C-HD-SM0.14-0.37AG	1651520000	HDC-C-HD-BM0.14-0.37AG	1651570000	
100	HDC-C-HD-SM0.5AG	1651530000	HDC-C-HD-BM0.5AG	1651580000	
100	HDC-C-HD-SM0.75-1.00AG	1601750000	HDC-C-HD-BM0.75-1.00AG	1601760000	
100	HDC-C-HD-SM1.5AG	1651550000	HDC-C-HD-BM1.5AG	1651600000	
100	HDC-C-HD-SM2.5AG	1651560000	HDC-C-HD-BM2.5AG	1651610000	



Conductor cross-section	Insulation stripping length
0.14 – 0.37 mm ²	AWG 26-22 8 mm
0.50 mm ²	AWG 20 8 mm
0.75 – 1.00 mm ²	AWG 18 8 mm
1.50 mm ²	AWG 16 8 mm
2.50 mm ²	AWG 14 6 mm

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
REMOVAL TOOL HD	1866730000

Housing selection RockStar® IP66
Size 12



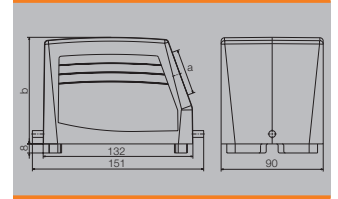
Further housings are available, see
Chapter E for IP66

Hood

Plug housing, cable entry sideways



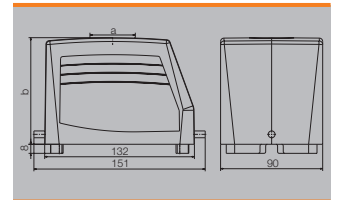
a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		94	HDC 48B TSLU 1M32G	1788320000
M 40	w. threading		94	HDC 48B TSLU 1M40G	1788310000
M 50	w. threading		94	HDC 48B TSLU 1M50G	1788300000



Plug housing, cable entry at top



a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		94	HDC 48B TOLU 1M32G	1788350000
M 50	w. threading		94	HDC 48B TOLU 1M50G	1788330000

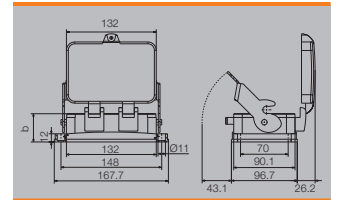


Base

Bulkhead housing



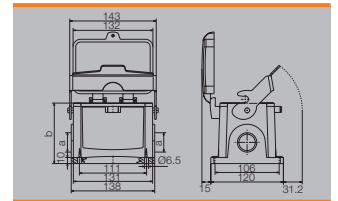
Version	Cover	b (mm)	Type	Order No.
	with cover	62	HDC 48B ADLU	1222900000



Base housing

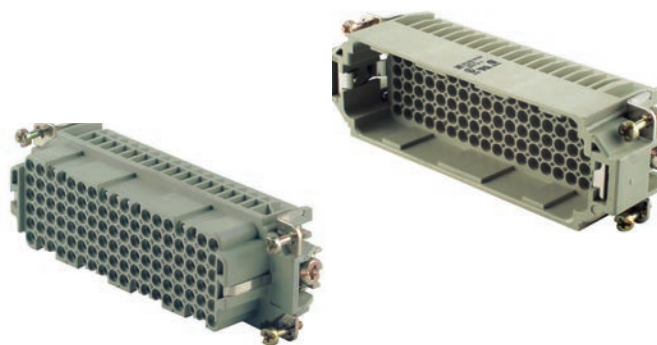


a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		100	HDC 48B SLU 2M32G	1788370000
M 32	w. threading	with cover	120	HDC 48B SDLU 2M32G	1788390000
M 40	w. threading		100	HDC 48B SLU 2M40G	1788360000



HDD series – the compact connectors

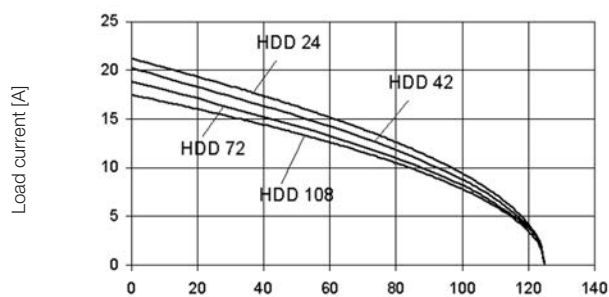
The HDD series with turned contacts is designed for many poles in a small space. The compact housing design saves the user space without compromising the number of poles.



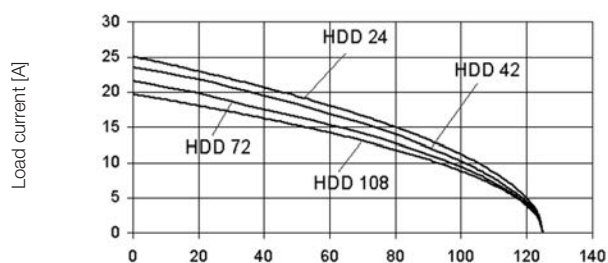
Technical data

Standards / approvals	
Standards	DIN EN 61984 DIN EN 60664-1
Approvals	UL/CSA
Inserts	
No. of poles	24, 42, 72, 108, 144, 216 +PE
Rated voltage	250 V
Rated voltage to UL/CSA	600 V
Rated current	10 A
Rated impulse withstand voltage	4 kV
Pollution severity	3
Insulation resistance	$\geq 10^{10} \Omega$
Material	Glass-fibre reinforced PC (in UL list and approved for railway applications)
Temperature range	-40 °C ... +125 °C
Flammability to UL 94	V-0
Mechanical service life	
- Plugging cycles Ag - Surface	≥ 500
- Plugging cycles Au - Surface	≥ 500
Contact resistance	
Crimp connection	$\leq 4 \text{ m}\Omega$
Contacts / Material	
Sockets and plug-in contact	Copper alloy
Surface	Passivated silver, or gold-plated
Crimp connection	
- Flexible conductor connection	0.14 - 2.5 mm ² (AWG 26 ... 14)
- Stripping length	8.0 mm
PE connection	
- Clamping range	0.5 ... 2.5 mm ²
- solid / stranded	0.5 ... 2.5 mm ² / 0.5 ... 2.5 mm ²
- flexible / flexible with wire end ferrule, DIN 46228 pt. 1	0.5 ... 2.5 mm ² / 0.5 ... 2.5 mm ²
- AWG conductor	AWG 20 ... 14
- Stripping length	10 mm
- Clamping torque	1.2 ... 1.5 Nm
- Blade dimensions	SD 0.8 x 4 mm or PZ 1

Derating curves















HDD 1.5 mm² Ambient temperature [°C]



HDD 2.5 mm² Ambient temperature [°C]

Note: When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load!

Overview

		Size	Rated voltage	Rated current	No. of poles	Tension clamp connection	Screw conn. with wire guard spring	Crimp connection	PUSH IN connection	Axial screw connection	Page
		3	250 V	10 A	24 + ⊕			•			B.70
		4	250 V	10 A	42 + ⊕			•			B.72
		6	250 V	10 A	72 + ⊕			•			B.74
		8	250 V	10 A	108 + ⊕			•			B.76
		10	250 V	10 A	144 + ⊕			•			B.78
		12	250 V	10 A	216 + ⊕			•			B.80

HDD series - the compact connectors

250 V, 10 A, Size 3

24 + ⊕

Inserts

Crimp connection



Insert	Type	Order No.
Male	HDC HDD 24 MC	1651150000
Female	HDC HDD 24 FC	1651160000

Note When using connectors with high contact density, we recommend the use of guide pins and sockets; see Chapter J

Dimensions

Arrangement of contacts

Mounting cut-out

Accessories

Crimp contacts

Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HD-SM0.14-0.37AU	1651620000	HDC-C-HD-BM0.14-0.37AU	1651670000	
100	HDC-C-HD-SM0.5AU	1651630000	HDC-C-HD-BM0.5AU	1651680000	
100	HDC-C-HD-SM0.75-1.00AU	1651640000	HDC-C-HD-BM0.75-1.00AU	1651690000	
100	HDC-C-HD-SM1.5AU	1651650000	HDC-C-HD-BM1.5AU	1651700000	
100	HDC-C-HD-SM2.5AU	1651660000	HDC-C-HD-BM2.5AU	1651710000	
100	HDC-C-HD-SM0.14-0.37AG	1651520000	HDC-C-HD-BM0.14-0.37AG	1651570000	
100	HDC-C-HD-SM0.5AG	1651530000	HDC-C-HD-BM0.5AG	1651580000	
100	HDC-C-HD-SM0.75-1.00AG	1601750000	HDC-C-HD-BM0.75-1.00AG	1601760000	
100	HDC-C-HD-SM1.5AG	1651550000	HDC-C-HD-BM1.5AG	1651600000	
100	HDC-C-HD-SM2.5AG	1651560000	HDC-C-HD-BM2.5AG	1651610000	

Conductor cross-section	Insulation stripping length
0.14 – 0.37 mm ²	AWG 26-22 8 mm
0.50 mm ²	AWG 20 8 mm
0.75 – 1.00 mm ²	AWG 18 8 mm
1.50 mm ²	AWG 16 8 mm
2.50 mm ²	AWG 14 6 mm

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
REMOVAL TOOL HD	1866730000

Housing selection RockStar® IP66
Size 3



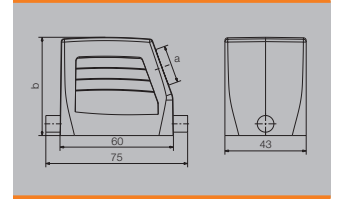
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



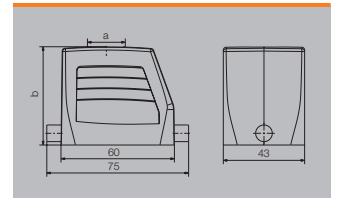
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 06B TSLU 1M20G	1788100000
M 25	w. threading		52	HDC 06B TSLU 1M25G	1788090000
M 25	w. threading		72	HDC 16D TSLU 1M25G	1787480000



Plug housing, cable entry at top



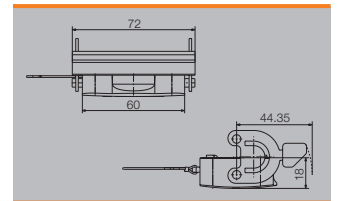
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 06B TOLU 1M20G	1788120000
M 25	w. threading		52	HDC 06B TOLU 1M25G	1788110000
M 25	w. threading		72	HDC 16D TOLU 1M25G	1787500000
M 32	w. threading		72	HDC 16D TOLU 1M32G	1787490000



Cover



Version	Type	Order No.
For hoods	HDC 06B DMDL 1LB	1665210000

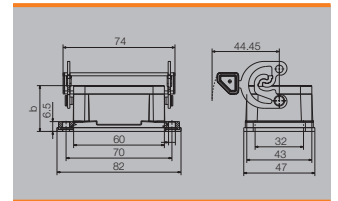


Base

Bulkhead housing



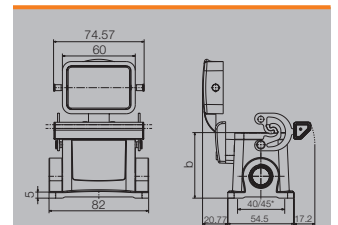
Version	Cover	b (mm)	Type	Order No.
		29	HDC 06B ALU	1202100000
	with cover	47	HDC 06B ADLU	1202500000



Base housing



a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		54	HDC 06B SLU 2M20G	1788140000
M 20	w. threading	with cover	72	HDC 06B SDLU 2M20G	1788170000
M 25	w. threading		54	HDC 06B SLU 2M25G	1788130000
M 25	w. threading	with cover	72	HDC 06B SDLU 2M25G	1788160000

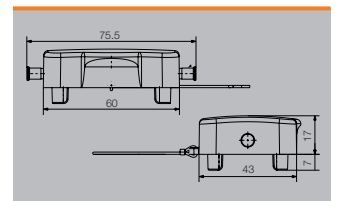


* Mounting dimensions for size-3 base housings, tall shape (16D)

Cover



Version	Type	Order No.
For bases	HDC 06B DODL 2B0	1665200000



HDD series - the compact connectors

250 V, 10 A, Size 4

42 + ⊕

Inserts

Crimp connection



Insert	Type	Order No.
Male	HDC HDD 42 MC	1651170000
Female	HDC HDD 42 FC	1651180000

Note When using connectors with high contact density, we recommend the use of guide pins and sockets; see Chapter J

Dimensions

Arrangement of contacts

Mounting cut-out

Accessories

Crimp contacts

Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HD-SM0.14-0.37AU	1651620000	HDC-C-HD-BM0.14-0.37AU	1651670000	
100	HDC-C-HD-SM0.5AU	1651630000	HDC-C-HD-BM0.5AU	1651680000	
100	HDC-C-HD-SM0.75-1.00AU	1651640000	HDC-C-HD-BM0.75-1.00AU	1651690000	
100	HDC-C-HD-SM1.5AU	1651650000	HDC-C-HD-BM1.5AU	1651700000	
100	HDC-C-HD-SM2.5AU	1651660000	HDC-C-HD-BM2.5AU	1651710000	
100	HDC-C-HD-SM0.14-0.37AG	1651520000	HDC-C-HD-BM0.14-0.37AG	1651570000	
100	HDC-C-HD-SM0.5AG	1651530000	HDC-C-HD-BM0.5AG	1651580000	
100	HDC-C-HD-SM0.75-1.00AG	1601750000	HDC-C-HD-BM0.75-1.00AG	1601760000	
100	HDC-C-HD-SM1.5AG	1651550000	HDC-C-HD-BM1.5AG	1651600000	
100	HDC-C-HD-SM2.5AG	1651560000	HDC-C-HD-BM2.5AG	1651610000	

Conductor cross-section	Insulation stripping length
0.14 – 0.37 mm ²	AWG 26-22 8 mm
0.50 mm ²	AWG 20 8 mm
0.75 – 1.00 mm ²	AWG 18 8 mm
1.50 mm ²	AWG 16 8 mm
2.50 mm ²	AWG 14 6 mm

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
REMOVAL TOOL HD	1866730000

Housing selection RockStar® IP66
Size 4



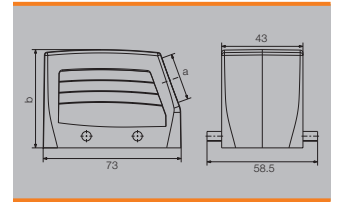
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



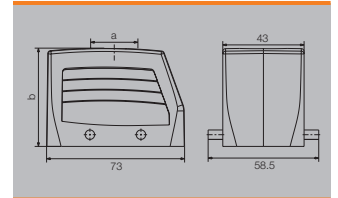
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 10B TSBU 1M20G	1787560000
M 25	w. threading		52	HDC 10B TSBU 1M25G	1787550000
M 25	w. threading		72	HDC 24D TSBU 1M25G	1787240000
M 32	w. threading		72	HDC 24D TSBU 1M32G	1787230000



Plug housing, cable entry at top



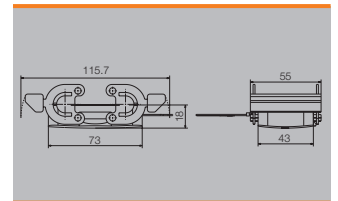
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 10B TOBU 1M20G	1787600000
M 25	w. threading		52	HDC 10B TOBU 1M25G	1787590000
M 25	w. threading		72	HDC 24D TOBU 1M25G	1787300000
M 32	w. threading		72	HDC 24D TOBU 1M32G	1787290000



Cover



Version	Type	Order No.
For hoods	HDC 10B DMDQ 2QB	1665240000

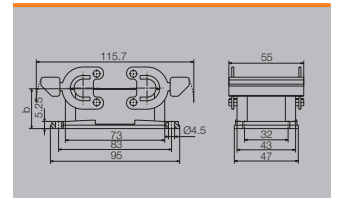


Base

Bulkhead housing



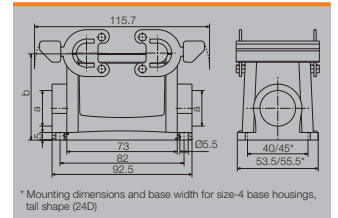
Version	Cover	b (mm)	Type	Order No.
		29.3	HDC 10B ABU	1205000000



Base housing



a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		57	HDC 10B SBU 2M20G	1787640000
M 25	w. threading		57	HDC 10B SBU 2M25G	1787630000

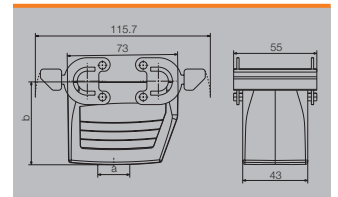


* Mounting dimensions and base width for size-4 base housings, tall shape (24D)

Coupling housing



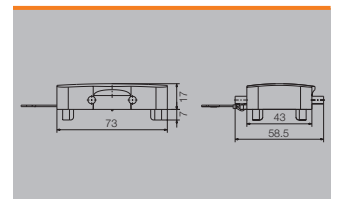
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		55	HDC 10B KBU 1M20G	1787720000



Cover



Version	Type	Order No.
For bases	HDC 10B DODQ 4B0	1665230000



HDD series - the compact connectors

250 V, 10 A, Size 6

72 + ⊕

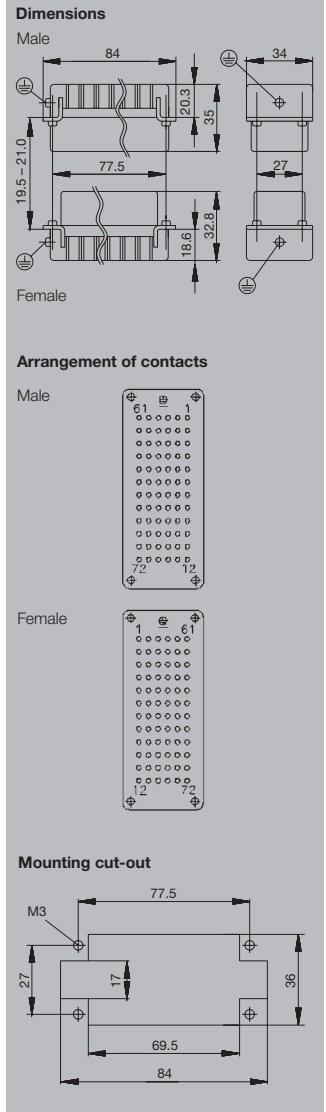
Inserts

Crimp connection



Insert	Type	Order No.
Male	HDC HDD 72 MC	1651190000
Female	HDC HDD 72 FC	1651200000

Note When using connectors with high contact density, we recommend the use of guide pins and sockets; see Chapter J



Accessories

Crimp contacts

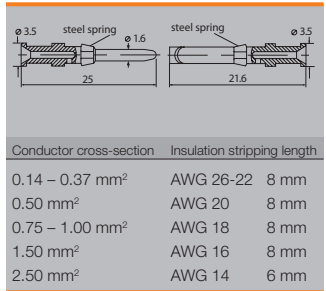
Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HD-SM0.14-0.37AU	1651620000	HDC-C-HD-BM0.14-0.37AU	1651670000	
100	HDC-C-HD-SM0.5AU	1651630000	HDC-C-HD-BM0.5AU	1651680000	
100	HDC-C-HD-SM0.75-1.00AU	1651640000	HDC-C-HD-BM0.75-1.00AU	1651690000	
100	HDC-C-HD-SM1.5AU	1651650000	HDC-C-HD-BM1.5AU	1651700000	
100	HDC-C-HD-SM2.5AU	1651660000	HDC-C-HD-BM2.5AU	1651710000	
100	HDC-C-HD-SM0.14-0.37AG	1651520000	HDC-C-HD-BM0.14-0.37AG	1651570000	
100	HDC-C-HD-SM0.5AG	1651530000	HDC-C-HD-BM0.5AG	1651580000	
100	HDC-C-HD-SM0.75-1.00AG	1601750000	HDC-C-HD-BM0.75-1.00AG	1601760000	
100	HDC-C-HD-SM1.5AG	1651550000	HDC-C-HD-BM1.5AG	1651600000	
100	HDC-C-HD-SM2.5AG	1651560000	HDC-C-HD-BM2.5AG	1651610000	



Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
REMOVAL TOOL HD	1866730000

Housing selection RockStar® IP66
Size 6



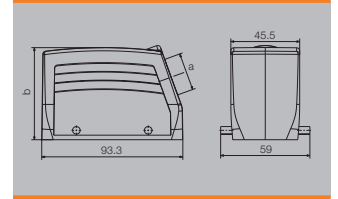
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



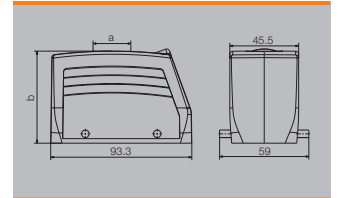
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TSBU 1M25G	1788180000
M 25	w. threading		76	HDC 40D TSBU 1M25G	1787010000
M 32	w. threading		76	HDC 40D TSBU 1M32G	1787000000



Plug housing, cable entry at top



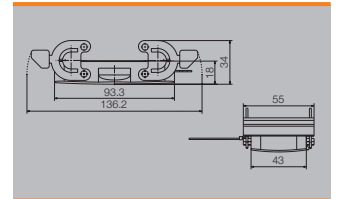
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TOBU 1M25G	1788210000
M 25	w. threading		76	HDC 40D TOBU 1M25G	1787070000
M 32	w. threading		76	HDC 40D TOBU 1M32G	1787060000



Cover



Version	Type	Order No.
For hoods	HDC 16B DMDQ 2QB	1665270000

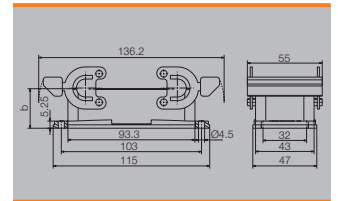


Base

Bulkhead housing



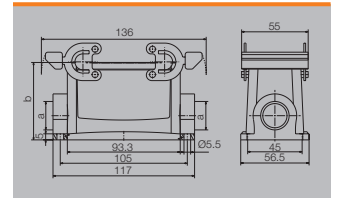
Version	Cover	b (mm)	Type	Order No.
		29	HDC 16B ABU	1208600000



Base housing



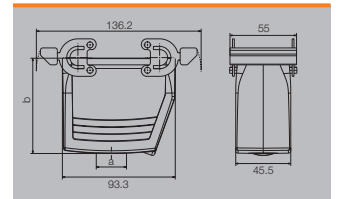
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		64	HDC 16B SBU 2M25G	1788240000
M 25	w. threading		84	HDC 40D SBU 2M25G	1787120000
M 32	w. threading		84	HDC 40D SBU 2M32G	1787110000



Coupling housing



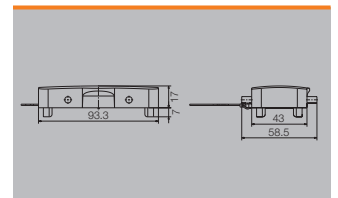
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		79	HDC 40D KBU 1M25G	1787200000
M 32	w. threading		79	HDC 40D KBU 1M32G	1787190000



Cover



Version	Type	Order No.
For bases	HDC 16B DODQ 4B0	1665260000



HDD series - the compact connectors

250 V, 10 A, Size 8

108 + ⊕

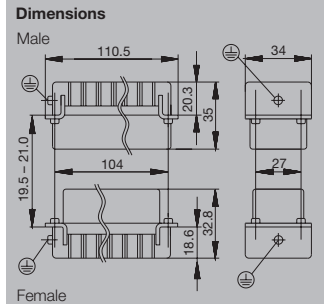
Inserts

Crimp connection

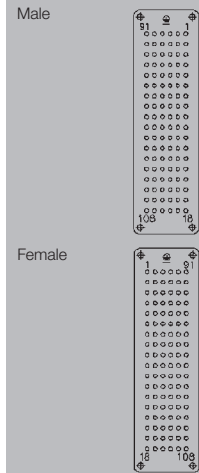


Insert	Type	Order No.
Male	HDC HDD 108 MC	1651210000
Female	HDC HDD 108 FC	1651220000

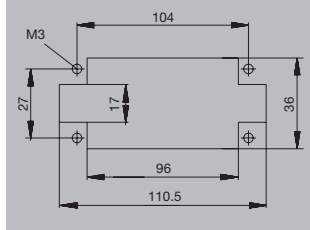
Note When using connectors with high contact density, we recommend the use of guide pins and sockets; see Chapter J



Arrangement of contacts



Mounting cut-out



Accessories

Crimp contacts

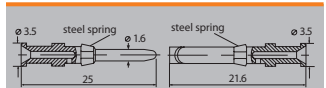
Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HD-SM0.14-0.37AU	1651620000	HDC-C-HD-BM0.14-0.37AU	1651670000	
100	HDC-C-HD-SM0.5AU	1651630000	HDC-C-HD-BM0.5AU	1651680000	
100	HDC-C-HD-SM0.75-1.00AU	1651640000	HDC-C-HD-BM0.75-1.00AU	1651690000	
100	HDC-C-HD-SM1.5AU	1651650000	HDC-C-HD-BM1.5AU	1651700000	
100	HDC-C-HD-SM2.5AU	1651660000	HDC-C-HD-BM2.5AU	1651710000	
100	HDC-C-HD-SM0.14-0.37AG	1651520000	HDC-C-HD-BM0.14-0.37AG	1651570000	
100	HDC-C-HD-SM0.5AG	1651530000	HDC-C-HD-BM0.5AG	1651580000	
100	HDC-C-HD-SM0.75-1.00AG	1601750000	HDC-C-HD-BM0.75-1.00AG	1601760000	
100	HDC-C-HD-SM1.5AG	1651550000	HDC-C-HD-BM1.5AG	1651600000	
100	HDC-C-HD-SM2.5AG	1651560000	HDC-C-HD-BM2.5AG	1651610000	



Conductor cross-section	Insulation stripping length
0.14 – 0.37 mm ²	AWG 26-22 8 mm
0.50 mm ²	AWG 20 8 mm
0.75 – 1.00 mm ²	AWG 18 8 mm
1.50 mm ²	AWG 16 8 mm
2.50 mm ²	AWG 14 6 mm

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
REMOVAL TOOL HD	1866730000

Housing selection RockStar® IP66
Size 8



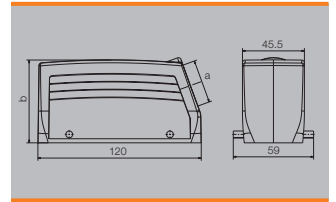
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



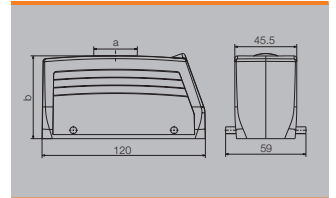
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 24B TSBU 1M25G	1787760000
M 25	w. threading		76	HDC 64D TSBU 1M25G	1786780000
M 32	w. threading		61	HDC 24B TSBU 1M32G	1787750000
M 32	w. threading		76	HDC 64D TSBU 1M32G	1786770000



Plug housing, cable entry at top



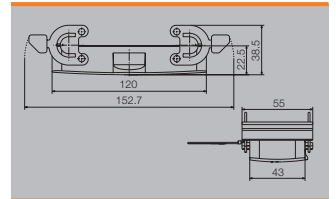
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 24B TOBU 1M25G	1787820000
M 32	w. threading		61	HDC 24B TOBU 1M32G	1787810000
M 32	w. threading		76	HDC 64D TOBU 1M32G	1786830000



Cover



Version	Type	Order No.
For hoods	HDC 24B DMDQ 2QB	1665640000

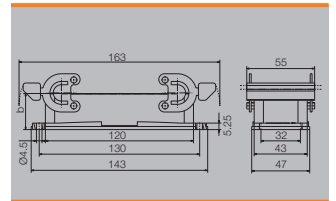


Base

Bulkhead housing



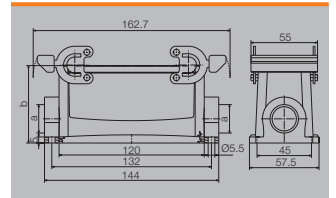
Version	Cover	b (mm)	Type	Order No.
		29.3	HDC 24B ABU	1212400000



Base housing



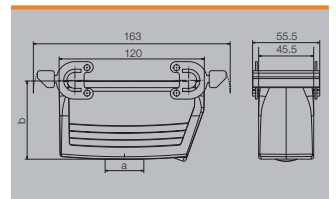
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		64	HDC 24B SBU 2M25G	1787870000
M 25	w. threading		84	HDC 64D SBU 2M25G	1786890000
M 32	w. threading		84	HDC 64D SBU 2M32G	1786880000



Coupling housing



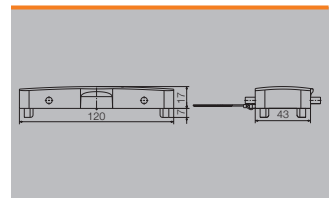
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		65	HDC 24B KBU 1M25G	1787920000
M 32	w. threading		79	HDC 64D KBU 1M32G	1786960000



Cover



Version	Type	Order No.
For bases	HDC 24B DODQ 4B0	1665630000



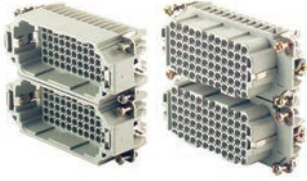
HDD series - the compact connectors

250 V, 10 A, Size 10

144 + ⊕

Inserts

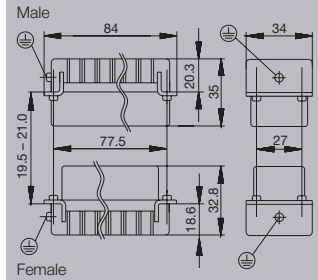
Crimp connection



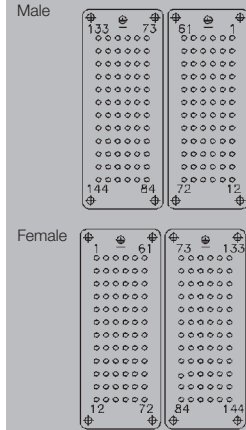
Insert	Type	Order No.
Male	HDC HDD 72 MC	1651190000
Female	HDC HDD 72 FC	1651200000
Male	HDC HDD 72 MC 73-144	1651240000
Female	HDC HDD 72 FC 73-144	1651260000

Note To complete the assembly of the plug-in connector, two inserts are required. We recommend the use of guide pins and sockets.

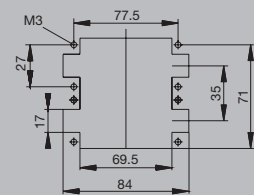
Dimensions



Arrangement of contacts



Mounting cut-out



Accessories

Crimp contacts

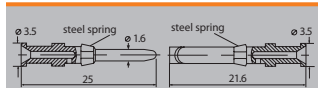
Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HD-SM0.14-0.37AU	1651620000	HDC-C-HD-BM0.14-0.37AU	1651670000	
100	HDC-C-HD-SM0.5AU	1651630000	HDC-C-HD-BM0.5AU	1651680000	
100	HDC-C-HD-SM0.75-1.00AU	1651640000	HDC-C-HD-BM0.75-1.00AU	1651690000	
100	HDC-C-HD-SM1.5AU	1651650000	HDC-C-HD-BM1.5AU	1651700000	
100	HDC-C-HD-SM2.5AU	1651660000	HDC-C-HD-BM2.5AU	1651710000	
100	HDC-C-HD-SM0.14-0.37AG	1651520000	HDC-C-HD-BM0.14-0.37AG	1651570000	
100	HDC-C-HD-SM0.5AG	1651530000	HDC-C-HD-BM0.5AG	1651580000	
100	HDC-C-HD-SM0.75-1.00AG	1601750000	HDC-C-HD-BM0.75-1.00AG	1601760000	
100	HDC-C-HD-SM1.5AG	1651550000	HDC-C-HD-BM1.5AG	1651600000	
100	HDC-C-HD-SM2.5AG	1651560000	HDC-C-HD-BM2.5AG	1651610000	



Conductor cross-section	Insulation stripping length
0.14 – 0.37 mm ²	AWG 26-22 8 mm
0.50 mm ²	AWG 20 8 mm
0.75 – 1.00 mm ²	AWG 18 8 mm
1.50 mm ²	AWG 16 8 mm
2.50 mm ²	AWG 14 6 mm

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
REMOVAL TOOL HD	1866730000

Housing selection RockStar® IP66
Size 10



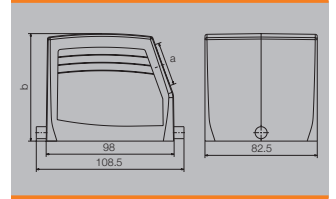
Further housings are available, see
Chapter E for IP66

Hood

Plug housing, cable entry sideways



a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		79	HDC 32B TSLU 1M32G	1788420000

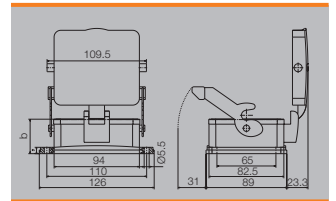


Base

Bulkhead housing



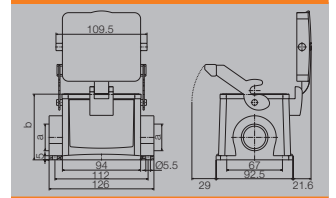
Version	Cover	b (mm)	Type	Order No.
		38	HDC 32B ALU	1219500000
	with cover	55	HDC 32B ADLU	1219800000



Base housing



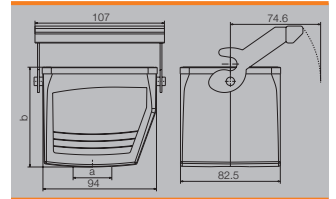
a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		79	HDC 32B SLU 2M32G	1788470000
M 32	w. threading	with cover	96	HDC 32B SDLU 2M32G	1788490000



Coupling housing



a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		83	HDC 32B KLU 1M32G	1788500000



HDD series - the compact connectors

250 V, 10 A, Size 12

216 + ⊕

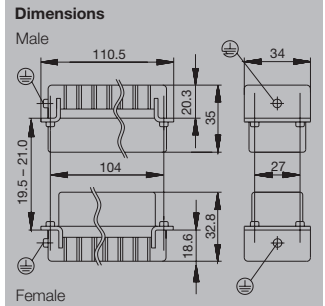
Inserts

Crimp connection

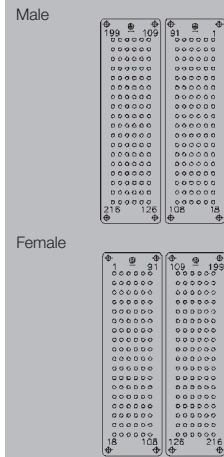


Insert	Type	Order No.
Male	HDC HDD 108 MC	1651210000
Female	HDC HDD 108 FC	1651220000
Male	HDC HDD 108 MC 109-216	1651280000
Female	HDC HDD 108 FC 109-216	1651300000

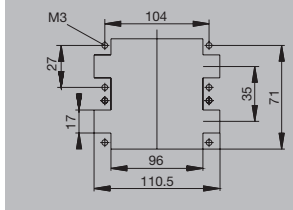
Note To complete the assembly of the plug-in connector, two inserts are required. We recommend the use of guide pins and sockets.



Arrangement of contacts



Mounting cut-out



Accessories

Crimp contacts

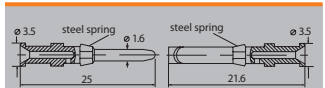
Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HD-SM0.14-0.37AG	1651620000	HDC-C-HD-BM0.14-0.37AU	1651670000	
100	HDC-C-HD-SM0.5AU	1651630000	HDC-C-HD-BM0.5AU	1651680000	
100	HDC-C-HD-SM0.75-1.00AU	1651640000	HDC-C-HD-BM0.75-1.00AU	1651690000	
100	HDC-C-HD-SM1.5AU	1651650000	HDC-C-HD-BM1.5AU	1651700000	
100	HDC-C-HD-SM2.5AU	1651660000	HDC-C-HD-BM2.5AU	1651710000	
100	HDC-C-HD-SM0.14-0.37AG	1651520000	HDC-C-HD-BM0.14-0.37AG	1651570000	
100	HDC-C-HD-SM0.5AG	1651530000	HDC-C-HD-BM0.5AG	1651580000	
100	HDC-C-HD-SM0.75-1.00AG	1601750000	HDC-C-HD-BM0.75-1.00AG	1601760000	
100	HDC-C-HD-SM1.5AG	1651550000	HDC-C-HD-BM1.5AG	1651600000	
100	HDC-C-HD-SM2.5AG	1651560000	HDC-C-HD-BM2.5AG	1651610000	



Conductor cross-section	Insulation stripping length
0.14 – 0.37 mm ²	AWG 26-22 8 mm
0.50 mm ²	AWG 20 8 mm
0.75 – 1.00 mm ²	AWG 18 8 mm
1.50 mm ²	AWG 16 8 mm
2.50 mm ²	AWG 14 6 mm

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
REMOVAL TOOL HD	1866730000

Housing selection RockStar® IP66
Size 12



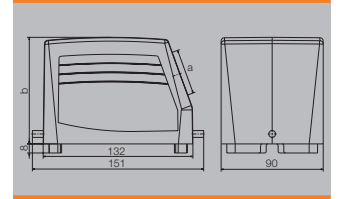
Further housings are available, see Chapter E for IP66

Hood

Plug housing, cable entry sideways



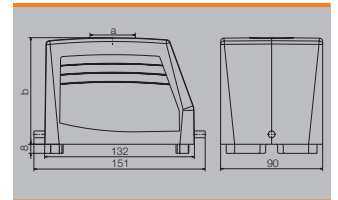
a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		94	HDC 48B TSLU 1M32G	1788320000
M 40	w. threading		94	HDC 48B TSLU 1M40G	1788310000
M 50	w. threading		94	HDC 48B TSLU 1M50G	1788300000



Plug housing, cable entry at top



a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		94	HDC 48B TOLU 1M32G	1788350000
M 50	w. threading		94	HDC 48B TOLU 1M50G	1788330000

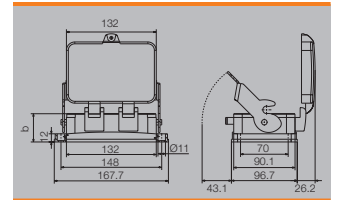


Base

Bulkhead housing



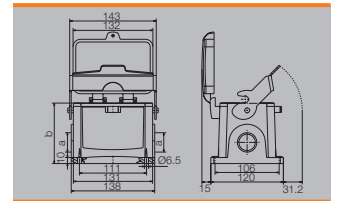
Version	Cover	b (mm)	Type	Order No.
	with cover	62	HDC 48B ADLU	1222900000



Base housing

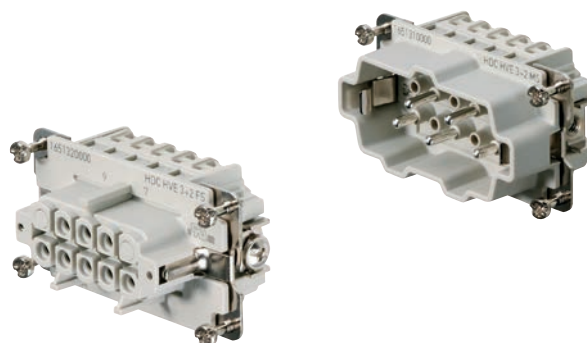


a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		100	HDC 48B SLU 2M32G	1788370000
M 32	w. threading	with cover	120	HDC 48B SDLU 2M32G	1788390000
M 40	w. threading		100	HDC 48B SLU 2M40G	1788360000



HVE series – exciting voltage

Weidmüller high-voltage inserts are equipped with lagging contacts. This results in more security during real operations.



Technical data

Standards / approvals	
Standards	DIN EN 61984 DIN EN 60664-1
Approvals	UL/CSA**
Inserts	
No. of poles	3 + 2, 6 + 2, 10 + 2
Rated voltage	830 V
Rated voltage to UL/CSA	600 V
Rated current	20 A
Rated impulse withstand voltage	8 kV
Pollution severity	3 (1000 V / 8 kV / 2)
Insulation resistance	$\geq 10^{10} \Omega$
Material	Glass-fibre reinforced PC (in UL list and approved for railway applications)
Temperature range	-40 °C ... +125 °C
Flammability to UL 94	V-0
Mechanical service life	
– Plugging cycles Ag - Surface	≥ 500
Contact resistance	$\leq 2 \text{ m}\Omega$
Contacts / Material	
Contacts	Copper alloy
Surface	Passivated silver
Clamping range / Stripping length	
– Screw connection	0.5 - 2.5 mm ² (AWG 20 ... 14) / 8 mm
– Tension clamp connection	0.25 - 2.5 mm ² (AWG 24 ... 14) / 8 mm
Clamping torque	
– Screw connection	0.5 - 0.55 Nm
SD blades	
– Screw connection	0.6 x 3.5 oder PZ 0
– Tension clamp connection	0.5 x 3 oder 0.6 x 3.5
PE connection	
– Clamping range	0.5 ... 4 mm ²
– solid / stranded	0.5 ... 4 mm ² / 0.5 ... 4 mm ²
– flexible / flexible with wire end ferrule, DIN 46228 pt. 1	0.5 ... 4 mm ² / 0.5 ... 4 mm ²
– AWG conductor	AWG 20 ... 12
– Stripping length	10 mm
– Clamping torque	1.2 ... 1.5 Nm
– Blade dimensions	SD 0.8 x 4 mm oder PZ 1

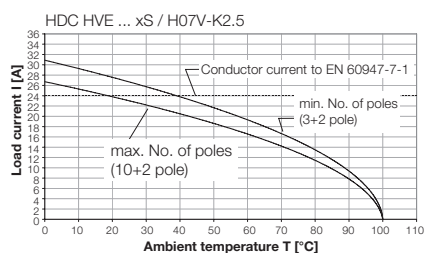
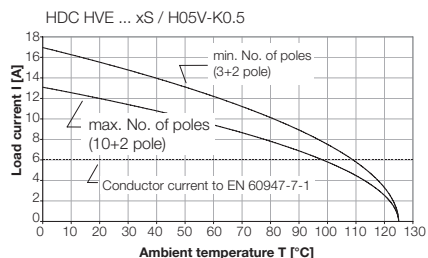
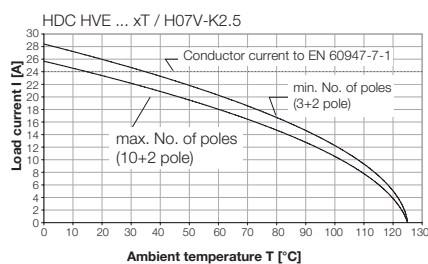
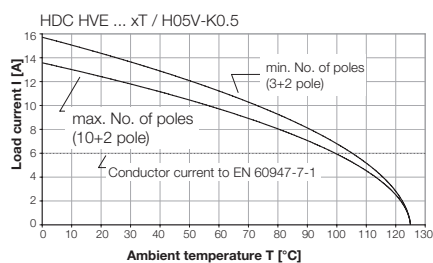
Note: When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load!

Rated voltage determined on the basis of DIN EN 61984 section 6.19.2.2.






500 V for signal contact.

** For screw connection

Derating curves



Overview

		Size	Rated voltage	Rated current	No. of poles	Tension clamp connection	Screw conn. with wire guard spring	Crimp connection	PUSH IN connection	Axial screw connection	Page
		4	830 V	20 A	3 + 2 + ⊥	•	•				B.84
		6	830 V	20 A	6 + 2 + ⊥	•	•				B.86
		8	830 V	20 A	10 + 2 + ⊥	•	•				B.88

HVE series - exciting voltage

830 V, 20 A, Size 4

3 + 2 + ⊕

Inserts

Tension clamp connection



Insert	Type	Order No.
Male	HDC HVE 3+2 MT CtH	1967230000
Female	HDC HVE 3+2 FT CtH	1967220000

Screw connection



Insert	Type	Order No.
Male	HDC HVE 3+2 MS	1651310000
Female	HDC HVE 3+2 FS	1651320000

Dimensions

Arrangement of contacts

Mounting cut-out

Housing selection RockStar® IP66
Size 4



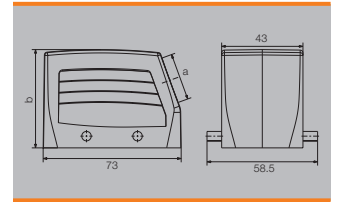
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



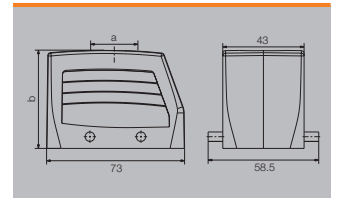
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 10B TSBU 1M20G	1787560000
M 25	w. threading		52	HDC 10B TSBU 1M25G	1787550000
M 25	w. threading		72	HDC 24D TSBU 1M25G	1787240000
M 32	w. threading		72	HDC 24D TSBU 1M32G	1787230000



Plug housing, cable entry at top



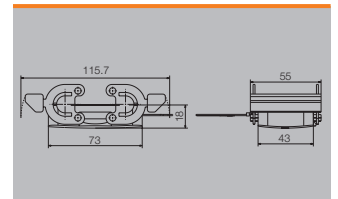
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 10B TOBU 1M20G	1787600000
M 25	w. threading		52	HDC 10B TOBU 1M25G	1787590000
M 25	w. threading		72	HDC 24D TOBU 1M25G	1787300000
M 32	w. threading		72	HDC 24D TOBU 1M32G	1787290000



Cover



Version	Type	Order No.
For hoods	HDC 10B DMDQ 2QB	1665240000

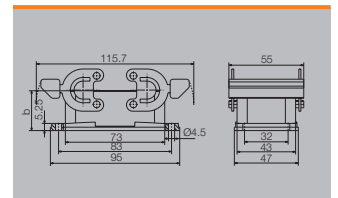


Base

Bulkhead housing



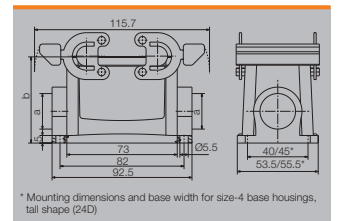
Version	Cover	b (mm)	Type	Order No.
		29.3	HDC 10B ABU	1205000000



Base housing



a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		57	HDC 10B SBU 2M20G	1787640000
M 25	w. threading		57	HDC 10B SBU 2M25G	1787630000

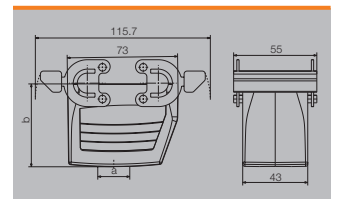


* Mounting dimensions and base width for size-4 base housings, tall shape (24D)

Coupling housing



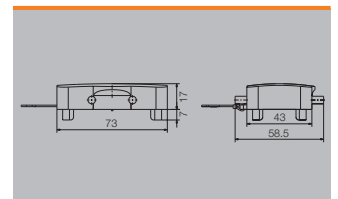
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		55	HDC 10B KBU 1M20G	1787720000



Cover



Version	Type	Order No.
For bases	HDC 10B DODQ 4B0	1665230000



HVE series - exciting voltage

830 V, 20 A, Size 6

6 + 2 + ⊕

Inserts

Tension clamp connection



Insert	Type	Order No.
Male	HDC HVE 6+2 MT CtH	1967250000
Female	HDC HVE 6+2 FT CtH	1967240000

Screw connection



Insert	Type	Order No.
Male	HDC HVE 6+2 MS	1651330000
Female	HDC HVE 6+2 FS	1651340000

Dimensions

Arrangement of contacts

Screw connection Tension clamp connection

Male

Female

○ switch contact
● operating contact

Mounting cut-out

Housing selection RockStar® IP66
Size 6



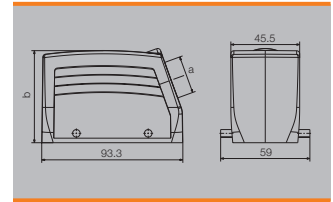
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



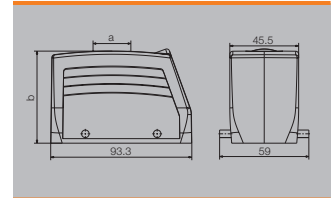
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TSBU 1M25G	1788180000
M 25	w. threading		76	HDC 40D TSBU 1M25G	1787010000
M 32	w. threading		76	HDC 40D TSBU 1M32G	1787000000



Plug housing, cable entry at top



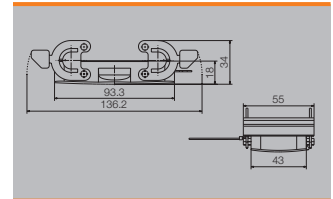
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TOBU 1M25G	1788210000
M 25	w. threading		76	HDC 40D TOBU 1M25G	1787070000
M 32	w. threading		76	HDC 40D TOBU 1M32G	1787060000



Cover



Version	Type	Order No.
For hoods	HDC 16B DMDQ 2QB	1665270000

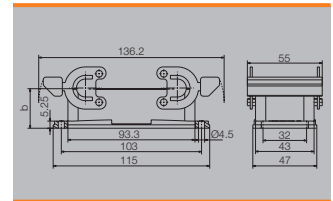


Base

Bulkhead housing



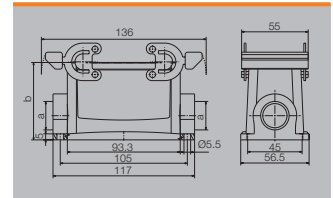
Version	Cover	b (mm)	Type	Order No.
		29	HDC 16B ABU	1208600000



Base housing



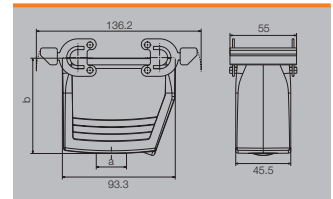
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		64	HDC 16B SBU 2M25G	1788240000
M 25	w. threading		84	HDC 40D SBU 2M25G	1787120000
M 32	w. threading		84	HDC 40D SBU 2M32G	1787110000



Coupling housing



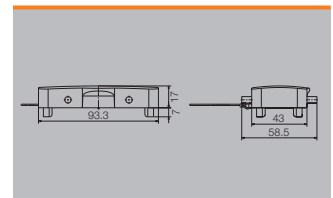
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		79	HDC 40D KBU 1M25G	1787200000
M 32	w. threading		79	HDC 40D KBU 1M32G	1787190000



Cover



Version	Type	Order No.
For bases	HDC 16B DODQ 4B0	1665260000



HVE series - exciting voltage

830 V, 20 A, Size 8

10 + 2 + ⊕

Inserts

Tension clamp connection

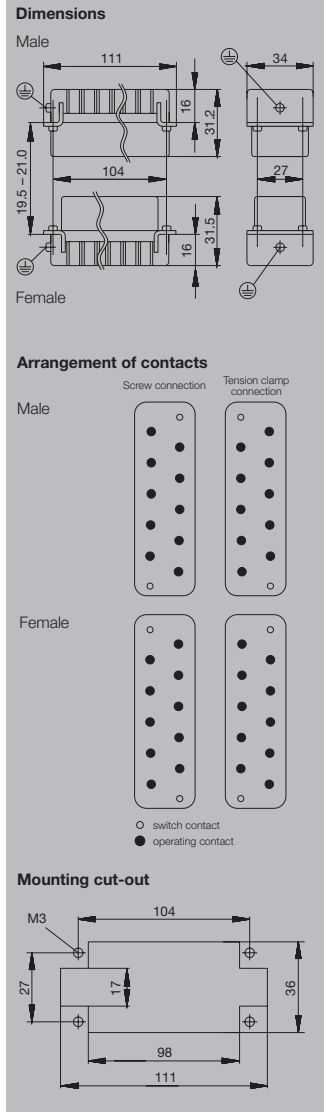


Insert	Type	Order No.
Male	HDC HVE 10+2 MT CtH	1967210000
Female	HDC HVE 10+2 FT CtH	1967260000

Screw connection



Insert	Type	Order No.
Male	HDC HVE 10+2 MS	1651350000
Female	HDC HVE 10+2 FS	1651360000



Housing selection RockStar® IP66
Size 8



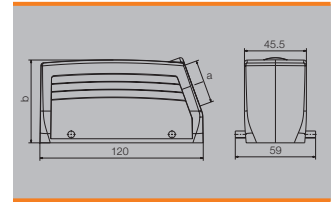
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



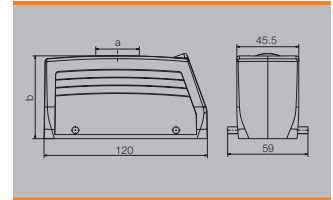
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 24B TSBU 1M25G	1787760000
M 25	w. threading		76	HDC 64D TSBU 1M25G	1786780000
M 32	w. threading		61	HDC 24B TSBU 1M32G	1787750000
M 32	w. threading		76	HDC 64D TSBU 1M32G	1786770000



Plug housing, cable entry at top



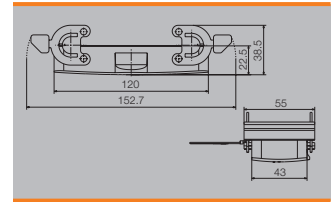
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 24B TOBU 1M25G	1787820000
M 32	w. threading		61	HDC 24B TOBU 1M32G	1787810000
M 32	w. threading		76	HDC 64D TOBU 1M32G	1786830000



Cover



Version	Type	Order No.
For hoods	HDC 24B DMDQ 2QB	1665640000

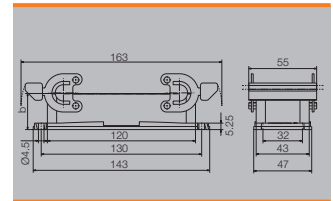


Base

Bulkhead housing



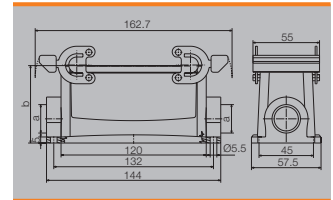
Version	Cover	b (mm)	Type	Order No.
		29.3	HDC 24B ABU	1212400000



Base housing



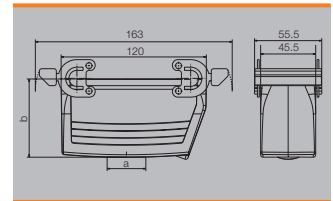
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		64	HDC 24B SBU 2M25G	1787870000
M 25	w. threading		84	HDC 64D SBU 2M25G	1786890000
M 32	w. threading		84	HDC 64D SBU 2M32G	1786880000



Coupling housing



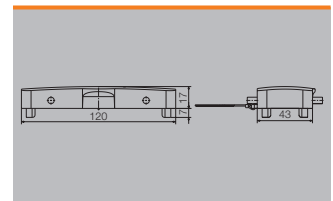
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		65	HDC 24B KBU 1M25G	1787920000
M 32	w. threading		79	HDC 64D KBU 1M32G	1786960000



Cover

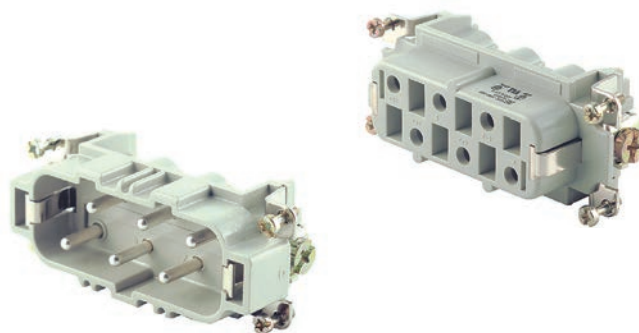


Version	Type	Order No.
For bases	HDC 24B DODQ 4B0	1665630000



HSB series – the heavy-duty connectors

The HSB series provides users with 35 A via each contact with screw connections for a safe and reliable connection.

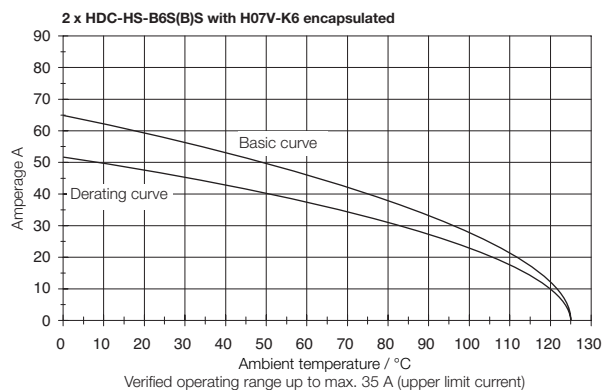


Technical data



Standards / approvals	
Standards	DIN EN 61984 DIN EN 60664-1
Approvals	UL/CSA
Inserts	
No. of poles	6, 12
Rated voltage	400 V
Rated voltage to UL/CSA	600 V
Rated current	35 A
Rated impulse withstand voltage	6 kV
Pollution severity	3
Insulation resistance	$\geq 10^{10} \Omega$
Material	Glass-fibre reinforced PC (in UL list and approved for railway applications)
Temperature range	-40 °C ... +125 °C
Flammability to UL 94	V-0
Mechanical service life	
– Plugging cycles Ag - Surface	≥ 500
– Plugging cycles Au - Surface	≥ 500
Contact resistance	
– Screw connection	$\leq 2 \text{ m}\Omega$
Contacts / Material	
Sockets and plug-in contact	Copper alloy
Surface	Passivated silver
Screw connection	
– Clamping range	0.5 - 6 mm ² (AWG 20 ... 10)
– Stripping length	11 mm
– flex. with wire end ferrule acc. to DIN 46228 pt. 1	4 mm ²
Clamping torque	
– Screw connection	1.2 ... 1.5 Nm
SD blades	0.6 x 3.5 or 0.8 x 4 mm
PE – Connection	
– Clamping range	0.5 ... 6 mm ²
– solid / stranded	0.5 ... 6 mm ² / 0.5 ... 6 mm ²
– flexible/flexible with wire end ferrule, DIN 46228 pt. 1	0.5 ... 6 mm ² / 0.5 ... 6 mm ²
– AWG conductor	AWG 20 ... 10
– Stripping length	10 mm
– Clamping torque	2 ... 2.5 Nm
– Blade dimensions	SD 1 x 5.5 mm or PZ 2

Note: When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load! When connecting flexible conductor with a screw connection, you should use ferrules, according to DIN 46228, section 1.

Derating curves



Overview

	Size	Rated voltage	Rated current	No. of poles	Tension clamp connection	Screw conn. with wire guard spring	Crimp connection	PUSH IN connection	Axial screw connection	Page
	6	400 V	35 A	6 + ⊕		•				B.92
	10	400 V	35 A	12 + ⊕		•				B.94

HSB series - the heavy-duty connectors

400 V, 35 A, Size 6

6 + ⊕

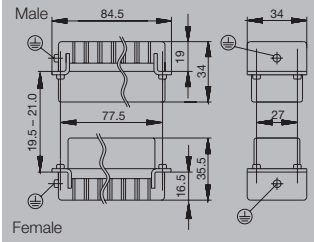
Inserts

Screw connection

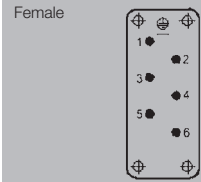
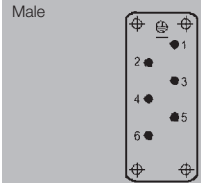


Insert	Type	Order No.
Male	HDC HSB 6 MS	1498700000
Female	HDC HSB 6 FS	1498900000

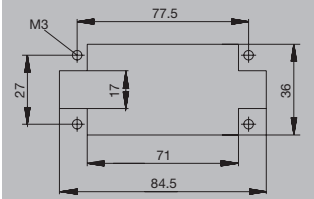
Dimensions



Arrangement of contacts



Mounting cut-out



Housing selection RockStar® IP66
Size 6



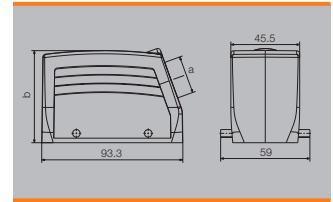
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



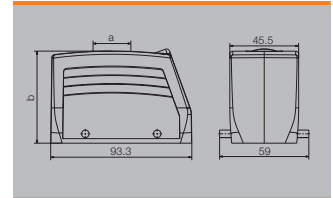
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TSBU 1M25G	1788180000
M 25	w. threading		76	HDC 40D TSBU 1M25G	1787010000
M 32	w. threading		76	HDC 40D TSBU 1M32G	1787000000



Plug housing, cable entry at top



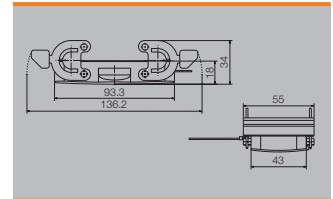
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TOBU 1M25G	1788210000
M 25	w. threading		76	HDC 40D TOBU 1M25G	1787070000
M 32	w. threading		76	HDC 40D TOBU 1M32G	1787060000



Cover



Version	Type	Order No.
For hoods	HDC 16B DMDQ 2QB	1665270000

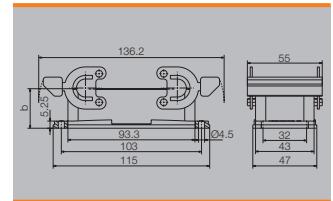


Base

Bulkhead housing



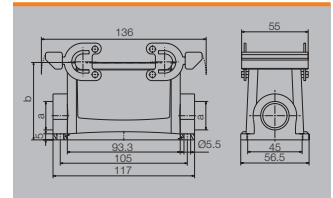
Version	Cover	b (mm)	Type	Order No.
		29	HDC 16B ABU	1208600000



Base housing



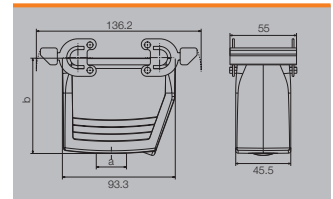
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		64	HDC 16B SBU 2M25G	1788240000
M 25	w. threading		84	HDC 40D SBU 2M25G	1787120000
M 32	w. threading		84	HDC 40D SBU 2M32G	1787110000



Coupling housing



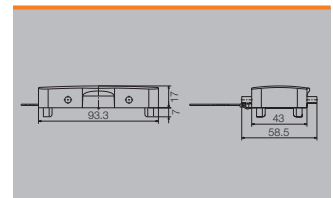
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		79	HDC 40D KBU 1M25G	1787200000
M 32	w. threading		79	HDC 40D KBU 1M32G	1787190000



Cover



Version	Type	Order No.
For bases	HDC 16B DODQ 4B0	1665260000



HSB series - the heavy-duty connectors

400 V, 35 A, Size 10

12 + ⊕

Inserts

Screw connection



Insert	Type	Order No.
Male	HDC HSB 6 MS	1498700000
Female	HDC HSB 6 FS	1498900000
Male	HDC HSB 6 MS 7 - 12	1498800000
Female	HDC HSB 6 FS 7 - 12	1499000000

Note Please use the following inserts for size 10 (12-pole): HSB 6 FS + HSB 6 FS 7-12

Dimensions

Arrangement of contacts

Male

Female

Mounting cut-out

Housing selection RockStar® IP66
Size 10



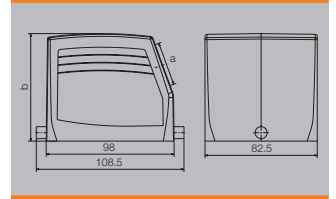
Further housings are available, see
Chapter E for IP66

Hood

Plug housing, cable entry sideways



a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		79	HDC 32B TSLU 1M32G	1788420000

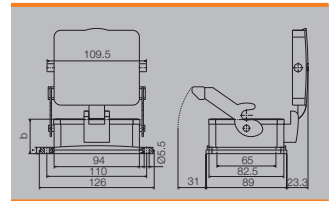


Base

Bulkhead housing



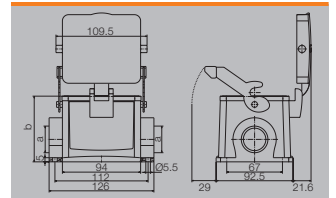
Version	Cover	b (mm)	Type	Order No.
		38	HDC 32B ALU	1219500000
	with cover	55	HDC 32B ADLU	1219800000



Base housing



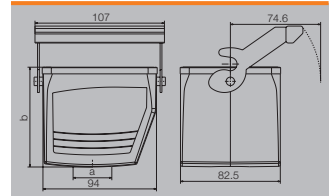
a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		79	HDC 32B SLU 2M32G	1788470000
M 32	w. threading	with cover	96	HDC 32B SDLU 2M32G	1788490000



Coupling housing

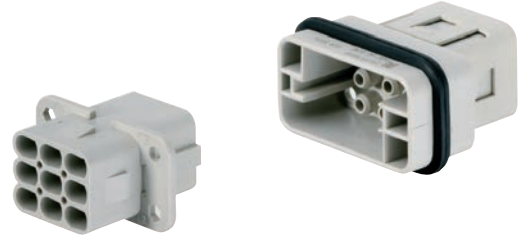


a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		83	HDC 32B KLU 1M32G	1788500000



HQ series – the powerful little connectors

A small size but quite big. The electrical values speak for themselves. The HQs use the proven HE and HD crimp contacts as well as the high-performance HX contacts.








Technical data

	HQ 5	HQ 7	HQ 8	HQ 4 2	HQ 17
Standards / approvals					
Standards	DIN EN 61984 DIN EN 60664-1	DIN EN 61984 DIN EN 60664-1	DIN EN 61984 DIN EN 60664-1	DIN EN 61984 DIN EN 60664-1	DIN EN 61984 DIN EN 60664-1
Approvals	UL/CSA	UL/CSA	UL/CSA/ISO 23570	UL/CSA/ISO 23570	UL/CSA
Inserts					
No. of poles	5 + PE	7 + PE	8 + PE	4 power, 2 signal + PE	17 + PE
Connection system	Crimp, HE-contact	Crimp, HD-contacts	Crimp, HE-contact	Crimp, HX-/HD-contacts	Crimp, HD-contacts
Rated voltage	250 V	400 V	500 V	690 V, 250 V	250 V
Rated voltage to UL/CSA	600 V	600 V	600 V	600 V	600 V
Rated current	16 A	10 A	16 A	40/10 A	10 A
Rated impulse withstand voltage	4 kV	6 kV	6 kV	6 kV/4 kV	4 kV
Pollution severity	3	3	3	3	2
Insulation resistance	≥ 10 ¹⁰ Ω	≥ 10 ¹⁰ Ω	≥ 10 ¹⁰ Ω	≥ 10 ¹⁰ Ω	≥ 10 ¹⁰ Ω
Material	PC glass-fibre reinforced	PC glass-fibre reinforced	PC glass-fibre reinforced	PC glass-fibre reinforced	PC glass-fibre reinforced
Temperature range	-40°...+125°	-40°...+125°	-40°...+125°	-40°...+125°	-40°...+125°
Flammability to UL 94	V - 0	V - 0	V - 0	V - 0	V - 0
Mechanical service life					
- Plugging cycles Ag - Surface	≥ 500	≥ 500	≥ 500	≥ 500	≥ 500
- Plugging cycles Au - Surface	≥ 500	≥ 500	≥ 500	≥ 500	≥ 500
Volume (continuity) resistance of crimp connection ≤ 2 mΩ					
		≤ 4 mΩ	≤ 2 mΩ	≤ 1 mΩ ≤ 4 mΩ	≤ 4 mΩ
Contacts / Material					
Sockets and plug-in contact	Copper alloy	Copper alloy	Copper alloy	Copper alloy	Copper alloy
Surface	Passivated silver	Passivated silver/ gold	Passivated silver	Passivated silver/ gold	Passivated silver/ gold
Crimp connection					
- Performance power range	0.5...4 mm ² (AWG 20...12)		0.5...4 mm ² (AWG 20...12)	1.5...6 mm ² (AWG 16...10)	
- Signal range		0.14...2.5 mm ² (AWG 26...14)		0.14...2.5 mm ² (AWG 26...14)	0.14...2.5 mm ² (AWG 26...14)
- Stripping length	7.5 mm	8.0 mm	7.5 mm	9 mm/8 mm	8.0 mm
PE connection					
- Clamping range	0.5...2.5 mm ²	0.5...2.5 mm ²	0.5...4 mm ²	1.5...6 mm ²	0.14...2.5 mm ²
- flexible/flexible with ferrule	0.5...2.5 mm ² /0.5...2.5 mm ²	0.5...2.5 mm ²	0.5...4 mm ²		
- AWG conductor	AWG 20...14	AWG 20...14	AWG 20...12	AWG 16...10	AWG 26...14
- Stripping length	10 mm	5 mm	7.5 mm	9 mm	8 mm
- Clamping torque	0.5...0.55 Nm	0.5...0.55 Nm			
- Blade dimensions	SD 0.8 x 4 mm	SD 0.8 x 4 mm			
Accessories and tools					
Crimping tools used					
	9205430000 CTIN CM 1.6/2.5 9018490000 CTX CM 1.6/2.5	9205430000 CTIN CM 1.6/2.5 9018490000 CTX CM 1.6/2.5	9205430000 CTIN CM 1.6/2.5 9018490000 CTX CM 1.6/2.5	9205430000 CTIN CM 1.6/2.5 9205440000 CTIN CM 3.6 9018490000 CTX CM 1.6/2.5 9018490000 CTX CM 1.6/2.5	9205430000 CTIN CM 1.6/2.5 9018490000 CTX CM 1.6/2.5
Screwdriver					
			Version Crosshead, shape H Sheet metal screw: ISO 7049-ST 2.9x9.5-F-H	Version Crosshead, shape H Sheet metal screw: ISO 7049-ST 2.9x9.5-F-H	Version Crosshead, shape H Sheet metal screw: ISO 7049-ST 2.9x9.5-F-H
Removal tool for crimps					
	1866750000 Removal Tool HE	1866730000 Removal Tool HD	1866750000 Removal Tool HE	1002990000 Removal Tool HX 1866730000 Removal Tool HD	1866730000 Removal Tool HD

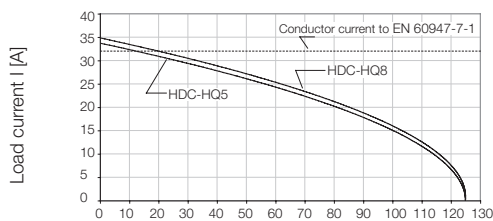
Note: When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load!

Overview

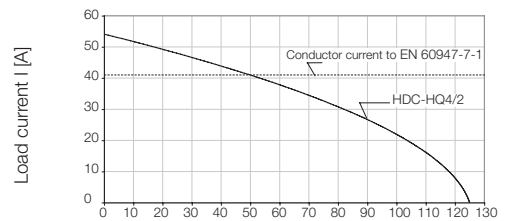
	Size	Rated voltage	Rated current	No. of poles	Tension clamp connection	Screw conn. with wire guard spring	Crimp connection	PUSH IN connection	Axial screw connection	Page
	1	250 V	16 A	5 + ⊕			•			B.98
	1	400 V	10 A	7 + ⊕			•			B.100
	HQ	500 V	16 A	8 + ⊕			•			B.102
	HQ	250 V	10 A	17 + ⊕			•			B.104
	HQ	690/250 V	40/10 A	4 + 2 + ⊕			•			B.106

Technical data

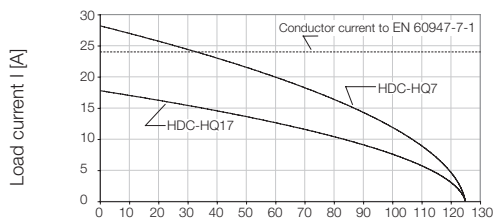
Derating curves



HDC-HQ5 und HDC-HQ8 / H07V-K4.0 Ambient temperature T [°C]



HDC-HQ4/2 / H07V-K6.0 Ambient temperature T [°C]
(control contacts with 10 A / H07V-K2.5)



HDC-HQ7 und HDC-HQ17 / H07V-K2.5 Ambient temperature Tr [°C]

HQ series - the powerful little connectors

250 V, 16 A, Size 1

5 + ⊕

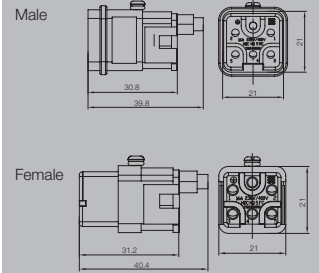
Inserts

Crimp connection

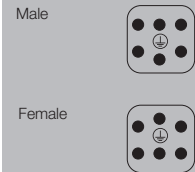


Insert	Type	Order No.
Male	HDC HQ 5 MC	1912440000
Female	HDC HQ 5 FC	1912460000

Dimensions



Arrangement of contacts



Accessories

Crimp contacts

Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HE-SM0.5AU	1651420000	HDC-C-HE-BM0.5AU	1651470000	
100	HDC-C-HE-SM0.75-1.00AU	1651430000	HDC-C-HE-BM0.75-1.00AU	1651480000	
100	HDC-C-HE-SM1.5AU	1651440000	HDC-C-HE-BM1.5AU	1651490000	
100	HDC-C-HE-SM2.5AU	1651450000	HDC-C-HE-BM2.5AU	1651500000	
100	HDC-C-HE-SM4.0AU	1651460000	HDC-C-HE-BM4.0AU	1651510000	
100	HDC-C-HE-SM0.5AG	1200500000	HDC-C-HE-BM0.5AG	1201100000	
100	HDC-C-HE-SM0.75-1.00AG	1200600000	HDC-C-HE-BM0.75-1.00AG	1201200000	
100	HDC-C-HE-SM1.5AG	1200700000	HDC-C-HE-BM1.5AG	1201300000	
100	HDC-C-HE-SM2.5AG	1200800000	HDC-C-HE-BM2.5AG	1201400000	
100	HDC-C-HE-SM4.0AG	1200900000	HDC-C-HE-BM4.0AG	1201500000	

Conductor cross-section	Insulation stripping length
0.50 mm ²	AWG 20 7.5 mm
0.75 – 1.00 mm ²	AWG 18 7.5 mm
1.50 mm ²	AWG 16 7.5 mm
2.50 mm ²	AWG 14 7.5 mm
4.00 mm ²	AWG 12 7.5 mm

Coding pin

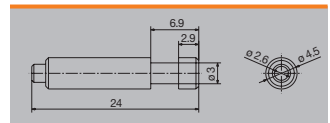


Qty.	Type	Order No.
100	HDC HE CP	1003240000

Tools



Crimping tool		Order No.
CTX CM 1.6/2.5		9018490000
CTIN CM 1.6/2.5		9205430000
Contact Removal Tool		Order No.
Removal Tool HE		1866750000



Housing selection RockStar® IP66
Size 1



Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

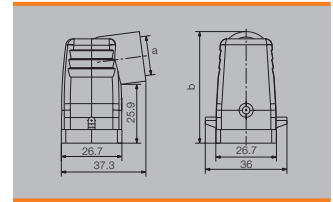
Hood

Plug housing, cable entry sideways



Material: diecast aluminium

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		49.2	HDC 04A TWLU 1M20G	1788810000

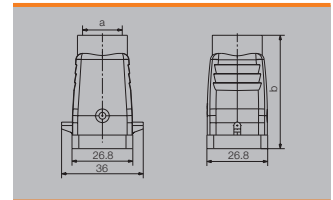


Plug housing, cable entry at top



Material: diecast aluminium

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		50	HDC 04A TOLU 1M20G	1788820000



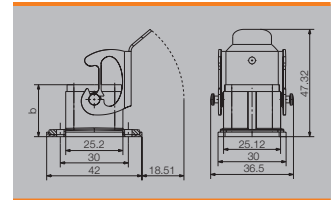
Base

Bulkhead housing



Material: diecast aluminium

Version	Cover	b (mm)	Type	Order No.
		23	HDC 04A ALU	1497600000

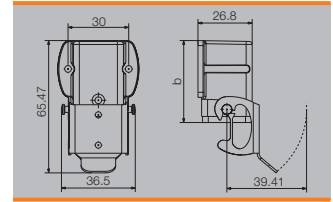


Base housing



Material: diecast aluminium

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		41.5	HDC 04A SLU 1M20G	1788830000

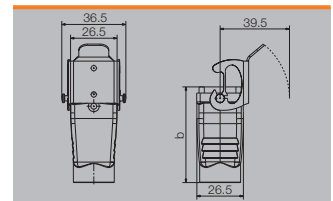


Coupling housing



Material: diecast aluminium

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		53.5	HDC 04A KOLU 1M20G	1788840000

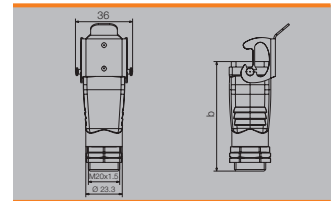


Screw mounting housing



Material: diecast aluminium

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		54	HDC 04A ELU 1M20G	1900320000

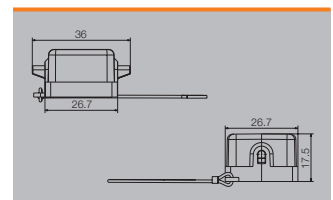


Cover



Material: diecast aluminium

Version	Type	Order No.
for female insert	HDC 04A DMDL 2BO	1665750000
for male insert	HDC 04A DODL 2BO	1665740000



HQ series - the powerful little connectors

400 V, 10 A, Size 1

7 + ⊕

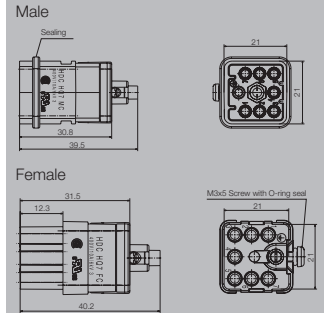
Inserts

Crimp connection

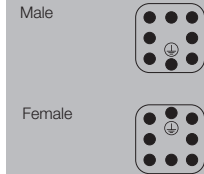


Insert	Type	Order No.
Male	HDC HQ 7 MC	1003190000
Female	HDC HQ 7 FC	1003180000

Dimensions



Arrangement of contacts



Accessories

Crimp contacts

Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HD-SM0.14-0.37AU	1651620000	HDC-C-HD-BM0.14-0.37AU	1651670000	
100	HDC-C-HD-SM0.5AU	1651630000	HDC-C-HD-BM0.5AU	1651680000	
100	HDC-C-HD-SM0.75-1.00AU	1651640000	HDC-C-HD-BM0.75-1.00AU	1651690000	
100	HDC-C-HD-SM1.5AU	1651650000	HDC-C-HD-BM1.5AU	1651700000	
100	HDC-C-HD-SM2.5AU	1651660000	HDC-C-HD-BM2.5AU	1651710000	
100	HDC-C-HD-SM0.14-0.37AG	1651520000	HDC-C-HD-BM0.14-0.37AG	1651570000	
100	HDC-C-HD-SM0.5AG	1651530000	HDC-C-HD-BM0.5AG	1651580000	
100	HDC-C-HD-SM0.75-1.00AG	1601750000	HDC-C-HD-BM0.75-1.00AG	1601760000	
100	HDC-C-HD-SM1.5AG	1651550000	HDC-C-HD-BM1.5AG	1651600000	
100	HDC-C-HD-SM2.5AG	1651560000	HDC-C-HD-BM2.5AG	1651610000	

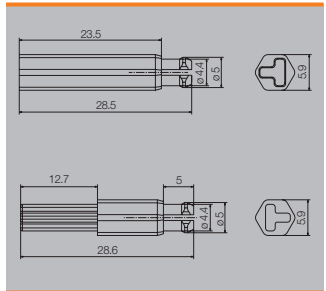
Conductor cross-section	Insulation stripping length
0.14 – 0.37 mm ²	AWG 26-22 8 mm
0.50 mm ²	AWG 20 8 mm
0.75 – 1.00 mm ²	AWG 18 8 mm
1.50 mm ²	AWG 16 8 mm
2.50 mm ²	AWG 14 6 mm

Coding pin



Qty.	Type	Order No.
50	HDC HQ 7 CPM	1003230000
50	HDC HQ 7 CPF	1003220000

Note: six-way coding is possible with a coding pin.



Tools



Crimping tool		Order No.
CTX CM 1.6/2.5		9018490000
CTIN CM 1.6/2.5		9205430000
Contact Removal Tool		Order No.
REMOVAL TOOL HD		1866730000

Housing selection RockStar® IP66
Size 1



Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

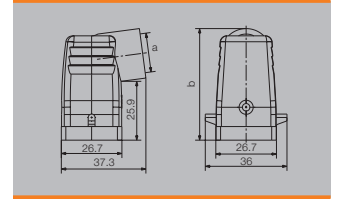
Hood

Plug housing, cable entry sideways



Material: diecast aluminium

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		49.2	HDC 04A TWLU 1M20G	1788810000

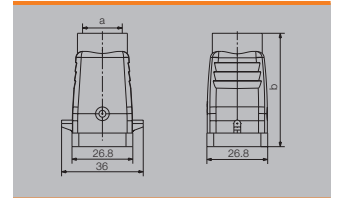


Plug housing, cable entry at top



Material: diecast aluminium

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		50	HDC 04A TOLU 1M20G	1788820000



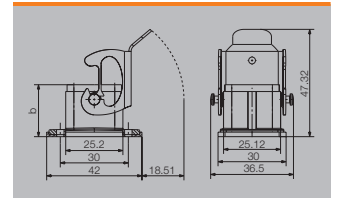
Base

Bulkhead housing



Material: diecast aluminium

Version	Cover	b (mm)	Type	Order No.
		23	HDC 04A ALU	1497600000

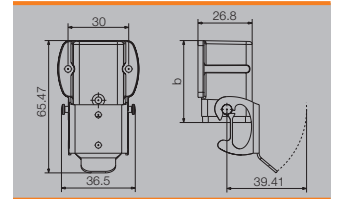


Base housing



Material: diecast aluminium

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		41.5	HDC 04A SLU 1M20G	1788830000

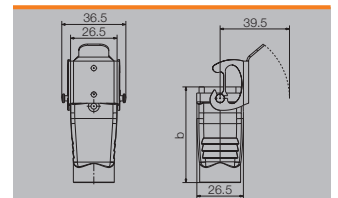


Coupling housing



Material: diecast aluminium

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		53.5	HDC 04A KOLU 1M20G	1788840000

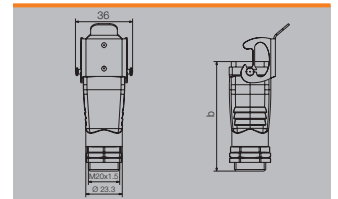


Screw mounting housing



Material: diecast aluminium

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		54	HDC 04A ELU 1M20G	1900320000

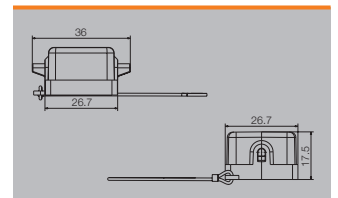


Cover



Material: diecast aluminium

Version	Type	Order No.
for female insert	HDC 04A DMDL 2BO	1665750000
for male insert	HDC 04A DODL 2BO	1665740000



HQ series - the powerful little connectors

500 V, 16 A, Size HQ

8 + ⊕

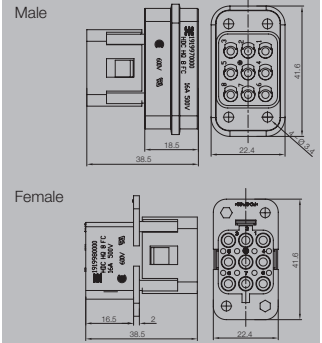
Inserts

Crimp connection

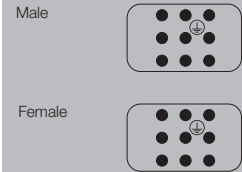


Insert	Type	Order No.
Male	HDC HQ 8 MC	1919970000
Female	HDC HQ 8 FC	1919980000

Dimensions



Arrangement of contacts



Accessories

Crimp contacts

Surface finish gold



Surface finish silver



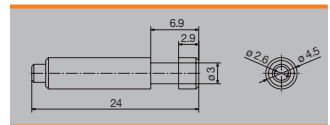
Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HE-SM0.5AU	1651420000	HDC-C-HE-BM0.5AU	1651470000	
100	HDC-C-HE-SM0.75-1.00AU	1651430000	HDC-C-HE-BM0.75-1.00AU	1651480000	
100	HDC-C-HE-SM1.5AU	1651440000	HDC-C-HE-BM1.5AU	1651490000	
100	HDC-C-HE-SM2.5AU	1651450000	HDC-C-HE-BM2.5AU	1651500000	
100	HDC-C-HE-SM4.0AU	1651460000	HDC-C-HE-BM4.0AU	1651510000	
100	HDC-C-HE-SM0.5AG	1200500000	HDC-C-HE-BM0.5AG	1201100000	
100	HDC-C-HE-SM0.75-1.00AG	1200600000	HDC-C-HE-BM0.75-1.00AG	1201200000	
100	HDC-C-HE-SM1.5AG	1200700000	HDC-C-HE-BM1.5AG	1201300000	
100	HDC-C-HE-SM2.5AG	1200800000	HDC-C-HE-BM2.5AG	1201400000	
100	HDC-C-HE-SM4.0AG	1200900000	HDC-C-HE-BM4.0AG	1201500000	

Conductor cross-section	Insulation stripping length
0.50 mm ²	AWG 20 7.5 mm
0.75 – 1.00 mm ²	AWG 18 7.5 mm
1.50 mm ²	AWG 16 7.5 mm
2.50 mm ²	AWG 14 7.5 mm
4.00 mm ²	AWG 12 7.5 mm

Coding pin



Qty.	Type	Order No.
100	HDC HE CP	1003240000



Tools



Crimping tool		Order No.
CTX CM 1.6/2.5		9018490000
CTIN CM 1.6/2.5		9205430000
Contact Removal Tool		Order No.
Removal Tool HE		1866750000

Housing selection RockStar® IP66
Size HQ



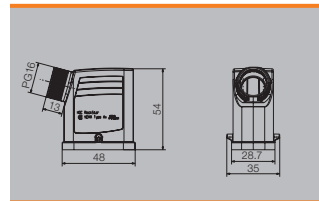
Further housings are available, see Chapter E for IP66

Hood

Plug housing, cable entry sideways



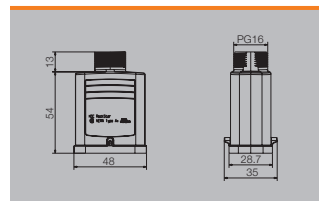
a	Version	Cover	b (mm)	Type	Order No.
PG 16	w. threading		54	HDC HQP TSLU 1PG16	1003090000



Plug housing, cable entry at top



a	Version	Cover	b (mm)	Type	Order No.
PG 16	w. threading		67	HDC HQP TOLU 1PG16	1003070000

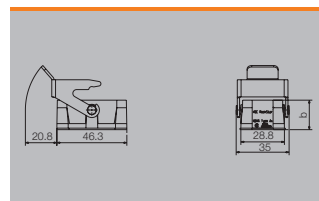


Base

Bulkhead housing



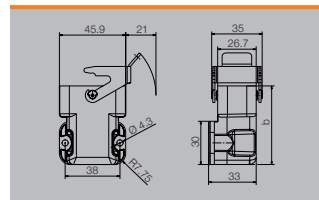
Version	Cover	b (mm)	Type	Order No.
		19.5	HDC HQP ALU	1003040000



Bulkhead housing angled



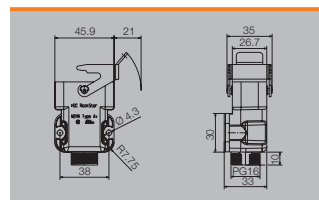
Version	Cover	b (mm)	Type	Order No.
angled		54.5	HDC HQP AWLU	1003060000



Base housing



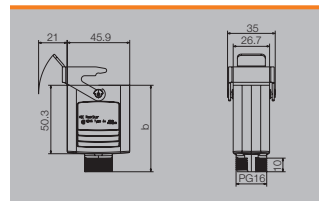
a	Version	Cover	b (mm)	Type	Order No.
PG 16	w. threading		54.5	HDC HQP SLU 1PG16	1003110000



Coupling housing



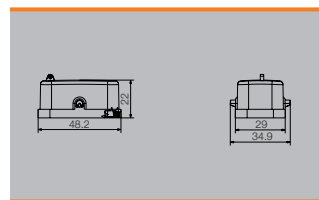
a	Version	Cover	b (mm)	Type	Order No.
PG 16	w. threading		63.5	HDC HQP KOLU 1PG16	1003120000



Cover



Version	Type	Order No.
for female insert	HDC HQP DMD 2BO	1003130000
for male insert	HDC HQP DOD 2BO	1003140000



Note For plastic and metal housings

HQ series - the powerful little connectors

250 V, 10 A, Size HQ

17 + ⊕

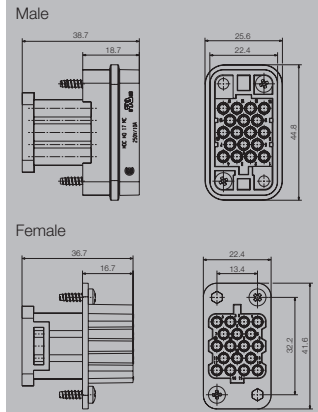
Inserts

Crimp connection

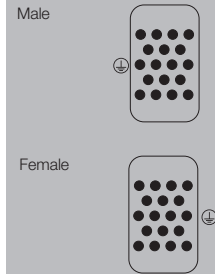


Insert	Type	Order No.
Male	HDC HQ 17 MC	1003210000
Female	HDC HQ 17 FC	1003200000

Dimensions



Arrangement of contacts



Accessories

Crimp contacts

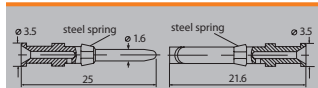
Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HD-SM0.14-0.37AU	1651620000	HDC-C-HD-BM0.14-0.37AU	1651670000	
100	HDC-C-HD-SM0.5AU	1651630000	HDC-C-HD-BM0.5AU	1651680000	
100	HDC-C-HD-SM0.75-1.00AU	1651640000	HDC-C-HD-BM0.75-1.00AU	1651690000	
100	HDC-C-HD-SM1.5AU	1651650000	HDC-C-HD-BM1.5AU	1651700000	
100	HDC-C-HD-SM2.5AU	1651660000	HDC-C-HD-BM2.5AU	1651710000	
100	HDC-C-HD-SM0.14-0.37AG	1651520000	HDC-C-HD-BM0.14-0.37AG	1651570000	
100	HDC-C-HD-SM0.5AG	1651530000	HDC-C-HD-BM0.5AG	1651580000	
100	HDC-C-HD-SM0.75-1.00AG	1601750000	HDC-C-HD-BM0.75-1.00AG	1601760000	
100	HDC-C-HD-SM1.5AG	1651550000	HDC-C-HD-BM1.5AG	1651600000	
100	HDC-C-HD-SM2.5AG	1651560000	HDC-C-HD-BM2.5AG	1651610000	



Conductor cross-section	Insulation stripping length
0.14 – 0.37 mm ²	AWG 26-22 8 mm
0.50 mm ²	AWG 20 8 mm
0.75 – 1.00 mm ²	AWG 18 8 mm
1.50 mm ²	AWG 16 8 mm
2.50 mm ²	AWG 14 6 mm

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
CTIN CM 1.6/2.5	9205430000
Contact Removal Tool	
REMOVAL TOOL HD	1866730000

Housing selection RockStar® IP66
Size HQ



Further housings are available, see
Chapter E for IP66

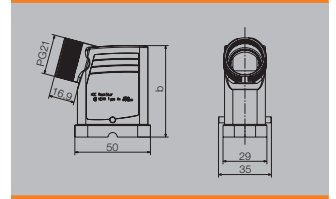
Hood

Plug housing, cable entry sideways



Material: Zinc diecast

a	Version	Cover	b (mm)	Type	Order No.
PG 21	w. threading		60.5	HDC HQM TSLU 1PG21	1003100000

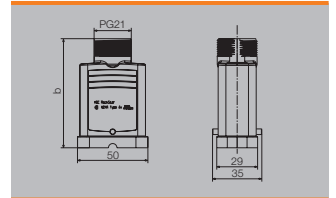


Plug housing, cable entry at top



Material: Zinc diecast

a	Version	Cover	b (mm)	Type	Order No.
PG 21	w. threading		77.5	HDC HQM TOLU 1PG21	1003080000



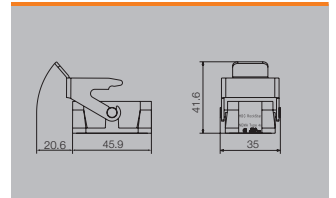
Base

Bulkhead housing



Material: Zinc diecast

Version	Cover	b (mm)	Type	Order No.
		20.5	HDC HQM ALU	1003050000

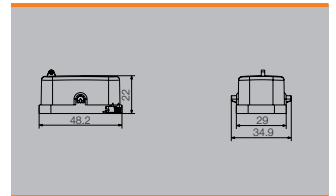


Cover



Material: Plastic

a	Version	Cover	b (mm)	Type	Order No.
		for female insert	23.5	HDC HQP DMD 2BO	1003130000
		for male insert	23.5	HDC HQP DOD 2BO	1003140000



Note For plastic and metal housings

HQ series - the powerful little connectors

690/250 V, 40/10 A, Size HQ

4 + 2 + ⊕

Inserts

Crimp connection



Insert	Type	Order No.
Male	HDC HQ 4/2 MC	1003170000
Female	HDC HQ 4/2 FC	1003160000

Dimensions

Male

Female

Arrangement of contacts

Male

Female

Accessories

Crimp contacts

Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
25	HDC C HX SM1.5AG	1002910000	HDC C HX BM1.5AG	1002950000	1002950000
25	HDC C HX SM2.5AG	1002920000	HDC C HX BM2.5AG	1002960000	1002960000
25	HDC C HX SM4.0AG	1002930000	HDC C HX BM4.0AG	1002970000	1002970000
25	HDC C HX SM6.0AG	1002940000	HDC C HX BM6.0AG	1002980000	1002980000

Conductor cross-section	Insulation stripping length
1.50 mm ²	AWG 16 8 mm
2.50 mm ²	AWG 14 8 mm
4.00 mm ²	AWG 12 8 mm
6.00 mm ²	AWG 10 8 mm

Tools



Crimping tool	
CTIN CM 1.6/2.5	9205430000
Contact Removal Tool	
Removal Tool HX	1002990000

Crimp contacts

Surface finish gold



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HD-SM0.14-0.37AU	1651620000	HDC-C-HD-BM0.14-0.37AU	1651670000	1651670000
100	HDC-C-HD-SM0.5AU	1651630000	HDC-C-HD-BM0.5AU	1651680000	1651680000
100	HDC-C-HD-SM0.75-1.00AU	1651640000	HDC-C-HD-BM0.75-1.00AU	1651690000	1651690000
100	HDC-C-HD-SM1.5AU	1651650000	HDC-C-HD-BM1.5AU	1651700000	1651700000
100	HDC-C-HD-SM2.5AU	1651660000	HDC-C-HD-BM2.5AU	1651710000	1651710000

Conductor cross-section	Insulation stripping length
0.14 – 0.37 mm ²	AWG 26-22 8 mm
0.50 mm ²	AWG 20 8 mm
0.75 – 1.00 mm ²	AWG 18 8 mm
1.50 mm ²	AWG 16 8 mm
2.50 mm ²	AWG 14 6 mm

Surface finish silver



100	HDC-C-HD-SM0.14-0.37AG	1651520000	HDC-C-HD-BM0.14-0.37AG	1651570000	1651570000
100	HDC-C-HD-SM0.5AG	1651530000	HDC-C-HD-BM0.5AG	1651580000	1651580000
100	HDC-C-HD-SM0.75-1.00AG	1601750000	HDC-C-HD-BM0.75-1.00AG	1601760000	1601760000
100	HDC-C-HD-SM1.5AG	1651550000	HDC-C-HD-BM1.5AG	1651600000	1651600000
100	HDC-C-HD-SM2.5AG	1651560000	HDC-C-HD-BM2.5AG	1651610000	1651610000

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
REMOVAL TOOL HD	1866730000

Housing selection RockStar® IP66
Size HQ



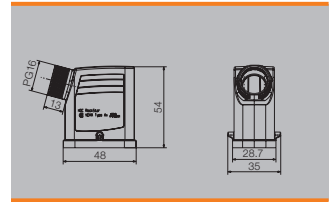
Further housings are available, see
Chapter E for IP66

Hood

Plug housing, cable entry sideways



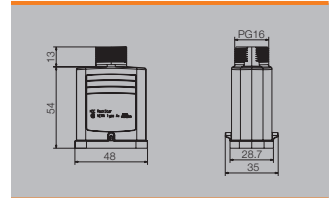
a	Version	Cover	b (mm)	Type	Order No.
PG 16	w. threading		54	HDC HQP TSLU 1PG16	1003090000



Plug housing, cable entry at top



a	Version	Cover	b (mm)	Type	Order No.
PG 16	w. threading		67	HDC HQP TOLU 1PG16	1003070000

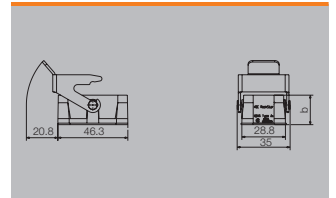


Base

Bulkhead housing



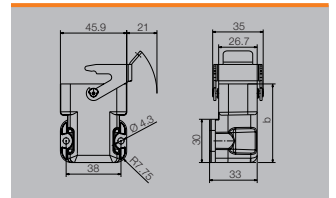
Version	Cover	b (mm)	Type	Order No.
		19.5	HDC HQP ALU	1003040000



Bulkhead housing angled



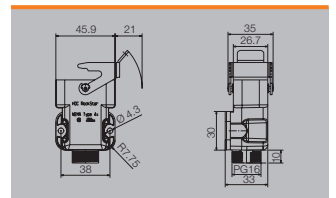
Version	Cover	b (mm)	Type	Order No.
angled		54.5	HDC HQP AWLU	1003060000



Base housing



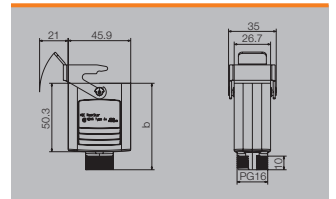
a	Version	Cover	b (mm)	Type	Order No.
PG 16	w. threading		54.5	HDC HQP SLU 1PG16	1003110000



Coupling housing



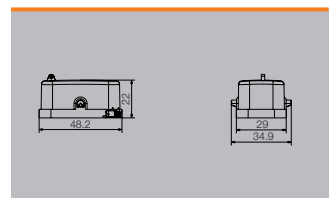
a	Version	Cover	b (mm)	Type	Order No.
PG 16	w. threading		63.5	HDC HQP KOLU 1PG16	1003120000



Cover



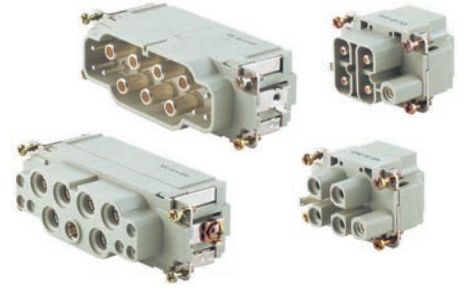
Version	Type	Order No.
for female insert	HDC HQP DMD 2BO	1003130000
for male insert	HDC HQP DOD 2BO	1003140000



Note For plastic and metal housings

MixMate series – the high-capacity connectors

Using the MixMate series, high rated currents and voltages can be transmitted concurrently with signals in a very confined space. MixMate is available in threaded, axial screw and crimp connection technology.



Technical data

	S4	S8/24	S4/0 Axial	S4/0	S4/2
Standards / approvals					
Standards	DIN EN 61984 DIN EN 60664-1	DIN EN 61984 DIN EN 60664-1	DIN EN 61984 DIN EN 60664-1	DIN EN 61984 DIN EN 60664-1	DIN EN 61984 DIN EN 60664-1
Approvals	UL/CSA	UL/CSA/VDE	UL/CSA	UL/CSA/VDE	UL/CSA/VDE
Inserts					
No. of poles					
– Power contact	4 (+PE)	8 (+PE)	4 (+PE)	4 (+PE)	4 (+PE)
– Signal contact		24			2
Rated voltage					
– Power contact	1000 V	400 V	690 V	830 V	830 V
– Signal contact		160 V			400 V
Rated voltage to UL/CSA	600 V	600 V	600 V	600 V	600 V
Rated current					
– Power contact	65 A	16 A	80 A	80 A	80 A
– Signal contact		10 A			16 A
Rated impulse withstand voltage					
– Power contact	8 KV	4 KV	8 KV	8 KV	8 KV
– Signal contact		2.5 KV			6 KV
Pollution severity	3	3	3 (1000 V / 8 kV / 2)	3	3
Insulation resistance	$\geq 10^{10} \Omega$	$\geq 10^{10} \Omega$	$\geq 10^{10} \Omega$	$\geq 10^{10} \Omega$	$\geq 10^{10} \Omega$
Material	Glass-fibre reinforced PC (in UL list and approved for railway applications)	Glass-fibre reinforced PC (in UL list and approved for railway applications)	Glass-fibre reinforced PC (in UL list and approved for railway applications)	Glass-fibre reinforced PC (in UL list and approved for railway applications)	Glass-fibre reinforced PC (in UL list and approved for railway applications)
Temperature range	-40 °C ... +125 °C	-40 °C ... +125 °C	-40 °C ... +125 °C	-40 °C ... +125 °C	-40 °C ... +125 °C
Flammability to UL 94	V-0	V-0	V-0	V-0	V-0
Mechanical service life					
– Plugging cycles Ag - Surface	≥ 500	≥ 500	≥ 500	≥ 500	≥ 500
– Plugging cycles Au - Surface		≥ 500			
Contact resistance with min. and max. conductors	$\leq 1 \text{ m}\Omega$	$\leq 2 \text{ m}\Omega$ (Power) $\leq 4 \text{ m}\Omega$ (Signals)	$\leq 1 \text{ m}\Omega$	$\leq 1 \text{ m}\Omega$	$\leq 1 \text{ m}\Omega$ (Power) $\leq 2 \text{ m}\Omega$ (Signals)
Contacts / Material					
Sockets and plug-in contact	Copper alloy	Copper alloy	Copper alloy	Copper alloy	Copper alloy
Surface	Passivated silver	Passivated silver or gold-plated	Passivated silver	Passivated silver	Passivated silver
Flexible conductor connection					
– Power contact	2.5 - 10 mm ² (AWG 14 ... 8)	0.5 - 4 mm ² (AWG 20 ... 12)	1.5 - 16 mm ² (AWG 16 ... 6)	1.5 - 16 mm ² (AWG 16 ... 6)	1.5 - 16 mm ² (AWG 16 ... 6)
– Signal contact		0.14 - 2.5 mm ² (AWG 26 ... 14)			0.5 - 2.5 mm ² (AWG 22 ... 14)
Stripping length					
– Power contact	8 mm	7.5 mm	13 mm	15 mm	15 mm
– Signal contact		8 mm			8 mm
Clamping torque					
– Power contact	1.1 - 1.7 Nm		2 ... 3 Nm	1.2 Nm (1.5 mm ²) / 2 Nm (2.5 mm ²) / 3 Nm (4 - 16 mm ²)	1.2 Nm (1.5 mm ²) / 2 Nm (2.5 mm ²) / 3 Nm (4 - 16 mm ²)
– Signal contact					0.5 - 0.55 Nm
Tools					
– Hexagon socket, 2 mm	SW 2		SW 3		
– Screwdriver	0.6 x 3.5 mm			SD 0.8 x 4 mm	SD 0.8 x 4 mm (Power) / SD 0.6 x 3.5 mm or PH1 (Signals)
– Crimping tool		CTIN 1.6/2.5 / CTX CM 1.6/2.5 (for 0.5 - 1.5 mm ²)			
PE connection via plug/socket					
– Clamping range	1.5/2.5 - 4/10 mm ²	0.5 - 6 mm ² (0.5 mm ² with ferrule)	1.5 - 16 mm ² with cable lug	0.5 - 16 mm ² (0.5 mm ² with ferrule 10 - 16 mm ² with ring cable lug)	0.5 - 16 mm ² (0.5 mm ² with ferrule 10 - 16 mm ² with ring cable lug)
– AWG conductor	AWG 16/14 ... 12/8	AWG 20 ... 10 (AWG 10 with ring cable lug)	AWG 16 ... 4	AWG 20 ... 6 (AWG 10, 8 and 6 with ring cable lug)	AWG 20 ... 6 (AWG 10, 8 and 6 with ring cable lug)
– Stripping length	8 mm	13 mm	8 mm (for wire up to 6 mm ² only)	13 mm	13 mm
– Clamping torque	0.5 - 0.8 Nm	2 - 2.5 Nm	2 - 2.5 Nm	2 - 2.5 Nm	2 - 2.5 Nm
– Blade dimensions	SD 0.8 x 4 mm	SD 1.2 x 6.5 mm or PH 2	SD 0.8 x 4 mm or PZ 2	SD 1.2 x 6.5 mm or PH 2	SD 1.2 x 6.5 mm or PH 2

Note: When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load!

* Power contact = Axial screw connection, Signal contact = Screw connection

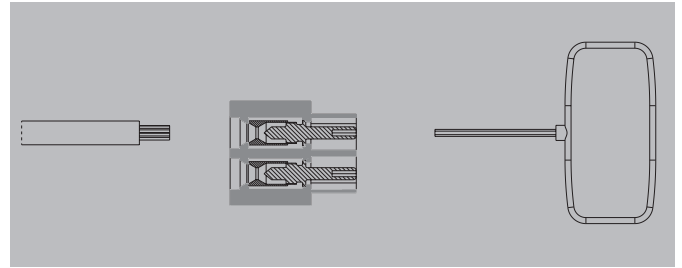
S6/12*	S6/36	S12/2	S4/8	S6/6*	S8/0
DIN EN 61984 DIN EN 60664-1 UL/CSA	DIN EN 61984 DIN EN 60664-1 UL/CSA/VDE	DIN EN 61984 DIN EN 60664-1 UL/CSA/VDE	DIN EN 61984 DIN EN 60664-1 UL/CSA/VDE	DIN EN 61984 DIN EN 60664-1 UL/CSA	DIN EN 61984 DIN EN 60664-1 UL/CSA/VDE
6 (+PE) 12	6 (+PE) 36	12 (+PE) 2	4 (+PE) 8	6 (+PE) 6	8 (+PE x 2)
690 V 400 V 600 V	690 V 160 V 600 V	690 V 250 V 600 V	400 V 400 V 600 V	690 V 400 V 600 V	690 V 600 V
48 A 16 A	40 A 10 A	40 A 10 A	80 A 16 A	100 A 16 A	110 A
8 KV 6 KV 3	8 KV 2.5 KV 3	8 KV 4 KV 3	6 KV 6 KV 3	8 KV 6 KV 3	8 KV 3
≥ 10 ¹⁰ Ω	≥ 10 ¹⁰ Ω	≥ 10 ¹⁰ Ω	≥ 10 ¹⁰ Ω	≥ 10 ¹⁰ Ω	≥ 10 ¹⁰ Ω
Glass-fibre reinforced PC (in UL list and approved for railway applications)	Glass-fibre reinforced PC (in UL list and approved for railway applications)	Glass-fibre reinforced PC (in UL list and approved for railway applications)	Glass-fibre reinforced PC (in UL list and approved for railway applications)	Glass-fibre reinforced PC (in UL list and approved for railway applications)	Glass-fibre reinforced PC (in UL list and approved for railway applications)
-40 °C ... +125 °C	-40 °C ... +125 °C	-40 °C ... +125 °C	-40 °C ... +125 °C	-40 °C ... +125 °C	-40 °C ... +125 °C
V - 0	V - 0	V - 0	V - 0	V - 0	V - 0
≥ 500	≥ 500 ≥ 500	≥ 500 ≥ 500	≥ 500	≥ 500	≥ 500
≤ 2 mΩ (Power) ≤ 2 mΩ (Signals)	≤ 2 mΩ (Power) ≤ 4 mΩ (Signals)	≤ 2 mΩ (Power) ≤ 4 mΩ (Signals)	≤ 1 mΩ (Power) ≤ 2 mΩ (Signals)	≤ 1 mΩ (Power) ≤ 2 mΩ (Signals)	≤ 1 mΩ
Copper alloy Passivated silver	Copper alloy Passivated silver or gold-plated	Copper alloy Passivated silver or gold-plated	Copper alloy Passivated silver	Copper alloy Passivated silver	Copper alloy Passivated silver
2.5 - 10 mm ² (AWG 14 ... 8) 0.5 - 2.5 mm ² (AWG 24 ... 14)	1.5 - 6 mm ² (AWG 16 ... 10) 0.14 - 2.5 mm ² (AWG 26 ... 14)	1.5 - 6 mm ² (AWG 16 ... 10) 0.14 - 2.5 mm ² (AWG 26 ... 14)	1.5 - 16 mm ² (AWG 16 ... 6) 0.5 - 2.5 mm ² (AWG 22 ... 14)	16 - 35 mm ² (AWG 6 ... 2) 0.5 - 2.5 mm ² (AWG 24 ... 14)	10 - 25 mm ² (AWG 8 ... 4)**
8 mm 12 mm	9 mm 8 mm	9 mm 8 mm	15 mm 8 mm	13 mm 12 mm	12 mm
1.1 ... 1.7 Nm			1.2 Nm (1.5 mm ²) / 2 Nm (2.5 mm ²) / 3 Nm (4 - 16 mm ²)	6 ... 8 Nm	6 Nm (10 - 16 mm ²) / 7 Nm (25 mm ²)
0.45 ... 0.9 Nm			0.5 - 0.55 Nm	0.45 ... 0.9 Nm	
SW 2 0.6 x 3.5 mm			SD 0.8 x 4 mm (Power) / SD 0.6 x 3.5 mm or PH1 (Signals)	SW 4 SD 0.6 x 3.5 or PZ 0	SW 4
	CTIN 1.6/2.5 / CTX CM 1.6/2.5 (for 0.5 - 1.5 mm ²)	CTIN 1.6/2.5 / CTX CM 1.6/2.5 (for 0.5 - 1.5 mm ²)			
2.5 - 10 mm ²	0.5 - 6 mm ² (0.5 mm ² with ferrule)	0.5 - 6 mm ² (0.5 mm ² with ferrule)	0.5 - 16 mm ² (0.5 mm ² with ferrule), 10 - 16 mm ² with ring cable lug)	16 - 35 mm ²	10 - 25 mm ² **
AWG 14 ... 8	AWG 20 ... 10 (AWG 10 with ring cable lug)	AWG 20 ... 10 (AWG 10 with ring cable lug)	AWG 20 ... 6 (AWG 10, 8 and 6 with ring cable lug)	AWG 6 ... 2	AWG 8 ... 4
8 mm	13 mm	13 mm	13 mm	8 mm	12 mm
2 - 2.5 Nm	2 - 2.5 Nm	2 - 2.5 Nm	2 - 2.5 Nm	6 - 8 Nm	6 Nm (10 - 16 mm ²)/7 Nm (25 mm ²)
SD 0.8 x 4 mm or PZ 2	SD 1.2 x 6.5 mm or PH 2	SD 1.2 x 6.5 mm or PH 2	SD 1.2 x 6.5 mm or PH 2	SD 0.8 x 4 mm or PZ 1	SD 5.5 x 1.0 or PH2

MixMate series – the high-capacity connectors

Overview

		Size	Rated voltage	Rated current	No. of poles	Tension clamp connection	Screw conn. with wire guard spring	Crimp connection	PUSH IN connection	Axial screw connection	Page
		3	1000 V	65 A	4 + ⊕					•	B.114
		4	400 V	16 A	8 + 24 + ⊕			•			B.116
		6	830 V	80 A	4 + 0 + ⊕					•	B.118
		6	830 V	80 A	4 + 0 + ⊕		•				B.120
		6	830 V	80 A	4 + 2 + ⊕		•				B.122
		6	690 V	40 A	6 + 36 + ⊕			•			B.124
		6	690 V	48 A	6 + 12 + ⊕		•			•	B.126
		6	690 V	40 A	12 + 2 + ⊕			•			B.128
		8	400 V	80 A	4 + 8 + ⊕		•				B.130
		8	690 V	100 A	6 + 6 + ⊕		•			•	B.132
		8	690 V	110 A	8 + 0 + ⊕					•	B.134

Hex-socket wrench



Ordering data

Type	Qty.	Order No.
IS 2 KG	2	1806630000
IS 3 KG	2	1806650000
IS 4 KG	2	1806660000

Assembly instructions:

1. Strip wire, refer to the technical data for stripping length. Be careful not to twist the litz conductor!
2. Insert the litz conductor into the contact cavity until the insulation lies flush against the contact.
3. Insert the hex wrench into the corresponding contact on the mating face side. Hold the litz conductor in position when tightening the clamping nut.

Technical data

Power contacts	S 4	S 4/0	S 6/12	S 6/6
Stripping length	8 mm	13 mm	8 mm	13 mm
Tightening torque	1.1 – 1.7 Nm	2 - 3 Nm	1.1 – 1.7 Nm	6 ... 8 Nm
Hex-socket wrench	IS 2 KG	IS 3 KG	IS 2 KG	IS 4 KG

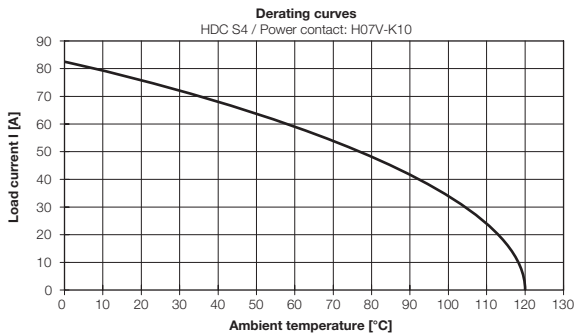
Technical data

Derating curves

Size 3

HDC S4

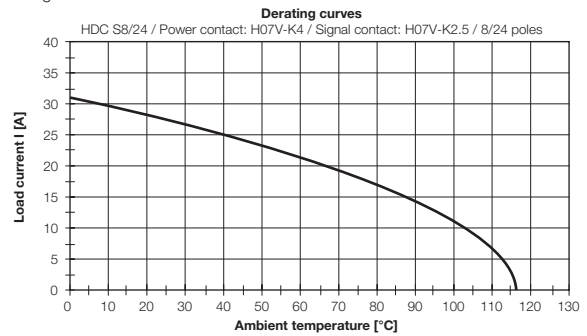
Power contacts: conductor H07V-K14, current varied
Derating factor: 0.80



Size 4

HDC S8/24

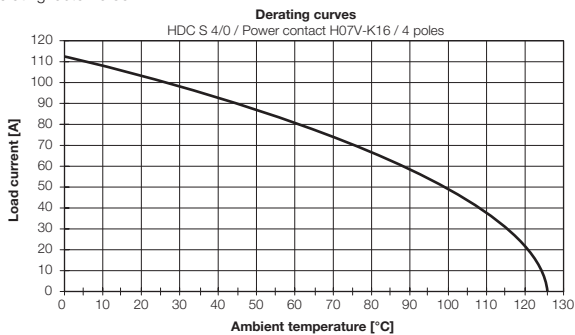
Power contacts: conductor: H07V-K14, current varied
Signal contacts: conductor: H07V-K2.5, continuous current of 10 A
Derating factor: 0.80



Size 6

HDC S4/0

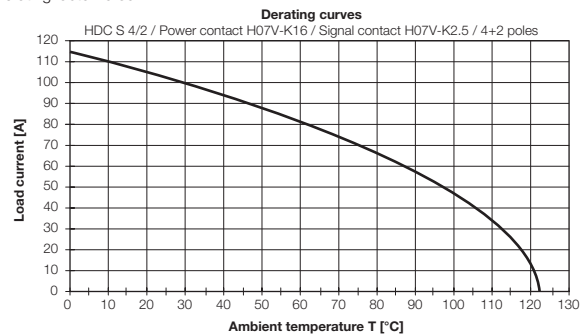
Power contacts H07V-K16, current varied
Signal contacts are not available
Derating factor: 0.80



Size 6

HDC S4/2

Power contacts H07V-K16, current varied
Signal contacts H07V-K2.5, 16 A constant current
Derating factor: 0.80



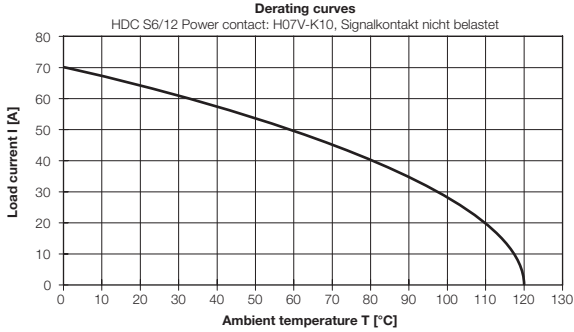
Technical data

Derating curves

Size 6

HDC S6/12

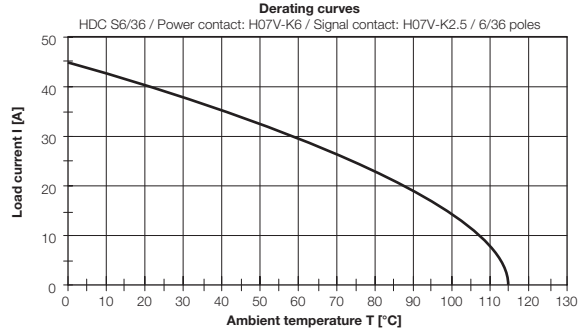
Power contacts: conductor H07V-K10, current varied
 Signal contacts: conductor under no load
 Derating factor: 0.80



Size 6

HDC S6/36

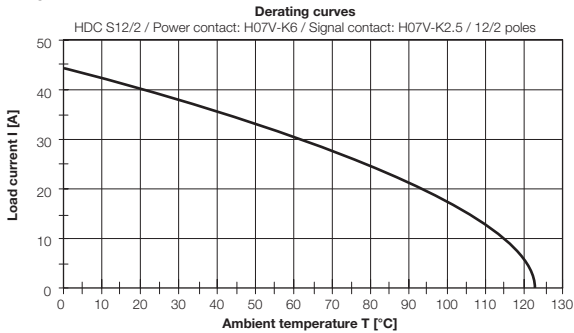
Power contacts: conductor: H07V-K6, current varied
 Signal contacts: conductor: H07V-K2.5, continuous current of 10 A
 Derating factor: 0.80



Size 6

HDC S12/2

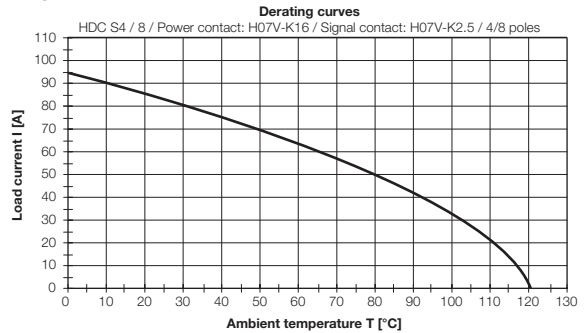
Power contacts: conductor H07V-K10, current varied
 Signal contacts: conductor: H07V-K2.5, continuous current of 10 A
 Derating factor: 0.80



Size 8

HDC S4/8

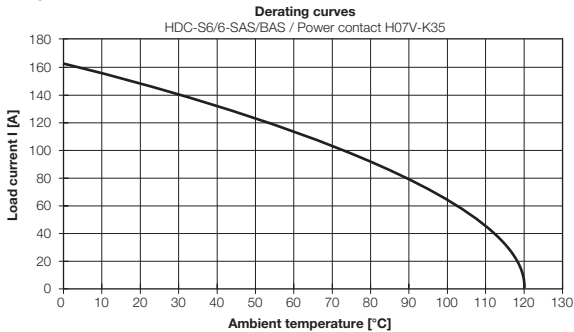
Power contacts: conductor: H07V-K16, current varied
 Signal contacts: conductor: H07V-K2.5, continuous current of 16 A
 Derating factor: 0.80



Size 8

HDC S6/6

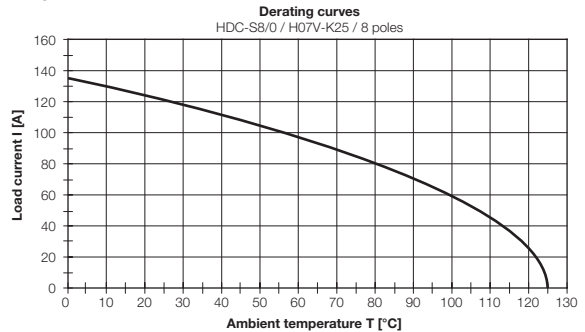
Power contacts: conductor H07V-K35, current varied
 Signal contacts: H07V-K2.5, continuous current of 16A
 Derating factor: 0.80



Size 8

HDC S8/0

Power contacts: conductor: H07V-K25, current varied
 Signal contacts: not available
 Derating factor: 0.80



MixMate series - the high-capacity connectors

1000 V, 65 A, Size 3

4 + ⊕

Inserts

Axial screw connection



Insert	Type	Order No.
Male	HDC S4 SAS	1789990000
Female	HDC S4 BAS	1789980000

Note Combine these inserts only with housings with a high design (Size 16D).

Dimensions

Arrangement of contacts

Mounting cut-out

Housing selection RockStar® IP66
Size 3



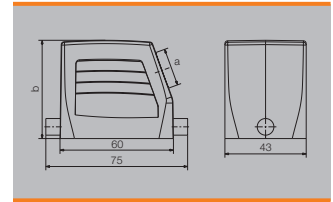
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



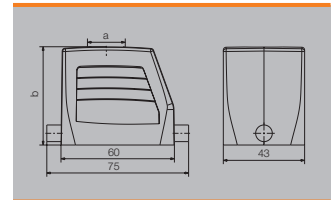
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		72	HDC 16D TSLU 1M25G	1787480000
M 32	w. threading		72	HDC 16D TSLU 1M32G	1787470000



Plug housing, cable entry at top



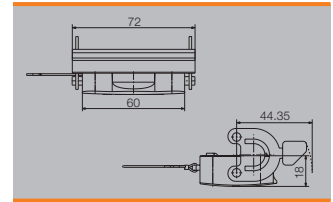
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		72	HDC 16D TOLU 1M25G	1787500000
M 32	w. threading		72	HDC 16D TOLU 1M32G	1787490000



Cover



Version	Type	Order No.
For hoods	HDC 06B DMDL 1LB	1665210000

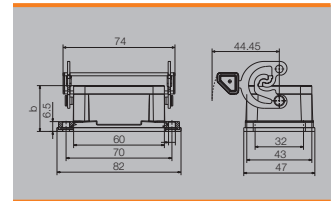


Base

Bulkhead housing



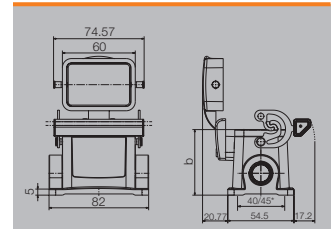
Version	Cover	b (mm)	Type	Order No.
		29	HDC 06B ALU	1202100000
	with cover	47	HDC 06B ADLU	1202500000



Base housing



a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		74	HDC 16D SLU 2M25G	1787520000
M 25	w. threading	with cover	92	HDC 16D SDLU 2M25G	1787540000
M 32	w. threading		74	HDC 16D SLU 2M32G	1787510000

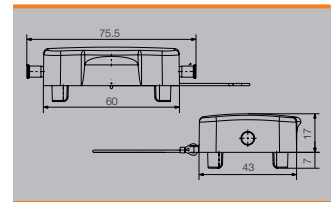


* Mounting dimensions for size-3 base housings, tall shape (16D)

Cover



Version	Type	Order No.
For bases	HDC 06B DODL 2B0	1665200000



MixMate series - the high-capacity connectors

400 V, 16 A, Size 4

8 + 24 + ⊕

Inserts

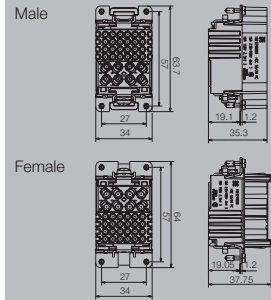
Crimp connection



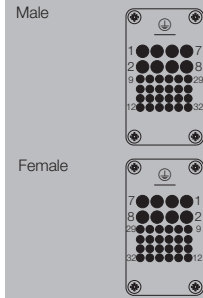
Insert	Type	Order No.
Male	HDC S8/24 MC	1023290000
Female	HDC S8/24 FC	1023270000

Note The signal contacts are designed for a rated voltage of 160 V and a rated current of 10 A.

Dimensions



Arrangement of contacts



Accessories

Crimp contacts

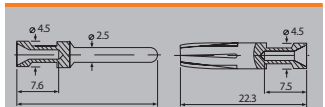
Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HE-SM0.5AU	1651420000	HDC-C-HE-BM0.5AU	1651470000	1651470000
100	HDC-C-HE-SM0.75-1.00AU	1651430000	HDC-C-HE-BM0.75-1.00AU	1651480000	1651480000
100	HDC-C-HE-SM1.5AU	1651440000	HDC-C-HE-BM1.5AU	1651490000	1651490000
100	HDC-C-HE-SM2.5AU	1651450000	HDC-C-HE-BM2.5AU	1651500000	1651500000
100	HDC-C-HE-SM4.0AU	1651460000	HDC-C-HE-BM4.0AU	1651510000	1651510000
Surface finish silver			Surface finish silver		
100	HDC-C-HE-SM0.5AG	1200500000	HDC-C-HE-BM0.5AG	1201100000	1201100000
100	HDC-C-HE-SM0.75-1.00AG	1200600000	HDC-C-HE-BM0.75-1.00AG	1201200000	1201200000
100	HDC-C-HE-SM1.5AG	1200700000	HDC-C-HE-BM1.5AG	1201300000	1201300000
100	HDC-C-HE-SM2.5AG	1200800000	HDC-C-HE-BM2.5AG	1201400000	1201400000
100	HDC-C-HE-SM4.0AG	1200900000	HDC-C-HE-BM4.0AG	1201500000	1201500000



Conductor cross-section	Insulation stripping length
0.50 mm ²	AWG 20 7.5 mm
0.75 – 1.00 mm ²	AWG 18 7.5 mm
1.50 mm ²	AWG 16 7.5 mm
2.50 mm ²	AWG 14 7.5 mm
4.00 mm ²	AWG 12 7.5 mm

Crimp contacts

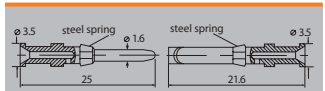
Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HD-SM0.14-0.37AG	1651620000	HDC-C-HD-BM0.14-0.37AG	1651670000	1651670000
100	HDC-C-HD-SM0.5AU	1651630000	HDC-C-HD-BM0.5AU	1651680000	1651680000
100	HDC-C-HD-SM0.75-1.00AU	1651640000	HDC-C-HD-BM0.75-1.00AU	1651690000	1651690000
100	HDC-C-HD-SM1.5AU	1651650000	HDC-C-HD-BM1.5AU	1651700000	1651700000
100	HDC-C-HD-SM2.5AU	1651660000	HDC-C-HD-BM2.5AU	1651710000	1651710000
Surface finish silver			Surface finish silver		
100	HDC-C-HD-SM0.14-0.37AG	1651520000	HDC-C-HD-BM0.14-0.37AG	1651570000	1651570000
100	HDC-C-HD-SM0.5AG	1651530000	HDC-C-HD-BM0.5AG	1651580000	1651580000
100	HDC-C-HD-SM0.75-1.00AG	1601750000	HDC-C-HD-BM0.75-1.00AG	1601760000	1601760000
100	HDC-C-HD-SM1.5AG	1651550000	HDC-C-HD-BM1.5AG	1651600000	1651600000
100	HDC-C-HD-SM2.5AG	1651560000	HDC-C-HD-BM2.5AG	1651610000	1651610000



Conductor cross-section	Insulation stripping length
0.14 – 0.37 mm ²	AWG 26-22 8 mm
0.50 mm ²	AWG 20 8 mm
0.75 – 1.00 mm ²	AWG 18 8 mm
1.50 mm ²	AWG 16 8 mm
2.50 mm ²	AWG 14 6 mm

Tools



Crimping tool		
CTIN CM 1.6/2.5		9205430000
Contact Removal Tool		
Removal Tool HE		1866750000
REMOVAL TOOL HD		1866730000

Housing selection RockStar® IP66
Size 4



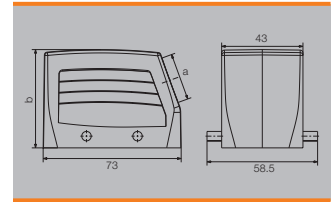
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



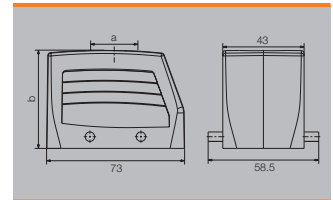
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 10B TSBU 1M20G	1787560000
M 25	w. threading		52	HDC 10B TSBU 1M25G	1787550000
M 25	w. threading		72	HDC 24D TSBU 1M25G	1787240000
M 32	w. threading		72	HDC 24D TSBU 1M32G	1787230000



Plug housing, cable entry at top



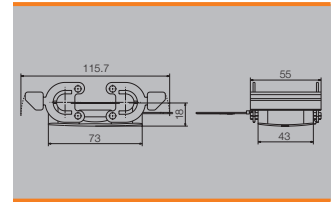
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 10B TOBU 1M20G	1787600000
M 25	w. threading		52	HDC 10B TOBU 1M25G	1787590000
M 25	w. threading		72	HDC 24D TOBU 1M25G	1787300000
M 32	w. threading		72	HDC 24D TOBU 1M32G	1787290000



Cover



Version	Type	Order No.
For hoods	HDC 10B DMDQ 2QB	1665240000

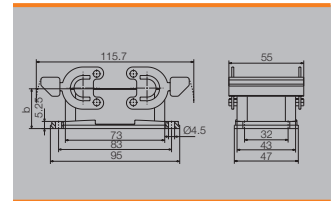


Base

Bulkhead housing



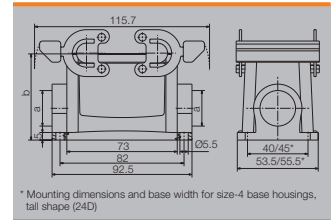
Version	Cover	b (mm)	Type	Order No.
		29.3	HDC 10B ABU	1205000000



Base housing



a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		57	HDC 10B SBU 2M20G	1787640000
M 25	w. threading		57	HDC 10B SBU 2M25G	1787630000

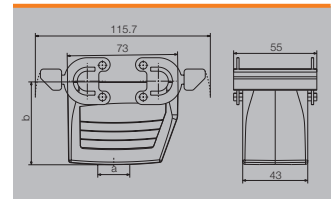


* Mounting dimensions and base width for size-4 base housings, tall shape (24D)

Coupling housing



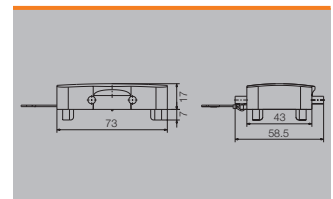
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		55	HDC 10B KBU 1M20G	1787720000



Cover



Version	Type	Order No.
For bases	HDC 10B DODQ 4B0	1665230000



MixMate series - the high-capacity connectors

830 V, 80 A, Size 6

4 + 0 + ⊕

Inserts

Axial screw connection



Insert	Type	Order No.
Male	HDC S4 0 SAS	1789960000
Female	HDC S4 0 BAS	1789970000

Dimensions

Arrangement of contacts

Male

Female

Mounting cut-out

Housing selection RockStar® IP66
Size 6



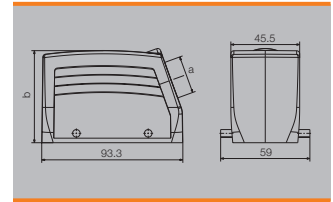
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



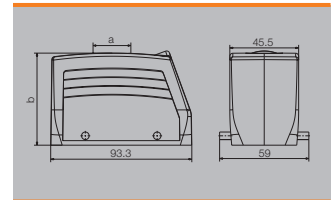
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TSBU 1M25G	1788180000
M 25	w. threading		76	HDC 40D TSBU 1M25G	1787010000
M 32	w. threading		76	HDC 40D TSBU 1M32G	1787000000



Plug housing, cable entry at top



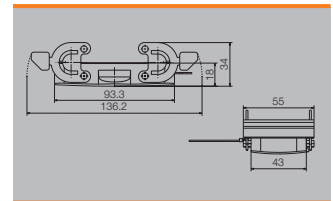
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TOBU 1M25G	1788210000
M 25	w. threading		76	HDC 40D TOBU 1M25G	1787070000
M 32	w. threading		76	HDC 40D TOBU 1M32G	1787060000



Cover



Version	Type	Order No.
For hoods	HDC 16B DMDQ 2QB	1665270000

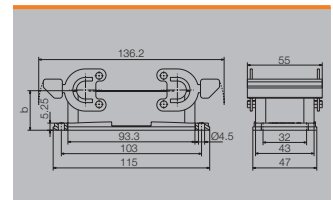


Base

Bulkhead housing



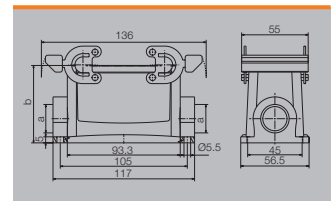
Version	Cover	b (mm)	Type	Order No.
		29	HDC 16B ABU	1208600000



Base housing



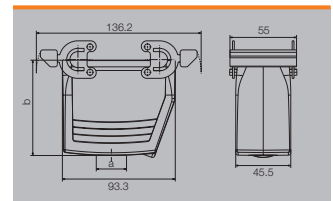
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		64	HDC 16B SBU 2M25G	1788240000
M 25	w. threading		84	HDC 40D SBU 2M25G	1787120000
M 32	w. threading		84	HDC 40D SBU 2M32G	1787110000



Coupling housing



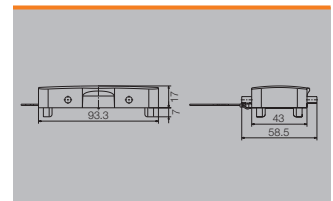
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		79	HDC 40D KBU 1M25G	1787200000
M 32	w. threading		79	HDC 40D KBU 1M32G	1787190000



Cover



Version	Type	Order No.
For bases	HDC 16B DODQ 4B0	1665260000



MixMate series - the high-capacity connectors

830 V, 80 A, Size 6

4 + 0 + ⊕

Inserts

Screw connection



Insert	Type	Order No.
Male	HDC S4/0 MS	1023220000
Female	HDC S4/0 FS	1023210000

Dimensiones

Male

Female

Arrangement of contacts

Male

Female

Housing selection RockStar® IP66
Size 6



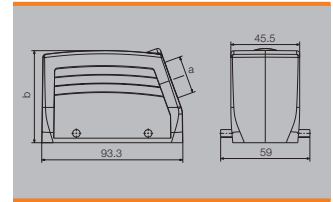
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



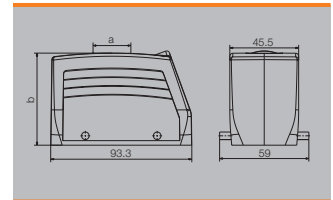
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TSBU 1M25G	1788180000
M 25	w. threading		76	HDC 40D TSBU 1M25G	1787010000
M 32	w. threading		76	HDC 40D TSBU 1M32G	1787000000



Plug housing, cable entry at top



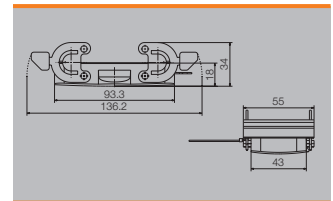
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TOBU 1M25G	1788210000
M 25	w. threading		76	HDC 40D TOBU 1M25G	1787070000
M 32	w. threading		76	HDC 40D TOBU 1M32G	1787060000



Cover



Version	Type	Order No.
For hoods	HDC 16B DMDQ 2QB	1665270000

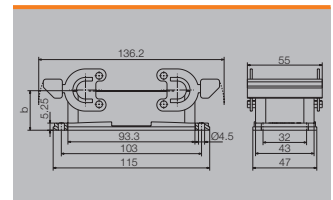


Base

Bulkhead housing



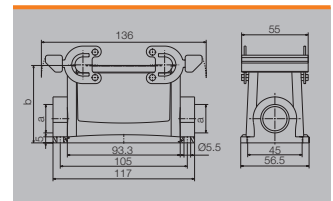
Version	Cover	b (mm)	Type	Order No.
		29	HDC 16B ABU	1208600000



Base housing



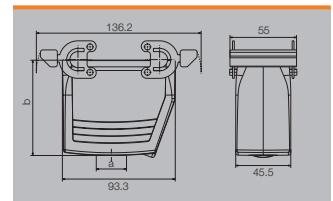
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		64	HDC 16B SBU 2M25G	1788240000
M 25	w. threading		84	HDC 40D SBU 2M25G	1787120000
M 32	w. threading		84	HDC 40D SBU 2M32G	1787110000



Coupling housing



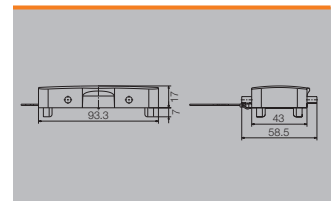
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		79	HDC 40D KBU 1M25G	1787200000
M 32	w. threading		79	HDC 40D KBU 1M32G	1787190000



Cover



Version	Type	Order No.
For bases	HDC 16B DODQ 4B0	1665260000



MixMate series - the high-capacity connectors

830 V, 80 A, Size 6

4 + 2 + ⊕

Inserts

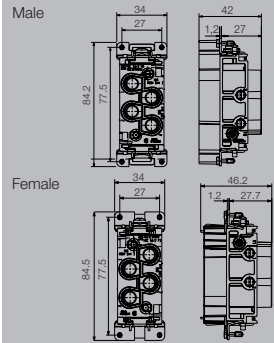
Screw connection



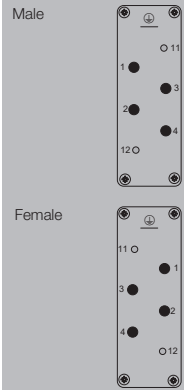
Insert	Type	Order No.
Male	HDC S4/2 MS	1023240000
Female	HDC S4/2 FS	1023230000

Note The signal contacts are designed for a rated voltage of 400V and a rated current of 16A.

Dimensions



Arrangement of contacts



Housing selection RockStar® IP66
Size 6



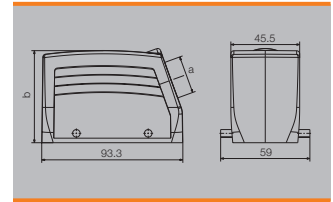
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



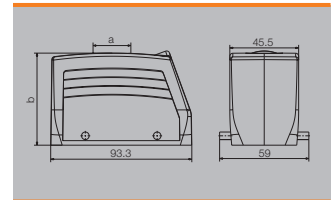
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TSBU 1M25G	1788180000
M 25	w. threading		76	HDC 40D TSBU 1M25G	1787010000
M 32	w. threading		76	HDC 40D TSBU 1M32G	1787000000



Plug housing, cable entry at top



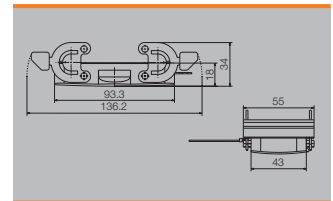
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TOBU 1M25G	1788210000
M 25	w. threading		76	HDC 40D TOBU 1M25G	1787070000
M 32	w. threading		76	HDC 40D TOBU 1M32G	1787060000



Cover



Version	Type	Order No.
For hoods	HDC 16B DMDQ 2QB	1665270000

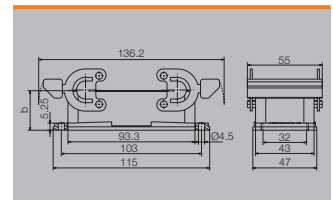


Base

Bulkhead housing



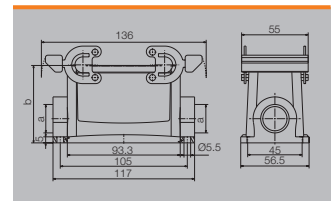
Version	Cover	b (mm)	Type	Order No.
		29	HDC 16B ABU	1208600000



Base housing



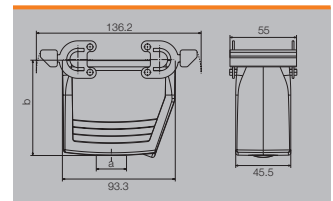
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		64	HDC 16B SBU 2M25G	1788240000
M 25	w. threading		84	HDC 40D SBU 2M25G	1787120000
M 32	w. threading		84	HDC 40D SBU 2M32G	1787110000



Coupling housing



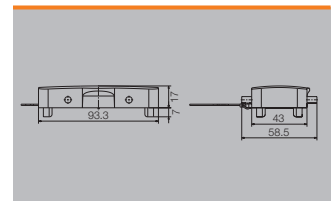
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		79	HDC 40D KBU 1M25G	1787200000
M 32	w. threading		79	HDC 40D KBU 1M32G	1787190000



Cover



Version	Type	Order No.
For bases	HDC 16B DODQ 4B0	1665260000



MixMate series - the high-capacity connectors

690 V, 40 A, Size 6

6 + 36 + ⊕

Inserts

Crimp connection



Insert	Type	Order No.
Male	HDC S6/36 MC	1023320000
Female	HDC S6/36 FC	1023310000

Note The signal contacts are designed for a rated voltage of 160 V and a rated current of 10 A.

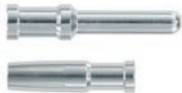
Dimensions

Arrangement of contacts

Accessories

Crimp contacts for HQ and MixMate inserts

Surface finish silver



Male			Female		
VPE	Type	Order No.	Type	Order No.	Order No.
25	HDC C HX SM1.5AG	1002910000	HDC C HX BM1.5AG	1002950000	
25	HDC C HX SM2.5AG	1002920000	HDC C HX BM2.5AG	1002960000	
25	HDC C HX SM4.0AG	1002930000	HDC C HX BM4.0AG	1002970000	
25	HDC C HX SM6.0AG	1002940000	HDC C HX BM6.0AG	1002980000	

Conductor cross-section	Insulation stripping length
1.50 mm ²	AWG 16 8 mm
2.50 mm ²	AWG 14 8 mm
4.00 mm ²	AWG 12 8 mm
6.00 mm ²	AWG 10 8 mm

Crimp contacts

Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HD-SM0.14-0.37AU	1651620000	HDC-C-HD-BM0.14-0.37AU	1651670000	
100	HDC-C-HD-SM0.5AU	1651630000	HDC-C-HD-BM0.5AU	1651680000	
100	HDC-C-HD-SM0.75-1.00AU	1651640000	HDC-C-HD-BM0.75-1.00AU	1651690000	
100	HDC-C-HD-SM1.5AU	1651650000	HDC-C-HD-BM1.5AU	1651700000	
100	HDC-C-HD-SM2.5AU	1651660000	HDC-C-HD-BM2.5AU	1651710000	
100	HDC-C-HD-SM0.14-0.37AG	1651520000	HDC-C-HD-BM0.14-0.37AG	1651570000	
100	HDC-C-HD-SM0.5AG	1651530000	HDC-C-HD-BM0.5AG	1651580000	
100	HDC-C-HD-SM0.75-1.00AG	1601750000	HDC-C-HD-BM0.75-1.00AG	1601760000	
100	HDC-C-HD-SM1.5AG	1651550000	HDC-C-HD-BM1.5AG	1651600000	
100	HDC-C-HD-SM2.5AG	1651560000	HDC-C-HD-BM2.5AG	1651610000	

Conductor cross-section	Insulation stripping length
0.14 - 0.37 mm ²	AWG 26-22 8 mm
0.50 mm ²	AWG 20 8 mm
0.75 - 1.00 mm ²	AWG 18 8 mm
1.50 mm ²	AWG 16 8 mm
2.50 mm ²	AWG 14 6 mm

Tools



Crimping tool		
CTX CM 1.6/2.5		9018490000
CTIN CM 1.6/2.5		9205430000
Contact Removal Tool		
Removal Tool HX		1002990000
REMOVAL TOOL HD		1866730000

Housing selection RockStar® IP66
Size 6



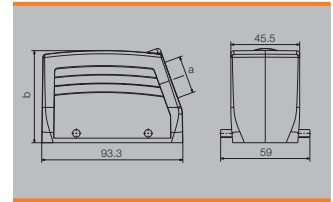
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



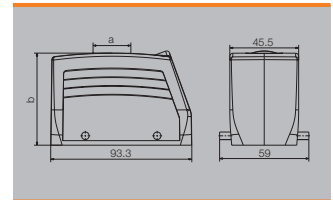
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TSBU 1M25G	1788180000
M 25	w. threading		76	HDC 40D TSBU 1M25G	1787010000
M 32	w. threading		76	HDC 40D TSBU 1M32G	1787000000



Plug housing, cable entry at top



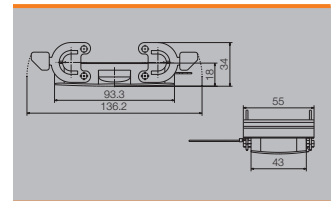
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TOBU 1M25G	1788210000
M 25	w. threading		76	HDC 40D TOBU 1M25G	1787070000
M 32	w. threading		76	HDC 40D TOBU 1M32G	1787060000



Cover



Version	Type	Order No.
For hoods	HDC 16B DMDQ 2QB	1665270000

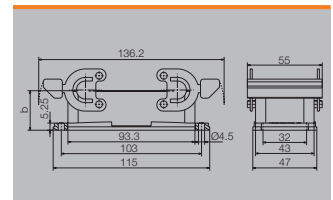


Base

Bulkhead housing



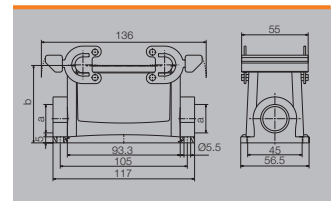
Version	Cover	b (mm)	Type	Order No.
		29	HDC 16B ABU	1208600000



Base housing



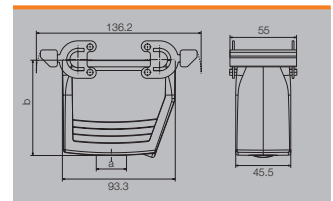
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		64	HDC 16B SBU 2M25G	1788240000
M 25	w. threading		84	HDC 40D SBU 2M25G	1787120000
M 32	w. threading		84	HDC 40D SBU 2M32G	1787110000



Coupling housing



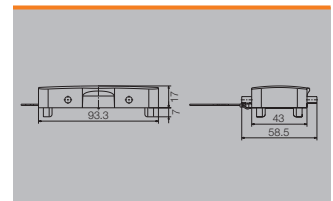
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		79	HDC 40D KBU 1M25G	1787200000
M 32	w. threading		79	HDC 40D KBU 1M32G	1787190000



Cover



Version	Type	Order No.
For bases	HDC 16B DODQ 4B0	1665260000



MixMate series - the high-capacity connectors

690 V, 48 A, Size 6

6 + 12 + ⊕

Inserts

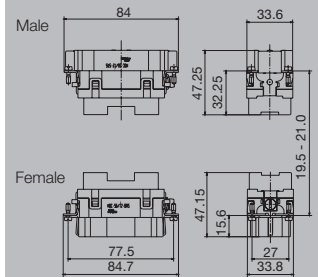
Axial screw connection



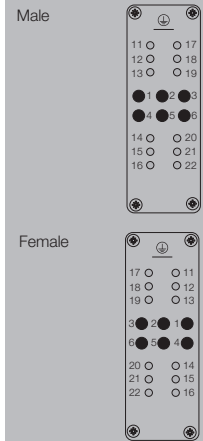
Insert	Type	Order No.
Male	HDC S6 12 SAS	1790000000
Female	HDC S6 12 BAS	1790010000

Note The signal contacts are designed for a rated voltage of 400V and a rated current of 16A.

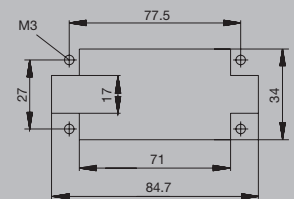
Dimensions



Arrangement of contacts



Mounting cut-out



Housing selection RockStar® IP66

Size 6



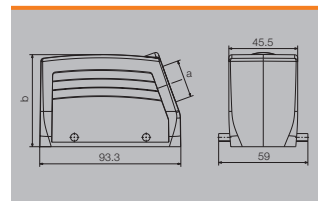
Further housings are available, see Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



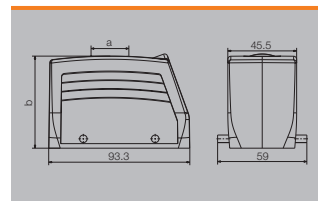
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TSBU 1M25G	1788180000
M 25	w. threading		76	HDC 40D TSBU 1M25G	1787010000
M 32	w. threading		76	HDC 40D TSBU 1M32G	1787000000



Plug housing, cable entry at top



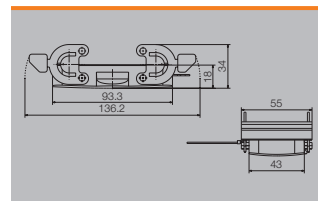
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TOBU 1M25G	1788210000
M 25	w. threading		76	HDC 40D TOBU 1M25G	1787070000
M 32	w. threading		76	HDC 40D TOBU 1M32G	1787060000



Cover



Version	Type	Order No.
For hoods	HDC 16B DMDQ 2QB	1665270000

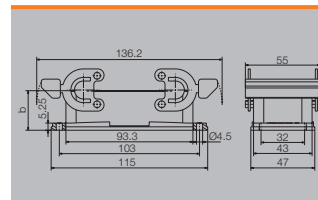


Base

Bulkhead housing



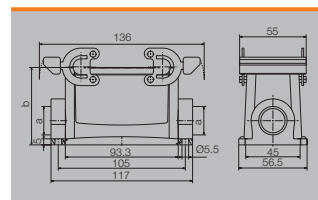
Version	Cover	b (mm)	Type	Order No.
		29	HDC 16B ABU	1208600000



Base housing



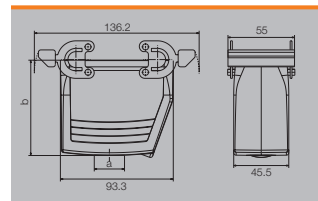
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		64	HDC 16B SBU 2M25G	1788240000
M 25	w. threading		84	HDC 40D SBU 2M25G	1787120000
M 32	w. threading		84	HDC 40D SBU 2M32G	1787110000



Coupling housing



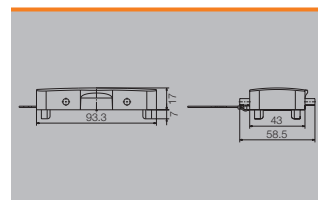
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		79	HDC 40D KBU 1M25G	1787200000
M 32	w. threading		79	HDC 40D KBU 1M32G	1787190000



Cover



Version	Type	Order No.
For bases	HDC 16B DODQ 4B0	1665260000



MixMate series - the high-capacity connectors

690 V, 40 A, Size 6

12 + 2 + ⊕

Inserts

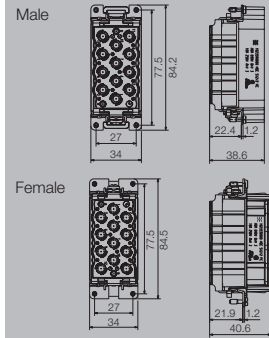
Crimp connection



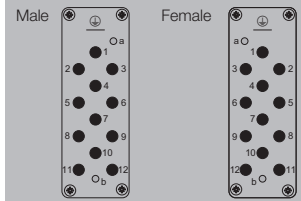
Insert	Type	Order No.
Male	HDC S12/2 MC	1023340000
Female	HDC S12/2 FC	1023330000

Note The signal contacts are designed for a rated voltage of 250 V and a rated current of 10 A.

Dimensions



Arrangement of contacts



Accessories

Crimp contacts for HQ and MixMate inserts

Surface finish silver



Male			Female		
VPE	Type	Order No.	Type	Order No.	Order No.
25	HDC C HX SM1.5AG	1002910000	HDC C HX BM1.5AG	1002950000	
25	HDC C HX SM2.5AG	1002920000	HDC C HX BM2.5AG	1002960000	
25	HDC C HX SM4.0AG	1002930000	HDC C HX BM4.0AG	1002970000	
25	HDC C HX SM6.0AG	1002940000	HDC C HX BM6.0AG	1002980000	

Conductor cross-section	Insulation stripping length
1.50 mm ²	AWG 16 8 mm
2.50 mm ²	AWG 14 8 mm
4.00 mm ²	AWG 12 8 mm
6.00 mm ²	AWG 10 8 mm

Crimp contacts

Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HD-SM0.14-0.37AU	1651620000	HDC-C-HD-BM0.14-0.37AU	1651670000	
100	HDC-C-HD-SM0.5AU	1651630000	HDC-C-HD-BM0.5AU	1651680000	
100	HDC-C-HD-SM0.75-1.00AU	1651640000	HDC-C-HD-BM0.75-1.00AU	1651690000	
100	HDC-C-HD-SM1.5AU	1651650000	HDC-C-HD-BM1.5AU	1651700000	
100	HDC-C-HD-SM2.5AU	1651660000	HDC-C-HD-BM2.5AU	1651710000	
100	HDC-C-HD-SM0.14-0.37AG	1651520000	HDC-C-HD-BM0.14-0.37AG	1651570000	
100	HDC-C-HD-SM0.5AG	1651530000	HDC-C-HD-BM0.5AG	1651580000	
100	HDC-C-HD-SM0.75-1.00AG	1601750000	HDC-C-HD-BM0.75-1.00AG	1601760000	
100	HDC-C-HD-SM1.5AG	1651550000	HDC-C-HD-BM1.5AG	1651600000	
100	HDC-C-HD-SM2.5AG	1651560000	HDC-C-HD-BM2.5AG	1651610000	

Conductor cross-section	Insulation stripping length
0.14 - 0.37 mm ²	AWG 26-22 8 mm
0.50 mm ²	AWG 20 8 mm
0.75 - 1.00 mm ²	AWG 18 8 mm
1.50 mm ²	AWG 16 8 mm
2.50 mm ²	AWG 14 6 mm

Tools



Crimping tool		
CTX CM 1.6/2.5		9018490000
CTIN CM 1.6/2.5		9205430000
Contact Removal Tool		
Removal Tool HX		1002990000
REMOVAL TOOL HD		1866730000

Housing selection RockStar® IP66
Size 6



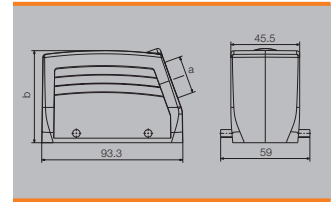
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



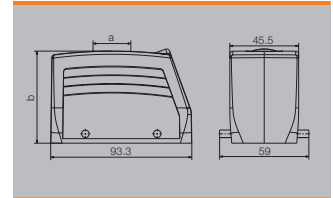
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TSBU 1M25G	1788180000
M 25	w. threading		76	HDC 40D TSBU 1M25G	1787010000
M 32	w. threading		76	HDC 40D TSBU 1M32G	1787000000



Plug housing, cable entry at top



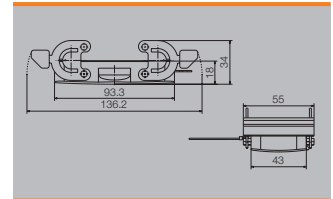
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TOBU 1M25G	1788210000
M 25	w. threading		76	HDC 40D TOBU 1M25G	1787070000
M 32	w. threading		76	HDC 40D TOBU 1M32G	1787060000



Cover



Version	Type	Order No.
For hoods	HDC 16B DMDQ 2QB	1665270000

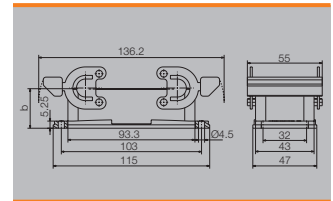


Base

Bulkhead housing



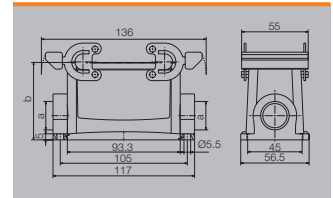
Version	Cover	b (mm)	Type	Order No.
		29	HDC 16B ABU	1208600000



Base housing



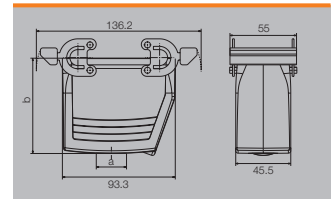
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		64	HDC 16B SBU 2M25G	1788240000
M 25	w. threading		84	HDC 40D SBU 2M25G	1787120000
M 32	w. threading		84	HDC 40D SBU 2M32G	1787110000



Coupling housing



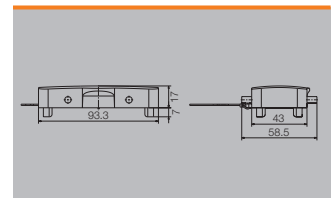
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		79	HDC 40D KBU 1M25G	1787200000
M 32	w. threading		79	HDC 40D KBU 1M32G	1787190000



Cover



Version	Type	Order No.
For bases	HDC 16B DODQ 4B0	1665260000



MixMate series - the high-capacity connectors

400 V, 80 A, Size 8

4 + 8 + ⊕

Inserts

Screw connection



Insert	Type	Order No.
Male	HDC S4/8 MS	1023260000
Female	HDC S4/8 FS	1023250000

Note The signal contacts are designed for a rated voltage of 400V and a rated current of 16A.

Dimensions

Male

Female

Arrangement of contacts

Male

Female

Housing selection RockStar® IP66
Size 8



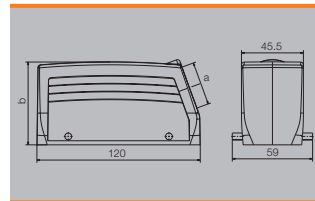
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



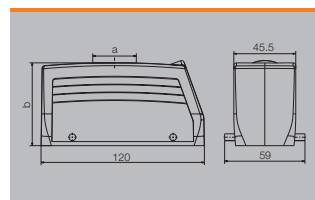
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 24B TSBU 1M25G	1787760000
M 25	w. threading		76	HDC 64D TSBU 1M25G	1786780000
M 32	w. threading		61	HDC 24B TSBU 1M32G	1787750000
M 32	w. threading		76	HDC 64D TSBU 1M32G	1786770000



Plug housing, cable entry at top



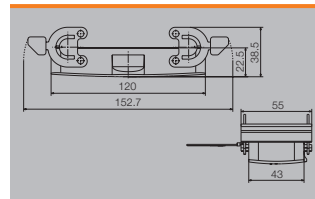
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 24B TOBU 1M25G	1787820000
M 32	w. threading		61	HDC 24B TOBU 1M32G	1787810000
M 32	w. threading		76	HDC 64D TOBU 1M32G	1786830000



Cover



Version	Type	Order No.
For hoods	HDC 24B DMDQ 2QB	1665640000

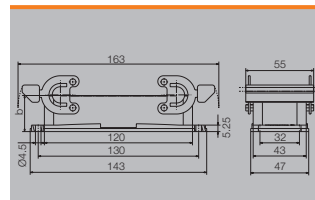


Base

Bulkhead housing



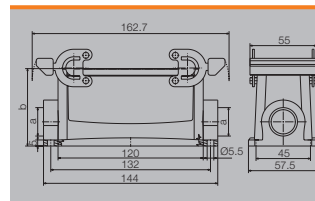
Version	Cover	b (mm)	Type	Order No.
		29.3	HDC 24B ABU	1212400000



Base housing



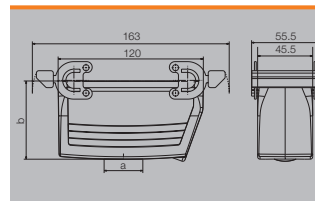
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		64	HDC 24B SBU 2M25G	1787870000
M 25	w. threading		84	HDC 64D SBU 2M25G	1786890000
M 32	w. threading		84	HDC 64D SBU 2M32G	1786880000



Coupling housing



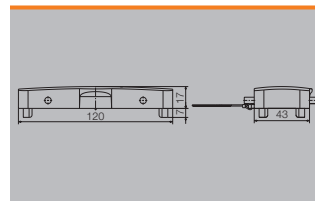
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		65	HDC 24B KBU 1M25G	1787920000
M 32	w. threading		79	HDC 64D KBU 1M32G	1786960000



Cover



Version	Type	Order No.
For bases	HDC 24B DODQ 4B0	1665630000



MixMate series - the high-capacity connectors

690 V, 100 A, Size 8

6 + 6 + ⊕

Inserts

Axial screw connection



Insert	Type	Order No.
Male	HDC S6 6 SAS	1790030000
Female	HDC S6 6 BAS	1790020000

Note The signal contacts are designed for a rated voltage of 400V and a rated current of 16A.

Dimensions

Arrangement of contacts

Male

Female

Mounting cut-out

Housing selection RockStar® IP66
Size 8



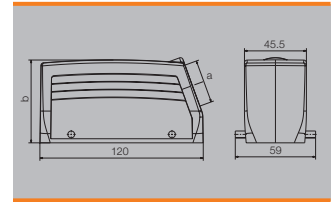
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



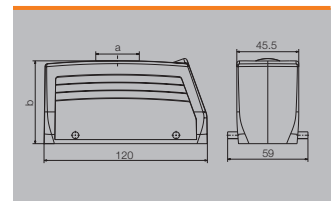
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 24B TSBU 1M25G	1787760000
M 25	w. threading		76	HDC 64D TSBU 1M25G	1786780000
M 32	w. threading		61	HDC 24B TSBU 1M32G	1787750000
M 32	w. threading		76	HDC 64D TSBU 1M32G	1786770000



Plug housing, cable entry at top



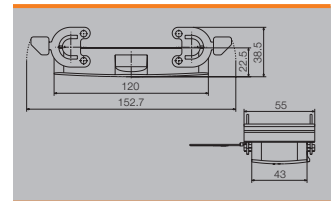
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 24B TOBU 1M25G	1787820000
M 32	w. threading		61	HDC 24B TOBU 1M32G	1787810000
M 32	w. threading		76	HDC 64D TOBU 1M32G	1786830000



Cover



Version	Type	Order No.
For hoods	HDC 24B DMDQ 2QB	1665640000

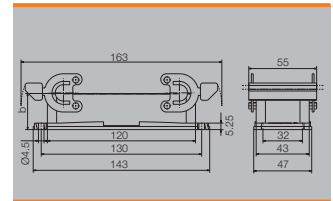


Base

Bulkhead housing



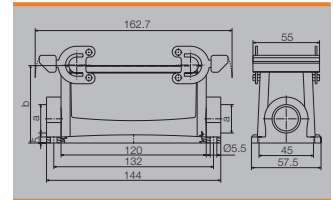
Version	Cover	b (mm)	Type	Order No.
		29.3	HDC 24B ABU	1212400000



Base housing



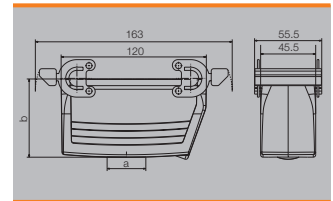
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		64	HDC 24B SBU 2M25G	1787870000
M 25	w. threading		84	HDC 64D SBU 2M25G	1786890000
M 32	w. threading		84	HDC 64D SBU 2M32G	1786880000



Coupling housing



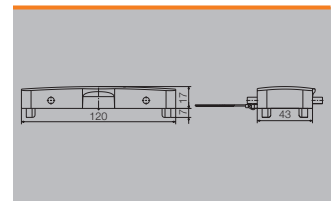
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		65	HDC 24B KBU 1M25G	1787920000
M 32	w. threading		79	HDC 64D KBU 1M32G	1786960000



Cover



Version	Type	Order No.
For bases	HDC 24B DODQ 4B0	1665630000



MixMate series - the high-capacity connectors

690 V, 100 A, Size 8

8 + 0 + ⊕

Inserts

Axial screw connection



Insert	Type	Order No.
Male	HDC S8/0 MAS	1023360000
Female	HDC S8/0 FAS	1023350000

Dimensions

Male

Female

Arrangement of contacts

Male

Female

Housing selection RockStar® IP66
Size 8



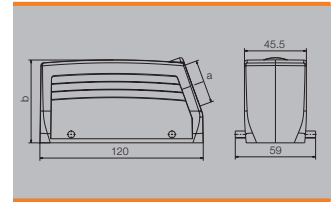
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



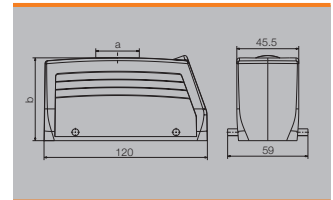
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 24B TSBU 1M25G	1787760000
M 25	w. threading		76	HDC 64D TSBU 1M25G	1786780000
M 32	w. threading		61	HDC 24B TSBU 1M32G	1787750000
M 32	w. threading		76	HDC 64D TSBU 1M32G	1786770000



Plug housing, cable entry at top



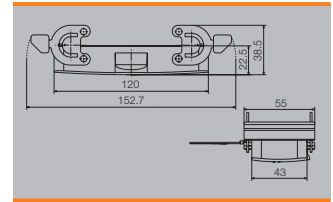
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 24B TOBU 1M25G	1787820000
M 32	w. threading		61	HDC 24B TOBU 1M32G	1787810000
M 32	w. threading		76	HDC 64D TOBU 1M32G	1786830000



Cover



Version	Type	Order No.
For hoods	HDC 24B DMDQ 2QB	1665640000

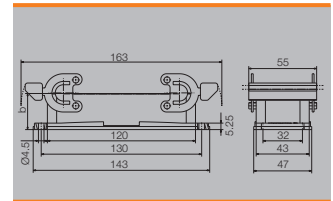


Base

Bulkhead housing



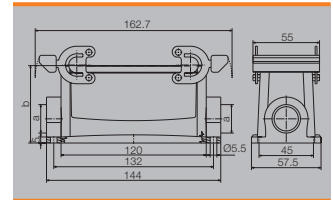
Version	Cover	b (mm)	Type	Order No.
		29.3	HDC 24B ABU	1212400000



Base housing



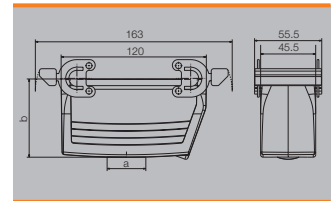
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		64	HDC 24B SBU 2M25G	1787870000
M 25	w. threading		84	HDC 64D SBU 2M25G	1786890000
M 32	w. threading		84	HDC 64D SBU 2M32G	1786880000



Coupling housing



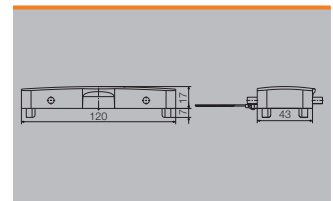
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		65	HDC 24B KBU 1M25G	1787920000
M 32	w. threading		79	HDC 64D KBU 1M32G	1786960000



Cover



Version	Type	Order No.
For bases	HDC 24B DODQ 4B0	1665630000



RockStar® HighPower

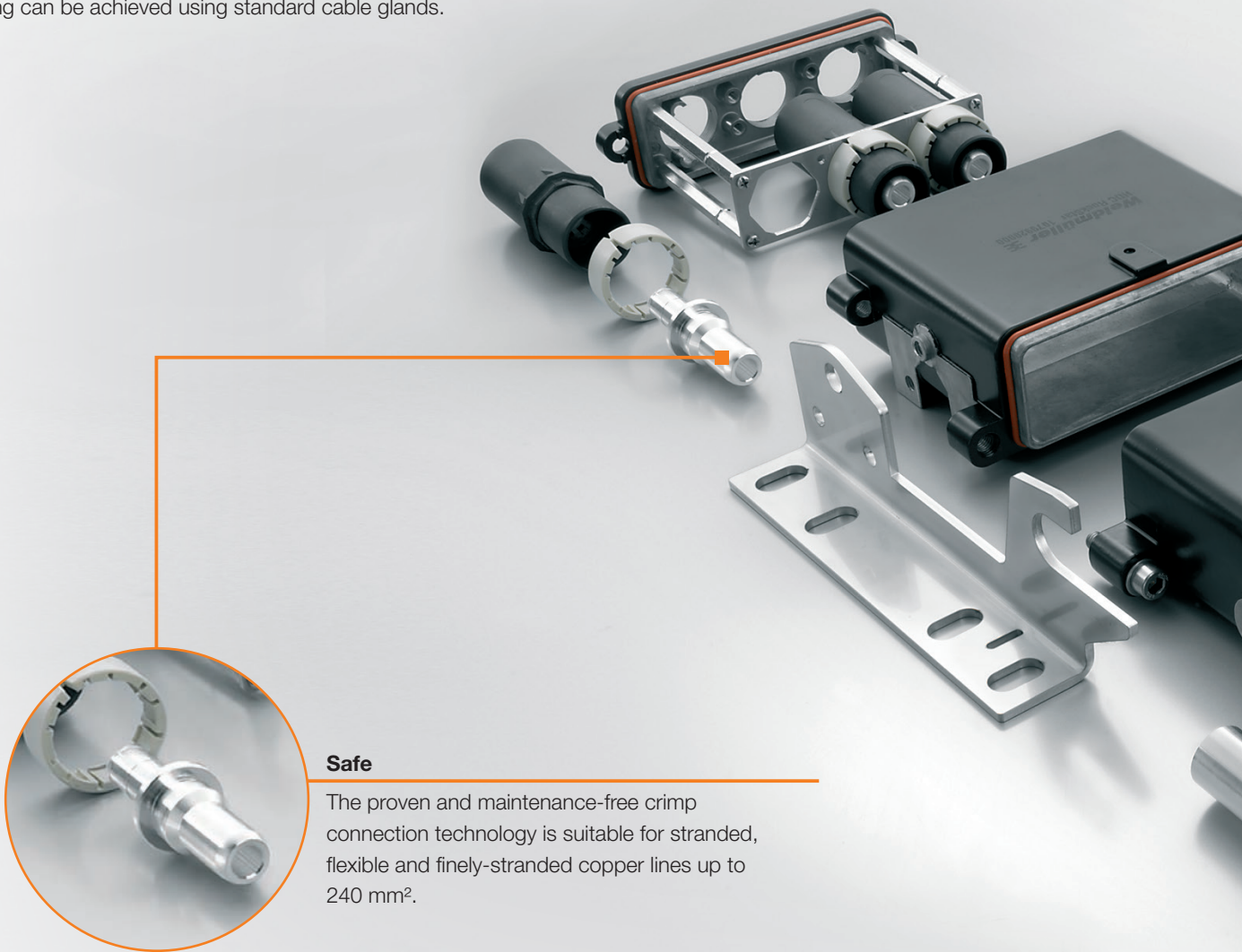
RockStar® HighPower	Introduction	C.2
	HighPower 250 A	C.4
	4000 V	
	250 A	
	1 – 4 poles	
	HighPower 550 A	C.10
	4000 V	
	550 A	
	1 – 3 poles	

RockStar® HighPower

Uncompromising power – in clever and safe packaging. The RockStar® HighPower modular high-current connector system has been custom designed for the high demands of traffic engineering applications. The system also meets the requirements of the wind power industry. It consists of one-piece crimp contacts, insulating sleeves, insert-holder frames and a multi-part die-cast aluminium housing in IP68 and IP69K.

C

This modular design offers clear advantages for handling: It is possible to wire crimped lines with large cross-sections and to see this process through to the final step. The wiring can be achieved using standard cable glands.

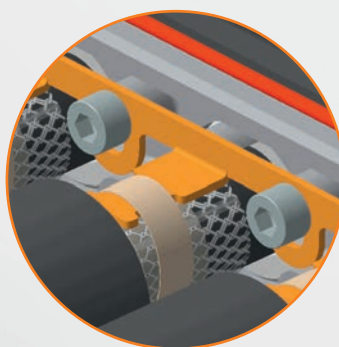
**Safe**

The proven and maintenance-free crimp connection technology is suitable for stranded, flexible and finely-stranded copper lines up to 240 mm².



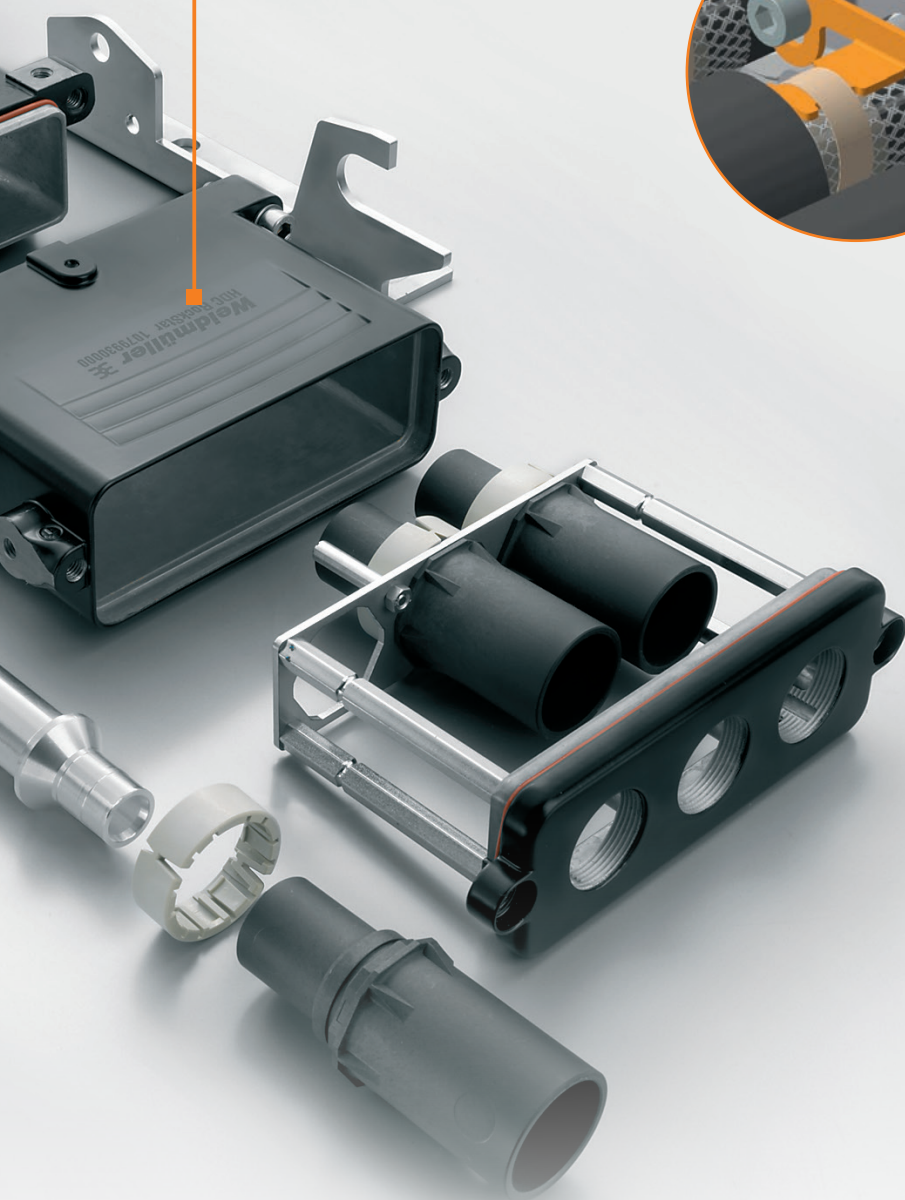
Practical

Durable laser marking is applied directly onto the housing – enables quick recognition and simple re-ordering.



Optimised shielding

An integrated shield connection in the housing makes the use of standard cable glands possible.



HighPower 250 A

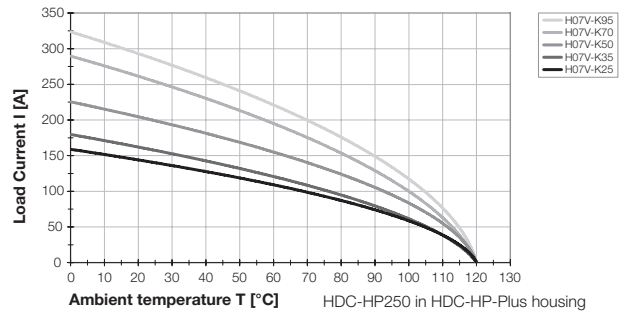
RockStar® HighPower is designed to meet the strict standards set by DIN EN 61373 Cat. 2 (pivot mounting). The coordinated connector components provide you with a fail-safe and maintenance-free power transmission solution: in this case up to 250 A / 4000 V.




Technical data

HighPower 250 A series	
Standards	DIN EN 50124-1 In compliance with DIN EN 61984 DIN EN 50155 DIN EN 61373 KAT 2 (Pivot mounting)
Number of contacts	1-, 2-, 3-, 4 poles
Wire connection method	Crimp
Rated current	250 A
Rated insulation voltage (Highest permitted operating voltage)	AC wire – wire 4000 V (4800 V)* AC wire – earthed housing 2300 V (3000 V)* DC wire – wire 4000 V (4800 V)* DC wire – earthed housing 2300 V (3000 V)*
Rated impulse voltage	Wire – wire 25 kV Wire – earthed housing 15 kV
Surge voltage category	OV 3
Pollution severity degree	PD 2 (PD 3)*1
Material	Insulating body PA 66 glass-fibre reinforced Contact Copper alloy, silver plated
Flammability	According to UL 94 V-0 According to NFF 16-101 / NFF 16-102 I3 F2 DIN 5510 Part 2 V-0
Insulation resistance	10 ¹⁰ Ω
Temperature range	-50 °C ... +120 °C
HDC IP68 HP 24B series	
Protection degree according to DIN EN 60529	IP68 when interlocked
Colour	RAL 9005 (black)
Surface finish	Powder coating
Locking element	Screw interlock M8 Material Stainless steel, rust-proof Torque 11 Nm
Housing seal	Silicone rubber
Temperature range	-50 °C ... +120 °C
Material	Housing Die-cast aluminium alloy, corrosion resistant Mounting bracket Stainless steel, rust-proof
Accessories	
Material	Assembly frame Stainless steel, rust-proof Shield clamp Sheet steel, galvanized Touch-safe protection PA66
Colour	Assembly frame Natural Shield clamp Natural Touch-safe protection Red
Cable gland	
Material	Cable gland Optional as nickel-plated brass or stainless steel Seal insert TPE
Temperature range	-40 °C ... +130 °C
Class of protection	IP68
Note: *4800 V, depending on the application *1 The contacts are protected against contamination and condensation within the HDC housing. The completely assembled connector can be used at pollution degree PD 3.	

Derating curves



Overview

	Size	Rated voltage	Rated current	No. of poles	Tension clamp connection	Screw conn. with wire guard spring	Crimp connection	PUSH IN connection	Axial screw connection	Page
	8	4000 V	250 A	1 – 4			•			C.6

RockStar® HighPower 250 A

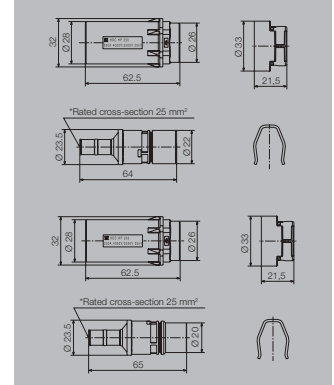
Crimp contacts

Crimp contact



Wire connection cross-section*	Male	Order No.	Female	Order No.
25 mm ²	HDC HP 250 M 25	1079690000	HDC HP 250 F 25	1079720000
35 mm ²	HDC HP 250 M 35	1079680000	HDC HP 250 F 35	1079730000
50 mm ²	HDC HP 250 M 50	1119080000	HDC HP 250 F 50	1079740000
70 mm ²	HDC HP 250 M 70	1119090000	HDC HP 250 F 70	1079750000
95 mm ²	HDC HP 250 M 95	1119100000	HDC HP 250 F 95	1079770000
Insulated PE contact		Order No.	Insulated PE contact	Order No.
Male			Female	
50 mm ²	HDC HP 250 M 50 PE	1220850000	HDC HP 250 F 50 PE	1220840000

Note: * In the version described here, the crimp contacts can be used for crimp connections with flexible, stranded, and finely stranded copper wires (according to DIN 48201 part 1 and DIN 57 295 VDE 0295) or with crimping inserts (according to DIN 48083 part 1, part 3 and part 4). We would be glad to customise the crimp contact to fit your requirements.

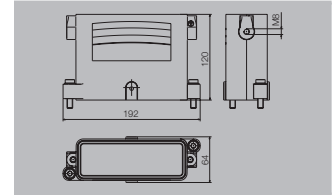


Housings

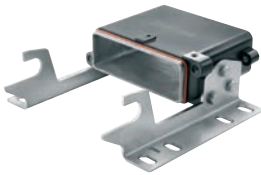
Plug housing



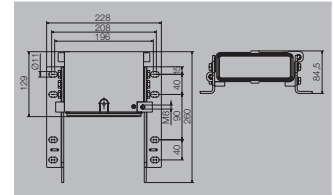
Designation	Type	Order No.
Plug housing	HDC IP68 HP 24B TO	1079930000



Base housing



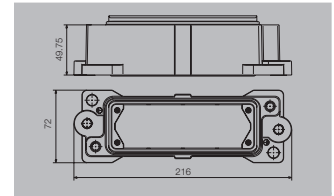
Designation	Type	Order No.
Base housing	HDC IP68 HP 24B AS S	1079920000



Bulkhead housing



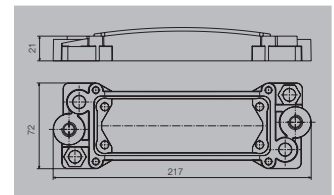
Designation	Type	Order No.
Bulkhead housing	HDC IP68 HP 24B A	1120040000



Counter-frame



Designation	Type	Order No.
Counter-frame	HDC IP68 24B HP FRAME	1282820000



RockStar® HighPower 250 A

Housings

Mounting cover



Designation	Type	Order No.
Mounting cover without thread	HDC IP68 HP 24B MD	1119950000
Mounting cover 3 threads M40	HDC IP68 HP 24B MD 3M40	1119970000
Mounting cover 3 threads M32	HDC IP68 24B MD 3M32	1119980000
Mounting cover 3 threads M25	HDC IP68 HP 24B MD 3M25	1079910000
Mounting cover 4 threads M25	HDC IP68 24B MD 4M25 T1	1160450000
Mounting cover 2 threads M40	HDC IP68 HP 24B MD 2M40	1119990000
Mounting cover 2 threads M32	HDC IP68 HP 24B MD 2M32	1120000000
Mounting cover 2 threads M25	HDC IP68 HP 24B MD 2M25	1120010000
Mounting cover 4 threads M25	HDC IP68 24B MD 4M25 T2	1220860000

Note: Because of the asymmetric arrangement of the four threaded holes, the T1 version must be used on one side and the T2 version must be used on the other side.

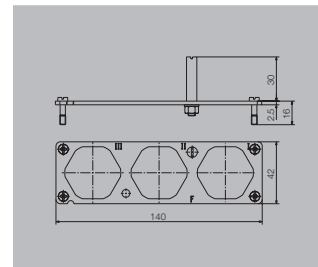
Accessories

Mounting frame



Designation	Type	Order No.
BG 3 for 1 HP 250 Female	HDC 06B HP250 MPL1	1103680000
BG 8 for 2 HP 250 Female	HDC 24B HP250 MPL2 TYP1	1103690000
BG 8 for 2 HP 250 Male	HDC 24B HP250 MPL2 TYP2	1103740000
BG 8 for 3 HP 250 Female	HDC 24B HP250 MPL3 TYP1	1079640000
BG 8 for 3 HP 250 Male	HDC 24B HP250 MPL3 TYP2	1103750000
BG 8 for 3 HP 250 Female + PE	HDC 24B HP250 MPL4PE T1	1212890000
BG 8 for 3 HP 250 Male + PE	HDC 24B HP250 MPL4PE T2	1212910000
BG 8 for 4 HP 250 Female	HDC 24B HP250 MPL4 TYP1	1160430000
BG 8 for 4 HP 250 Male	HDC 24B HP250 MPL4 TYP2	1160440000

Note: Coding pins can be used for additional coding of the mounting frame; refer to Chapter J.



EMC – Shield connection



Designation	Type	Order No.
M25 Set	VGM25-MS68 EMC 11-20SET	1463720000
M32 Set	VGM32-MS68 EMC 15-25SET	1463730000

Mounting tool



Designation	Type	Order No.
Mounting tool	HDC FBS TOOL 13-50	8000015137

Touch-safe protection set



Designation	Type	Order No.
Touch-safe protection set HP 250	HDC HP_250 SHOCKPROTEC	1120130000

RockStar® HighPower

RockStar® HighPower 250 A

Accessories

Cable glands



Designation	Type	Order No.
M25, Stainless steel, clamping range 11-20	VGM25-SS68 11-20 BG	1193570000
M32, Stainless steel, clamping range 15-25	VGM32-SS68 15-25 BG	1193580000
M40, Stainless steel, clamping range 20-32	VGM40-SS68 20-32 BG	1193590000
M40, Stainless steel, clamping range 20-32; Elongated version	VGM40/1-SS68 20-32 BG	1205920000
M25, Brass, nickel-plated, clamping range 11-20	VGM25-MS68 11-20 BG	1193600000
M32, Brass, nickel-plated, clamping range 15-25	VGM32-MS68 15-25 BG	1193610000
M40, Brass, nickel-plated, clamping range 20-32	VGM40-MS68 20-32 BG	1193620000
M40, Brass, nickel-plated, clamping range 20-32; Elongated version	VGM40/1-MS68 20-32 BG	1205890000

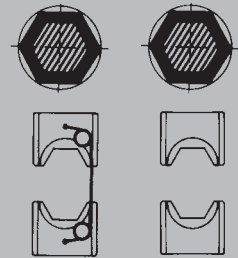
Note: When using mounting lids with 3 M40 cable entry threads, the elongated version must be used for the cable gland in the middle.

Hand crimping tools

Hand crimping tools



Designation	Type	Order No.
Hand crimping tool 10 ... 240 mm ²	MTR 160	9017250000
Crimping inserts 25 ² , Crimping width 7.0 mm	EINSATZ MTR 160 25HEX	9020920000
Crimping inserts 35 ² , Crimping width 7.0 mm	EINSATZ MTR 160 35HEX	9020930000
Crimping inserts 50 ² , Crimping width 7.0 mm	EINSATZ MTR 160 50HEX	9020940000
Crimping inserts 70 ² , Crimping width 7.0 mm	EINSATZ MTR 160 70HEX	9020950000
Crimping inserts 95 ² , Crimping width 7.0 mm	EINSATZ MTR 160 95HEX	9020960000
Hand crimping tool 10 ... 300 mm ²	MTR 300	9021390000
Crimping inserts 25 ² , Crimping width 7.0 mm	EINSATZ MTR 300 25HEX	9021450000
Crimping inserts 35 ² , Crimping width 7.0 mm	EINSATZ MTR 300 35HEX	9021460000
Crimping inserts 50 ² , Crimping width 7.0 mm	EINSATZ MTR 300 50HEX	9021470000
Crimping inserts 70 ² , Crimping width 7.0 mm	EINSATZ MTR 300 70HEX	9021480000
Crimping inserts 95 ² , Crimping width 7.0 mm	EINSATZ MTR 300 95HEX	9022290000



HighPower 550 A

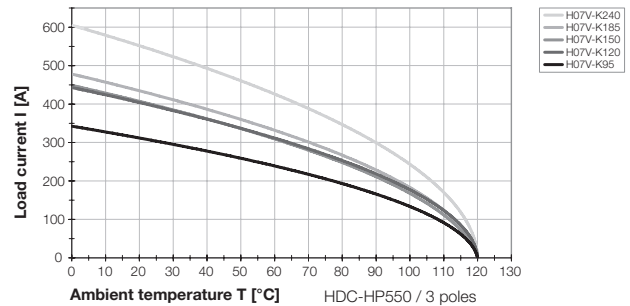
RockStar® HighPower is designed to meet the strict standards set by DIN EN 61373 Cat. 2 (pivot mounting). The coordinated connector components provide you with a fail-safe and maintenance-free power transmission solution: in this case up to 550 A / 4000 V.




Technical data

HighPower 550 A series	
Standards	DIN EN 50124-1 In compliance with DIN EN 61984 DIN EN 50155 DIN EN 61373 KAT 2 (Pivot mounting)
Number of contacts	1-, 2-, 3 poles
Wire connection method	Crimp
Rated current	550 A
Rated insulation voltage (Highest permitted operating voltage)	AC wire – wire 4000 V (4800 V)* AC wire – earthed housing 3000 V DC wire – wire 4000 V (4800 V)* DC wire – earthed housing 3000 V
Rated impulse voltage	Wire – wire 25 kV Wire – earthed housing 15 kV
Surge voltage category	OV 3
Pollution severity degree	PD 2 (PD 3)*1
Material	Insulating body PA 66 glass-fibre reinforced Contact Copper alloy, silver plated
Flammability	According to UL 94 V-0 According to NFF 16-101 / NFF 16-102 I3 F2 DIN 5510 Part 2 V-0
Insulation resistance	10 ¹⁰ Ω
Temperature range	-50 °C ... +120 °C
HDC IP68 HP 24B series	
Protection degree according to DIN EN 60529	IP68 when interlocked
Colour	RAL 9005 (black)
Surface finish	Powder coating
Locking element	Screw interlock M8 Material Stainless steel, rust-proof Torque 11 Nm
Housing seal	Silicone rubber
Temperature range	-50 °C ... +120 °C
Material	Housing Die-cast aluminium alloy, corrosion resistant Mounting bracket Stainless steel, rust-proof
Accessories	
Material	Assembly frame Stainless steel, rust-proof Shield clamp Sheet steel, galvanized Touch-safe protection PA66
Colour	Assembly frame Natural Shield clamp Natural Touch-safe protection Orange
Cable gland	
Material	Cable gland Optional as nickel-plated brass or stainless steel Seal insert TPE
Temperature range	-40 °C ... +130 °C
Class of protection	IP68
Note: *4800 V, depending on the application *1 The contacts are protected against contamination and condensation within the HDC housing. The completely assembled connector can be used at pollution degree PD 3.	

Derating curves



Overview

	Size	Rated voltage	Rated current	No. of poles	Tension clamp connection	Screw conn. with wire guard spring	Crimp connection	PUSH IN connection	Axial screw connection	Page
	8	4000 V	550 A	1 – 3			•			C.12

RockStar® HighPower

RockStar® HighPower 550 A

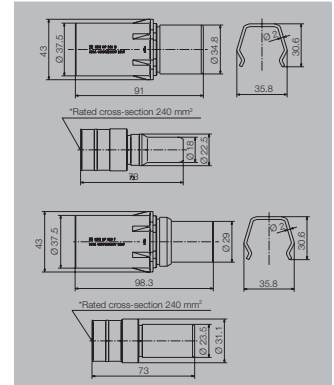
Crimp contacts

Crimp contact



Wire connection cross-section*	Male	Order No.	Female	Order No.
50 mm ²	HDC HP 550 M 50	1157800000	HDC HP 550 F 50	1177100000
95 mm ²	HDC HP 550 M 95	1079790000	HDC HP 550 F 95	1079810000
120 mm ²	HDC HP 550 M 120	1079780000	HDC HP 550 F 120	1079820000
150 mm ²	HDC HP 550 M 150	1119110000	HDC HP 550 F 150	1079830000
185 mm ²	HDC HP 550 M 185	1120580000	HDC HP 550 F 185	1079840000
240 mm ²	HDC HP 550 M 240	1120590000	HDC HP 550 F 240	1120600000

Note: * In the version described here, the crimp contacts can be used for crimp connections with flexible, stranded, and finely stranded copper wires (according to DIN 48201 part 1 and DIN 57 295 VDE 0295) or with crimping inserts (according to DIN 48083 part 1, part 3 and part 4). We would be glad to customise the crimp contact to fit your requirements.

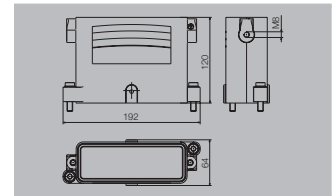


Housings

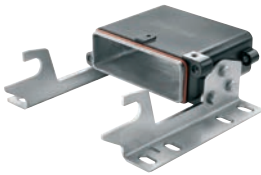
Plug housing



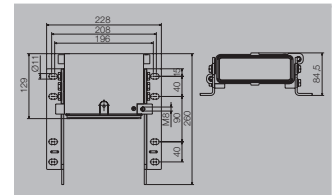
Designation	Type	Order No.
Plug housing	HDC IP68 HP 24B TO	1079930000



Base housing



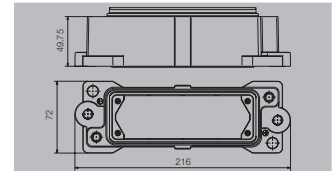
Designation	Type	Order No.
Base housing	HDC IP68 HP 24B AS S	1079920000



Bulkhead housing



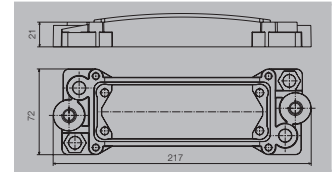
Designation	Type	Order No.
Bulkhead housing	HDC IP68 HP 24B A	1120040000



Counter-frame



Designation	Type	Order No.
Counter-frame	HDC IP68 24B HP FRAME	1282820000



Mounting cover



Designation	Type	Order No.
Mounting cover without thread	HDC IP68 HP 24B MD	1119950000
Mounting cover 3 threads M40	HDC IP68 HP MD 3M40	1119970000
Mounting cover 3 threads M32	HDC IP68 HP MD 3M32	1119980000
Mounting cover 3 threads M25	HDC IP68 HP 24B MD 3M25	1079910000
Mounting cover 2 threads M40	HDC IP68 HP 24B MD 2M40	1119990000
Mounting cover 2 threads M32	HDC IP68 HP 24B MD 2M32	1120000000
Mounting cover 2 threads M25	HDC IP68 HP 24B MD 2M25	1120010000



RockStar® HighPower 550 A

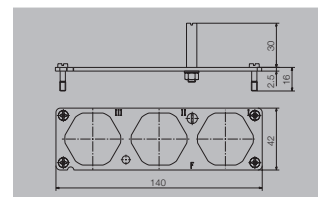
Accessories

Mounting frame



Designation	Type	Order No.
BG 8 for 2 HP 550 Female	HDC 24B HP550 MPL2 TYP1	1103710000
BG 8 for 2 HP 550 Male	HDC 24B HP550 MPL2 TYP2	1103770000
BG 8 for 3 HP 550 Female	HDC 24B HP550 MPL3 TYP1	1103720000
BG 8 for 3 HP 550 Male	HDC 24B HP550 MPL3 TYP2	1103780000

Note: Coding pins can be used for additional coding of the mounting frame; refer to Chapter J.



EMC – Shield connection



Designation	Type	Order No.
M25 Set	VGM25-MS68 EMC 11-20SET	1463720000
M32 Set	VGM32-MS68 EMC 15-25SET	1463730000

Mounting tool



Designation	Type	Order No.
Mounting tool	HDC FBS TOOL 13-50	8000015137

Touch-safe protection set



Designation	Type	Order No.
Touch-safe protection set HP 550	HDC HP 550 SHOCKPROTEC	1120140000

Cable glands



Designation	Type	Order No.
M25, Stainless steel, clamping range 11-20	VGM25-SS68 11-20 BG	1193570000
M32, Stainless steel, clamping range 15-25	VGM32-SS68 15-25 BG	1193580000
M40, Stainless steel, clamping range 20-32	VGM40-SS68 20-32 BG	1193590000
M40, Stainless steel, clamping range 20-32; Elongated version	VGM40/1-SS68 20-32 BG	1205920000
M25, Brass, nickel-plated, clamping range 11-20	VGM25-MS68 11-20 BG	1193600000
M32, Brass, nickel-plated, clamping range 15-25	VGM32-MS68 15-25 BG	1193610000
M40, Brass, nickel-plated, clamping range 20-32	VGM40-MS68 20-32 BG	1193620000
M40, Brass, nickel-plated, clamping range 20-32; Elongated version	VGM40/1-MS68 20-32 BG	1205890000

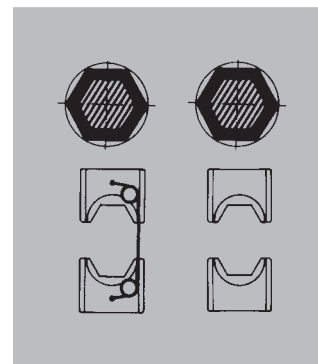
Note: When using mounting lids with 3 M40 cable entry threads, the elongated version must be used for the cable gland in the middle.

Hand crimping tools

Hand crimping tools



Designation	Type	Order No.
Hand crimping tool	MTR 160	9017250000
Crimping inserts 50°, Crimping width 7.0 mm	EINSATZ MTR 160 50HEX	9020940000
Crimping inserts 95°, Crimping width 7.0 mm	EINSATZ MTR 160 95HEX	9020960000
Crimping inserts 120°, Crimping width 7.0 mm	EINSATZ MTR 160 120HEX	9020970000
Crimping inserts 150°, Crimping width 7.0 mm	EINSATZ MTR 160 150HEX	9020980000
Crimping inserts 185°, Crimping width 7.0 mm	EINSATZ MTR 160 185HEX	9020990000
Crimping inserts 240°, Crimping width 7.0 mm	EINSATZ MTR 160 240HEX	9021000000
Hand crimping tool	MTR 300	9021390000
Crimping inserts 50°, Crimping width 7.0 mm	EINSATZ MTR 300 50HEX	9021470000
Crimping inserts 95°, Crimping width 7.0 mm	EINSATZ MTR 300 95HEX	9022290000
Crimping inserts 120°, Crimping width 7.0 mm	EINSATZ MTR 300 120HEX	9022300000
Crimping inserts 150°, Crimping width 7.0 mm	EINSATZ MTR 300 150HEX	9022310000
Crimping inserts 185°, Crimping width 7.0 mm	EINSATZ MTR 300 185HEX	9022320000
Crimping inserts 240°, Crimping width 7.0 mm	EINSATZ MTR 300 240HEX	9022330000



RockStar® ConCept modular system

RockStar® ConCept modular system	Introduction	D.2
	ConCept modules	D.4
	1 - 10 poles	
	ConCept bus modules	D.12
	2 - 16 poles	
	ConCept ST	D.20
	2 - 10 poles	
	ConCept pneumatic modules	D.23
	1 - 2 poles	
	ConCept module frame	D.24
	Size 3 - 8	
	ModuFlex C	D.44
	Coupling frame 1 - 5 modules	

RockStar® ConCept modular system

ConCept is a modular system consisting of modules for electrical, optical and pneumatic connections as well as module frames in various sizes. Together, the modules and frames form a full connector insert. The key advantage with ConCept is that you can combine multiple functions together. You can create a connector according to your requirements; this saves space and money compared to the use of multiple fixed-pole inserts.

D

ConCept is simple to work with and can easily be integrated into an HDC housing in IP66 or IP68. The ConCept modules can also be used individually in ModuFlex-C coupling frames and snapped together to form a block which can then be used in IP20 environments. ConCept can in this way be used on DIN rails, in cable conduits or on flat surfaces.

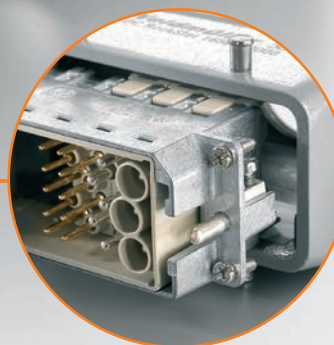
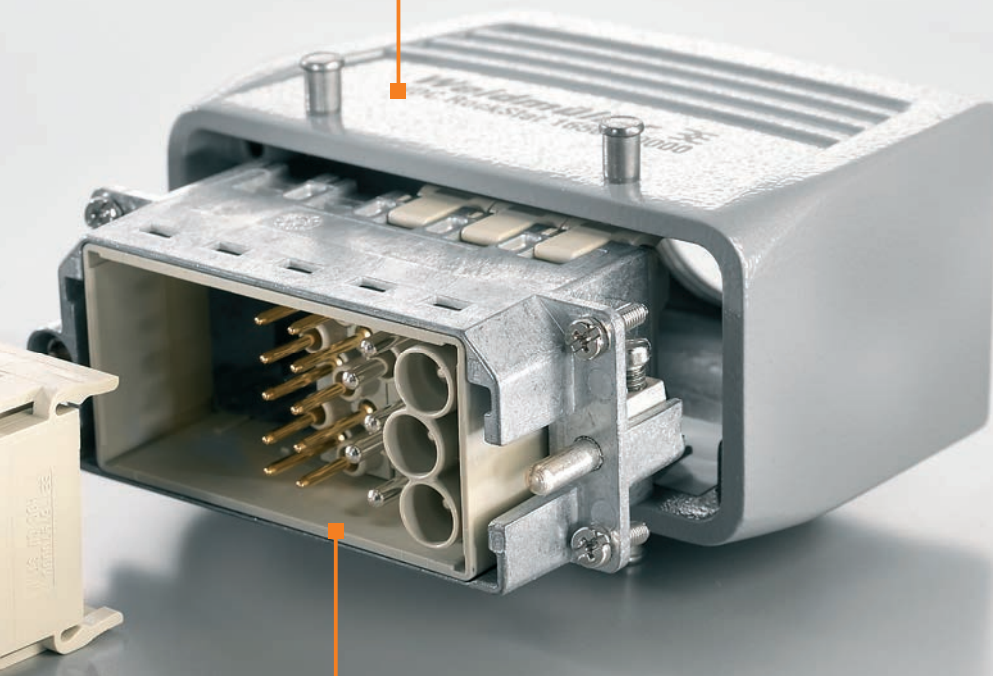


Power, Signals, Data

The modules can be combined to produce a single integrated connector that can carry power, signals and data.

**Flexible**

Because of its unique platform design, the ConCept ST module can be fitted with up to eight different data inserts.

**Sturdy**

The optimal protection for the modules is provided by the solid module frame which is made of plastic or die-cast zinc.

ConCept modules

CM-3 Concept module / turned contacts

Technical data

Contact inserts

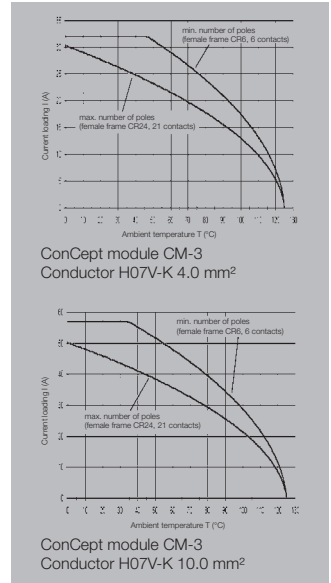
Rated current (DIN EN 61984)	40 A
Rated voltage (DIN EN 61984)	690 V
Rated impulse voltage (DIN EN 61984)	8 kV
Pollution severity	3
Insulation resistance	10 ¹² Ω
Surge voltage category	III
Volume resistance	≤ 1 mΩ
Flammability class UL 94	V-0

Contacts

Contact diameter, male Ø	3.6 mm
Connection cross-section	1.5-10 mm ²
AWG conductor	AWG 16-AWG 7
Material	Polycarbonate, glass fibre reinforced

Note

Rated voltage 1000 V / 8 kV at pollution degree 2. For conductor cross-sections of 6 mm² to 10 mm², you must use ring cable lugs at the connection to the PE conductor. With the 690-V rated voltage, this also covers three-phase 4-wire or 3-wire AC-voltage systems with rated voltages up to 690 V – according to DIN EN 60664-1. When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load!

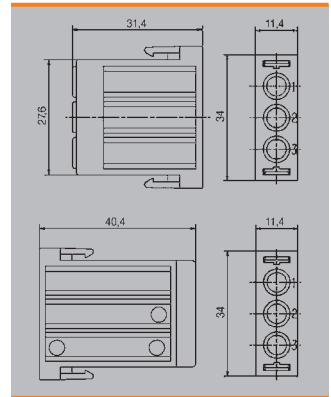


Modules

Crimp connection



Type	Type	Order No.
Male	HDC CM 3 MC	1758360000
Female	HDC CM 3 FC	1758370000



Accessories

Crimp contacts

Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-M3-SM1.5AG	1698120000	HDC-C-M3-BM1.5AG	1698130000	1698130000
100	HDC-C-M3-SM2.5AG	1698140000	HDC-C-M3-BM2.5AG	1698150000	1698150000
100	HDC-C-M3-SM4.0AG	1682260000	HDC-C-M3-BM4.0AG	1682270000	1682270000
100	HDC-C-M3-SM6.0AG	1682280000	HDC-C-M3-BM6.0AG	1682290000	1682290000
100	HDC-C-M3-SM10.0AG	1682300000	HDC-C-M3-BM10.0AG	1682310000	1682310000

Conductor cross-section	Insulation stripping length
1.50 mm ²	AWG 16 10 mm
2.50 mm ²	AWG 14 10 mm
4.00 mm ²	AWG 12 10 mm
6.00 mm ²	AWG 10 10 mm
10.00 mm ²	AWG 7 10 mm

Tools



Crimping tool		
CTX CM 3.6		9018480000
Contact Removal Tool		
Removal Tool CM 3		1866710000

CM-HE Concept module / turned contacts

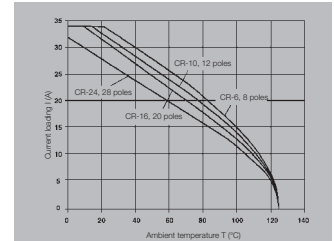
Technical data

Contact inserts

Rated current (DIN EN 61984)	25 A
Rated voltage (DIN EN 61984)	630 V
Rated impulse voltage (DIN EN 61984)	8 kV
Pollution severity	3
Insulation resistance	10 ¹² Ω
Surge voltage category	III
Volume resistance	≤ 2mΩ
Flammability class UL 94	V-0

Contacts

Contact diameter, male Ø	2.5 mm
Connection cross-section	0.5-4 mm ²
AWG conductor	AWG 20-AWG 12
Material	Polycarbonate, glass fibre reinforced



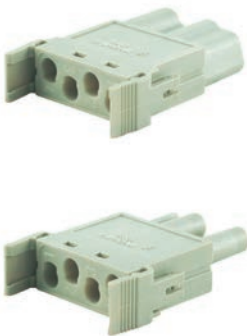
ConCept module CM-HE
Conductor H07V-K 4.0 mm²

Note

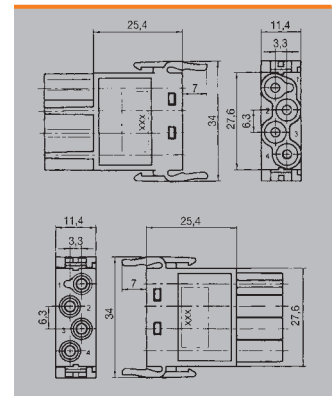
Rated voltage 1000 V / 8 kV at pollution degree 2. For conductor cross-sections ≤ 0.75 mm², you must use wire-end ferrules at the connection to the PE conductor. When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load!

Modules

Crimp connection



Type	Type	Order No.
Male	HDC CM HE 4 MC	1861920000
Female	HDC CM HE 4 FC	1861900000



Accessories

Crimp contacts

Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HE-SM0.5AU	1651420000	HDC-C-HE-BM0.5AU	1651470000	
100	HDC-C-HE-SM0.75-1.00AU	1651430000	HDC-C-HE-BM0.75-1.00AU	1651480000	
100	HDC-C-HE-SM1.5AU	1651440000	HDC-C-HE-BM1.5AU	1651490000	
100	HDC-C-HE-SM2.5AU	1651450000	HDC-C-HE-BM2.5AU	1651500000	
100	HDC-C-HE-SM4.0AU	1651460000	HDC-C-HE-BM4.0AU	1651510000	
100	HDC-C-HE-SM0.5AG	1200500000	HDC-C-HE-BM0.5AG	1201100000	
100	HDC-C-HE-SM0.75-1.00AG	1200600000	HDC-C-HE-BM0.75-1.00AG	1201200000	
100	HDC-C-HE-SM1.5AG	1200700000	HDC-C-HE-BM1.5AG	1201300000	
100	HDC-C-HE-SM2.5AG	1200800000	HDC-C-HE-BM2.5AG	1201400000	
100	HDC-C-HE-SM4.0AG	1200900000	HDC-C-HE-BM4.0AG	1201500000	



Conductor cross-section	Insulation stripping length
0.50 mm ²	AWG 20 7.5 mm
0.75 - 1.00 mm ²	AWG 18 7.5 mm
1.50 mm ²	AWG 16 7.5 mm
2.50 mm ²	AWG 14 7.5 mm
4.00 mm ²	AWG 12 7.5 mm

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
Removal Tool HE	1866750000

ConCept modules

CM-4 Concept module with tension spring connection

Technical data

Contact inserts

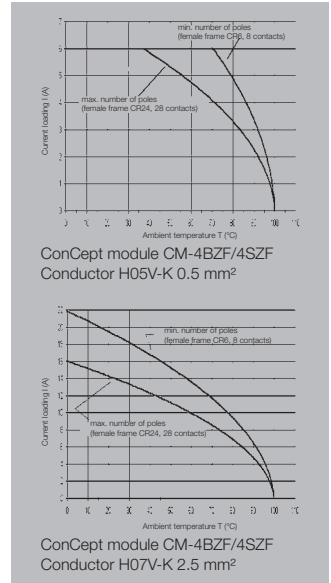
Rated current (DIN EN 61984)	14 A
Rated voltage (DIN EN 61984)	400 V
Rated impulse voltage (DIN EN 61984)	6 kV
Pollution severity	3
Insulation resistance	10 ¹² Ω
Surge voltage category	III
Volume resistance	1.5 mΩ
Flammability class UL 94	V-0

Contacts

Contact diameter, male Ø	2.5 mm
Connection cross-section	0.5-2.5 mm ²
AWG conductor	AWG 20-AWG 14
Material	Polycarbonate, glass fibre reinforced

Note

For conductor cross-sections ≤ 0.75 mm², you must use wire-end ferrules at the connection to the PE conductor.
When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load!

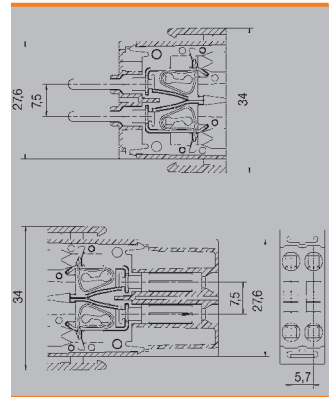


Modules

Tension clamp connection



Type	Type	Order No.
Male	HDC-CM-4SZF AG	1730120000
Female	HDC-CM-4BZF AG	1730130000



CM-5 Concept module / turned contacts

Technical data

Contact inserts

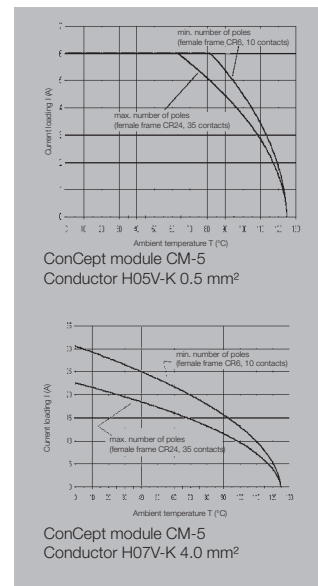
Rated current (DIN EN 61984)	20 A
Rated voltage (DIN EN 61984)	250 V
Rated impulse voltage (DIN EN 61984)	6 kV
Pollution severity	3
Insulation resistance	10 ¹² Ω
Surge voltage category	III
Volume resistance	≤ 2mΩ
Flammability class UL 94	V-0

Contacts

Contact diameter, male Ø	2.5 mm
Connection cross-section	0.5-4 mm ²
AWG conductor	AWG 20-AWG 12
Material	Polycarbonate, glass fibre reinforced

Note

Rated voltage 500 V / 6 kV at pollution degree 2. For conductor cross-sections ≤ 0.75 mm², you must use wire-end ferrules at the connection to the PE conductor. When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load!

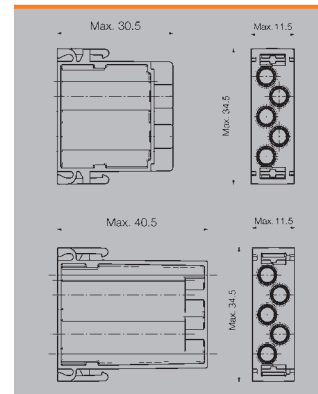


Modules

Crimp connection



Type	Type	Order No.
Male	HDC CM 5 MC	1758380000
Female	HDC CM 5 FC	1758390000



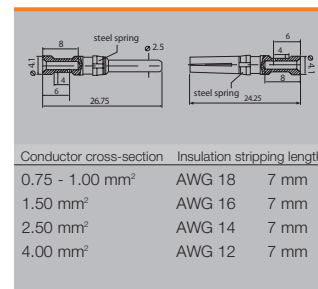
Accessories

Crimp contacts

Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-M5-SM0.5AG	1682320000	HDC-C-M5-BM0.5AG	1682330000	
100	HDC-C-M5-SM0.75-1.0AG	1682340000	HDC-C-M5-BM0.75-1.0AG	1682350000	
100	HDC-C-M5-SM1.5AG	1682360000	HDC-C-M5-BM1.5AG	1682370000	
100	HDC-C-M5-SM2.5AG	1682380000	HDC-C-M5-BM2.5AG	1682390000	
100	HDC-C-M5-SM4.0AG	1682400000	HDC-C-M5-BM4.0AG	1682410000	



Tools



Tool	Order No.
Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
Removal Tool CM 5	1866720000

ConCept modules

CM-10 Concept module / turned contacts

Technical data

Contact inserts

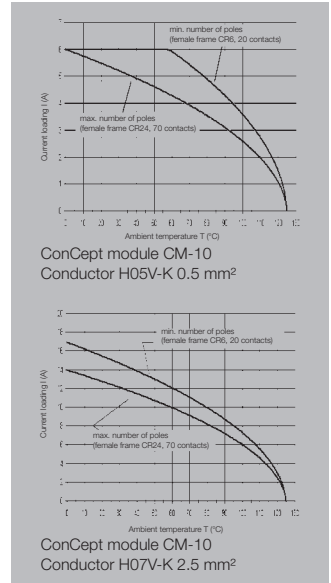
Rated current (DIN EN 61984)	10 A
Rated voltage (DIN EN 61984)	250 V
Rated impulse voltage (DIN EN 61984)	4 kV
Pollution severity	3
Insulation resistance	10 ¹¹ Ω
Surge voltage category	III
Volume resistance	≤ 4mΩ
Flammability class UL 94	V-0

Contacts

Contact diameter, male Ø	1.6 mm
Connection cross-section	0.14-2.5 mm ²
AWG conductor	AWG 26-AWG 14
Material	Polycarbonate, glass fibre reinforced

Note

Rated voltage 320 V / 4 kV at pollution degree 2. For conductor cross-sections ≤ 0.75 mm², you must use wire-end ferrules at the connection to the PE conductor. When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load!

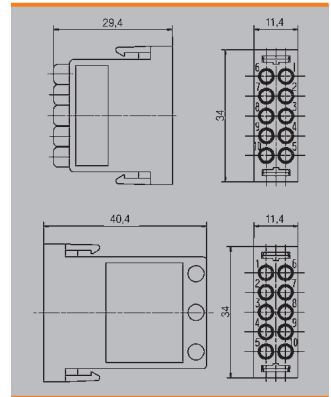


Modules

Crimp connection



Type	Type	Order No.
Male	HDC CM 10 MC	1758400000
Female	HDC CM 10 FC	1758410000



Accessories

Crimp contacts

Surface finish gold



Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-HD-SM0.14-0.37AU	1651620000	HDC-C-HD-BM0.14-0.37AU	1651670000	
100	HDC-C-HD-SM0.5AU	1651630000	HDC-C-HD-BM0.5AU	1651680000	
100	HDC-C-HD-SM0.75-1.00AU	1651640000	HDC-C-HD-BM0.75-1.00AU	1651690000	
100	HDC-C-HD-SM1.5AU	1651650000	HDC-C-HD-BM1.5AU	1651700000	
100	HDC-C-HD-SM2.5AU	1651660000	HDC-C-HD-BM2.5AU	1651710000	
100	HDC-C-HD-SM0.14-0.37AG	1651520000	HDC-C-HD-BM0.14-0.37AG	1651570000	
100	HDC-C-HD-SM0.5AG	1651530000	HDC-C-HD-BM0.5AG	1651580000	
100	HDC-C-HD-SM0.75-1.00AG	1601750000	HDC-C-HD-BM0.75-1.00AG	1601760000	
100	HDC-C-HD-SM1.5AG	1651550000	HDC-C-HD-BM1.5AG	1651600000	
100	HDC-C-HD-SM2.5AG	1651560000	HDC-C-HD-BM2.5AG	1651610000	

Conductor cross-section	Insulation stripping length
0.14 – 0.37 mm ²	AWG 26-22 8 mm
0.50 mm ²	AWG 20 8 mm
0.75 – 1.00 mm ²	AWG 18 8 mm
1.50 mm ²	AWG 16 8 mm
2.50 mm ²	AWG 14 6 mm

Tools



Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact Removal Tool	
REMOVAL TOOL HD	1866730000

CM-3 HV

Technical data

Contact inserts

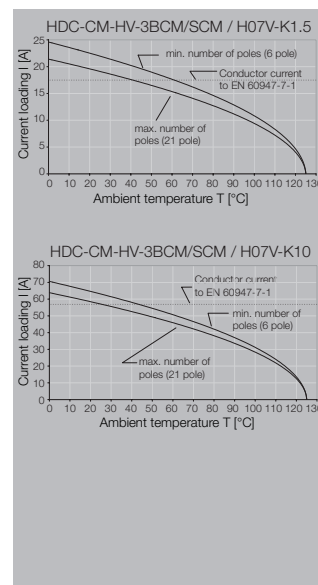
Rated current (DIN EN 61984)	57 A
Rated voltage (DIN EN 61984)	1000 V
Rated impulse voltage (DIN EN 61984)	8 kV
Pollution severity	3
Insulation resistance	10 ¹² Ω
Surge voltage category	III
Volume resistance	≤ 1 mΩ
Flammability class UL 94	V-0

Contacts

Contact diameter, male Ø	3.6 mm
Connection cross-section	1.5-10 mm ²
AWG conductor	AWG 16-AWG 7
Material	Polycarbonate, glass fibre reinforced

Note

For conductor cross-sections of 6 mm² to 10 mm², you must use ring cable lugs at the connection to the PE conductor.
When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load!



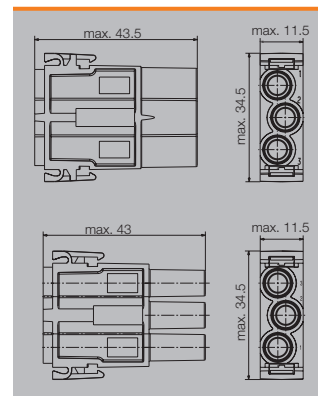
D

Modules

Crimp connection



Type	Type	Order No.
Male	HDC CM HV 3 MC	1862080000
Female	HDC CM HV 3 FC	1862060000



Accessories

Crimp contacts

Surface finish silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	Order No.
100	HDC-C-M3-SM1.5AG	1698120000	HDC-C-M3-BM1.5AG	1698130000	1698130000
100	HDC-C-M3-SM2.5AG	1698140000	HDC-C-M3-BM2.5AG	1698150000	1698150000
100	HDC-C-M3-SM4.0AG	1682260000	HDC-C-M3-BM4.0AG	1682270000	1682270000
100	HDC-C-M3-SM6.0AG	1682280000	HDC-C-M3-BM6.0AG	1682290000	1682290000
100	HDC-C-M3-SM10.0AG	1682300000	HDC-C-M3-BM10.0AG	1682310000	1682310000

Conductor cross-section	Insulation stripping length
1.50 mm ²	AWG 16 10 mm
2.50 mm ²	AWG 14 10 mm
4.00 mm ²	AWG 12 10 mm
6.00 mm ²	AWG 10 10 mm
10.00 mm ²	AWG 7 10 mm

Tools



Crimping tool		
CTX CM 3.6		9018480000
Contact Removal Tool		
Removal Tool CM 3		1866710000

ConCept modules

CM High current module

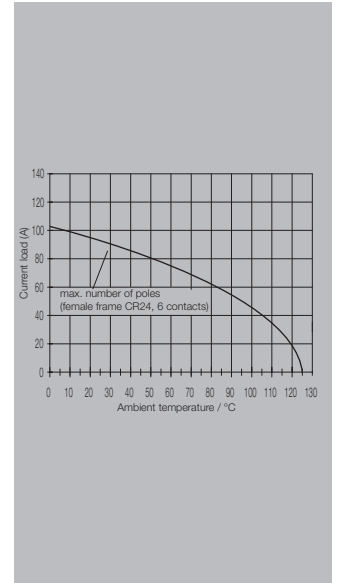
Technical data

Contact inserts

Rated current (DIN EN 61984)	82 A
Rated voltage (DIN EN 61984)	1000 V
Rated impulse voltage (DIN EN 61984)	6 kV
Pollution severity	3
Insulation resistance	10 ¹² Ω
Surge voltage category	III
Volume resistance	≤ 1 mΩ
Flammability class UL 94	V-0

Contacts

Contact diameter, male Ø	6 mm
Tightening torque	1.2
Connection cross-section	10-25 mm ²
AWG conductor	AWG 8-AWG 4
Material	Polyamide, glass fibre-reinforced



Note

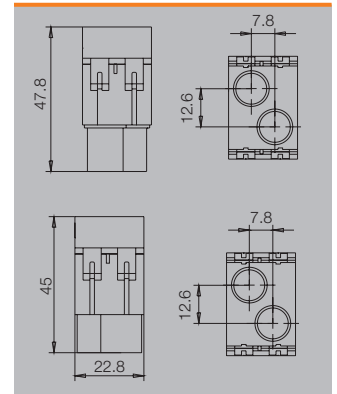
The modules have a double-module design and occupy two places in the ConCept module frame. Only use the modules with wire-end ferrules! When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load!

Modules

Screw connection



Type	Type	Order No.
Male	HDC CM 1 MS + PE	1828390000
Female	HDC CM 1 FS + PE	1828410000

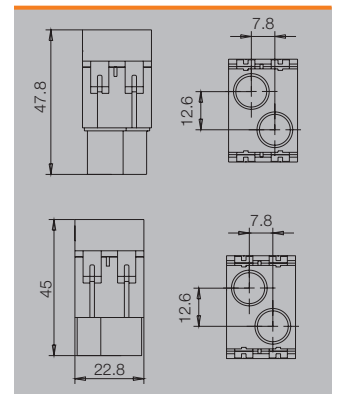


Modules

Screw connection



Type	Type	Order No.
Male	HDC CM 2 MS	1828380000
Female	HDC CM 2 FS	1828400000



Note

ConCept bus module for screened wires

Concept bus is ideal for transmitting highly sensitive signals in heavy-duty connectors.

Modules of the ConCept heavy-duty connector system offer many functions in a very small space with reliable protection from electromagnetic fields, moisture, dust and extreme mechanical loads.

D

By combining these with other modules, the power supply and other signals for the field device can be connected in a single plug-in connector.

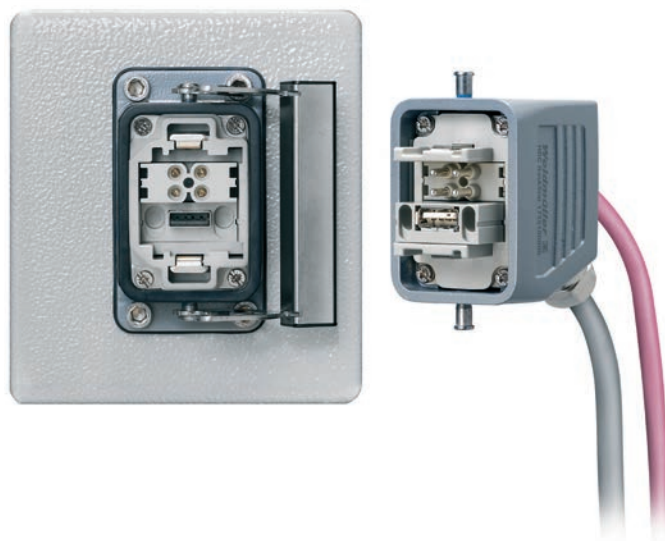
The **Profibus-DP** module with **T-Connector function** enables uninterrupted operation of the fieldbus during servicing or when replacing a field device. The fieldbus system no longer has to be switched off, as was the case in the past, because the field device can simply be connected or disconnected during operation using the heavy-duty connector – “plug and play” is now available for the first time for fieldbus solutions. The same heavy-duty connector also provides a reliable power supply for the connected fieldbus device.

On one side, Weidmüller uses the robust USB plug as connection system for the Profibus DP modules.

This guarantees a high transmission rate of 12 Mbit/s and at least 200 plugging cycles. On the other side, screw terminals are used to connect the screened Profibus cables.

Advantages

- Simple screw connection
- Simple screen connection



Versions

- Bus connector
HDC CM BUS 4 ...
for screened wires
(for connecting 4 wires and screen)



- Bus connector with integrated T-exit
HDC CM BUS 2 ... PDP
for screened wires
(Profibus-DP solution = 2 wires and screen)



Technical data

Material data	HDC CM BUS 4 ...	HDC CM BUS 2 ... PDP
Insulation	Glass fibre reinforced PC	
Colour	Grey (similar to RAL 7032)	
Temperature range	-20 °C to +85 °C	

System characteristics		
Connection technology	Screw connection	
No. of poles	4 + screen	2 + screen
Conductor capacity	0.08 ... 1.5 mm AWG 28 ... 16	As Profibus DP
Stripping length 5 mm		
Clamping capacity (outer diameter of cable screen)	2.1 ... 7 mm	
Stripped sheath length 19 mm		

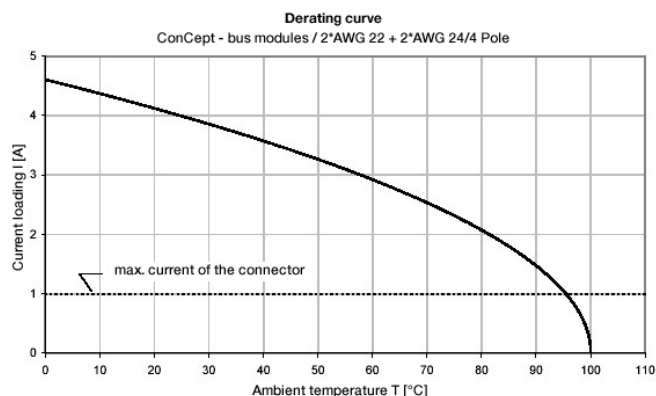
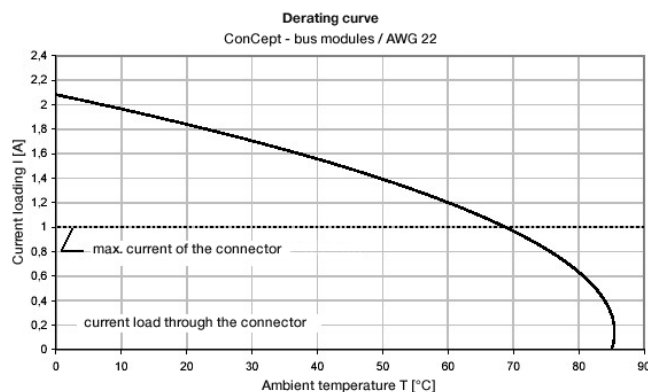
Rated data to VDE 0627	
Rated current	1 A
Rated voltage	32 V
Rated impulse withstand voltage	0.8 kV
Degree of pollution	3
Transmission rate	max. 12 Mbit/s

Clamping torques	
Screen clip	0.5 – 0.6 Nm
PCB terminal	0.2 – 0.3 Nm

- Assembly instructions**
- Use wire end ferrules
 - Clamp screen braid under clip
 - Use specified torque settings
 - Place module at the far end of the frame with the connection side to the outside
 - Only use high housing types

Note: Also take note of the assembly instructions enclosed with the product.

Derating curves



D

ConCept bus modules

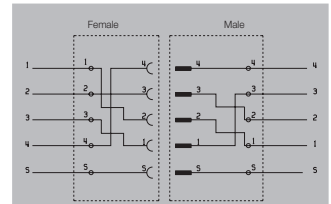
Bus connectors

4 poles

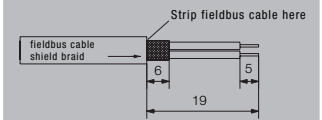
Technical data

Contact inserts

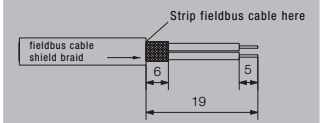
Rated current	1 A
Rated voltage	30 V
Qty.	5



Male module



Female module



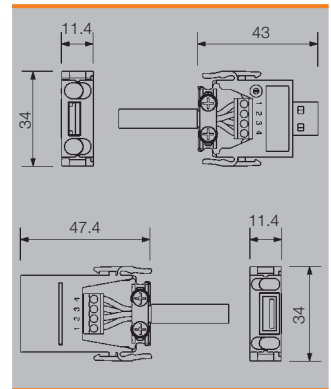
Note

Modules

Female module



Insert	Designation	Order No.
Male	HDC CM BUS 4SS	1814310000
Female	HDC CM BUS 4BS	1814300000



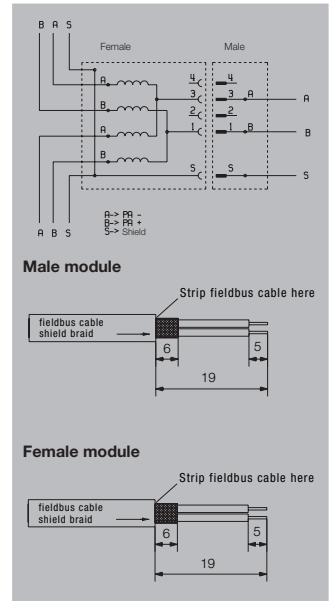
Bus connector with integrated T-exit

2 poles

Technical data

Contact inserts

Rated current	1 A
Rated voltage	30 V
Qty.	5



Note

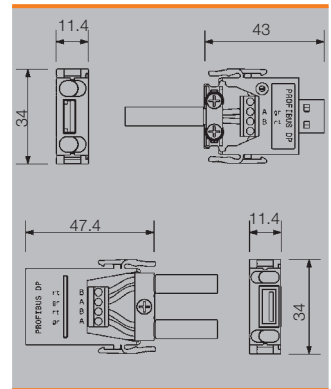
The Profibus topology is the line structure. The branches (T-pieces) connect the individual field devices or remote I/Os to the bus cable. The length of the spur depends on the transmission rate and should be as short as possible. IEC 61158 specifies that with a transmission rate of 1.5 Mbit/s per segment, spur lengths of up to 6.6 m are permitted. Source: Profibus Directive, Order No. 2.111 Version 1.0

Modules

Female module



Insert	Designation	Order No.
Male	HDC CM BUS 2SS PDP A	1806060000
Female	HDC CM BUS 2BS T PDP C	1806030000



ConCept bus modules

ConCept system bus

Shielded module

Technical data

Contact inserts

Standards	DIN EN 61984 IEC 60664
Approvals	UL/CSA
No. contacts	2...16 poles for signal transmission
Conductor connection system	Crimp
Rated current	10 A (HD) / 25 A (HE)
Rated voltage/Rated impulse withstand voltage	50 V/0.8 kV (HD) / 160V/3kV (HE)
Degree of pollution	3 (100 V/1.5 kV/2 (HD) / 250 V/3 kV/2 (HE))
Shield	Shield connected to contact carrier using cable clamp
Outside diameter of shielded cable	3 to 6 mm and/or 6 to 9.5 mm
Conductor clamping ranges	0.14 mm ² ... 4.62 mm ² AWG 26 ... AWG 11
Stripping lengths	8 mm (HD/HE) / 4 mm (SUB-D)
Volume resistance	< 4 mΩ (HD) / < 2 mΩ (HE)
Contacts (crimp)	HD / HE / SUB-D
Contact material	Copper alloy
Surface	
Crimp contact	Passivated silver or gold-plated
Contact carrier	Zinc alloy
Temperature range	-40 °C ... +70 °C
Material – module	Glass-fibre reinforced PC (in UL list and approved for railway applications)
Flammability to UL 94	V-0
Frame material	Die cast zinc
Surface of frame	CuNi
Frame earthing (ground)	Leading earthing contact; double-sided PE connection



Note

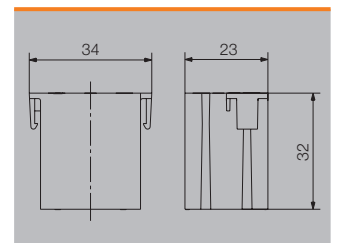
The modules have a double-module design and occupy two places in the ConCept module frame.
When used properly and as designated, the listed connectors may not be connected or disconnected if there is a live voltage or load!

Modules

Female receptacle module



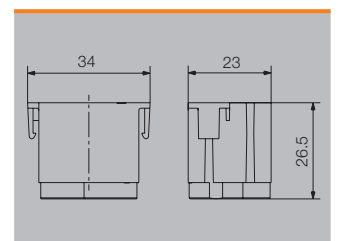
Designation	Type	Order No.
HDC CM BUS SV F2	Female module	1983720000



Male receptacle module



Designation	Type	Order No.
HDC CM BUS SV M2	Male module	1983750000

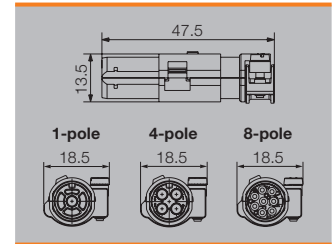


Female contact carrier



Designation	Type	Type of contact	Order No.
HDC CM BUS SV F1 CT	1-pole	Females contact carrier HD	1983800000
HDC CM BUS SV F4 CT	4-pole	Females contact carrier HD	1983770000
HDC CM BUS SV F8 CT	8-pole	Females contact carrier SUB-D	1043120000
HDC CM BUS HE F1 CT	1-pole	Females contact carrier HE	1116090000

Note: Additional crimp contacts on D.18

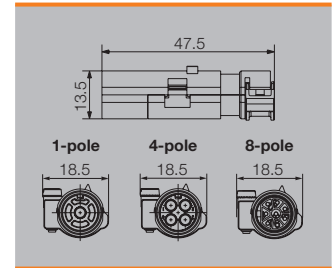


Male contact carrier



Designation	Type	Type of contact	Order No.
HDC CM BUS SV M1 CT	1-pole	Male contact carrier HD	1983810000
HDC CM BUS SV M4 CT	4-pole	Male contact carrier HD	1983790000
HDC CM BUS SV M8 CT	8-pole	Male contact carrier SUB-D	1043130000
HDC CM BUS HE M1 CT	1-pole	Male contact carrier HE	1116100000

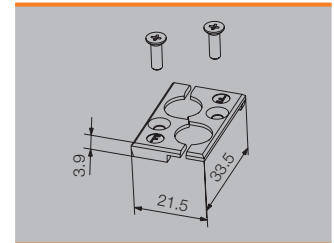
Note: Additional crimp contacts on D.18



Earthing connection adapter plate



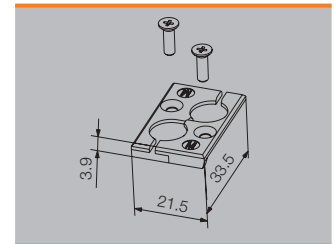
Designation	Type	Order No.
HDC CM BUS SV GCA F	Earthing connection adapter plate	1983820000



Earthing connection adapter plate



Designation	Type	Order No.
HDC CM BUS SV GCA M	Earthing connection adapter plate	1014080000



Accessories

HD crimp contacts

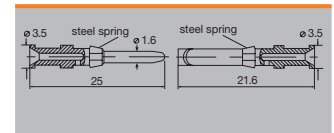
Surface Gold



Surface Silver



Qty.	Male	Order No.	Female	Order No.
100	HDC-C-HD-SM0.14-0.37AU	1651620000	HDC-C-HD-BM0.14-0.37AU	1651670000
100	HDC-C-HD-SM0.5AU	1651630000	HDC-C-HD-BM0.5AU	1651680000
100	HDC-C-HD-SM0.75-1AU	1651640000	HDC-C-HD-BM0.75-1AU	1651690000
100	HDC-C-HD-SM1.5AU	1651650000	HDC-C-HD-BM1.5AU	1651700000
100	HDC-C-HD-SM2.5AU	1651660000	HDC-C-HD-BM2.5AU	1651710000
100	HDC-C-HD-SM0.14-0.37AG	1651520000	HDC-C-HD-BM0.14-0.37AG	1651570000
100	HDC-C-HD-SM0.5AG	1651530000	HDC-C-HD-BM0.75-1AG	1601760000
100	HDC-C-HD-SM0.75-1AG	1601750000	HDC-C-HD-BM0.5AG	1651580000
100	HDC-C-HD-SM1.5AG	1651550000	HDC-C-HD-BM1.5AG	1651600000
100	HDC-C-HD-SM2.5AG	1651560000	HDC-C-HD-BM2.5AG	1651610000



Conductor cross-section	Insulation stripping length
0.14 – 0.37 mm ²	AWG 26-22 8 mm
0.50 mm ²	AWG 20 8 mm
0.75 – 1.00 mm ²	AWG 18 8 mm
1.50 mm ²	AWG 16 8 mm
2.50 mm ²	AWG 14 6 mm

Tools



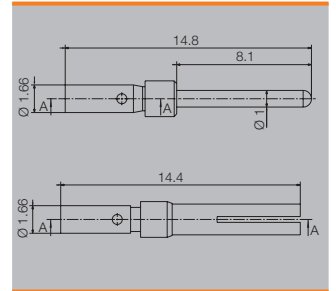
Crimping tool	Order No.
CTX CM 1.6/2.5	9018490000
Contact release tool	Order No.
Removal Tool HD	1866730000

Accessories

SUB-D crimp contacts



Qty.	Male	Order No.	Female	Order No.
100	HDC-C-CM-BUS-S0.33-0.52	1027260000	HDC-C-CM-BUS-B0.33-0.52	1027270000



D

HE crimp contacts

Surface Gold



Surface Silver



Qty.	Male	Order No.	Female	Order No.
100	HDC-C-HE-SM0.5AU	1651420000	HDC-C-HE-BM0.5AU	1651470000
100	HDC-C-HE-SM0.75-1AU	1651430000	HDC-C-HE-BM0.75-1AU	1651480000
100	HDC-C-HE-SM1.5AU	1651440000	HDC-C-HE-BM1.5AU	1651490000
100	HDC-C-HE-SM2.5AU	1651450000	HDC-C-HE-BM2.5AU	1651500000
100	HDC-C-HE-SM4.0AU	1651460000	HDC-C-HE-BM4.0AU	1651510000
100	HDC-C-HE-SM4.65AU	1116540000	HDC-C-HE-BM4.65AU	1116530000
100	HDC-C-HE-SM0.5AG	1200500000	HDC-C-HE-BM0.5AG	1201100000
100	HDC-C-HE-SM0.75-1AG	1200600000	HDC-C-HE-BM0.75-1AG	1201200000
100	HDC-C-HE-SM1.5AG	1200700000	HDC-C-HE-BM1.5AG	1201300000
100	HDC-C-HE-SM2.5AG	1200800000	HDC-C-HE-BM2.5AG	1201400000
100	HDC-C-HE-SM4.0AG	1200900000	HDC-C-HE-BM4.0AG	1201500000

Conductor cross-section	Insulation stripping length
0.50 mm ²	AWG 20 7.5 mm
0.75 - 1.00 mm ²	AWG 18 7.5 mm
1.50 mm ²	AWG 16 7.5 mm
2.50 mm ²	AWG 14 7.5 mm
4.00 mm ²	AWG 12 7.5 mm

Tools



Crimping tool	Order No.
CTX CM 1.6/2.5	9018490000
Contact release tool	
Removal Tool HE	1866750000

ConCept ST

The new RockStar® ConCept ST data module with **STEADYTEC®** technology is a new versatile Gigabit Ethernet module for use with the modular connector system ConCept.

- Gigabit Ethernet (Cat.6A 10GBit System Class EA): fast RJ45 data insert suitable for field assembly.
- Your choice for excellent flexibility: the platform concept allows the use of RJ45, SC/LC and hybrid inserts.
- Optimised handling and easy implementation through integrated module release levers.
- Can be combined with all available ConCept modules and module frames.



Technical data

Standards	IEC 60664 DIN EN 61984
Approvals	GL, further approvals are pending
Number of poles	8-pole (RJ45) / 2-pole SC (single-mode/multi-mode/POF)/LC (single-mode/multi-mode) / 10-pole hybrid
Rated voltage (RJ45)	50 V
Rated impulse voltage (RJ45)	1 kV
Rated current (RJ45)	1 A
Volume resistance	≤ 20 mΩ
Insulation resistance	≤ 10 ¹⁰ mΩ
Shielding	360° shielded data insert housing / optional shield clamp
Pollution severity	3
Category	Cat.6A 10GBit System Class EA (Ethernet TCP/IP, Profinet, Ethernet IP) according to ISO/IEC 11801
Wire connection method	IDC (RJ45) / crimp (RJ45/SC/LC/hybrid)
Wire clamping range	RJ45 inserts, no tool required (FH): Flexible: 0.48 - 0.76 mm ² (AWG 26/7...AWG 22/7) Solid: 0.40 - 0.64 mm ² (AWG 26/1...AWG 22/1) RJ45 crimp inserts (TH): Flexible: 0.46 - 0.61 mm ² (AWG 27/7...AWG 24/7) Solid: 0.36 - 0.51 mm ² (AWG 26/1...AWG 24/1) SC/LC crimp inserts: Inner wire G50 µm/125 µm and G62.5 µm/125 µm Hybrid crimp inserts: 0.2 - 0.5 mm ² (AWG 24...20)
Temperature range	- 40 °C ... + 70 °C
Insertion and pulling forces	≤ 30 N
Plugging cycles	≥ 500
Materials	
Module housing	PC glass-fibre reinforced
Flammability according to UL 94	V-0
Flammability according to NFF 16-101 / NFF 16-102	I1F2
Colour of module housing	grey (RAL 7032)
Data inserts	Die-cast zinc/ brass/PC (RJ45 TH) / PA (SC socket) / PBT (LC socket) / PA/nickel silver (hybrid)
Contacts (RJ45/hybrid)	Copper (RJ45 FH) / Phosphor-bronze (RJ45 TH) / Tin-bronze (hybrid)
Contact surface (RJ45/hybrid)	Gold-plated nickel (RJ45) / partially gold-plated (hybrid)

Note: These modules are designed as double modules and take up two slots in the ConCept module frames.
The RJ45 data inserts are suitable for PoE (power over Ethernet) in compliance with IEEE 802.3af.
The main catalogue 9 contains additional information on our industrial Ethernet products.

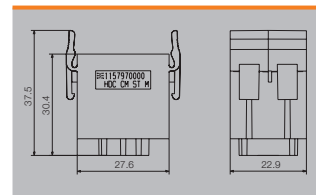
ConCept ST

Modules

Male



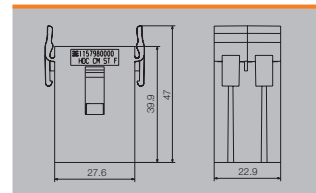
Designation	Type	Order No.
Male	HDC CM ST M	1157970000



Female



Designation	Type	Order No.
Female	HDC CM ST F	1157980000

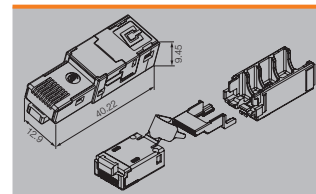


Data inserts RJ45

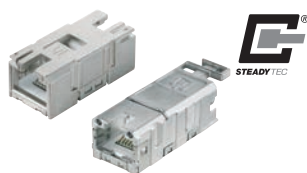
Male



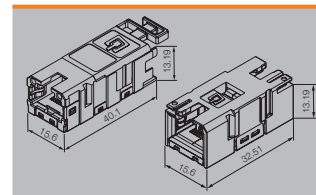
Designation	Type	Order No.
Male	IE-PI-RJ45-FH	1962730000
Male	IE-PI-RJ45-FH-A	1132010000
Male	IE-PI-RJ45-FH-B	1132020000
Male	IE-PI-RJ45-FH-P	1132030000
Male	IE-PI-RJ45-TH	1962720000



Female

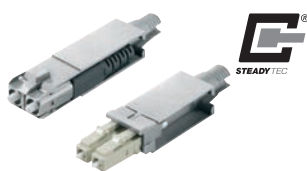


Designation	Type	Order No.
Female	IE-BI-RJ45-C	1962840000
Female	IE-BI-RJ45-FJ-A	1962850000
Female	IE-BI-RJ45-FJ-B	1963840000
Female	IE-BI-RJ45-FJ-P	1963830000

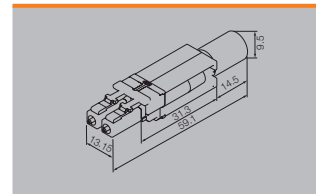


Data inserts SC/LC

Male



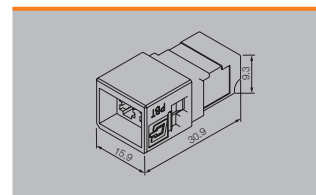
Designation	Type	Order No.
Male	IE-PI-2SC-SM	1962760000
Male	IE-PI-2SC-MM	1962750000
Male	IE-PI-2SC-POF	1962770000
Male	IE-PI-2LC-SM	1962790000
Male	IE-PI-2LC-MM	1962780000




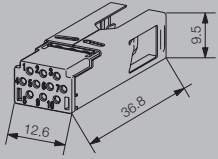
Female


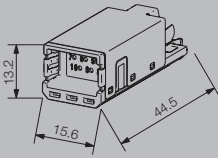


Designation	Type	Order No.
Female	IE-BI-SCRJ2SC-SM-C	1962870000
Female	IE-BI-SCRJ2SC-MM-C	1964430000
Female	IE-BI-LCD-SM-C	1962880000
Female	IE-BI-LCD-MM-C	1964420000


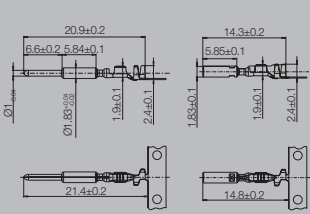



ConCept ST
ConCept ST
Data inserts hybrid

Male	Designation	Type	Order No.	
	Male	IE-PI-HYB-10P	1068990000	

Female	Designation	Type	Order No.	
	Female	IE-BI-HYB-10P	1069010000	

Crimp contacts hybrid

Male	Designation	Type	Order No.	
	Male	IE-BIC-HYB-P-0.5-300	1096150000	 <p>Conductor cross-section Insulation stripping length</p> <p>0.21 – 0.50 mm² AWG 24-20 3.5 mm</p>
Female	Designation	Type	Order No.	
	Female	IE-PIC-HYB-S-0.5-300	1096180000	

Accessories

Designation	Type	Order No.
Crimping tool RJ45	TT 8 RS MP 8	9202800000
Stripping tool RJ45	IE-CST	9204350000
	AM 12	9030060000
Crimping tools SC/LC	IE-CT-SC-GOF	9205320000
	IE-CT-SC-POF	9205340000
	IE-CT-SC-GOF-P	9205350000
	IE-CT-LC-GOF	9205330000
Stripping tool SC (POF)	M-D-STRIPAX LWL	9003750000
Assembly case SC/LC	IE-CTC-SCST-GOF	1032030000
	IE-CTC-AS-SC-POF	1033360000
	IE-CTC-AS-LC-GOF	1033350000
Crimping tool hybrid	HTF HYB	1119580000
Cutting tool	KT 8	9002650000

CM pneumatic

Technical data

Contact inserts

Number of valves	1
Type of connection	Hose connection (pneumatic)
Connection diameter, hose (inner)	2.5 mm
Module operating pressure	10 bar
Contact travel	4 mm
Stop valve	Socket side
Hose type	Only use PTFE hoses
Connection diameter, hose (outer)	8 mm
Connection system	Self-locking
Temperature range, installation	-40...80 °C
Flammability class UL 94	V-0

Contacts

Contact material	Ms 58 brass
Sealing material	NBR
Module body material	PA 6.6
Colour	Black

Note

When delivering liquids or gases of any type through pneumatic modules, it is very important to remember that no current-carrying modules should be mounted or be mounted later in the same housing.



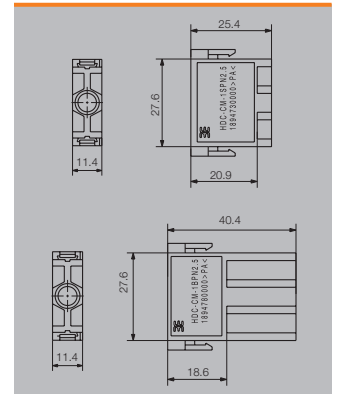
D

Modules

Hose connection (pneumatic)



Type	Type	Order No.
Male	HDC CM 1 MPN 2.5	1894730000
Female	HDC CM 1 FPN 2.5	1894780000
Male	HDC CM 1 MPN 4.0	1894740000
Female	HDC CM 1 FPN 4.0	1894720000



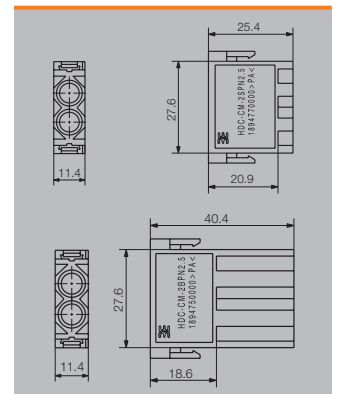
Modules

Hose connection (pneumatic)



Type	Type	Order No.
Male	HDC CM 2 MPN 2.5	1894770000
Female	HDC CM 2 FPN 2.5	1894750000
Male	HDC CM 2 MPN 4.0	1894710000
Female	HDC CM 2 FPN 4.0	1894760000

Note



ConCept module frame

Size 3

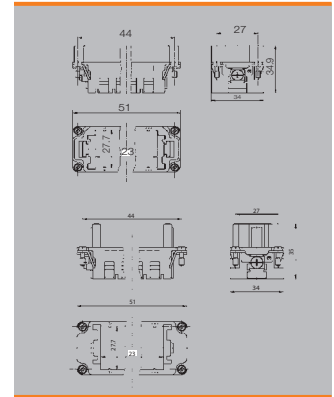
CR6 ConCept frame, plastic

Frame



Type	Type	Order No.
Male	HDC-CR6-2S GR	1758440000
Female	HDC-CR6-2B GR	1758450000

Note For 2 modules



**Selection of Housings RockStar® IP66
Size 3**



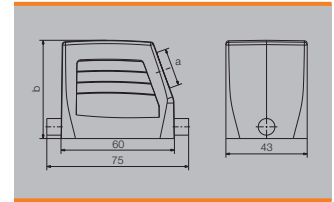
Further housings are available, see Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



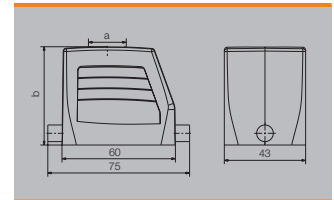
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 06B TSLU 1M20G	1788100000
M 25	w. threading		52	HDC 06B TSLU 1M25G	1788090000
M 25	w. threading		72	HDC 16D TSLU 1M25G	1787480000



Plug housing, cable entry at top



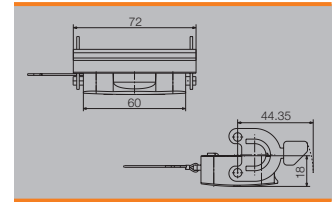
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 06B TOLU 1M20G	1788120000
M 25	w. threading		52	HDC 06B TOLU 1M25G	1788110000
M 25	w. threading		72	HDC 16D TOLU 1M25G	1787500000
M 32	w. threading		72	HDC 16D TOLU 1M32G	1787490000



Cover



Version	Type	Order No.
For hoods	HDC 06B DMDL 1LB	1665210000

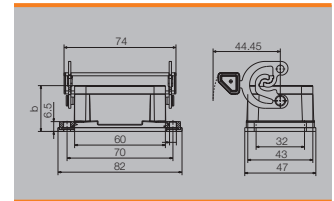


Base

Bulkhead housing



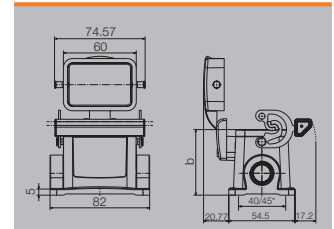
Version	Cover	b (mm)	Type	Order No.
		29	HDC 06B ALU	1202100000
	with cover	47	HDC 06B ADLU	1202500000



Base housing



a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		54	HDC 06B SLU 2M20G	1788140000
M 20	w. threading	with cover	72	HDC 06B SDLU 2M20G	1788170000
M 25	w. threading		54	HDC 06B SLU 2M25G	1788130000
M 25	w. threading	with cover	72	HDC 06B SDLU 2M25G	1788160000

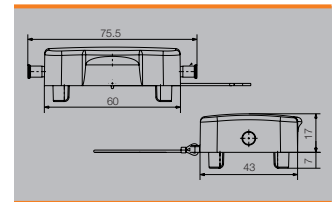


* Mounting dimensions for size-3 base housings, tall shape (16D)

Cover



Version	Type	Order No.
For bases	HDC 06B DODL 2BO	1665200000



ConCept module frame

Size 3

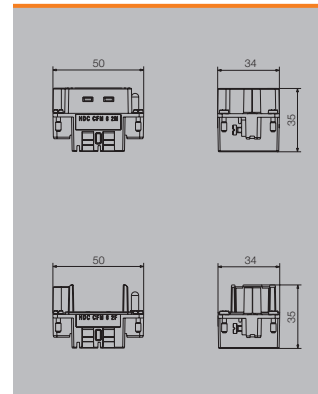
CR6 ConCept frame, metal

Frame



Type	Type	Order No.
Male	HDC CFM 6 2M	1983830000
Female	HDC CFM 6 2F	1983840000

Note For 2 modules



**Selection of Housings RockStar® IP66
Size 3**



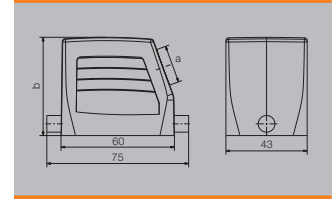
Further housings are available, see Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



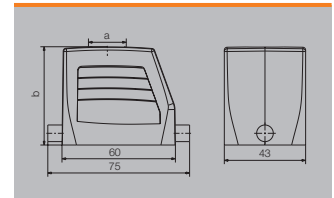
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 06B TSLU 1M20G	1788100000
M 25	w. threading		52	HDC 06B TSLU 1M25G	1788090000
M 25	w. threading		72	HDC 16D TSLU 1M25G	1787480000



Plug housing, cable entry at top



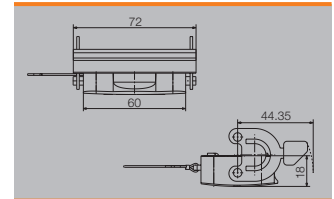
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 06B TOLU 1M20G	1788120000
M 25	w. threading		52	HDC 06B TOLU 1M25G	1788110000
M 25	w. threading		72	HDC 16D TOLU 1M25G	1787500000
M 32	w. threading		72	HDC 16D TOLU 1M32G	1787490000



Cover



Version	Type	Order No.
For hoods	HDC 06B DMDL 1LB	1665210000

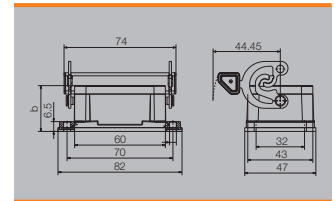


Base

Bulkhead housing



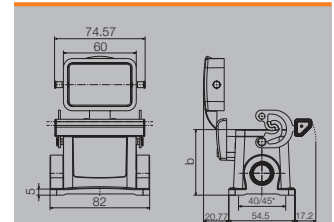
Version	Cover	b (mm)	Type	Order No.
		29	HDC 06B ALU	1202100000
	with cover	47	HDC 06B ADLU	1202500000



Base housing



a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		54	HDC 06B SLU 2M20G	1788140000
M 20	w. threading	with cover	72	HDC 06B SDLU 2M20G	1788170000
M 25	w. threading		54	HDC 06B SLU 2M25G	1788130000
M 25	w. threading	with cover	72	HDC 06B SDLU 2M25G	1788160000



* Mounting dimensions for size-3 base housings, tall shape (16D)

D

ConCept module frame

Size 4

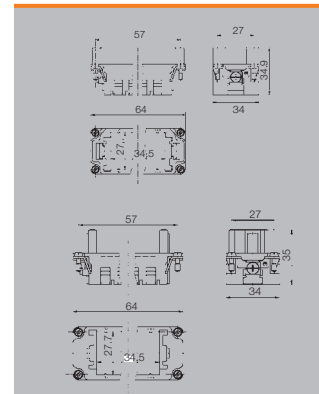
CR10 ConCept frame, plastic

Frame



Type	Type	Order No.
Male	HDC-CR10-3S GR	1758460000
Female	HDC-CR10-3B GR	1758470000

Note For 3 modules



Selection of Housings RockStar® IP66
Size 4



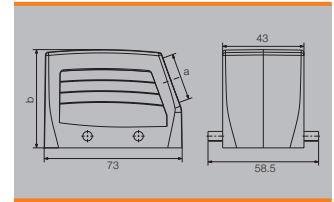
Further housings are available, see Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



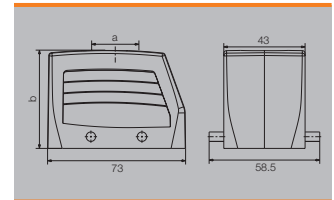
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 10B TSBU 1M20G	1787560000
M 25	w. threading		52	HDC 10B TSBU 1M25G	1787550000
M 25	w. threading		72	HDC 24D TSBU 1M25G	1787240000
M 32	w. threading		72	HDC 24D TSBU 1M32G	1787230000



Plug housing, cable entry at top



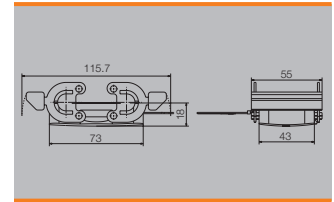
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 10B TOBU 1M20G	1787600000
M 25	w. threading		52	HDC 10B TOBU 1M25G	1787590000
M 25	w. threading		72	HDC 24D TOBU 1M25G	1787300000
M 32	w. threading		72	HDC 24D TOBU 1M32G	1787290000



Cover



Version	Type	Order No.
For hoods	HDC 10B DMDQ 2QB	1665240000

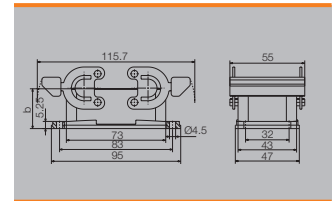


Base

Bulkhead housing



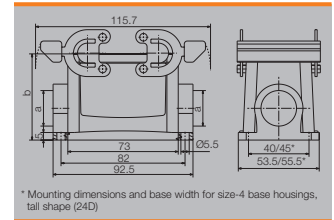
Version	Cover	b (mm)	Type	Order No.
		29.3	HDC 10B ABU	1205000000



Base housing



a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		57	HDC 10B SBU 2M20G	1787640000
M 25	w. threading		57	HDC 10B SBU 2M25G	1787630000

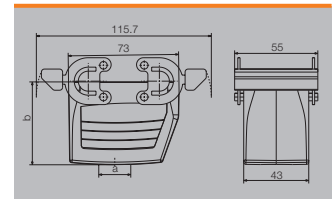


* Mounting dimensions and base width for size-4 base housings, tall shape (24D)

Coupling housing



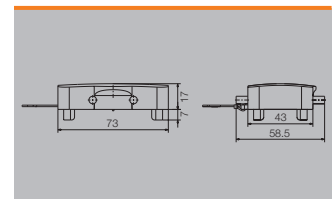
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		55	HDC 10B KBU 1M20G	1787720000



Cover



Version	Type	Order No.
For bases	HDC 10B DODQ 4BO	1665230000

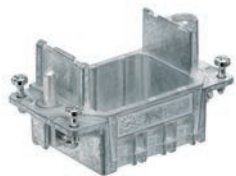


ConCept module frame

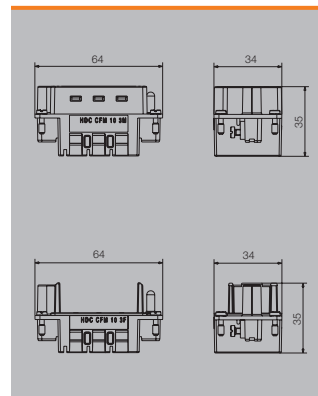
Size 4

CR10 ConCept frame, metal

Frame



Type	Type	Order No.
Male	HDC CFM 10 3M	1983850000
Female	HDC CFM 10 3F	1983860000



Note For 3 modules

**Selection of Housings RockStar® IP66
Size 4**



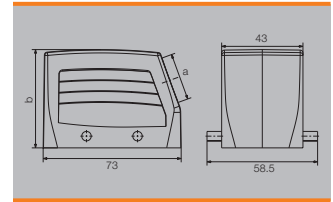
Further housings are available, see Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



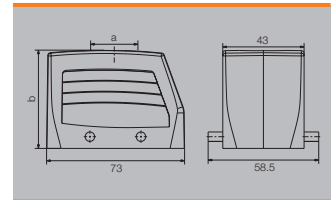
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 10B TSBU 1M20G	1787560000
M 25	w. threading		52	HDC 10B TSBU 1M25G	1787550000
M 25	w. threading		72	HDC 24D TSBU 1M25G	1787240000
M 32	w. threading		72	HDC 24D TSBU 1M32G	1787230000



Plug housing, cable entry at top



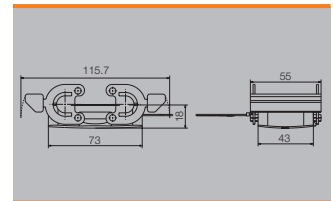
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 10B TOBU 1M20G	1787600000
M 25	w. threading		52	HDC 10B TOBU 1M25G	1787590000
M 25	w. threading		72	HDC 24D TOBU 1M25G	1787300000
M 32	w. threading		72	HDC 24D TOBU 1M32G	1787290000



Cover



Version	Type	Order No.
For hoods	HDC 10B DMDQ 2QB	1665240000

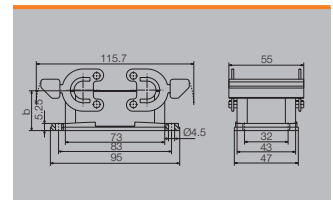


Base

Bulkhead housing



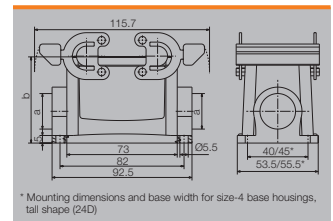
Version	Cover	b (mm)	Type	Order No.
		29.3	HDC 10B ABU	1205000000



Base housing



a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		57	HDC 10B SBU 2M20G	1787640000
M 25	w. threading		57	HDC 10B SBU 2M25G	1787630000

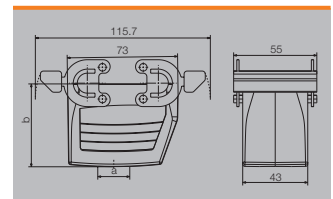


* Mounting dimensions and base width for size-4 base housings, tall shape (24D)

Coupling housing



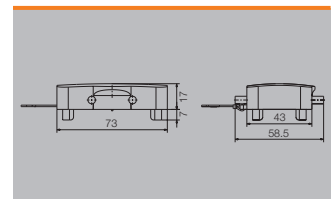
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		55	HDC 10B KBU 1M20G	1787720000



Cover



Version	Type	Order No.
For bases	HDC 10B DODQ 4B0	1665230000



ConCept module frame

Size 6

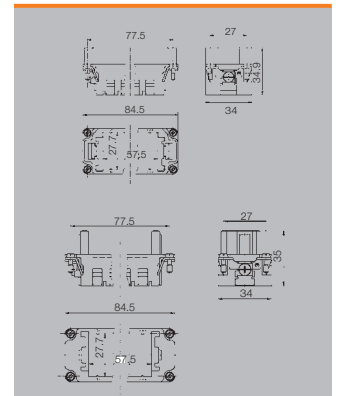
CR16 ConCept frame, plastic

Frame



Type	Type	Order No.
Male	HDC-CR16-5S GR	1758480000
Female	HDC-CR16-5B GR	1758490000

Note For 5 modules



Selection of Housings RockStar® IP66
Size 6



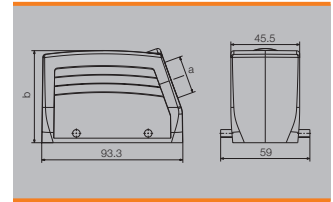
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



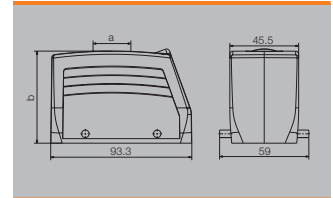
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TSBU 1M25G	1788180000
M 25	w. threading		76	HDC 40D TSBU 1M25G	1787010000
M 32	w. threading		76	HDC 40D TSBU 1M32G	1787000000



Plug housing, cable entry at top



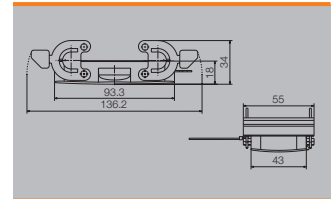
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TOBU 1M25G	1788210000
M 25	w. threading		76	HDC 40D TOBU 1M25G	1787070000
M 32	w. threading		76	HDC 40D TOBU 1M32G	1787060000



Cover



Version	Type	Order No.
For hoods	HDC 16B DMDQ 2QB	1665270000

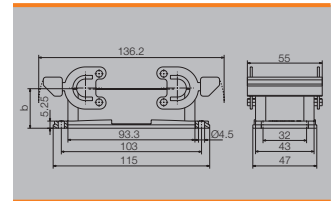


Base

Bulkhead housing



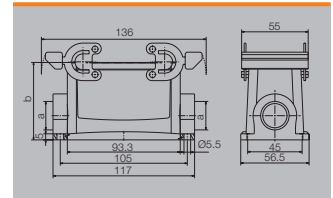
Version	Cover	b (mm)	Type	Order No.
		29	HDC 16B ABU	1208600000



Base housing



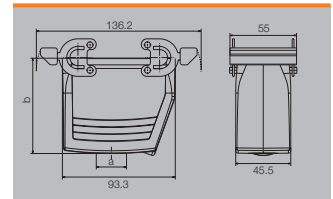
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		64	HDC 16B SBU 2M25G	1788240000
M 25	w. threading		84	HDC 40D SBU 2M25G	1787120000
M 32	w. threading		84	HDC 40D SBU 2M32G	1787110000



Coupling housing



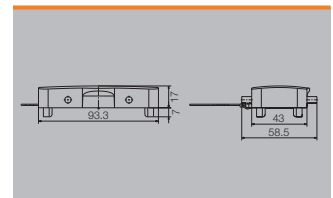
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		79	HDC 40D KBU 1M25G	1787200000
M 32	w. threading		79	HDC 40D KBU 1M32G	1787190000



Cover



Version	Type	Order No.
For bases	HDC 16B DODQ 4B0	1665260000

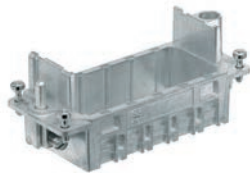


ConCept module frame

Size 6

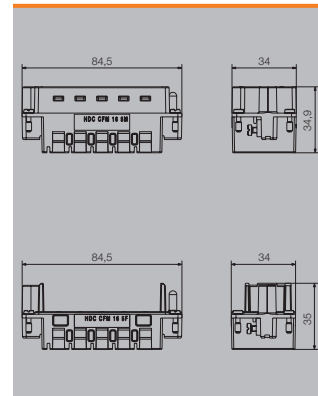
CR16 ConCept frame, metal

Frame



Type	Type	Order No.
Male	HDC CFM 16 5M	1983870000
Female	HDC CFM 16 5F	1983880000

Note For 5 modules



D

Selection of Housings RockStar® IP66
Size 6



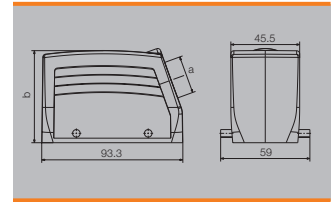
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



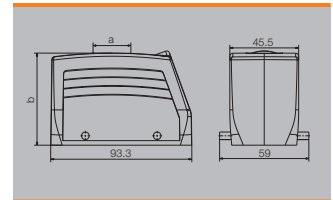
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TSBU 1M25G	1788180000
M 25	w. threading		76	HDC 40D TSBU 1M25G	1787010000
M 32	w. threading		76	HDC 40D TSBU 1M32G	1787000000



Plug housing, cable entry at top



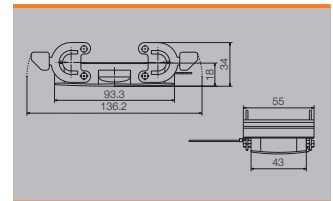
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TOBU 1M25G	1788210000
M 25	w. threading		76	HDC 40D TOBU 1M25G	1787070000
M 32	w. threading		76	HDC 40D TOBU 1M32G	1787060000



Cover



Version	Type	Order No.
For hoods	HDC 16B DMDQ 2QB	1665270000

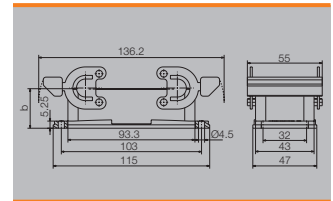


Base

Bulkhead housing



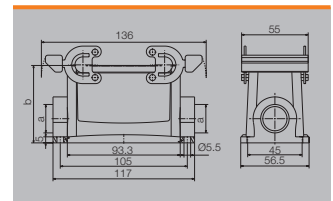
Version	Cover	b (mm)	Type	Order No.
		29	HDC 16B ABU	1208600000



Base housing



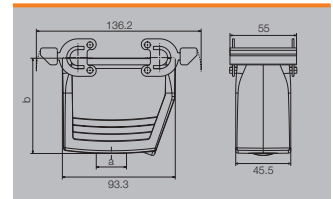
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		64	HDC 16B SBU 2M25G	1788240000
M 25	w. threading		84	HDC 40D SBU 2M25G	1787120000
M 32	w. threading		84	HDC 40D SBU 2M32G	1787110000



Coupling housing



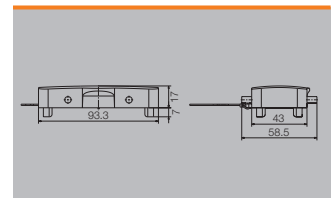
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		79	HDC 40D KBU 1M25G	1787200000
M 32	w. threading		79	HDC 40D KBU 1M32G	1787190000



Cover



Version	Type	Order No.
For bases	HDC 16B DODQ 4B0	1665260000

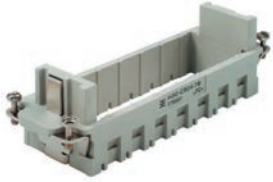


ConCept module frame

Size 8

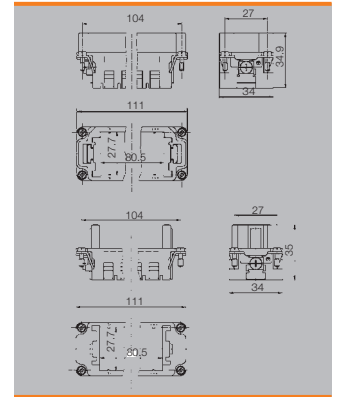
CR24 ConCept frame, plastic

Frame



Type	Type	Order No.
Male	HDC-CR24-7S GR	175850000
Female	HDC-CR24-7B GR	175851000

Note For 7 modules



Selection of Housings RockStar® IP66
Size 8



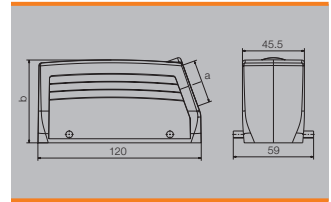
Further housings are available, see
Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



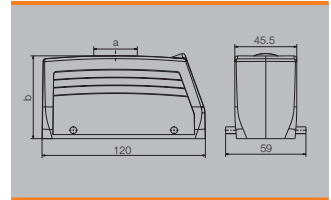
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 24B TSBU 1M25G	1787760000
M 25	w. threading		76	HDC 64D TSBU 1M25G	1786780000
M 32	w. threading		61	HDC 24B TSBU 1M32G	1787750000
M 32	w. threading		76	HDC 64D TSBU 1M32G	1786770000



Plug housing, cable entry at top



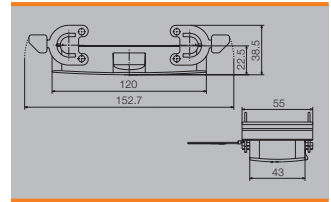
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 24B TOBU 1M25G	1787820000
M 32	w. threading		61	HDC 24B TOBU 1M32G	1787810000
M 32	w. threading		76	HDC 64D TOBU 1M32G	1786830000



Cover



Version	Type	Order No.
For hoods	HDC 24B DMDQ 2QB	1665640000

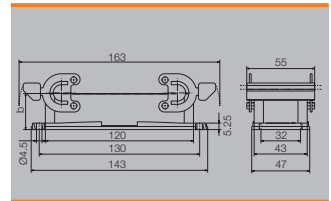


Base

Bulkhead housing



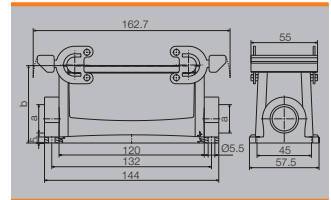
Version	Cover	b (mm)	Type	Order No.
		29.3	HDC 24B ABU	1212400000



Base housing



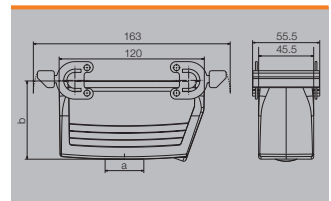
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		64	HDC 24B SBU 2M25G	1787870000
M 25	w. threading		84	HDC 64D SBU 2M25G	1786890000
M 32	w. threading		84	HDC 64D SBU 2M32G	1786880000



Coupling housing



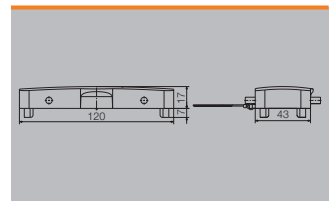
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		65	HDC 24B KBU 1M25G	1787920000
M 32	w. threading		79	HDC 64D KBU 1M32G	1786960000



Cover



Version	Type	Order No.
For bases	HDC 24B DODQ 4B0	1665630000



ConCept module frame

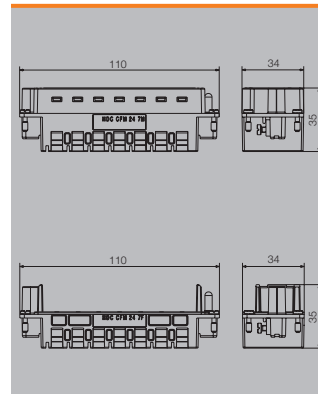
Size 8

CR24 ConCept frame, metal

Frame



Type	Type	Order No.
Male	HDC CFM 24 7M	1983890000
Female	HDC CFM 24 7F	1983900000



Note For 7 modules

**Selection of Housings RockStar® IP66
Size 8**



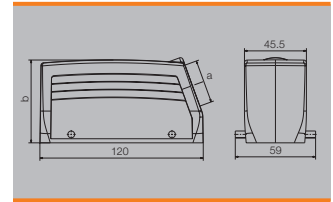
Further housings are available, see Chapter E for IP66 and Chapter F for IP68

Hood

Plug housing, cable entry sideways



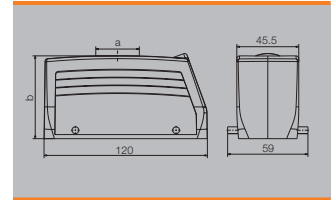
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 24B TSBU 1M25G	1787760000
M 25	w. threading		76	HDC 64D TSBU 1M25G	1786780000
M 32	w. threading		61	HDC 24B TSBU 1M32G	1787750000
M 32	w. threading		76	HDC 64D TSBU 1M32G	1786770000



Plug housing, cable entry at top



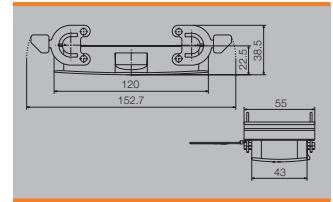
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 24B TOBU 1M25G	1787820000
M 32	w. threading		61	HDC 24B TOBU 1M32G	1787810000
M 32	w. threading		76	HDC 64D TOBU 1M32G	1786830000



Cover



Version	Type	Order No.
For hoods	HDC 24B DMDQ 2QB	1665640000

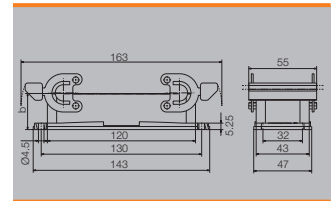


Base

Bulkhead housing



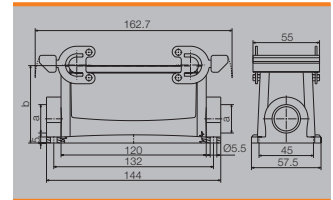
Version	Cover	b (mm)	Type	Order No.
		29.3	HDC 24B ABU	1212400000



Base housing



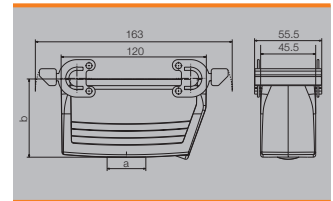
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		64	HDC 24B SBU 2M25G	1787870000
M 25	w. threading		84	HDC 64D SBU 2M25G	1786890000
M 32	w. threading		84	HDC 64D SBU 2M32G	1786880000



Coupling housing



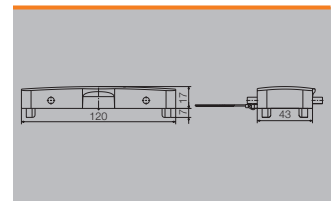
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		65	HDC 24B KBU 1M25G	1787920000
M 32	w. threading		79	HDC 64D KBU 1M32G	1786960000



Cover



Version	Type	Order No.
For bases	HDC 24B DODQ 4B0	1665630000

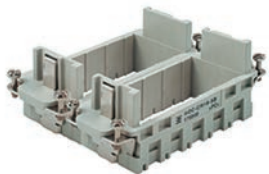


ConCept module frame

Size 10

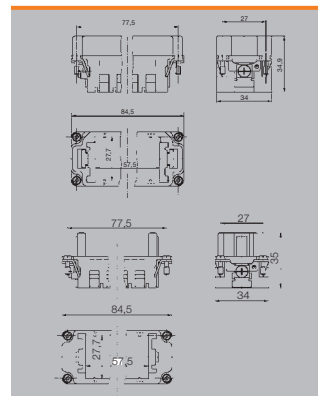
CR16 ConCept frame, plastic 2x

Frame



Type	Type	Order No.
Male	HDC-CR16-5S GR	1758480000
Male	HDC-CR16-5S-2 GR	1758520000
Female	HDC-CR16-5B GR	1758490000
Female	HDC-CR16-5B-2 GR	1758530000

Note For 2 x 5 modules



Selection of Housings RockStar® IP66
Size 10



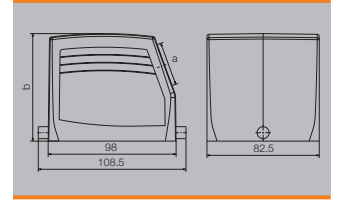
Further housings are available, see Chapter E for IP66

Hood

Plug housing, cable entry sideways



a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		79	HDC 32B TSLU 1M32G	1788420000

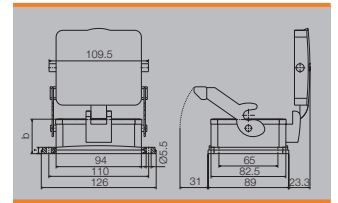


Base

Bulkhead housing



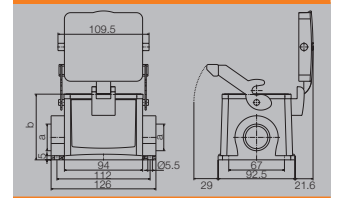
Version	Cover	b (mm)	Type	Order No.
		38	HDC 32B ALU	1219500000
	with cover	55	HDC 32B ADLU	1219800000



Base housing



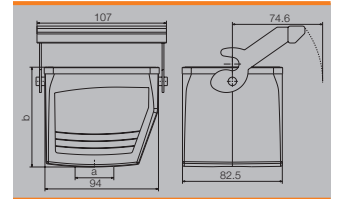
a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		79	HDC 32B SLU 2M32G	1788470000
M 32	w. threading	with cover	96	HDC 32B SDLU 2M32G	1788490000



Coupling housing



a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		83	HDC 32B KLU 1M32G	1788500000



ConCept module frame

Size 12

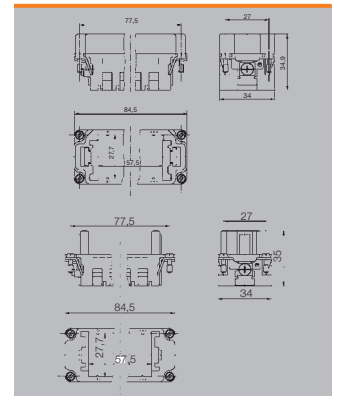
CR24 ConCept frame, plastic 2x

Frame



Type	Type	Order No.
Male	HDC-CR24-7S GR	175850000
Male	HDC-CR24-7S-2 GR	175854000
Female	HDC-CR24-7B GR	175851000
Female	HDC-CR24-7B-2 GR	175855000

Note For 2 x 7 modules



Selection of Housings RockStar® IP66
Size 12



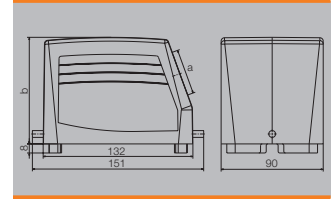
Further housings are available, see Chapter E for IP66

Hood

Plug housing, cable entry sideways



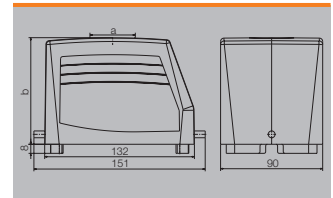
a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		94	HDC 48B TSLU 1M32G	1788320000
M 40	w. threading		94	HDC 48B TSLU 1M40G	1788310000
M 50	w. threading		94	HDC 48B TSLU 1M50G	1788300000



Plug housing, cable entry at top



a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		94	HDC 48B TOLU 1M32G	1788350000
M 50	w. threading		94	HDC 48B TOLU 1M50G	1788330000

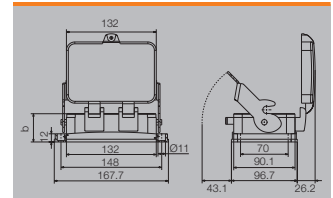


Base

Bulkhead housing



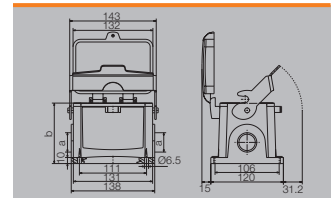
Version	Cover	b (mm)	Type	Order No.
	with cover	62	HDC 48B ADLU	1222900000



Base housing

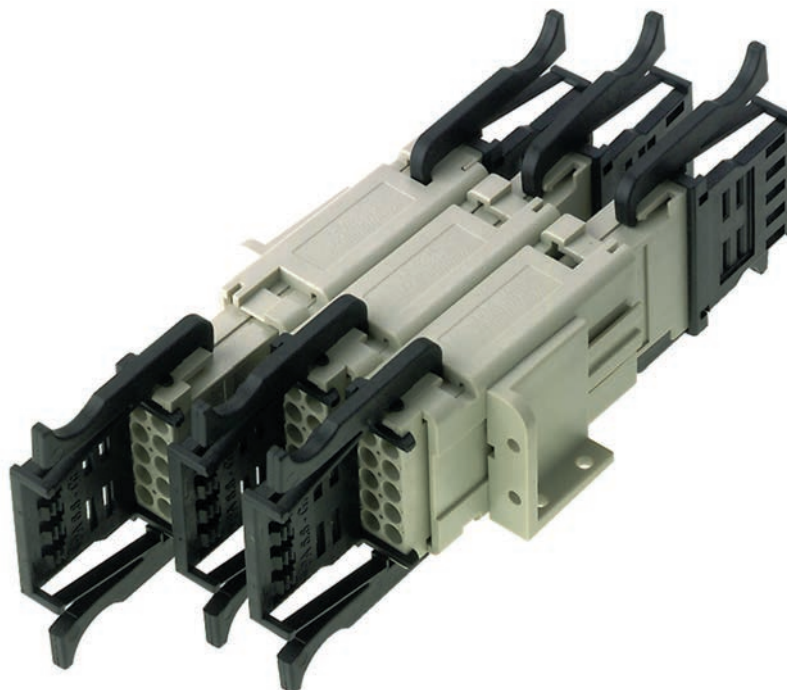


a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		100	HDC 48B SLU 2M32G	1788370000
M 32	w. threading	with cover	120	HDC 48B SDLU 2M32G	1788390000
M 40	w. threading		100	HDC 48B SLU 2M40G	1788360000



D

ModuFlex C



The ModuFlex C coupling system together with modules from the ConCept connector system provides a flexible and low-cost solution for indoor applications (IP20 zone).

ConCept 3–20-pin male and female modules of the same pin number and design can be mounted in the coupling frame. Up to 5 coupling frames can be combined into a block with the help of the tongue-and-groove locking system. The coupling frames can also be locked onto TS32 and TS35 rail by using the mounting feet.

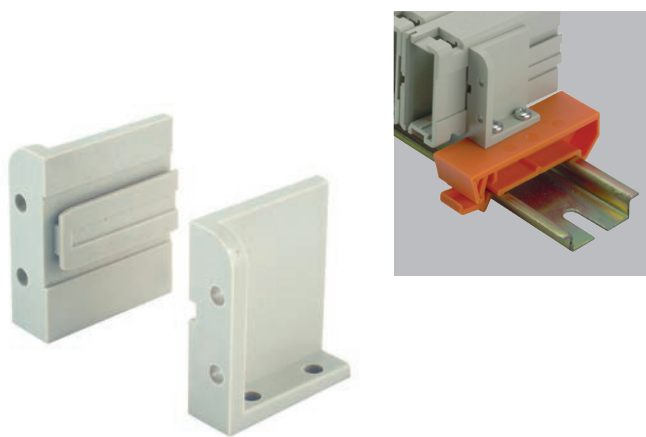
Each individual module can be individually plugged in and released. Thanks to the optional extractor / strain relief tool and the snap-on mounting bracket, ModuFlex C-coupling frames and the male and female modules of the ConCept system allow a wide range of combinations for all possible connector configurations.

Coupling frame



- Max. 5 coupling frames in a row
- Protection from incorrect connection
- Force required to withdraw a single module from the coupling frame >170 N

Mounting bracket / mounting foot



Mounting bracket

- For fixing the coupling frames to a flat surface and to MOFU mounting foot
- Hole diameter 3 mm

Mounting foot

- For fixing coupling frames to TS35x7.5 and TS35x15 mounting rails using mounting brackets

D

Technical data

	Coupling frame
Insulation	PC
Colour	grey (RAL 7032)
Temperature range	-40 ... +120 °C
Flammability class to UL 94	V-0

C-CR

Technical data

	C-MW	MOFU
Insulation	PC	PA
Colour	grey (RAL 7032)	orange
Temperature range	-40 ... +120 °C	-40 ... +120 °C
Flammability class to UL 94	V-0	V-2

Ordering data

Type	Qty.	Order No.
ModuFlex C-CR grey	10	1746060000

Ordering data

Type		Qty.	Order No.
ModuFlex C-MW	Mounting bracket	10	1746070000
MOFU	Mounting foot	20	0495660000

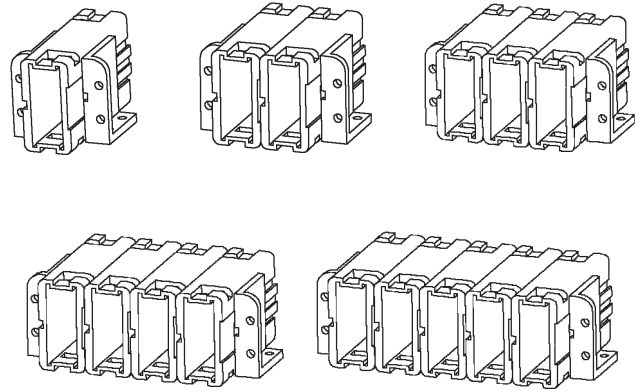
Accessories

Type	Qty.	Order No.
Crosshead screw for fastening the coupling to the mounting foot, to front and back panel and to a flat surface PTSC KB 30 x 6	100	1766120000
Spacer pin M3 x 27 and clamping screws M3 x 8 in set. For mounting the coupling to flat panels. 1 pack contains 80 screws and 40 spacer pins, separately packaged. ABST.BOLZM3X27+KLSC-KIT	1	1766130000

Module extractor and strain relief tool



Coupling frame – sets



- Set consists of:
- 1 – 5 coupling frames
 - 1 right and 1 left mounting bracket

D

Technical data

C-MH/ZE

Module extractor and strain relief tool	
Insulation	PA
Colour	black
Temperature range	-40 ... +120 °C
Flammability class to UL 94	V-2

Technical data

Mounting bracket	Mounting foot
Insulation	PC
Colour	grey (RAL 7032)
Temperature range	-40 ... +120 °C
Flammability class to UL 94	V-0

Ordering data

Type	Qty.	Order No.
ModuFlex C-MH/ZE black	10	1752970000

Ordering data

Type	No. of coupling frames	Qty.	Order No.
ModuFlex C-KITo.M.MW-1F	1	1	1765570000
ModuFlex C-KITo.M.MW-2F	2	1	1765580000
ModuFlex C-KITo.M.MW-3F	3	1	1765590000
ModuFlex C-KITo.M.MW-4F	4	1	1765600000
ModuFlex C-KITo.M.MW-5F	5	1	1765610000

Accessories

Type	Qty.	Order No.
Crosshead screw for fastening the coupling to the mounting foot, to front and back panel and to a flat surface PTSC KB 30 x 6	100	1766120000
Spacer pin M3 x 27 and clamping screws M3 x 8 in set. For mounting the coupling to flat panels. 1 pack contains 80 screws and 40 spacer pins, separately packaged. ABST.BOLZM3X27+KLSC-KIT	1	1766130000

RockStar® Housings IP66 / NEMA Type 4X

RockStar® Housings IP66 / NEMA Type 4X	Introduction	E.2
	RockStar® Housings IP66 / NEMA Type 4X	E.4
	Size 1 - 12	

RockStar® Housings IP66 / NEMA Type 4X

Where something extra comes as standard. The high quality workmanship of RockStar® IP66 housings begins with the material from which all interlock mechanisms are made: stainless steel. It guarantees a long lifespan with high resistance to corrosion and impact. For the die-cast aluminium variants, a high-quality, multi-stage surface sealing provides years of safety and reliability – even under the most extreme conditions. With just one housing series, Weidmüller delivers the proper protective solution for your heavy-duty connector – so your choice is simple.

Other standard extras:

- A patented spring system provides a secure interlock and easier handling.
- Integrated threads: your choice of cable glands
- Integrated insulation strips: for worry-free transmission of higher voltages

RockStar® IP66 housings are available in 12 sizes and can be combined with all fixed-pole and modular inserts.



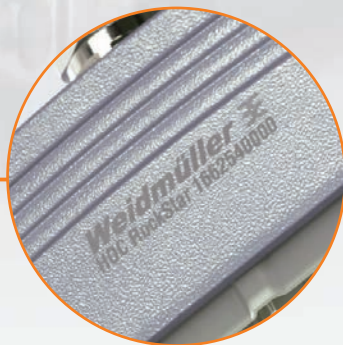
Sturdy

Stainless steel interlock systems and multi-stage surface sealing results in high durability.



Reliable

Guaranteed protection against jets of water, corrosion, ice and rain, according to IEC 60529 and UL.



Practical

Laser labelling for permanent identification and faster allocation.



RockStar® Housings IP66 / NEMA Type 4X

Plastic housing

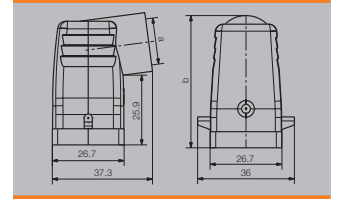
Size 1

Hood

Plug housing, cable entry sideways



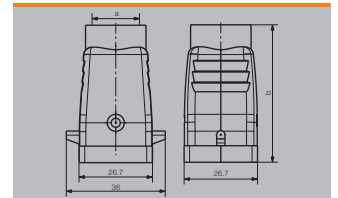
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		49.2	HDC 07A TWLU 1M20G	1788510000
PG 11	w. threading		49.2	HDC 07A TWLU 1PG11G	1652400000



Plug housing, cable entry at top



a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		50	HDC 07A TOLU 1M20G	1788520000
PG 11	w. threading		50	HDC 07A TOLU 1PG11G	1652380000



Plastic housing

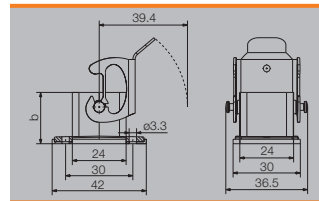
Size 1

Base

Bulkhead housing



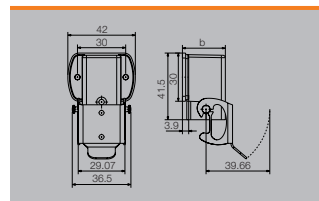
Version	Cover	b (mm)	Type	Order No.
		23	HDC 07A ALU	1652410000



Bulkhead housing, angled



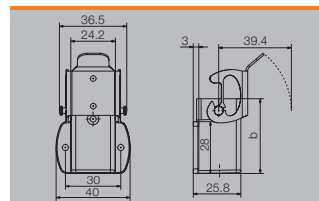
Version	Cover	b (mm)	Type	Order No.
angled		26.7	HDC 07A AWLU	1652420000



Base housing



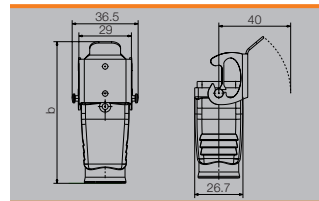
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		41.5	HDC 07A SLU 1M20G	1788530000
PG 11	w. adapter		41.5	HDC 07A SLU 1PG11S	1652440000



Coupling housing



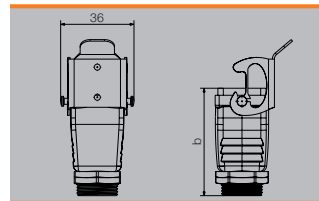
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		53.5	HDC 07A KOLU 1M20G	1788540000
PG 11	w. threading		53.5	HDC 07A KOLU 1PG11G	1652460000



Screw mounting housing



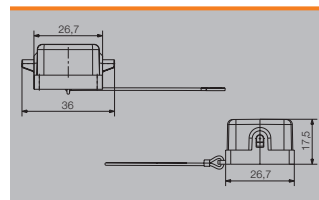
a	Version	Cover	b (mm)	Type	Order No.
PG 13.5	w. threading		54	HDC 07A ELU 1PG13G	1900990000



Cover



Version	Type	Order No.
for female insert	HDC 07A DMDL 2BO	1665770000
for male insert	HDC 07A DODL 2BO	1665760000



RockStar® Housings IP66 / NEMA Type 4X

Metal housing

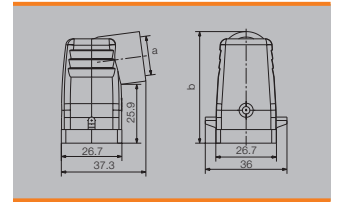
Size 1

Hood

Plug housing, cable entry sideways



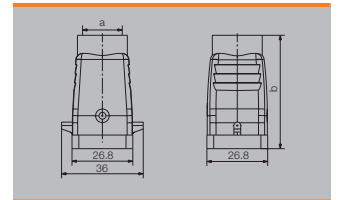
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		49.2	HDC 04A TWLU 1M20G	1788810000
PG 11	w. threading		49.2	HDC 04A TWLU 1PG11G	1652480000
PG 11	w. threading		49.2	HDC 04A TWLU 1PG11S BL	1900310000



Plug housing, cable entry at top



a	Version	Cover	b (mm)	Type	Order No.
M 16	w. threading		50	HDC 04A TOLU 1M16G	1206090000
M 20	w. threading		50	HDC 04A TOLU 1M20G	1788820000
PG 11	w. threading		50	HDC 04A TOLU 1PG11G	1652470000
PG 11	w. threading		50	HDC 04A TOLU 1PG11S BL	1900280000

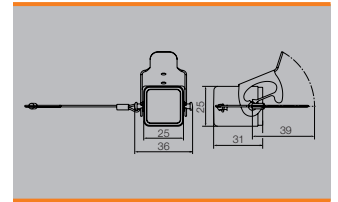


E

Cover



Version	Type	Order No.
for male insert	HDC 04A DODL 1LB	1963690000



Metal housing

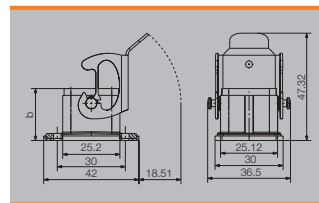
Size 1

Base

Bulkhead housing



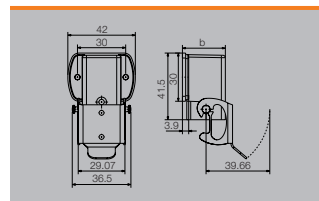
Version	Cover	b (mm)	Type	Order No.
		23	HDC 04A ALU	149760000



Bulkhead housing, angled



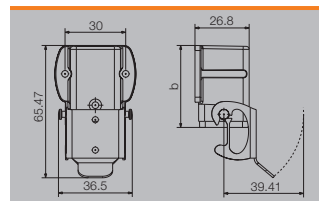
Version	Cover	b (mm)	Type	Order No.
angled		26.7	HDC 04A AWLU	149770000
angled		26.7	HDC 04A AWLU BL	189989000



Base housing



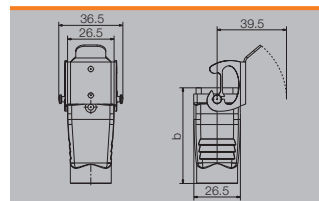
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		41.5	HDC 04A SLU 1M20G	1788830000
PG 11	w. threading		41.5	HDC 04A SLU 1PG11G	1652490000
PG 11	w. threading		41.5	HDC 04A SLU 1PG11G BL	1899800000



Coupling housing



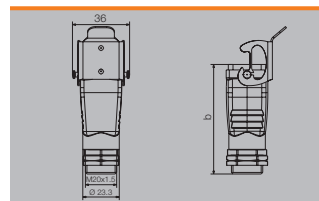
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		53.5	HDC 04A KOLU 1M20G	1788840000
PG 11	w. threading		53.5	HDC 04A KOLU 1PG11G	1652500000
PG 11	w. threading		53.5	HDC 04A KOLU 1PG11S BL	1899920000



Screw mounting housing



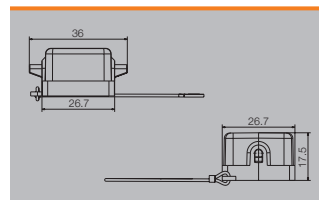
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		54	HDC 04A ELU 1M20G	1900320000
PG 13	w. threading		54	HDC 04A ELU 1PG13S	1900330000
PG 13	w. threading		54	HDC 04A ELU 1PG13S bl	1900350000



Cover



Version	Type	Order No.
for female insert	HDC 04A DMDL 2BO	1665750000
for male insert	HDC 04A DODL 2BO	1665740000



RockStar® Housings IP66 / NEMA Type 4X

Plastic housing

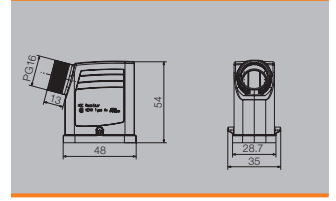
Size HQ

Hood

Plug housing, cable entry sideways



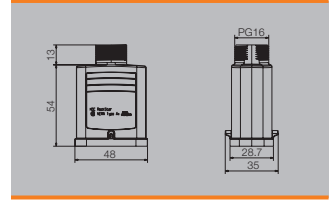
a	Version	Cover	b (mm)	Type	Order No.
PG 16	w. threading		54	HDC HQP TSLU 1PG16	1003090000



Plug housing, cable entry at top



a	Version	Cover	b (mm)	Type	Order No.
PG 16	w. threading		67	HDC HQP TOLU 1PG16	1003070000



Plastic housing

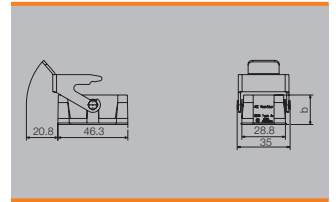
Size HQ

Base

Bulkhead housing



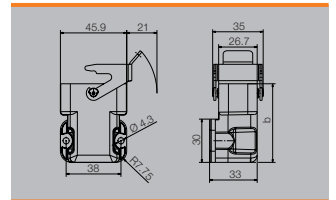
Version	Cover	b (mm)	Type	Order No.
		19.5	HDC HQP ALU	1003040000



Bulkhead housing, angled



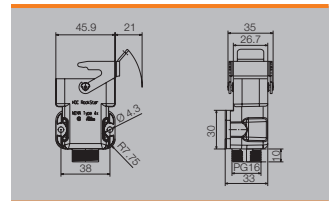
Version	Cover	b (mm)	Type	Order No.
angled		54.5	HDC HQP AWLU	1003060000



Base housing



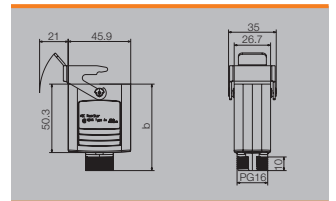
a	Version	Cover	b (mm)	Type	Order No.
PG 16	w. threading		54.5	HDC HQP SLU 1PG16	1003110000



Coupling housing



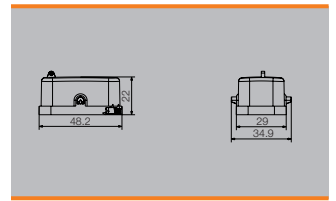
a	Version	Cover	b (mm)	Type	Order No.
PG 16	w. threading		63.5	HDC HQP KOLU 1PG16	1003120000



Cover



Version	Type	Order No.
for female insert	HDC HQP DMD 2BO	1003130000
for male insert	HDC HQP DOD 2BO	1003140000



Note For plastic and metal housings

E

RockStar® Housings IP66 / NEMA Type 4X

Die cast zinc housing (EMC)

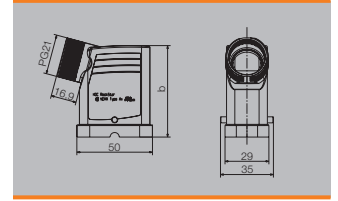
Size HQ

Hood

Plug housing, cable entry sideways



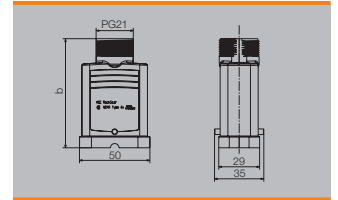
a	Version	Cover	b (mm)	Type	Order No.
PG 21	w. threading		60.5	HDC HQM TSLU 1PG21	1003100000



Plug housing, cable entry at top



a	Version	Cover	b (mm)	Type	Order No.
PG 21	w. threading		77.5	HDC HQM TOLU 1PG21	1003080000



Die cast zinc housing (EMC)

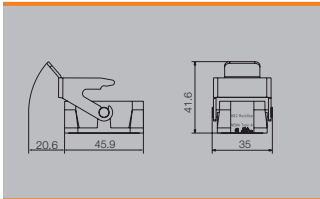
Size HQ

Base

Bulkhead housing



Version	Cover	b (mm)	Type	Order No.
		20.5	HDC HQM ALU	1003050000

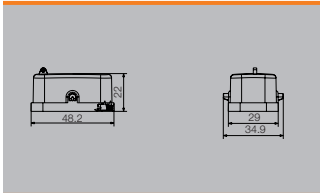


Cover



Material: Plastic

Version	Type	Order No.
for female insert	HDC HQP DMD 2BO	1003130000
for male insert	HDC HQP DOD 2BO	1003140000



Note For plastic and metal housings

RockStar® Housings IP66 / NEMA Type 4X

End locking, lower side

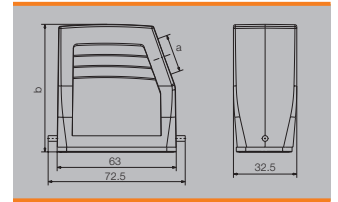
Size 2

Hood

Plug housing, cable entry sideways



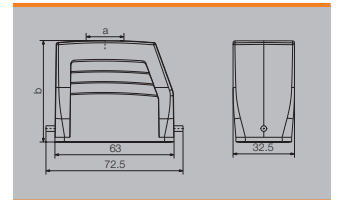
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		54	HDC 10A TSLU 1M20G	1967660000
M 20	w. threading		68	HDC 15A TSLU 1M20G	1788860000
M 25	w. threading		68	HDC 15A TSLU 1M25G	1788850000
PG 16	w. threading		54	HDC 10A TSLU 1PG16G	1663810000
PG 16	w. threading		68	HDC 15A TSLU 1PG16G	1663850000
PG 21	w. threading		68	HDC 15A TSLU 1PG21G	1663870000



Plug housing, cable entry at top



a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		54	HDC 10A TOLU 1M20G	1788620000
M 25	w. threading		54	HDC 10A TOLU 1M25G	1788610000
PG 11	w. threading		54	HDC 10A TOLU 2PG11G	1746170000
PG 16	w. threading		54	HDC 10A TOLU 1PG16G	1663930000
PG 21	w. threading		68	HDC 15A TOLU 1PG21G	1663990000

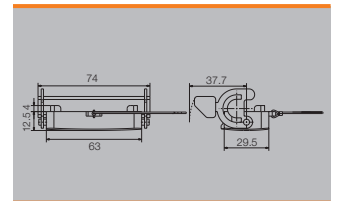


E

Cover



Version	Type	Order No.
For hoods	HDC 10A DODL 1LB	1665890000



End locking, lower side

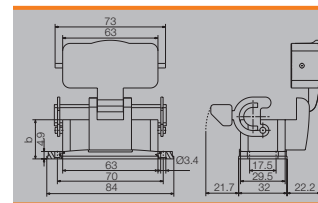
Size 2

Base

Bulkhead housing



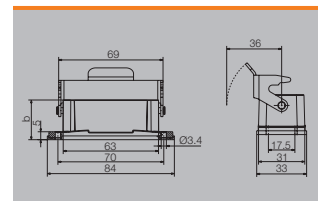
Version	Cover	b (mm)	Type	Order No.
		25	HDC 10A ALU	1664040000
	with cover	37.5	HDC 10A ADLU	1664060000



Bulkhead housing



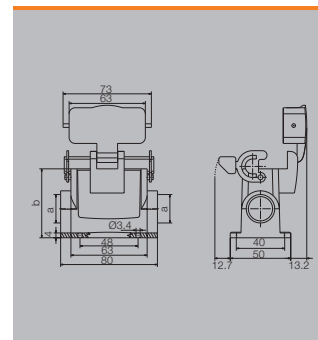
Version	Cover	b (mm)	Type	Order No.
		26	HDC 10A ALU SL	1021450000



Base housing



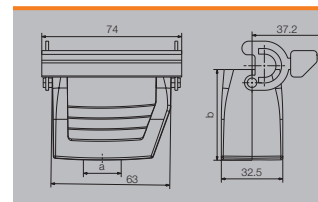
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		57	HDC 10A SLU 1M20G	1901100000
M 20	w. threading	with cover	69.5	HDC 10A SDLU 1M20G	1901010000
M 20	w. threading		57	HDC 10A SLU 2M20G	1788640000
M 20	w. threading	with cover	69.5	HDC 10A SDLU 2M20G	1788660000
M 25	w. threading		57	HDC 10A SLU 1M25G	1901160000
M 25	w. threading	with cover	69.5	HDC 10A SDLU 1M25G	1901040000
M 25	w. threading		57	HDC 10A SLU 2M25G	1788630000
M 25	w. threading	with cover	69.5	HDC 10A SDLU 2M25G	1788650000
PG 16	w. threading		57	HDC 10A SLU 1PG16G	1664170000
PG 16	w. threading	with cover	69.5	HDC 10A SDLU 1PG16G	1664410000
PG 16	w. threading		57	HDC 10A SLU 2PG16G	1664190000
PG 16	w. threading	with cover	69.5	HDC 10A SDLU 2PG16G	1664420000
PG 21	w. threading		57	HDC 10A SLU 1PG21G	1664210000



Coupling housing



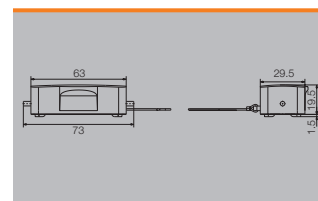
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		48	HDC 10A KLU 1M25G	1788670000
PG 9	w. threading		48	HDC 10A KLU 2PG09G	1783250000
PG 16	w. threading		48	HDC 10A KLU 1PG16G	1664560000
PG 21	w. threading		62	HDC 15A KLU 1PG21G	1664630000



Cover



Version	Type	Order No.
For bases	HDC 10A DMDL 2B0	1665880000



RockStar® Housings IP66 / NEMA Type 4X

End locking, lower side

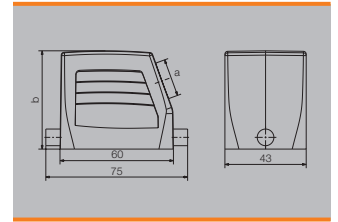
Size 3

Hood

Plug housing, cable entry sideways



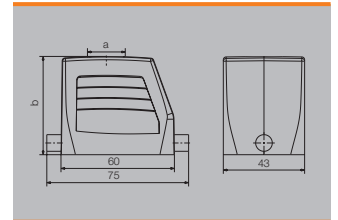
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 06B TSLU 1M20G	1788100000
M 25	w. threading		52	HDC 06B TSLU 1M25G	1788090000
M 25	w. threading		72	HDC 16D TSLU 1M25G	1787480000
M 32	w. threading		72	HDC 16D TSLU 1M32G	1787470000
PG 13.5	w. threading		52	HDC 06B TSLU 1PG13G	1670530000
PG 16	w. threading		52	HDC 06B TSLU 1PG16G	1652520000
PG 21	w. threading		72	HDC 16D TSLU 1PG21G	1652560000
PG 29	w. threading		72	HDC 16D TSLU 1PG29G	1652580000



Plug housing, cable entry at top



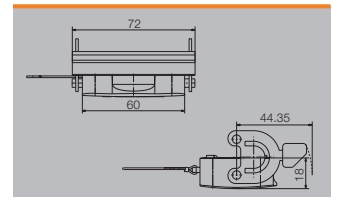
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 06B TOLU 1M20G	1788120000
M 25	w. threading		52	HDC 06B TOLU 1M25G	1788110000
M 25	w. threading		72	HDC 16D TOLU 1M25G	1787500000
M 32	w. threading		72	HDC 16D TOLU 1M32G	1787490000
PG 13.5	w. threading		52	HDC 06B TOLU 1PG13G	1670500000
PG 16	w. threading		52	HDC 06B TOLU 1PG16G	1652640000
PG 21	w. threading		72	HDC 16D TOLU 1PG21G	1652680000
PG 29	w. threading		72	HDC 16D TOLU 1PG29G	1652700000



Cover



Version	Type	Order No.
For hoods	HDC 06B DMDL 1LB	1665210000



End locking, lower side

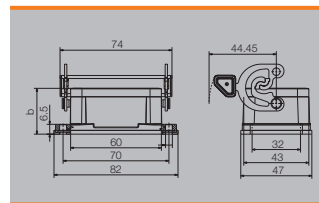
Size 3

Base

Bulkhead housing



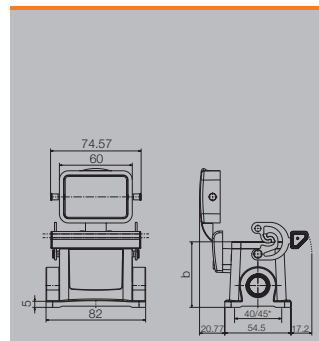
Version	Cover	b (mm)	Type	Order No.
		29	HDC 06B ALU	1202100000
	with cover	47	HDC 06B ADLU	1202500000
		27.8	HDC 06B ALU O-RING	1019870000



Base housing



a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		54	HDC 06B SLU 1M20G	1900460000
M 20	w. threading	with cover	72	HDC 06B SDLU 1M20G	1900360000
M 20	w. threading		54	HDC 06B SLU 2M20G	1788140000
M 20	w. threading	with cover	72	HDC 06B SDLU 2M20G	1788170000
M 25	w. threading		54	HDC 06B SLU 1M25G	1900480000
M 25	w. threading	with cover	72	HDC 06B SDLU 1M25G	1900380000
M 25	w. threading		74	HDC 16D SLU 1M25G	1900880000
M 25	w. threading	with cover	92	HDC 16D SDLU 1M25G	1900820000
M 25	w. threading		54	HDC 06B SLU 2M25G	1788130000
M 25	w. threading		74	HDC 16D SLU 2M25G	1787520000
M 25	w. threading	with cover	92	HDC 16D SDLU 2M25G	1787540000
M 25	w. threading	with cover	72	HDC 06B SDLU 2M25G	1788160000
M 32	w. threading		74	HDC 16D SLU 1M32G	1900900000
M 32	w. threading		74	HDC 16D SLU 2M32G	1787510000
PG 16	w. threading		54	HDC 06B SLU 1PG16G	1652750000
PG 16	w. threading	with cover	72	HDC 06B SDLU 1PG16G	1652980000
PG 16	w. threading		54	HDC 06B SLU 2PG16G	1652760000
PG 16	w. threading	with cover	72	HDC 06B SDLU 2PG16G	1652990000
PG 21	w. threading		74	HDC 16D SLU 2PG21G	1652840000

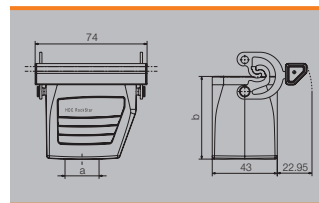


* Mounting dimensions for size-3 base housings, tall shape (16D)

Coupling housing



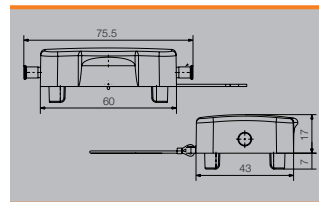
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		55	HDC 06B KLU 1M25G	1021330000
PG 21	w. threading		75	HDC 16D KLU 1PG21G	1653230000
PG 16	w. threading		55	HDC 06B KLU 1PG16G	1653200000



Cover



Version	Type	Order No.
For bases	HDC 06B DODL 2B0	1665200000



RockStar® Housings IP66 / NEMA Type 4X

Side locking, lower side

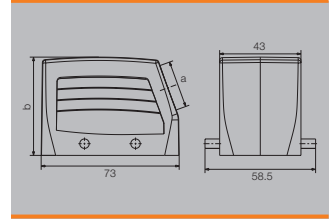
Size 4

Hood

Plug housing, cable entry sideways



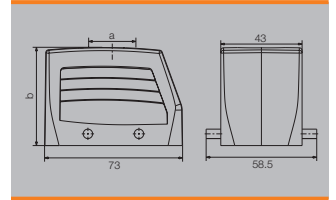
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 10B TSBU 1M20G	1787560000
M 25	w. threading		52	HDC 10B TSBU 1M25G	1787550000
M 25	w. threading		72	HDC 24D TSBU 1M25G	1787240000
M 32	w. threading		72	HDC 24D TSBU 1M32G	1787230000
PG 16	w. threading		52	HDC 10B TSBU 1PG16G	1654070000
PG 21	w. threading		52	HDC 10B TSBU 1PG21G	1654090000
PG 21	w. threading		72	HDC 24D TSBU 1PG21G	1654150000
PG 29	w. threading		72	HDC 24D TSBU 1PG29G	1654170000



Plug housing, cable entry at top



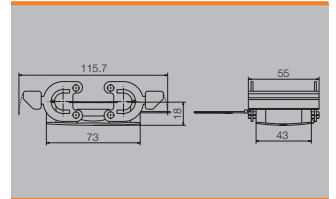
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		52	HDC 10B TOBU 1M20G	1787600000
M 25	w. threading		52	HDC 10B TOBU 1M25G	1787590000
M 25	w. threading		72	HDC 24D TOBU 1M25G	1787300000
M 32	w. threading		72	HDC 24D TOBU 1M32G	1787290000
PG 16	w. threading		52	HDC 10B TOBU 1PG16G	1654220000
PG 21	w. threading		52	HDC 10B TOBU 1PG21G	1654240000
PG 29	w. threading		72	HDC 24D TOBU 1PG29G	1654320000



Cover



Version	Type	Order No.
For hoods	HDC 10B DMDQ 2QB	1665240000



Side locking, lower side

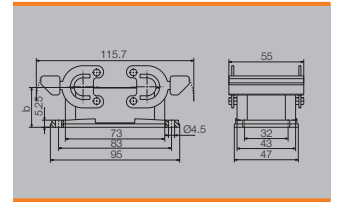
Size 4

Base

Bulkhead housing



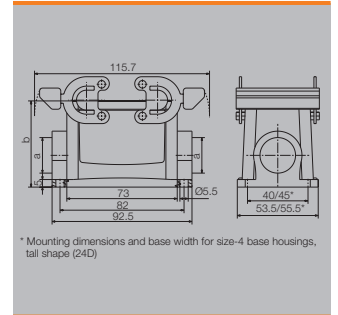
Version	Cover	b (mm)	Type	Order No.
		29.3	HDC 10B ABU	120500000



Base housing



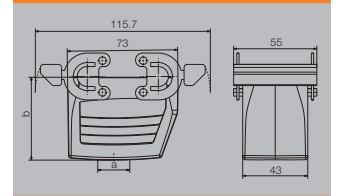
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		57	HDC 10B SBU 1M20G	1901360000
M 20	w. threading		57	HDC 10B SBU 2M20G	1787640000
M 25	w. threading		57	HDC 10B SBU 1M25G	1901370000
M 25	w. threading		57	HDC 10B SBU 2M25G	1787630000
M 25	w. threading		74	HDC 24D SBU 1M25G	1903210000
M 25	w. threading		74	HDC 24D SBU 2M25G	1787350000
M 32	w. threading		74	HDC 24D SBU 1M32G	1903220000
M 32	w. threading		74	HDC 24D SBU 2M32G	1787360000
PG 16	w. threading		57	HDC 10B SBU 1PG16G	1654370000
PG 16	w. threading		57	HDC 10B SBU 2PG16G	1654380000
PG 21	w. threading		74	HDC 24D SBU 2PG21G	1654450000
PG 29	w. threading		74	HDC 24D SBU 1PG29G	1654470000



Coupling housing



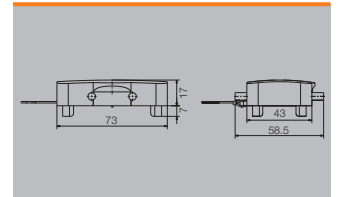
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		55	HDC 10B KBU 1M20G	1787720000
M 25	w. threading		55	HDC 10B KBU 1M25G	1021250000
PG 16	w. threading		55	HDC 10B KBU 1PG16G	1654580000



Cover



Version	Type	Order No.
For bases	HDC 10B DODQ 4B0	1665230000



E

End locking, lower side

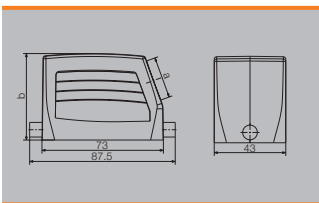
Size 4

Hood

Plug housing, cable entry sideways



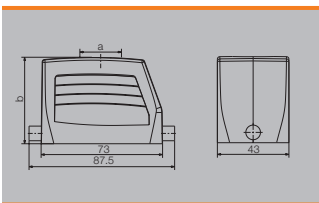
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		52	HDC 10B TSLU 1M25G	1787580000
M 25	w. threading		72	HDC 24D TSLU 1M25G	1787280000
M 32	w. threading		72	HDC 24D TSLU 1M32G	1787270000
PG 16	w. threading		52	HDC 10B TSLU 1PG16G	1655210000
PG 21	w. threading		72	HDC 24D TSLU 1PG21G	1655250000
PG 29	w. threading		72	HDC 24D TSLU 1PG29G	1655270000



Plug housing, cable entry at top



a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		52	HDC 10B TOLU 1M25G	1787620000
M 25	w. threading		72	HDC 24D TOLU 1M25G	1787340000
M 32	w. threading		72	HDC 24D TOLU 1M32G	1787330000
PG 16	w. threading		52	HDC 10B TOLU 1PG16G	1655320000
PG 21	w. threading		72	HDC 24D TOLU 1PG21G	1655360000
PG 29	w. threading		72	HDC 24D TOLU 1PG29G	1655380000



End locking, lower side

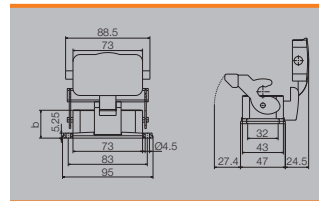
Size 4

Base

Bulkhead housing



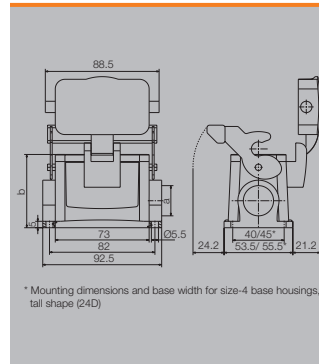
Version	Cover	b (mm)	Type	Order No.
		29.3	HDC 10B ALU	1206100000
	with cover	47	HDC 10B ADLU	1206500000



Base housing



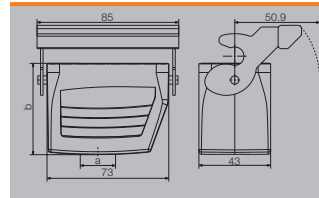
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		57	HDC 10B SLU 1M20G	1901620000
M 20	w. threading	with cover	79.5	HDC 10B SDLU 1M20G	1901570000
M 20	w. threading		57	HDC 10B SLU 2M20G	1787660000
M 20	w. threading	with cover	79.5	HDC 10B SDLU 2M20G	1787700000
M 25	w. threading		57	HDC 10B SLU 1M25G	1901640000
M 25	w. threading	with cover	96.5	HDC 24D SDLU 1M25G	1903410000
M 25	w. threading		57	HDC 10B SLU 2M25G	1787650000
M 25	w. threading	with cover	96.5	HDC 24D SDLU 2M25G	1787420000
M 32	w. threading		74	HDC 24D SLU 1M32G	1903560000
M 32	w. threading	with cover	96.5	HDC 24D SDLU 1M32G	1903510000
M 32	w. threading		74	HDC 24D SLU 2M32G	1787370000
M 32	w. threading	with cover	96.5	HDC 24D SDLU 2M32G	1787410000
PG 16	w. threading		57	HDC 10B SLU 2PG16G	1655470000
PG 16	w. threading	with cover	79.5	HDC 10B SDLU 2PG16G	1655680000



Coupling housing



a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		55	HDC 10B KLU 1M20G	1787740000
M 25	w. threading		55	HDC 10B KLU 1M25G	1787730000
M 25	w. threading		75	HDC 24D KLU 1M25G	1787460000
M 32	w. threading		75	HDC 24D KLU 1M32G	1787450000
PG 16	w. threading		55	HDC 10B KLU 1PG16G	1655890000



Side locking, upper side

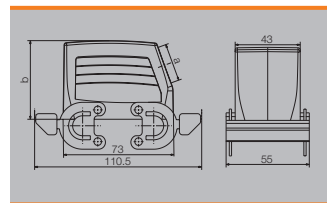
Size 4

Hood

Plug housing, cable entry sideways



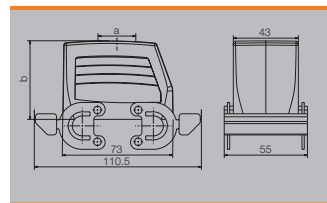
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		52	HDC 10B TSBO 1M25G	1787570000
M 25	w. threading		72	HDC 24D TSBO 1M25G	1787260000
M 32	w. threading		72	HDC 24D TSBO 1M32G	1787250000
PG 16	w. threading		52	HDC 10B TSBO 1PG16G	1654750000
PG 16	w. threading		72	HDC 24D TSBO 1PG16G	1654810000
PG 21	w. threading		72	HDC 24D TSBO 1PG21G	1654790000



Plug housing, cable entry at top



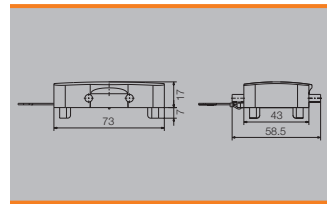
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		52	HDC 10B TOBO 1M25G	1787610000
PG 16	w. threading		52	HDC 10B TOBO 1PG16G	1654860000
PG 29	w. threading		72	HDC 24D TOBO 1PG29G	1654920000



Cover



Version	Type	Order No.
For hoods	HDC 10B DMDQ 4B0	1665250000

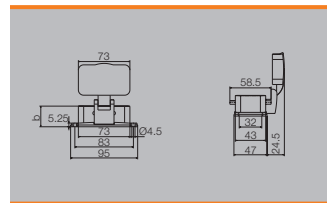


Base

Bulkhead housing



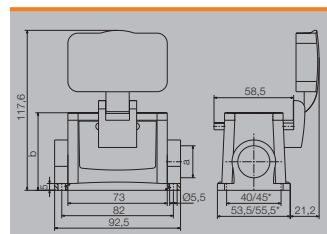
Version	Cover	b (mm)	Type	Order No.
			HDC 10B ABO	1052430000
	with cover	51.6	HDC 10B ADBO	1205600000



Base housing



a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading	with cover	79.5	HDC 10B SDBO 1M20G	1901490000
M 20	w. threading	with cover	79.5	HDC 10B SDBO 2M20G	1787680000
M 25	w. threading	with cover	79.5	HDC 10B SDBO 1M25G	1901510000
M 25	w. threading	with cover	96.5	HDC 24D SDBO 1M25G	1903370000
M 25	w. threading	with cover	79.5	HDC 10B SDBO 2M25G	1787670000
M 25	w. threading	with cover	96.5	HDC 24D SDBO 2M25G	1787400000
PG 16	w. threading	with cover	79.5	HDC 10B SDBO 2PG16G	1655000000

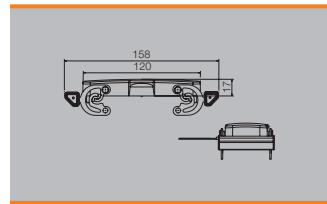


* Mounting dimensions and base width for size-4 base housings, tall shape (24D)

Cover



Version	Type	Order No.
For bases	HDC 10B DODQ 2QB	1009080000



RockStar® Housings IP66 / NEMA Type 4X

Central-locking clamp

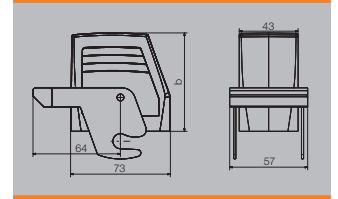
Size 4

Hood

Plug housing, cable entry sideways



a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		72	HDC 24D TSZO 1M25G	1903610000
PG 21	w. threading		72	HDC 24D TSZO 1PG21G	1968360000

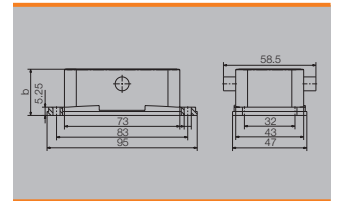


Base

Bulkhead housing



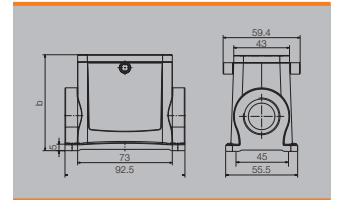
Version	Cover	b (mm)	Type	Order No.
		29.3	HDC 10B AZO	1901700000



Base housing



a	Version	Cover	b (mm)	Type	Order No.
PG 21	w. threading		74	HDC 24D SZO 2PG21G	1968350000



RockStar® Housings IP66 / NEMA Type 4X

End locking, lower side

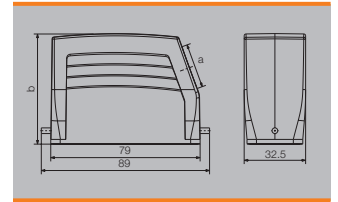
Size 5

Hood

Plug housing, cable entry sideways



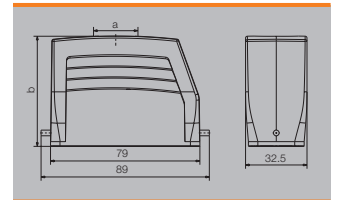
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		58	HDC 16A TSLU 1M20G	1041760000
M 20	w. threading		72	HDC 25A TSLU 1M20G	1788680000
M 25	w. threading		58	HDC 16A TSLU 1M25G	1788740000
M 25	w. threading		72	HDC 25A TSLU 1M25G	1788690000
PG 16	w. threading		58	HDC 16A TSLU 1PG16G	1664690000
PG 16	w. threading		72	HDC 25A TSLU 1PG16G	1664730000
PG 21	w. threading		72	HDC 25A TSLU 1PG21G	1664750000



Plug housing, cable entry at top



a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		72	HDC 25A TOLU 1M20G	1788710000
M 25	w. threading		58	HDC 16A TOLU 1M25G	1788750000
M 25	w. threading		72	HDC 25A TOLU 1M25G	1788700000
PG 16	w. threading		58	HDC 16A TOLU 1PG16G	1664810000
PG 21	w. threading		72	HDC 25A TOLU 1PG21G	1664870000

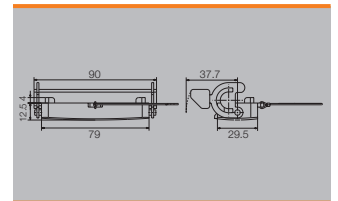


E

Cover



Version	Type	Order No.
For hoods	HDC 16A DODL 1LB	1665900000



End locking, lower side

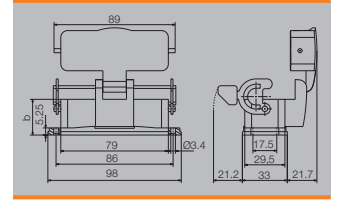
Size 5

Base

Bulkhead housing



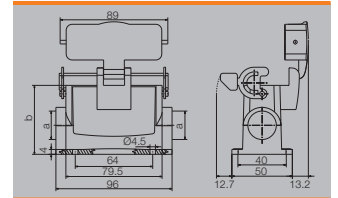
Version	Cover	b (mm)	Type	Order No.
		25	HDC 16A ALU	1664920000
	with cover	44.5	HDC 16A ADLU	1664940000



Base housing



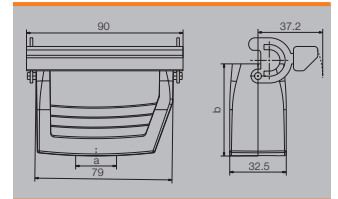
a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		57	HDC 16A SLU 2M20G	1788770000
M 20	w. threading	with cover	76.5	HDC 16A SDLU 2M20G	1788790000
M 25	w. threading		57	HDC 16A SLU 2M25G	1788760000
M 25	w. threading	with cover	76.5	HDC 16A SDLU 2M25G	1788780000
PG 16	w. threading		57	HDC 16A SLU 2PG16G	1665070000
PG 16	w. threading	with cover	76.5	HDC 16A SDLU 2PG16G	1665300000
PG 21	w. threading		57	HDC 16A SLU 1PG21G	1665090000



Coupling housing



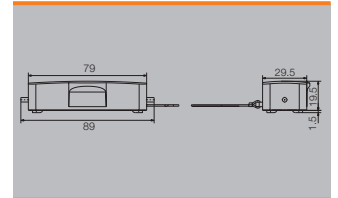
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		53	HDC 16A KLU 1M25G	1788800000
PG 16	w. threading		53	HDC 16A KLU 1PG16G	1665450000



Cover



Version	Type	Order No.
For bases	HDC 16A DMDL 2BO	1665910000



E

RockStar® Housings IP66 / NEMA Type 4X

Side locking, lower side

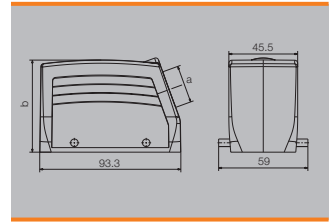
Size 6

Hood

Plug housing, cable entry sideways



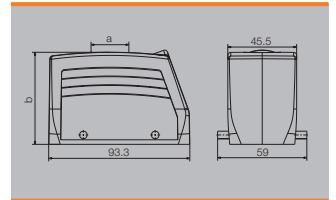
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TSBU 1M25G	1788180000
M 25	w. threading		76	HDC 40D TSBU 1M25G	1787010000
M 32	w. threading		76	HDC 40D TSBU 1M32G	1787000000
M 40	w. threading		61	HDC 16B TSBU 1M40G	1809620000
M 40	w. threading		76	HDC 40D TSBU 1M40G	1904800000
PG 21	w. threading		61	HDC 16B TSBU 1PG21G	1656480000
PG 21	w. threading		76	HDC 40D TSBU 1PG21G	1656520000
PG 29	w. threading		76	HDC 40D TSBU 1PG29G	1656540000



Plug housing, cable entry at top



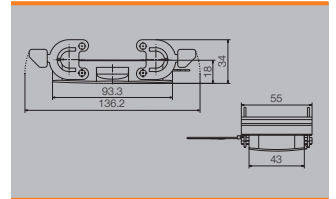
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TOBU 1M25G	1788210000
M 25	w. threading		76	HDC 40D TOBU 1M25G	1787070000
M 32	w. threading		76	HDC 40D TOBU 1M32G	1787060000
PG 21	w. threading		61	HDC 16B TOBU 1PG21G	1656590000
PG 21	w. threading		76	HDC 40D TOBU 1PG21G	1656630000
PG 29	w. threading		76	HDC 40D TOBU 1PG29G	1656650000



Cover



Version	Type	Order No.
For hoods	HDC 16B DMDQ 2QB	1665270000



Side locking, lower side

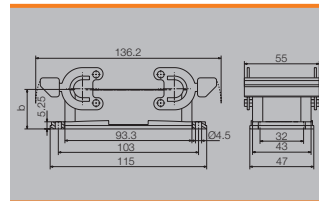
Size 6

Base

Bulkhead housing



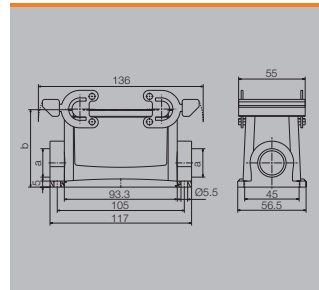
Version	Cover	b (mm)	Type	Order No.
29		115	HDC 16B ABU	120860000



Base housing



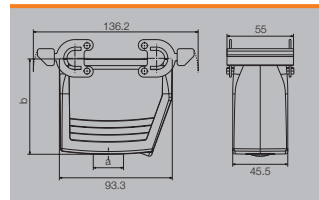
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		64	HDC 16B SBU 1M25G	1899980000
M 25	w. threading		84	HDC 40D SBU 1M25G	1902970000
M 25	w. threading		64	HDC 16B SBU 2M25G	1788240000
M 25	w. threading		84	HDC 40D SBU 2M25G	1787120000
M 32	w. threading		84	HDC 40D SBU 1M32G	1902990000
M 32	w. threading		84	HDC 40D SBU 2M32G	1787110000
PG 21	w. threading		64	HDC 16B SBU 1PG21G	1656720000
PG 21	w. threading		64	HDC 16B SBU 2PG21G	1656730000
PG 21	w. threading		84	HDC 40D SBU 2PG21G	1656810000
PG 29	w. threading		84	HDC 40D SBU 1PG29G	1656830000
PG 29	w. threading		84	HDC 40D SBU 2PG29G	1656840000



Coupling housing



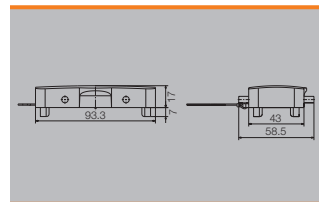
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		79	HDC 40D KBU 1M25G	1787200000
M 32	w. threading		79	HDC 40D KBU 1M32G	1787190000
PG 21	w. threading		64	HDC 16B KBU 1PG21G	1657270000
PG 21	w. threading		79	HDC 40D KBU 1PG21G	1657310000
PG 29	w. threading		79	HDC 40D KBU 1PG29G	1967670000



Cover



Version	Type	Order No.
For bases	HDC 16B DODQ 4B0	1665260000



RockStar® Housings IP66 / NEMA Type 4X

End locking, lower side

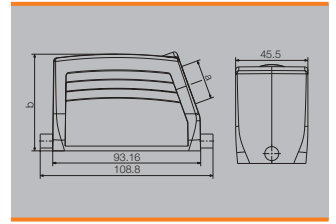
Size 6

Hood

Plug housing, cable entry sideways



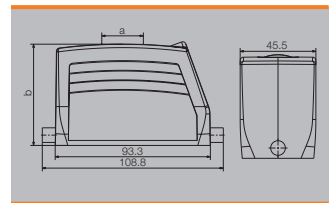
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading	61	HDC 16B TSLU 1M25G	1788200000	
M 25	w. threading	76	HDC 40D TSLU 1M25G	1787050000	
M 32	w. threading	61	HDC 16B TSLU 1M32G	1804640000	
M 32	w. threading	76	HDC 40D TSLU 1M32G	1787040000	
M 40	w. threading	76	HDC 40D TSLU 1M40G	1804650000	
PG 21	w. threading	61	HDC 16B TSLU 1PG21G	1657850000	
PG 21	w. threading	76	HDC 40D TSLU 1PG21G	1657890000	
PG 29	w. threading	76	HDC 40D TSLU 1PG29G	1657910000	



Plug housing, cable entry at top



a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading	61	HDC 16B TOLU 1M25G	1788230000	
M 32	w. threading	61	HDC 16B TOLU 1M32G	1804630000	
M 32	w. threading	76	HDC 40D TOLU 1M32G	1787100000	
PG 21	w. threading	61	HDC 16B TOLU 1PG21G	1657960000	
PG 29	w. threading	76	HDC 40D TOLU 1PG29G	1658020000	



End locking, lower side

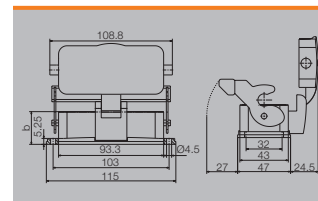
Size 6

Base

Bulkhead housing



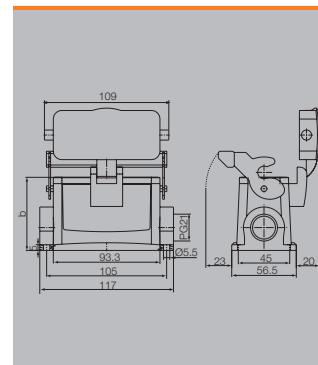
Version	Cover	b (mm)	Type	Order No.
		29	HDC 16B ALU	120970000
	with cover	47	HDC 16B ADLU	121010000



Base housing



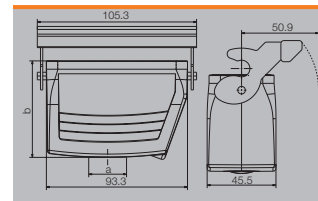
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		64	HDC 16B SLU 1M25G	1900170000
M 25	w. threading	with cover	102	HDC 40D SDLU 1M25G	1903070000
M 25	w. threading		64	HDC 16B SLU 2M25G	1788250000
M 25	w. threading	with cover	82	HDC 16B SDLU 2M25G	1788270000
M 25	w. threading	with cover	102	HDC 40D SDLU 2M25G	1787180000
M 32	w. threading		84	HDC 40D SLU 1M32G	1903110000
M 32	w. threading	with cover	102	HDC 40D SDLU 1M32G	1903080000
M 32	w. threading		84	HDC 40D SLU 2M32G	1804660000
M 32	w. threading	with cover	102	HDC 40D SDLU 2M32G	1787170000
PG 21	w. threading		64	HDC 16B SLU 1PG21G	1658110000
PG 21	w. threading	with cover	82	HDC 16B SDLU 1PG21G	1658320000
PG 21	w. threading		64	HDC 16B SLU 2PG21G	1658120000
PG 21	w. threading	with cover	82	HDC 16B SDLU 2PG21G	1658330000
PG 29	w. threading	with cover	102	HDC 40D SDLU 1PG29G	1658410000



Coupling housing



a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		64	HDC 16B KLU 1M25G	1788290000
M 25	w. threading		79	HDC 40D KLU 1M25G	1787220000



RockStar® Housings IP66 / NEMA Type 4X

Side locking, upper side

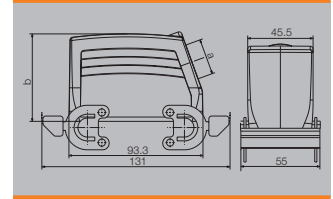
Size 6

Hood

Plug housing, cable entry sideways



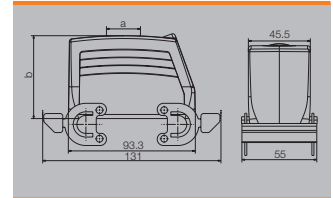
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TSBO 1M25G	1788190000
M 25	w. threading		76	HDC 40D TSBO 1M25G	1787030000
M 32	w. threading		76	HDC 40D TSBO 1M32G	1787020000
PG 21	w. threading		61	HDC 16B TSBO 1PG21G	1657380000
PG 21	w. threading		76	HDC 40D TSBO 1PG21G	1657420000



Plug housing, cable entry at top



a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 16B TOBO 1M25G	1788220000
PG 21	w. threading		61	HDC 16B TOBO 1PG21G	1657490000
PG 29	w. threading		76	HDC 40D TOBO 1PG29G	1657550000

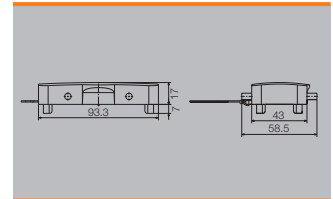


E

Cover



Version	Type	Order No.
For hoods	HDC 16B DMDQ 4BO	1665620000



Side locking, upper side

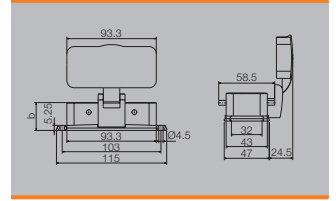
Size 6

Base

Bulkhead housing



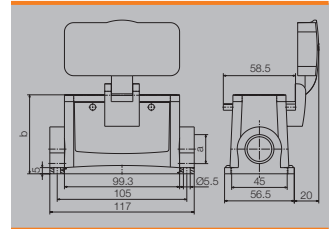
Version	Cover	b (mm)	Type	Order No.
	with cover	47	HDC 16B ADBO	120920000



Base housing



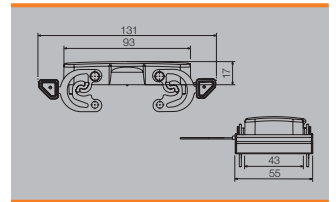
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading	with cover	82	HDC 16B SDBO 1M25G	1900080000
M 25	w. threading	with cover	82	HDC 16B SDBO 2M25G	1788260000
PG 21	w. threading	with cover	82	HDC 16B SDBO 2PG21G	1657640000



Cover



Version	Type	Order No.
For bases	HDC 16B DODQ 2QB	1009090000



E

RockStar® Housings IP66 / NEMA Type 4X

Side locking, lower side

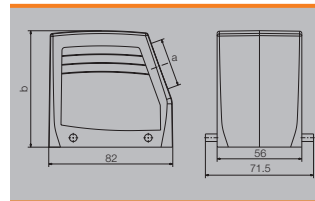
Size 7

Hood

Plug housing, cable entry sideways



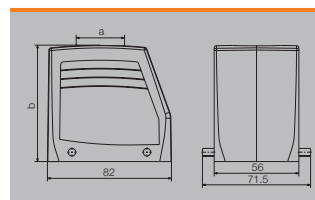
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		75	HDC 32A TSBU 1M25G	1787960000
M 32	w. threading		75	HDC 32A TSBU 1M32G	1787950000
PG 21	w. threading		75	HDC 32A TSBU 1PG21G	1665670000
PG 29	w. threading		75	HDC 32A TSBU 1PG29G	1665690000



Plug housing, cable entry at top



a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		75	HDC 32A TOBU 1M32G	1787990000
PG 21	w. threading		75	HDC 32A TOBU 1PG21G	1665790000
PG 29	w. threading		75	HDC 32A TOBU 1PG29G	1665810000

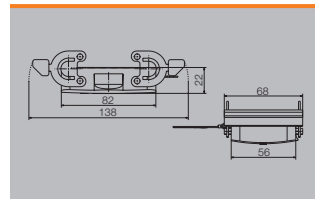


E

Cover



Version	Type	Order No.
For hoods	HDC 32A DMDQ 2QB	1665930000



Side locking, lower side

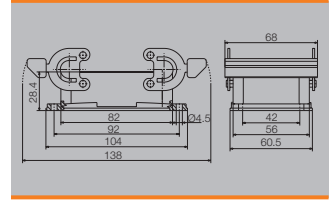
Size 7

Base

Bulkhead housing



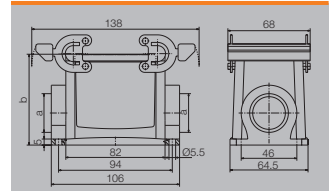
Version	Cover	b (mm)	Type	Order No.
		28.4	HDC 32A ABU	1665860000



Base housing



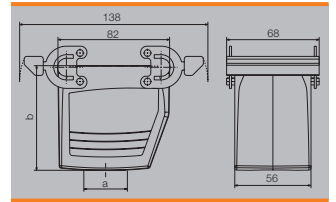
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		75	HDC 32A SBU 1M25G	1903870000
M 25	w. threading		75	HDC 32A SBU 2M25G	1788040000
PG 21	w. threading		75	HDC 32A SBU 2PG21G	1665980000
PG 29	w. threading		75	HDC 32A SBU 1PG29G	1666010000



Coupling housing



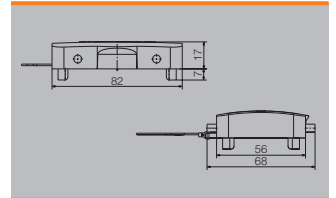
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		76.5	HDC 32A KBU 1M25G	1788080000
M 32	w. threading		76.5	HDC 32A KBU 1M32G	1788070000



Cover



Version	Type	Order No.
For bases	HDC 32A DODQ 4BO	1665920000



E

RockStar® Housings IP66 / NEMA Type 4X

Side locking, upper side

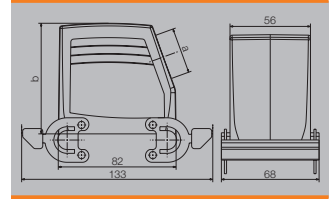
Size 7

Hood

Plug housing, cable entry sideways



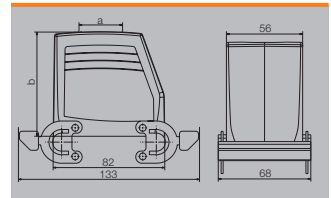
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		75	HDC 32A TSBO 1M25G	1787980000
M 32	w. threading		75	HDC 32A TSBO 1M32G	1787970000
PG 29	w. threading		75	HDC 32A TSBO 1PG29G	1666270000



Plug housing, cable entry at top



a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		77	HDC 32A TOBO 1M32G	1788010000

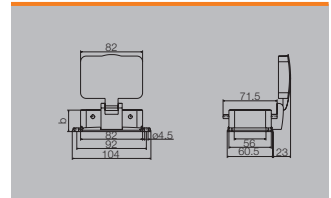


Base

Bulkhead housing



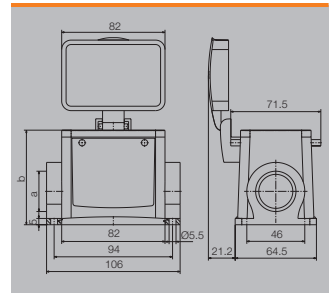
Version	Cover	b (mm)	Type	Order No.
	with cover	46.4	HDC 32A ADBO	1666440000



Base housing



a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading	with cover	97	HDC 32A SDBO 1M25G	1903900000
M 25	w. threading	with cover	97	HDC 32A SDBO 2M25G	1788060000
M 32	w. threading	with cover	97	HDC 32A SDBO 1M32G	1903910000
M 32	w. threading	with cover	97	HDC 32A SDBO 2M32G	1788050000
PG 21	w. threading	with cover	97	HDC 32A SDBO 1PG21G	1666550000
PG 29	w. threading	with cover	97	HDC 32A SDBO 1PG29G	1666590000



Side locking, lower side

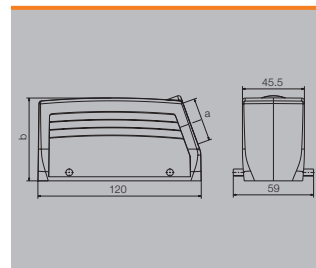
Size 8

Hood

Plug housing, cable entry sideways



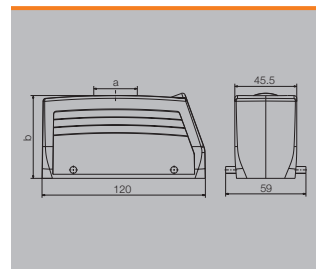
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 24B TSBU 1M25G	1787760000
M 25	w. threading		76	HDC 64D TSBU 1M25G	1786780000
M 32	w. threading		61	HDC 24B TSBU 1M32G	1787750000
M 32	w. threading		76	HDC 64D TSBU 1M32G	1786770000
M 40	w. threading		61	HDC 24B TSBU 1M40G	1902480000
M 40	w. threading		76	HDC 64D TSBU 1M40G	1809630000
PG 21	w. threading		61	HDC 24B TSBU 1PG21G	1661230000
PG 21	w. threading		76	HDC 64D TSBU 1PG21G	1661300000
PG 29	w. threading		61	HDC 24B TSBU 1PG29G	1661240000
PG 29	w. threading		76	HDC 64D TSBU 1PG29G	1661320000



Plug housing, cable entry at top



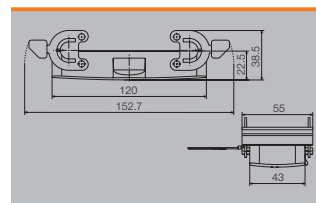
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 24B TOBU 1M25G	1787820000
M 32	w. threading		61	HDC 24B TOBU 1M32G	1787810000
M 32	w. threading		76	HDC 64D TOBU 1M32G	1786830000
M 32	w. threading		76	HDC 64D TOBU 2M32G	1009710000
M 40	w. threading		61	HDC 24B TOBU 1M40G	1902980000
M 40	w. threading		61	HDC 64D TOBU 1M40G	1045560000
PG 21	w. threading		61	HDC 24B TOBU 1PG21G	1661370000
PG 21	w. threading		76	HDC 64D TOBU 1PG21G	1661440000
PG 29	w. threading		61	HDC 24B TOBU 1PG29G	1661380000
PG 29	w. threading		76	HDC 64D TOBU 1PG29G	1661460000



Cover



Version	Type	Order No.
For hoods	HDC 24B DMDQ 2QB	1665640000



Side-locking clamp on the bottom section

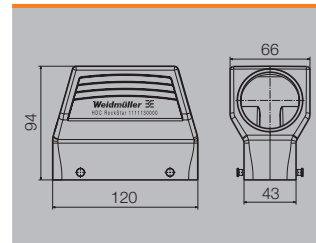
Size 8

upper section

XXL connector housing, cable exit on side



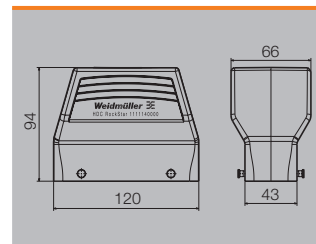
a	Version	Cover	B (mm)	Type	Order No.
M50	with threading		94	HDC 64D TSBU 1M50G	1111130000



XXL connector housing, cable exit on top



a	Version	Cover	B (mm)	Type	Order No.
M50	with threading		94	HDC 64D TOBU 1M50G	1111140000



Side locking, lower side

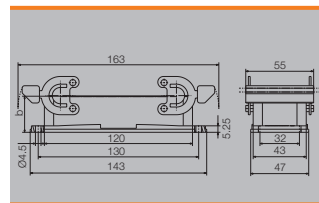
Size 8

Base

Bulkhead housing



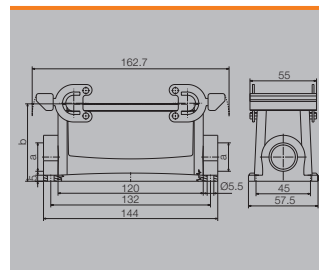
Version	Cover	b (mm)	Type	Order No.
		29.3	HDC 24B ABU	121240000



Base housing



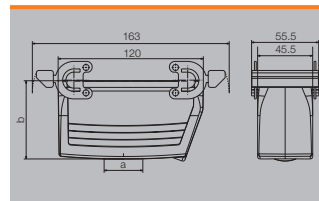
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		64	HDC 24B SBU 1M25G	1901150000
M 25	w. threading		84	HDC 64D SBU 1M25G	1904340000
M 25	w. threading		64	HDC 24B SBU 2M25G	1787870000
M 25	w. threading		84	HDC 64D SBU 2M25G	1786890000
M 32	w. threading		84	HDC 64D SBU 1M32G	1904350000
M 32	w. threading		84	HDC 64D SBU 2M32G	1786880000
PG 21	w. threading		64	HDC 24B SBU 1PG21G	1661510000
PG 21	w. threading		64	HDC 24B SBU 2PG21G	1661520000
PG 21	w. threading		84	HDC 64D SBU 2PG21G	1661590000
PG 29	w. threading		84	HDC 64D SBU 2PG29G	1661630000



Coupling housing



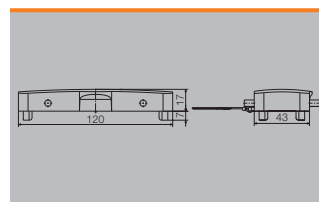
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		65	HDC 24B KBU 1M25G	1787920000
M 32	w. threading		79	HDC 64D KBU 1M32G	1786960000
PG 21	w. threading		65	HDC 24B KBU 1PG21G	1661720000
PG 29	w. threading		65	HDC 24B KBU 1PG29G	1661730000
PG 29	w. threading		79	HDC 64D KBU 1PG29G	1661810000



Cover



Version	Type	Order No.
For bases	HDC 24B DODQ 4B0	1665630000



RockStar® Housings IP66 / NEMA Type 4X

End locking, lower side

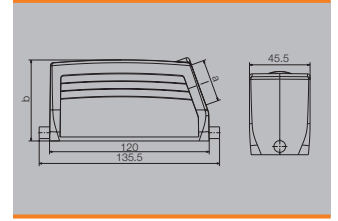
Size 8

Hood

Plug housing, cable entry sideways



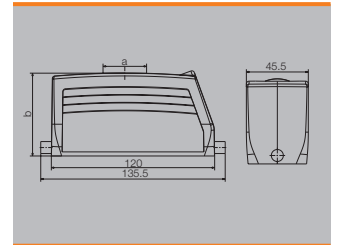
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 24B TSLU 1M25G	1787800000
M 32	w. threading		61	HDC 24B TSLU 1M32G	1787790000
M 32	w. threading		76	HDC 64D TSLU 1M32G	1786810000
M 40	w. threading		76	HDC 64D TSLU 1M40G	1804610000
PG 21	w. threading		76	HDC 64D TSLU 1PG21G	1662470000
PG 21	w. threading		61	HDC 24B TSLU 1PG21G	1662390000
PG 29	w. threading		61	HDC 24B TSLU 1PG29G	1662410000
PG 29	w. threading		76	HDC 64D TSLU 1PG29G	1662490000



Plug housing, cable entry at top



a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 24B TOLU 1M25G	1787860000
M 25	w. threading		92	HDC 64D TOLU 1M25G	1786870000
M 32	w. threading		61	HDC 24B TOLU 1M32G	1787850000
M 32	w. threading		92	HDC 64D TOLU 1M32G	1786860000
M 40	w. threading		92	HDC 64D TOLU 1M40G	1983470000
PG 21	w. threading		61	HDC 24B TOLU 1PG21G	1662540000
PG 21	w. threading		92	HDC 64D TOLU 1PG21G	1662610000
PG 29	w. threading		61	HDC 24B TOLU 1PG29G	1662550000
PG 29	w. threading		92	HDC 64D TOLU 1PG29G	1662630000



End-locking clamp on the bottom section

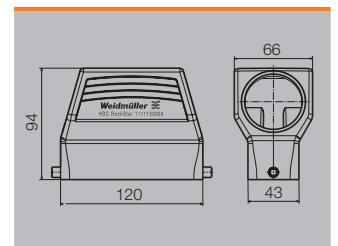
Size 8

upper section

XXL connector housing, cable exit on side



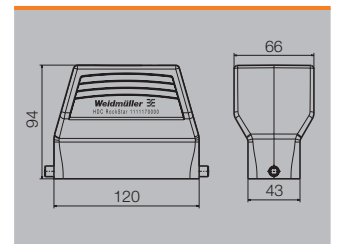
a	Version	Cover	B (mm)	Type	Order No.
M50	with threading		94	HDC 64D TSLU 1M50G	1111150000



XXL connector housing, cable exit on top



a	Version	Cover	B (mm)	Type	Order No.
M50	with threading		94	HDC 64D TOLU 1M50G	1111170000



End locking, lower side

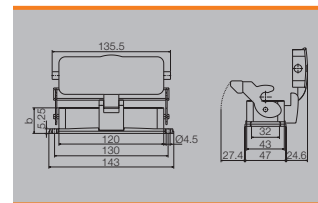
Size 8

Base

Bulkhead housing



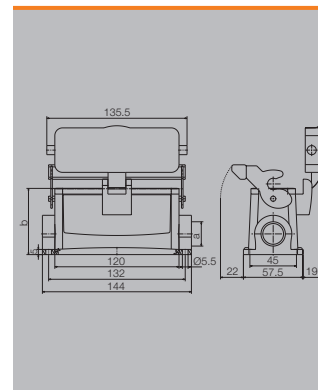
Version	Cover	b (mm)	Type	Order No.
		29.3	HDC 24B ALU	1213900000
	with cover	47	HDC 24B ADLU	1214300000



Base housing



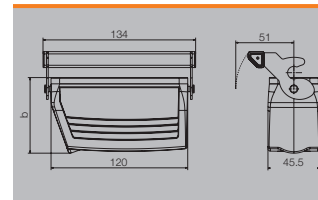
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		64	HDC 24B SLU 1M25G	1901560000
M 25	w. threading	with cover	86	HDC 24B SDLU 1M25G	1901480000
M 25	w. threading		84	HDC 64D SLU 1M25G	1904480000
M 25	w. threading	with cover	106	HDC 64D SDLU 1M25G	1904430000
M 25	w. threading		64	HDC 24B SLU 2M25G	1787880000
M 25	w. threading	with cover	86	HDC 24B SDLU 2M25G	1787900000
M 25	w. threading	with cover	106	HDC 64D SDLU 2M25G	1786950000
M 32	w. threading		84	HDC 64D SLU 1M32G	1904490000
M 32	w. threading	with cover	106	HDC 64D SDLU 1M32G	1904440000
M 32	w. threading		84	HDC 64D SLU 2M32G	1786900000
M 32	w. threading	with cover	106	HDC 64D SDLU 2M32G	1786940000
PG 21	w. threading		64	HDC 24B SLU 2PG21G	1662720000
PG 21	w. threading	with cover	86	HDC 24B SDLU 2PG21G	1214500000
PG 29	w. threading	with cover	106	HDC 64D SDLU 2PG29G	1663040000



Coupling housing



a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		63.8	HDC 24B KLU 1M25G	1968340000



RockStar® Housings IP66 / NEMA Type 4X

Side locking, upper side

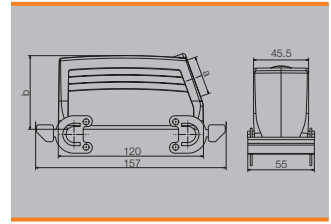
Size 8

Hood

Plug housing, cable entry sideways



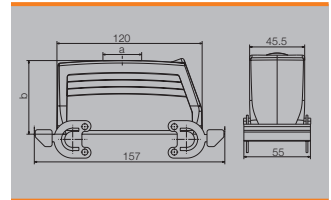
a	Version	Cover	b (mm)	Type	Order No.
M 25	w. threading		61	HDC 24B TSBO 1M25G	1787780000
M 25	w. threading		76	HDC 64D TSBO 1M25G	1786800000
M 32	w. threading		61	HDC 24B TSBO 1M32G	1787770000
M 32	w. threading		76	HDC 64D TSBO 1M32G	1786790000
PG 21	w. threading		61	HDC 24B TSBO 1PG21G	1661860000
PG 21	w. threading		76	HDC 64D TSBO 1PG21G	1661940000
PG 29	w. threading		61	HDC 24B TSBO 1PG29G	1661880000
PG 29	w. threading		76	HDC 64D TSBO 1PG29G	1661960000



Plug housing, cable entry at top



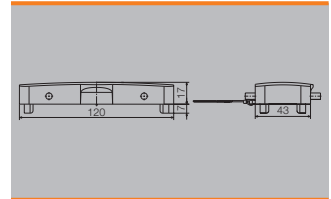
a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		61	HDC 24B TOBO 1M32G	1787830000
PG 21	w. threading		76	HDC 64D TOBO 1PG21G	1662080000
PG 29	w. threading		61	HDC 24B TOBO 1PG29G	1662020000
PG 29	w. threading		76	HDC 64D TOBO 1PG29G	1662100000



Cover



Version	Type	Order No.
For hoods	HDC 24B DMDQ 4BO	1665650000

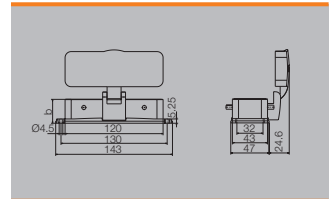


Base

Bulkhead housing



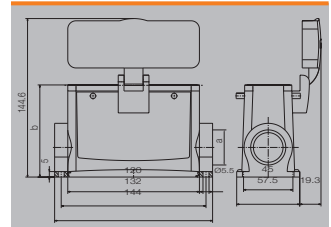
Version	Cover	b (mm)	Type	Order No.
		28.8	HDC 24B ABO	1967910000
	with cover	51.3	HDC 24B ADBO	1213300000



Base housing



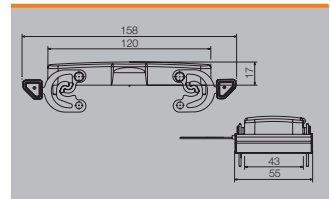
a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading	with cover	106	HDC 64D SDBO 1M32G	1904400000
M 32	w. threading	with cover	106	HDC 64D SDBO 2M32G	1786920000
PG 21	w. threading	with cover	86	HDC 24B SDBO 2PG21G	1662180000
PG 29	w. threading	with cover	106	HDC 64D SDBO 1PG29G	1662280000



Cover



Version	Type	Order No.
For bases	HDC 24B DODQ 2QB	1009100000



Central-locking clamp

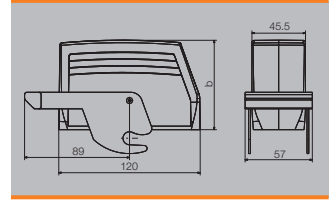
Size 8

Hood

Plug housing, cable entry sideways



a	Version	Cover	b (mm)	Type	Order No.
M 40	w. threading		76	HDC 64D TSO 1M40G	1904690000
PG 21	w. threading		76	HDC 64D TSO 1PG21G	1663370000
PG 29	w. threading		76	HDC 64D TSO 1PG29G	1663390000

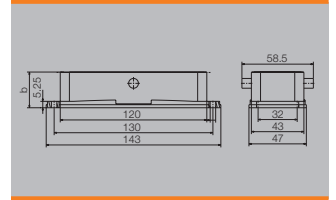


Base

Bulkhead housing



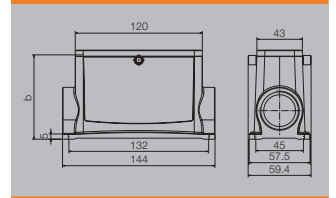
Version	Cover	b (mm)	Type	Order No.
		29,3	HDC 24B AZO	1611350000



Base housing



a	Version	Cover	b (mm)	Type	Order No.
PG 29	w. threading		84	HDC 64D SZO 2PG29G	1968370000



E

RockStar® Housings IP66 / NEMA Type 4X

End locking, lower side

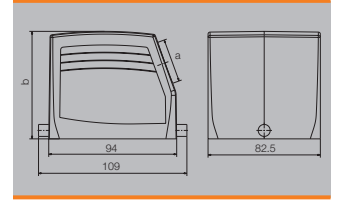
Size 9

Hood

Plug housing, cable entry sideways



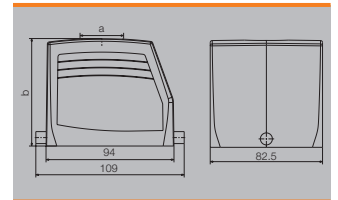
a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		79	HDC 48A TSLU 1M32G	1788550000
PG 29	w. threading		79	HDC 48A TSLU 1PG29G	1666710000



Plug housing, cable entry at top



a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		79	HDC 48A TOLU 1M32G	1788560000
PG 29	w. threading		79	HDC 48A TOLU 1PG29G	1666730000



End locking, lower side

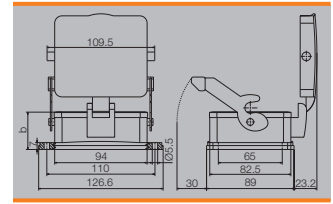
Size 9

Base

Bulkhead housing



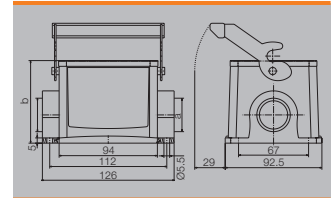
Version	Cover	b (mm)	Type	Order No.
		38	HDC 48A ALU	1666740000
	with cover	55	HDC 48A ADLU	1666750000



Base housing



a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		79	HDC 48A SLU 2M32G	1788570000
PG 29	w. threading		79	HDC 48A SLU 1PG29G	1666770000
PG 29	w. threading	with cover	96	HDC 48A SDLU 1PG29G	1666810000



RockStar® Housings IP66 / NEMA Type 4X

Side locking, lower side

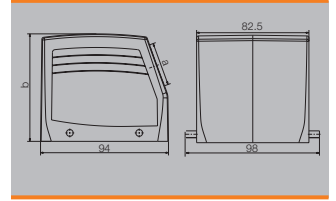
Size 10

Hood

Plug housing, cable entry sideways



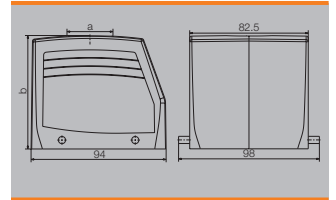
a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		79	HDC 32B TSBU 1M32G	1788400000
PG 29	w. threading		79	HDC 32B TSBU 1PG29G	1666840000



Plug housing, cable entry at top



a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		79	HDC 32B TOBU 1M32G	1788430000
PG 29	w. threading		79	HDC 32B TOBU 1PG29G	1666870000



Side locking, lower side

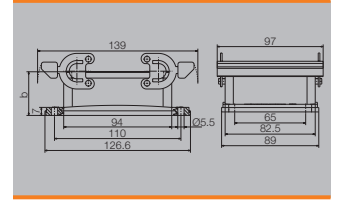
Size 10

Base

Bulkhead housing



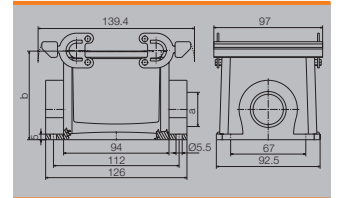
Version	Cover	b (mm)	Type	Order No.
		38	HDC 32B ABU	121780000



Base housing



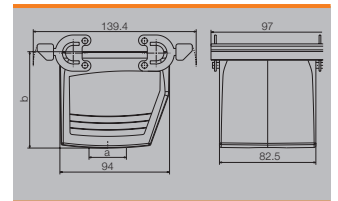
a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		79	HDC 32B SBU 1M32G	190260000
M 32	w. threading		79	HDC 32B SBU 2M32G	1788460000
PG 29	w. threading		79	HDC 32B SBU 2PG29G	1666920000
PG 36	w. threading		79	HDC 32B SBU 1PG36G	1902610000
PG 36	w. threading		79	HDC 32B SBU 2PG36G	1902640000



Coupling housing



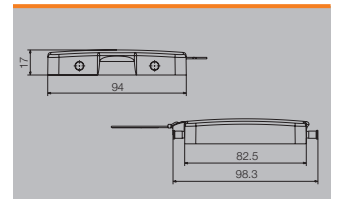
a	Version	Cover	b (mm)	Type	Order No.
M 40	w. threading		83	HDC 32B KBU 1M40G	1902730000
PG 29	w. threading		83	HDC 32B KBU 1PG29G	1902740000
PG 36	w. threading		83	HDC 32B KBU 1PG36G	1902750000



Cover



Version	Type	Order No.
	HDC 32B DODQ 4BO	1165790000



E

RockStar® Housings IP66 / NEMA Type 4X

End locking, lower side

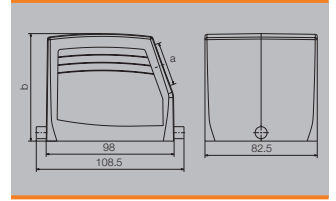
Size 10

Hood

Plug housing, cable entry sideways



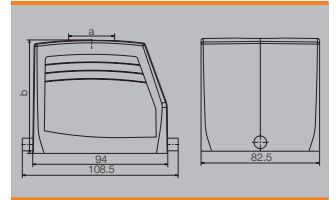
a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		79	HDC 32B TSLU 1M32G	1788420000
PG 29	w. threading		79	HDC 32B TSLU 1PG29G	1667120000



Plug housing, cable entry at top



a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		79	HDC 32B TOLU 1M32G	1788450000
PG 29	w. threading		79	HDC 32B TOLU 1PG29G	1219300000



End locking, lower side

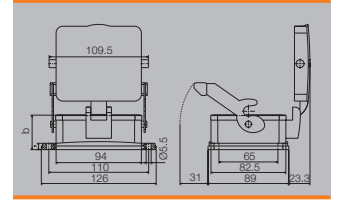
Size 10

Base

Bulkhead housing



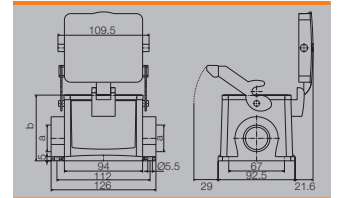
Version	Cover	b (mm)	Type	Order No.
		38	HDC 32B ALU	1219500000
	with cover	55	HDC 32B ADLU	1219800000



Base housing



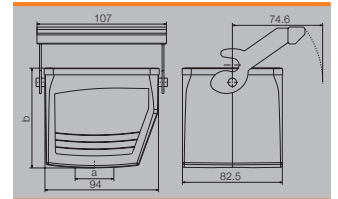
a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		79	HDC 32B SLU 1M32G	1902670000
M 32	w. threading	with cover	96	HDC 32B SDLU 1M32G	1902650000
M 32	w. threading		79	HDC 32B SLU 2M32G	1788470000
M 32	w. threading	with cover	96	HDC 32B SDLU 2M32G	1788490000



Coupling housing



a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		83	HDC 32B KLU 1M32G	1788500000



E

RockStar® Housings IP66 / NEMA Type 4X

Side locking, upper side

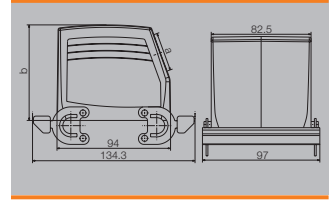
Size 10

Hood

Plug housing, cable entry at top



a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		79	HDC 32B TSBO 1M32G	1788410000

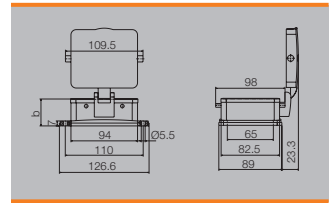


Base

Bulkhead housing



Version	Cover	b (mm)	Type	Order No.
	with cover	55	HDC 32B ADBO	1218800000



End locking, lower side

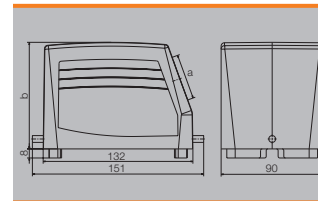
Size 12

Hood

Plug housing, cable entry sideways



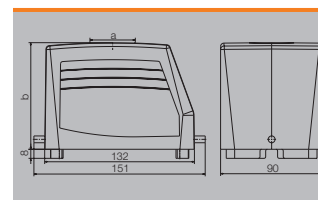
a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		94	HDC 48B TSLU 1M32G	1788320000
M 40	w. threading		94	HDC 48B TSLU 1M40G	1788310000
M 50	w. threading		94	HDC 48B TSLU 1M50G	1788300000
PG 29	w. threading		94	HDC 48B TSLU 1PG29G	1650850000
PG 36	w. threading		94	HDC 48B TSLU 1PG36G	1650860000
PG 42	w. threading		94	HDC 48B TSLU 1PG42G	1670470000



Plug housing, cable entry at top



a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		94	HDC 48B TOLU 1M32G	1788350000
M 40	w. threading		94	HDC 48B TOLU 1M40G	1788340000
M 50	w. threading		94	HDC 48B TOLU 1M50G	1788330000
PG 29	w. threading		94	HDC 48B TOLU 1PG29G	1650980000
PG 36	w. threading		94	HDC 48B TOLU 1PG36G	1651000000

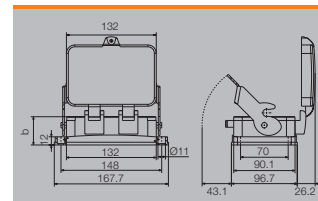


Base

Bulkhead housing



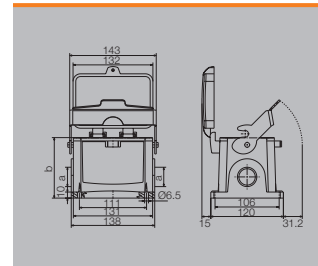
Version	Cover	b (mm)	Type	Order No.
	with cover	62	HDC 48B ADLU	1222900000



Base housing



a	Version	Cover	b (mm)	Type	Order No.
M 32	w. threading		100	HDC 48B SLU 1M32G	1904190000
M 32	w. threading	with cover	120	HDC 48B SDLU 1M32G	1904150000
M 32	w. threading		100	HDC 48B SLU 2M32G	1788370000
M 32	w. threading	with cover	120	HDC 48B SDLU 2M32G	1788390000
M 40	w. threading		100	HDC 48B SLU 2M40G	1788360000
M 40	w. threading	with cover	120	HDC 48B SDLU 2M40G	1983500000
M 50	w. threading	with cover	120	HDC 48B SDLU 2M50G	1983510000
PG 29	w. threading		100	HDC 48B SLU 1PG29G	1651100000
PG 29	w. threading	with cover	120	HDC 48B SDLU 1PG29G	1799810000
PG 29	w. threading	with cover	120	HDC 48B SDLU 2PG29G	1667560000



E

RockStar® Housings IP68

RockStar® Housings IP68	Introduction	F.2
	RockStar® Housings IP68	F.4
	Size 1 - 8	

RockStar® Housings IP68

The new RockStar® IP68 and IP69K housings are resistant to sea water and high impacts. They are designed for use under extreme environmental conditions and comply with the high vibration requirements of DIN EN 61373 Cat 2 (pivot mounting). These housings deliver a fail-safe and maintenance-free solution when using heavy-duty connectors in transportation, traffic engineering and energy technology. They are also suitable for applications subject to extreme climatic conditions. Weidmüller has designed the RockStar® IP68 housings with additional built-in features that ensure outstanding EMC. The bulkhead or base housing, combined with the plug housing, produces a labyrinth structure which ensures high shield attenuation. RockStar® IP68 housings are available in sizes 1, 3, 4, 6, 8 and 8 XXL; they can be combined with all fixed-pole modular inserts.

F



Impact resistant

The optimised construction provides high impact resistance and therefore, a long product lifespan.



Practical

Laser labelling for permanent identification and faster allocation.



Simple

A screw lock with internal and external hex drive is used for the housing's closure mechanism.

RockStar® Housings IP68

Screw connection

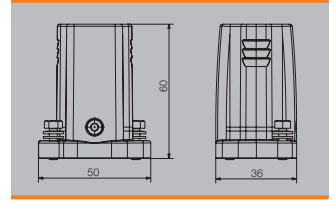
Size 1

Hood

Plug housing, cable entry at top



a	Version	b (mm)	Type	Order No.
M 20	w. threading	60	HDC IP68 04A TOS 1M20	1082390000
PG 13.5	w. threading	60	HDC IP68 04A TOS 1PG13	1082410000



Screw connection

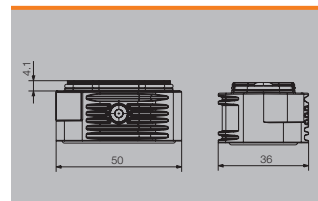
Size 1

Base

Bulkhead housing



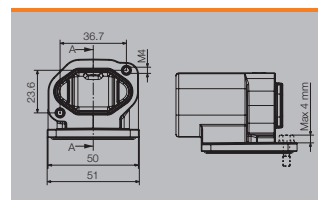
a	Version	b (mm)	Type	Order No.
		24.4	HDC IP68 04A AS	1081470000



Angled bulkhead housing



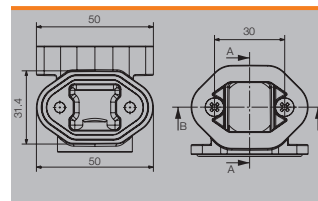
a	Version	b (mm)	Type	Order No.
M 20	w. threading	43.7	HDC IP68 04A AWS 1M20	1081480000
		43.7	HDC IP68 04A AWS	1081490000



Adapter



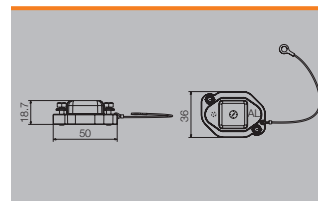
a	Version	b (mm)	Type	Order No.
		38.6	HDC IP68 04A ADS	1083130000
PG 13.5	w. threading	38.6	HDC IP68 04A ADS 1PG13	1083120000



Cover



Version	b (mm)	Type	Order No.
	18.7	HDC IP68 04A COVER	1083110000



RockStar® Housings IP68

Screw connection

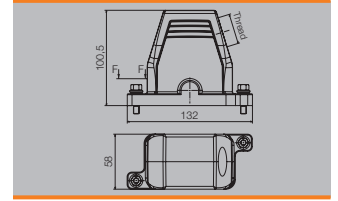
Size 3

Hood

Plug housing, cable entry sideways



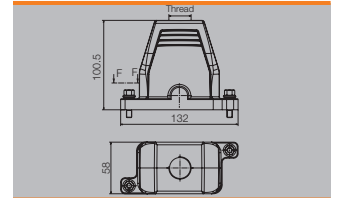
a	Version	b (mm)	Type	Order No.
M 20	w. threading	100.5	HDC IP68 06B TSS 1M20	1082510000
M 25	w. threading	100.5	HDC IP68 06B TSS 1M25	1082530000
M 32	w. threading	100.5	HDC IP68 06B TSS 1M32	1082550000
PG 16	w. threading	100.5	HDC IP68 06B TSS 1PG16	1082560000
PG 21	w. threading	100.5	HDC IP68 06B TSS 1PG21	1082570000



Plug housing, cable entry at top



a	Version	b (mm)	Type	Order No.
M 20	w. threading	100.5	HDC IP68 06B TOS 1M20	1082420000
M 25	w. threading	100.5	HDC IP68 06B TOS 1M25	1082430000
M 32	w. threading	100.5	HDC IP68 06B TOS 1M32	1082440000
M 40	w. threading	100.5	HDC IP68 06B TOS 1M40	1082450000
PG 16	w. threading	100.5	HDC IP68 06B TOS 1PG16	1082460000
PG 21	w. threading	100.5	HDC IP68 06B TOS 1PG21	1082470000
PG 29	w. threading	100.5	HDC IP68 06B TOS 1PG29	1082480000



Screw connection

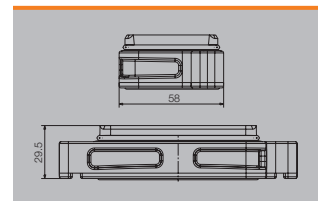
Size 3

Base

Bulkhead housing



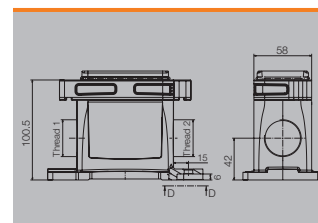
Version	b (mm)	Type	Order No.
	29.5	HDC IP68 06B AS	1081510000



Base housing



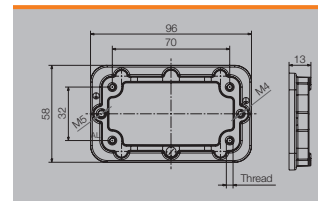
a	Version	b (mm)	Type	Order No.
M 20	w. threading	100.5	HDC IP68 06B SS 1M20	1081180000
M 20	w. threading	100.5	HDC IP68 06B SS 2M20	1081250000
M 25	w. threading	100.5	HDC IP68 06B SS 1M25	1081190000
M 25	w. threading	100.5	HDC IP68 06B SS 2M25	1081240000
M 32	w. threading	100.5	HDC IP68 06B SS 1M32	1081210000
M 32	w. threading	100.5	HDC IP68 06B SS 2M32	1081220000
PG 29	w. threading	100.5	HDC IP68 06B SS 1PG29	1081230000
PG 29	w. threading	100.5	HDC IP68 06B SS 2PG29	1081260000



Counter-frame



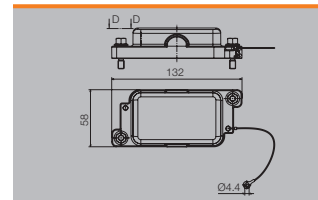
a	Version	b (mm)	Type	Order No.
		13	HDC IP65 06B FRAME M4	1081550000
		13	HDC IP68 06B FRAME M6	1110890000



Cover



Version	b (mm)	Type	Order No.
	31	HDC IP68 06B COVER	1083060000



RockStar® Housings IP68

Screw connection

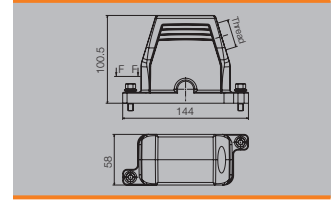
Size 4

Hood

Plug housing, cable entry sideways



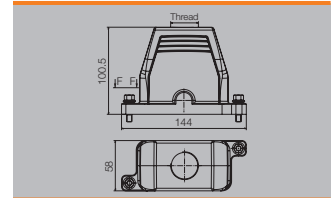
a	Version	b (mm)	Type	Order No.
M 20	w. threading	100.5	HDC IP68 10B TSS 1M20	1082690000
M 25	w. threading	100.5	HDC IP68 10B TSS 1M25	1082650000
M 32	w. threading	100.5	HDC IP68 10B TSS 1M32	1082660000
PG 21	w. threading	100.5	HDC IP68 10B TSS 1PG21	1082670000
PG 29	w. threading	100.5	HDC IP68 10B TSS 1PG29	1082680000



Plug housing, cable entry at top



a	Version	b (mm)	Type	Order No.
M 20	w. threading	100.5	HDC IP68 10B TOS 1M20	1082580000
M 25	w. threading	100.5	HDC IP68 10B TOS 1M25	1082590000
M 32	w. threading	100.5	HDC IP68 10B TOS 1M32	1082610000
PG 16	w. threading	100.5	HDC IP68 10B TOS 1PG16	1082620000
PG 21	w. threading	100.5	HDC IP68 10B TOS 1PG21	1082630000
PG 29	w. threading	100.5	HDC IP68 10B TOS 1PG29	1082640000



Screw connection

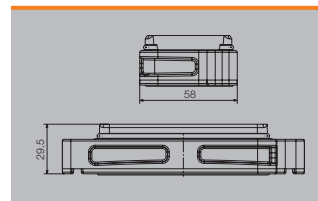
Size 4

Base

Bulkhead housing



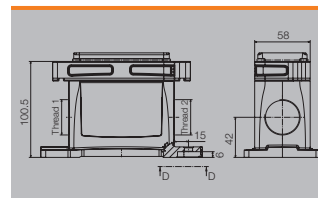
Version	b (mm)	Type	Order No.
	29.5	HDC IP68 10B AS	1081520000



Base housing



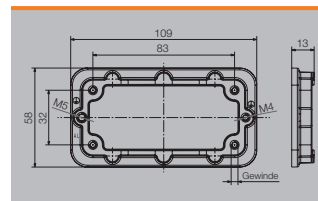
a	Version	b (mm)	Type	Order No.
M 20	w. threading	100.5	HDC IP68 10B SS 1M20	1081270000
M 20	w. threading	100.5	HDC IP68 10B SS 2M20	1081310000
M 32	w. threading	100.5	HDC IP68 10B SS 1M32	1081280000
M 32	w. threading	100.5	HDC IP68 10B SS 2M32	1081320000
PG 29	w. threading	100.5	HDC IP68 10B SS 1PG29	1081290000
PG 29	w. threading	100.5	HDC IP68 10B SS 2PG29	1081330000



Counter-frame



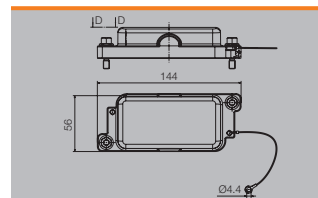
a	Version	b (mm)	Type	Order No.
		13	HDC IP65 10B FRAME M4	1081560000
		13	HDC IP68 10B FRAME M6	1110900000



Cover



Version	b (mm)	Type	Order No.
	31	HDC IP68 10B COVER	1083070000



RockStar® Housings IP68

Screw connection

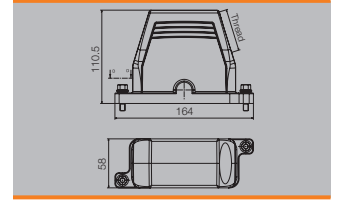
Size 6

Hood

Plug housing, cable entry sideways



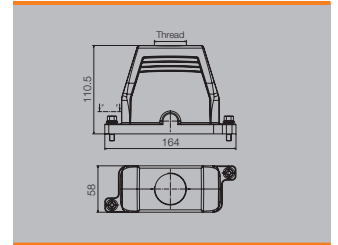
a	Version	b (mm)	Type	Order No.
M 32	w. threading	164	HDC IP68 16B TSS 1M32	1082800000
M 40	w. threading	164	HDC IP68 16B TSS 1M40	1082810000
M 50	w. threading	164	HDC IP68 16B TSS 1M50	1082820000
PG 21	w. threading	164	HDC IP68 16B TSS 1PG21	1082830000
PG 29	w. threading	164	HDC IP68 16B TSS 1PG29	1082840000
PG 36	w. threading	164	HDC IP68 16B TSS 1PG36	1082850000



Plug housing, cable entry at top



a	Version	b (mm)	Type	Order No.
M 25	w. threading	164	HDC IP68 16B TOS 1M25	1082700000
M 25	w. threading	164	HDC IP68 16B TOS 2M25	1082780000
M 32	w. threading	164	HDC IP68 16B TOS 1M32	1082710000
M 40	w. threading	164	HDC IP68 16B TOS 1M40	1082720000
M 50	w. threading	164	HDC IP68 16B TOS 1M50	1082730000
PG 21	w. threading	164	HDC IP68 16B TOS 1PG21	1082750000
PG 21	w. threading	164	HDC IP68 16B TOS 2PG21	1082740000
PG 29	w. threading	164	HDC IP68 16B TOS 1PG29	1082760000
PG 36	w. threading	164	HDC IP68 16B TOS 1PG36	1082770000



Screw connection

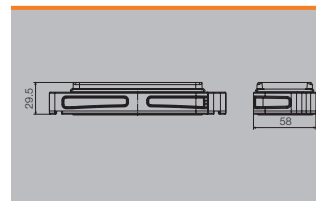
Size 6

Base

Bulkhead housing



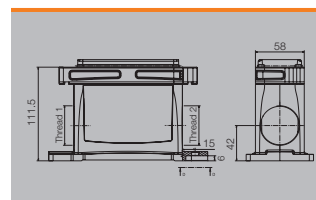
Version	b (mm)	Type	Order No.
21		HDC IP68 16B AS	1081530000



Base housing



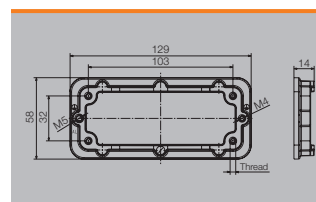
a	Version	b (mm)	Type	Order No.
		111.5	HDC IP68 16B SS	1081340000
M 32	w. threading	111.5	HDC IP68 16B SS 1M32	1081350000
M 32	w. threading	111.5	HDC IP68 16B SS 2M32	1081390000
M 40	w. threading	111.5	HDC IP68 16B SS 1M40	1081360000
M 40	w. threading	111.5	HDC IP68 16B SS 2M40	1081370000
PG 36	w. threading	111.5	HDC IP68 16B SS 1PG36	1081380000



Counter-frame



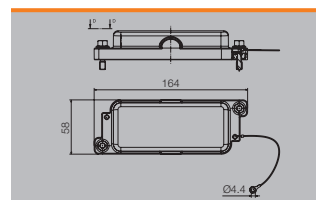
a	Version	b (mm)	Type	Order No.
		14	HDC IP65 16B FRAME M4	1081570000
		14	HDC IP68 16B FRAME M6	1110910000



Cover



Version	b (mm)	Type	Order No.
31		HDC IP68 16B COVER	1083080000



RockStar® Housings IP68

Screw connection

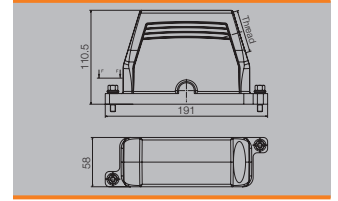
Size 8

Hood

Plug housing, cable entry sideways



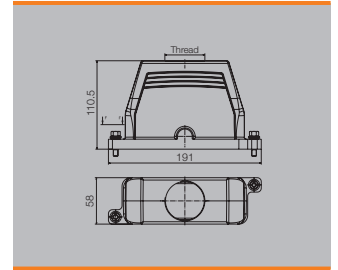
a	Version	b (mm)	Type	Order No.
M 32	w. threading	110.5	HDC IP68 24B TSS 1M32	1082970000
M 40	w. threading	110.5	HDC IP68 24B TSS 1M40	1082980000
M 50	w. threading	110.5	HDC IP68 24B TSS 1M50	1082990000
PG 29	w. threading	110.5	HDC IP68 24B TSS 1PG29	1083000000
PG 36	w. threading	110.5	HDC IP68 24B TSS 1PG36	1083010000



Plug housing, cable entry at top



a	Version	b (mm)	Type	Order No.
M 25	w. threading	110.5	HDC IP68 24B TOS 3M25	1082960000
M 32	w. threading	110.5	HDC IP68 24B TOS 1M32	1082860000
M 32	w. threading	110.5	HDC IP68 24B TOS 2M32	1082940000
M 40	w. threading	110.5	HDC IP68 24B TOS 1M40	1082870000
M 40	w. threading	110.5	HDC IP68 24B TOS 2M40	1082950000
M 50	w. threading	110.5	HDC IP68 24B TOS 1M50	1082880000
PG 21	w. threading	110.5	HDC IP68 24B TOS 1PG21	1082900000
PG 29	w. threading	110.5	HDC IP68 24B TOS 1PG29	1082920000
PG 29	w. threading	110.5	HDC IP68 24B TOS 2PG29	1082910000
PG 36	w. threading	110.5	HDC IP68 24B TOS 1PG36	1082930000



Screw connection

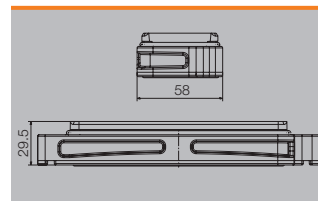
Size 8

Base

Bulkhead housing



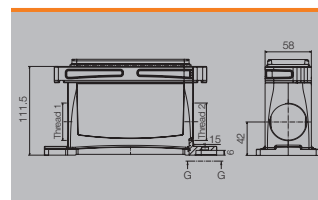
Version	b (mm)	Type	Order No.
	29.5	HDC IP68 24B AS	1081540000



Base housing



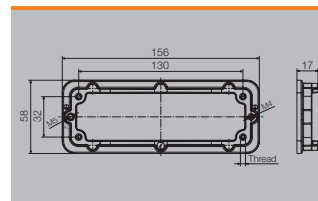
a	Version	b (mm)	Type	Order No.
		111.5	HDC IP68 24B SS	1081450000
M 40	w. threading	111.5	HDC IP68 24B SS 1M40	1081410000
M 40	w. threading	111.5	HDC IP68 24B SS 2M40	1081420000
PG 36	w. threading	111.5	HDC IP68 24B SS 1PG36	1081430000
PG 36	w. threading	111.5	HDC IP68 24B SS 2PG36	1081440000



Counter-frame



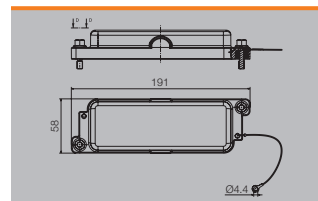
a	Version	b (mm)	Type	Order No.
		17	HDC IP65 24B FRAME M4	1081580000
		17	HDC IP68 24B FRAME M6	1110920000



Cover



Version	b (mm)	Type	Order No.
	31	HDC IP68 24B COVER	1083090000



RockStar® Housings IP68

Screw connection

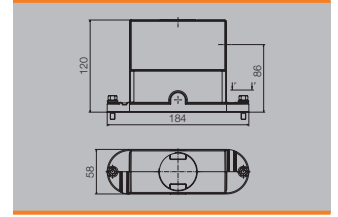
Size 8, XXL

Hood

Plug housing, cable entry sideways



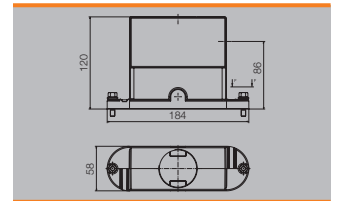
a	Version	b (mm)	Type	Order No.
M 40	w. threading	120	HDC HB 24 TEK TSS1xM40G	1000920001
M 50	w. threading	120	HDC HB 24 TEK TSS1xM50G	1827160000



Plug housing, cable entry at top



a	Version	b (mm)	Type	Order No.
M 40	w. threading	120	HDC HB 24 TEK TOS2XM40G	1020520000
M 50	w. threading	120	HDC HB 24 TEK TOS1xM50G	1827170000



Screw connection

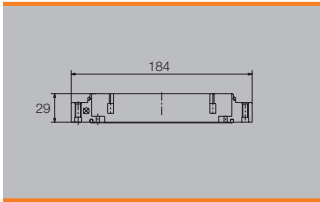
Size 8, XXL

Base

Bulkhead housing



Version	b (mm)	Type	Order No.
29		HDC HB 24 TEK AS M4	1827470000



RockStar® Heat Trace Connector

RockStar® Heat Trace Connector	Introduction	G.2
	RockStar® Heat Trace Connector	G.4
	600 V	
	35 A	
	2 poles	

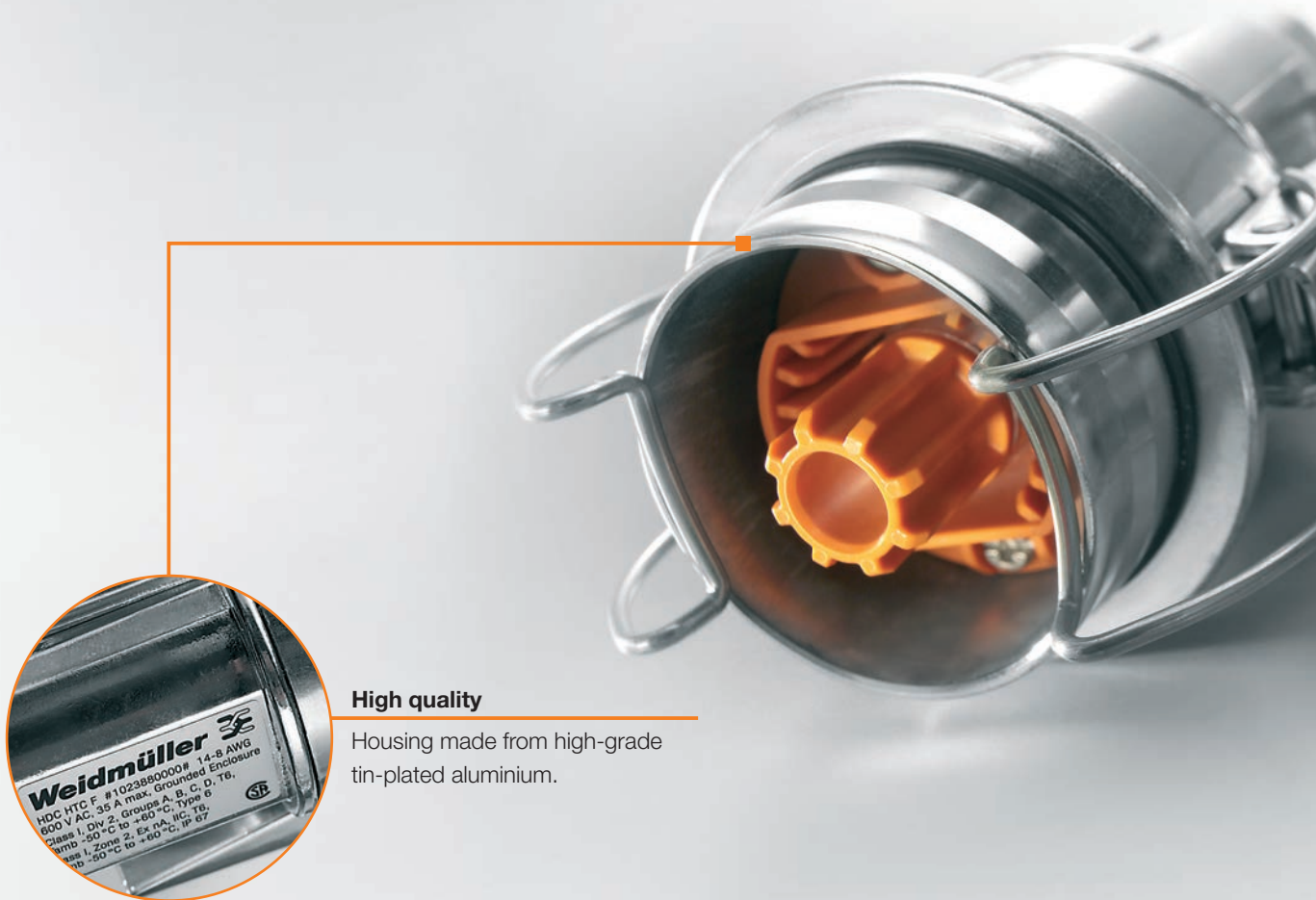
Introduction

RockStar® Heat Trace Connector

The temperature in an oil pipeline system must not fall below a specific limit, even when operating in harsh Arctic conditions, in order to ensure the smooth flow of oil. Pipelines are therefore equipped with heaters which must be connected to each other in a simple, safe and durable manner. Weidmüller has designed a connector with a CSA-approved temperature range from -50 °C to +60 °C. The coaxial design makes it easy to connect the connector elements in any position (360°). The inserts can be wired using the reliable screw connection. A snap closure secures the connection. It can also be easily released using a screwdriver. This provides long-term protection against an accidental opening.

The benefits for you:

- Two-piece construction helps save you time and money during installation
- Coaxial design for maximum 360° pluggability: can be plugged in without a complex alignment process or rotation
- Caps provide IP67 protection even when unplugged



High quality

Housing made from high-grade tin-plated aluminium.



Sturdy

Sturdy spiral spring contacts ensure a long-term, reliable electrical connection.



Colour coded

Simplified assignment using colour-coded inserts and caps.

Heat Trace Connector – Male and female

Heat Trace Connector

Male and female

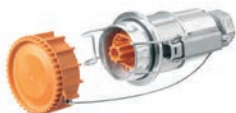
Technical data

Contact inserts

Rated electrical data	
Contacts	2-pole (L1, L2) + PE (earth/ground)
Rating data	35 amps, 600 V AC, 50 Hz / 60 Hz
Conductor	
Harmonised	2.5 mm ² – 10 mm ²
AWG	8 – 14 AWG
Materials, components	
Body	tin-plated aluminium
Contacts	silver-plated brass
Inserts	Polyamide (UL94-V0)
Cover	Polyamide (UL94-V0)
Sealing	FVMQ
Thread shape, cable gland	3/4" NPT-F (internal thread)
Environmental conditions	
Housing classification	Type 6, IP67
Approvals	
CSA	Class 1, Division 2 , Groups A, B, C, D, T6, Tamb –50 °C to +60 °C, Type 6
	Class 1, Zone 2 ; Ex nA, IIC, T6, Tamb –50 °C to +60 °C, IP67
GOSTEx	

Heat Trace Connector

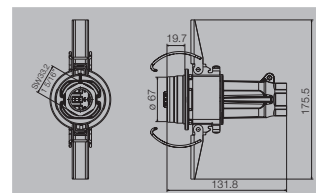
Female



Designation	Type	Order No.
HDC HTC F	3/4" NPT female	1023880000

Caution: special closing mechanism contingent on approval. (screwdriver required)

Note: included with delivery:
socket housing, socket insert and protective cap with safety cord

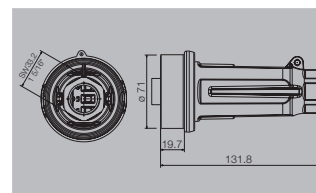


Male



Designation	Type	Order No.
HDC HTC M	3/4" NPT male	1023890000

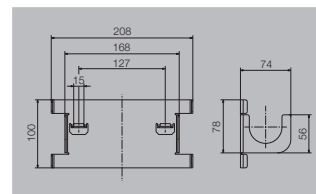
Note: included with delivery:
socket housing, socket insert and protective cap with safety cord



Mounting frame



Designation	Type	Order No.
HDC HTC MOUNTING	Mounting frame	1049370000

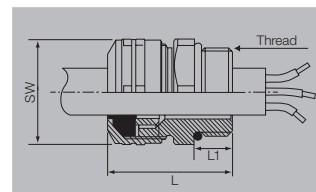


Cable gland



Designation	Type	Order No.
VG NPT 3/4" Eex-e MS	Ex cable gland	1778150000

Note: Additional Ex fittings and Ex adapters for the Heat Trace connector can be found in Section L.



Accessories

Designation	Type	Order No.
SD 0.8x4.0x100	Slotted screwdriver	9008340000

RockStar® Data Connectors

RockStar® Data Connectors	Introduction	H.2
	RockStar® CSB Size 1	H.4
	Coax	
	2 - 16 poles	
	IE-LINE Variant 5	H.10
	RJ45/USB	
	4 - 8 poles	

Introduction

RockStar® Data Connectors

Weidmüller's expertise and experience with the proven modular-based ConCept System bus has been applied to the design of the RockStar® CSB size 1 – the smallest HDC housing size available. This new connector can be combined with all contact carriers from the ConCept System bus module – optionally assembled with HD, HE or Sub-D contacts. RockStar® CSB size 1 can be easily built into an HDC IP66/IP68 housing and can be used to connect coaxial cables in railway applications.

In size 1, Weidmüller also offers IP67 Ethernet connectors that comply with requirements for up to 10 GBit Ethernet. They are also standardised for IEC 61076-3-106 and IEC 61076-3-117 (variant 5 for Ethernet IP). Variant 5 in the IE LINE can be assembled very quickly on-site. The RJ45 data inserts data, featuring STEADYTEC® technology*, are extremely reliable and easy to use. A USB coupling is also available for the female side which can be used with the IE LINE connector as a service interface.

*STEADYTEC® is a brand of technology from Weidmüller, BTR NETCOM and Telegärtner.

H

**Compact**

For use in compact HDC housings with IP66 or HDC-IP68/69K.



**Secure**

Signal and data transmission with resistance against shock and vibration

H

Fast

RJ45 data inserts for assembling in the field, according to Cat.6_A 10 GBit system Class EA.

RockStar® CSB Size 1

ConCept system bus

Shielded module

Technical data

Contact inserts

Standards	DIN EN 61984 IEC 60664
Number of contacts	2...16 poles for signal transmission
Conductor connection system	Crimp
Rated current	10 A (HD) / 25 A (HE)
Rated voltage/Rated impulse withstand voltage	50 V/0.8 kV (HD) / 160V/3kV (HE)
Degree of pollution	3 (100 V/1.5 kV/2 (HD) / 250 V/3 kV/2 (HE))
Shield	Shield connected to contact carrier using cable clamp
Outside diameter of shielded cable	3 to 6 mm and/or 6 to 9.5 mm
Conductor clamping ranges	0.14 mm ² ... 1.5 mm ² AWG 26 ... AWG 16
Stripping lengths	8 mm (HD/HE) / 4 mm (SUB-D)
Volume resistance	< 4 mΩ (HD) / < 2 mΩ (HE)
Contacts (crimp)	HD / HE / SUB-D
Contact material	Copper alloy
Surface	
Crimp contact	Passivated silver or gold-plated
Contact carrier	Zinc alloy
Temperature range	-40 °C ... +70 °C
Material – module	Glass-fibre reinforced PC (in UL list and approved for railway applications)
Flammability to UL 94	V-0



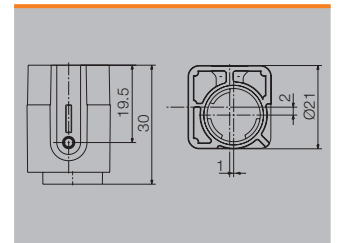
Note

Inserts

Male insert



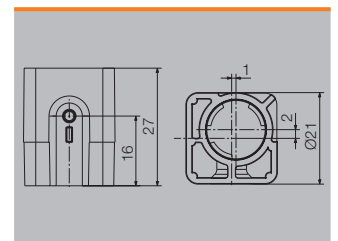
Designation	Type	Order No.
HDC 04A CSB MALE	Male insert	1137720000



Female insert



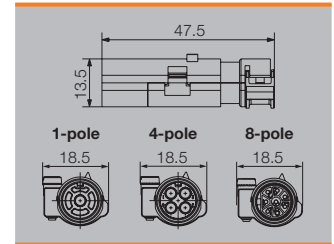
Designation	Type	Order No.
HDC 04A CSB FEMALE	Female insert	1137760000



Male contact carrier



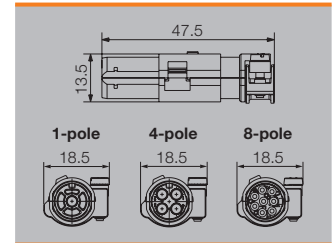
Designation	Type	Order No.
HDC CM BUS SV M1 CT	1-pole Male contact carrier HD	1983810000
HDC CM BUS SV M4 CT	4-pole Male contact carrier HD	1983790000
HDC CM BUS SV M8 CT	8-pole Male contact carrier SUB-D	1043130000
HDC CM BUS HE M1 CT	1-pole Male contact carrier HE	1116100000



Female contact carrier



Designation	Type	Order No.
HDC CM BUS SV F1 CT	1-pole Females contact carrier HD	1983800000
HDC CM BUS SV F4 CT	4-pole Females contact carrier HD	1983770000
HDC CM BUS SV F8 CT	8-pole Females contact carrier SUB-D	1043120000
HDC CM BUS HE F1 CT	1-pole Females contact carrier HE	1116090000



Accessories

HD crimp contacts

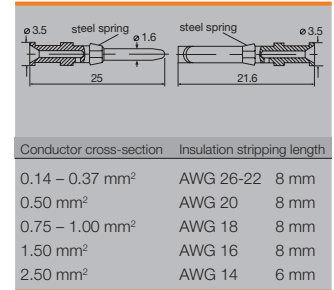
Surface Gold



Surface Silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	
100	HDC-C-HD-SM0.14-0.37AU	1651620000	HDC-C-HD-BM0.14-0.37AU	1651670000	
100	HDC-C-HD-SM0.5AU	1651630000	HDC-C-HD-BM0.5AU	1651680000	
100	HDC-C-HD-SM0.75-1AU	1651640000	HDC-C-HD-BM0.75-1AU	1651690000	
100	HDC-C-HD-SM1.5AU	1651650000	HDC-C-HD-BM1.5AU	1651700000	
100	HDC-C-HD-SM2.5AU	1651660000	HDC-C-HD-BM2.5AU	1651710000	
100	HDC-C-HD-SM0.14-0.37AG	1651520000	HDC-C-HD-BM0.14-0.37AG	1651570000	
100	HDC-C-HD-SM0.5AG	1651530000	HDC-C-HD-BM0.75-1AG	1601760000	
100	HDC-C-HD-SM0.75-1AG	1601750000	HDC-C-HD-BM0.5AG	1651580000	
100	HDC-C-HD-SM1.5AG	1651550000	HDC-C-HD-BM1.5AG	1651600000	
100	HDC-C-HD-SM2.5AG	1651560000	HDC-C-HD-BM2.5AG	1651610000	



Tools



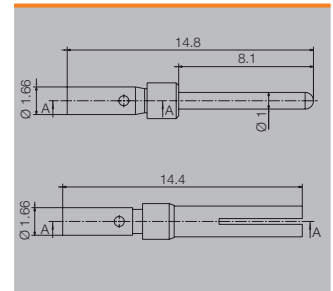
Tool	Order No.
Crimping tool	
CTX CM 1.6/2.5	9018490000
Contact release tool	
Removal Tool HD	1866730000

Accessories

SUB-D crimp contacts



Qty.	Male	Order No.	Female	Order No.
100	HDC-C-CM-BUS-S0.33-0.52	1027260000	HDC-C-CM-BUS-B0.33-0.52	1027270000



HE crimp contacts

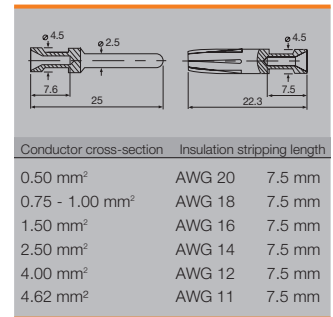
Surface Gold



Surface Silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	
100	HDC-C-HE-SM0.5AU	1651420000	HDC-C-HE-BM0.5AU	1651470000	
100	HDC-C-HE-SM0.75-1AU	1651430000	HDC-C-HE-BM0.75-1AU	1651480000	
100	HDC-C-HE-SM1.5AU	1651440000	HDC-C-HE-BM1.5AU	1651490000	
100	HDC-C-HE-SM2.5AU	1651450000	HDC-C-HE-BM2.5AU	1651500000	
100	HDC-C-HE-SM4.0AU	1651460000	HDC-C-HE-BM4.0AU	1651510000	
100	HDC-C-HE-SM4.65AU	1116540000	HDC-C-HE-BM4.65AU	1116530000	
100	HDC-C-HE-SM0.5AG	1200500000	HDC-C-HE-BM0.5AG	1201100000	
100	HDC-C-HE-SM0.75-1AG	1200600000	HDC-C-HE-BM0.75-1AG	1201200000	
100	HDC-C-HE-SM1.5AG	1200700000	HDC-C-HE-BM1.5AG	1201300000	
100	HDC-C-HE-SM2.5AG	1200800000	HDC-C-HE-BM2.5AG	1201400000	
100	HDC-C-HE-SM4.0AG	1200900000	HDC-C-HE-BM4.0AG	1201500000	



Tools



Tool	Order No.
Crimping tool CTX CM 1.6/2.5	9018490000
Contact release tool Removal Tool HE	1866750000

Housing selection RockStar® IP66
Size 1

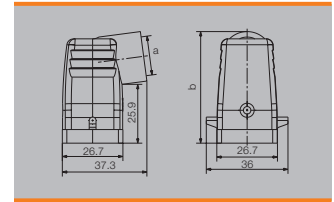
Hood

Plug housing, cable entry sideways



Material: diecast aluminium

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		49.2	HDC 04A TWLU 1M20G	1788810000

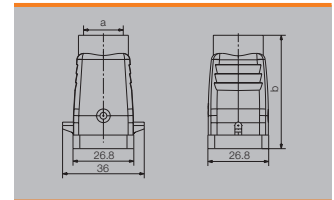


Plug housing, cable entry at top



Material: diecast aluminium

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		50	HDC 04A TOLU 1M20G	1788820000



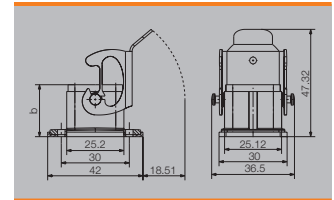
Base

Bulkhead housing



Material: diecast aluminium

Version	Cover	b (mm)	Type	Order No.
		23	HDC 04A ALU	1497600000

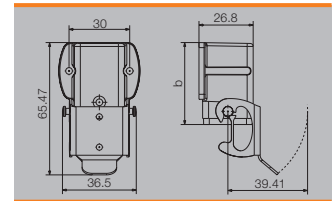


Base housing



Material: diecast aluminium

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		41.5	HDC 04A SLU 1M20G	1788830000

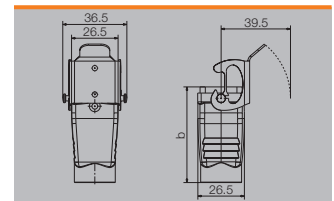


Coupling housing



Material: diecast aluminium

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		53.5	HDC 04A KOLU 1M20G	1788840000

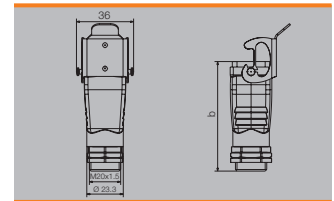


Screw mounting housing



Material: diecast aluminium

a	Version	Cover	b (mm)	Type	Order No.
M 20	w. threading		54	HDC 04A ELU 1M20G	1900320000

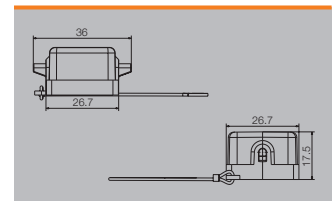


Cover



Material: diecast aluminium

Version	Type	Order No.
for female insert	HDC 04A DMDL 2BO	1665750000
for male insert	HDC 04A DODL 2BO	1665740000



RockStar® CSB Size 1

Screw connection

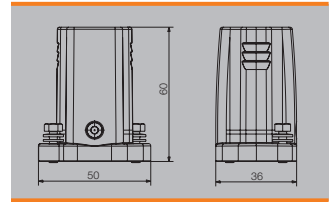
Size 1

Hood

Plug housing, cable entry at top



a	Version	b (mm)	Type	Order No.
M 20	w. threading	60	HDC IP68 04A TOS 1M20	1082390000
PG 13.5	w. threading	60	HDC IP68 04A TOS 1PG13	1082410000



Screw connection

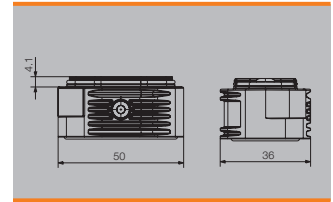
Size 1

Base

Bulkhead housing



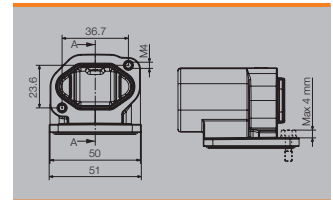
a	Version	b (mm)	Type	Order No.
		24.4	HDC IP68 04A AS	1081470000



Angled bulkhead housing



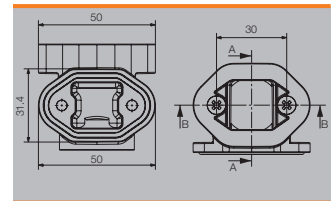
a	Version	b (mm)	Type	Order No.
M 20	w. threading	43.7	HDC IP68 04A AWS 1M20	1081480000
		43.7	HDC IP68 04A AWS	1081490000



Adapter



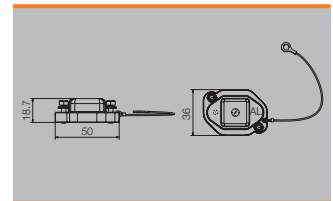
a	Version	b (mm)	Type	Order No.
		38.6	HDC IP68 04A ADS	1083130000
PG 13.5	w. threading	38.6	HDC IP68 04A ADS 1PG13	1083120000



Cover



Version	b (mm)	Type	Order No.
	18.7	HDC IP68 04A COVER	1083110000

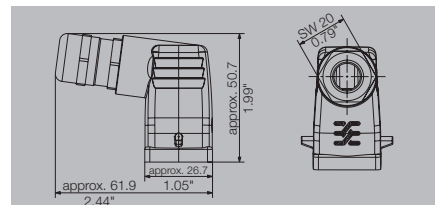
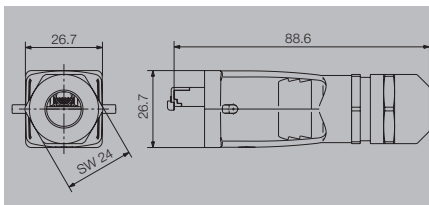


IE-LINE Variant 5

Plug RockStar® V5 - RJ45

V5 - RJ45 plug, straight

V5-RJ45 plug, angled



Technical data

Degree of protection
Housing main material
Sheath diameter, min. / max.
Plugging cycles
Ambient temperature (operational), min. / max.
Connector standard
Note

IP 67
diecast aluminium
5 mm / 12 mm
750
-40 °C...+70 °C
IEC 61076-3-106 Var. 5, IEC 60603-7-51
Note

IP 67
diecast aluminium
5 mm / 10 mm
750
-40 °C...+70 °C
IEC 61076-3-106 Var. 5, IEC 60603-7-51
Note

Ordering data - Sets

RJ45 tool-free, AWG 26-22, TIA-A/-B/-PROFINET
RJ45 tool-free, AWG 26-22, TIA-B
RJ45 Crimp, AWG 27-24
Note

Type	Qty.	Order No.
IE-PS-V05M-RJ45-FH	10	1963200000
IE-PS-V05M-RJ45-FH-B	10	1271250000
IE-PS-V05M-RJ45-TH	10	1963110000
Note		

Type	Qty.	Order No.
IE-PS-V05M-A-RJ45-FH	10	1077300000
Note		

Ordering data - Empty housings

Note

Type	Qty.	Order No.
IE-PH-V05M	10	1962540000
Note		

Type	Qty.	Order No.
Note		

Accessories

Dust protection cap
Plug housing protective cap
Note

Type	Qty.	Order No.
IE-PP-V05M	10	1968920000
Note		

Type	Qty.	Order No.
IE-PP-V05M	10	1968920000
Note		

Plug inserts can also be ordered separately. Refer to Inserts.

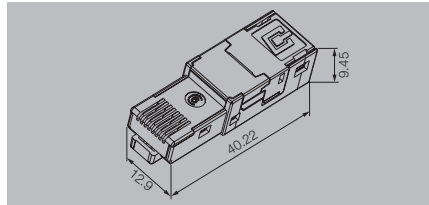
Plug inserts can also be ordered separately. Refer to Inserts.

IE-LINE Variant 5

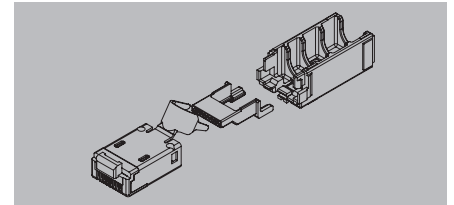
Plug inserts RJ45

- Cat.6_A
- IP 20
- For Variant 1, 4, 5 and 14 housings

Tool-free



Crimp



Technical data

Category
Degree of protection
Plugging cycles
Shielding
Housing main material
Contact material / Contact surface
Wire cross-section, flexible, min. / max.
Wire cross-section, flexible, min. / max.
Wire cross-section, solid, min. / max.
Wire cross-section, solid, min. / max.
Insulation cross-section, max.
Humidity
Ambient temperature (operational), min. / max.
Insulation resistance
Dielectric strength, contact / contact
Dielectric strength, contact / shield
Current-carrying capacity at 50 °C
PoE+
Speed
Connector standard
Note

Cat.6 _A / Class E _A (ISO/IEC 11801 2010)
IP 67 with housing
750
360° all-round enclosure
Zinc diecast
AWG 26 / AWG 22
0.48 mm / 0.76 mm
AWG 24 / AWG 24
0.4 mm / 0.64 mm
1.6 mm
-40 °C...+70 °C
500 MΩ
≥ 1000 V DC
≥ 1500 V DC
1 A
10 GBit
IEC 60603-7-51
Note

Cat.6 _A / Class E _A (ISO/IEC 11801 2010)
IP 67 with housing
750
360° all-round enclosure
Brass, PC UL 94 V0
Phosphor bronze / AU ≥ 0.8 μm, Ni 2.54 μm
AWG 27 / AWG 24
0.46 mm / 0.61 mm
AWG 24 / AWG 24
0.4 mm / 0.51 mm
1.05 mm
0...93 % rel. humidity
-40 °C...+70 °C
500 MΩ
≥ 1000 V DC
≥ 1500 V DC
1 A
conforming to IEEE 802.3af
10 GBit
IEC 60603-7-51
Note

Ordering data

tool-free	TIA-A/B/PROFINET
	TIA-A
	TIA-B
	PROFINET
Crimp	
Note	

Type	Qty.	Order No.
IE-PI-RJ45-FH	10	1962730000
IE-PI-RJ45-FH-A	10	1132010000
IE-PI-RJ45-FH-B	10	1132020000
IE-PI-RJ45-FH-P	10	1132030000

Type	Qty.	Order No.
IE-PI-RJ45-TH	10	1962720000

Accessories

Tools	Crimping tool
	Optional pressing tool

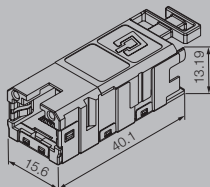
Type	Qty.	Order No.
PWZ RJ45	1	1118040000

Type	Qty.	Order No.
TT 8 RS MP 8	1	9202800000

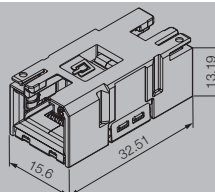
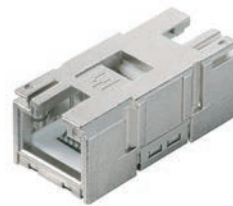
Flange inserts RJ45

- Cat.6_A
- IP 20
- For Variant 1, 4, 5 and 14 housings

Module



Coupling



Technical data

Category
Degree of protection
Plugging cycles
Shielding
Housing main material
Wire cross-section, flexible, min. / max.
Wire cross-section, solid, min. / max.
Insulation cross-section, max.
Connector standard
Ambient temperature (operational), min. / max.
Note

Cat.6 _A / Class E _A (ISO/IEC 11801 2010)
IP 67 with housing
750
360° all-round enclosure
Zinc diecast
AWG 26 / AWG 22
AWG 24 / AWG 24
1.6 mm
IEC 60603-7-51
-40 °C...+70 °C
Note

Cat.6 _A / Class E _A (ISO/IEC 11801 2010)
IP 67 with housing
750
360° all-round enclosure
Zinc diecast
IEC 60603-7-51
-40 °C...+70 °C
Note

Ordering data

No tools needed
TIA-A
TIA-B
PROFINET
Coupling
Note

Type	Qty.	Order No.
IE-BI-RJ45-FJ-A	10	1962850000
IE-BI-RJ45-FJ-B	10	1963840000
IE-BI-RJ45-FJ-P	10	1963830000
Note		

Type	Qty.	Order No.
IE-BI-RJ45-C	10	1962840000
Note		

Accessories

Tools
Optional pressing tool

Type	Qty.	Order No.
PWZ RJ45	1	1118040000
Note		

Type	Qty.	Order No.
Note		

IE-LINE Variant 5

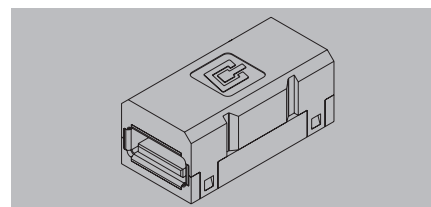
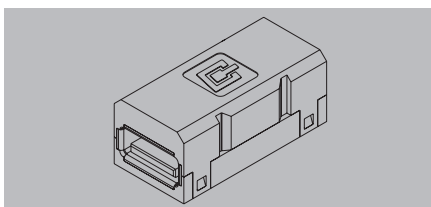
Flange inserts USB

- IP 20
- For Variant 1, 4, 5 and 14 housings

Coupling USB A/A



Coupling USB A/B



Technical data

Degree of protection
Shielding
Ambient temperature (operational), min. / max.
Connection 1 / 2
Connector standard

IP 67 with housing
360° all-round enclosure
-40 °C...+70 °C
USB A / USB A
IEC 61076-3-107

IP 67 with housing
360° all-round enclosure
-40 °C...+70 °C
USB A / USB B
IEC 61076-3-107

Note

Ordering data

USB coupling

Type	Qty.	Order No.
IE-BI-USB-A	10	1019570000

Type	Qty.	Order No.
IE-BI-USB-AB	10	1131380000

Note

Accessories

RockStar® Kits

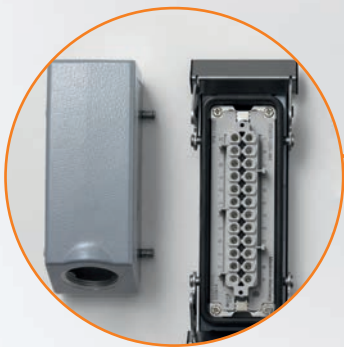
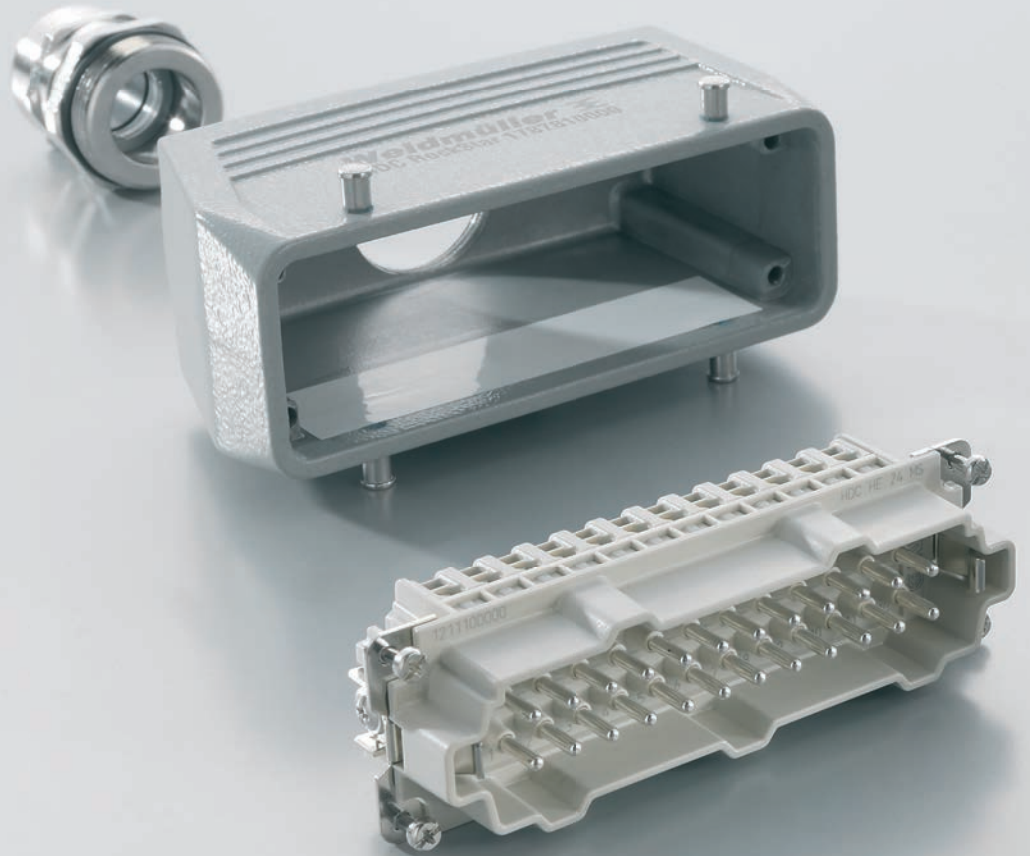
RockStar® Kits	Introduction	1.2
	RockStar® Kits with HA inserts	1.4
	250 V	
	22 A	
	3 - 4 poles	
	RockStar® Kits with HE inserts	1.8
	500 V	
	16 A	
	6 - 48 poles	
	RockStar® Kits with HSB inserts	1.28
	400 V	
	35 A	
	6 poles	

RockStar® Kits

RockStar® kits are sets consisting of all components necessary for assembling a heavy-duty connector. The kit includes the male and female inserts, the plug housing, the bulkhead housing and the cable gland.

The benefits for you:

- Easy to purchase – only one ordered part for all items
- Easy to use – just one package with no individual parts
- Wide variety – we'll put together a customised kit for whichever components you need.



Easy to choose

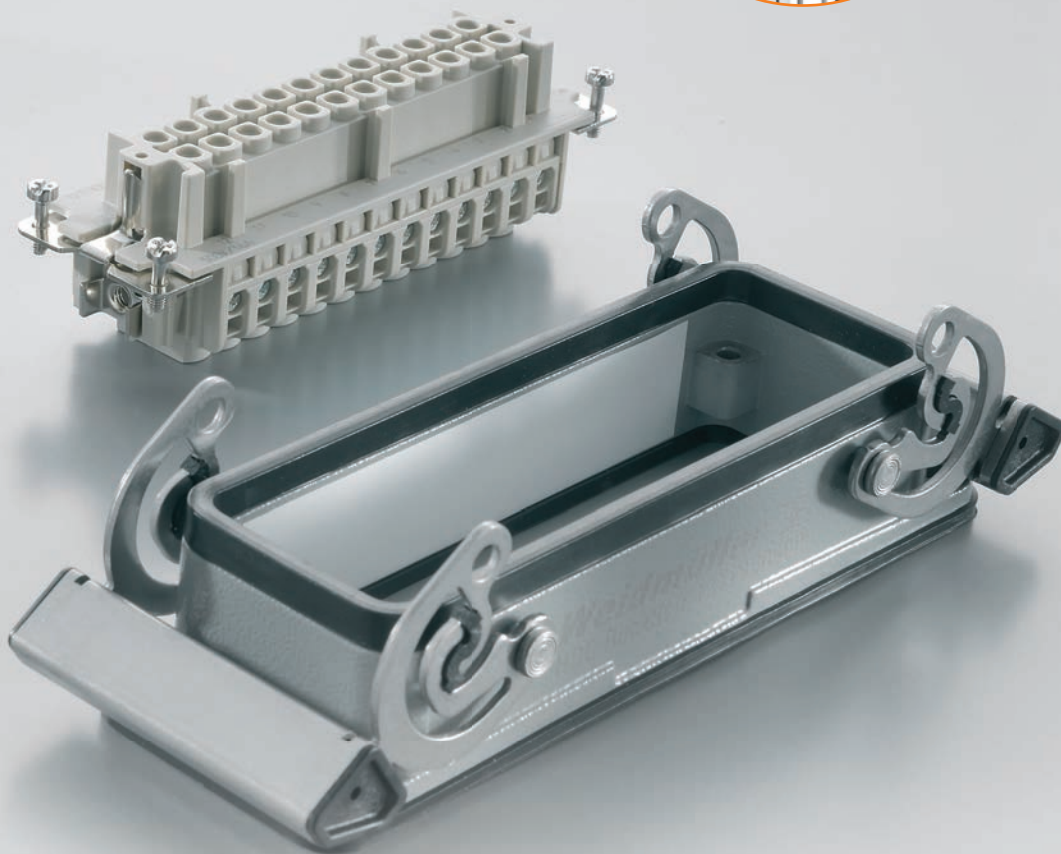
All components at a single glance – each matched to the required number of poles, size and wire connection method

**Easy to stock**

Only one package is needed for the complete connector. The RockStar® kits simplify your logistics.

**Easy to install**

You only need a screwdriver to install the connector in the field.



Kits with HA inserts, 3 pole

250 V, 22 A, Size 1

Metric versions



Type	Order No.
HDC-KIT-HA 03.300 M	1802470000

Part	Type	Order No.
Female	HDC HA 3 FS	1498200000
Male	HDC HA 3 MS	1498100000
Bulkhead (feed-through)	HDC 04A ALU	1497600000
Plug	HDC 04A TOLU 1M20G	1788820000
Cable glands	VG M20 - MS 68	1772220000

Metal housing



Type	Order No.
HDC-KIT-HA 03.301 M	1802460000

Part	Type	Order No.
Female	HDC HA 3 FS	1498200000
Male	HDC HA 3 MS	1498100000
Bulkhead (feed-through)	HDC 07A ALU	1652410000
Plug	HDC 07A TOLU 1M20G	1788520000
Cable glands	VG M20-1/K68	1772300000

Plastic housing



Type	Order No.
HDC-KIT-HA 03.302 M	1802450000

Part	Type	Order No.
Female	HDC HA 3 FS	1498200000
Male	HDC HA 3 MS	1498100000
Bulkhead (feed-through)	HDC 04A AWLU	1497700000
Plug	HDC 04A TOLU 1M20G	1788820000
Cable glands	VG M20 - MS 68	1772220000

Metal housing

250 V, 22 A, Size 1

PG versions



Type	Order No.
HDC-KIT-HA 03.300	1712560000

Part	Type	Order No.
Female	HDC HA 3 FS	1498200000
Male	HDC HA 3 MS	1498100000
Bulkhead (feed-through)	HDC 04A ALU	1497600000
Plug	HDC 04A TOLU 1PG11G	1652470000
Cable glands	VG 11-MS68	1569080000

Metal housing



Type	Order No.
HDC-KIT-HA 03.301	1712570000

Part	Type	Order No.
Female	HDC HA 3 FS	1498200000
Male	HDC HA 3 MS	1498100000
Bulkhead (feed-through)	HDC 07A ALU	1652410000
Plug	HDC 07A TOLU 1PG11G	1652380000
Cable glands	VG 11-K68	1568990000

Plastic housing



Type	Order No.
HDC-KIT-HA 03.302	1712580000

Part	Type	Order No.
Female	HDC HA 3 FS	1498200000
Male	HDC HA 3 MS	1498100000
Bulkhead (feed-through)	HDC 04A AWLU	1497700000
Plug	HDC 04A TOLU 1PG11G	1652470000
Cable glands	VG 11-MS68	1569080000

Metal housing



Type	Order No.
HDC-KIT-HA 03.404	1712630000

Part	Type	Order No.
Female	HDC HA 3 FS	1498200000
Male	HDC HA 3 MS	1498100000
Bulkhead (feed-through)	HDC 07A AWLU	1652420000
Plug	HDC 07A TOLU 1PG11G	1652380000
Cable glands	VG 11-K68	1568990000

Plastic housing

Kits with HA inserts, 4 pole

250 V, 22 A, Size 1

Metric versions



Type	Order No.
HDC-KIT-HA 04.400 M	1802440000

Part	Type	Order No.
Female	HDC HA 4 FS	1498400000
Male	HDC HA 4 MS	1498300000
Bulkhead (feed-through)	HDC 04A ALU	1497600000
Plug	HDC 04A TOLU 1M20G	1788820000
Cable glands	VG M20 - MS 68	1772220000

Metal housing



Type	Order No.
HDC-KIT-HA 04.401 M	1802430000

Part	Type	Order No.
Female	HDC HA 4 FS	1498400000
Male	HDC HA 4 MS	1498300000
Bulkhead (feed-through)	HDC 07A ALU	1652410000
Plug	HDC 07A TOLU 1M20G	1788520000
Cable glands	VG M20-1/K68	1772300000

Plastic housing



Type	Order No.
HDC KIT HA 04.402 M	1802700000

Part	Type	Order No.
Female	HDC HA 4 FS	1498400000
Male	HDC HA 4 MS	1498300000
Bulkhead (feed-through)	HDC 04A AWLU	1497700000
Plug	HDC 04A TOLU 1M20G	1788820000
Cable glands	VG M20 - MS 68	1772220000

Metal housing



Type	Order No.
HDC KIT HA 04.406 M	1802720000

Part	Type	Order No.
Female	HDC HA 4 FS	1498400000
Male	HDC HA 4 MS	1498300000
Bulkhead (feed-through)	HDC 07A AWLU	1652420000
Plug	HDC 07A TOLU 1M20G	1788520000
Cable glands	VG M20-1/K68	1772300000

Plastic housing

250 V, 22 A, Size 1

PG versions



Type	Order No.
HDC-KIT-HA 04.400	1712590000

Part	Type	Order No.
Female	HDC HA 4 FS	1498400000
Male	HDC HA 4 MS	1498300000
Bulkhead (feed-through)	HDC 04A ALU	1497600000
Plug	HDC 04A TOLU 1PG11G	1652470000
Cable glands	VG 11-MS68	1569080000

Metal housing



Type	Order No.
HDC-KIT-HA 04.401	1712600000

Part	Type	Order No.
Female	HDC HA 4 FS	1498400000
Male	HDC HA 4 MS	1498300000
Bulkhead (feed-through)	HDC 07A ALU	1652410000
Plug	HDC 07A TOLU 1PG11G	1652380000
Cable glands	VG 11-K68	1568990000

Plastic housing



Type	Order No.
HDC-KIT-HA 04.402	1712610000

Part	Type	Order No.
Female	HDC HA 4 FS	1498400000
Male	HDC HA 4 MS	1498300000
Bulkhead (feed-through)	HDC 04A AWLU	1497700000
Plug	HDC 04A TOLU 1PG11G	1652470000
Cable glands	VG 11-MS68	1569080000

Metal housing



Type	Order No.
HDC-KIT-HA 04.406	1712650000

Part	Type	Order No.
Female	HDC HA 4 FS	1498400000
Male	HDC HA 4 MS	1498300000
Bulkhead (feed-through)	HDC 07A AWLU	1652420000
Plug	HDC 07A TOLU 1PG11G	1652380000
Cable glands	VG 11-K68	1568990000

Plastic housing

Kits with HE inserts, 6 pole

500 V, 24 A, Size 3

Metric versions



Type	Order No.
HDC KIT HE 06.100 M	1802730000

Part	Type	Order No.
Female	HDC HE 6 FS	1200200000
Male	HDC HE 6 MS	1200000000
Bulkhead (feed-through)	HDC 06B ALU	1202100000
Plug	HDC 06B TSLU 1M20G	1788100000
Cable glands	VG M20 - MS 68	1772220000

Metal housing



Type	Order No.
HDC KIT HE 06.101 M	1802740000

Part	Type	Order No.
Female	HDC HE 6 FS	1200200000
Male	HDC HE 6 MS	1200000000
Bulkhead (feed-through)	HDC 06B ALU	1202100000
Plug	HDC 06B TOLU 1M20G	1788120000
Cable glands	VG M20 - MS 68	1772220000

Metal housing

500 V, 24 A (16 A), Size 3

PG versions



Type	Order No.
HDC-KIT-HE 06.100	1712460000

Part	Type	Order No.
Female	HDC HE 6 FS	1200200000
Male	HDC HE 6 MS	1200000000
Bulkhead (feed-through)	HDC 06B ALU	1202100000
Plug	HDC 06B TSLU 1PG16G	1652520000
Cable glands	VG 16-MS68	1569100000

Metal housing



Type	Order No.
HDC-KIT-HE 06.101	1712660000

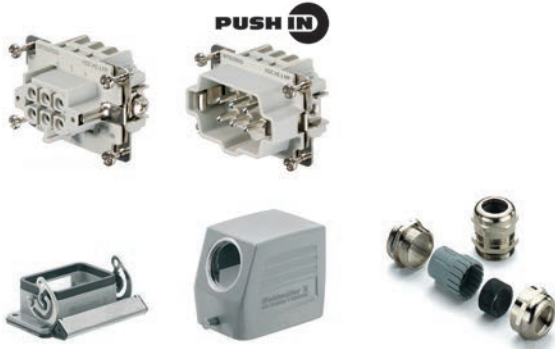
Part	Type	Order No.
Female	HDC HE 6 FS	1200200000
Male	HDC HE 6 MS	1200000000
Bulkhead (feed-through)	HDC 06B ALU	1202100000
Plug	HDC 06B TOLU 1PG16G	1652640000
Cable glands	VG 16-MS68	1569100000

Metal housing

Kits with HE inserts, 6-pole, PUSH IN

500 V, 24 A, Size 3

Metric versions



Type	Order No.
HDC KIT HE-P 06.10 M	1027650000

Part	Type	Order No.
Female	HDC HE 6 FP	1873520000
Male	HDC HE 6 MP	1873530000
Bulkhead (feed-through)	HDC 06B ALU	1202100000
Plug	HDC 06B TSLU 1M20G	1788100000
Cable glands	VG M20 - MS 68	1772220000

Metal housings



Type	Order No.
HDC KIT HE-P 06.11 M	1061720000

Part	Type	Order No.
Female	HDC HE 6 FP	1873520000
Male	HDC HE 6 MP	1873530000
Bulkhead (feed-through)	HDC 06B ALU	1202100000
Plug	HDC 06B TOLU 1M20G	1788120000
Cable glands	VG M20 - MS 68	1772220000

Metal housings

500 V, 24 A, Size 3

PG versions



Type	Order No.
HDC KIT HE-P 06.10	1027660000

Part	Type	Order No.
Female	HDC HE 6 FP	1873520000
Male	HDC HE 6 MP	1873530000
Bulkhead (feed-through)	HDC 06B ALU	1202100000
Plug	HDC 06B TSLU 1PG16G	1652520000
Cable glands	VG 16-MS68	1569100000

Metal housings



Type	Order No.
HDC KIT HE-P 06.11	1061710000

Part	Type	Order No.
Female	HDC HE 6 FP	1873520000
Male	HDC HE 6 MP	1873530000
Bulkhead (feed-through)	HDC 06B ALU	1202100000
Plug	HDC 06B TOLU 1PG16G	1652640000
Cable glands	VG 16-MS68	1569100000

Metal housings

Kits with HE inserts, 10 pole

500 V, 16 A, Size 4

Metric versions



Type	Order No.
HDC-KIT-HE 10.110 M	1802420000

Part	Type	Order No.
Female	HDC HE 10 FS	1204100000
Male	HDC HE 10 MS	1203900000
Bulkhead (feed-through)	HDC 10B ABU	1205000000
Plug	HDC 10B TSBU 1M25G	1787550000
Cable glands	VG M25 - MS 68	1772230000

Metal housing



Type	Order No.
HDC-KIT-HE 10.111 M	1802410000

Part	Type	Order No.
Female	HDC HE 10 FS	1204100000
Male	HDC HE 10 MS	1203900000
Bulkhead (feed-through)	HDC 10B ABU	1205000000
Plug	HDC 10B TOBU 1M25G	1787590000
Cable glands	VG M25 - MS 68	1772230000

Metal housing

500 V, 16 A, Size 4

PG versions



Type	Order No.
HDC-KIT-HE 10.110	1712510000

Part	Type	Order No.
Female	HDC HE 10 FS	1204100000
Male	HDC HE 10 MS	1203900000
Bulkhead (feed-through)	HDC 10B ABU	1205000000
Plug	HDC 10B TSBU 1PG16G	1654070000
Cable glands	VG 16-MS68	1569100000

Metal housing



Type	Order No.
HDC-KIT-HE 10.111	1712670000

Part	Type	Order No.
Female	HDC HE 10 FS	1204100000
Male	HDC HE 10 MS	1203900000
Bulkhead (feed-through)	HDC 10B ABU	1205000000
Plug	HDC 10B TOBU 1PG16G	1654220000
Cable glands	VG 16-MS68	1569100000

Metal housing

Kits with HE inserts, 10-pole, PUSH IN

500 V, 16 A, Size 4

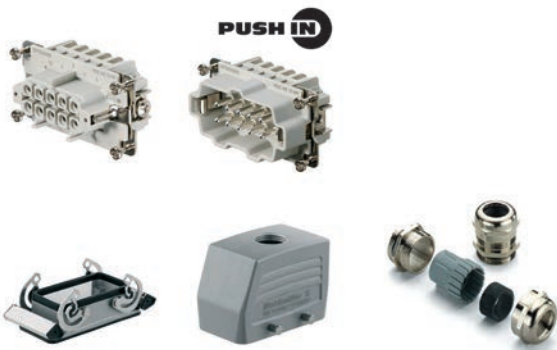
Metric versions



Type	Order No.
HDC KIT HE-P 10.110 M	1027670000

Part	Type	Order No.
Female	HDC HE 10 FP	1873540000
Male	HDC HE 10 MP	1873550000
Bulkhead (feed-through)	HDC 10B ABU	1205000000
Plug	HDC 10B TSBU 1M25G	1787550000
Cable glands	VG M25 - MS 68	1772230000

Metal housings



Type	Order No.
HDC KIT HE-P 10.111 M	1061740000

Part	Type	Order No.
Female	HDC HE 10 FP	1873540000
Male	HDC HE 10 MP	1873550000
Bulkhead (feed-through)	HDC 10B ABU	1205000000
Plug	HDC 10B TOBU 1M25G	1787590000
Cable glands	VG M25 - MS 68	1772230000

Metal housings

500 V, 16 A, Size 4

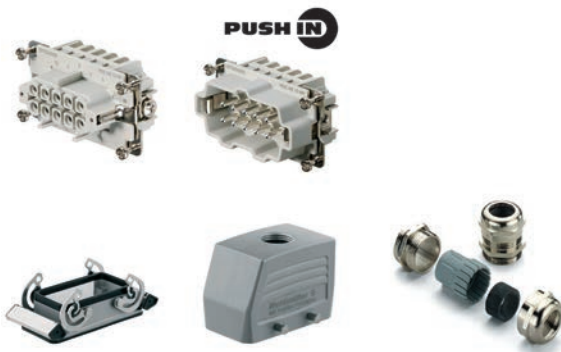
PG versions



Type	Order No.
HDC KIT HE-P 10.110	1027680000

Part	Type	Order No.
Female	HDC HE 10 FP	1873540000
Male	HDC HE 10 MP	1873550000
Bulkhead (feed-through)	HDC 10B ABU	1205000000
Plug	HDC 10B TSBU 1PG16G	1654070000
Cable glands	VG 16-MS68	1569100000

Metal housings



Type	Order No.
HDC KIT HE-P 10.111	1061730000

Part	Type	Order No.
Female	HDC HE 10 FP	1873540000
Male	HDC HE 10 MP	1873550000
Bulkhead (feed-through)	HDC 10B ABU	1205000000
Plug	HDC 10B TOBU 1PG16G	1654220000
Cable glands	VG 16-MS68	1569100000

Metal housings

Kits with HE inserts, 16 pole

500 V, 16 A, Size 6

Metric versions



Type	Order No.
HDC-KIT-HE 16.120 M	180240000

Part	Type	Order No.
Female	HDC HE 16 FS	1207700000
Male	HDC HE 16 MS	1207500000
Bulkhead (feed-through)	HDC 16B ABU	1208600000
Plug	HDC 16B TSBU 1M25G	1788180000
Cable glands	VG M25 - MS 68	1772230000

Metal housing



Type	Order No.
HDC-KIT-HE 16.121 M	1802390000

Part	Type	Order No.
Female	HDC HE 16 FS	1207700000
Male	HDC HE 16 MS	1207500000
Bulkhead (feed-through)	HDC 16B ABU	1208600000
Plug	HDC 16B TOBU 1M25G	1788210000
Cable glands	VG M25 - MS 68	1772230000

Metal housing

500 V, 16 A, Size 6

PG versions



Type	Order No.
HDC-KIT-HE 16.120	1712520000

Part	Type	Order No.
Female	HDC HE 16 FS	1207700000
Male	HDC HE 16 MS	1207500000
Bulkhead (feed-through)	HDC 16B ABU	1208600000
Plug	HDC 16B TSBU 1PG21G	1656480000
Cable glands	VG 21-MS68	1569110000

Metal housing



Type	Order No.
HDC-KIT-HE 16.121	1712680000

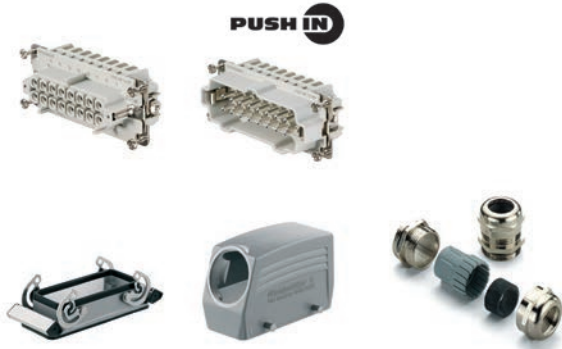
Part	Type	Order No.
Female	HDC HE 16 FS	1207700000
Male	HDC HE 16 MS	1207500000
Bulkhead (feed-through)	HDC 16B ABU	1208600000
Plug	HDC 16B TOBU 1PG21G	1656590000
Cable glands	VG 21-MS68	1569110000

Metal housing

Kits with HE inserts, 16-pole, PUSH IN

500 V, 16 A, Size 6

Metric versions



Type	Order No.
HDC KIT HE-P 16.120 M	1027690000

Part	Type	Order No.
Female	HDC HE 16 FP	1873560000
Male	HDC HE 16 MP	1873570000
Bulkhead (feed-through)	HDC 16B ABU	1208600000
Plug	HDC 16B TSBU 1M25G	1788180000
Cable glands	VG M25 - MS 68	1772230000

Metal housings



Type	Order No.
HDC KIT HE-P 16.121 M	1061770000

Part	Type	Order No.
Female	HDC HE 16 FP	1873560000
Male	HDC HE 16 MP	1873570000
Bulkhead (feed-through)	HDC 16B ABU	1208600000
Plug	HDC 16B TOBU 1M25G	1788210000
Cable glands	VG M25 - MS 68	1772230000

Metal housings

500 V, 16 A, Size 6

PG versions



Type	Order No.
HDC KIT HE-P 16.120	1027640000

Part	Type	Order No.
Female	HDC HE 16 FP	1873560000
Male	HDC HE 16 MP	1873570000
Bulkhead (feed-through)	HDC 16B ABU	1208600000
Plug	HDC 16B TSBU 1PG21G	1656480000
Cable glands	VG 21-MS68	1569110000

Metal housings



Type	Order No.
HDC KIT HE-P 16.121	1061750000

Part	Type	Order No.
Female	HDC HE 16 FP	1873560000
Male	HDC HE 16 MP	1873570000
Bulkhead (feed-through)	HDC 16B ABU	1208600000
Plug	HDC 16B TOBU 1PG21G	1656590000
Cable glands	VG 21-MS68	1569110000

Metal housings

Kits with HE inserts, 24 pole

500 V, 16 A, Size 8

Metric versions



Type	Order No.
HDC-KIT-HE 24.130 M	1802380000

Part	Type	Order No.
Female	HDC HE 24 FS	1211300000
Male	HDC HE 24 MS	1211100000
Bulkhead (feed-through)	HDC 24B ABU	1212400000
Plug	HDC 24B TSBU 1M32G	1787750000
Cable glands	VG M32 - MS 68	1772240000

Metal housing



Type	Order No.
HDC-KIT-HE 24.131 M	1802480000

Part	Type	Order No.
Female	HDC HE 24 FS	1211300000
Male	HDC HE 24 MS	1211100000
Bulkhead (feed-through)	HDC 24B ABU	1212400000
Plug	HDC 24B TOBU 1M32G	1787810000
Cable glands	VG M32 - MS 68	1772240000

Metal housing

500 V, 16 A, Size 8

PG versions



Type	Order No.
HDC-KIT-HE 24.130	1712530000

Part	Type	Order No.
Female	HDC HE 24 FS	1211300000
Male	HDC HE 24 MS	1211100000
Bulkhead (feed-through)	HDC 24B ABU	1212400000
Plug	HDC 24B TSBU 1PG21G	1661230000
Cable glands	VG 21-MS68	1569110000

Metal housing



Type	Order No.
HDC-KIT-HE 24.131	1712690000

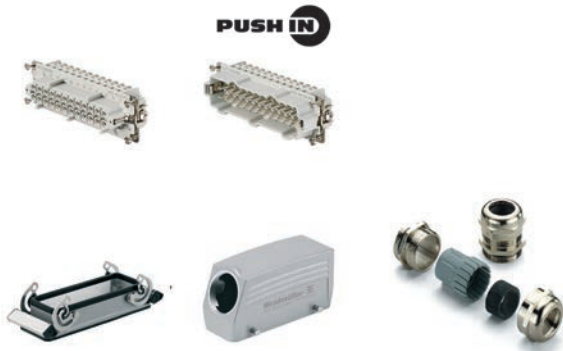
Part	Type	Order No.
Female	HDC HE 24 FS	1211300000
Male	HDC HE 24 MS	1211100000
Bulkhead (feed-through)	HDC 24B ABU	1212400000
Plug	HDC 24B TOBU 1PG21G	1661370000
Cable glands	VG 21-MS68	1569110000

Metal housing

Kits with HE inserts, 24-pole, PUSH IN

500 V, 16 A, Size 8

Metric versions



Type	Order No.
HDC KIT HE-P 24.130 M	1061790000

Part	Type	Order No.
Female	HDC HE 24 FP	1873580000
Male	HDC HE 24 MP	1873590000
Bulkhead (feed-through)	HDC 24B ABU	1212400000
Plug	HDC 24B TSBU 1M32G	1787750000
Cable glands	VG M32 - MS 68	1772240000

Metal housings



Type	Order No.
HDC KIT HE-P 24.131 M	1061700000

Part	Type	Order No.
Female	HDC HE 24 FP	1873580000
Male	HDC HE 24 MP	1873590000
Bulkhead (feed-through)	HDC 24B ABU	1212400000
Plug	HDC 24B TOBU 1M32G	1787810000
Cable glands	VG M32 - MS 68	1772240000

Metal housings

500 V, 16 A, Size 8

PG versions



Type	Order No.
HDC KIT HE-P 24.130	1061780000

Part	Type	Order No.
Female	HDC HE 24 FP	1873580000
Male	HDC HE 24 MP	1873590000
Bulkhead (feed-through)	HDC 24B ABU	1212400000
Plug	HDC 24B TSBU 1PG21G	1661230000
Cable glands	VG 21-MS68	1569110000

Metal housings



Type	Order No.
HDC KIT HE-P 24.131	1061800000

Part	Type	Order No.
Female	HDC HE 24 FP	1873580000
Male	HDC HE 24 MP	1873590000
Bulkhead (feed-through)	HDC 24B ABU	1212400000
Plug	HDC 24B TOBU 1PG21G	1661370000
Cable glands	VG 21-MS68	1569110000

Metal housings

Kits with HE inserts, 32 pole

500 V, 16 A, Size 10

Metric versions



Type	Order No.
HDC-KIT-HE 32.140 M	1802370000

Part	Type	Order No.
Female	HDC HE 16 FS	1207700000
Female	HDC HE 16 FS 17-32	1216100000
Male	HDC HE 16 MS	1207500000
Male	HDC HE 16 MS 17-32	1215700000
Bulkhead (feed-through)	HDC 32B ABU	1217800000
Plug	HDC 32B TSBU 1M32G	1788400000
Cable glands	VG M32 - MS 68	1772240000

Metal housing

500 V, 16 A, Size 10

PG versions



Type	Order No.
HDC-KIT-HE 32.140	1712540000

Part	Type	Order No.
Female	HDC HE 16 FS	1207700000
Female	HDC HE 16 FS 17-32	1216100000
Male	HDC HE 16 MS	1207500000
Male	HDC HE 16 MS 17-32	1215700000
Bulkhead (feed-through)	HDC 32B ABU	1217800000
Plug	HDC 32B TSBU 1PG29G	1666840000
Cable glands	VG 29-MS68	1569120000

Metal housing

Kits with HE inserts, 48 pole

500 V, 16 A, Size 12

Metric versions



Type	Order No.
HDC-KIT-HE 48.150 M	1802360000

Part	Type	Order No.
Female	HDC HE 24 FS	1211300000
Female	HDC HE 24 FS 25-48	1221200000
Male	HDC HE 24 MS	1211100000
Male	HDC HE 24 MS 25-48	1220800000
Bulkhead (feed-through)	HDC 48B ADLU	1222900000
Plug	HDC 48B TSLU 1M40G	1788310000
Cable glands	VG M40 - MS 68	1772250000

Metal housing

500 V, 16 A, Size 12

PG versions



Type	Order No.
HDC-KIT-HE 48.150	1712550000

Part	Type	Order No.
Female	HDC HE 24 FS	1211300000
Female	HDC HE 24 FS 25-48	1221200000
Male	HDC HE 24 MS	1211100000
Male	HDC HE 24 MS 25-48	1220800000
Bulkhead (feed-through)	HDC 48B ADLU	1222900000
Plug	HDC 48B TSLU 1PG29G	1650850000
Cable glands	VG 29-MS68	1569120000

Metal housing

Kits with HSB inserts, 6 pole

400 V, 35 A, Size 6

PG versions



Type	Order No.
HDC-KIT-HSB 06.500	172400000

Part	Type	Order No.
Female	HDC HSB 6 FS	1498900000
Male	HDC HSB 6 MS	1498700000
Bulkhead (feed-through)	HDC 16B ABU	1208600000
Plug	HDC 16B TSBU 1PG21G	1656480000
Cable glands	VG 21-MS68	1569110000

Metal housing

RockStar® accessories

RockStar® accessories	Introduction	J.2
	Crimp contacts	J.4
	Coding	J.12
	Shield lever	J.16
	Other accessories	J.20

RockStar® accessories

In addition to heavy-duty connectors, RockStar® also includes functional and safety accessories – including crimp contacts, coding systems and shield clamps – to help you with your facility cabling.

A technically proper crimp connection should be gas-tight and corrosion-resistant. Machined crimp contacts are available with different performance requirements and with either silver or gold plating.

When aligning multiple connectors with similar mating profiles within one facility, you must safeguard against accidental plugging mistakes. The RockStar® product line also includes the corresponding locking pins, coding systems and pole coding for this purpose.

If multiple shielded cables are being fed into the connector housing using a flexible hose or a multi-cable feed, then the shielding should normally be connected to a shield clamp attached to an insert. The potential is conducted to the housing using the metallic transition. The shielded conductor is fastened to the shield clamp with shield clips, which are available in a variety of sizes.




Solid

Weidmüller's coding system can help you to clearly classify and organise your connectors while also ensuring that they cannot be plugged in incorrectly.



Secure

Solid, machined crimped contacts ensure a gas-tight and corrosion-resistant crimp.



Optimised shielding

Shield clamps and shield clips allow the shield to be directly attached to the connector housing.

Crimp contacts

Crimp contacts for fixed-pole inserts

Technical data

	for HD and HDD inserts	for HE and HEE inserts
Material	Copper alloy	Copper alloy
Surface hard gold-plated	0.8 µm	0.8 µm
Surface hard silver-plated	3 µm	3 µm
Contact resistance	≤ 4 mΩ	≤ 2 mΩ
Clamping range	0.14 ... 2.5 mm ² 26 ... 14 AWG	0.5 ... 4.0 mm ² 20 ... 12 AWG
Stripping length	8 mm	7.5 mm

For HD and HDD inserts

Crimp contacts

Surface Gold



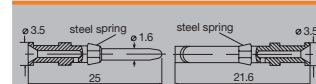
Surface Silver



Male

Qty.	Type	Order No.	Type	Order No.
100	HDC-C-HD-SM0.14-0.37AU	1651620000	HDC-C-HD-BM0.14-0.37AU	1651670000
100	HDC-C-HD-SM0.5AU	1651630000	HDC-C-HD-BM0.5AU	1651680000
100	HDC-C-HD-SM0.75-1.00AU	1651640000	HDC-C-HD-BM0.75-1.00AU	1651690000
100	HDC-C-HD-SM1.5AU	1651650000	HDC-C-HD-BM1.5AU	1651700000
100	HDC-C-HD-SM2.5AU	1651660000	HDC-C-HD-BM2.5AU	1651710000
100	HDC-C-HD-SM0.14-0.37AG	1651520000	HDC-C-HD-BM0.14-0.37AG	1651570000
100	HDC-C-HD-SM0.5AG	1651530000	HDC-C-HD-BM0.5AG	1651580000
100	HDC-C-HD-SM0.75-1.00AG	1601750000	HDC-C-HD-BM0.75-1.00AG	1601760000
100	HDC-C-HD-SM1.5AG	1651550000	HDC-C-HD-BM1.5AG	1651600000
100	HDC-C-HD-SM2.5AG	1651560000	HDC-C-HD-BM2.5AG	1651610000

Female



Conductor cross-section	Insulation stripping length
0.14 – 0.37 mm ²	AWG 26-22 8 mm
0.50 mm ²	AWG 20 8 mm
0.75 – 1.00 mm ²	AWG 18 8 mm
1.50 mm ²	AWG 16 8 mm
2.50 mm ²	AWG 14 8 mm

Tools



Crimping tool	Order No.
CTX CM 1.6 / 2.5	9018490000
CTIN CM 1.6/2.5	9205430000
Contact release tool	
Removal Tool HD	1866730000

For HE and HEE inserts

Crimp contacts

Surface Gold



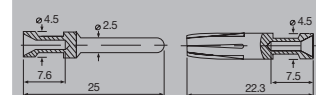
Surface Silver



Male

Qty.	Type	Order No.	Type	Order No.
100	HDC-C-HE-SM0.5AU	1651420000	HDC-C-HE-BM0.5AU	1651470000
100	HDC-C-HE-SM0.75-1.00AU	1651430000	HDC-C-HE-BM0.75-1.00AU	1651480000
100	HDC-C-HE-SM1.5AU	1651440000	HDC-C-HE-BM1.5AU	1651490000
100	HDC-C-HE-SM2.5AU	1651450000	HDC-C-HE-BM2.5AU	1651500000
100	HDC-C-HE-SM4.0AU	1651460000	HDC-C-HE-BM4.0AU	1651510000
100	HDC-C-HE-SM4.65AU	1116540000	HDC-C-HE-BM4.65AU	1116530000
100	HDC-C-HE-SM0.5AG	1200500000	HDC-C-HE-BM0.5AG	1201100000
100	HDC-C-HE-SM0.75-1.00AG	1200600000	HDC-C-HE-BM0.75-1.00AG	1201200000
100	HDC-C-HE-SM1.5AG	1200700000	HDC-C-HE-BM1.5AG	1201300000
100	HDC-C-HE-SM2.5AG	1200800000	HDC-C-HE-BM2.5AG	1201400000
100	HDC-C-HE-SM4.0AG	1200900000	HDC-C-HE-BM4.0AG	1201500000

Female



Conductor cross-section	Insulation stripping length
0.50 mm ²	AWG 20 7.5 mm
0.75 – 1.00 mm ²	AWG 18 7.5 mm
1.50 mm ²	AWG 16 7.5 mm
2.50 mm ²	AWG 14 7.5 mm
4.00 mm ²	AWG 12 7.5 mm
4.65 mm ²	AWG 11 7.5 mm

Tools



Crimping tool	Order No.
CTX CM 1.6 / 2.5	9018490000
CTIN CM 1.6/2.5	9205430000
Contact release tool	
Removal Tool HE	1866750000

Crimp contacts for fixed-pole inserts

Technical data

For HQ and MixMate inserts	
Material	Copper alloy
Surface hard silver-plated	3 µm
Contact resistance	≤ 1 mΩ
Clamping range	1.5 ... 6 mm ²
Stripping length	16 ... 10 AWG
	8 mm

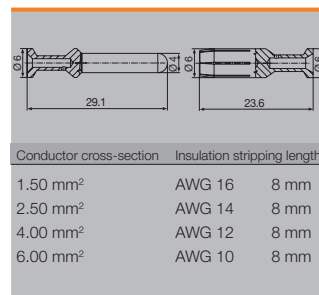
For HQ and MixMate inserts

Crimp contacts

Surface Silver



Male			Female		
Qty.	Type	Order No.	Type	Order No.	
25	HDC C HX SM1.5AG	1002910000	HDC C HX BM1.5AG	1002950000	
25	HDC C HX SM2.5AG	1002920000	HDC C HX BM2.5AG	1002960000	
25	HDC C HX SM4.0AG	1002930000	HDC C HX BM4.0AG	1002970000	
25	HDC C HX SM6.0AG	1002940000	HDC C HX BM6.0AG	1002980000	



Tools



Order No.	Order No.
CTIN CM 1.6/2.5	9205430000
Removal Tool HX	1002990000

Crimp contacts

Crimp contacts for HighPower

Technical data

for HighPower 250 A	
Material	Copper alloy
Surface hard silver-plated	3-5 µm
Contact resistance	≤ 0.1 mΩ
Clamping range	25 ... 95 mm ²
	AWG 4 ... AWG 000
Stripping length	30 mm*

For HighPower 250 A

Crimp contacts



Wire connection cross-section*	Male	Order No.	Female	Order No.
25 mm ²	HDC HP 250 M 25	1079690000	HDC HP 250 F 25	1079720000
35 mm ²	HDC HP 250 M 35	1079680000	HDC HP 250 F 35	1079730000
50 mm ²	HDC HP 250 M 50	1119080000	HDC HP 250 F 50	1079740000
70 mm ²	HDC HP 250 M 70	1119090000	HDC HP 250 F 70	1079750000
95 mm ²	HDC HP 250 M 95	1119100000	HDC HP 250 F 95	1079770000

Note: * In the version described here, the crimp contacts can be used for crimp connections with flexible, stranded, and finely stranded copper wires (according to DIN 48201 part 1 and DIN 57 295 VDE 0295) or with crimping inserts (according to DIN 48083 part 1, part 3 and part 4). We would be glad to customize the crimp contact to fit your requirements.

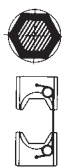
Conductor cross-section	Insulation stripping length
25 mm ²	AWG 4 23 mm
35 mm ²	AWG 2 23 mm
50 mm ²	AWG 1 23 mm
70 mm ²	AWG 00 23 mm
95 mm ²	AWG 000 23 mm

Hand crimping tools



Designation	Type	Order No.
Hand crimping tool	MTR 160	9017250000
Hand crimping tool	MTR 300	9021390000

Crimping inserts MTR 160



Cross-section (mm ²)	Code to DIN 48083	Crimping width (mm)	Order No.
25	10	7.0	9020920000
35	12	7.0	9020930000
50	14	7.0	9020940000
70	16	7.0	9020950000
95	18	7.0	9020960000

Crimping inserts MTR 300



Cross-section (mm ²)	Code to DIN 48083	Crimping width (mm)	Order No.
25	10	7.0	9021450000
35	12	7.0	9021460000
50	14	7.0	9021470000
70	16	7.0	9021480000
95	18	7.0	9022290000

Crimp contacts for HighPower

Technical data

for HighPower 550 A	
Material	Copper alloy
Surface hard silver-plated	3-5 µm
Contact resistance	≤ 0.1 mΩ
Clamping range	50 ... 240 mm ²
	AWG 1/0 ... kcmil 500
Stripping length	30 mm*

For HighPower 550 A

Crimp contacts



Wire connection cross-section*	Male	Order No.	Female	Order No.
50 mm ²	HDC HP 550 M 50	1157800000	HDC HP 550 F 50	1177100000
95 mm ²	HDC HP 550 M 95	1079790000	HDC HP 550 F 95	1079810000
120 mm ²	HDC HP 550 M 120	1079780000	HDC HP 550 F 120	1079820000
150 mm ²	HDC HP 550 M 150	1119110000	HDC HP 550 F 150	1079830000
185 mm ²	HDC HP 550 M 185	1120580000	HDC HP 550 F 185	1079840000
240 mm ²	HDC HP 550 M 240	1120590000	HDC HP 550 F 240	1120600000

Note: * In the version described here, the crimp contacts can be used for crimp connections with flexible, stranded, and finely stranded copper wires (according to DIN 48201 part 1 and DIN 57 295 VDE 0295) or with crimping inserts (according to DIN 48083 part 1, part 3 and part 4). We would be glad to customise the crimp contact to fit your requirements.

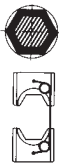
Conductor cross-section	Insulation stripping length
50 mm ²	AWG 1 30 mm
95 mm ²	AWG 000 30 mm
120 mm ²	AWG 0000 30 mm
150 mm ²	AWG 00000 30 mm
185 mm ²	AWG 000000 30 mm
240 mm ²	kcmil 500 30 mm

Hand crimping tools



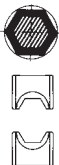
Designation	Type	Order No.
Hand crimping tool	MTR 160	9017250000
Hand crimping tool	MTR 300	9021390000

Crimping inserts MTR 160



Cross-section (mm ²)	Code to DIN 48083	Crimping width (mm)	Order No.
50	14	7.0	9020940000
95	18	7.0	9020960000
120	20	7.0	9020970000
150	22	7.0	9020980000
185	25	7.0	9020990000
240	28	7.0	9021000000

Crimping inserts MTR 300



Cross-section (mm ²)	Code to DIN 48083	Crimping width (mm)	Order No.
50	14	7.0	9021470000
95	18	7.0	9022290000
120	20	7.0	9022300000
150	22	7.0	9022310000
185	25	7.0	9022320000
240	28	7.0	9022330000

Crimp contacts

Crimp contacts for the modular ConCept system

Technical data

	CM-3	CM-5	CM-10	CM-HE	CM ST Hybrid
Material	Copper alloy	Copper alloy	v	Copper alloy	Tin-bronze
Surface hard gold-plated			0.8 µm	0.8 µm	
Surface hard silver-plated	3 µm	3 µm	3 µm	3 µm	
Contact resistance	≤ 1 mΩ	≤ 2 mΩ	≤ 4 mΩ	≤ 2 mΩ	≤ 5 mΩ
Clamping range	1.5 ... 10 mm ² 16 ... 7 AWG	0.5 ... 4.0 mm ² 20 ... 12 AWG	0.14 ... 2.5 mm ² 26 ... 14 AWG	0.5 ... 4.0 mm ² 20 ... 12 AWG	0.25 ... 0.5 mm ² AWG 24 ... 20
Stripping length	10 mm	7 mm	8 mm	7.5 mm	3 mm

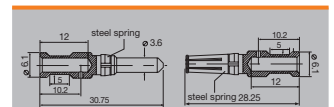
For CM-3 modules

Crimp contacts

Surface Silver



Qty.	Male	Order No.	Female	Order No.
100	HDC-C-M3-SM1.5AG	1698120000	HDC-C-M3-BM1.5AG	1698130000
100	HDC-C-M3-SM2.5AG	1698140000	HDC-C-M3-BM2.5AG	1698150000
100	HDC-C-M3-SM4.0AG	1682260000	HDC-C-M3-BM4.0AG	1682270000
100	HDC-C-M3-SM6.0AG	1682280000	HDC-C-M3-BM6.0AG	1682290000
100	HDC-C-M3-SM10.0AG	1682300000	HDC-C-M3-BM10.0AG	1682310000



Conductor cross-section	Insulation stripping length
1.50 mm ²	AWG 16 10 mm
2.50 mm ²	AWG 14 10 mm
4.00 mm ²	AWG 12 10 mm
6.00 mm ²	AWG 10 10 mm
10.00 mm ²	AWG 7 10 mm

Tools



Tool description	Order No.
Crimping tool 1.5 ... 2.5 mm²	
CTX CM 1.6 / 2.5	9018490000
CTIN CM 1.6/2.5	9205430000
Crimping tool 4 ... 10 mm²	
CTX CM 3.6	9018480000
Crimping tool 1.5 ... 10 mm²	
CTIN CM 3.6	9205440000
Contact release tool	
Removal Tool CM3	1866710000

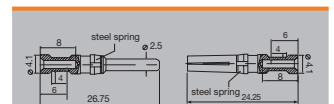
For CM-5 modules

Crimp contacts

Surface Silver



Qty.	Male	Order No.	Female	Order No.
100	HDC-C-M5-SM0.5AG	1682320000	HDC-C-M5-BM0.5AG	1682330000
100	HDC-C-M5-SM0.75-1.00AG	1682340000	HDC-C-M5-BM0.75-1.00AG	1682350000
100	HDC-C-M5-SM1.5AG	1682360000	HDC-C-M5-BM1.5AG	1682370000
100	HDC-C-M5-SM2.5AG	1682380000	HDC-C-M5-BM2.5AG	1682390000
100	HDC-C-M5-SM4.0AG	1682400000	HDC-C-M5-BM4.0AG	1682410000



Conductor cross-section	Insulation stripping length
0.5 mm ²	AWG 20 7 mm
0.75 - 1.00 mm ²	AWG 18 7 mm
1.50 mm ²	AWG 16 7 mm
2.50 mm ²	AWG 14 7 mm
4.00 mm ²	AWG 12 7 mm

Tools



Tool description	Order No.
Crimping tool	
CTX CM 1.6 / 2.5	9018490000
CTIN CM 1.6/2.5	9205430000
Contact release tool	
Removal Tool CM5	1866720000

For CM-10 modules and ConCept system bus, 1 and 4 poles

Crimp contacts

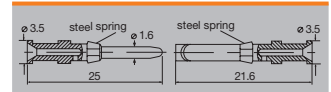
Surface Gold



Surface Silver



Qty.	Male	Order No.	Female	Order No.
100	HDC-C-HD-SM0.14-0.37AU	1651620000	HDC-C-HD-BM0.14-0.37AU	1651670000
100	HDC-C-HD-SM0.5AU	1651630000	HDC-C-HD-BM0.5AU	1651680000
100	HDC-C-HD-SM0.75-1.00AU	1651640000	HDC-C-HD-BM0.75-1.00AU	1651690000
100	HDC-C-HD-SM1.5AU	1651650000	HDC-C-HD-BM1.5AU	1651700000
100	HDC-C-HD-SM2.5AU	1651660000	HDC-C-HD-BM2.5AU	1651710000
100	HDC-C-HD-SM0.14-0.37AG	1651520000	HDC-C-HD-BM0.14-0.37AG	1651570000
100	HDC-C-HD-SM0.5AG	1651530000	HDC-C-HD-BM0.5AG	1651580000
100	HDC-C-HD-SM0.75-1.00AG	1601750000	HDC-C-HD-BM0.75-1.00AG	1601760000
100	HDC-C-HD-SM1.5AG	1651550000	HDC-C-HD-BM1.5AG	1651600000
100	HDC-C-HD-SM2.5AG	1651560000	HDC-C-HD-BM2.5AG	1651610000



Conductor cross-section	Insulation stripping length
0.14 – 0.37 mm ²	AWG 26-22 8 mm
0.50 mm ²	AWG 20 8 mm
0.75 – 1.00 mm ²	AWG 18 8 mm
1.50 mm ²	AWG 16 8 mm
2.50 mm ²	AWG 14 8 mm

Tools



Crimping tool	Order No.
CTX CM 1.6 / 2.5	9018490000
CTIN CM 1.6/2.5	9205430000
Contact release tool	Order No.
Removal Tool HD	1866730000

For CM-HE modules and ConCept system bus, 1-pole HE

Crimp contacts

Surface Gold



Surface Silver



Qty.	Male	Order No.	Female	Order No.
100	HDC-C-HE-SM0.5AU	1651420000	HDC-C-HE-BM0.5AU	1651470000
100	HDC-C-HE-SM0.75-1.00AU	1651430000	HDC-C-HE-BM0.75-1.00AU	1651480000
100	HDC-C-HE-SM1.5AU	1651440000	HDC-C-HE-BM1.5AU	1651490000
100	HDC-C-HE-SM2.5AU	1651450000	HDC-C-HE-BM2.5AU	1651500000
100	HDC-C-HE-SM4.0AU	1651460000	HDC-C-HE-BM4.0AU	1651510000
100	HDC-C-HE-SM4.65AU	1116540000	HDC-C-HE-BM4.65AU	1116530000
100	HDC-C-HE-SM0.5AG	1200500000	HDC-C-HE-BM0.5AG	1201100000
100	HDC-C-HE-SM0.75-1.00AG	1200600000	HDC-C-HE-BM0.75-1.00AG	1201200000
100	HDC-C-HE-SM1.5AG	1200700000	HDC-C-HE-BM1.5AG	1201300000
100	HDC-C-HE-SM2.5AG	1200800000	HDC-C-HE-BM2.5AG	1201400000
100	HDC-C-HE-SM4.0AG	1200900000	HDC-C-HE-BM4.0AG	1201500000



Conductor cross-section	Insulation stripping length
0.50 mm ²	AWG 20 7.5 mm
0.75 – 1.00 mm ²	AWG 18 7.5 mm
1.50 mm ²	AWG 16 7.5 mm
2.50 mm ²	AWG 14 7.5 mm
4.00 mm ²	AWG 12 7.5 mm
4.65 mm ²	AWG 11 7.5 mm

Tools



Crimping tool	Order No.
CTX CM 1.6 / 2.5	9018490000
CTIN CM 1.6/2.5	9205430000
Contact release tool	Order No.
Removal Tool HD	1866750000

For ConCept ST modules with hybrid insert

Crimp contacts hybrid

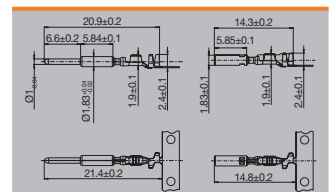
Male



Female



Qty.	Male	Order No.	Female	Order No.
300	IE-BIC-HYB-P-0.5-300	1096150000	IE-PIC-HYB-S-0.5-300	1096180000



Conductor cross-section	Insulation stripping length
0.21 – 0.50 mm ²	AWG 24-20 3.5 mm

Accessories



Crimping tool hybrid	Order No.
HTF HYB	1119580000

Crimp contacts

Fibre optic contacts



Fibre-optic cables guarantee interference-free transmission without any feedback.

The new fibre-optic contacts can now also be used in heavy-duty connectors. Their shape corresponds to that of our proven HD contacts for connecting conventional copper wires. Accordingly, they can be assembled in existing connectors of the HD series, as well as being suitable for use with the ConCept modular system. It is even possible to connect fibre-optic wires and copper wires in a single connector.

The advantages at a glance:

- Immune to electromagnetic interference
- Absolute contact separation
- Weight reduction by dispensing with copper wires
- High transmission capacity and large bandwidth
- All advantages now also available for robust industrial environments

HDC-C-HD ... LWL 1.0 POF

Technical data

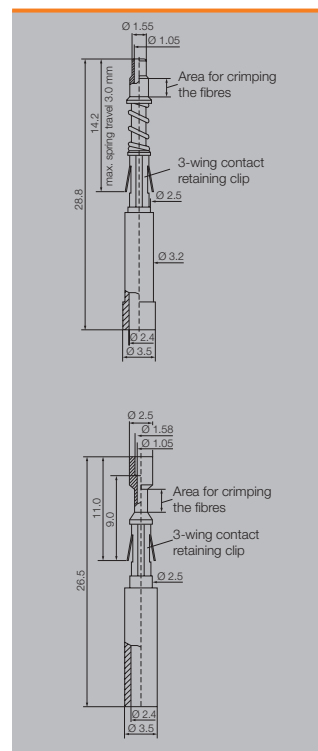
Connection for POF cable	
Maximum outer diameter	2.2 mm
Polymer fibre diameter	1.0 mm
Attenuation	
- Requirement to DIN IEC Part 7 Section 2/05.94:	< 3 dB
- the HDC-C-HD LWL contacts in plugged-in state:	< 2 dB
Material	
Temperature range	-40 °C to +85 °C
Contact material	Nickel-silver
Over-spring	Copper alloy

Ordering data



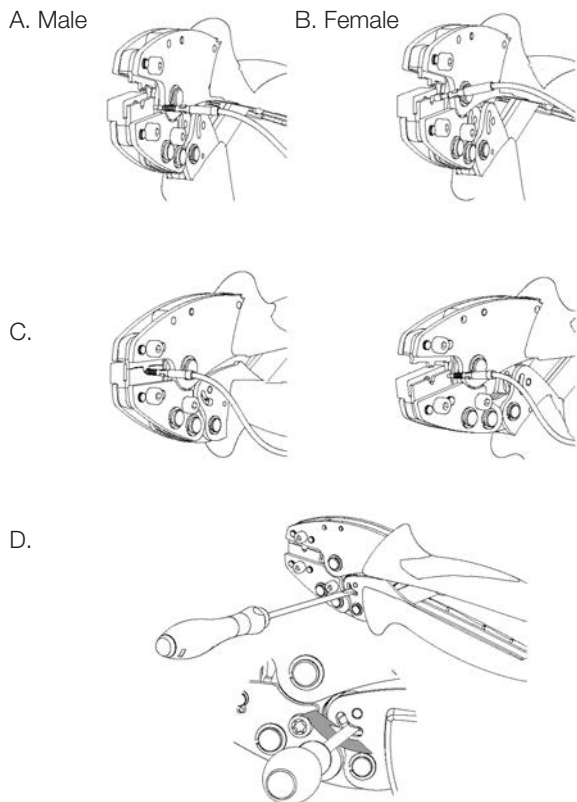
Qty.	Male	Order No.	Female	Order No.
5	HDC-C-HD-S-LWL 1.0 POF	1773630000	HDC-C-HD-B-LWL 1.0 POF	1773640000

HD inserts must be ordered separately



Instructions for assembling fibre optic contacts

1. Cut POF cable (polymer optical fibre) to the required length with cutting tool (we recommend the KT 8).
2. The end face of the fibre of 2.2 mm POF cables must be polished before crimping onto the fibre optic contact. Insert end of POF cable into polishing disc and polish with polishing sheet placed on a smooth surface (e.g. glass plate). Wipe away any residues after polishing. The best optical attenuation values are obtained with wet polishing.
3. Strip sheath of 2.2 mm POF cable to at least 14 mm for female contacts (HDC-C-HD-B-LWL) and at least 19 mm for male contacts (HDC-C-HD-S-LWL).
4. Crimping:
 - A. Insert POF cable into male contact, then both together into the crimping die.
 - B. The female contact has to be inserted angled slightly downwards into the die.
Make sure the end face of the contact and the plastic fibre press against the locator.
 - C. Squeeze the hand levers until the tool unlocks.
 - D. Release option in case of incorrect operation.



Cutting tool

including positioning sleeve



Type	Qty.	Order No.
KT 8	1	9002650000

Polishing disc for fibre-optic cable

Polishing sheet, 1000 grit size



Type	Qty.	Order No.
PS LWL/POF	1	9020390000
PB LWL/POF	1	9020400000

Stripping tool

for fibre-optic cable



Type	Qty.	Order No.
AM LWL/POF	1	9020360000

Crimping tool

for fibre-optic set



Type	Qty.	Order No.
HTX-HDC/POF	1	9010950000

Contact release tool

for removing machined HD and fibre-optic contacts



Type	Qty.	Order No.
Removal Tool HD	1	1866730000

Coding

Coding pins


Where several connectors of similar type are arranged on a machine, it is essential to avoid the risk of connectors being inserted in the wrong place.

If you have up to 6 connectors to code, Weidmüller coding pins are the simplest solution. They allow 6 secure coding variations.

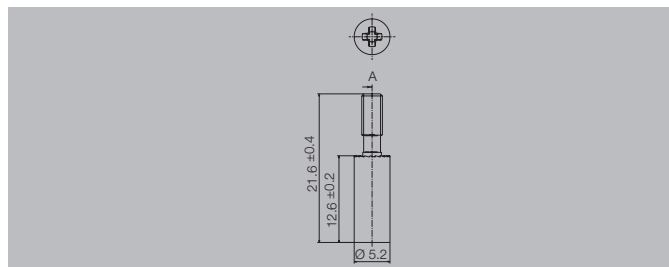
In this case, you substitute 2 M3 fastening screws on the female insert by coding pins. On the male insert, you leave the opposing fastening screws where they are and substitute the others by coding pins. You then have a pair of inserts that fit together. The coding diagram illustrates the system.

Ordering data

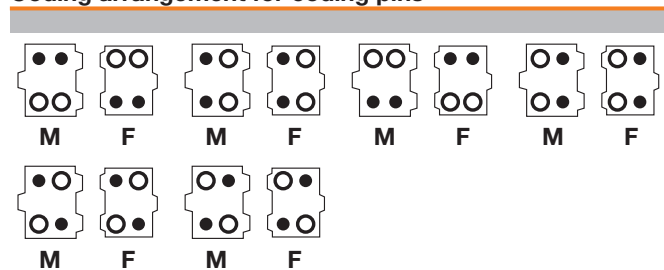
Type	Qty.	Order No.
SPB-M 3	10	1203600000



Allow 4 coding pins for each connector.



Coding arrangement for coding pins



Coding system with guiding function

If you have more than 6 connectors of similar type to code, you need coding pins and coding sockets.

Replace all M3 fastening screws of an insert by 2 coding pins and 2 coding sockets. You then fit 2 coding pins and 2 coding

sockets to the mating insert, in a complementary arrangement. Fit coding pins to the other connectors in the same way, but with a different arrangement. The coding diagram illustrates the system.

Ordering data DSTV

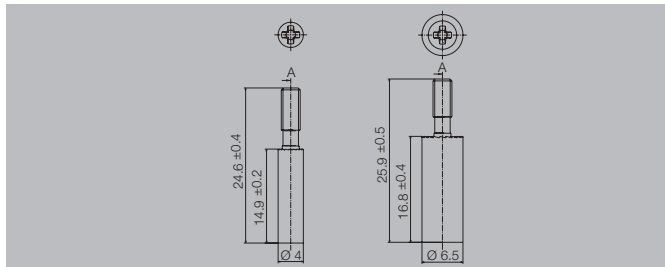
For fixed-pole inserts and ConCept plastic frames



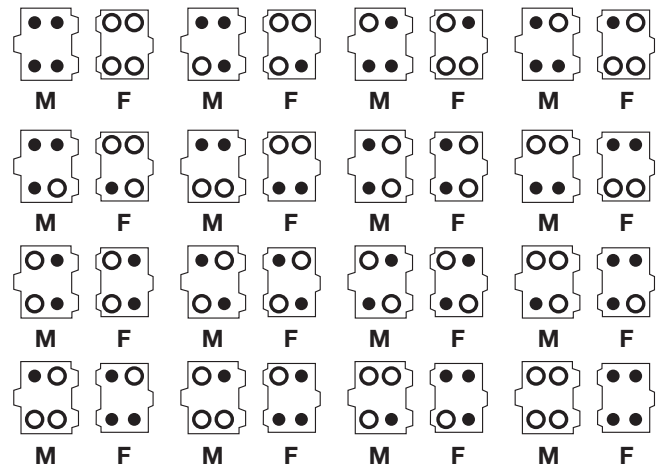
Cod. socket 5 mm dia ○
Cod. pin 4 mm dia ●

Type	Qty.	Order No.
DSTV COST4	100	1471300000
DSTV COBU5	100	1471500000

Plan to have four coding pins and four coding sockets for each connector.



Coding arrangement for coding pins



Ordering data HDC CM

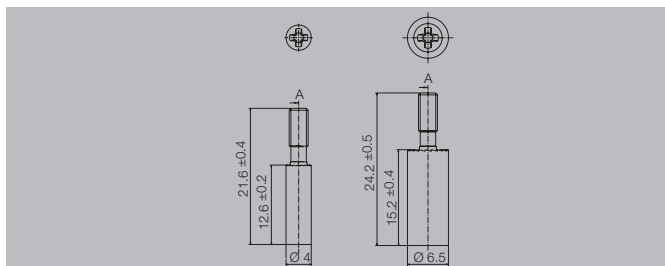
For ConCept metal frames



Cod. socket 5 mm dia ○
Cod. pin 4 mm dia ●

Type	Qty.	Order No.
HDC CM	100	1202660000
GUIDING PIN		
HDC CM	100	1202670000
GUIDING SOCKET		

Plan to have four coding pins and four coding sockets for each connector.




Coding

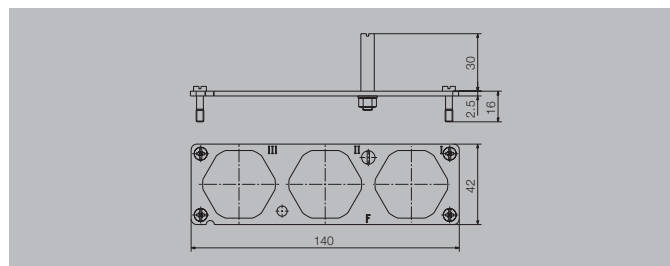
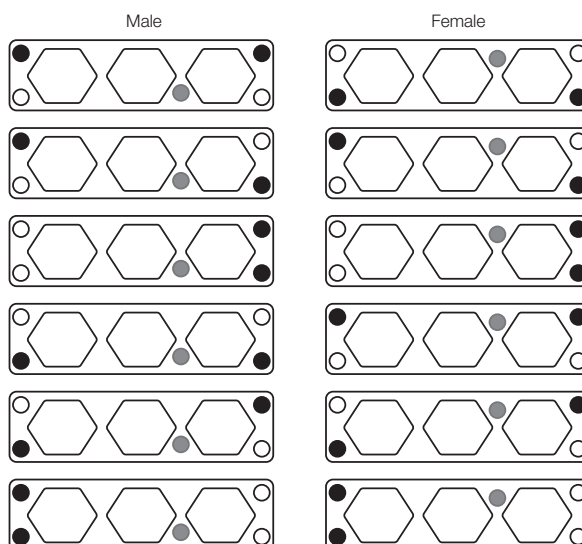
Assembly instructions for the coding system for the RockStar® HDC HighPower connectors

The coding elements (available under Accessories) can be used to code up to five connectors.

Ordering data

Mounting frame	Type	Order No.
	HDC 06B HP250 MPL1	1103680000
	HDC 24B HP250 MPL2 TYP1	1103690000
	HDC 24B HP250 MPL2 TYP2	1103740000
	HDC 24B HP250 MPL3 TYP1	1079640000
	HDC 24B HP250 MPL3 TYP2	1103750000
	HDC 24B HP250 MPL4PE T1	1212890000
	HDC 24B HP250 MPL4PE T2	1212910000
	HDC 24B HP250 MPL4 TYP1	1160430000
	HDC 24B HP250 MPL4 TYP2	1160440000

Coding arrangement Male/Female



HE coding pin

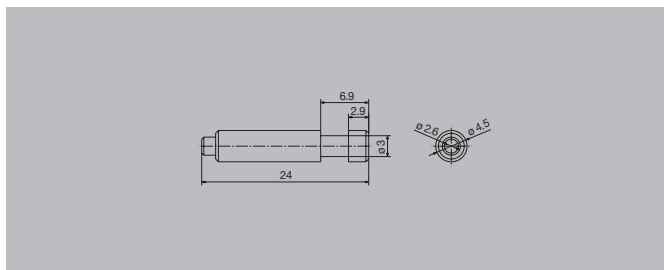
Use the HE coding pin for a quick and simple solution to avoid mixing up your plug-in connections. The coding pin can be inserted into a single contact chamber (instead of a crimp contact) on both the male and female side of the connector. The opposite mated contact then remains free. The HE coding pin can be used to code all inserts and modules using HE-series crimp contacts.

These include the following:

- HA crimp inserts
- HE crimp inserts
- HEE inserts
- HQ 5 insert
- HQ 8 insert
- S8/24 insert (power contacts)
- CM-HE module

Ordering data

Type	Qty.	Order No.
HDC HE CP	100	1003240000



HQ 7 coding system

You can protect 7-pole HQ connectors against false insertions by using the HQ 7 coding system. Both a coding pin and socket are used for protection. Six different variants are

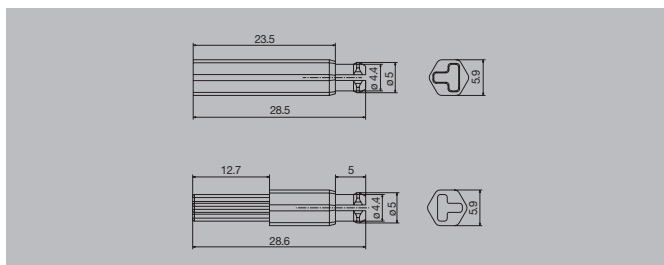
permitted by the shape of the optional coding which is aligned centrally in the connector. Refer to the coding diagram for the layout.

Ordering data

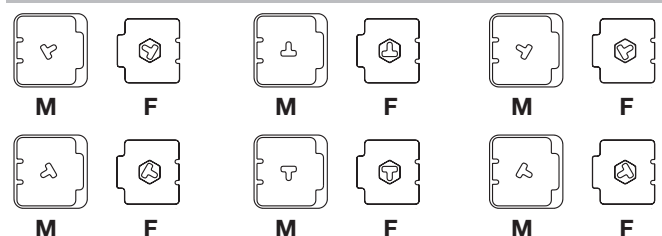
Type	Qty.	Order No.
HDC HQ 7 CPM	50	1003230000
HDC HQ 7 CPF	50	1003220000



Note: six-way coding is possible with a coding pin.



Coding arrangement Male/Female



Shield lever

Shield lever for sizes 3, 4, 6 and 8
for fitting of shield clamps or KLBÜ 3–8 SC

Technical data

Use	Clamping of the shield
Fastening of shield lever	To PE terminal, both sides, 2nd screw for fixing
Cable connection system	Shield clamp or KLBÜ clamping yoke
No. shield clamps or KLBÜ clamping yokes	
Size 3	1*
Size 4	2*
Size 6	3*
Size 8	5*
Clamping range shield clamp	see page J.20
Material	Steel
Surface	Galvanised
Temperature range	-40 °C ... +125 °C
Note: *Fastening points of shield clamp, 16 mm spacing	

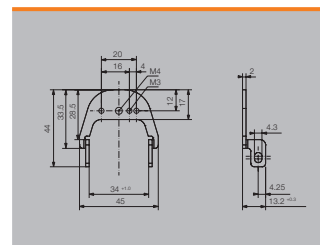
Shield lever

for standard inserts and the ConCept modular system (plastic frame)

HDC SHIELD LEVER 3 SC



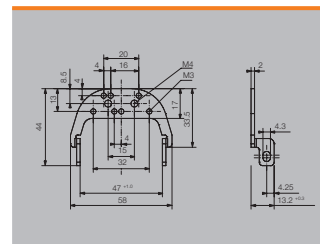
Type	Size	Qty.	Order No.
HDC SHIELD LEVER 3 SC	3	1	1867390000



HDC SHIELD LEVER 4 SC



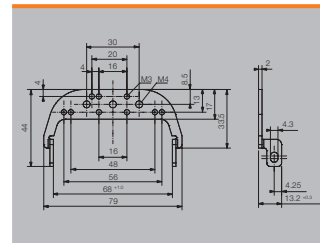
Type	Size	Qty.	Order No.
HDC SHIELD LEVER 4 SC	4	1	1867370000



HDC SHIELD LEVER 6 SC



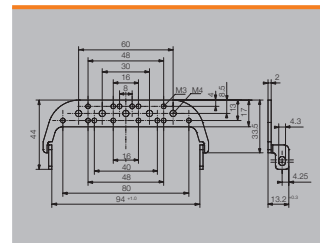
Type	Size	Qty.	Order No.
HDC SHIELD LEVER 6 SC	6	1	1867380000



HDC SHIELD LEVER 8 SC



Type	Size	Qty.	Order No.
HDC SHIELD LEVER 8 SC	8	1	1867360000



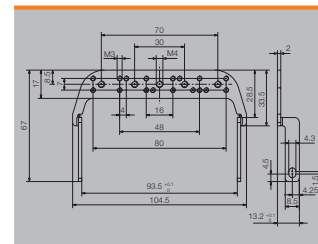
Shield lever

for standard inserts and the ConCept modular system (plastic frame) – special versions

SHIELD LEVER 8 MOD 35 mm



Type	Size	Qty.	Order No.
SHIELD LEVER 8 MOD 35mm	8	1	1000950001



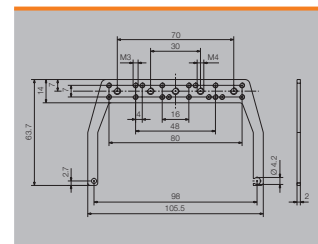
Shield lever

Special versions

SHIELD LEVER 8 MOD HIGH



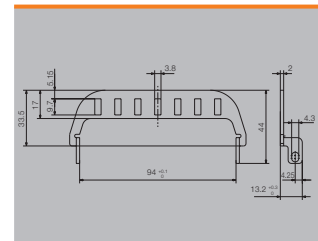
Type	Size	Qty.	Order No.
SHIELD LEVER 8 MOD HIGH	8	1	1009310000



HDC SHIELD LEVER 8 LL



Type	Size	Qty.	Order No.
HDC SHIELD LEVER 8 LL	8	1	1011380000



Shield lever

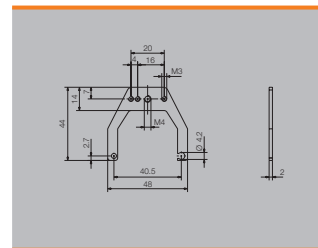
Shield lever

for the ConCept modular system (metal frame) – straight version

SHIELD LEVER 3 MOD



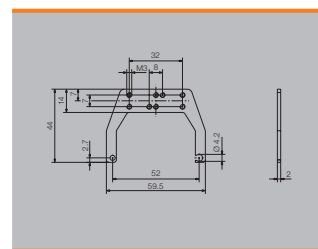
Type	Size	Qty.	Order No.
SHIELD LEVER 3 MOD	3	1	1983910000



SHIELD LEVER 4 MOD



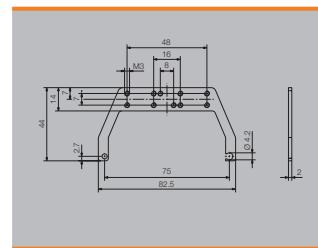
Type	Size	Qty.	Order No.
SHIELD LEVER 4 MOD	4	1	1983920000



SHIELD LEVER 6 MOD



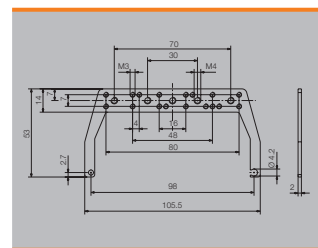
Type	Size	Qty.	Order No.
SHIELD LEVER 6 MOD	6	1	1983930000



SHIELD LEVER 8 MOD



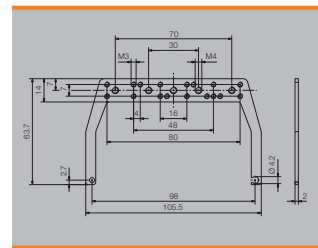
Type	Size	Qty.	Order No.
SHIELD LEVER 8 MOD	8	1	1983940000



SHIELD LEVER 8 MOD HIGH



Type	Size	Qty.	Order No.
SHIELD LEVER 8 MOD HIGH	8	1	1009310000



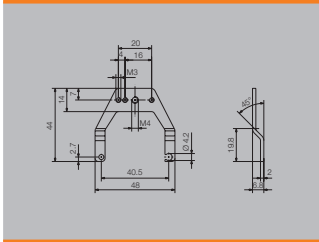
Shield lever

for the ConConcept modular system (metal frame) – 45° angled version

SHIELD LEVER 3 CSB 45°



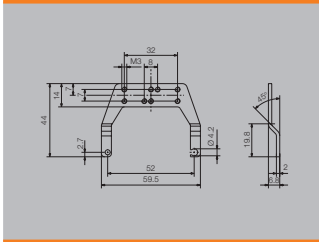
Type	Size	Qty.	Order No.
SHIELD LEVER 3 CSB 45°	3	1	1017040000



SHIELD LEVER 4 CSB 45°



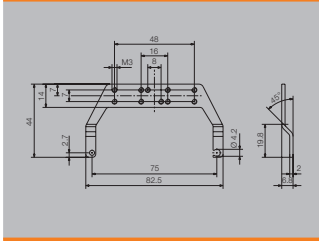
Type	Size	Qty.	Order No.
SHIELD LEVER 4 CSB 45°	4	1	1017050000



SHIELD LEVER 6 CSB 45°



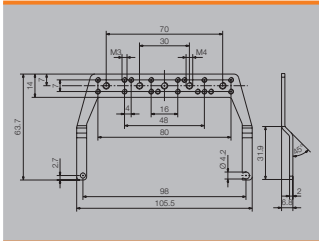
Type	Size	Qty.	Order No.
SHIELD LEVER 6 CSB 45°	6	1	1017060000



SHIELD LEVER 8 CSB 45°



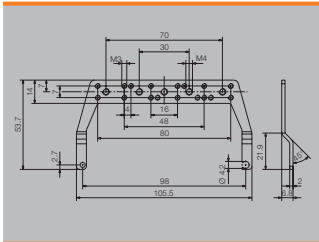
Type	Size	Qty.	Order No.
SHIELD LEVER 8 CSB 45°	8	1	1017070000



SHIELD LEVER 8 CSB 45°L



Type	Size	Qty.	Order No.
SHIELD LEVER 8 CSB 45°L	8	1	1018760000



Other accessories

Shield clamps for shield levers
of size 3 (06B), 4 (10B), 6 (16B) and 8 (24B)

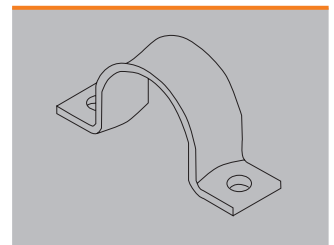
Technical data

Use	Clamps shield on the shield lever	
Fastening of shield lever	With supplied fastening accessories	
Clamping range shield clamp	Cable diameter mm	Gauge of fastening holes mm
Shield clamp 10 mm	10	20
Shield clamp 9 mm	9	20
Shield clamp 8 mm	8	20
Shield clamp 7 mm	7	20
Shield clamp 6 mm	6	16
Shield clamp 5 mm	5	16
Shield clamp 4.5 mm	4.5	16
Material	Steel	
Surface	Galvanised	
Temperature range	-40 °C ... +125 °C	

Shield clamps



Type	Qty.	Order No.
SHIELD CLAMP 4.5 WO S	100	1018120000
SHIELD CLAMP 5 WO S	100	1018130000
SHIELD CLAMP 6 WO S	100	1018150000
SHIELD CLAMP 7 WO S	100	1018160000
SHIELD CLAMP 8 WO S	100	1018170000
SHIELD CLAMP 9 WO S	100	1018180000
SHIELD CLAMP 10 WO S	100	1018110000
SHIELD CLAMP 14 WO S	100	1041490000

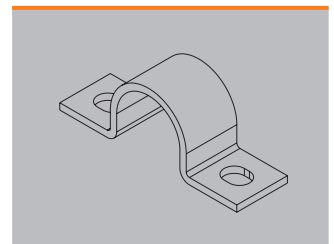


J

Shield contact clips with fitting materials



Type	Qty.	Order No.
HDC SHIELD CLAMP 4.5	100	1912190000
HDC SHIELD CLAMP 5.0	100	1912200000
HDC SHIELD CLAMP 6.0	100	1912210000
HDC SHIELD CLAMP 7.0	100	1912220000
HDC SHIELD CLAMP 8.0	100	1912230000
HDC SHIELD CLAMP 9.0	100	1912240000
HDC SHIELD CLAMP 10.0	100	1912250000
HDC SHIELD CLAMP 14.0	1	1002820000



HDC GRIP PANEL 8 SC

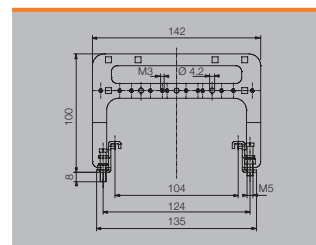
Technical data

Use	To establish direct contact to bulkhead Fastened with integrated M5 screws
Advantages	Broad contact surface gives large-area contact Low contact resistance; high torsional rigidity Shield can be connected to grip panel
Material data Grip Panel 8 SC	
Material	Steel
Surface	Galvanised
Temperature range	-40 °C to 125 °C
System data	
Size	24B or 8 KLBÜ and shield clamps can be used Cable ties can be used for fixing cable

Grip panel



Type	Qty.	Order No.
HDC GRIP PANEL 8 SC	5	1934770000



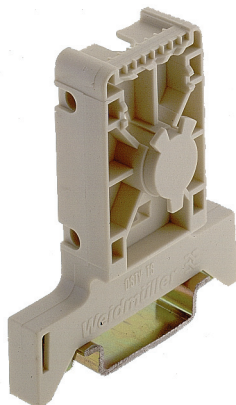
PE and mounting screws



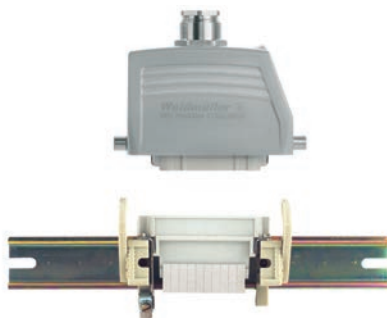
Type	Qty.	Order No.
HDC PE HA SCREW M4x5.5	50	1025660000
HDC PE HE SCREW M4x7.8	50	1025670000
HDC PE HD/ HDD/CF SCREW M4x6	50	1029440000
HDC PE HSB/S SCREW M5x8	50	1029470000
HDC PE S6/6 SCREW M4x8	50	1029520000
HDC FIXING SC SIZE1 M3x6	50	1168850000
HDC FIXING SCREW M3x10	50	1029510000

Other accessories

Locking foot for TS 35 mounting rail



Locking hook



Example: DSTV-TS

Ordering data

Type	Qty.	Order No.
DSTV-TS 6-24	10	1595220000

Ordering data

Type	Qty.	Order No.
DSTV-TS 6 VH	10	1595230000
DSTV-TS 10-24 VH	10	1595240000

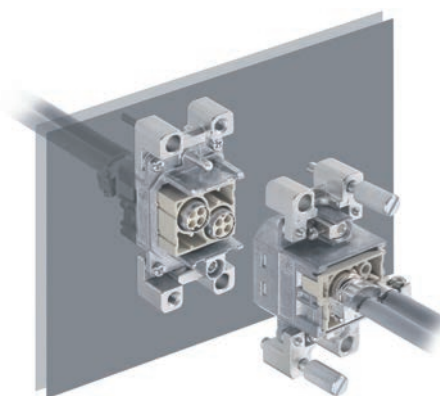
Note:
For all inserts apart from HA and all inserts of size 1

Note:
For all inserts apart from HA and all inserts of size 1

HDC screw adapter

The screw adapter is an IP20 installation solution with a full metal construction. The inserts are screwed into the screw adapters. The fastening screws for the inserts should be tightened with 0.5 Nm torque.

After the contact insert has been properly connected with the screw adapter, it can be mounted to the bulkhead or used as a mating connector, depending on the particular version. Three different screw adapters are possible based on the screw-in angle. The required mounting hardware is included.

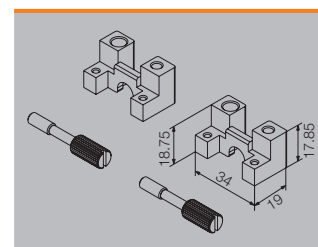


HDC ADAPTER W. SCREW



Type	Qty.	Order No.
HDC ADAPTER W. SCREW	1	1017010000

Note: Knurled screw interlock for the connector.

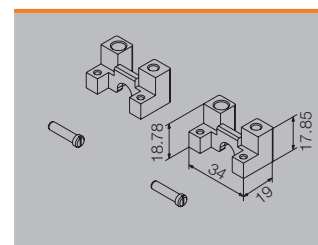


HDC SCREW ADAPTER



Type	Qty.	Order No.
HDC SCHRAUBADAPTER	1	1002790000

Note: Rectangular cut-out and M4 screws for mounting to wall panel; M3 screws for mounting the insert in the adapter.

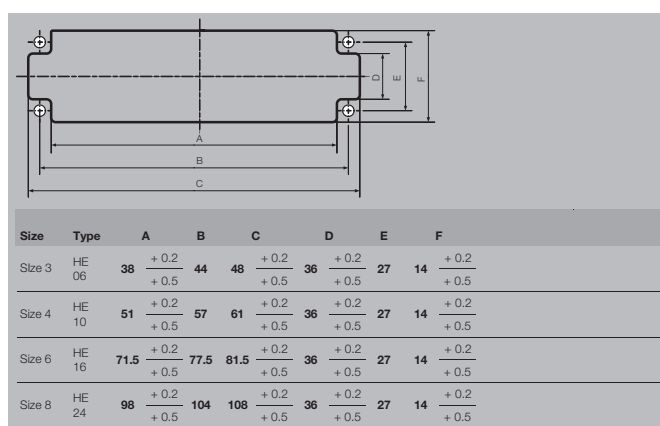
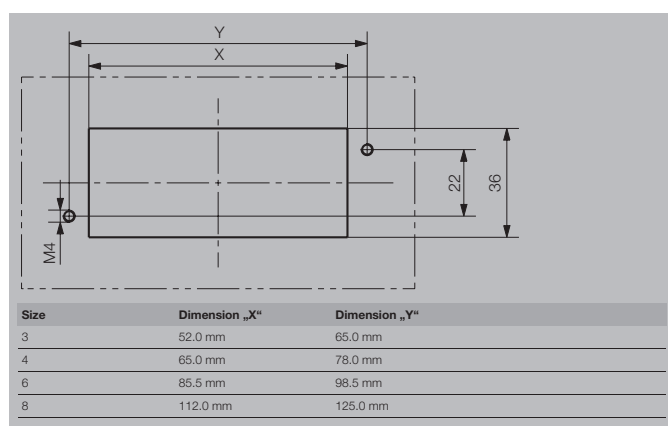
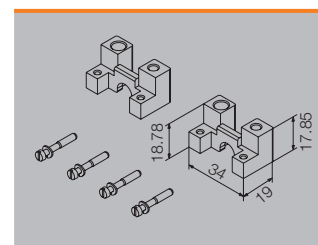


HDC SCREW ADAPTER W/O T



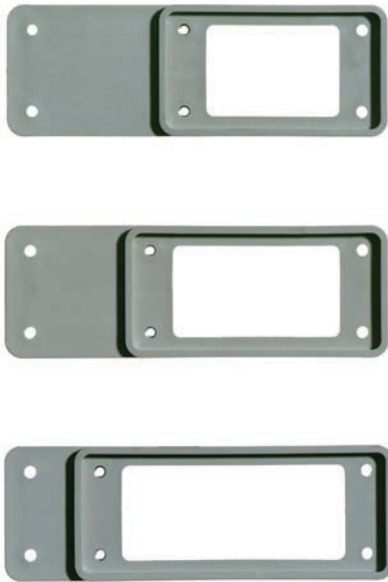
Type	Qty.	Order No.
HDC SCREW ADAPTER W/O T	1	1028030000

Note: Direct mounting on wall panel with rectangular cut-out and M3 screws



Other accessories

Adapter plates, plastic



Cover plates



Adapter plates, SUB-D



Technical data

Adapter plates, plastic	
Material	PA6
Sealing material	TPE-S
Colour	orange/grey
Temperature range	-30 °C to +110 °C
Class of protection	IP 65

Technical data

Cover plates	
Material	PA6 / FE
Sealing material	TPE-S
Colour	orange/grey
Temperature range	-30 °C to +110 °C
Class of protection	IP 65

Technical data

Adapter plates, SUB-D	
Material	PA6
Sealing material	
Colour	grey
Temperature range	-30 °C to +110 °C
Class of protection	

Ordering data

Type	Size	Qty.	Order No.
orange			
ADP-8/3-OR	3	10	1664980000
ADP-8/4-OR	4	10	1665000000
ADP-8/6-OR	6	10	1665020000
grey			
ADP-8/3-GR	3	10	1664990000
ADP-8/4-GR	4	10	1665010000
ADP-8/6-GR	6	10	1665030000

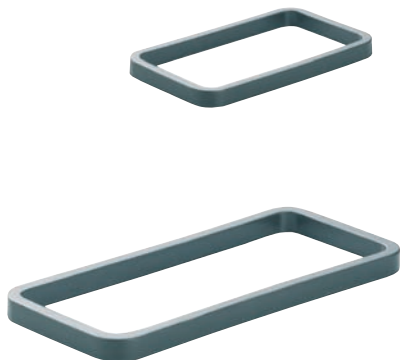
Ordering data

Type	Size	Qty.	Order No.
Sheet steel			
ABD-1 sheet steel	1	10	9457300000
Plastic, grey			
ABD-2-GR	2	10	1664330000
ABD-3-GR	3	10	1664350000
ABD-4-GR	4	10	1664360000
ABD-5-GR	5	10	1664370000
ABD-6-GR	6	10	1664390000
ABD-8-GR	8	10	1664970000
Plastic, orange			
ABD-8-OR	8	10	1664960000

Ordering data

Type	Aperture	Qty.	Order No.
Size 3 / Plastic			
ADS/6-1/9	1 x SUB-D 9	10	1665940000
ADS/6-2/9	2 x SUB-D 9	10	1665950000
ADS/6-1/15	1 x SUB-D 15	10	1666200000
ADS/6-2/15	2 x SUB-D 15	10	1666210000
Size 4 / Plastic			
ADS/10-1/25	1 x SUB-D 25	10	1666220000
ADS/10-2/25	2 x SUB-D 25	10	1666230000
Size 6 / Plastic			
ADS/16-1/25	1 x SUB-D 25	10	1666320000
ADS/16-2/25	2 x SUB-D 25	10	1666330000
ADS/16-1/37	1 x SUB-D 37	10	1666340000
ADS/16-2/37	2 x SUB-D 37	10	1666350000
ADS/16-1/50	1 x SUB-D 50	10	1666460000

Profile seals



Gaskets



Ordering data

Type	Size	Qty.	Order No.
HDC DG 07A	1	5	1044580000
HDC DG 10A	2	5	1044590000
HDC DG 06B	3	5	1044610000
HDC DG 10B	4	5	1044620000
HDC DG 16A	5	5	1044600000
HDC DG 16B	6	5	1044630000
HDC DG 32A	7	5	1044640000
HDC DG 24B	8	5	1044650000
HDC DG 48A 32B	9/10	5	1044660000
HDC DG 48B	12	5	1044670000

Note:
for bulkhead and coupling housings

Ordering data

Type	Size	Qty.	Order No.
HDC FLDG 04A	1	5	1044480000
HDC FLDG 10A	2	5	1044490000
HDC FLDG 06B	3	5	1044500000
HDC FLDG 10B	4	5	1044510000
HDC FLDG 16A	5	5	1044520000
HDC FLDG 16B	6	5	1044530000
HDC FLDG 32A	7	5	1044540000
HDC FLDG 24B	8	5	1044550000
HDC FLDG 32B	10	5	1044560000
HDC FLDG 48B	12	5	1044570000
HDC-HB10 AWVL FD HB-10 AWVL		500	1855680000

Note:
for bulkhead housings

Other accessories

Protective transportation cap for IP66 housings

The protective transportation caps are available for sizes 3, 4, 6 and 8. They can be used with the IP65/IP66 standard housings. The transportation caps are easy to attach and provide IP20 protection. They can be used with all bottom housing sections, bulkhead housings or base housings. A lanyard (not included) can be threaded through the built-in eyelet.

Technical data

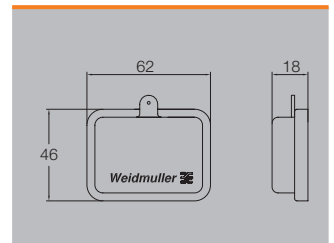
Material	Polypropylene
UL94	HB
Colour	white/transparent
Temperature range	-55 °C ... +110 °C
Class of protection	IP20

Protective transportation cap for IP66 housings

HDC 06B DC



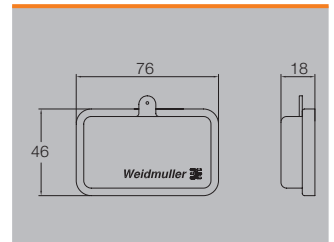
Type	Qty.	Order No.
HDC 06B DC	10	1215900000



HDC 10B DC



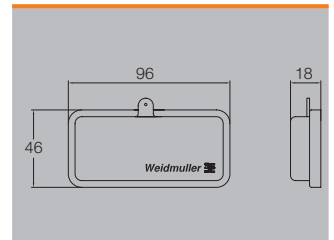
Type	Qty.	Order No.
HDC 10B DC	10	1215910000



HDC 16B DC



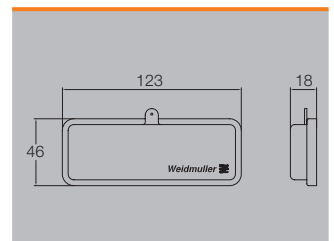
Type	Qty.	Order No.
HDC 16B DC	10	1215920000



HDC 24B DC



Type	Qty.	Order No.
HDC 24B DC	10	1215930000



Tools

Tools	Introduction	K.2
	Cutting	K.4
	Stripping	K.7
	Crimping	K.12
	Screwdrivers	K.20
	Miscellaneous	K.25

Tools

Weidmüller's professional tools are the result of an intensive development process that has been specifically focussed on the requirements of their use in practice.

The ideal tool can only be designed by a company that understands work processes and is constantly engaged on perfecting these processes. In addition to optimising the workflow, we are also concentrating on ensuring a long lifespan and improving application-based functionality for our products. Weidmüller establishes this by designing tools and products that are perfectly matched to each other.

At Weidmüller, everything fits together.

We offer many tools that help you work safely and precisely for an optimised installation of heavy-duty connectors. The new stripax[®], for example, with its 70 self-adjusting blades, ensures that insulation is cut precisely, without damaging the conductor. This increases your accuracy and improves the efficiency of your manufacturing process.





Cutting



Practical tools for cutting cables up to 400 mm² comfortably and easily – with just one hand.

Crimping



Long lifespan; optimised grip delivers crimping results with high repeat accuracy.

Screwdrivers



Torque screwdrivers ensure that the housing is properly mounted without loss of the IP protection rating.

Cutting

Cutting tools


- Cutting formation for different cable sizes increases the quality of the cuts for smaller cross-sections
- Not suitable for steel wires, steel-armoured cables, aluminium alloys and hard-drawn copper conductors!
- Cutting without deformation of the conductor



KT 8

KT 12



 max. 8 mm	 max. 12 mm
 max. 16 mm ²	 max. 16 mm ²
 max. 16 mm ²	 max. 25 mm ²
 max. 16 mm ²	 max. 35 mm ²

Technical data

Max. cutting performance, copper cable	
Solid (max. conductor cross-section)	mm ² /AWG
Stranded (max. conductor cross-section)	mm ² /AWG
Flexible (max. conductor cross-section)	mm ² /AWG
Flexible, stranded (max. conductor diameter)	mm
Max. cutting performance, aluminium cable	
Stranded (max. conductor cross-section)	mm ² /-
Stranded (max. conductor diameter)	mm
solid	mm ²
Data / telephone / control cable	
Max. outer diameter	mm
Tool data	
Length / Width / Height	mm
Weight	g
Note	

KT8	KT12
16 / 6	16 / 6
16 / 6	25 / 3
16 / 6	35 / 2
8	12
16 / 6	25 / 6
8	8
16	25
8	12
165 / 65 / 25	215 / 66 / 28
180	300
Tool closed	

Ordering data

Version
Note

Type	Qty	Order No.
KT 8	1	9002650000
KT 12	1	9002660000
Note		




Cable cutter

- One-hand operation
- Easy handling
- Minimal hand force required
- Release option in every cutting position
- Not suitable for steel wires, steel-armoured cables, aluminium alloys and hard-drawn copper conductors!



KT 45 R



-  Cu + Al: max. 45 mm
-  Cu: max. 300 mm²
Al: max. 400 mm²
-  Cu: max. 400 mm²



Technical data

Max. cutting performance, copper cable	
Stranded (max. conductor cross-section)	mm ² /kcmil
Flexible (max. conductor cross-section)	mm ² /kcmil
Flexible, stranded (max. conductor diameter)	mm
Copper sector cable	
Max. cutting performance, aluminium cable	
Stranded (max. conductor cross-section)	mm ² /kcmil
Stranded (max. conductor diameter)	mm
Aluminium sector cable	
Data / telephone / control cable	
Max. outer diameter	mm
Tool data	
Length / Width / Height	mm
Weight	g
Note	

Ordering data

Version
Note

KT 45 R		
300 / 600		
400 / 800		
45		
3 x 70 SM		
400 / 800		
45		
4 x 70 SE		
45		
290 / 85 / 40		
740		

Type	Qty	Order No.
KT 45 R	1	9202040000
Pivoting blade KT 45 R	1	9204270000

The dimensions of the cable cutter refer to the delivery condition, i.e. the point of the hinged blade parallel to the fixed blade.

Cutting

Hydraulic hole puncher

The IP protection classes for housings, cable glands, heavy-duty connectors and Industrial Ethernet connectors can only be maintained under two conditions: the sheet metal must not be bent during the punching process and the size of the punched-out holes must correspond precisely with the specifications. The IE-KO-HAT hydraulic sheet metal hole puncher, together with its accessories, guarantees you the highest quality workmanship available. It ensures that the connector fits precisely with the punched-out holes so that you can fulfill the proper IP protection class requirements.



Automatic centre punching at the drill points when punching out holes for heavy-duty connectors.

Technical data

Maximum steel-sheet punching performance	
Square holes up to	68 x 68 mm
Rectangular holes up to	36 x 112 mm

Tool data	
Length / width / height	mm
Weight	kg
Punching force	kN
Max. operating pressure	bar
Including accessories (contents)	

Ordering data

Version

Note

Accessories



Note

IE-KO-HAT



- Pressure-relief valve protects against overload
- Cylinder head angled 90°
- Angled head, 360° turnable
- Ergonomic handle springs back by itself
- Waste pieces no longer become jammed thanks to the three-way splitting
- Hydraulic punch made from high-strength aluminium (approx. 40 % weight savings)

IE-KO-HAT
2.0 mm F = 370 N/mm ²
3.0 mm F = 370 N/mm ²
2.0 mm F = 370 N/mm ²
2.0 mm F = 370 N/mm ²
290/120/70
1.9
75
650
1 hydraulic screw Ø 19 mm
1 hydraulic screw Ø 19 x 9.5 mm
1 HSS pre-drill Ø 10 mm
1 spacer nut set (3-part)
1 bridge

Type	Qty.	Order No.
IE-KO-HAT	1	1966810000

Type	Qty.	Order No.
Tension screw KOBBS 9,5 x 50	1	9205030000
Tension screw KOBBS 19 x 55	1	9205040000
Tension screw KOBBS 19 x 75	1	9204780000

KOK



Rectangular splitting stamp for heavy-duty connectors

Ordering data

Type	Description	Qty.	Order No.
KOK 52 x 36	6-pole	1	9204820000
KOK 65 x 36	10-pole	1	9204830000
KOK 86 x 36	16-pole	1	9204850000
KOK 112 x 36	24-pole	1	9204870000

Note: the fastening points are centre-punched.

Stripping and cutting tools

- for flexible and solid conductors with PVC insulation
- Cable with double insulation in two processing steps without special adjustment
- Automatic opening of clamping jaws after stripping
- No play in self-adjusting cutting unit
- Long-lasting
- No splicing of single conductors
- Optimised ergonomic design
- Stripping length adjustable via stop
- Adjustable for different insulation thicknesses
- switchable partial stripping function
- Removable handle shells
- Fold-out cutting protection
- Custom marking with ESG device markers

stripax®

0.08 - 10 mm²



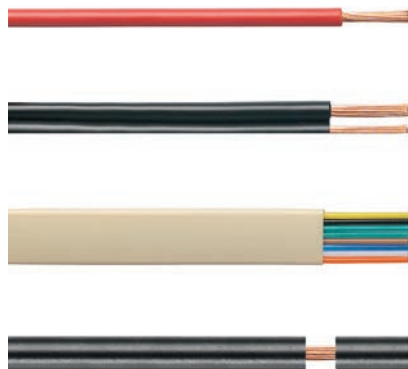
stripax® 16

6 - 16 mm²



- Stripping: PVC insulated flexible conductor, size 0.08...10 mm² (~AWG 28...7)
- Cutting: PVC insulated flexible conductor, size 0.08...6 mm² (~AWG 28...10)
- Conductors undamaged due to special self adjusting stripping blades.
- Processing of multi-conductors, with thin flat ribbon cables and even multiple conductors in one operation

- Stripping: PVC insulated flexible and solid conductors (~AWG 10...6)
- Cutting: PVC insulated flexible and solid conductors, up to 6 mm² (AWG 10)
- Conductors undamaged due to special self adjusting stripping blades.



Technical data

Max. stripping performance	
Cable type	
Conductor cross-section	mm ²
Stripping length, max.	mm
Cutting performance	
Max. cutting performance	mm ²
Tool data	
Length	mm
Weight	g
Note	

stripax®		
Flexible and solid conductors with PVC insulation		
0.08...10		
25		
6		
190		
175		
Note		

stripax® 16		
Flexible and solid conductors with PVC insulation		
6...16		
25		
6		
190		
175		
Note		

Ordering data

Version
Note

Type	Qty.	Order No.
stripax®	1	9005000000
Note		

Type	Qty.	Order No.
stripax® 16	1	9005610000
Note		

Accessories

Type	Qty.	Order No.
Spare stripping blades	1	1119030000
Note		

Type	Qty.	Order No.
Spare stripping blades	1	1119030000
Note		

Type	Qty.	Order No.
Spare stripping blades	1	1119040000
Note		

Stripping

Stripping and cutting tools multi-stripax®

- Specially shaped stripping blades enable stripping of special types of insulation and conductor configurations
- High-quality stripping for industrial applications
- Stripping results reproduced accurately time and time again
- A long-lasting, reliable tool thanks to its robust design
- Optimised ergonomic design
- No damage to the conductor or insulation
- Highly flexible thanks to interchangeable stripping units
- Adjustable stop for setting stripping lengths from 2.3 to 30 mm
- The stripping length can be increased by repeating the stripping process.
- Integral cutting function for max. 2.5 mm² solid or 6 mm² flexible cables

multi-stripax®



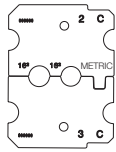
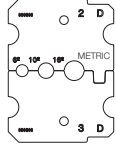
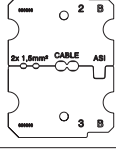
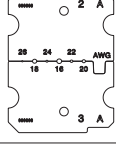
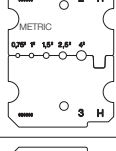
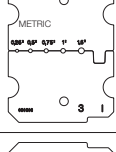
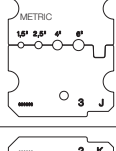
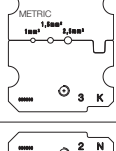
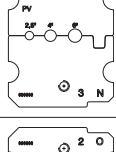
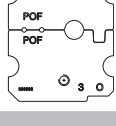
Technical data

Cable type	PVC, Teflon, PTE, PUR, silicone, halogen-free
Conductor cross-section, min.	2 mm
Conductor cross-section, max.	no limit (in several steps)
max. cutting capacity, fine-strand	6 mm ²
max. cutting capacity, solid	2.5 mm ²
max. cutting capacity, ribbon	10.2 x 4 mm
Length/Width/Height	250 / 85 / 40 mm
Weight	250 g
Information	



K

Ordering data

Type	Conductor	Insulation	Shaped blade	Code	Qty.	Order No.
multi-stripax 16 SL stripping unit multi-stripax 16 SL	16 mm ² Standard stranded	PVC		C	1 1	9202220000 9202270000
multi-stripax 6-16 stripping unit multi-stripax 6-16	6 mm ² 10 mm ² 16 mm ² solid stranded flexible	PVC		D	1 1	9202210000 9202260000
multi-stripax ASI stripping unit multi-stripax ASI	ASI cable 1.5 mm ²	PTE PUR EPDM		B	1 1	9202250000 9202300000
multi-stripax AWG stripping unit multi-stripax AWG	AWG 26 AWG 24 AWG 22 AWG 20 AWG 18 AWG 16	PTFE PVC		A	1 1	9202230000 9202280000
multi-stripax 0.75-4 ² SL stripping unit multi-spx 0.75-4 ² SL	0.75 mm ² 1 mm ² 1.5 mm ² 2.5 mm ² 4 mm ²	PVC halogen-free		H	1 1	9203610000 9203730000
multi-stripax 0.25-1.5S stripping unit M-SPX 0.25-1.5 S	0.25 mm ² 0.5 mm ² 0.75 mm ² 1 mm ² 1.5 mm ²	PVC halogen-free		I	1 1	9204540000 9204550000
multi-stripax 1.5-6.0S stripping unit M-SPX 1.5-6.0 S	1.5 mm ² 2.5 mm ² 4 mm ² 6 mm ²	PVC halogen-free		J	1 1	9204560000 9204570000
multi-stripax® GKW LW stripping unit M-SPX GKW LW	1.0 mm ² 1.5 mm ² 2.5 mm ²	Railway Radox cable GKW LW		K	1 1	9205760000 9205770000
multi-stripax® PV stripping unit M-SPX PV	2.5 mm ² 4 mm ² 6 mm ²	Photovoltaic cable and earth- and short-circuit- proof cables		N	1 1	1190490000 1204280000
multi-stripax® POF stripping unit M-SPX POF	1000 µm 980 µm POF	Duplex stripping tool for POF fibre and cable		O	1 1	1208880000 1212770000

Information

Accessories

Type	Description	Qty.	Order No.
ERME MULTI-STRIPAX	cutting blade	1	9203070000
ERAN MULTI-STRIPAX	wire stop-set	1	9203100000

Information

Sheathing stripper for coaxial cable

- For coaxial cable and round (shielded) data cables from 2.5 to 8mm diameter
- 1-, 2- and 3-level stripping in one step
- Fast changeover to other cable types thanks to adjustable interchangeable screw holder
- Colour-coded replaceable cassettes with preset stripping lengths for standard coax cable. Refer to the table.
- Setting block (included) permits quick presetting of cutting depths
- Blade cassettes can be used on both sides

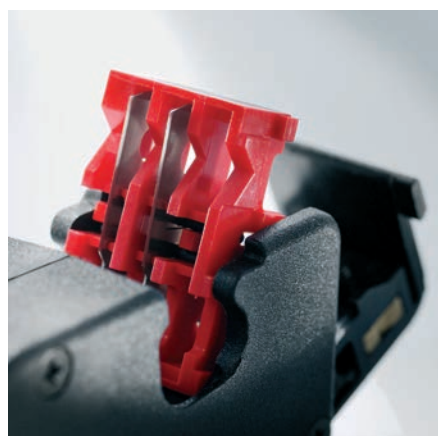
CST / IE-CST

ø 2.5...8 mm



- RG 58 and RG 71
- RG 59 and RG 62
- Antenna cable
- Profibus cable
- Ethernet cable

Cutter cassettes for CST



Technical data

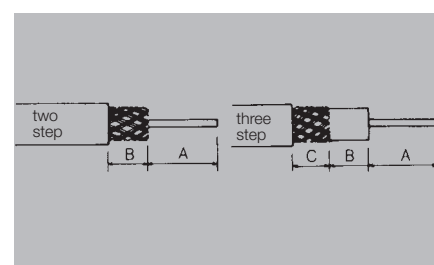
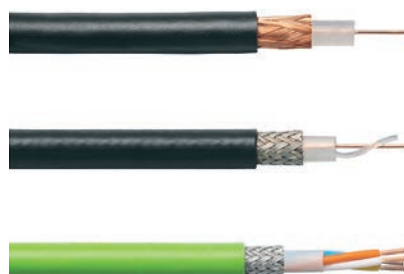
Max. stripping performance	
Cable type	
Conductor diameter	mm
Stripping length, max.	-
Tool data	
Length	mm
Weight	g
Note	

Ordering data

Version
Note

Accessories

Type	Qty	Order No.
Screw holder	1	9032060000
Screwdriver	1	9005720000
Setting block	1	9005800000
Note		
Dimension A: as specified by connector manufacturer (not defined by tool)		



CST	IE-CST
Coaxial & round data cables	Coaxial & round data cables
2.5...8	2.5...8
Note	
100	100
65	85
Note	

Type	Qty	Order No.
CST	1	9030500000
IE-CST	1	9204350000
Note		
IE-CST including blade cartridge, adjusted to Weidmüller Ethernet cable CST not including blade cartridge		

Type	Qty	Order No.
Screw holder	1	9032060000
Screwdriver	1	9005720000
Setting block	1	9005800000
Note		
Dimension A: as specified by connector manufacturer (not defined by tool)		

Colour cutter cassettes	B [mm]	C [mm]
grey	3.9	
red	6.0	
yellow	12.0	
blue	6.5	
white	8.6	
green	7.1	5.1
brown	7.5	3.5
orange	8.0	3.7
light green	6.0	6.0
black	8.6	2.3

Dim. A as stated by manufacturer (not defined by tool)

Colour cutter cassettes	Qty.	Order No.
grey	1	9032050000
red	1	9032040000
yellow	1	9032030000
blue	1	9032020000
white	1	9204340000
green	1	9032000000
brown	1	9032010000
orange	1	9032200000
light green	1	9032210000
black	1	9032220000

Crimping

Crimping tool for wire end ferrules

Three functions:

- Cutting
- Stripping
- Crimping

- Wire-end ferrules with plastic collars, in compliance with DIN 46228-4
- Ratchet for precise crimping.
- Efficient operation: Change of tools not necessary, resulting in a significant time savings
- Automatic conveyance of wire-end ferrules
- Quick adjustment for differing cross-sections
- Easy handling of ferrule strips

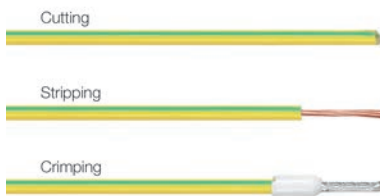
Only Weidmüller fifty-piece linked ferrule strips can be processed. The use of wire-end ferrules on reels can lead to damage.

stripax® plus 2.5

0,5...2,5 mm²



- For processing linked wire-end ferrules from Weidmüller 0.5...2.5 mm² (~AWG 20...14)



K

Technical data

Description of contact	
Type of contact	
Crimping range	mm ²
Crimping range 1 (with multiple crimping positions)	mm ²
Crimping range 2 (with multiple crimping positions)	mm ²
Crimping range 3 (with multiple crimping positions)	mm ²
Crimping range 4 (with multiple crimping positions)	-
Crimping range 5 (with multiple crimping positions)	-
Tool data	
Length	mm
Weight	g
Note	

STRIPAX PLUS 2.5	
Strips of linked wire-end ferrules	
Crimping range	0.5...2.5
Crimping range 1 (with multiple crimping positions)	0.5...0.75
Crimping range 2 (with multiple crimping positions)	1...1.5
Crimping range 3 (with multiple crimping positions)	2.5
Crimping range 4 (with multiple crimping positions)	-
Crimping range 5 (with multiple crimping positions)	-
Tool data	
Length	210
Weight	260
Note	
Only strip-type products from Weidmüller can be processed. The use of wire-end ferrules on reels can lead to damage.	

Ordering data

Version
Note

Type	Qty	Order No.
STRIPAX PLUS 2.5	1	9020000000
Spare cutting blade	1	9050340000
Note		
Additional accessories can be found in Chapter J.		

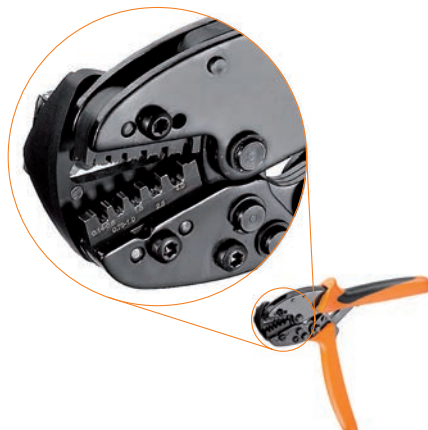
Crimping

Crimping tools for turned contacts

- Ratchet for precise crimping.
- Release option in the event of incorrect operation
- With stop for exact positioning of the contacts.

CTX CM 1.6/2.5 / CTX CM 3.6

0.14...10 mm²



CTX CM 1.6/2.5

- Turned HD contacts
- Turned HE contacts
- ConCept M10 and M5 contacts
- 0.14...4.0 mm²

CTX CM 3.6

- Turned HD contacts
- ConCept M 3 contacts
- 4.0...10 mm²



CTIN CM 1.6/2.5 / CTIN 3.6

0.14...10 mm²



CTIN CM 1.6/2.5

- Turned HD and HE contacts
- Turned HX contacts
- ConCept M10, M5 and M3 contacts
- 4-indent crimp
- 0.14...6.0 mm²

CTIN CM 3.6

- Turned HX contacts
- ConCept M 3 contacts
- 4-indent crimp
- 1.5...10.0 mm²



Technical data

Description of contact	
Type of contact	
Crimping range	mm ²
Crimping range 1 (with multiple crimping positions)	mm ²
Crimping range 2 (with multiple crimping positions)	mm ²
Crimping range 3 (with multiple crimping positions)	mm ²
Crimping range 4 (with multiple crimping positions)	mm ²
Crimping range 5 (with multiple crimping positions)	mm ²
Tool data	
Length	mm
Weight	g
Note	

CTX CM 1.6/2.5	CTX CM 3.6
Turned contacts	Turned contacts
0.14...4	4...10
0.14...0.5	4
0.75...1	6
1.5	10
2.5	
4	
250	250
730	730
Note	

CTIN CM 1.6/2.5	CTIN CM 3.6
Turned HD,HE HX +Concept M10,M5,M3 HX turned and Concept M3 contacts	
0.14...6	1.5...10
0.14...6	1.5...10
230	230
1220	1220
Note	

Ordering data

Version	
Note	

Type	Qty	Order No.
CTX CM 1.6/2.5	1	9018490000
CTX CM 3.6	1	9018480000
Note		

Type	Qty	Order No.
CTIN CM 1.6/2.5	1	9205430000
CTIN CM 3.6	1	9205440000
Note		

Stripping and crimping machines

CA 4/8 Indent

0.14...4 mm²

The CA 4/8 Indent is an electro-pneumatic-driven automatic stripper and crimper for processing loose-packed, turned male and female contacts. The contacts are fed automatically via an oscillating conveyor set-up. Conductors and contacts in the 0.14 - 4.0 mm range (AWG 26-14) can be crimped normally with a 4/8 indent crimp shape, in compliance with MIL C-22520/1-01. The settings for stripping and crimp depth are motor-driven. The values can be saved in 50 different programs. The keyboard is used for configuration and program-ming. Important data, functions and errors are shown on the LCD display. With the help of the appropriate tools, the automatic crimper may be converted to various contacts and/or conductors.

It was developed for preparing conductors in medium-batch series for stationary use.

The automatic machine can be operated quickly and easily.

- Stripping and crimping in one operation
- Electro-pneumatic drive
- Strips and crimps 0.14...4.0 mm²
- Processes loose twisted pin and socket contacts
- Rapid and simple change-over
- Vibration-feeder takes 500 loose machined contacts
- 4/8-Indent crimp conforms with MIL C-22520/1-01
- Program memory for 50 contact variations
- Stripping and crimping dimensions adjusted by means of electric motor
- The CA 4/8 Indent S features an oscillating conveyor with selective feed. It uses sensors and actuators to ensure that the contacts are correctly positioned for processing.

Technical data

	CA 4/8 Indent	CA 4/8 Indent S
Stripping range	0.14 ... 2,5 mm ²	0.25 ... 4 mm ²
Connection	220 V / 50 Hz / 115 VA	220 V / 50 Hz / 115 VA
Drive	pneumatic	pneumatic
Compressed air connection	5 bar	5 bar
Processing time	approx. 2.5 s	approx. 2.5 s
Size W x D x H	450 x 490 x 420	530 x 500 x 600
Weight	40 kg	54 kg
Options	special blade fixture (profile blade, V-radius blade), special fixing device for stranded wires, shortened insertion length, monitoring of entry, feed equipped with selection unit, control of crimping force, interface	

Note on ordering

The machine is set up using sample contacts to suit the user's requirements. For this we need the name of the manufacturer, the type designation and the cross-sections of the contacts.

Crimping

Crimping tools for connectors

- For insulated and uninsulated cable lugs and connectors
- Mechanical function ensures safe and manageable operations under different environmental conditions
- Precision engineering means high pressing force with little physical effort
- Fast feed helps pre-centering and extraction of the connecting parts
- Ratchet for proper trouble-free crimping
- Release option in the event of incorrect operation

MTR 160 / MTR 300

10...300 mm²



- Tubular cable lugs ranging from 10...300 mm²
- Rolled CU connectors ranging from 10...150 mm²
- Retractable head for easy withdrawal of crimped connection (only MTR 300)

MTR 300

Turntable presses: 25...240 ms; 35...240 sec

Crimping inserts

Technical data

Description of contact	
Pressing force / Deviation	kN/mm
Crimping range for copper connector (rolled)	mm ²
Crimping range for copper tube connector	mm ²
Crimping range for insulated connectors	mm ²
Crimping range of wire end ferrule	mm ²
Tool data	
Length / Weight	mm/kg
Note	

MTR 160	MTR 300
100 / 16	100 / 16
10...150	10...150
10...240	10...300
	10...120
Tool data	
540 / 4	540 / 4
sm: sector conductor stranded; se: sector single conductor	

Ordering data

Version
Note

Type	Qty.	Order No.
MTR 160	1	9017250000
MTR 300	1	9021390000

Accessories

Carry cases
Note

Type	Qty.	Order No.
MTR 300	1	9021420000
MTR 160	1	9017270000
Crimping inserts see on the following pages		

MTR 160

	Cross-section [mm ²]	Code to DIN 48083	Crimping width [mm]	Order No.
Die sets for copper tube cable lugs and connectors				
DIN 46235				
	10	6	7.0	9020900000
	16	8	7.0	9020910000
	25	10	7.0	9020920000
	35	12	7.0	9020930000
	50	14	7.0	9020940000
	70	16	7.0	9020950000
	95	18	7.0	9020960000
	120	20	7.0	9020970000
	150	22	7.0	9020980000
	185	25	7.0	9020990000
	240	28	7.0	9021000000

MTR 300

	Cross-section [mm ²]	Code to DIN 48083	Crimping width [mm]	Order No.
Die sets for copper tube cable lugs and connectors				
DIN 46235				
	10	6	7.0	9021430000
	16	8	7.0	9021440000
	25	10	7.0	9021450000
	35	12	7.0	9021460000
	50	14	7.0	9021470000
	70	16	7.0	9021480000
	95	18	7.0	9022290000
	120	20	7.0	9022300000
	150	22	7.0	9022310000
	185	25	7.0	9022320000
	240	28	7.0	9022330000

Pressing tool

- Pressing tool for modular plug connectors of the WE system (Western Electric and DEC)
- Ratchet for precise crimping.
- Release option in the event of incorrect operation

Three functions:

- Pressing of plug connectors
- Pressing of enclosure shielding
- Crimping of cable shielding

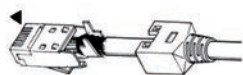
TT 8 RS MP 8



For 8-pole shielded RJ45 plug

AWG 27...24

Pressing of IDC contacts



Pressing of shielded enclosures



Crimping of shielded cable



Technical data

Description of contact	
No. of poles	
Tool data	
Length	mm
Weight	g
Note	

TT 8 RS MP 8	
8	
255	
1251	

Ordering data

Version	
Note	

Type	Qty	Order No.
TT 8 RS MP 8	1	9202800000

Note	
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A large selection of RJ 45 plugs can be found in our current Industrial Ethernet Catalogue.

Crimping

Crimping tools for SC/LC contacts

- Ratchet for precise crimping.
- Release option in the event of incorrect operation

IE-CT-SC-GOF / IE-CT-LC-GOF

Crimping tools for IP 20 + 67 plugs



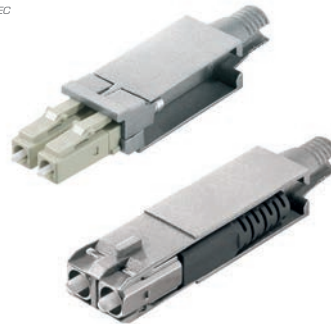
- For fibre-optic SC/ST, IP 20 and IP 67 connectors
- For fibre-optic LC and IP 67 connectors

IE-CT-SC-POF / IE-CT-SC-GOF-P

Crimping tools for IP 20 + 67 plugs



- For polymer fibre-optic SC/ST, IP 20 and IP 67 connectors
- For fibre-optic, ProfiNet, Mobil cable SC/ST and IP 67 connectors



K

Technical data

Tool data
Length
Weight
Note

IE-CT-SC-GOF	IE-CT-LC-GOF
250	250
730	730

IE-CT-SC-POF	IE-CT-SC-GOF-P
250	250
730	730

Ordering data

Version
Note

Type	Qty	Order No.
IE-CT-SC-GOF	1	9205320000
IE-CT-LC-GOF	1	9205330000

Type	Qty	Order No.
IE-CT-SC-POF	1	9205340000
IE-CT-SC-GOF-P	1	9205350000

Accessories

Note

Type	Qty	Order No.
IE-CTI-SC-GOF	1	9205280000
IE-CTI-LC-GOF	1	9205290000

A large selection of plugs and connectors can be found in our current Industrial Ethernet Catalogue.

Type	Qty	Order No.
IE-CTI-SC-POF	1	9205300000
IE-CTI-SC-GOF-P	1	9205310000

A large selection of plugs and connectors can be found in our current Industrial Ethernet Catalogue.

Tools for polymer optical fibre

HTX-HDC/POF

POF crimping

Crimping of fibre optic contacts "polymer optical fibre" (POF).

- For plug and socket
- Ratchet for precise crimping.
- Unlocks in case of incorrect operation
- Locator for precise contact positioning

Contacts:

- Fibre-optic HD-contact socket for \varnothing 1.0mm POF
- Fibre-optic HD-contact pin for \varnothing 1.0mm POF

Ordering data

Type	Qty	Order No.
HTX-HDC/POF	1	9010950000

Technical data

Length	200 mm
Weight	438 g



PB LWL/POF / PS LWL/POF

POF polishing

For processing the cut surface of fibre-optic cables with polymer optical fibre (POF).

- Buffing disc (PS LWL/POF)
- Buffing sheet (PB LWL/POF)

Ordering data

Type	Qty	Order No.
PS LWL/POF	1	9020390000
PB LWL/POF	1	9020400000



AM LWL/POF

POF stripping

Stripping fibre-optic cables. Fibre-optic cables with polymer optical fibre (POF).

- Longitudinal stop with scale is built into the tool
- Stripping direction is lengthwise to the fibre
- No damage to the optical fibre

Ordering data

Type	Qty	Order No.
AM LWL/POF	1	9020360000



LWL-stripax

Stripping and cutting tool for plastic fibre-optic cables with 1-mm diameter inner conductor

- Stripping length adjustable via end stop
- Automatic opening of the clamping jaws after stripping

Ordering data

Type	Qty	Order No.
M-D-STRIPAX LWL	1	9003750000

Accessories

Type	Qty	Order No.
Spare stripping blades LWL-Stripax	1	9003760000



Technical data

Max. stripping performance	
Cable type	
Conductor diameter	-
Stripping length, max.	-
Tool data	
Length	mm
Weight	g
Note	

M-D-STRIPAX LWL	
POF conductor with an inner conductor of 1 mm \varnothing	
...	1
7.5	
135	
110	
POF: polymer optical fibre	

Screwdrivers

Uninsulated torque screwdriver



DMS manual

Torque screwdriver
EN ISO 6798, BS EN 26789, ASME B107.14M



Type	Size / AF	a	b	c	Order No.
DMS MANUAL 0.5-1.7	0.5 - 1.7 Nm				9918370000
DMS MANUAL 2.0-8.0	2.0 - 8.0 Nm				9918380000

WK K S

Interchangeable bits for torque screwdriver
output acc. to DIN 5264, ISO 2380/1



WK S 0.4x2.5	Max. 0.4 Nm	0.4	2.5	175	9918520000
WK S 0.5x3.0	Max. 0.6 Nm	0.5	3.0	175	9918530000
WK S 0.6x3.5	Max. 1.1 Nm	0.6	3.5	175	9918540000
WK S 0.8x4.0	Max. 2.5 Nm	0.8	4.0	175	9918550000
WK S 1.0x5.5	Max. 3.8 Nm	1.0	5.5	175	9918560000

WK K PZ

Interchangeable bits for torque screwdriver
output acc. to DIN 5260-PZ, ISO 8764/1-PZ



WK K PZ0	Max. 0.9 Nm			175	9918600000
WK K PZ1	Max. 3.8 Nm			175	9918610000
WK K PZ2	Max. 5.5 Nm			175	9918620000

K

WK K PH

Interchangeable bits for torque screwdriver
output acc. to DIN 5260-PH, ISO 8764/1-PH



WK K PH0	Max. 0.9 Nm			175	9918570000
WK K PH1	Max. 3.8 Nm			175	9918580000
WK K PH2	Max. 5.5 Nm			175	9918590000

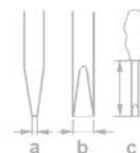
WGK 1/4 C6.3 E6.3

Interchangeable bit with bit holder for torque screwdrivers
Drive: 1/4" C6.3 and 1/4" E6.3



WK 1/4" C6.3 E6.3					9202510000
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VDE-insulated torque screwdriver



DMSI manual

VDE-insulated torque screwdriver
EN ISO 6798, BS EN 26789, ASME B107.14M



Type	Size / AF	a	b	c	Order No.
DMSI MANUAL 0.5-1.7	0.5 - 1.7 Nm				9918390000
DMSI MANUAL 2.0-8.0	2.0 - 8.0 Nm				9918400000

WK SI

VDE-insulated interchangeable bits for VDE-insulated torque
screwdriver; output acc. to DIN 5264, ISO 2380/1



WK SI 0.4x2.5	Max. 0.4 Nm	0.4	2.5	220	9918410000
WK SI 0.5x3.0	Max. 0.6 Nm	0.5	3.0	220	9918420000
WK SI 0.6x3.5	Max. 1.1 Nm	0.6	3.5	220	9918430000
WK SI 0.8x4.0	Max. 2.5 Nm	0.8	4.0	220	9918440000
WK SI 1.0x5.5	Max. 3.8 Nm	1.0	5.5	220	9918450000

WK IK PH

VDE-insulated interchangeable bits for VDE-insulated torque
screwdriver; output acc. to DIN 5260-PH, ISO 8764/1-PH



WK IK PH0	Max. 0.9 Nm			220	9918460000
WK IK PH1	Max. 3.8 Nm			220	9918470000
WK IK PH2	Max. 5.5 Nm			220	9918480000

WK IK PZ

VDE-insulated interchangeable bits for VDE-insulated torque
screwdriver; output acc. to DIN 5260-PZ, ISO 8764/1-PZ

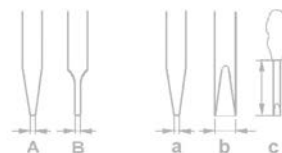


WK IK PZ0	Max. 0.9 Nm			220	9918490000
WK IK PZ1	Max. 3.8 Nm			220	9918500000
WK IK PZ2	Max. 5.5 Nm			220	9918510000

Screwdrivers

Uninsulated screwdriver

The Weidmüller SoftFinish screwdriver, for general use, has a blade made from fully-hardened high-alloy chromium-vanadium-molybdenum steel with a matt chrome finish.



SD S

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



Type	Blade type	Size / AF	a	b	c	Order No.
SD 0.4x2.0x60	B		0.4	2.0	60	9037160000
SD 0.4x2.5x75	A		0.4	2.5	75	9009030000
SD 0.5x3.0x80	A		0.5	3.0	80	9008320000
SD 0.6x3.5x100	A		0.6	3.5	100	9008330000
SD 0.6x3.5x200	A		0.6	3.5	200	9010110000
SD 0.8x4.0x100	A		0.8	4.0	100	9008340000
SD 0.8x4.5x125	A		0.8	4.5	125	9009020000
SD 1.0x5.5x150	A		1.0	5.5	150	9008350000
SD 1.2x6.5x150	A		1.2	6.5	150	9009010000

SDK PH

Crosshead screwdriver, Phillips, SDK PH DIN 5262, ISO 8764/2-PH, output to ISO 8764-PH, ChromTop tip, SoftFinish grip



SDK PH0	0	60	9008470000
SDK PH1	1	80	9008480000
SDK PH2	2	100	9008490000
SDK PH3	3	150	9008500000

SDK PZ

Crosshead screwdriver, Pozidriv, SDK PZ DIN 5262, ISO 8764/2-PZ, output to ISO 8764/1-PZ, ChromTop tip, SoftFinish grip



SDK PZ0	0	60	9008520000
SDK PZ1	1	80	9008530000
SDK PZ2	2	100	9008540000
SDK PZ3	3	150	9008550000

K

SD TH

Torx® TH screwdriver with hole in tip of blade (tamper-resistant), SD TH for screwing Torx® and Torx®-TH security screws (pin in centre of Torx recess), chrome top tip, SoftFinish grip. The SD TH20 can be used with the Klippon® K housing series.



SD TH20	20	100	9009160000
SD TH15	15	80	9009170000
SD TH10	10	80	9009180000
SD TH8	8	60	9009190000

SK

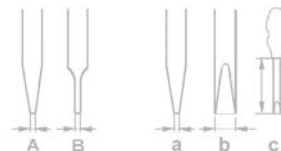
The SK 10.0x125 Allen key, SK DIN 3125, drive output acc. to DIN 475/2, SoftFinish grip. It can be used with all sizes of the Klippon® TB and Klippon® STB housing series.



SK 10.0x125	10	125	9009070000
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Uninsulated screwdriver

The Weidmüller SoftFinish screwdriver, for general use, has a blade made from fully-hardened high-alloy chromium-vanadium-molybdenum steel with a matt chrome finish.



Set S 2.5/3.0/4.0/5.5/PH 1/2

6-part set: slotted and crosshead PH screwdriver set with circular blades



Type	Blade type	Size / AF	a	b	c	Order No.
SD 0.4x2.5x75	A		0.4	2.5	75	
SD 0.5x3.0x80	A		0.5	3.0	80	
SD 0.8x4.0x100	A		0.8	4.0	100	
SD 1.0x5.5x150	A		1.0	5.5	150	
SD PH 1		1			80	
SD PH 2		2			100	
SDS 2.5-5.5/PH1/2						9009740000

Set S 2.0/2.5/3.0/3.5/4.0/5.5

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



SD 0.4x2.0x60	B		0.4	2.0	60	
SD 0.4x2.5x75	A		0.4	2.5	75	
SD 0.5x3.0x80	A		0.5	3.0	80	
SD 0.6x3.5x100	A		0.6	3.5	100	
SD 0.8x4.0x100	A		0.8	4.0	100	
SD 1.0x5.5x150	A		1.0	5.5	150	
SDS 2.0-5.5						9205560000

System 11+1 S-PH-PZ-SK

12-part set of interchangeable blades for slotted head, crosshead PH/PZ and hexagon screws, SoftFinish grip



SD			0.5	3.0	140	
SD			0.8	4.0	140	
SD			1.0	5.0	140	
SD			1.2	6.0	140	
PH 1		1			140	
PH 2		2			140	
PZ 1		1			140	
PZ 2		2			140	
SK		3			140	
SK		4			140	
SK		5			140	
SYSTEM 11+1					140	9009750000

Screwdrivers

Weidmüller wrench set

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

SK S

7-piece Allen key set



Type	Blade type	Size / AF	a	b	c	Order No.
		2				
		2.5				
		3				
		4				
		5				
		6				
		8				
SKS 2.0-8.0						9008860000

IS 2 KG / IS 3 KG / IS 4 KG

Socket wrench

Hexagon screwdriver with cross-grip made from high-quality plastics

- Surface nickel-plated
- Made from hardened chromium-vanadium s
- According to DIN 6911
- Designed for screws acc. to DIN 6912



Ordering data

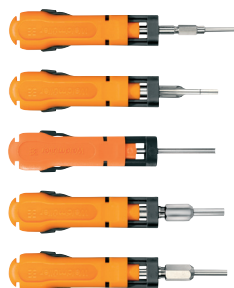
Type	Qty.	Order No.
IS 2 KG	1	1806630000
IS 3 KG	1	1806650000
IS 4 KG	1	1806660000

Technical data

Blade length (C)	100 mm
Weight	32 g

Crimp removal tools

Crimp removal tools



Ordering data

Type	Qty.	Order No.
Removal Tool HD	1	1866730000
Removal Tool HE	1	1866750000
Removal Tool HX	1	1002990000
Removal Tool CM 3	1	1866710000
Removal Tool CM 5	1	1866720000

Replacement sleeves, crimp removal tools



Ordering data

Type	Qty.	Order No.
HÜLSE REMOVAL TOOL HD	5	1044100000
HÜLSE REMOVAL TOOL CM 3	5	1044080000
HÜLSE REMOVAL TOOL CM 5	5	1044090000

Module removal tool

Tool for removing ConCept modules from the frame



Ordering data

Type	Qty.	Order No.
HDC-DW-MOD	1	1688200000

Cable entries

Cable entries	Introduction	L.2
	Standard cable glands - Plastic	L.5
	Standard cable glands - Brass	L.7
	EMC cable glands	L.14
	Standard cable glands - Stainless steel	L.16
	Cable glands for Ex applications - Brass	L.17
	Adaptors	L.18
	Accessories - Flat IP washers	L.19
	Sealing plugs	L.21

Cable entries

In this section of the catalogue, we offer a selected range of cable glands for heavy-duty connectors.

Our complete product range is listed in our Enclosure and Cable Entry Catalogue.

Depending on the connector series and the application area, the cable glands, sealing plugs, adaptors, pressure compensation elements and accessories are certified and manufactured in line with the following standards:

- EN 60423 (metric thread)
- EN 40430 (PG and NPT thread)
- EN 60079-0 (General ATEX regulations)
- EN 50262 (strain relief)
- EN 60529 (IP protection degree)

The range of cable glands is available in metric (M) and high-strength (PG) threads. When choosing glands and sealing plugs, the table with the sealing characteristics of the O-rings, IP washers and sealing rings must be considered. The O-ring or IP washer is provided to seal the connecting thread of an enclosure, the sealing ring is for the gland and actually seals and clamps the connection cable.



You should always observe the maximum drill-hole diameter when installing a cable gland. These must not exceed the following specified maximum values / tolerances so that the protection degree of the whole enclosure can be guaranteed.

Through-hole information

M thread	Through-hole, in mm
M 16	16.2
M 20	20.2
M 25	25.2
M 32	32.2
M 40	40.2
M 50	50.2
M 63	63.2
PG thread	Through-hole, in mm
PG 9	15.1
PG 11	18.5
PG 13.5	20.4
PG 16	22.5
PG 21	28.3
PG 29	37.4
PG 36	47.2
PG 42	54.2
PG 48	59.5

Overview of sealing materials for O-rings, flat gaskets as well as seal inserts

Abbreviation	Material	Trade name	Temperature range	Chemical resistance	Fire resistant	Shore	Free from halogens	UV resistance
TPE	Thermo-plastic elastomer	Santoprene	-40 °C...+130 °C	Hydrocarbons, oils, acids	UL94, HB	64	Yes	very good
CR	Chloroprene rubber	Neoprene	-40 °C...+130 °C	Mineral oils, greases, fuels	very good	40 - 90	No	very good
NBR	Nitrile rubber	Perbunan, Nitrile	-40 °C...+130 °C	Hydrocarbons, oils, acids, aliphatic solvents, greases, fuels	weak	40 - 90	No	good
EPDM	Ethylene-propylene-diene rubber	Keltan	-50 °C...+130 °C	Weather-, grease-, mineral oil-, chlorine-,and ozone resistant, hydrocarbons	weak	20 - 90		very good
FPM	Fluoro-rubber	Viton	-25 °C...+200 °C	ozone, oxygen, mineral oils, synthetic hydraulic fluids, fuels, aromatics, many organic solvents and chemicals	weak	65 - 95		good

Abbreviations - technical data

A, L	Length
L1	Length of thread
D	Diameter
S	Thickness
S1,S2	Depth
SW	Distance across flats (AF)
KB	Clamping range
Thread	External thread
SUHB	Shroud
TRQ BO	Body torque
MODR	Mounting torque
TRQ CN	Cap nut torque
Qty.	Packing unit












Product designation

VG	Cable gland
VP	Sealing plugs
ZE	Strain relief
EMV	Electromagnetic compatibility
SKS	Spiral kink protection
GWDR	Flat IP washer
SKMU	Hexagon nut




Glands and accessories

The tables below provide an overview of the Weidmüller cable glands and the recommended accessories.


Standard glands

Material/Type	Approvals				Thread sealing rings			Locknuts				
	IP class of protection without seal	IP class of protection with seal	Ex	EMC	Armouring	CSM GWDR PO	CR GWDR...NR	O-Ring	grey SKMU...K GR	black SKMU...K SW	brass SKMU...MS	MS EMC SKMU EMV...
Plastic												
 VG ... K67	IP67								•			
 VG ... K68	IP68 / 5 bar								•			
 VG ... K68 SKS	IP68 / 5 bar								•			
Nickel-plated brass												
 VG ... MS54	IP54	IP65				optional					•	
 VG ... MS54-ZE	IP54										•	
 VG...MS54 ZE BS	IP54										•	
 VG...MS54 ZR	IP54										•	
 VG ... MS68		IP68 / 5 bar, IP69k						included			•	
 VG ... EMV		IP68 / 10 bar		•				included				•
 VG ... 1/EMV		IP68 / 5 bar, IP69k		•				included				•
Stainless steel												
 VG...SS68		IP68 / 5 bar, IP69k						included			•	



Cable glands HQ

Material/Type	Approvals				Thread sealing rings			Locknuts				
	IP class of protection without seal	IP class of protection with seal	Ex	EMC	Armouring	CSM GWDR PO	CR GWDR...NR	O-Ring	grey SKMU...K GR	black SKMU...K SW	brass SKMU...MS	MS EMC SKMU EMV...
Plastic												
 VG ... K68 ...	IP65											
Nickel-plated brass												
 VG ... MS68 ...	IP65											
 VG ... EMV68 ...	IP65			•								

Cable glands Ex

Material/Type	Approvals				Thread sealing rings			Locknuts				
	IP class of protection without seal	IP class of protection with seal	Ex	EMC	Armouring	CSM GWDR PO	CR GWDR...NR	O-Ring	grey SKMU...K GR	black SKMU...K SW	brass SKMU...MS	MS EMC SKMU EMV...
Nickel-plated brass												
 VG ... Exe MS		IP68 / 20 bar	Exe					included			•	•
Stainless steel glands on request												

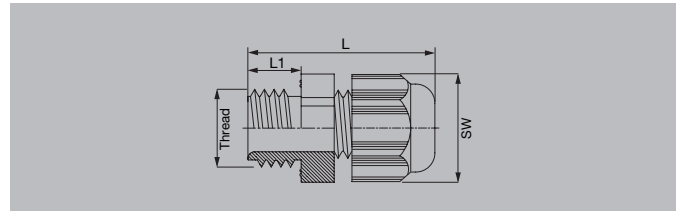
Stopping plugs

Material/Type	Approvals				Thread sealing rings			Locknuts				
	IP class of protection without seal	IP class of protection with seal	Ex	EMC	Armouring	CSM GWDR PO	CR GWDR...NR	O-Ring	grey SKMU...K GR	black SKMU...K SW	brass SKMU...MS	MS EMC SKMU EMV...
Plastic												
 VP ... K54	IP54	IP66							•			
Nickel-plated brass												
 VP ... MS65		IP68						included			•	

Cable glands - Plastic - IP68



Plastic cable glands with integrated strain relief mechanism suitable for industrial applications that require IP68 protection.



Technical data

Material / Colour	Polyamide 6 / RAL 7035
Seal insert	CR
Temperature range	-30 °C...80 °C
Degree of protection	IP68 - 5 bar (30 min)
Flammability rating	V-2

Note Version with moulded sealing lip
Length L varies depending on the cable diameter used

Ordering data

Type	Thread	KB	L/L1	SW	TRQ CN, min.	TRQ CN, max.	TRQ BO, min.	TRQ BO, max.	Qty.	Order No.
metric										
VG M16-1/K68	M 16 x 1.5	5.00-10.00	39.7 / 10.00	22	2.00	3.00	3.00	5.00	50	1772290000
VG M16-1/K68	M 16 x 1.5	4.00-8.00	35.7 / 8.00	19	2.50	2.50	3.80	3.80	50	1909860000
VG M20-1/K68	M 20 x 1.5	6.00-12.00	41.2 / 10.00	24	2.50	2.50	3.80	3.80	50	1772300000
VG M25-1/K68	M 25 x 1.5	13.00-18.00	48.2 / 10.00	33	7.00	9.00	10.00	13.00	25	1772310000
VG M25-1/K68	M 25 x 1.5	11.00-17.00	43.2 / 8.00	29	5.00	5.00	7.50	7.50	25	1909870000
VG M32-1/K68	M 32 x 1.5	18.00-25.00	50.8 / 15.00	42	8.00	10.00	12.00	15.00	20	1772320000
VG M32-1/K68	M 32 x 1.5	15.00-21.00	50.7 / 10.00	36	5.00	5.00	7.50	7.50	20	1909880000
VG M40-1/K68	M 40 x 1.5	22.00-32.00	69.9 / 15.00	53	15.00	20.00	22.00	30.00	10	1772330000
VG M40-1/K68	M 40 x 1.5	19.00-28.00	55.2 / 10.00	46	11.00	11.00	7.50	7.50	10	1909890000
VG M50-1/K68	M 50 x 1.5	30.00-38.00	71.7 / 18.00	60	20.00	25.00	30.00	35.00	10	1772340000
VG M50-1/K68	M 50 x 1.5	30.00-38.00	70.3 / 18.00	60	12.00	12.00	7.50	7.50	10	1909900000
VG M63-1/K68	M 63 x 1.5	34.00-44.00	72.9 / 18.00	65	12.00	12.00	7.50	7.50	10	1772350000
PG										
VG 9-K68	PG 9	4.00-8.00	34 / 8.00	19	2.50	2.50	3.75	3.75	50	1568980000
VG 11-K68	PG 11	5.00-10.00	37 / 8.00	22	2.50	2.50	3.75	3.75	50	1568990000
VG 13.5-K68	PG 13.5	6.00-12.00	39 / 9.00	24	2.50	2.50	3.75	3.75	50	1569000000
VG 16-K68	PG 16	10.00-14.00	42.5 / 10.00	27	3.30	3.30	5.00	5.00	50	1569010000
VG 21-K68	PG 21	13.00-18.00	48 / 11.00	33	5.00	5.00	7.50	7.50	25	1569020000
VG 29-K68	PG 29	18.00-25.00	53 / 11.00	42	5.00	5.00	7.50	7.50	20	1569030000
VG 36-K68	PG 36	22.00-32.00	65 / 13.00	53	5.00	5.00	7.50	7.50	10	1569040000
VG 42-K68	PG 42	30.00-38.00	68 / 13.00	60	5.00	5.00	7.50	7.50	10	1569050000
VG 48-K68	PG 48	34.00-44.00	69 / 14.00	65	5.00	5.00	7.50	7.50	10	1718770000

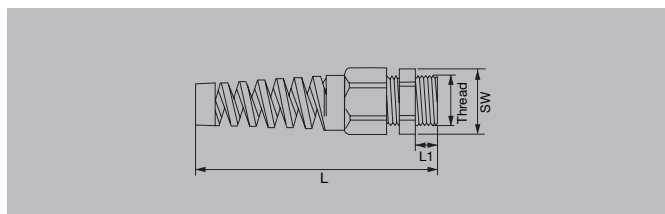
Note halogen free, without sealing ring

Standard cable glands - Plastic

Cable glands - Plastic - SKS



Plastic cable glands with spiral bending protection specially suited for flexible connections.



Technical data

Material / Colour	Polyamide 6 / RAL 7035
Seal insert	OR
Temperature range	-30 °C...80 °C
Degree of protection	IP68 - 5 bar (30 min)
Flammability rating	V-2

Note Version with moulded sealing lip
Length L varies depending on the cable diameter used

Ordering data

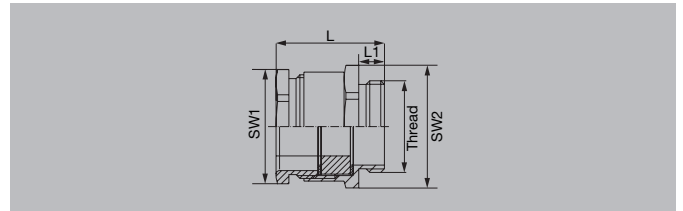
Type	Thread	KB	L/L1	SW	TRQ CN, min.	TRQ CN, max.	TRQ BO, min.	TRQ BO, max.	Qty.	Order No.
metric										
VG M16-K68 SKS	M 16 x 1.5	5.00-10.00	80 / 15.00	22	2.50	2.50	3.80	3.80	50	1776710000
VG M20-K68 SKS	M 20 x 1.5	6.00-12.00	106 / 11.00	24	2.50	2.50	3.80	3.80	50	1778860000
VG M20-K68 SKS	M 20 x 1.5	10.00-14.00	106 / 15.00	27	3.30	3.30	5.00	5.00	50	1776720000
VG M25-K68 SKS	M 25 x 1.5	13.00-18.00	129 / 15.00	33	5.00	5.00	7.50	7.50	25	1776730000
PG										
VG 9-K68 SKS	PG 9	4.00-8.00	78 / 8.00	19	2.50	2.50	3.75	3.75	50	1720480000
VG 11-K68 SKS	PG 11	5.00-10.00	84 / 8.00	22	2.50	2.50	3.75	3.75	100	1720490000
VG 13.5-K68 SKS	PG 13.5	6.00-12.00	105 / 9.00	24	2.50	2.50	3.75	3.75	50	1720500000
VG 16-K68 SKS	PG 16	10.00-14.00	117 / 10.00	27	3.30	3.30	5.00	5.00	25	1720510000
VG 21-K68 SKS	PG 21	13.00-18.00	130 / 11.00	33	5.00	5.00	7.50	7.50	20	1720520000

Note halogen free, without sealing ring

Cable glands - Brass - IP54



Brass cable glands for industrial applications that require IP54 protection.



Technical data

Material	Brass, nickel-plated
Seal insert	NBR
Temperature range	-20 °C...60 °C
Degree of protection	IP 54
Degree of protection with thread gasket	IP 65

Note Optional sealing ring
Length „L“ varies depending on the cable diameter used.

Ordering data

Type	Thread	KB	L/L1	SW1/SW2	TRQ CN, min.	TRQ CN, max.	TRQ BO, min.	TRQ BO, max.	Qty.	Order No.
metric										
VG M16-MS54	M 16 x 1.5	8.00-10.00	26 / 6.00	18 / 20	3.05	3.05	6.25	6.25	100	1778390000
VG M20-MS54	M 20 x 1.5	8.00-10.00	26.5 / 6.50	18 / 22	3.05	3.05	6.25	6.25	50	1778380000
VG M20-MS54	M 20 x 1.5	10.00-12.00	26.5 / 6.50	20 / 22	3.05	3.05	6.25	6.25	50	1778370000
VG M25-MS54	M 25 x 1.5	12.00-14.00	27.5 / 7.00	22 / 27	3.66	3.66	7.50	7.50	50	1778360000
VG M25-MS54	M 25 x 1.5	15.00-17.00	29.5 / 7.00	28 / 30	4.88	4.88	10.00	10.00	50	1778350000
VG M32-MS54	M 32 x 1.5	24.00-26.00	33 / 8.00	38 / 40	4.88	4.88	10.00	10.00	25	1778340000
VG M40-MS54	M 40 x 1.5	28.00-30.00	33 / 8.00	37 / 43	4.88	4.88	10.00	10.00	25	1778330000
VG M50-MS54	M 50 x 1.5	31.00-33.00	39 / 9.00	47 / 55	4.88	4.88	10.00	10.00	10	1778320000
VG M50-MS54	M 50 x 1.5	39.00-41.00	43 / 9.00	54 / 57	4.88	4.88	10.00	10.00	5	1778310000
VG M63-MS54	M 63 x 1.5	45.00-47.00	45 / 10.00	60 / 68	4.88	4.88	10.00	10.00	5	1778300000
PG										
VG 9-MS54	PG 9	6.00-8.00	22 / 6.00	15 / 17	10.13	10.13	15.20	15.20	100	0261500000
VG 11-MS54	PG 11	8.00-10.00	26 / 6.00	18 / 20	12.40	12.40	18.60	18.60	50	0260700000
VG 13.5-MS54	PG 13.5	10.00-12.00	26 / 6.50	20 / 22	13.60	13.60	20.40	20.40	50	0260800000
VG 16-MS54	PG 16	12.00-14.00	27 / 6.50	22 / 24	15.00	15.00	22.50	22.50	50	0261400000
VG 21-MS54	PG 21	15.00-17.00	29.5 / 7.00	28 / 30	18.87	18.87	28.30	28.30	50	0260900000
VG 29-MS54	PG 29	24.00-26.00	33 / 8.00	37 / 40	24.67	24.67	37.00	37.00	25	0261000000
VG 36-MS54	PG 36	33.00-35.00	39 / 9.00	47 / 50	31.33	31.33	47.00	47.00	20	0497600000
VG 42-MS54	PG 42	41.00-43.00	44 / 10.00	54 / 57	36.00	36.00	54.00	54.00	10	0497700000
VG 48-MS54	PG 48	45.00-47.00	45 / 10.00	60 / 64	39.50	39.50	59.30	59.30	5	1718780000

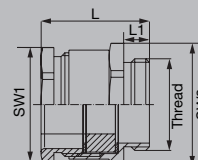
Note Further versions on request

Standard cable glands - Brass

Cable glands - Brass - ZR



Brass cable gland with concentric O-rings for standard industrial applications. The sealed insert used here contains several removable or dividable inlets. This allows to connect cables of a wide diameter range (from 4 mm to 41 mm) with only one sealed insert.



Technical data

Material	Brass, nickel-plated
Seal insert	NBR
Temperature range	-20 °C...80 °C
Degree of protection	IP 54

Note

Ordering data

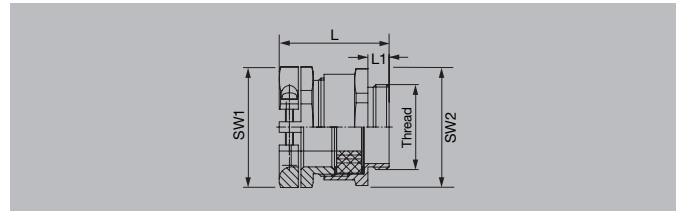
Type	Thread	KB	L/L1	SW1/SW2	TRQ CN, min.	TRQ BO, min.	D1	D2	D3	D4	Qty.	Order No.
metric												
VG M20-MS54	M 20 x 1.5	4.00-13.00	26.5 / 6.50	22 / 24	3.05	6.25	4	7	10	13	50	1009560000
VG M25-MS54	M 25 x 1.5	8.50-18.00	27.5 / 7.00	28 / 30	3.66	7.50	8.5	11.5	14.5	18	25	1009570000
VG M32-MS54	M 32 x 1.5	16.00-26.00	33 / 8.00	37 / 40	4.88	10.00	16	19	22	25	25	1009580000
VG M40-MS54	M 40 x 1.5	23.00-30.00	33 / 33.00	47 / 50	4.88	10.00	23	26	29	32	10	1009590000
VG M50-MS54	M 50 x 1.5	32.00-40.00	39 / 39.00	54 / 57	4.88	10.00	32	35	38	41	5	1009600000
PG												
VGPG13.5-MS54	PG 13.5	7.50-12.50	22 / 6.50	20 / 22	13.60	20.40	7.5	10	12.5	0	50	1009610000
VG PG16-MS54	PG 16	7.50-15.00	27 / 6.50	22 / 24	15.00	22.50	7.5	10	12.5	15	50	1009620000
VG PG21-MS54	PG 21	10.00-19.00	29.5 / 7.00	28 / 30	18.87	28.30	10	13	16	19	25	1009630000
VG PG29-MS54	PG 29	18.00-27.00	33 / 8.00	37 / 40	24.67	37.00	18	21	24	27	25	1009640000
VG PG36-MS54	PG 36	24.00-33.00	39 / 9.00	47 / 50	31.33	47.00	24	27	30	33	10	1009650000
VG PG42-MS54	PG 42	30.00-39.00	44 / 10.00	54 / 57	36.00	54.00	30	33	36	39	5	1009670000

Note It is possible to connect cables with diameters ranging from D1 to D4.

Cable glands - Brass - ZE



Brass cable glands with external, centrally positioned strain relief provided by the clamping jaws.



Technical data

Material	Brass, nickel-plated
Seal insert	NBR
Temperature range	-20 °C...80 °C
Degree of protection	IP 54

Note Optional sealing ring
Length „L“ varies depending on the cable diameter used.

Ordering data

Type	Thread	KB	L/L1	SW1/SW2	TRQ CN, min.	TRQ CN, max.	TRQ BO, min.	TRQ BO, max.	Qty.	Order No.
metric										
VG M16-MS54 ZE	M 16 x 1.5	4.00-10.00	26 / 6.00	18 / 19	6.67	6.67	10.00	10.00	100	1778440000
VG M20-MS54 ZE	M 20 x 1.5	6.50-12.50	26.5 / 6.50	20 / 22	8.00	8.00	12.00	12.00	50	1778450000
VG M20-MS54 ZE	M 20 x 1.5	6.50-12.50	26.5 / 6.50	22 / 22	8.00	8.00	12.00	12.00	50	1778460000
VG M25-MS54 ZE	M 25 x 1.5	9.00-19.00	29.5 / 7.00	30 / 34	8.00	8.00	12.00	12.00	50	1778480000
VG M32-MS54 ZE	M 32 x 1.5	17.00-27.00	33 / 8.00	40 / 42	12.00	12.00	18.00	18.00	25	1778490000
VG M40-MS54 ZE	M 40 x 1.5	23.00-33.00	33 / 8.00	50 / 52	12.00	12.00	18.00	18.00	25	1778500000
VG M50-MS54 ZE	M 50 x 1.5	29.00-39.00	43 / 9.00	57 / 59	13.33	13.33	20.00	20.00	5	1778520000
VG M63-MS54 ZE	M 63 x 1.5	35.00-45.00	45 / 10.00	66 / 64	13.33	13.33	20.00	20.00	5	1778530000
PG										
VG 9-MS54-ZE	PG 9	4.00-10.00	30.5 / 6.00	17 / 19	10.13	10.13	15.20	15.20	50	1718810000
VG 11-MS54-ZE	PG 11	6.50-12.50	31.5 / 6.00	20 / 22	12.40	12.40	18.60	18.60	50	1718820000
VG 13.5-MS54-ZE	PG 13.5	6.50-12.50	32 / 6.50	22 / 24	13.60	13.60	20.40	20.40	50	1718830000
VG 16-MS54-ZE	PG 16	6.50-15.00	33 / 6.50	24 / 27	15.00	15.00	22.50	22.50	50	1718840000
VG 21-MS54-ZE	PG 21	9.00-19.00	38 / 7.00	30 / 34	18.87	18.87	28.30	28.30	50	1718850000
VG 29-MS54-ZE	PG 29	17.00-27.00	43 / 8.00	40 / 42	24.67	24.67	37.00	37.00	25	1718860000
VG 36-MS54-ZE	PG 36	23.00-33.00	49.5 / 9.00	50 / 52	31.33	31.33	47.00	47.00	10	1718870000
VG 42-MS54-ZE	PG 42	29.00-39.00	53.5 / 10.00	57 / 62	36.00	36.00	54.00	54.00	5	1718880000
VG 48-MS54-ZE	PG 48	35.00-45.00	55 / 10.00	64 / 68	39.53	39.53	59.30	59.30	5	1718890000

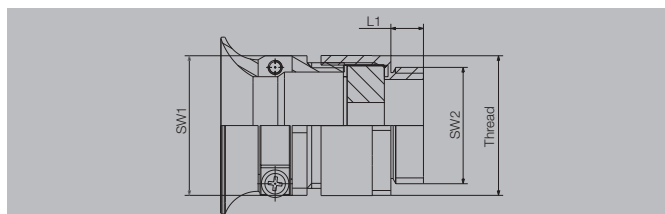
Note Further versions on request

Standard cable glands - Brass

Cable glands with strain-relief and bending protection



Industrial brass cable glands with strain-relief and bending protection for connecting non-stationary cables and lines.



Technical data

Material	Brass, nickel-plated
Seal insert	NBR
Temperature range	-20 °C...80 °C
Degree of protection	IP 54

Note

Ordering data

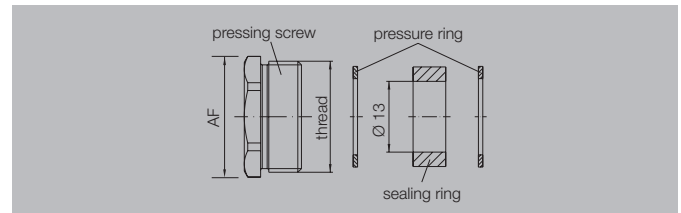
Type	Thread	KB	L/L1	SW1/SW2	TRQ CN, min.	TRQ CN, max.	TRQ BO, min.	TRQ BO, max.	Qty.	Order No.
metric										
VGM16-MS54ZE	M 16 x 1.5	4.00-10.00	5 / 5.00	17 / 18	2.50	2.50	4.00	4.00	50	1005190000
VGM16-MS54ZE	M 16 x 1.5	6.50-12.50	34 / 5.00	17 / 18	2.50	2.50	4.00	4.00	50	1005200000
VGM20-MS54ZE	M 20 x 1.5	6.50-12.50	37.8 / 6.00	22 / 22	8.00	8.00	12.00	12.00	50	1005210000
VGM20-MS54ZE	M 20 x 1.5	6.50-15.00	37.8 / 6.00	22 / 22	8.00	8.00	12.00	12.00	50	1005220000
VGM25-MS54ZE	M 25 x 1.5	9.00-19.00	44 / 7.00	30 / 30	8.00	8.00	12.00	12.00	25	1005230000
VGM32-MS54ZE	M 32 x 1.5	17.00-27.00	50.8 / 8.00	41 / 40	12.00	12.00	18.00	18.00	25	1005240000

Note

Brass clamping screws - IP54



These special cable glands are designed for use in HDC RockStar® bases and hoods.



Technical data

Clamping screw material	Nickel-plated brass
Sealing ring material	SBR/NBR
Pressure ring material	Polyamide
Temperature range	-20 °C...60 °C

Note

Ordering data

Type	Thread	Inserts in mm	SW	Qty.	Order No.
metric					
VG H M20 MS	M 20 x 1.5	4 / 7 / 10 / 13	20	50	1921720000
VG H M25 MS	M 25 x 1.5	8.5 / 11.5 / 14.5 / 18	25	25	1921740000
VG H M32 MS	M 32 x 1.5	16 / 19 / 22 / 25	32	20	1921760000
VG H M40 MS	M 40 x 1.5	23 / 26 / 29 / 32	40	10	1921770000
PG					
KV 11-M	PG 11	7.5 / 10 / 12.5	10	10	1656390000
KV 13-M	PG 13	7.5 / 10 / 12.5	10	10	1656400000
KV 16-M	PG 16	7.5 / 10 / 12.5 / 15	10	10	1656410000
KV 21-M	PG 21	10 / 13 / 16 / 19	10	10	1656420000
KV 29-M	PG 29	18 / 21 / 24 / 27	10	10	1656430000

Note

Standard cable glands - Brass

Cable glands HQ



Cable glands specifically for the HQ series, in plastic. Available as brass and brass-EMC versions.

Technical data

Material	PA 6 / Brass, nickel-plated
Seal insert	TPE-V
Temperature range	-40 °C...100 °C
Degree of protection	IP 68

Note

Ordering data

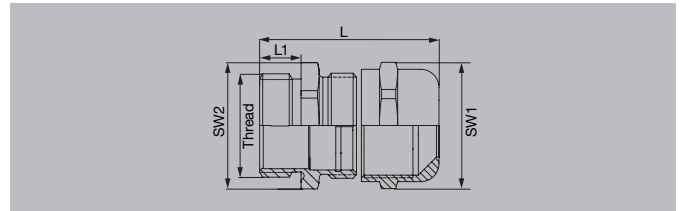
Type	Thread	KB	SW	Qty.	Order No.
Plastic					
VG 16 HQ K68 9-13	PG 16	9.00-13.00	27	1	1016070000
VG 16 HQ K68 11.5-15.5	PG 16	11.50-15.50	27	1	1016080000
Brass					
VG 21 HQ MS68 9-13	PG 21	9.00-13.00	30	1	1016090000
VG 21 HQ MS68 11.5-15.5	PG 21	11.50-15.50	30	1	1016100000
VG 21 HQ MS68 14-18	PG 21	14.00-18.00	30	1	1016110000
EMC					
VG 21 HQ EMV68 11-15.5	PG 21	11.00-15.50	30	1	1016120000
VG 21 HQ EMV68 14-18	PG 21	14.00-18.00	30	1	1016130000
Only for angled HQ base housing (order number 1003110000)					
VG16 HQ K68 9-12SH	PG 16	9.00-12.00	30	50	1045530000
VG16 HQ K68 11.5-15.5SH	PG 16	11.50-15.50	30	50	1045540000

Note

Cable glands - Brass - IP68



Standard brass cable glands for industrial applications that require IP68 protection.



Technical data

Material	Brass, nickel-plated
O-ring / Seal insert	NBR / CR
Temperature range	-40 °C...100 °C
Clamp insert	Polyamide
Degree of protection with thread gasket	IP 68 - 5 bar

Note Length „L“ varies according to cable diameter used

Ordering data

Type	Thread	L/L1	SW	TRQ CN, min.	TRQ CN, max.	TRQ BO, min.	TRQ BO, max.	Qty.	Order No.
metric									
VG M16-1/MS68	M 16 x 1.5	28 / 5.50	17	2.50	2.50	3.80	3.80	50	1772210000
VG M16-1/MS68	M 16 x 1.5	37.3 / 7.00	20	12.00	12.00	10.00	10.00	50	1909910000
VG M20-1/MS68	M 20 x 1.5	32 / 8.00	22	2.50	2.50	3.80	3.80	50	1772220000
VG M25-1/MS68	M 25 x 1.5	35 / 7.00	30	12.00	12.00	7.50	7.50	25	1772230000
VG M25-1/MS68	M 25 x 1.5	42 / 8.00	27	20.00	20.00	14.00	14.00	25	1909920000
VG M32-1/MS68	M 32 x 1.5	39 / 8.00	34	12.00	12.00	7.50	7.50	25	1772240000
VG M32-1/MS68	M 32 x 1.5	45 / 8.00	34	20.00	20.00	20.00	20.00	20	1909930000
VG M40-1/MS68	M 40 x 1.5	53 / 8.00	44	12.00	12.00	7.50	7.50	20	1772250000
VG M40-1/MS68	M 40 x 1.5	55.1 / 9.00	43	20.00	20.00	20.00	20.00	20	1909940000
VG M50-1/MS68	M 50 x 1.5	62.2 / 9.00	58	20.00	20.00	20.00	20.00	12	1909950000
VG M63-1/MS68	M 63 x 1.5	63.6 / 14.00	64	20.00	20.00	20.00	20.00	12	1772270000
PG (IP 69K)									
VG 9-MS68	PG 9	27 / 6.00	17	12.00	12.00	10.00	10.00	50	1569070000
VG 11-MS68	PG 11	28.5 / 6.00	20	12.00	12.00	10.00	10.00	50	1569080000
VG 13.5-MS68	PG 13.5	29.5 / 6.50	22	14.00	14.00	12.00	12.00	50	1569090000
VG 16-MS68	PG 16	29.5 / 6.50	24	14.00	14.00	14.00	14.00	25	1569100000
VG 21-MS68	PG 21	33.5 / 7.00	30	18.00	18.00	16.00	16.00	25	1569110000
PG (IP 68)									
VG 29-MS68	PG 29	37.5 / 8.00	40	20.00	20.00	20.00	20.00	20	1569120000
VG 36-MS68	PG 36	45 / 10.00	50	20.00	20.00	20.00	20.00	15	1569130000
VG 42-MS68	PG 42	47.5 / 12.00	58	20.00	20.00	20.00	20.00	12	1569140000
VG 48-MS68	PG 48	50.5 / 14.00	64	20.00	20.00	20.00	20.00	12	1718790000

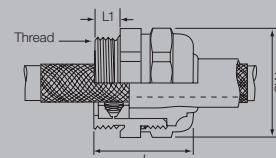
Note Further versions on request

EMC cable glands

Cable glands - Brass - EMC



Brass cable glands for shielding against interference frequencies with a screening attenuation of up to 100 dB. Contact with cable shield by means of spring washer.



Technical data

Material	Brass, nickel-plated
O-Ring	NBR
Temperature range	-40 °C...135 °C
Degree of protection	IP 68 - 5 bar
Degree of protection with thread gasket	IP 68 - 10 bar
Clamp insert	TPE

Note Length „L“ varies according to cable diameter used

Ordering data

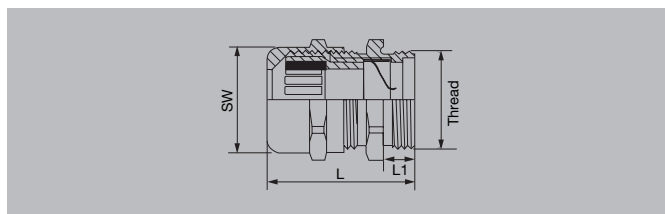
Type	Thread	KB	Shield Ø	L/L1	SW	TRQ CN, min.	TRQ CN, max.	TRQ BO, min.	TRQ BO, max.	Qty.	Order No.
metric											
VG EMV M20X1.5	M 20 x 1.5	8.00-11.00	4.00-8.50	41 / 10.00	24	9.00	10.00	9.00	9.00	50	1706940000
VG EMV M25X1.5	M 25 x 1.5	14.00-18.00	8.00-13.50	43 / 11.00	30	10.00	10.00	10.00	10.00	25	1706950000
PG											
VG EMV PG 9/11	PG 9	6.50-9.50	2.50-6.00	34 / 6.00	20	6.00	8.00	6.00	6.00	50	1706860000
VG EMV PG 11	PG 11	6.50-9.00	3.50-7.50	41 / 10.00	24	10.00	10.00	10.00	10.00	50	1706870000
VG EMV PG 13.5	PG 13.5	8.00-11.00	4.00-8.50	41 / 10.00	24	10.00	10.00	10.00	10.00	50	1706880000
VG EMV PG 16 K14	PG 16	10.00-14.00	8.00-13.00	43 / 11.00	30	10.00	10.00	10.00	10.00	25	1706890000
VG EMV PG 16 K18	PG 16	14.00-18.00	8.00-13.00	43 / 11.00	30	10.00	10.00	10.00	10.00	25	1713880000
VG EMV PG 21 K18	PG 21	17.00-18.00	12.50-17.50	45 / 11.00	35	10.00	15.00	10.00	10.00	10	1706900000
VG EMV PG K28	PG 21	17.00-20.00	12.50-17.50	45 / 11.00	35	8.00	15.00	8.00	8.00	10	1713890000
VG EMV PG 29 K26	PG 29	22.00-26.00	15.00-21.00	52 / 13.00	40	15.00	20.00	15.00	15.00	10	1706910000
VG EMV PG 29 K29	PG 29	25.00-29.00	22.00-25.00	58 / 13.00	50	20.00	20.00	20.00	20.00	5	1713900000
VG EMV PG36 K32-27	PG 36	27.00-32.00	24.00-30.50	54 / 9.00	50	15.00	30.00	15.00	15.00	10	1770410000

Note Further versions on request

Cable glands - Brass - 1/EMC



Brass cable glands for shielding against interference frequencies with a screening attenuation of up to 90 dB. Conical metal cage ensures multiple contacts with the cable shielding.



Technical data

Material	Brass, nickel-plated
O-ring / Seal insert	NBR / CR
Temperature range	-40 °C...100 °C
Degree of protection	IP 68 - 5 bar
Clamp insert	Polyamide

Note Length „L“ varies according to cable diameter used

Ordering data

Type	Thread	KB	L/L1	SW	TRQ CN, min.	TRQ CN, max.	TRQ BO, min.	TRQ BO, max.	Qty.	Order No.
metric										
VG M16-MS 1/EMV	M 16 x 1.5	4.50-10.00	37.3 / 7.00	20	5.00	7.00	8.00	10.00	50	1909500000
VG M20-MS 1/EMV	M 20 x 1.5	6.00-12.00	38.8 / 8.00	22	8.00	10.00	12.00	15.00	50	1909510000
VG M25-MS 1/EMV	M 25 x 1.5	11.00-17.00	42 / 8.00	27	6.00	8.00	9.00	12.00	25	1909520000
VG M32-MS 1/EMV	M 32 x 1.5	15.00-21.00	45 / 8.00	34	6.00	10.00	9.00	15.00	20	1909530000
VG M40-MS 1/EMV	M 40 x 1.5	19.00-28.00	55.1 / 9.00	43	7.00	10.00	10.00	15.00	10	1909540000
VG M50-MS 1/EMV	M 50 x 1.5	27.00-38.00	62.2 / 9.00	58	20.00	30.00	30.00	45.00	10	1909550000
VG M63-MS 1/EMV	M 63 x 1.5	34.00-44.00	71.5 / 14.00	64	23.00	28.00	30.00	40.00	5	1909560000

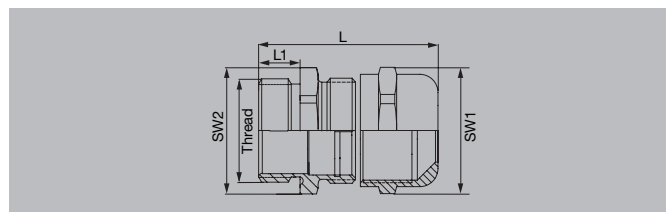
Note Further versions on request

Standard cable glands - Stainless steel

Cable glands - Stainless steel - IP68



Stainless steel cable glands for standard industrial applications that require a high (IP68) degree of protection. These cable glands – with their resistance to impact and sea water – are also suitable for use in applications under extreme environmental conditions.



Technical data

Material	Stainless steel
O-Ring / Seal insert	NBR / CR
Temperature range	-40 °C...100 °C
Degree of protection	IP68 - 5 bar (30 min)

Note

Ordering data

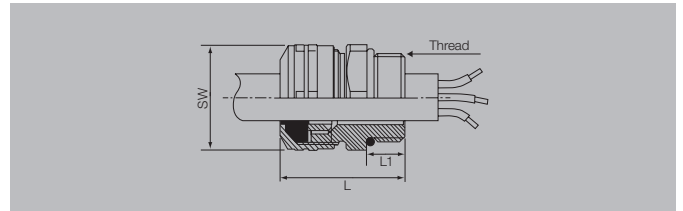
Type	Thread	KB	L/L1	SW	TRQ CN, min.	TRQ CN, max.	TRQ BO, min.	TRQ BO, max.	Qty.	Order No.
metric										
VGM16-SS 68 KB 4-8	M 16 x 1.5	4.00-8.00	7.00	18	8.00	10.00	15.00	12.00	50	1009850000
VGM20-SS 68 KB 6-12	M 20 x 1.5	6.00-12.00	8.00	22	12.00	15.00	22.00	16.00	50	1009860000
VGM25-SS 68 KB 10-14	M 25 x 1.5	10.00-14.00	8.00	27	15.00	20.00	30.00	22.00	25	1009870000
VGM32-SS 68 KB 13-18	M 32 x 1.5	13.00-18.00	9.00	34	28.00	35.00	50.00	40.00	20	1009880000
VGM40-SS 68 KB 18-25	M 40 x 1.5	18.00-25.00	9.00	43	30.00	40.00	60.00	45.00	20	1009890000
VGM50-SS 68 KB 22-32	M 50 x 1.5	22.00-32.00	9.00	55	35.00	45.00	60.00	50.00	12	1009900000
VGM63-SS 68 KB 34-44	M 63 x 1.5	34.00-44.00	14.00	68	45.00	55.00	70.00	60.00	10	1009910000
PG										
VG 9-SS 68 KB 4-8	PG 9	4.00-8.00	6.00	17	8.00	10.00	15.00	12.00	50	1009750000
VG 11-SS 68 KB 5-10	PG 11	5.00-10.00	6.00	22	10.00	13.00	20.00	15.00	50	1009760000
VG 13.5-SS 68 KB 6-12	PG 13.5	6.00-12.00	6.50	22	12.00	15.00	22.00	16.00	50	1009770000
VG 16-SS 68 KB 10-14	PG 16	10.00-14.00	6.50	24	15.00	20.00	30.00	22.00	25	1009780000
VG 21-SS 68 KB 13-18	PG 21	13.00-18.00	7.50	30	28.00	35.00	50.00	40.00	25	1009790000
VG 29-SS 68 KB 18-25	PG 29	18.00-25.00	8.00	40	30.00	40.00	60.00	45.00	20	1009800000
VG 36-SS 68 KB 22-32	PG 36	22.00-32.00	9.00	50	35.00	45.00	60.00	50.00	15	1009810000
VG 42-SS 68 KB 30-38	PG 42	30.00-38.00	12.00	58	40.00	50.00	70.00	55.00	12	1009820000
VG 48-SS 68 KB 34-44	PG 48	34.00-44.00	14.00	64	45.00	55.00	70.00	60.00	10	1009830000

Note

Cable glands - Brass - Ex e, IP 68



Brass nickel-plated cable glands for use in Ex zones Ex-e and Ex-i.



Technical data

Material	Brass, nickel-plated
O-ring / Seal insert	NBR / CR
Temperature range	-40 °C...100 °C
Degree of protection	IP 68 - 5 bar (30 min.)
Approval	Ex e II, II 2 GD

Note Length „L“ varies according to cable diameter used

Ordering data

Type	Thread	KB	L/L1	SW	TRQ CN, min.	TRQ CN, max.	TRQ BO, min.	TRQ BO, max.	Qty.	Order No.
metric										
VG M20-EXE MS	M 20 x 1.5	8.50-13.00	28 / 8.00	24	27.50	27.50	6.00	6.00	50	1737220000
VG M25-EXE MS	M 25 x 1.5	13.50-18.00	33 / 9.00	30	45.00	45.00	10.00	10.00	20	1737230000
VG M32-EXE MS	M 32 x 1.5	17.50-25.00	38 / 10.00	41	85.00	85.00	17.50	17.50	20	1737240000
NPT										
VG NPT 3/4" Eex-e MS	NPT 3/4"	13.50-18.00	24 / 16.00	30					1	1778150000

Note Further versions available on request
Suitable for the Heat Trace connector, Chapter G

Adaptors

Adaptors with NPT male threads



Adaptors can be used to connect threaded holes and cable glands of different thread sizes and types.

Technical data

Material	Brass, nickel-plated
Temperature range	-40 °C...100 °C
Degree of protection	IP 54
Degree of protection with thread gasket	IP 68
Approval	II 2 GD, Ex d IIC, Ex e II, Ex tD

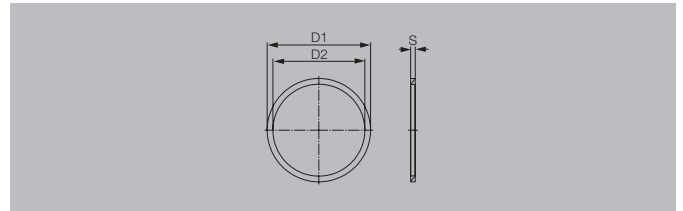
Ordering data

External thread	3/4" NPT
Inner thread	Order No.
M20	1737640000
M25	1737800000
M32	1737950000
1/2" NPT	1738400000
3/4" NPT	1738560000
Note	We recommend using sealing compound or tape Suitable for the Heat Trace connector, Chapter G

Flat IP washers - Standard - Polyethylene



Flat IP washers for increasing the degree of protection for cable glands and sealing plugs. The IP washer is also suitable as a replacement for O-rings.



Technical data

Material / Colour	Polyethylene / transparent
Temperature range	-30 °C...90 °C

Note

Ordering data

Type	Thread	D1	D2	S	Qty.	Order No.
metric						
GWDR M12-PO	M 12 x 1.5	16.00	12.00	1.50	50	1777920000
GWDR M16-PO	M 16 x 1.5	20.00	16.00	1.50	50	1777930000
GWDR M20-PO	M 20 x 1.5	25.00	20.40	2.00	100	1777940000
GWDR M25-PO	M 25 x 1.5	30.00	25.00	2.00	50	1777950000
GWDR M32-PO	M 32 x 1.5	38.00	32.00	2.00	50	1777960000
GWDR M40-PO	M 40 x 1.5	45.00	40.00	2.00	50	1777970000
GWDR M50-PO	M 50 x 1.5	56.00	50.00	2.00	50	1777980000
GWDR M63-PO	M 63 x 1.5	70.00	63.00	2.00	50	1777990000
PG						
GWDR PG7-PO	PG 7	16.50	12.50	1.60	100	1719440000
GWDR PG9-PO	PG 9	19.00	15.20	1.60	100	1719450000
GWDR PG11-PO	PG 11	22.50	18.60	1.80	100	1719460000
GWDR PG13.5-PO	PG 13.5	25.00	20.40	1.80	100	1719470000
GWDR PG16-PO	PG 16	27.00	22.50	1.80	100	1719480000
GWDR PG21-PO	PG 21	33.50	28.30	2.20	100	1719490000
GWDR PG29-PO	PG 29	43.50	37.00	2.20	50	1719500000
GWDR PG36-PO	PG 36	55.00	47.00	2.70	50	1719510000
GWDR PG42-PO	PG 42	63.00	54.00	3.20	10	1719520000
GWDR PG48-PO	PG 48	69.00	59.30	3.20	5	1719530000

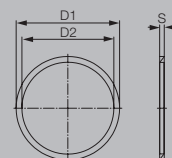
Note Further versions on request

Accessories - Flat IP washers

Flat IP washers - Standard - Neoprene



Flat IP washers for increasing the degree of protection for cable glands and sealing plugs – recommended for use in Ex applications. The IP washers are also suitable as a replacement for O-rings.



Technical data

Material / Colour	Neoprene / RAL 9005
Temperature range	-40 °C...100 °C

Note

Ordering data

Type	Thread	D1	D2	S	Qty.	Order No.
metric						
GWDR M12-NP	M 12 x 1.5	16.00	12.00	1.20	50	1913320000
GWDR M16-NP	M 16 x 1.5	22.00	16.00	1.20	50	1736230000
GWDR M20-NP	M 20 x 1.5	24.00	20.00	1.20	50	1736240000
GWDR M25-NP	M 25 x 1.5	30.00	25.00	1.50	50	1736250000
GWDR M32-NP	M 32 x 1.5	42.00	32.00	1.50	50	1736260000
GWDR M40-NP	M 40 x 1.5	52.00	40.00	1.50	20	1736270000
GWDR M50-NP	M 50 x 1.5	63.00	50.00	1.50	20	1736280000
GWDR M63-NP	M 63 x 1.5	77.00	63.00	2.00	10	1736290000
PG						
GWDR PG7-NP	PG 7	17.00	11.60	1.20	100	1719540000
GWDR PG9-NP	PG 9	21.00	14.00	1.20	100	1719550000
GWDR PG11-NP	PG 11	24.00	17.00	1.20	100	1719560000
GWDR PG13.5-NP	PG 13.5	27.00	19.50	1.20	100	1719570000
GWDR PG16-NP	PG 16	30.00	22.50	1.20	100	1719580000
GWDR PG21-NP	PG 21	35.00	28.30	1.50	100	1719590000
GWDR PG29-NP	PG 29	45.00	37.00	1.50	50	1719600000
GWDR PG36-NP	PG 36	60.00	47.00	1.50	20	1719610000
GWDR PG42-NP	PG 42	65.00	54.00	1.50	10	1719620000
GWDR PG48-NP	PG 48	71.00	59.30	1.50	5	1719630000

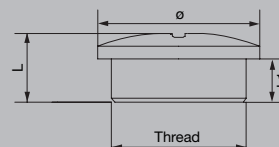
Note

Further versions on request

Sealing plugs - Plastic



Plastic sealing plugs with cross-heads are used to seal surplus threaded holes and to maintain the IP protection degree.



Technical data

Material / Colour	Polyamid 6 (PA6 - GF30) / RAL 7035
Temperature range	-40 °C...100 °C
Degree of protection	IP 54
Degree of protection with thread gasket	IP 65
Flammability rating	V-2

Note Optional sealing ring

Ordering data

Type	Thread	L	L1	Head Ø	TRQ BO, min.	TRQ BO, max.	Qty.	Order No.
metric								
VP M12 K54	M 12 x 1.5	10	6.00	15.00	0.50	0.50	100	1776930000
VP M16 K54	M 16 x 1.5	11.5	7.00	19.00	0.50	0.50	100	1776920000
VP M20 K54	M 20 x 1.5	12.5	7.50	22.00	1.00	1.00	100	1776910000
VP M25 K54	M 25 x 1.5	15	11.00	27.00	1.00	1.00	100	1776900000
VP M32 K54	M 32 x 1.5	16	11.00	34.00	1.00	1.00	100	1776940000
VP M40 K54	M 40 x 1.5	18	12.00	42.00	2.00	2.00	50	1776950000
VP M50 K54	M 50 x 1.5	20	13.00	52.00	2.00	2.00	25	1776960000
VP M63 K54	M 63 x 1.5	20	14.00	65.00	2.50	2.50	50	1776970000
PG								
VP 7-K54	PG 7	8	6.00	15.00	0.50	0.50	50	1719250000
VP 9-K54	PG 9	9	6.00	19.00	0.50	0.50	100	0294760000
VP 11-K54	PG 11	10.5	6.50	22.00	0.50	0.50	100	0294860000
VP 13.5-K54	PG 13.5	9.5	6.00	25.00	1.00	1.00	100	0294960000
VP 16-K54	PG 16	9.5	6.00	27.00	1.00	1.00	100	0295060000
VP 21-K54	PG 21	11	8.00	33.00	1.00	1.00	100	0295160000
VP 29-K54	PG 29	12	8.00	44.00	1.00	1.00	50	0501160000
VP 36-K54	PG 36	15	10.00	55.00	2.00	2.00	25	0501260000
VP 42-K54	PG 42	16	10.00	62.00	2.00	2.00	10	0501360000
VP 48-K54	PG 48	16	12.00	69.00	2.50	2.50	5	1719260000

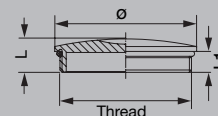
Note Further versions on request

Sealing plugs

Sealing plugs - Brass - Nickel-plated



Brass sealing plugs with cross-heads are used to seal surplus threaded holes and to maintain the IP protection degree.



Technical data

Material	Brass, nickel-plated
O-Ring	NBR
Temperature range	-30 °C...100 °C
Degree of protection with thread gasket	IP 68

Note

Ordering data

Type	Thread	L	L1	Head Ø	TRQ BO, min.	TRQ BO, max.	Qty.	Order No.
metric								
VP M12-MS65	M 12 x 1.5	7.4	5.00	14.00	8.00	8.00	100	1777720000
VP M16-MS65	M 16 x 1.5	8	5.00	18.00	10.00	10.00	100	1777730000
VP M20-MS65	M 20 x 1.5	9.4	6.50	22.00	12.00	12.00	100	1777740000
VP M25-MS65	M 25 x 1.5	10.8	7.00	28.00	12.00	12.00	100	1777750000
VP M32-MS65	M 32 x 1.5	11.6	8.00	35.00	18.00	18.00	50	1777760000
VP M40-MS65	M 40 x 1.5	12.3	8.00	44.00	18.00	18.00	50	1777770000
VP M50-MS65	M 50 x 1.5	15	9.00	54.00	20.00	20.00	25	1777780000
VP M63-MS65	M 63 x 1.5	18	10.00	67.00	20.00	20.00	10	1777790000
PG								
VP 7-MS65	PG 7	8	5.00	15.00	12.50	12.50	100	0521600000
VP 9-MS65	PG 9	8	5.00	18.00	15.20	15.20	100	0294700000
VP 11-MS65	PG 11	8	5.00	20.00	18.60	18.60	100	0294800000
VP 13.5-MS65	PG 13.5	9.5	5.50	22.00	20.40	20.40	100	0294900000
VP 16-MS65	PG 16	9	5.50	24.00	22.50	22.50	100	0295000000
VP 21-MS65	PG 21	11	6.00	30.00	28.30	28.30	100	0295100000
VP 29-MS65	PG 29	12	8.00	40.00	37.00	37.00	50	0501100000
VP 36-MS65	PG 36	15	9.00	50.00	47.00	47.00	25	0501200000
VP 42-MS65	PG 42	16	10.00	57.00	54.00	54.00	10	0501300000
VP 48-MS65	PG 48	16	10.00	64.00	59.30	59.30	5	1719270000

Note

Further versions on request

Weidmüller Services

Weidmüller Services

RockStar® individual services

V.2

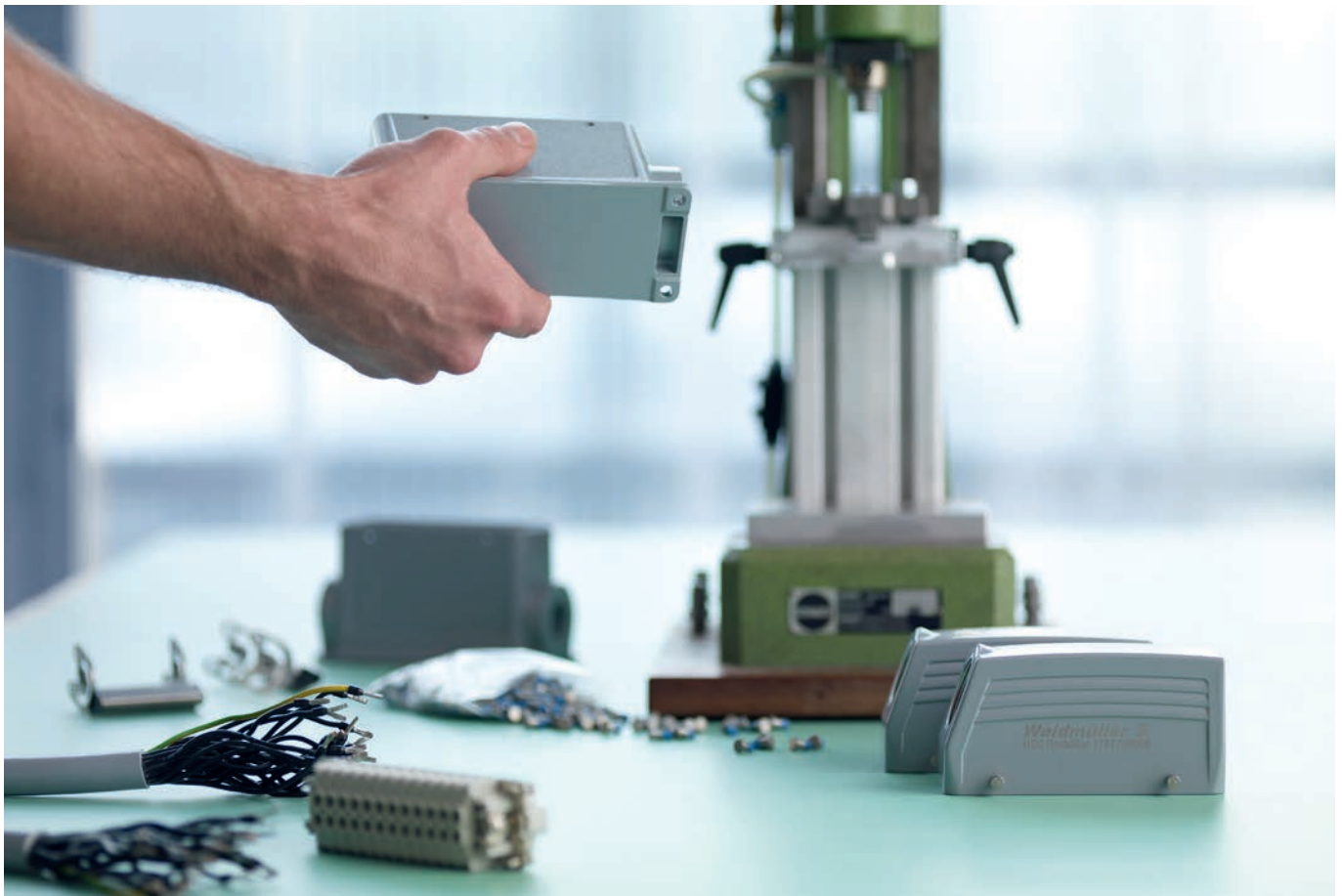
RockStar® individual services – Heavy duty connectors to match your specification

A wide array of options with RockStar®

RockStar® is a highly effective industrial, heavy duty connector range which has made “excellence” its minimum design standard. Now, all you have to do is decide how you wish to use this portfolio to your best advantage.

With our customer specific assembly service we can meet any of your requirements not covered by the standard RockStar® range. Do you need extra threads, special laser markings or a different RAL colour? No problem!

We will put everything you need together, exactly as specified by you - so that you end up with a custom solution that is guaranteed fit for purpose - completely pre-assembled, ready to use and with the power, dynamics and innovation you expect from all of our products.



Overview of services



Kitting

We can configure all individual connector components to meet your specific needs and provide you with a complete kit.

- One order number
- Demand-oriented delivery
- Minimal logistics costs



Housing colours

For large order quantities we are able to powder coat our RockStar® housings in the colour of your choice.

- Choice of numerous RAL colours
- Special colours on request
- Can be combined with customised laser marking



Housing adaptation

All of our housings can be designed to meet your specification needs.

- Inserting of holes and threads
- Enhanced wiring space
- You decide on the size, position and quantity of cable entries

Pre-assembled connectors

Looking for something extra? We are able to deliver ready-to-use connectors to meet your demands.

- You choose the type, length and number of cables
- Preparing, marking and connection of conductors
- Demand-based configuration from one single source



Laser marking of inserts

Laser marking is a unique service provided by Weidmüller.

- Connector inserts marked with your corporate logo, reference or individual article number
- Individual pole identification
- Wipe proof and UV resistant for durable markings



Laser marking of housings

Individualised housing markings offer you endless opportunities.

- Connector housings marked with your corporate logo, reference or individual article number
- Choose the type, size and position of the markings
- Wipe proof and UV resistant for durable markings



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HDC 07A ALU	1652410000	E.5	HDC 10B ADBO	1205600000	E.21	HDC 10B TOBU 1PG21G	1654240000	E.16	HDC 16B ABU	1208600000	B.39
HDC 07A ALU	1652410000	B.49	HDC 10B ADLU	1206500000	E.19	HDC 10B TOLU 1M25G	1787620000	E.18	HDC 16B ABU	1208600000	B.25
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HDC 07A AWLU	1652420000	E.5	HDC 10B DMDQ 2QB	1665240000	D.31	HDC 10B TSBU 1M20G	1787560000	D.31	HDC 16B DMDQ 2QB	1665270000	E.26
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HDC 07A DMDL 2B0	1665770000	B.49	HDC 10B DMDQ 2QB	1665240000	B.85	HDC 10B TSBU 1M20G	1787560000	B.85	HDC 16B DMDQ 2QB	1665270000	B.129
HDC 07A DMDL 2B0	1665760000	E.5	HDC 10B DMDQ 2QB	1665240000	B.73	HDC 10B TSBU 1M20G	1787560000	B.73	HDC 16B DMDQ 2QB	1665270000	B.127
HDC 07A DMDL 2B0	1665760000	B.49	HDC 10B DMDQ 2QB	1665240000	B.55	HDC 10B TSBU 1M20G	1787560000	B.55	HDC 16B DMDQ 2QB	1665270000	B.125
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HDC 07A ELU 1PG13G	1900990000	B.49	HDC 10B DMDQ 4B0	1665250000	E.21	HDC 10B TSBU 1M25G	1787550000	L.14	HDC 16B DMDQ 2QB	1665270000	B.119
HDC 07A ELU 1PG13G	1900990000	E.47	HDC 10B DODQ 2QB	1009080000	E.21	HDC 10B TSBU 1M25G	1787550000	L.12	HDC 16B DMDQ 2QB	1665270000	B.93
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HDC 07A KOLU 1PG11G	1652380000	E.5	HDC 10B DODQ 4B0	1665230000	B.117	HDC 10B TSBU 1M25G	1787550000	B.117	HDC 16B DMDQ 2QB	1665270000	B.39
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HDC 07A SLU 1M20G	1788530000	B.47	HDC 10B DODQ 4B0	1665230000	B.55	HDC 10B TSBU 1M25G	1787550000	B.55	HDC 16B DODQ 4B0	1009090000	E.31
HDC 07A SLU 1PG11S	1652440000	E.5	HDC 10B DODQ 4B0	1665230000	B.37	HDC 10B TSBU 1M25G	1787550000	B.37	HDC 16B DODQ 4B0	1665260000	E.27
HDC 07A TOLU 1M20G	1788520000	I.6	HDC 10B DODQ 4B0	1665230000	E.23	HDC 10B TSBU 1M25G	1787550000	E.23	HDC 16B DODQ 4B0	1665260000	D.35
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HDC 07A TOLU 1M20G	1788520000	E.4	HDC 10B KBU 1M20G	1787720000	D.31	HDC 10B TSBU 1PG21G	1654070000	I.13	HDC 16B DODQ 4B0	1665260000	B.129
HDC 07A TOLU 1M20G	1788520000	B.49	HDC 10B KBU 1M20G	1787720000	D.29	HDC 10B TSBU 1PG16G	1654070000	E.16	HDC 16B DODQ 4B0	1665260000	B.127
HDC 07A TOLU 1M20G	1788520000	B.47	HDC 10B KBU 1M20G	1787720000	B.117	HDC 10B TSBU 1PG21G	1654090000	E.16	HDC 16B DODQ 4B0	1665260000	B.125
HDC 07A TOLU 1PG11G	1652380000	I.7	HDC 10B KBU 1M20G	1787720000	B.85	HDC 10B TSLU 1M25G	1787580000	E.18	HDC 16B DODQ 4B0	1665260000	B.123
HDC 07A TOLU 1PG11G	1652380000	E.5	HDC 10B KBU 1M20G	1787720000	B.73	HDC 10B TSLU 1PG16G	1655210000	E.18	HDC 16B DODQ 4B0	1665260000	B.121
HDC 07A TOLU 1PG11G	1652380000	I.4	HDC 10B KBU 1M20G	1787720000	B.55	HDC 15A KLU 1PG21G	1664630000	E.13	HDC 16B DODQ 4B0	1665260000	B.119
HDC 07A TWLU 1M20G	1788510000	E.4	HDC 10B KBU 1M20G	1787720000	B.37	HDC 15A TSLU 1PG21G	1663990000	E.12	HDC 16B DODQ 4B0	1665260000	B.93
HDC 07A TWLU 1M20G	1788510000	B.49	HDC 10B KBU 1M20G	1787720000	B.23	HDC 15A TSLU 1M20G	1788860000	E.12	HDC 16B DODQ 4B0	1665260000	B.87
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HDC 07A TWLU 1PG11G	1652400000	E.4	HDC 10B KBU 1PG16G	1654580000	E.17	HDC 15A TSLU 1M20G	1788860000	B.11	HDC 16B DODQ 4B0	1665260000	B.59
HDC 10A ADLU	1664060000	E.13	HDC 10B KLU 1M20G	1787740000	E.19	HDC 15A TSLU 1M25G	1788850000	E.12	HDC 16B DODQ 4B0	1665260000	B.39
HDC 10A ADLU	1664060000	B.51	HDC 10B KLU 1M25G	1787730000	E.19	HDC 15A TSLU 1M25G	1788850000	B.51	HDC 16B DODQ 4B0	1665260000	B.25
HDC 10A ADLU	1664060000	B.11	HDC 10B KLU 1PG16G	1655890000	E.19	HDC 15A TSLU 1M25G	1788850000	B.11	HDC 16B KBU 1PG21G	1657270000	E.27
HDC 10A ALU	1664040000	E.13	HDC 10B SBU 1M20G	1901360000	E.17	HDC 15A TSLU 1PG16G	1663850000	E.12	HDC 16B KLU 1M25G	1788290000	E.29
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HDC 10A DMDL 2B0	1665880000	B.51	HDC 10B SBU 2M20G	1787640000	D.29	HDC 16A ADLU	1664920000	E.25	HDC 16B SBU 2M25G	1788240000	D.33
HDC 10A DMDL 2B0	1665880000	B.11	HDC 10B SBU 2M20G	1787640000	B.117	HDC 16A ADLU	1664920000	B.57	HDC 16B SBU 2M25G	1788240000	B.129
HDC 10A DMDL 1LB	1665890000	E.12	HDC 10B SBU 2M20G	1787640000	B.85	HDC 16A ADLU	1664920000	B.13	HDC 16B SBU 2M25G	1788240000	B.127
HDC 10A DMDL 1LB	1665890000	B.51	HDC 10B SBU 2M20G	1787640000	B.73	HDC 16A DMDL 2B0	1665910000	E.25	HDC 16B SBU 2M25G	1788240000	B.125
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HDC 10A KLU 1M25G	1788670000	E.13	HDC 10B SBU 2M20G	1787640000	B.37	HDC 16A DMDL 2B0	1665910000	B.13	HDC 16B SBU 2M25G	1788240000	B.121
HDC 10A KLU 1M25G	1788670000	B.51	HDC 10B SBU 2M20G	1787640000	B.23	HDC 16A DMDL 1LB	1665900000	E.24	HDC 16B SBU 2M25G	1788240000	B.119
HDC 10A KLU 1M25G	1788670000	B.11	HDC 10B SBU 2M25G	1787630000	E.17	HDC 16A DMDL 1LB	1665900000	B.57	HDC 16B SBU 2M25G	1788240000	B.93
HDC 10A KLU 1PG16G	1664560000	E.13	HDC 10B SBU 2M25G	1787630000	D.31	HDC 16A DODL 1LB	1665900000	B.13	HDC 16B SBU 2M25G	1788240000	B.87
HDC 10A KLU 2PG09G	1783250000	E.13	HDC 10B SBU 2M25G	1787630000	D.29	HDC 16A KLU 1M25G	1788800000	E.25	HDC 16B SBU 2M25G	1788240000	B.75
HDC 10A SDLU 1M20G	1901010000	E.13	HDC 10B SBU 2M25G	1787630000	B.117	HDC 16A KLU 1M25G	1788800000	B.57	HDC 16B SBU 2M25G	1788240000	B.59
HDC 10A SDLU 1M25G	1901040000	E.13	HDC 10B SBU 2M25G	1787630000	B.85	HDC 16A KLU 1M25G	1788800000	B.13	HDC 16B SBU 2M25G	1788240000	B.39
HDC 10A SDLU 1PG16G	1664410000	E.13	HDC 10B SBU 2M25G	1787630000	B.73	HDC 16A KLU 1PG16G	1665450000	E.25	HDC 16B SBU 2M25G	1788240000	B.25
HDC 10A SDLU 1M20G	1788660000	E.13	HDC 10B SBU 2M25G	1787630000	B.55	HDC 16A SDLU 2M20G	1788790000	E.25	HDC 16B SBU 2PG21G	1656730000	E.27
HDC 10A SDLU 2M20G	1788660000	B.11	HDC 10B SBU 2M25G	1787630000	B.37	HDC 16A SDLU 2M20G	1788790000	B.57	HDC 16B SDBO 1M25G	1900800000	E.31
HDC 10A SDLU 2M20G	1788660000	B.51	HDC 10B SBU 2M25G	1787630000	B.23	HDC 16A SDLU 2M20G	1788790000	B.13	HDC 16B SDBO 2M25G	1788260000	E.31
HDC 10A SDLU 2M25G	1788650000	E.13	HDC 10B SBU 2PG16G	1654380000	E.17	HDC 16A SDLU 2M25G	1788780000	E.25	HDC 16B SDBO 2PG21G	1657640000	E.31
HDC 10A SDLU 2M25G	1788650000	B.51	HDC 10B SDBO 1M20G	1901490000	E.21	HDC 16A SDLU 2M25G	1788780000	B.57	HDC 16B SDLU 1PG21G	1658320000	E.29
HDC 10A SDLU 2M25G	1788650000	B.11	HDC 10B SDBO 1M25G	1901510000	E.21	HDC 16A SDLU 2M25G	1788780000	B.13	HDC 16B SDLU 2M25G	1788270000	E.29
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HDC 10A SLU 1M25G	1901160000	E.13	HDC 10B SDBO 2PG16G	1655000000	E.21	HDC 16A SLU 2M20G	1788770000	E.25	HDC 16B SLU 1PG21G	1658110000	E.29
HDC 10A SLU 1PG16G	1664170000	E.13	HDC 10B SDLU 1M20G	1901570000	E.19	HDC 16A SLU 2M20G	1788770000	B.57	HDC 16B SLU 2M25G	1788250000	E.29
HDC 10A SLU 1PG21G	1664210000	E.13	HDC 10B SDLU 2M20G	1901700000	E.19	HDC 16A SLU 2M20G	1788770000	B.13	HDC 16B SLU 2PG21G	1658120000	E.29
HDC 10A SLU 2M20G	1788640000	E.13	HDC 10B SDLU 2PG16G	1655680000	E.19	HDC 16A SLU 2M25G	1788760000	E.25	HDC 16B TOBO 1M25G	1788220000	E.30
HDC 10A SLU 2M20G	1788640000	B.51	HDC 10B SLU 1M20G	1901620000	E.19	HDC 16A SLU 2M25G	1788760000	B.57	HDC 16B TOBO 1PG21G	1657490000	E.30
HDC 10A SLU 2M20G	1788640000	B.11	HDC 10B SLU 1M25G	1901640000	E.19	HDC 16A SLU 2M25G	1788760000	B.13	HDC 16B TOBU 1M25G	1788210000	I.18
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HDC 16B TSBU 1M25G	1788180000	B.127	HDC 24B DODQ 4B0	1665630000	B.131	HDC 24B TSB0 1PG29G	1661880000	E.40	HDC 24D TSLU 1M25G	1787280000	E.18
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HDC 16B TSBU 1M25G	1788180000	B.123	HDC 24B DODQ 4B0	1665630000	B.77	HDC 24B TSB0 1M25G	1787760000	D.39	HDC 24D TSLU 1PG21G	1655250000	E.18
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HDC 16B TSBU 1M25G	1788180000	B.119	HDC 24B DODQ 4B0	1665630000	B.41	HDC 24B TSB0 1M25G	1787760000	B.135	HDC 24D TSLU 1M25G	1903610000	E.22
HDC 16B TSBU 1M25G	1788180000	B.93	HDC 24B DODQ 4B0	1665630000	B.27	HDC 24B TSB0 1M25G	1787760000	B.133	HDC 24D TSLU 1PG21G	1968360000	E.22
HDC 16B TSBU 1M25G	1788180000	B.87	HDC 24B HP250 MPL2 TYP1	1103690000	J.14	HDC 24B TSB0 1M25G	1787760000	B.131	HDC 25A TOLL 1M20G	1788710000	E.24
HDC 16B TSBU 1M25G	1788180000	B.75	HDC 24B HP250 MPL2 TYP1	1103690000	C.7	HDC 24B TSB0 1M25G	1787760000	B.89	HDC 25A TOLL 1M20G	1788710000	B.57
HDC 16B TSBU 1M25G	1788180000	B.59	HDC 24B HP250 MPL2 TYP2	1103740000	J.14	HDC 24B TSB0 1M25G	1787760000	B.77	HDC 25A TOLL 1M20G	1788710000	B.13
HDC 16B TSBU 1M25G	1788180000	B.39	HDC 24B HP250 MPL2 TYP2	1103740000	C.7	HDC 24B TSB0 1M25G	1787760000	B.63	HDC 25A TOLL 1M25G	1788700000	E.24
HDC 16B TSBU 1M25G	1788180000	B.25	HDC 24B HP250 MPL3 TYP1	1079640000	J.14	HDC 24B TSB0 1M25G	1787760000	B.41	HDC 25A TOLL 1M25G	1788700000	B.57
HDC 16B TSBU 1M40G	1809620000	E.26	HDC 24B HP250 MPL3 TYP1	1079640000	C.7	HDC 24B TSB0 1M25G	1787760000	B.27	HDC 25A TOLL 1M25G	1788700000	B.13
HDC 16B TSBU 1PG21G	1656480000	L.28	HDC 24B HP250 MPL3 TYP2	1103750000	J.14	HDC 24B TSB0 1M32G	1787750000	L.22	HDC 25A TOLL 1PG21G	1664770000	E.24
HDC 16B TSBU 1PG21G	1656480000	L.19	HDC 24B HP250 MPL3 TYP2	1103750000	C.7	HDC 24B TSB0 1M32G	1787750000	L.20	HDC 25A TOLL 1M20G	1788680000	E.24
HDC 16B TSBU 1PG21G	1656480000	L.17	HDC 24B HP250 MPL4 TYP1	1160430000	J.14	HDC 24B TSB0 1M32G	1787750000	E.36	HDC 25A TOLL 1M20G	1788680000	B.57
HDC 16B TSBU 1PG21G	1656480000	E.26	HDC 24B HP250 MPL4 TYP1	1160430000	C.7	HDC 24B TSB0 1M32G	1787750000	D.39	HDC 25A TOLL 1M20G	1788680000	B.13
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HDC 16B TSLU 1M32G	1804640000	E.28	HDC 24B HP250 MPL4 TYP2	1160440000	C.7	HDC 24B TSB0 1M32G	1787750000	B.135	HDC 25A TOLL 1M25G	1788690000	B.57
HDC 16B TSLU 1PG21G	1657850000	E.18	HDC 24B HP250 MPL4PE T1	1212890000	J.14	HDC 24B TSB0 1M32G	1787750000	B.133	HDC 25A TOLL 1M25G	1788690000	B.13
HDC 16D KLU 1PG21G	1652330000	E.25	HDC 24B HP250 MPL4PE T1	1212890000	C.7	HDC 24B TSB0 1M32G	1787750000	B.131	HDC 25A TOLL 1PG16G	1664730000	E.24
HDC 16D SDLU 1M25G	1900820000	E.15	HDC 24B HP250 MPL4PE T2	1212910000	J.14	HDC 24B TSB0 1M32G	1787750000	B.89	HDC 25A TOLL 1PG21G	1664750000	E.24
HDC 16D SDLU 2M25G	1787540000	E.15	HDC 24B HP250 MPL4PE T2	1212910000	C.7	HDC 24B TSB0 1M32G	1787750000	B.77	HDC 32A ABU	1665860000	E.33
HDC 16D SDLU 2M25G	1787540000	B.115	HDC 24B HP550 MPL2 TYP1	1103710000	C.13	HDC 24B TSB0 1M32G	1787750000	B.63	HDC 32A ABU	1665860000	B.61
HDC 16D SLU 1M25G	1900880000	E.15	HDC 24B HP550 MPL2 TYP2	1103770000	C.13	HDC 24B TSB0 1M32G	1787750000	B.41	HDC 32A ABU	1665860000	B.15
HDC 16D SLU 1M32G	1900980000	E.15	HDC 24B HP550 MPL3 TYP1	1103720000	C.13	HDC 24B TSB0 1M32G	1787750000	B.27	HDC 32A ADB0	1666440000	E.34
HDC 16D SLU 2M25G	1787520000	E.15	HDC 24B HP550 MPL3 TYP2	1103780000	C.13	HDC 24B TSB0 1M40G	1902480000	E.36	HDC 32A DMDQ 20B	1665930000	E.32
HDC 16D SLU 2M25G	1787520000	B.115	HDC 24B KBU 1M25G	1787920000	E.37	HDC 24B TSB0 1PG21G	1661230000	L.23	HDC 32A DODQ 4B0	1665920000	E.33
HDC 16D SLU 2M32G	1787510000	E.15	HDC 24B KBU 1M25G	1787920000	D.39	HDC 24B TSB0 1PG21G	1661230000	L.21	HDC 32A KBU 1M25G	1788080000	E.33
HDC 16D SLU 2M32G	1787510000	B.115	HDC 24B KBU 1M25G	1787920000	D.37	HDC 24B TSB0 1PG21G	1661230000	E.36	HDC 32A KBU 1M25G	1788080000	B.61
HDC 16D SLU 2PG21G	1652840000	E.15	HDC 24B KBU 1M25G	1787920000	B.135	HDC 24B TSB0 1PG29G	1661240000	E.36	HDC 32A KBU 1M25G	1788080000	B.15
HDC 16D TOLL 1M25G	1787500000	E.14	HDC 24B KBU 1M25G	1787920000	B.133	HDC 24B TSLU 1M25G	1787800000	E.38	HDC 32A KBU 1M32G	1788070000	E.33
HDC 16D TOLL 1M25G	1787500000	D.27	HDC 24B KBU 1M25G	1787920000	B.131	HDC 24B TSLU 1M32G	1787790000	E.38	HDC 32A KBU 1M32G	1788070000	B.61
HDC 16D TOLL 1M25G	1787500000	D.25	HDC 24B KBU 1M25G	1787920000	B.89	HDC 24B TSLU 1PG21G	1662390000	E.38	HDC 32A KBU 1M32G	1788070000	B.15
HDC 16D TOLL 1M25G	1787500000	B.115	HDC 24B KBU 1M25G	1787920000	B.77	HDC 24B TSLU 1PG29G	1662410000	E.38	HDC 32A SBU 1M25G	1903870000	E.33
HDC 16D TOLL 1M25G	1787500000	B.71	HDC 24B KBU 1M25G	1787920000	B.63	HDC 24D KLU 1M25G	1787460000	E.19	HDC 32A SBU 1PG29G	1666010000	E.33
HDC 16D TOLL 1M25G	1787500000	B.53	HDC 24B KBU 1M25G	1787920000	B.41	HDC 24D KLU 1M32G	1787450000	E.19	HDC 32A SBU 2M25G	1788040000	E.33
HDC 16D TOLL 1M25G	1787500000	B.35	HDC 24B KBU 1M25G	1787920000	B.27	HDC 24D SBU 1M25G	1903210000	E.17	HDC 32A SBU 2M25G	1788040000	B.61
HDC 16D TOLL 1M25G	1787500000	B.21	HDC 24B KBU 1PG21G	1661720000	E.37	HDC 24D SBU 1M32G	1903220000	E.17	HDC 32A SBU 2M25G	1788040000	B.15
HDC 16D TOLL 1M32G	1787490000	E.14	HDC 24B KBU 1PG29G	1661730000	E.37	HDC 24D SBU 1PG29G	1654470000	E.17	HDC 32A SBU 2PG21G	1665980000	E.33
HDC 16D TOLL 1M32G	1787490000	D.27	HDC 24B KLU 1M25G	1968340000	E.39	HDC 24D SBU 2M25G	1787350000	E.17	HDC 32A SDB0 1M25G	1903900000	E.34
HDC 16D TOLL 1M32G	1787490000	D.25	HDC 24B SBU 1M25G	1901150000	E.37	HDC 24D SBU 2M32G	1787360000	E.17	HDC 32A SDB0 1M32G	1903910000	E.34
HDC 16D TOLL 1M32G	1787490000	B.115	HDC 24B SBU 1PG21G	1661510000	E.37	HDC 24D SBU 2PG21G	1654450000	E.17	HDC 32A SDB0 1PG21G	1666550000	E.34
HDC 16D TOLL 1M32G	1787490000	B.71	HDC 24B SBU 2M25G	1787870000	E.37	HDC 24D SDB0 1M25G	1903370000	E.21	HDC 32A SDB0 1PG29G	1666590000	E.34
HDC 16D TOLL 1M32G	1787490000	B.53	HDC 24B SBU 2M25G	1787870000	C.39	HDC 24D SDB0 2M25G	1787400000	E.21	HDC 32A SDB0 2M25G	1788060000	E.34
HDC 16D TOLL 1M32G	1787490000	B.35	HDC 24B SBU 2M25G	1787870000	D.37	HDC 24D SDLU 1M25G	1903410000	E.19	HDC 32A SDB0 2M32G	1788050000	E.34
HDC 16D TOLL 1M32G	1787490000	B.21	HDC 24B SBU 2M25G	1787870000	B.135	HDC 24D SDLU 1M32G	1903510000	E.19	HDC 32A TOB0 1M32G	1788010000	E.34
HDC 16D TOLL 1M32G	1787490000	E.14	HDC 24B SBU 2M25G	1787870000	B.133	HDC 24D SDLU 2M25G	1787420000	E.19	HDC 32A TOB0 1M32G	1787990000	E.32
HDC 16D TOLL 1PG21G	1652680000	E.14	HDC 24B SBU 2M25G	1787870000	B.131	HDC 24D SDLU 2M32G	1787410000	E.19	HDC 32A TOB0 1M32G	1787990000	B.61
HDC 16D TOLL 1PG29G	1652700000	E.14	HDC 24B SBU 2M25G	1787870000	B.89	HDC 24D SLU 1M32G	1903560000	E.19	HDC 32A TOB0 1M32G	1787990000	B.15
HDC 16D TSLU 1M25G	1787480000	E.14	HDC 24B SBU 2M25G	1787870000	B.77	HDC 24D SLU 2M32G	1787370000	E.19	HDC 32A TOB0 1PG21G	1665790000	E.32
HDC 16D TSLU 1M25G	1787480000	D.27	HDC 24B SBU 2M25G	1787870000	B.63	HDC 24D S20 2PG21G	1968350000	E.22	HDC 32A TOB0 1PG29G	1665810000	E.32
HDC 16D TSLU 1M25G	1787480000	D.25	HDC 24B SBU 2M25G	1787870000	B.41	HDC 24D TOB0 1PG29G	1654920000	E.21	HDC 32A TSB0 1M25G	1787980000	E.34
HDC 16D TSLU 1M25G	1787480000	B.115	HDC 24B SBU 2M25G	1787870000	B.27	HDC 24D TOB0 1M25G	1787300000	E.16	HDC 32A TSB0 1M32G	1787970000	E.34
HDC 16D TSLU 1M25G	1787480000	B.71	HDC 24B SBU 2PG21G	1661520000	E.37	HDC 24D TOB0 1M25G	1787300000	D.31	HDC 32A TSB0 1PG29G	1666270000	E.34
HDC 16D TSLU 1M25G	1787480000	B.35	HDC 24B SDB0 2PG21G	1662180000	E.40	HDC 24D TOB0 1M25G	1787300000	D.29	HDC 32A TSLU 1M25G	1787960000	E.32
HDC 16D TSLU 1M25G	1787480000	B.21	HDC 24B SDLU 1M25G	1901480000	E.39	HDC 24D TOB0 1M25G	1787300000	B.117	HDC 32A TSLU 1M32G	1787960000	B.61
HDC 16D TSLU 1M32G	1787470000	E.14	HDC 24B SDLU 2M25G	1787900000	E.39	HDC 24D TOB0 1M25G	1787300000	B.85	HDC 32A TSLU 1M25G	1787960000	B.15
HDC 16D TSLU 1M32G	1787470000	B.115	HDC 24B SDLU 2PG21G	1214500000	E.39	HDC 24D TOB0 1M25G	1787300000	B.73	HDC 32A TSLU 1M32G	1787950000	E.32
HDC 16D TSLU 1PG21G	1652660000	E.14	HDC 24B SLU 1M25G	1901560000	E.39	HDC 24D TOB0 1M25G	1787300000	B.55	HDC 32A TSLU 1M32G	1787950000	B.61
HDC 16D TSLU 1PG29G	1652580000	E.14	HDC 24B SLU 2M25G	1787880000	E.39	HDC 24D TOB0 1M25G	1787300000	B.37	HDC 32A TSLU 1M32G	1787950000	B.15
HDC 24B ABO	1967910000	E.40	HDC 24B SLU 2PG21G	1662720000	E.39	HDC 24D TOB0 1M25G	1787300000	B.23	HDC 32A TSLU 1PG21G	1665670000	E.32
HDC 24B ABU	1212400000	L.23	HDC 24B TOB0 1M32G	1787830000	E.40	HDC 24D TOB0 1M32G	1787290000	E.16	HDC 32A TSLU 1PG29G	1665690000	E.32
HDC 24B ABU	1212400000	L.22	HDC 24B TOB0 1PG29G	1662020000	E.40	HDC 24D TOB0 1M32G	1787290000	D.31	HDC 32B ABU	1217800000	L.25
HDC 24B ABU	1212400000	L.21	HDC 24B TOB0 1M25G	1787820000	E.36	HDC 24D TOB0 1M32G	1787290000	D.29	HDC 32B ABU	1217800000	L.24
HDC 24B ABU	1212400000	L.20	HDC 24B TOB0 1M25G	1787820000	D.39	HDC 24D TOB0 1M32G	1787290000	B.117	HDC 32B ABU	1217800000	E.45
HDC 24B ABU	1212400000	E.37	HDC 24B TOB0 1M25G	1787820000	D.37	HDC 24D TOB0 1M32G	1787290000	B.85	HDC 32B ADB0	1218800000	E.48
HDC 24B ABU	1212400000	D.39	HDC 24B TOB0 1M25G	1787820000	B.135	HDC 24D TOB0 1M32G	1787290000	B.73	HDC 32B ADLU	1219800000	E.47
HDC 24B ABU	1212400000	D.37	HDC 24B TOB0 1M25G	1787820000	B.133	HDC 24D TOB0 1M32G	1787290000	B.55	HDC 32B ADLU	1219800000	D.41
HDC 24B ABU	1212400000	B.135	HDC 24B TOB0 1M25G	1787820000	B.131	HDC 24D TOB0 1M32G	1787290000	B.37	HDC 32B ADLU	1219800000	B.95

Type	Order No.	Page	Type	Order No.	Page	Type	Order No.	Page	Type	Order No.	Page
HDC 32B SBLU 1M32G	1902650000	E.47	HDC 40D SBU 2PG21G	1656810000	E.27	HDC 48B ADLU	1222900000	L.27	HDC 64D SBU 2PG29G	1661630000	E.37
HDC 32B SBLU 2M32G	1788490000	E.47	HDC 40D SBU 2PG29G	1656840000	E.27	HDC 48B ADLU	1222900000	L.26	HDC 64D SDBO 1M32G	1904400000	E.40
HDC 32B SBLU 2M32G	1788490000	D.41	HDC 40D SBLU 1M25G	1903070000	E.29	HDC 48B ADLU	1222900000	E.49	HDC 64D SDBO 1PG29G	1662280000	E.40
HDC 32B SBLU 2M32G	1788490000	B.95	HDC 40D SBLU 1M32G	1903080000	E.29	HDC 48B ADLU	1222900000	D.43	HDC 64D SDBO 2M32G	1786920000	E.40
HDC 32B SBLU 2M32G	1788490000	B.79	HDC 40D SBLU 1PG29G	1658410000	E.29	HDC 48B ADLU	1222900000	B.81	HDC 64D SDLU 1M25G	1904430000	E.39
HDC 32B SBLU 2M32G	1788490000	B.65	HDC 40D SBLU 2M25G	1787180000	E.29	HDC 48B ADLU	1222900000	B.67	HDC 64D SDLU 1M32G	1904440000	E.39
HDC 32B SBLU 2M32G	1788490000	B.43	HDC 40D SBLU 2M32G	1787170000	E.29	HDC 48B ADLU	1222900000	B.31	HDC 64D SDLU 2M25G	1786950000	E.39
HDC 32B SBLU 2M32G	1788490000	B.29	HDC 40D SLU 1M32G	1903110000	E.29	HDC 48B SBLU 1M32G	1904150000	E.49	HDC 64D SDLU 2M32G	1786940000	E.39
HDC 32B SLU 1M32G	1902670000	E.47	HDC 40D SLU 2M32G	1804660000	E.29	HDC 48B SBLU 1PG29G	1799810000	E.49	HDC 64D SBLU 2PG29G	1663040000	E.39
HDC 32B SLU 2M32G	1788470000	E.47	HDC 40D TOBU 1PG29G	1657550000	E.30	HDC 48B SBLU 2M32G	1788390000	E.49	HDC 64D SLU 1M25G	1904480000	E.39
HDC 32B SLU 2M32G	1788470000	D.41	HDC 40D TOBU 1M25G	1787070000	E.26	HDC 48B SBLU 2M32G	1788390000	D.43	HDC 64D SLU 1M32G	1904490000	E.39
HDC 32B SLU 2M32G	1788470000	B.95	HDC 40D TOBU 1M25G	1787070000	D.35	HDC 48B SBLU 2M32G	1788390000	B.81	HDC 64D SLU 2M25G	1786910000	E.39
HDC 32B SLU 2M32G	1788470000	B.79	HDC 40D TOBU 1M25G	1787070000	D.33	HDC 48B SBLU 2M32G	1788390000	B.67	HDC 64D SLU 2M32G	1786900000	E.39
HDC 32B SLU 2M32G	1788470000	B.65	HDC 40D TOBU 1M25G	1787070000	B.129	HDC 48B SBLU 2M32G	1788390000	B.31	HDC 64D SZO 2PG29G	1968370000	E.41
HDC 32B SLU 2M32G	1788470000	B.43	HDC 40D TOBU 1M25G	1787070000	B.127	HDC 48B SBLU 2M40G	1983500000	E.49	HDC 64D TOBU 1PG21G	1662080000	E.40
HDC 32B SLU 2M32G	1788470000	B.29	HDC 40D TOBU 1M25G	1787070000	B.125	HDC 48B SBLU 2M50G	1983510000	E.49	HDC 64D TOBU 1PG29G	1662100000	E.40
HDC 32B TOBU 1M32G	1788430000	E.44	HDC 40D TOBU 1M25G	1787070000	B.123	HDC 48B SBLU 2PG29G	1667560000	E.49	HDC 64D TOBU 1M32G	1786830000	E.36
HDC 32B TOBU 1PG29G	1666870000	E.44	HDC 40D TOBU 1M25G	1787070000	B.121	HDC 48B SLU 1M32G	1904190000	E.49	HDC 64D TOBU 1M32G	1786830000	D.39
HDC 32B TOLU 1M32G	1788450000	E.46	HDC 40D TOBU 1M25G	1787070000	B.119	HDC 48B SLU 1PG29G	1651100000	E.49	HDC 64D TOBU 1M32G	1786830000	D.37
HDC 32B TOLU 1PG29G	1219300000	E.46	HDC 40D TOBU 1M25G	1787070000	B.93	HDC 48B SLU 2M32G	1788370000	E.49	HDC 64D TOBU 1M32G	1786830000	B.135
HDC 32B TSBO 1M32G	1788410000	E.46	HDC 40D TOBU 1M25G	1787070000	B.87	HDC 48B SLU 2M32G	1788370000	D.43	HDC 64D TOBU 1M32G	1786830000	B.133
HDC 32B TSBU 1M32G	1788400000	L.24	HDC 40D TOBU 1M25G	1787070000	B.75	HDC 48B SLU 2M32G	1788370000	B.81	HDC 64D TOBU 1M32G	1786830000	B.131
HDC 32B TSBU 1M32G	1788400000	E.44	HDC 40D TOBU 1M25G	1787070000	B.59	HDC 48B SLU 2M32G	1788370000	B.67	HDC 64D TOBU 1M32G	1786830000	B.89
HDC 32B TSBU 1PG29G	1666840000	L.25	HDC 40D TOBU 1M25G	1787070000	B.39	HDC 48B SLU 2M32G	1788370000	B.31	HDC 64D TOBU 1M32G	1786830000	B.77
HDC 32B TSBU 1PG29G	1666840000	E.44	HDC 40D TOBU 1M25G	1787070000	B.25	HDC 48B SLU 2M40G	1788360000	E.49	HDC 64D TOBU 1M32G	1786830000	B.63
HDC 32B TSLU 1M32G	1788420000	E.46	HDC 40D TOBU 1M32G	1787060000	E.26	HDC 48B SLU 2M40G	1788360000	D.43	HDC 64D TOBU 1M32G	1786830000	B.41
HDC 32B TSLU 1M32G	1788420000	D.41	HDC 40D TOBU 1M32G	1787060000	D.35	HDC 48B SLU 2M40G	1788360000	B.81	HDC 64D TOBU 1M32G	1786830000	B.27
HDC 32B TSLU 1M32G	1788420000	B.95	HDC 40D TOBU 1M32G	1787060000	D.33	HDC 48B TOLU 1M50G	1788360000	B.67	HDC 64D TOBU 1M40G	1045560000	E.36
HDC 32B TSLU 1M32G	1788420000	B.79	HDC 40D TOBU 1M32G	1787060000	B.129	HDC 48B TOLU 1M40G	1788360000	B.31	HDC 64D TOBU 1M50G	1111140000	E.36
HDC 32B TSLU 1M32G	1788420000	B.65	HDC 40D TOBU 1M32G	1787060000	B.127	HDC 48B TOLU 1M32G	1788350000	E.49	HDC 64D TOBU 1PG21G	1661440000	E.36
HDC 32B TSLU 1M32G	1788420000	B.43	HDC 40D TOBU 1M32G	1787060000	B.125	HDC 48B TOLU 1M32G	1788350000	D.43	HDC 64D TOBU 1PG29G	1661460000	E.36
HDC 32B TSLU 1M32G	1788420000	B.29	HDC 40D TOBU 1M32G	1787060000	B.123	HDC 48B TOLU 1M32G	1788350000	B.81	HDC 64D TOLU 1M32G	1008710000	E.36
HDC 32B TSLU 1PG29G	1667120000	E.46	HDC 40D TOBU 1M32G	1787060000	B.121	HDC 48B TOLU 1M32G	1788350000	B.67	HDC 64D TOLU 1M25G	1786870000	E.38
HDC 40D KBU 1M25G	1787200000	E.27	HDC 40D TOBU 1M32G	1787060000	B.119	HDC 48B TOLU 1M32G	1788350000	B.31	HDC 64D TOLU 1M32G	1786860000	E.38
HDC 40D KBU 1M25G	1787200000	D.35	HDC 40D TOBU 1M32G	1787060000	B.93	HDC 48B TOLU 1M40G	1788340000	E.49	HDC 64D TOLU 1M40G	1983470000	E.38
HDC 40D KBU 1M25G	1787200000	B.129	HDC 40D TOBU 1M32G	1787060000	B.87	HDC 48B TOLU 1M50G	1788330000	E.49	HDC 64D TOLU 1M50G	1111170000	E.38
HDC 40D KBU 1M25G	1787200000	B.127	HDC 40D TOBU 1M32G	1787060000	B.75	HDC 48B TOLU 1M50G	1788330000	D.43	HDC 64D TOLU 1PG21G	1662610000	E.38
HDC 40D KBU 1M25G	1787200000	B.125	HDC 40D TOBU 1M32G	1787060000	B.59	HDC 48B TOLU 1M50G	1788330000	B.81	HDC 64D TOLU 1PG29G	1662630000	E.38
HDC 40D KBU 1M25G	1787200000	B.123	HDC 40D TOBU 1M32G	1787060000	B.39	HDC 48B TOLU 1M50G	1788330000	B.67	HDC 64D TSBO 1M25G	1786800000	E.40
HDC 40D KBU 1M25G	1787200000	B.125	HDC 40D TOBU 1M32G	1787060000	B.25	HDC 48B TOLU 1M50G	1788330000	B.31	HDC 64D TSBO 1M32G	1786790000	E.40
HDC 40D KBU 1M25G	1787200000	B.121	HDC 40D TOBU 1PG21G	1656630000	E.26	HDC 48B TOLU 1PG29G	1650980000	E.49	HDC 64D TSBO 1PG21G	1661940000	E.40
HDC 40D KBU 1M25G	1787200000	B.119	HDC 40D TOBU 1PG29G	1656650000	E.26	HDC 48B TOLU 1PG36G	1651000000	E.49	HDC 64D TSBO 1PG29G	1661960000	E.40
HDC 40D KBU 1M25G	1787200000	B.93	HDC 40D TOLU 1M32G	1787100000	E.28	HDC 48B TSLU 1M32G	1788320000	E.49	HDC 64D TSBO 1M25G	1786780000	E.36
HDC 40D KBU 1M25G	1787200000	B.87	HDC 40D TOLU 1PG29G	1658020000	E.28	HDC 48B TSLU 1M32G	1788320000	D.43	HDC 64D TSBO 1M25G	1786780000	D.39
HDC 40D KBU 1M25G	1787200000	B.75	HDC 40D TSBO 1M25G	1657030000	E.30	HDC 48B TSLU 1M32G	1788320000	B.81	HDC 64D TSBO 1M25G	1786780000	D.37
HDC 40D KBU 1M25G	1787200000	B.59	HDC 40D TSBO 1M32G	1787020000	E.30	HDC 48B TSLU 1M32G	1788320000	B.67	HDC 64D TSBO 1M25G	1786780000	B.135
HDC 40D KBU 1M25G	1787200000	B.39	HDC 40D TSBO 1PG21G	1657420000	E.30	HDC 48B TSLU 1M32G	1788320000	B.31	HDC 64D TSBO 1M25G	1786780000	B.133
HDC 40D KBU 1M25G	1787200000	B.25	HDC 40D TSBU 1M25G	1787010000	E.26	HDC 48B TSLU 1M40G	1788310000	L.26	HDC 64D TSBO 1M25G	1786780000	B.131
HDC 40D KBU 1M32G	1787190000	E.27	HDC 40D TSBU 1M25G	1787010000	D.35	HDC 48B TSLU 1M40G	1788310000	E.49	HDC 64D TSBO 1M25G	1786780000	B.89
HDC 40D KBU 1M32G	1787190000	D.35	HDC 40D TSBU 1M25G	1787010000	D.33	HDC 48B TSLU 1M40G	1788310000	D.43	HDC 64D TSBO 1M25G	1786780000	B.77
HDC 40D KBU 1M32G	1787190000	D.33	HDC 40D TSBU 1M25G	1787010000	B.129	HDC 48B TSLU 1M40G	1788310000	B.81	HDC 64D TSBO 1M25G	1786780000	B.63
HDC 40D KBU 1M32G	1787190000	B.129	HDC 40D TSBU 1M25G	1787010000	B.127	HDC 48B TSLU 1M40G	1788310000	B.67	HDC 64D TSBO 1M25G	1786780000	B.41
HDC 40D KBU 1M32G	1787190000	B.125	HDC 40D TSBU 1M25G	1787010000	B.125	HDC 48B TSLU 1M40G	1788310000	B.31	HDC 64D TSBO 1M25G	1786780000	B.27
HDC 40D KBU 1M32G	1787190000	B.123	HDC 40D TSBU 1M25G	1787010000	B.123	HDC 48B TSLU 1M50G	1788300000	E.49	HDC 64D TSBO 1M32G	1786770000	E.36
HDC 40D KBU 1M32G	1787190000	B.121	HDC 40D TSBU 1M25G	1787010000	B.121	HDC 48B TSLU 1M50G	1788300000	D.43	HDC 64D TSBO 1M32G	1786770000	D.39
HDC 40D KBU 1M32G	1787190000	B.119	HDC 40D TSBU 1M25G	1787010000	B.119	HDC 48B TSLU 1M50G	1788300000	B.81	HDC 64D TSBO 1M32G	1786770000	B.135
HDC 40D KBU 1M32G	1787190000	B.93	HDC 40D TSBU 1M25G	1787010000	B.93	HDC 48B TSLU 1M50G	1788300000	B.67	HDC 64D TSBO 1M32G	1786770000	B.133
HDC 40D KBU 1M32G	1787190000	B.87	HDC 40D TSBU 1M25G	1787010000	B.87	HDC 48B TSLU 1M50G	1788300000	B.31	HDC 64D TSBO 1M32G	1786770000	B.131
HDC 40D KBU 1M32G	1787190000	B.75	HDC 40D TSBU 1M25G	1787010000	B.75	HDC 48B TSLU 1PG29G	1650850000	L.27	HDC 64D TSBO 1M32G	1786770000	B.89
HDC 40D KBU 1M32G	1787190000	B.65	HDC 40D TSBU 1M25G	1787010000	B.59	HDC 48B TSLU 1PG29G	1650850000	E.49	HDC 64D TSBO 1M32G	1786770000	B.77
HDC 40D KBU 1M32G	1787190000	B.59	HDC 40D TSBU 1M25G	1787010000	B.39	HDC 48B TSLU 1PG36G	1650860000	E.49	HDC 64D TSBO 1M32G	1786770000	B.63
HDC 40D KBU 1M32G	1787190000	B.39	HDC 40D TSBU 1M25G	1787010000	B.25	HDC 48B TSLU 1PG42G	1670470000	E.49	HDC 64D TSBO 1M32G	1786770000	B.41
HDC 40D KBU 1M32G	1787190000	B.25	HDC 40D TSBU 1M32G	1787000000	E.26	HDC 64D KBU 1M32G	1786960000	E.37	HDC 64D TSBO 1M32G	1786770000	B.27
HDC 40D KBU 1PG21G	1657310000	E.27	HDC 40D TSBU 1M32G	1787000000	D.35	HDC 64D KBU 1M32G	1786960000	D.39	HDC 64D TSBO 1M40G	1809630000	E.36
HDC 40D KBU 1PG29G	1967670000	E.27	HDC 40D TSBU 1M32G	1787000000	D.33	HDC 64D KBU 1M32G	1786960000	D.37	HDC 64D TSBO 1M50G	1111130000	E.36
HDC 40D KLU 1M25G	1787220000	E.29	HDC 40D TSBU 1M32G	1787000000	B.129	HDC 64D KBU 1M32G	1786960000	B.135	HDC 64D TSBO 1PG21G	1661300000	E.36
HDC 40D SBU 1M25G	1902970000	E.27	HDC 40D TSBU 1M32G	1787000000	B.127	HDC 64D KBU 1M32G	1786960000	B.131	HDC 64D TSBO 1PG29G	1661320000	E.36
HDC 40D SBU 1M32G	1902990000	E.27	HDC 40D TSBU 1M32G	1787000000	B.125	HDC 64D KBU 1M32G	1786960000	B.89	HDC 64D TSLU 1M32G	1786810000	E.38
HDC 40D SBU 1PG29G	1656830000	E.27	HDC 40D TSBU 1M32G	1787000000	B.123	HDC 64D KBU 1M32G	1786960000	B.77	HDC 64D TSLU 1M40G	1804610000	E.38
HDC 40D SBU 2M25G	1787120000	E.27	HDC 40D TSBU 1M32G	1787000000	B.121	HDC 64D KBU 1M32G	1786960000	B.63	HDC 64D TSLU 1M50G	1111150000	E.38
HDC 40D SBU 2M25G	1787120000	D.35	HDC 40D TSBU 1M32G	1787000000	B.119	HDC 64D KBU 1M32G	1786960000	B.31	HDC 64D TSLU 1PG21G	1662470000	E.38
HDC 40D SBU 2M25G	1787120000	D.33	HDC 40D TSBU 1M32G	1787000000	B.93	HDC 64D KBU 1M32G	1786960000	B.27	HDC		

Type	Order No.	Page	Type	Order No.	Page	Type	Order No.	Page	Type	Order No.	Page
HDC CM 3 FC	1758370000	D.4	HDC HA 16 MT	1896830000	B.12	HDC HE 16 MC 17-32	1216500000	B.28	HDC HP 250 F 95	1079770000	C.6
HDC CM 3 MC	1758360000	D.4	HDC HA 16 MT 17-32	1896840000	B.16	HDC HE 16 MP	1873570000	1.19	HDC HP 250 M 25	1079690000	J.6
HDC CM 5 FC	1758390000	D.7	HDC HA 16 MT 17-32	1896840000	B.14	HDC HE 16 MP	1873570000	1.18	HDC HP 250 M 25	1079690000	C.6
HDC CM 5 MC	1758380000	D.7	HDC HA 16 MT 33-48	1896850000	B.16	HDC HE 16 MP	1873570000	B.28	HDC HP 250 M 35	1079680000	J.6
HDC CM BUS 2BS T PBOP	1806030000	D.15	HDC HA 3 FS	1498200000	1.5	HDC HE 16 MP	1873570000	B.24	HDC HP 250 M 35	1079680000	C.6
HDC CM BUS 2SS PBOP	1806060000	D.15	HDC HA 3 FS	1498200000	1.4	HDC HE 16 MP 17-32	1875800000	B.28	HDC HP 250 M 50	1119080000	J.6
HDC CM BUS 4BS	1814300000	D.14	HDC HA 3 FS	1498200000	B.6	HDC HE 16 MS	1207500000	1.25	HDC HP 250 M 50	1119080000	C.6
HDC CM BUS 4SS	1814310000	D.14	HDC HA 3 MS	1498100000	1.5	HDC HE 16 MS	1207500000	1.24	HDC HP 250 M 50 PE	1220850000	C.6
HDC CM BUS HE F1 CT	1116090000	H.5	HDC HA 3 MS	1498100000	1.4	HDC HE 16 MS	1207500000	1.17	HDC HP 250 M 70	1119090000	J.6
HDC CM BUS HE F1 CT	1116090000	D.17	HDC HA 3 MS	1498100000	B.6	HDC HE 16 MS	1207500000	1.16	HDC HP 250 M 70	1119090000	C.6
HDC CM BUS HE M1 CT	1116100000	H.5	HDC HA 4 FS	1498400000	1.7	HDC HE 16 MS	1207500000	B.28	HDC HP 250 M 95	1119100000	J.6
HDC CM BUS HE M1 CT	1116100000	D.17	HDC HA 4 FS	1498400000	1.6	HDC HE 16 MS	1207500000	B.24	HDC HP 250 M 95	1119100000	C.6
HDC CM BUS SV F1 CT	1983800000	H.5	HDC HA 4 FS	1498400000	B.8	HDC HE 16 MS 17-32	1215700000	1.25	HDC HP 250 SHOCKPROTEC	1120130000	C.7
HDC CM BUS SV F1 CT	1983800000	D.17	HDC HA 4 MS	1498300000	1.7	HDC HE 16 MS 17-32	1215700000	1.24	HDC HP 550 F 120	1079820000	J.7
HDC CM BUS SV F2	1983720000	D.16	HDC HA 4 MS	1498300000	1.6	HDC HE 16 MS 17-32	1215700000	B.28	HDC HP 550 F 120	1079820000	C.12
HDC CM BUS SV F4 CT	1983770000	H.5	HDC HA 4 MS	1498300000	B.8	HDC HE 16 MT	1745840000	B.28	HDC HP 550 F 150	1079830000	J.7
HDC CM BUS SV F4 CT	1983770000	D.17	HDC HB 24 TEK AS M4	1827470000	F.15	HDC HE 16 MT	1745840000	B.24	HDC HP 550 F 150	1079830000	C.12
HDC CM BUS SV F8 CT	1043120000	H.5	HDC HB 24 TEK TOS1xM50G	1827170000	F.14	HDC HE 16 MT 17-32	1745860000	B.28	HDC HP 550 F 185	1079840000	J.7
HDC CM BUS SV F8 CT	1043120000	D.17	HDC HB 24 TEK TOS2xM40G	1020520000	F.14	HDC HE 24 FC	1211600000	B.30	HDC HP 550 F 185	1079840000	C.12
HDC CM BUS SV GCA F	1983820000	D.17	HDC HB 24 TEK TSS1xM40G	1009320000	F.14	HDC HE 24 FC	1211600000	B.26	HDC HP 550 F 240	1120600000	J.7
HDC CM BUS SV GCA M	1014080000	D.17	HDC HB 24 TEK TSS1xM50G	1827160000	F.14	HDC HE 24 FC 25-48	1226600000	B.30	HDC HP 550 F 240	1120600000	C.12
HDC CM BUS SV M1 CT	1983810000	H.5	HDC HD 15 FC	1650660000	B.50	HDC HE 24 FC	1873580000	1.23	HDC HP 550 F 50	1171700000	J.7
HDC CM BUS SV M1 CT	1983810000	D.17	HDC HD 15 MC	1650850000	B.50	HDC HE 24 FC	1873580000	1.22	HDC HP 550 F 50	1171700000	C.12
HDC CM BUS SV M2	1983750000	D.16	HDC HD 16 FC	1650720000	B.52	HDC HE 24 FC	1873580000	B.30	HDC HP 550 F 95	1079810000	J.7
HDC CM BUS SV M4 CT	1983790000	H.5	HDC HD 16 MC	1650710000	B.52	HDC HE 24 FC	1873580000	B.26	HDC HP 550 F 95	1079810000	C.12
HDC CM BUS SV M4 CT	1983790000	D.17	HDC HD 24 FC	1650890000	B.54	HDC HE 24 FC 25-48	1875850000	B.30	HDC HP 550 M 120	1079780000	J.7
HDC CM BUS SV M8 CT	1043130000	H.5	HDC HD 24 MC	1650870000	B.54	HDC HE 24 FS	1211300000	1.27	HDC HP 550 M 120	1079780000	C.12
HDC CM BUS SV M8 CT	1043130000	D.17	HDC HD 25 FC	1650820000	B.60	HDC HE 24 FS	1211300000	1.26	HDC HP 550 M 150	1119110000	J.7
HDC CM GUIDING PIN	1202660000	J.13	HDC HD 25 FC	1650820000	B.56	HDC HE 24 FS	1211300000	1.21	HDC HP 550 M 150	1119110000	C.12
HDC CM GUIDING SOCKET	1202670000	J.13	HDC HD 25 FC, Z"	1023050000	B.56	HDC HE 24 FS	1211300000	1.20	HDC HP 550 M 185	1120580000	J.7
HDC CM HE 4 FC	1861900000	D.5	HDC HD 25 MC	1650810000	B.60	HDC HE 24 FS	1211300000	B.30	HDC HP 550 M 185	1120580000	C.12
HDC CM HE 4 FC	1861920000	D.5	HDC HD 25 MC	1650810000	B.56	HDC HE 24 FS	1211300000	B.26	HDC HP 550 M 240	1120590000	J.7
HDC CM HV 3 MC	1862060000	D.9	HDC HD 25 MC, Z"	1023040000	B.56	HDC HE 24 FS 25-48	1221200000	1.27	HDC HP 550 M 240	1120590000	C.12
HDC CM HV 3 MC	1862080000	D.9	HDC HD 40 FC	1601730000	B.64	HDC HE 24 FS 25-48	1221200000	1.26	HDC HP 550 M 50	1157800000	J.7
HDC CM ST F	1157980000	D.21	HDC HD 40 FC	1601730000	B.58	HDC HE 24 FS 25-48	1221200000	B.30	HDC HP 550 M 50	1157800000	C.12
HDC CM ST M	1157970000	D.21	HDC HD 40 MC	1601710000	B.64	HDC HE 24 FT	1745790000	B.30	HDC HP 550 M 95	1079790000	J.7
HDC DG 06B	1044610000	J.25	HDC HD 40 MC	1601710000	B.58	HDC HE 24 FT	1745790000	B.26	HDC HP 550 M 95	1079790000	C.12
HDC DG 07A	1044580000	J.25	HDC HD 64 FC	1601740000	B.66	HDC HE 24 FT 25-48	1745810000	B.30	HDC HP 550 SHOCKPROTEC	1120140000	C.13
HDC DG 10A	1044590000	J.25	HDC HD 64 FC	1601740000	B.62	HDC HE 24 MC	1211500000	B.30	HDC HQ 7 CPF	1003220000	J.15
HDC DG 10B	1044620000	J.25	HDC HD 64 MC	1601720000	B.66	HDC HE 24 MC	1211500000	B.26	HDC HQ 7 CPF	1003220000	B.106
HDC DG 16A	1044600000	J.25	HDC HD 64 MC	1601720000	B.62	HDC HE 24 MC 25-48	1226400000	B.30	HDC HQ 7 CPM	1003230000	J.15
HDC DG 16B	1044630000	J.25	HDC HD 7 FC	1650580000	B.46	HDC HE 24 MP	1873590000	1.23	HDC HQ 7 CPM	1003230000	B.100
HDC DG 24B	1044650000	J.25	HDC HD 7 MC	1650570000	B.46	HDC HE 24 MP	1873590000	1.22	HDC HQ 17 FC	1003200000	B.104
HDC DG 32A	1044640000	J.25	HDC HD 8 FC	1650600000	B.48	HDC HE 24 MP	1873590000	B.30	HDC HQ 17 MC	1003210000	B.104
HDC DG 48A 32B	1044660000	J.25	HDC HD 8 MC	1650590000	B.48	HDC HE 24 MP	1873590000	B.26	HDC HQ 4/2 FC	1003160000	B.106
HDC DG 48B	1044670000	J.25	HDC HDD 108 FC	1651220000	B.80	HDC HE 24 MP 25-48	1875890000	B.30	HDC HQ 4/2 MC	1003170000	B.106
HDC FBS TOOL 13-50	8000015137	C.7	HDC HDD 108 FC	1651220000	B.76	HDC HE 24 MS	1211100000	1.27	HDC HQ 5 FC	1912460000	B.98
HDC FBS TOOL 13-50	8000015137	C.13	HDC HDD 108 FC 109-216	1651300000	B.80	HDC HE 24 MS	1211100000	1.26	HDC HQ 5 MC	1912440000	B.98
HDC FIXING SCREW 1 M3x6	1168850000	J.21	HDC HDD 108 MC	1651210000	B.80	HDC HE 24 MS	1211100000	1.21	HDC HQ 5 FC	1003180000	B.100
HDC FIXING SCREW M3x10	1029510000	J.21	HDC HDD 108 MC	1651210000	B.76	HDC HE 24 MS	1211100000	1.20	HDC HQ 7 MC	1003190000	B.100
HDC FLDG 04A	1044480000	J.25	HDC HDD 108 MC 109-216	1651280000	B.80	HDC HE 24 MS	1211100000	B.30	HDC HQ 8 FC	1919980000	B.102
HDC FLDG 06B	1044500000	J.25	HDC HDD 24 FC	1651160000	B.70	HDC HE 24 MS	1211100000	B.26	HDC HQ 8 MC	1919970000	B.102
HDC FLDG 10A	1044490000	J.25	HDC HDD 24 MC	1651150000	B.70	HDC HE 24 MS 25-48	1220800000	1.27	HDC HQM ALLU	1003050000	E.11
HDC FLDG 10B	1044510000	J.25	HDC HDD 42 FC	1651180000	B.72	HDC HE 24 MS 25-48	1220800000	1.26	HDC HQM ALLU	1003050000	B.105
HDC FLDG 16A	1044520000	J.25	HDC HDD 42 MC	1651170000	B.72	HDC HE 24 MS 25-48	1220800000	B.30	HDC HQM TOLL 1PG21	1003080000	E.10
HDC FLDG 16B	1044530000	J.25	HDC HDD 72 FC	1651200000	B.78	HDC HE 24 MT	1745850000	B.30	HDC HQM TOLL 1PG21	1003080000	B.105
HDC FLDG 24B	1044550000	J.25	HDC HDD 72 FC	1651200000	B.74	HDC HE 24 MT	1745850000	B.26	HDC HQM TOLL 1PG21	1003100000	E.10
HDC FLDG 32A	1044540000	J.25	HDC HDD 72 FC 73-144	1651260000	B.78	HDC HE 24 MT 25-48	1745870000	B.30	HDC HQM TOLL 1PG21	1003100000	B.105
HDC FLDG 32B	1044560000	J.25	HDC HDD 72 MC	1651190000	B.78	HDC HE 6 FC	1201000000	B.20	HDC HOP ALLU	1003040000	E.9
HDC FLDG 48B	1044570000	J.25	HDC HDD 72 MC	1651190000	B.74	HDC HE 6 FC	1873520000	1.11	HDC HOP ALLU	1003040000	B.107
HDC GRIP PANEL 8 SC	1934770000	J.21	HDC HDD 72 MC 73-144	1651240000	B.78	HDC HE 6 FP	1873520000	1.10	HDC HOP ALLU	1003040000	B.103
HDC HA 10 FC	1873860000	B.10	HDC HE 10 FC	1204400000	B.22	HDC HE 6 FP	1873520000	B.20	HDC HOP AWLU	1003060000	E.9
HDC HA 10 FS	1650620000	B.10	HDC HE 10 FP	1873540000	1.15	HDC HE 6 FS	1200200000	1.9	HDC HOP AWLU	1003060000	B.107
HDC HA 10 FT	1896780000	B.10	HDC HE 10 FP	1873540000	1.14	HDC HE 6 FS	1200200000	1.8	HDC HOP AWLU	1003060000	B.103
HDC HA 10 MC	1873870000	B.10	HDC HE 10 FP	1873540000	B.22	HDC HE 6 FS	1200200000	B.20	HDC HOP DMD 2B0	1003130000	E.11
HDC HA 10 MS	1650610000	B.10	HDC HE 10 FS	1204100000	1.13	HDC HE 6 FT	1745760000	B.20	HDC HOP DMD 2B0	1003130000	E.9
HDC HA 10 MT	1996790000	B.10	HDC HE 10 FS	1204100000	1.12	HDC HE 6 MC	1200400000	B.20	HDC HOP DMD 2B0	1003130000	B.107
HDC HA 16 FC	1873880000	B.16	HDC HE 10 FS	1204100000	B.22	HDC HE 6 MP	1873530000	1.11	HDC HOP DMD 2B0	1003130000	B.105
HDC HA 16 FC	1873880000	B.14	HDC HE 10 FT	1745770000	B.22	HDC HE 6 MP	1873530000	1.10	HDC HOP DMD 2B0	1003130000	B.103
HDC HA 16 FC	1873880000	B.12	HDC HE 10 MC	1204300000	B.22	HDC HE 6 MP	1873530000	B.20	HDC HOP DMD 2B0	1003140000	E.11
HDC HA 16 FC 17-32	1876040000	B.16	HDC HE 10 MP	1873550000	1.15	HDC HE 6 MS	1200000000	1.9	HDC HOP DMD 2B0	1003140000	E.9
HDC HA 16 FC 17-32	1876040000	B.14	HDC HE 10 MP	1873550000	1.14	HDC HE 6 MS	1200000000	1.8	HDC HOP DMD 2B0	1003140000	B.107
HDC HA 16 FC 33-48	1875540000	B.16	HDC HE 10 MP	1873550000	B.22	HDC HE 6 MS	1200000000	B.20	HDC HOP DMD 2B0	1003140000	B.105
HDC HA 16 FS	1650780000	B.16	HDC HE 10 MS	1203900000	1.13	HDC HE 6 MT	1745820000	B.20	HDC HOP DMD 2B0	1003140000	B.103
HDC HA 16 FS	1650780000	B.14	HDC HE 10 MS	1203900000	1.12	HDC HE CP	1003240000	J.15	HDC HOP KOLL 1PG16	1003120000	E.9
HDC HA 16 FS	1650780000	B.12	HDC HE 10 MS	1203900000	B.22	HDC HE CP	1003240000	B.102	HDC HOP KOLL 1PG16	1003120000	B.107
HDC HA 16 FS 17-32	1650900000	B.16	HDC HE 10 MT	1745830000	B.22	HDC HE CP	1003240000	B.98	HDC HOP KOLL 1PG16	1003120000	B.103
HDC HA 16 FS 17-32	1650900000	B.14	HDC HE 16 FC	1208000000	B.28	HDC HEE 10 BCM	1826840000	B.34	HDC HOP KOLL 1PG16	1003110000	E.9
HDC HA 16 FS 33-48	1651020000	B.16	HDC HE 16 FC	1208000000	B.24	HDC HEE 10 SCM	1826830000	B.34	HDC HOP KOLL 1PG16	1003110000	B.107
HDC HA 16 FT	1896800000	B.16	HDC HE 16 FC 17-32	1216700000	B.28	HDC HEE 18 BCM	1826820000	B.36	HDC HOP KOLL 1PG16	1003110000	B.103
HDC HA 16 FT	1896800000	B.14	HDC HE 16 FP	1873560000	1.19	HDC HEE 18 SCM	1826810000	B.36	HDC HOP TOLL 1PG16	1003070000	E.8
HDC HA 16 FT	1896800000	B.12	HDC HE 16 FP	1873560000	1.18	HDC HEE 32 BCM	1826800000	B.42	HDC HOP TOLL 1PG16	1003070000	B.107
HDC HA 16 FT 17-32	1896810000	B.16	HDC HE 16 FP	1873560000	B.28	HDC HEE 32 BCM	1826800000	B.38	HDC HOP TOLL 1PG16	1003070000	B.103
HDC HA 16 FT 1											

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HDC HVE 10+2 MS	1651350000	B.88	HDC IP68 16B TOS 2M25	1082780000	F.10	HDC SHIELD CLAMP 8.0	1912230000	J.20	HDC-CHE-BM4.0AG	1201500000	J.4
HDC HVE 10+2 MT C/H	1967210000	B.88	HDC IP68 16B TOS 2PG21	1082740000	F.10	HDC SHIELD CLAMP 9.0	1912240000	J.20	HDC-CHE-BM4.0AG	1201500000	H.6
HDC HVE 3+2 FS	1651320000	B.84	HDC IP68 16B TSS 1M32	1082800000	F.10	HDC SHIELD CLAMP 14.0	1002820000	J.20	HDC-CHE-BM4.0AU	1651510000	J.9
HDC HVE 3+2 FT C/H	1967220000	B.84	HDC IP68 16B TSS 1M40	1082810000	F.10	HDC SHIELD LEVER 3 SC	1867390000	J.16	HDC-CHE-BM4.0AU	1651510000	J.4
HDC HVE 3+2 MS	1651310000	B.84	HDC IP68 16B TSS 1M50	1082820000	F.10	HDC SHIELD LEVER 4 SC	1867370000	J.16	HDC-CHE-BM4.0AU	1651510000	H.6
HDC HVE 3+2 MT C/H	1967230000	B.84	HDC IP68 16B TSS 1PG21	1082830000	F.10	HDC SHIELD LEVER 6 SC	1867380000	J.16	HDC-CHE-BM4.65AU	1116530000	J.9
HDC HVE 6+2 FS	1651340000	B.86	HDC IP68 16B TSS 1PG29	1082840000	F.10	HDC SHIELD LEVER 8 LL	1011380000	J.17	HDC-CHE-BM4.65AU	1116530000	J.4
HDC HVE 6+2 FT C/H	1967240000	B.86	HDC IP68 16B TSS 1PG36	1082850000	F.10	HDC SHIELD LEVER 8 SC	1867360000	J.16	HDC-CHE-BM4.65AU	1116530000	H.6
HDC HVE 6+2 MS	1651330000	B.86	HDC IP68 24B AS	1081540000	F.13	HDC-CM-BUS-80.33-0.52	1027270000	H.6	HDC-CHE-BM4.65AU	1116530000	D.18
HDC HVE 6+2 MT C/H	1967250000	B.86	HDC IP68 24B COVER	1083090000	F.13	HDC-CM-BUS-80.33-0.52	1027270000	D.18	HDC-CHE-SM0.5AG	1200500000	J.9
HDC IP65 06B FRAME M4	1081550000	F.7	HDC IP68 24B FRAME M6	1110920000	F.13	HDC-CM-BUS-50.33-0.52	1027260000	H.6	HDC-CHE-SM0.5AG	1200500000	J.4
HDC IP65 10B FRAME M4	1081560000	F.9	HDC IP68 24B HP FRAME	1282820000	C.12	HDC-CM-BUS-50.33-0.52	1027260000	D.18	HDC-CHE-SM0.5AG	1200500000	H.6
HDC IP65 16B FRAME M4	1081570000	F.11	HDC IP68 24B HP FRAME	1282820000	C.6	HDC-CM-BUS-50.33-0.52	1027260000	J.10	HDC-CHE-SM0.5AG	1081420000	J.9
HDC IP65 24B FRAME M4	1081580000	F.13	HDC IP68 24B MD	1119950000	C.12	HDC-CM-BUS-14.0-3.7AG	1651570000	J.9	HDC-CHE-SM0.5AG	1651420000	J.4
HDC IP68 24B AS	1079920000	C.12	HDC IP68 24B MD	1119950000	C.7	HDC-CM-BUS-14.0-3.7AG	1651570000	J.4	HDC-CHE-SM0.5AG	1651420000	H.6
HDC IP68 24B ASS	1079920000	C.6	HDC IP68 24B MD 2M40	1119990000	C.12	HDC-CM-BUS-14.0-3.7AG	1651570000	H.5	HDC-CHE-SM0.75-1.00AG	1200600000	J.9
HDC IP68 24B MD 2M25	1120010000	C.12	HDC IP68 24B MD 2M40	1119990000	C.7	HDC-CM-BUS-14.0-3.7AU	1651670000	J.9	HDC-CHE-SM0.75-1.00AG	1200600000	J.4
HDC IP68 24B MD 2M25	1120010000	C.7	HDC IP68 24B MD 3M25	1079910000	C.12	HDC-CM-BUS-14.0-3.7AU	1651670000	J.4	HDC-CHE-SM0.75-1.00AG	1200600000	H.6
HDC IP68 24B MD 2M32	1120000000	C.12	HDC IP68 24B MD 3M25	1079910000	C.7	HDC-CM-BUS-14.0-3.7AU	1651670000	H.5	HDC-CHE-SM0.75-1.00AU	1651430000	J.9
HDC IP68 24B MD 2M32	1120000000	C.12	HDC IP68 24B MD 3M32	1119980000	C.12	HDC-CM-BUS-14.0-3.7AU	1651670000	J.9	HDC-CHE-SM0.75-1.00AU	1651430000	J.4
HDC IP68 24B MD 3M40	1119970000	C.7	HDC IP68 24B MD 3M32	1119980000	C.7	HDC-CM-BUS-14.0-3.7AU	1651670000	J.4	HDC-CHE-SM0.75-1.00AU	1651430000	H.6
HDC IP68 24B MD 3M40	1119970000	C.12	HDC IP68 24B MD 4M25 T1	11206450000	C.7	HDC-CM-BUS-14.0-3.7AU	1651670000	H.5	HDC-CHE-SM1.5AG	1200700000	J.9
HDC IP68 24B TO	1079930000	C.7	HDC IP68 24B MD 4M25 T2	1220890000	C.7	HDC-CM-BUS-14.0-3.7AU	1651680000	J.9	HDC-CHE-SM1.5AG	1200700000	J.4
HDC IP68 24B TO	1079930000	C.6	HDC IP68 24B SS	1081450000	F.13	HDC-CM-BUS-14.0-3.7AU	1651680000	J.4	HDC-CHE-SM1.5AG	1200700000	H.6
HDC IP68 04A ADS	1083130000	H.9	HDC IP68 24B SS 1M40	1081410000	F.13	HDC-CM-BUS-14.0-3.7AU	1651680000	H.5	HDC-CHE-SM1.5AG	1651440000	J.9
HDC IP68 04A ADS	1083130000	F.5	HDC IP68 24B SS 1PG36	1081430000	F.13	HDC-CM-BUS-14.0-3.7AU	1651680000	J.9	HDC-CHE-SM1.5AG	1651440000	J.4
HDC IP68 04A ADS 1PG13	1083120000	H.9	HDC IP68 24B SS 2M40	1081420000	F.13	HDC-CM-BUS-14.0-3.7AU	1651680000	J.4	HDC-CHE-SM1.5AG	1651440000	H.6
HDC IP68 04A ADS 1PG13	1083120000	F.5	HDC IP68 24B SS 2PG36	1081440000	F.13	HDC-CM-BUS-14.0-3.7AU	1651680000	H.5	HDC-CHE-SM2.5AG	1200800000	J.9
HDC IP68 04A AS	1081470000	H.9	HDC IP68 24B TOS 1M32	1082860000	F.12	HDC-CM-BUS-14.0-3.7AU	1651690000	J.9	HDC-CHE-SM2.5AG	1200800000	J.4
HDC IP68 04A AS	1081470000	F.5	HDC IP68 24B TOS 1M40	1082870000	F.12	HDC-CM-BUS-14.0-3.7AU	1651690000	J.4	HDC-CHE-SM2.5AG	1200800000	H.6
HDC IP68 04A AWS	1081490000	H.9	HDC IP68 24B TOS 1M50	1082880000	F.12	HDC-CM-BUS-14.0-3.7AU	1651690000	H.5	HDC-CHE-SM2.5AG	1651450000	J.9
HDC IP68 04A AWS	1081490000	F.5	HDC IP68 24B TOS 1PG21	1082900000	F.12	HDC-CM-BUS-14.0-3.7AU	1651690000	J.9	HDC-CHE-SM2.5AG	1651450000	J.4
HDC IP68 04A AWS 1M20	1081480000	H.9	HDC IP68 24B TOS 1PG29	1082920000	F.12	HDC-CM-BUS-14.0-3.7AU	1651690000	J.4	HDC-CHE-SM2.5AG	1651450000	H.6
HDC IP68 04A AWS 1M20	1081480000	F.5	HDC IP68 24B TOS 1PG36	1082930000	F.12	HDC-CM-BUS-14.0-3.7AU	1651690000	H.5	HDC-CHE-SM2.5AG	1200900000	J.9
HDC IP68 04A COVER	1083110000	H.9	HDC IP68 24B TOS 2M32	1082940000	F.12	HDC-CM-BUS-14.0-3.7AU	1651700000	J.9	HDC-CHE-SM2.5AG	1200900000	J.4
HDC IP68 04A COVER	1083110000	F.5	HDC IP68 24B TOS 2M40	1082950000	F.12	HDC-CM-BUS-14.0-3.7AU	1651700000	J.4	HDC-CHE-SM2.5AG	1200900000	H.6
HDC IP68 04A TOS 1M20	1082390000	H.8	HDC IP68 24B TOS 2PG29	1082910000	F.12	HDC-CM-BUS-14.0-3.7AU	1651700000	H.5	HDC-CHE-SM4.0AG	1651460000	J.9
HDC IP68 04A TOS 1M20	1082390000	F.4	HDC IP68 24B TOS 3M25	1082960000	F.12	HDC-CM-BUS-14.0-3.7AU	1651700000	J.9	HDC-CHE-SM4.0AG	1651460000	J.4
HDC IP68 04A TOS 1PG13	1082410000	H.8	HDC IP68 24B TSS 1M32	1082970000	F.12	HDC-CM-BUS-14.0-3.7AU	1651700000	J.4	HDC-CHE-SM4.0AG	1651460000	H.6
HDC IP68 04A TOS 1PG13	1082410000	F.4	HDC IP68 24B TSS 1M40	1082980000	F.12	HDC-CM-BUS-14.0-3.7AU	1651700000	H.5	HDC-CHE-SM4.65AU	1116540000	J.9
HDC IP68 06B AS	1081510000	F.7	HDC IP68 24B TSS 1M50	1082990000	F.12	HDC-CM-BUS-14.0-3.7AU	1651710000	J.9	HDC-CHE-SM4.65AU	1116540000	J.4
HDC IP68 06B COVER	1083060000	F.7	HDC IP68 24B TSS 1PG29	1083000000	F.12	HDC-CM-BUS-14.0-3.7AU	1651710000	J.4	HDC-CHE-SM4.65AU	1116540000	H.6
HDC IP68 06B FRAME M6	1110890000	F.7	HDC IP68 24B TSS 1PG36	1083010000	F.12	HDC-CM-BUS-14.0-3.7AU	1651710000	H.5	HDC-CHE-SM4.65AU	1116540000	D.18
HDC IP68 06B SS 2M20	1081250000	F.7	HDC IP68 HP24 A	1120040000	C.12	HDC-CM-BUS-14.0-3.7AU	1651710000	J.10	HDC-CM3-BM1.5AG	1698130000	J.8
HDC IP68 06B SS 1M20	1081180000	F.7	HDC IP68 HP24 A	1120040000	C.6	HDC-CM-BUS-14.0-3.7AG	1651520000	J.9	HDC-CM3-BM1.5AG	1698130000	D.9
HDC IP68 06B SS 1M25	1081190000	F.7	HDC KIT HA 0.40x2 M	1802700000	L.6	HDC-CM-BUS-14.0-3.7AG	1651520000	J.4	HDC-CM3-BM1.5AG	1698130000	D.4
HDC IP68 06B SS 1M32	1081210000	F.7	HDC KIT HA 0.40x6 M	1802720000	L.6	HDC-CM-BUS-14.0-3.7AG	1651520000	H.5	HDC-CM3-BM1.5AG	1698130000	J.8
HDC IP68 06B SS 1PG29	1081230000	F.7	HDC KIT HE 06.100 M	1802730000	L.8	HDC-CM-BUS-14.0-3.7AG	1651520000	J.9	HDC-CM3-BM1.0AG	1682310000	D.9
HDC IP68 06B SS 2M25	1081240000	F.7	HDC KIT HE 06.101 M	1802740000	L.8	HDC-CM-BUS-14.0-3.7AU	1651620000	J.4	HDC-CM3-BM1.0AG	1682310000	D.4
HDC IP68 06B SS 2M32	1081220000	F.7	HDC KIT HE-P 06.10	1027660000	L.11	HDC-CM-BUS-14.0-3.7AU	1651620000	H.5	HDC-CM3-BM2.5AG	1698150000	J.8
HDC IP68 06B SS 2PG29	1081260000	F.7	HDC KIT HE-P 06.10 M	1027650000	L.10	HDC-CM-BUS-14.0-3.7AU	1651620000	J.9	HDC-CM3-BM2.5AG	1698150000	D.9
HDC IP68 06B TOS 1M20	1082420000	F.6	HDC KIT HE-P 06.11 M	1061710000	L.11	HDC-CM-BUS-14.0-3.7AU	1651530000	J.4	HDC-CM3-BM2.5AG	1698150000	D.4
HDC IP68 06B TOS 1M25	1082430000	F.6	HDC KIT HE-P 06.11 M	1061720000	L.10	HDC-CM-BUS-14.0-3.7AU	1651530000	H.5	HDC-CM3-BM4.0AG	1682270000	J.8
HDC IP68 06B TOS 1M32	1082440000	F.6	HDC KIT HE-P 10.110	1027680000	L.15	HDC-CM-BUS-14.0-3.7AU	1651630000	J.9	HDC-CM3-BM4.0AG	1682270000	D.9
HDC IP68 06B TOS 1M40	1082450000	F.6	HDC KIT HE-P 10.110 M	1027670000	L.14	HDC-CM-BUS-14.0-3.7AU	1651630000	J.4	HDC-CM3-BM4.0AG	1682270000	D.4
HDC IP68 06B TOS 1PG16	1082460000	F.6	HDC KIT HE-P 10.111	1061730000	L.15	HDC-CM-BUS-14.0-3.7AU	1651630000	H.5	HDC-CM3-BM6.0AG	1682290000	J.8
HDC IP68 06B TOS 1PG21	1082470000	F.6	HDC KIT HE-P 10.111 M	1061740000	L.14	HDC-CM-BUS-14.0-3.7AU	1651630000	J.9	HDC-CM3-BM6.0AG	1682290000	D.9
HDC IP68 06B TOS 1PG29	1082480000	F.6	HDC KIT HE-P 16.120	1027640000	L.19	HDC-CM-BUS-14.0-3.7AU	1651630000	J.4	HDC-CM3-BM6.0AG	1682290000	D.4
HDC IP68 06B TSS 1M20	1082510000	F.6	HDC KIT HE-P 16.120 M	1027690000	L.18	HDC-CM-BUS-14.0-3.7AU	1651630000	H.5	HDC-CM3-BM1.5AG	1698120000	J.8
HDC IP68 06B TSS 1M25	1082530000	F.6	HDC KIT HE-P 16.121	1061750000	L.19	HDC-CM-BUS-14.0-3.7AU	1651640000	J.9	HDC-CM3-SM1.5AG	1698120000	D.9
HDC IP68 06B TSS 1M32	1082550000	F.6	HDC KIT HE-P 16.121 M	1061770000	L.18	HDC-CM-BUS-14.0-3.7AU	1651640000	J.4	HDC-CM3-SM1.5AG	1698120000	D.4
HDC IP68 06B TSS 1PG16	1082560000	F.6	HDC KIT HE-P 24.130	1061780000	L.23	HDC-CM-BUS-14.0-3.7AU	1651640000	H.5	HDC-CM3-SM1.0AG	1682300000	J.8
HDC IP68 06B TSS 1PG21	1082570000	F.6	HDC KIT HE-P 24.130 M	1061790000	L.22	HDC-CM-BUS-14.0-3.7AU	1651640000	J.9	HDC-CM3-SM1.0AG	1682300000	D.9
HDC IP68 10B AS	1081520000	F.9	HDC KIT HE-P 24.131	1061800000	L.23	HDC-CM-BUS-14.0-3.7AU	1651550000	J.4	HDC-CM3-SM1.0AG	1682300000	D.4
HDC IP68 10B COVER	1083070000	F.9	HDC KIT HE-P 24.131 M	1061800000	L.22	HDC-CM-BUS-14.0-3.7AU	1651550000	H.5	HDC-CM3-SM2.5AG	1698140000	J.8
HDC IP68 10B FRAME M6	1110900000	F.9	HDC PE HA SCREW M4x5.5	1025660000	J.21	HDC-CM-BUS-14.0-3.7AU	1651650000	J.9	HDC-CM3-SM2.5AG	1698140000	D.9
HDC IP68 10B SS 1M20	1081270000	F.9	HDC PE HD/ HDD/CF SCREW M4x6	1029440000	J.21	HDC-CM-BUS-14.0-3.7AU	1651650000	J.4	HDC-CM3-SM2.5AG	1698140000	D.4
HDC IP68 10B SS 1M32	1081280000	F.9	HDC PE HE SCREW M4x7.8	1025670000	J.21	HDC-CM-BUS-14.0-3.7AU	1651650000	H.5	HDC-CM3-SM4.0AG	1682280000	J.8
HDC IP68 10B SS 1PG29	1081290000	F.9	HDC PE HS/B/ S SCREW M5x8	1029470000	J.21	HDC-CM-BUS-14.0-3.7AU	1651650000	J.9	HDC-CM3-SM4.0AG	1682280000	D.9
HDC IP68 10B SS 2M20	1081310000	F.9	HDC PE S6/6 SCREW M4x8	1029520000	J.21	HDC-CM-BUS-14.0-3.7AU	1651650000	J.4	HDC-CM3-SM4.0AG	1682280000	D.4
HDC IP68 10B SS 2M32	1081320000	F.9	HDC S12/2 FC	1023330000	B.128	HDC-CM-BUS-14.0-3.7AU	1651650000	H.5	HDC-CM3-SM6.0AG	1682280000	J.8
HDC IP68 10B SS 2PG29	1081330000	F.9	HDC S12/2 MC	1023340000	B.128	HDC-CM-BUS-14.0-3.7AU	1651660000	J.9	HDC-CM3-SM6.0AG	1682280000	D.9
HDC IP68 10B TOS 1M20	1082580000	F.8	HDC S4 0 BAS	1789970000	B.118	HDC-CM-BUS-14.0-3.7AU	1651660000	J.4	HDC-CM3-SM6.0AG	1682280000	D.4
HDC IP68 10B TOS 1M25	1082590000	F.8	HDC S4 0 SAS	1789960000	B.118	HDC-CM-BUS-14.0-3.7AU	1651660000	H.5	HDC-CM5-BM0.5AG	1682330000	J.8
HDC IP68 10B TOS 1M32	1082610000	F.8	HDC S4 BAS	1789980000	B.114	HDC-CM-BUS-14.0-3.7AU	1201100000	J.9	HDC-CM5-BM0.5AG		

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KT 45 R	9202040000	K.5
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1014080000	HDC CM BUS SV GCA M	D.17
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1016080000	VG 16 HQ K68 11.5-15.5	L.12
1016090000	VG 21 HQ MS68 9-13	L.12
1016100000	VG 21 HQ MS68 11.5-15.5	L.12
1016110000	VG 21 HQ MS68 14-18	L.12
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1018120000	SHIELD CLAMP 4.5 WD S	J.20
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1021330000	HDC O6B KLU 1M25G	E.17
1021450000	HDC 10A ALU SL	E.13
1023040000	HDC HD 25 MC „Z“	B.56
1023050000	HDC HD 25 FC „Z“	B.56
1023210000	HDC S4/0 FS	B.120
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1044080000	HULSE REMOVAL TOOL CM 3	K.25
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1044100000	HULSE REMOVAL TOOL HD	K.25
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1082990000	HDC IP68 24B TSS 1M50	F.12
1083000000	HDC IP68 24B TSS 1PG29	F.12
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1103680000	HDC 06B HP250 MPL1	C.7
1103690000	HDC 24B HP250 MPL2 TYP1	J.14
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1103710000	HDC 24B HP550 MPL2 TYP1	C.13
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1103770000	HDC 24B HP550 MPL2 TYP2	C.13
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1110900000	HDC IP68 10B FRAME M6	F.9
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1116090000	HDC CM BUS HE F1 CT	H.5
1116090000	HDC CM BUS HE F1 CT	D.17
1116100000	HDC CM BUS HE M1 CT	H.5
1116100000	HDC CM BUS HE M1 CT	D.17
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1116540000	HDC-C-HE-SM4.65AU	H.4
1116540000	HDC-C-HE-SM4.65AU	J.6
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1118040000	PWZ RJ45	H.13
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1119030000	ERME 10_SPX 4	K.7
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1119080000	HDC HP 250 M 50	J.6
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1119090000	HDC HP 250 M 70	J.6
1119090000	HDC HP 250 M 70	C.6
1119100000	HDC HP 250 M 95	J.6
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1119110000	HDC HP 550 M 150	J.7
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1120000000	HDC IP68 24B MD 2M32	C.12
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1120580000	HDC HP 550 M 185	C.12
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1132020000	IE-PIRJ45-FH-B	H.12
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1137720000	HDC 04A CSB MALE	H.4
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1157800000	HDC HP 550 M 50	J.7
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1160430000	HDC 24B HP250 MPL4 TYP1	J.14
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1160440000	HDC 24B HP250 MPL4 TYP2	J.14
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1165790000	HDC 32B BDDQ 4B20	E.45
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1177100000	HDC HP 550 F 50	J.7
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1193570000	VGM25-SS68 11-20 BG	C.8
1193580000	VGM32-SS68 15-25 BG	C.13
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1193590000	VGM40-SS68 20-32 BG	C.13
1193590000	VGM40-SS68 20-32 BG	C.8
1193600000	VGM25-MS68 11-20 BG	C.13
1193600000	VGM25-MS68 11-20 BG	C.8
1193610000	VGM32-MS68 15-25 BG	C.13
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1193620000	VGM40-MS68 20-32 BG	C.13
1193620000	VGM40-MS68 20-32 BG	C.8

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1200000000	HDC HE 6 MS	L.8
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1200200000	HDC HE 6 FS	I.9
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1200200000	HDC HE 6 FS	B.20
1200400000	HDC HE 6 MC	B.20
1200500000	HDC-C-HE-SM0.5AG	J.9
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1200500000	HDC-C-HE-SM0.5AG	H.6
1200600000	HDC-C-HE-SM0.75-1.00AG	J.9
1200600000	HDC-C-HE-SM0.75-1.00AG	J.4
1200600000	HDC-C-HE-SM0.75-1.00AG	H.6
1200700000	HDC-C-HE-SM1.5AG	J.9
1200700000	HDC-C-HE-SM1.5AG	J.4
1200700000	HDC-C-HE-SM1.5AG	H.6
1200800000	HDC-C-HE-SM2.5AG	J.9
1200800000	HDC-C-HE-SM2.5AG	J.4
1200800000	HDC-C-HE-SM2.5AG	H.6
1200900000	HDC-C-HE-SM4.0AG	J.9
1200900000	HDC-C-HE-SM4.0AG	J.4
1200900000	HDC-C-HE-SM4.0AG	H.6
1201000000	HDC HE 6 FC	B.20
1201100000	HDC-C-HE-BM0.5AG	J.9
1201100000	HDC-C-HE-BM0.5AG	J.4
1201100000	HDC-C-HE-BM0.5AG	H.6
1201200000	HDC-C-HE-BM0.75-1.00AG	J.9
1201200000	HDC-C-HE-BM0.75-1.00AG	J.4
1201200000	HDC-C-HE-BM0.75-1.00AG	H.6
1201300000	HDC-C-HE-BM1.5AG	J.9
1201300000	HDC-C-HE-BM1.5AG	J.4
1201300000	HDC-C-HE-BM1.5AG	H.6
1201400000	HDC-C-HE-BM2.5AG	J.9
1201400000	HDC-C-HE-BM2.5AG	J.4
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1201500000	HDC-C-HE-BM4.0AG	J.9
1201500000	HDC-C-HE-BM4.0AG	J.4

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1202100000	HDC 06B ALU	I.9
1202100000	HDC 06B ALU	I.8
1202100000	HDC 06B ALU	E.15
1202100000	HDC 06B ALU	D.27
1202100000	HDC 06B ALU	D.25
1202100000	HDC 06B ALU	B.115
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1202100000	HDC 06B ALU	B.53
1202100000	HDC 06B ALU	B.35
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1202100000	HDC 06B ADLU	E.15
1202500000	HDC 06B ADLU	D.27
1202500000	HDC 06B ADLU	D.25
1202500000	HDC 06B ADLU	B.115
1202500000	HDC 06B ADLU	B.71
1202500000	HDC 06B ADLU	B.53
1202500000	HDC 06B ADLU	B.35
1202500000	HDC 06B ADLU	B.21
1202660000	HDC CM GUIDING PIN	J.13
1202670000	HDC CM GUIDING SOCKET	J.13
1203600000	SPB-M 3	J.12
1203900000	HDC HE 10 MS	I.13
1203900000	HDC HE 10 MS	I.12
1203900000	HDC HE 10 MS	B.22
1204100000	HDC HE 10 FS	I.13
1204100000	HDC HE 10 FS	I.12
1204100000	HDC HE 10 FS	B.22
1204300000	HDC HE 10 MC	B.22
1204400000	HDC HE 10 FC	B.22
1205000000	HDC 10B ABU	I.15
1205000000	HDC 10B ABU	I.14
1205000000	HDC 10B ABU	I.13
1205000000	HDC 10B ABU	I.12
1205000000	HDC 10B ABU	E.17
1205000000	HDC 10B ABU	D.31
1205000000	HDC 10B ABU	D.29
1205000000	HDC 10B ABU	B.117
1205000000	HDC 10B ABU	B.85
1205000000	HDC 10B ABU	B.73
1205000000	HDC 10B ABU	B.55
1205000000	HDC 10B ABU	B.37
1205000000	HDC 10B ABU	B.23
1205600000	HDC 10B ADDBO	E.21
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1205890000	VGM40/1-MS68 20-32 BG	C.8
1205920000	VGM40/1-SS68 20-32 BG	C.13
1205920000	VGM40/1-SS68 20-32 BG	C.8
1206090000	HDC 04A TOLL 1M16G	E.6
1206100000	HDC 10B ALU	I.19
1206500000	HDC 10B ADLU	E.19
1207500000	HDC HE 16 MS	I.25
1207500000	HDC HE 16 MS	I.24
1207500000	HDC HE 16 MS	I.17
1207500000	HDC HE 16 MS	I.16
1207500000	HDC HE 16 MS	B.28
1207500000	HDC HE 16 MS	B.24
1207700000	HDC HE 16 FS	I.25
1207700000	HDC HE 16 FS	I.24
1207700000	HDC HE 16 FS	I.17
1207700000	HDC HE 16 FS	I.16
1207700000	HDC HE 16 FS	B.28
1207700000	HDC HE 16 FS	B.24
1207900000	HDC HE 16 MC	B.28
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1208000000	HDC HE 16 FC	B.28
1208000000	HDC HE 16 FC	B.24
1208600000	HDC 16B ABU	I.28
1208600000	HDC 16B ABU	I.19
1208600000	HDC 16B ABU	I.18
1208600000	HDC 16B ABU	I.17
1208600000	HDC 16B ABU	I.16
1208600000	HDC 16B ABU	E.27
1208600000	HDC 16B ABU	D.35
1208600000	HDC 16B ABU	D.33
1208600000	HDC 16B ABU	B.129
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1208600000	HDC 16B ABU	B.59
1208600000	HDC 16B ABU	B.39
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1497600000	HDC 04A ALU	I.5
1497600000	HDC 04A ALU	I.4
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1497600000	HDC 04A ALU	H.7
1497600000	HDC 04A ALU	B.101
1497600000	HDC 04A ALU	B.99
1497600000	HDC 04A ALU	B.9
1497600000	HDC 04A ALU	B.7
1497700000	HDC 04A AWLU	I.6
1497700000	HDC 04A AWLU	I.5
1497700000	HDC 04A AWLU	I.4
1497700000	HDC 04A AWLU	E.7
1498100000	HDC HA 3 MS	I.5
1498100000	HDC HA 3 MS	I.4
1498100000	HDC HA 3 MS	B.6
1498200000	HDC HA 3 FS	I.5
1498200000	HDC HA 3 FS	I.4
1498200000	HDC HA 3 FS	B.6
1498300000	HDC HA 4 MS	I.7
1498300000	HDC HA 4 MS	I.6
1498300000	HDC HA 4 MS	B.8
1498400000	HDC HA 4 FS	I.7
1498400000	HDC HA 4 FS	I.6
1498400000	HDC HA 4 FS	B.8
1498700000	HDC HSB 6 MS	I.28
1498700000	HDC HSB 6 MS	B.94
1498700000	HDC HSB 6 MS	B.92
1498800000	HDC HSB 6 MS 7 - 12	B.94
1498900000	HDC HSB 6 FS	I.28
1498900000	HDC HSB 6 FS	B.94
1498900000	HDC HSB 6 FS	B.92
1499000000	HDC HSB 6 FS 7 - 12	B.94

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1568980000	VG 11-K68	L.5
1568980000	VG 11-K68	L.7
1568990000	VG 11-K68	L.5
1569000000	VG 13,5-K68	L.5
1569010000	VG 16-K68	L.5
1569020000	VG 21-K68	L.5
1569030000	VG 29-K68	L.5
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1569080000	VG 11-MS68	L.13
1569080000	VG 11-MS68	L.7
1569080000	VG 11-MS68	I.5
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1569100000	VG 16-MS68	L.13
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1569110000	VG 21-MS68	I.23
1569110000	VG 21-MS68	I.21
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1664810000	HDC 16A TOLL 1PG16G	E.24
1664870000	HDC 25A TOLL 1PG21G	E.24
1664920000	HDC 16A ALU	E.25
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1665750000	HDC 04A DMDL 2B0	B.99
1665750000	HDC 04A DMDL 2B0	B.9
1665750000	HDC 04A DMDL 2B0	B.7
1665760000	HDC 07A DODL 2B0	E.5
1665760000	HDC 07A DODL 2B0	B.49
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1665770000	HDC 07A DMDL 2B0	E.5
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1667120000	HDC 32B TSLU 1PG29G	E.46
1667560000	HDC 48B SDLU 2PG29G	E.49

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1682290000	HDC-C-M3-SM6.0AG	D.9
1682290000	HDC-C-M3-SM6.0AG	D.4
1682300000	HDC-C-M3-SM10.0AG	J.8
1682300000	HDC-C-M3-SM10.0AG	D.9
1682300000	HDC-C-M3-SM10.0AG	D.4
1682310000	HDC-C-M3-SM10.0AG	J.8
1682310000	HDC-C-M3-SM10.0AG	D.9
1682310000	HDC-C-M3-SM10.0AG	D.4
1682320000	HDC-C-M5-SM0.5AG	J.8
1682320000	HDC-C-M5-SM0.5AG	D.7
1682330000	HDC-C-M5-BM0.5AG	J.8
1682330000	HDC-C-M5-BM0.5AG	D.7
1682340000	HDC-C-M5-SM0.75-1.0AG	J.8
1682340000	HDC-C-M5-SM0.75-1.0AG	D.7
1682350000	HDC-C-M5-BM0.75-1.0AG	J.8
1682350000	HDC-C-M5-BM0.75-1.0AG	D.7
1682360000	HDC-C-M5-SM1.5AG	J.8
1682360000	HDC-C-M5-SM1.5AG	D.7
1682370000	HDC-C-M5-BM1.5AG	J.8
1682370000	HDC-C-M5-BM1.5AG	D.7
1682380000	HDC-C-M5-SM2.5AG	J.8
1682380000	HDC-C-M5-SM2.5AG	D.7
1682390000	HDC-C-M5-BM2.5AG	J.8
1682390000	HDC-C-M5-BM2.5AG	D.7
1682400000	HDC-C-M5-SM4.0AG	J.8
1682400000	HDC-C-M5-SM4.0AG	D.7
1682410000	HDC-C-M5-BM4.0AG	J.8
1682410000	HDC-C-M5-BM4.0AG	D.7
1688200000	HDC-DW-MOD	K.25

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1698120000	HDC-C-M3-SM1.5AG	J.8
1698120000	HDC-C-M3-SM1.5AG	D.9
1698120000	HDC-C-M3-SM1.5AG	D.4
1698130000	HDC-C-M3-BM1.5AG	J.8
1698130000	HDC-C-M3-BM1.5AG	D.9
1698130000	HDC-C-M3-BM1.5AG	D.4
1698140000	HDC-C-M3-SM2.5AG	J.8
1698140000	HDC-C-M3-SM2.5AG	D.9
1698140000	HDC-C-M3-SM2.5AG	D.4
1698150000	HDC-C-M3-BM2.5AG	J.8
1698150000	HDC-C-M3-BM2.5AG	D.9
1698150000	HDC-C-M3-BM2.5AG	D.4

1700000000

1706880000	VG EMV PG 9/11	L.14
1706870000	VG EMV PG 11	L.14
1706880000	VG EMV PG 13.5	L.14
1706890000	VG EMV PG 16 K14	L.14
1706900000	VG EMV PG 21 K18	L.14
1706910000	VG EMV PG 29 K26	L.14
1706940000	VG EMV M20X1,5	L.14
1706950000	VG EMV M25X1,5	L.14

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1712460000	HDC-KIT-HE 06.100	L.9
1712510000	HDC-KIT-HE 10.110	L.13
1712520000	HDC-KIT-HE 16.120	L.17
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1788540000	HDC 07A KOLU 1M20G	B.47
1788550000	HDC 48A TSLU 1M32G	E.42
1788550000	HDC 48A TSLU 1M32G	B.17
1788560000	HDC 48A TOLU 1M32G	E.42
1788560000	HDC 48A TOLU 1M32G	B.17
1788570000	HDC 48A SLU 2M32G	E.43
1788570000	HDC 48A SLU 2M32G	B.17
1788610000	HDC 10A TOLU 1M25G	E.12
1788610000	HDC 10A TOLU 1M25G	B.51
1788610000	HDC 10A TOLU 1M25G	B.11
1788620000	HDC 10A TOLU 1M20G	E.12
1788620000	HDC 10A TOLU 1M20G	B.51
1788620000	HDC 10A TOLU 1M20G	B.11
1788630000	HDC 10A SLU 2M25G	E.13
1788630000	HDC 10A SLU 2M25G	B.11
1788630000	HDC 10A SLU 2M25G	B.51
1788640000	HDC 10A SLU 2M20G	E.13
1788640000	HDC 10A SLU 2M20G	B.51
1788640000	HDC 10A SLU 2M20G	B.11
1788650000	HDC 10A SDLU 2M25G	E.13
1788650000	HDC 10A SDLU 2M25G	B.51
1788650000	HDC 10A SDLU 2M25G	B.11
1788660000	HDC 10A SDLU 2M20G	E.13
1788660000	HDC 10A SDLU 2M20G	B.51
1788660000	HDC 10A SDLU 2M20G	B.11
1788670000	HDC 10A KLU 1M25G	E.13
1788670000	HDC 10A KLU 1M25G	B.51
1788670000	HDC 10A KLU 1M25G	B.11
1788680000	HDC 25A TSLU 1M20G	E.24
1788680000	HDC 25A TSLU 1M20G	B.57
1788680000	HDC 25A TSLU 1M20G	B.13
1788690000	HDC 25A TSLU 1M25G	E.24
1788690000	HDC 25A TSLU 1M25G	B.57
1788690000	HDC 25A TSLU 1M25G	B.13
1788700000	HDC 25A TOLU 1M25G	E.24
1788700000	HDC 25A TOLU 1M25G	B.57
1788700000	HDC 25A TOLU 1M25G	B.13
1788710000	HDC 25A TOLU 1M20G	E.24
1788710000	HDC 25A TOLU 1M20G	B.57
1788710000	HDC 25A TOLU 1M20G	B.13
1788740000	HDC 16A TSLU 1M25G	E.24
1788740000	HDC 16A TSLU 1M25G	B.57
1788740000	HDC 16A TSLU 1M25G	B.13
1788750000	HDC 16A TOLU 1M25G	E.24
1788750000	HDC 16A TOLU 1M25G	B.57
1788750000	HDC 16A TOLU 1M25G	B.13
1788760000	HDC 16A SLU 2M25G	E.25
1788760000	HDC 16A SLU 2M25G	B.57
1788760000	HDC 16A SLU 2M25G	B.13
1788770000	HDC 16A SLU 2M20G	E.25
1788770000	HDC 16A SLU 2M20G	B.57
1788770000	HDC 16A SLU 2M20G	B.13
1788780000	HDC 16A SDLU 2M25G	E.25
1788780000	HDC 16A SDLU 2M25G	B.57
1788780000	HDC 16A SDLU 2M25G	B.13
1788790000	HDC 16A SDLU 2M20G	E.25
1788790000	HDC 16A SDLU 2M20G	B.57
1788790000	HDC 16A SDLU 2M20G	B.13
1788800000	HDC 16A KLU 1M25G	E.25
1788800000	HDC 16A KLU 1M25G	B.57
1788800000	HDC 16A KLU 1M25G	B.13
1788810000	HDC 04A TWLU 1M20G	H.7
1788810000	HDC 04A TWLU 1M20G	E.6
1788810000	HDC 04A TWLU 1M20G	B.101
1788810000	HDC 04A TWLU 1M20G	B.99
1788810000	HDC 04A TWLU 1M20G	B.9
1788810000	HDC 04A TWLU 1M20G	B.7
1788820000	HDC 04A TOLU 1M20G	1.6
1788820000	HDC 04A TOLU 1M20G	1.4
1788820000	HDC 04A TOLU 1M20G	H.7
1788820000	HDC 04A TOLU 1M20G	E.6
1788820000	HDC 04A TOLU 1M20G	B.101
1788820000	HDC 04A TOLU 1M20G	B.99
1788820000	HDC 04A TOLU 1M20G	B.9
1788820000	HDC 04A TOLU 1M20G	B.7
1788830000	HDC 04A SLU 1M20G	H.7
1788830000	HDC 04A SLU 1M20G	E.7
1788830000	HDC 04A SLU 1M20G	B.101
1788830000	HDC 04A SLU 1M20G	B.99
1788830000	HDC 04A SLU 1M20G	B.9
1788830000	HDC 04A SLU 1M20G	B.7
1788850000	HDC 15A TSLU 1M25G	E.12
1788850000	HDC 15A TSLU 1M25G	B.51
1788850000	HDC 15A TSLU 1M25G	B.11
1788860000	HDC 15A TOLU 1M20G	E.12
1788860000	HDC 15A TOLU 1M20G	B.51
1788860000	HDC 15A TOLU 1M20G	B.11
1788960000	HDC S4 0 SAS	B.118
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1799810000	HDC 48B SDLU 1PG29G	E.49
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1802360000	HDC-KIT-HE 48.150 M	1.26
1802370000	HDC-KIT-HE 32.140 M	1.24
1802380000	HDC-KIT-HE 24.130 M	1.20
1802390000	HDC-KIT-HE 16.121 M	1.16
1802400000	HDC-KIT-HE 16.120 M	1.16
1802410000	HDC-KIT-HE 10.111 M	1.12
1802420000	HDC-KIT-HE 10.110 M	1.12
1802430000	HDC-KIT-HA 04.401 M	1.8
1802440000	HDC-KIT-HA 04.400 M	1.6
1802450000	HDC-KIT-HA 03.302 M	1.4
1802460000	HDC-KIT-HA 03.301 M	1.4
1802470000	HDC-KIT-HA 03.300 M	1.4
1802480000	HDC-KIT-HE 24.131 M	1.20
1802700000	HDC KIT HA 04.402 M	1.6
1802720000	HDC KIT HA 04.406 M	1.6
1802730000	HDC KIT HE 06.100 M	1.8
1802740000	HDC KIT HE 06.101 M	1.8
1804610000	HDC 64D TSLU 1M40G	E.28
1804630000	HDC 16B TOLU 1M32G	E.28
1804640000	HDC 16B TOLU 1M32G	E.28
1804650000	HDC 40D TSLU 1M40G	E.28
1804660000	HDC 40D SLU 2M32G	E.29
1806030000	HDC CM BUS 2BS T PBDP	D.15
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1806630000	IS 2 KG	K.24
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1806660000	IS 4 KG	K.24
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1814300000	HDC CM BUS 4BS	D.14
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1826770000	HDC HEE 46 SCM	B.40
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1855680000	HDC-HB10 AWVL FD	J.25
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1862060000	HDC CM HV 3 FC	D.9
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1866710000	Removal Tool CM 3	K.25
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1866720000	Removal Tool CM 5	K.25
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1866730000	REMOVAL TOOL HD	K.25
1866750000	Removal Tool HE	K.25
1867360000	HDC SHIELD LEVER 8 SC	J.16
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1873530000	HDC HE 6 MP	1.11
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1873550000	HDC HE 10 MP	1.14
1873550000	HDC HE 10 MP	B.22
1873560000	HDC HE 16 FP	1.19
1873560000	HDC HE 16 FP	1.18
1873560000	HDC HE 16 FP	B.28
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1873570000	HDC HE 16 MP	1.19
1873570000	HDC HE 16 MP	1.18
1873570000	HDC HE 16 MP	B.28
1873570000	HDC HE 16 MP	B.24
1873580000	HDC HE 24 FP	1.23
1873580000	HDC HE 24 FP	1.22
1873580000	HDC HE 24 FP	B.30
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1873860000	HDC HA 10 FC	B.10
1873870000	HDC HA 10 MC	B.10
1873880000	HDC HA 16 FC	B.16
1873880000	HDC HA 16 FC	B.14
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1875620000	HDC HA 16 MC 17 - 32	B.16
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1875630000	HDC HA 16 MC 33 - 48	B.16
1875740000	HDC HE 16 FP 17-32	B.28
1875800000	HDC HE 16 MP 17-32	B.28
1875850000	HDC HE 24 FP 25-48	B.30
1875890000	HDC HE 24 MP 25-48	B.30
1876040000	HDC HA 16 FC 17 - 32	B.16
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1894720000	HDC-CM-1BPN4.0	D.23
1894730000	HDC-CM-1SPN2.5	D.23
1894740000	HDC-CM-1SPN4.0	D.23
1894750000	HDC-CM-2BPN2.5	D.23
1894760000	HDC-CM-2BPN4.0	D.23
1894770000	HDC-CM-2SPN2.5	D.23
1894780000	HDC-CM-1BPN2.5	D.23
1896780000	HDC HA 10 FT	B.10
1896790000	HDC HA 10 MT	B.10
1896800000	HDC HA 16 FT	B.16
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1896800000	HDC HA 16 FT	B.12
1896810000	HDC HA 16 FT 17-32	B.16
1896810000	HDC HA 16 FT 17-32	B.14
1896820000	HDC HA 16 FT 33-48	B.16
1896830000	HDC HA 16 MT	B.16
1896830000	HDC HA 16 MT	B.14
1896830000	HDC HA 16 MT	B.12
1896840000	HDC HA 16 MT 17-32	B.16
1896840000	HDC HA 16 MT 17-32	B.14
1896850000	HDC HA 16 MT 33-48	B.16
1898900000	HDC 04A SLU 1PG11G BL	E.7
1898980000	HDC 04A AWLU BL	E.7
1899220000	HDC 04A KOLU 1PG11S BL	E.7
1899890000	HDC 16B SBU 1M25G	E.27
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1900080000	HDC 16B SDBO 1M25G	E.31
1900170000	HDC 16B SLU 1M25G	E.29
1900280000	HDC 04A TOLU 1PG11S BL	E.6
1900310000	HDC 04A TWLU 1PG11S BL	E.6
1900320000	HDC 04A ELU 1M20G	H.7
1900320000	HDC 04A ELU 1M20G	E.7
1900320000	HDC 04A ELU 1M20G	B.101
1900320000	HDC 04A ELU 1M20G	B.99
1900320000	HDC 04A ELU 1M20G	B.9
1900320000	HDC 04A ELU 1M20G	B.7
1900330000	HDC 04A ELU 1PG13S	E.7
1900350000	HDC 04A ELU 1PG13S bl	E.7
1900360000	HDC 06B SDLU 1M20G	E.15
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1900460000	HDC 06B SLU 1M20G	E.15
1900480000	HDC 06B SLU 1M25G	E.15
1900820000	HDC 16D SDLU 1M25G	E.15
1900880000	HDC 16D SLU 1M25G	E.15
1900900000	HDC 16D SLU 1M32G	E.15
1900990000	HDC 07A ELU 1PG13G	E.5
1900990000	HDC 07A ELU 1PG13G	B.49
1900990000	HDC 07A ELU 1PG13G	B.47
1901010000	HDC 10A SDLU 1M20G	E.13
1901040000	HDC 10A SDLU 1M25G	E.13
1901100000	HDC 10A SLU 1M20G	E.13
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1901480000	HDC 24B SDLU 1M25G	E.39
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1901510000	HDC 10B SDBO 1M25G	E.21
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1962870000	IE-BI-SCRJ25C-SM-C	D.21
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1963200000	IE-PS-V05M-RJ45-FH	H.10
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1963510000	IE-BS-V05M-RJ45-C	H.11
1963530000	IE-BH-V05M	H.11
1963690000	HDC 04A DODL 1LB	E.6
1963700000	IE-BS-V05M-RJ45-FJP	H.11
1963830000	IE-BI-RJ45-FJP	H.13
1963830000	IE-BI-RJ45-FJP	D.21
1963840000	IE-BI-RJ45-FJ-B	H.13
1963840000	IE-BI-RJ45-FJ-B	D.21
1964420000	IE-BI-LCD-MM-C	D.21
1964430000	IE-BI-SCRJ25C-MM-C	D.21
1966810000	IE-KO-HAT	K.6
1967210000	HDC HVE 10+2 MT C1H	B.88
1967220000	HDC HVE 3+2 FT C1H	B.84
1967230000	HDC HVE 3+2 MT C1H	B.84
1967240000	HDC HVE 6+2 FT C1H	B.86
1967250000	HDC HVE 6+2 MT C1H	B.86
1967260000	HDC HVE 10+2 FT C1H	B.88
1967660000	HDC 10A TSLU 1M20G	E.12
1967670000	HDC 40D KBU 1PG29G	E.27
1967910000	HDC 24B ABO	E.40
1968340000	HDC 24B KLU 1M25G	E.39
1968350000	HDC 24D SZO 2PG21G	E.22
1968360000	HDC 24D TSZO 1PG21G	E.22
1968370000	HDC 64D SZO 2PG29G	E.41
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1983500000	HDC 48B SDLU 2M40G	E.49
1983510000	HDC 48B SDLU 2M50G	E.49
1983720000	HDC CM BUS SV F2	D.16
1983750000	HDC CM BUS SV M2	D.16
1983770000	HDC CM BUS SV F4 CT	H.5
1983770000	HDC CM BUS SV F4 CT	D.17
1983790000	HDC CM BUS SV M4 CT	H.5
1983790000	HDC CM BUS SV M4 CT	D.17
1983800000	HDC CM BUS SV F1 CT	H.5
1983800000	HDC CM BUS SV F1 CT	D.17
1983810000	HDC CM BUS SV M1 CT	H.5
1983810000	HDC CM BUS SV M1 CT	D.17
1983820000	HDC CM BUS SV GCA F	D.17
1983830000	HDC CFM 6 2M	D.26
1983840000	HDC CFM 6 2F	D.26
1983850000	HDC CFM 10 3M	D.30
1983860000	HDC CFM 10 3F	D.30
1983870000	HDC CFM 16 5M	D.34
1983880000	HDC CFM 16 5F	D.34
1983890000	HDC CFM 24 7M	D.38
1983900000	HDC CFM 24 7F	D.38
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9001530000	ERSATZMESSER AM 25/35	K.10
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9003760000	MEHA KP LWL M-D-SPX	K.19
9005000000	STRIPAX	K.7
9005610000	STRIPAX 16	K.7
9005720000	SCHRAUBENDREHER CST	K.11
9005800000	EINSTELLBLOCK CST	K.11
9008320000	SD 0,5x3,0x80	K.22
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9008340000	SD 0,8x4,0x100	K.22
9008340000	SD 0,8x4,0x100	G.4
9008350000	SD 1,0x5,5x150	K.22
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