



PLUSCON heavy

HEAVYCON heavy-duty connectors

HEAVYCON – Heavy-duty connectors

Heavy-duty connectors of the HEAVYCON series can be used under extremely harsh conditions caused by dirt, water, vibrations and high mechanical loads. They are leak-proof up to the IP69K degree of protection. The rugged metal housings are available with longitudinal, transverse, central, screw and bayonet locking. Besides terminal adapters, contact inserts with different connection methods are available in versions with fixed numbers of positions and as modules that can be aligned.



Benefit from the advantages

Advantages

Rugged connectors for the highest requirements

- Housings with the IP65/IP68/IP69K degrees of protection
- Use of corrosion-resistant aluminum die-cast alloys

User benefits

- Can be used in especially aggressive environments such as the chemical sector, railway, off-shore, automotive industry, machine and system engineering
- Effective protection ensured (e.g. against corrosion, EMC and strain cracks)
- Reliable and safe operation



Housings with longitudinal, transverse and central locking latch

- Sleeve housings, panel mounting and box mounting bases and coupling housings with all types of locking

- Space-saving
- Easy operation
- Especially time-saving
- Replaceable brackets
- Flexible mounting



ADVANCE housing

- No need for panel mounting bases
- Compatible with standard panel cutouts
- Bayonet and screw locking
- Wiring space increased by 50%

- Cost-saving
- Space-saving assembly
- Convenient cabling
- Quick and safe housing locking



Versatile contact inserts and terminal adapters

- With screw, crimp, spring-cage, push-in and QUICKON fast connection technology
- High-quality materials

- Suitable for conductors with or without splicing protection
- Quicker and safer conductor connection
- Long-term stability
- Toolless connection
- Suitable for solid and stranded conductors



Modularity of the contact inserts

- Up to six different contact inserts in one HEAVYCON housing

- Efficient and individual design of the contact inserts
- Transmission of data, signals and power through a single connector



Modular contact inserts and contact inserts with a fixed number of positions

Contact inserts are available in versions with a fixed number of positions – even with mixed components – as well as in modular versions for the most varied parameters such as number of positions, connection cross section, rated voltage and current. Contact inserts are available in the A/B/BB/D/DD/HS/HV/K and M series. There are inserts with screw, crimp, spring-cage, push-in and QUICKON connections.

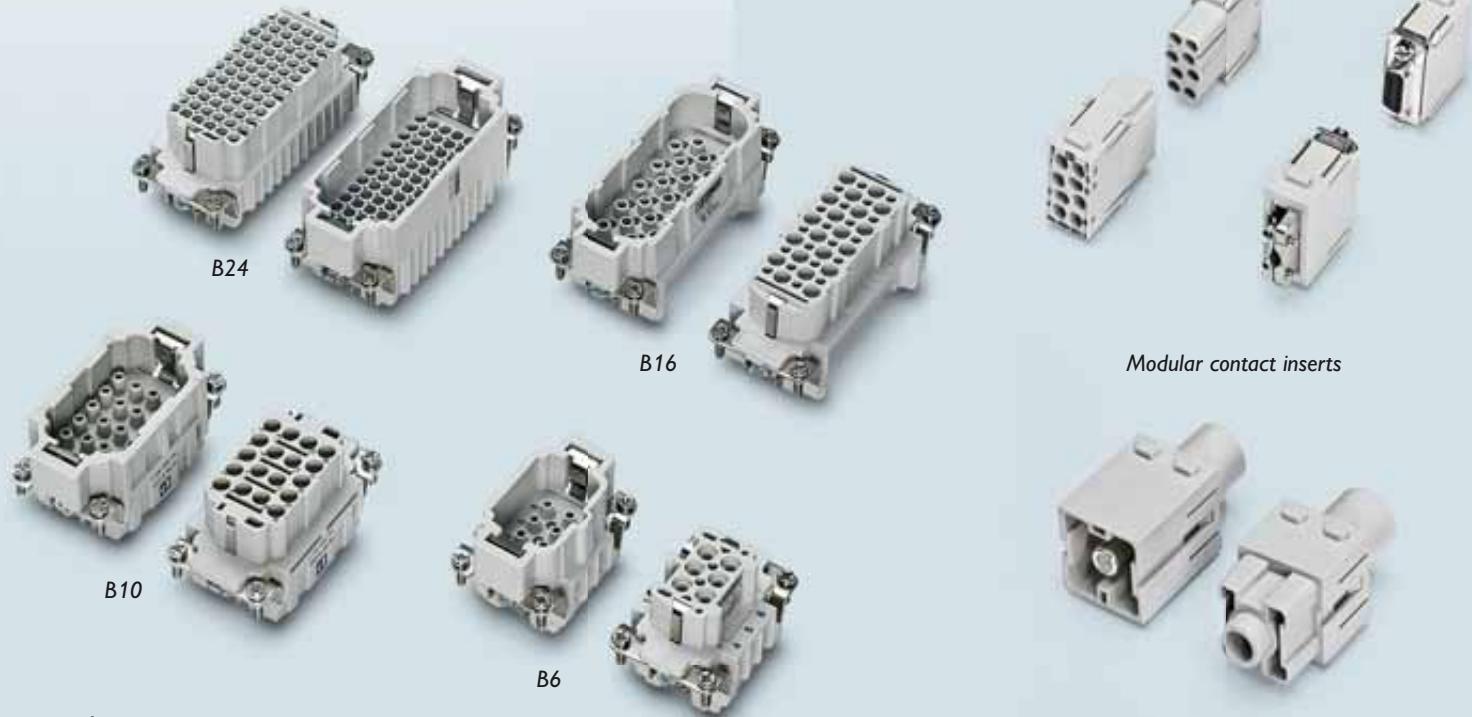


Better PE contact

Use of tension sleeve technology in the PE connection guarantees maximum reliability. The conductor pull-out forces are much higher in comparison with the pull-out forces of the PE header contact terminal point.

Fast coding

Often, identical adjacent connectors need to be protected against being mixed up. Unlike current coding methods such as keying bolts, pins or sockets, the HEAVYCON contact inserts are keyed by quickly snapping in keying profiles.



Connection technologies for the HEAVYCON contact inserts



QUICKON connection

In this connection procedure, a non-stripped conductor is guided into the connection space in front of the insulation displacement contact of the QUICKON connection and is then pressed into the gap with the lever movement of a screwdriver, which pierces the conductor insulation and establishes gas-tight contact between the conductor and the contact. That's

all. The wire therefore does not need to be stripped first, which saves at least 60 % of the connection time. Here, conductors can be connected up to ten times. When a new connection is made, the used conductor end must be cut off first.



Screw connection

Important characteristics of this connection designed for the highest requirements are the maintenance-free conductor connection and the multi-conductor connection that is often required. Copper conductors can be clamped without any pretreatment or with ferrules. The conductive metal parts of the screw connections are made of high-grade, strain-

crack and corrosion-proof copper alloys. This eliminates the possibility of electrolytic corrosion in the presence of moisture and the risk of corrosion as well as the consequences of the same.

A further advantage is the low temperature rise due to good electrical conductivity.



Crimp connection

The connection between the conductor and the crimp contact is established with the help of a crimping tool adapted to the conductor cross-section and the crimp contact by specifically deforming the crimp range, the crimp contact and the conductor. The conductor is stripped, the crimp contact is positioned into the crimping tool, the conductor is inserted and the crimping

tool is closed. That's all. Crimp technology offers a consistent crimping quality and thus consistently low contact resistances. Crimp contacts snapped into the contact insert can be removed using a contact removal tool.



Spring-cage connection

The spring-cage connection contains a spring that presses the stripped conductor against a power rail. After the conductor has been inserted into the clamping space, the screwdriver that is required for opening is removed and the conductor automatically makes contact. In the spring-cage terminal blocks from Phoenix Contact, the contact force is thus independent

from the user. The connection is vibration-proof, gas-tight, has long-term stability and is thus extremely reliable – be it with or without splicing protection. The front connection, in which the conductor and the screwdriver come from the same direction, guarantees comfortable operation.



Push-in connection

Stranded conductors with splicing protection or solid conductors can be inserted directly into the connection without using a tool. A screwdriver is only required to connect smaller cross-sections and to remove the conductors. The connection space is opened using a screwdriver. The push-in connection offers easy handling, an extremely short connection time and is gas-tight as well as

vibration and shock-proof. All metal parts of the connection are made of corrosion-free materials.

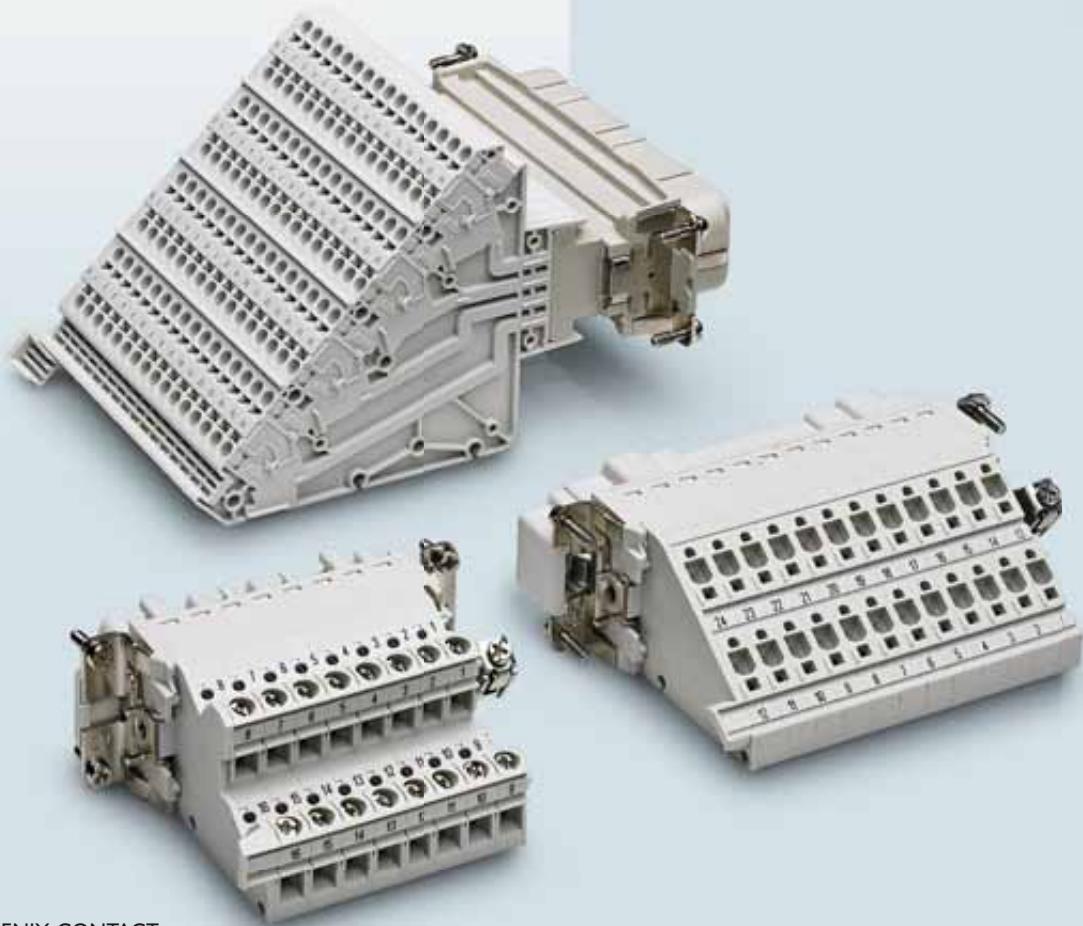
HEAVYCON terminal adapters

The terminal adapters were developed specially for type B (500 V) and type D (250 V) heavy-duty industrial connectors.

They combine contact inserts with modular terminal blocks to form a space-saving connection element. Together with the corresponding HEAVYCON sleeve housing, this ensures that the cable entry through the control cabinet walls corresponds to industrial requirements. This range includes terminal adapters with screw and push-in connection.

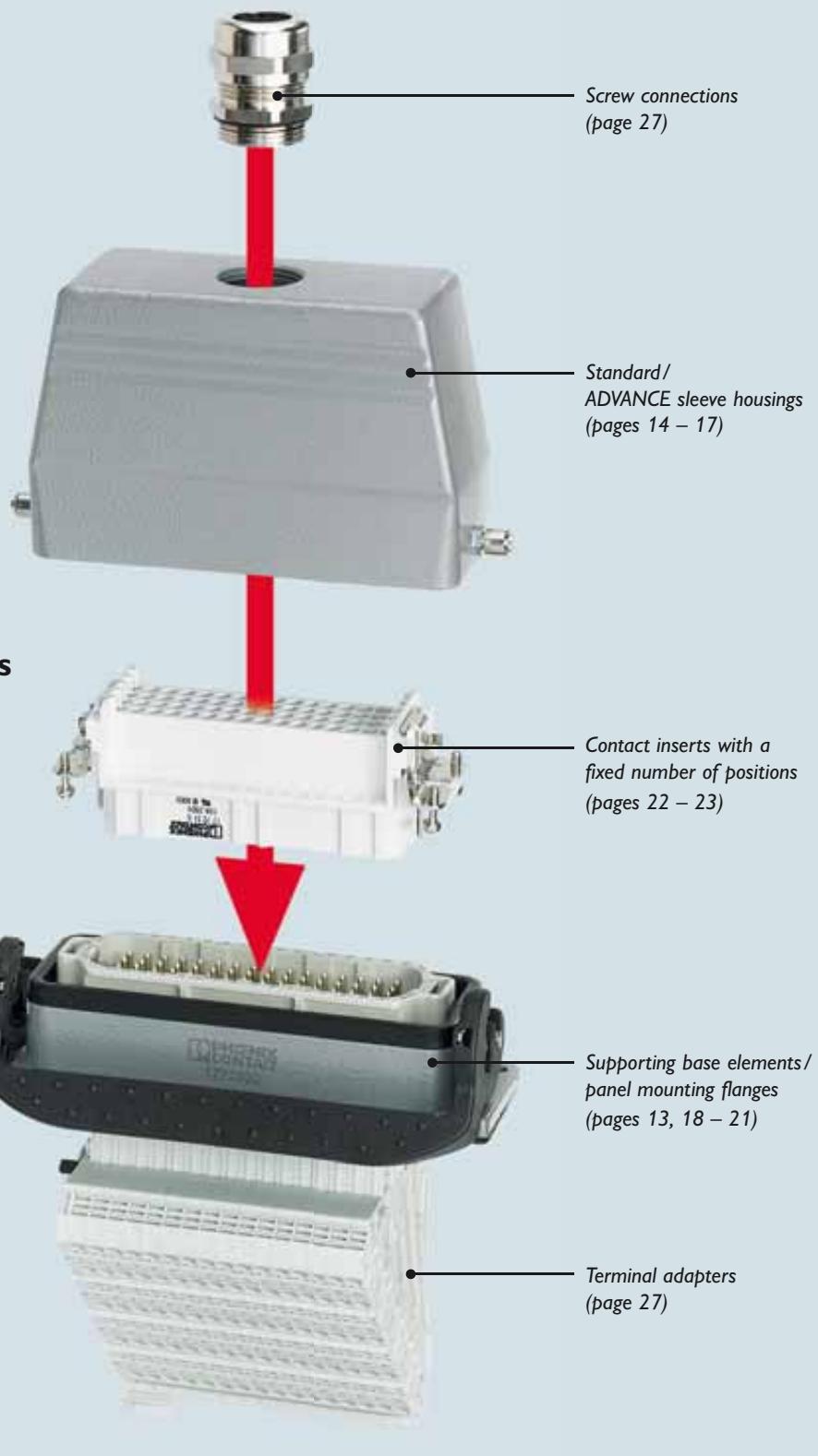
Terminal adapters on the DIN rail

In principle, terminal adapters can be mounted on the DIN rail in a sleeve housing or even directly, without a housing. The terminal adapter can be mounted on the DIN rail with the help of special foot elements. Here, a vibration-resistant connection is established between the terminal adapter and the mating connector using a locking screw.



System configuration for HEAVYCON connectors with terminal adapters

Like all contact inserts, **HEAVYCON terminal adapters** can be used in standard connectors as well as in ADVANCE connectors. The option of using the terminal adapter as a male or female connector ensures seamless compatibility. The terminal adapter replaces the contact insert on the side of the supporting base element or the panel mounting flange and is routed from outside through the panel cutout.



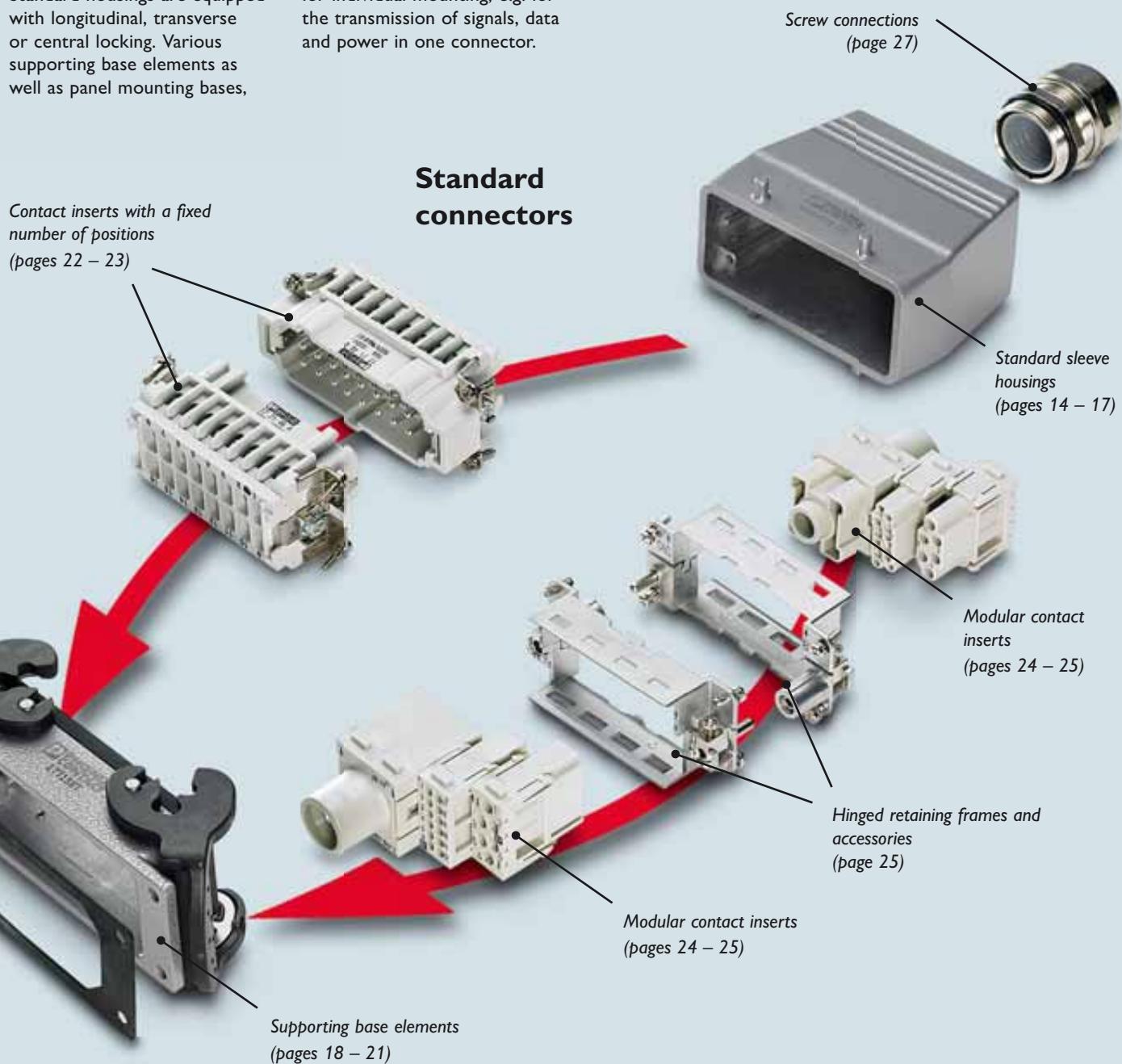
Space-saving connection terminal blocks for the control cabinet feed-through

The individual conductors can be directly inserted on the terminal side without being stripped off and can be connected with just a flick of the screwdriver. To ensure that the conductor makes contact correctly the next time, the already used contact point must be cut off.

System configuration for HEAVYCON connectors

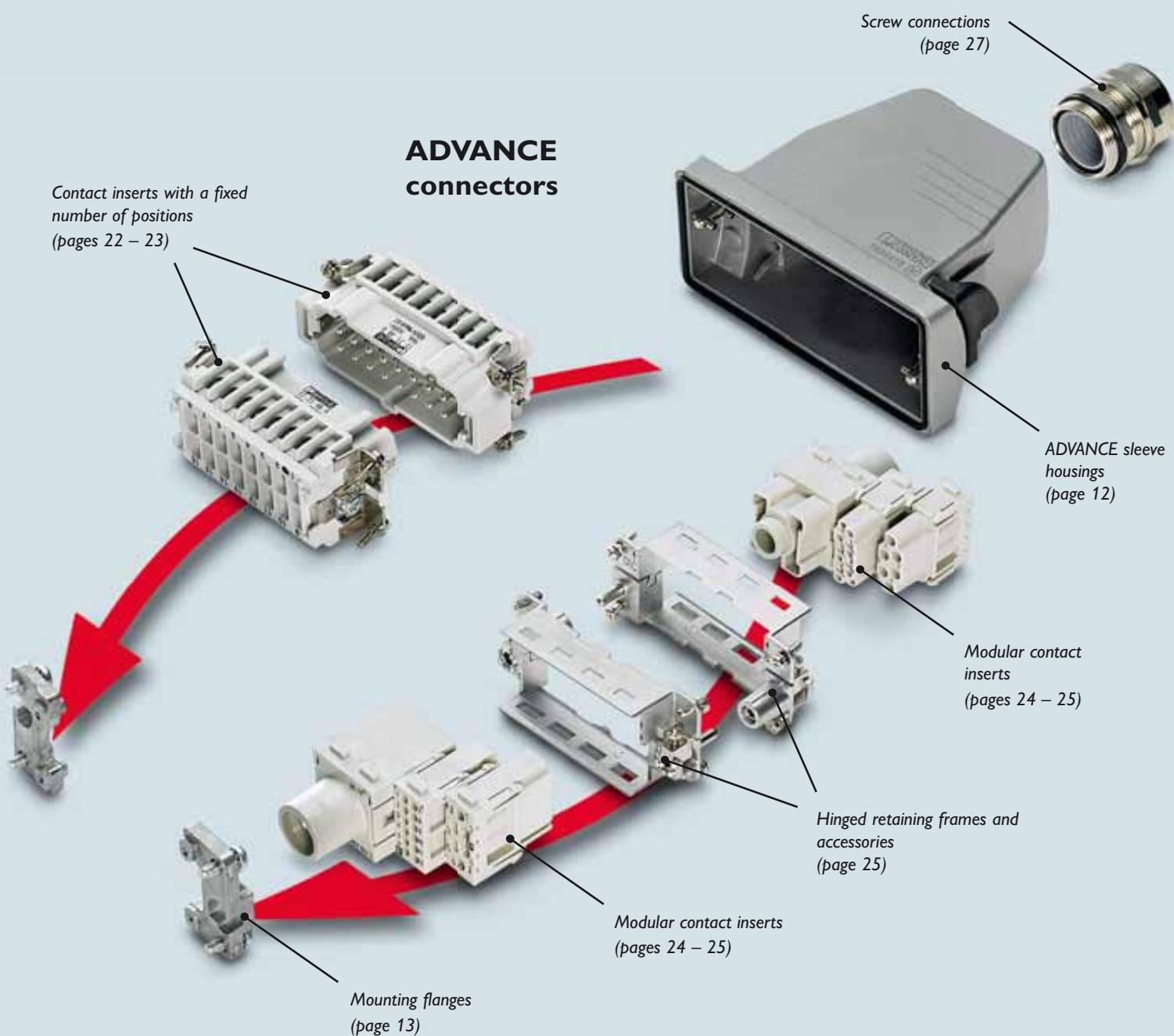
The rugged metal housings of the **standard connectors** are provided with an extremely robust epoxide powder coating that withstands dirt, water and high mechanical stress. Standard housings are equipped with longitudinal, transverse or central locking. Various supporting base elements as well as panel mounting bases,

box mounting bases or coupling housings are available depending on the requirements. Besides the contact inserts with a fixed number of positions, modular contact inserts are also available for individual mounting, e.g. for the transmission of signals, data and power in one connector.



ADVANCE connectors are characterized especially by the fact that the use of an ADVANCE housing with a panel mounting flange makes a supporting base element unnecessary. The ADVANCE housings with bayonet or screw locking are suitable for extreme requirements such as especially aggressive environments

and sensitive interfaces. The range is supplemented with the option of using contact inserts with a fixed number of positions or modular contact inserts, e.g. to transmit signals, data and power in one connector.



An overview of the combination options for different contact inserts and housings can be found in the cross-reference list on page 10/11. Further information on the HEAVYCON range can be found in the latest PLUSCON catalog and at www.phoenixcontact.net/eshop.

System cross-reference list: HEAVYCON housings / HEAVYCON contact inserts

The **system cross-reference list** shows the relationships between the contact inserts and the housing types in a simple manner.

The upper lines describe the contact inserts according to number of positions, voltage, current and connection method.
The marking in the columns refers to the suitable type of housing.

The numbers of positions marked with ¹ indicate that in addition to the normal contact insert, a second one with the corresponding contact numbering must always be ordered as well.

Notes:

- Connectors may only be actuated when there is no voltage
- Terminal adapters of type B/D40/D64 can be used in the B6 to B24 panel mounting bases
- Contact inserts of the HV series (690 V, 16 A) can be delivered on request



		Type/ series	B						
			Number of positions	6	10	16	32 ¹	24	
			Rated voltage	500	500	500	500	500	
			Rated current	16	16	16	16	16	
			Connection methods:						
			S = Screw	S	S	S	S	S	
			C = Crimp	C	C	C	C	C	
			Q = Quikon	Q	Q	Q	Q	Q	
			L = Fiber optics						
			Z = Spring-cage	Z	Z	Z	Z	Z	
			PI = Push-in	PI	PI	PI	PI	PI	
			Pages	22 – 23					
HEAVYCON housings									
ADVANCE		B6 B10 B16 B24		12 – 13	•				
				12 – 13		•			
				12 – 13			•		
				12 – 13				•	
Type B		B6 B10 B16 B24 B32 B48		16 – 17	•				
				14 – 17		•			
				14 – 17			•		
				14 – 17				•	
				14 – 17				•	
				16 – 17				•	
Type B-EMV		B6 ... EMV B10 ... EMV B16 ... EMV B24 ... EMV	Housings of the type B-EMV can be found in the PLUSCON catalog 2009 on pages 518 – 519.			•			
						•			
							•		
								•	
Type D		D7 D15 D25 D50	Housings of type D can be found in the PLUSCON catalog 2009 from page 508 on.						

HEAVYCON contact inserts



Further information on the HEAVYCON range can be found in the latest PLUSCON catalog and at www.phoenixcontact.net/eshop.

ADVANCE sleeve housings with bayonet or screw locking

	B6				B10				B16			
	Height [mm]	Thread	Cable outlet	Order No.	Height [mm]	Thread	Cable outlet	Order No.	Height [mm]	Thread	Cable outlet	Order No.
Standard design												
Screw locking * (IP65/68/ 69K)	100	1x M20	Straight	1604052	100	1x M25	Straight	1690040	100	1x M25	Straight	1644630
	100	1x M20	Lateral	1604081	100	1x M25	Lateral	1690082	100	1x M25	Lateral	1644643
	100	1x M25	Straight	1604117	100	1x M32	Straight	1690121	100	1x M32	Straight	1690202
	100	1x M25	Lateral	1604146	100	1x M32	Lateral	1690163	100	1x M32	Lateral	1690244
									100	1x M40	Straight	1690286
									100	1x M40	Lateral	1690325
Bayonet locking * (IP65/67)	100	1x M20	Straight	1604175	100	1x M25	Straight	1604298	100	1x M32	Straight	1604418
	100	1x M20	Lateral	1604201	100	1x M25	Lateral	1604324	100	1x M32	Lateral	1604447
	100	1x M25	Straight	1604230	100	1x M32	Straight	1604353	100	1x M40	Straight	1604476
	100	1x M25	Lateral	1604269	100	1x M32	Lateral	1604382	100	1x M40	Lateral	1604502
Housings for more exacting ambient conditions												
Screw locking * (IP65/68/ 69K)	100	1x M20	Straight	1604049	100	1x M25	Straight	1690037	100	1x M32	Straight	1690192
	100	1x M20	Lateral	1604078	100	1x M25	Lateral	1690079	100	1x M32	Lateral	1690231
	100	1x M25	Straight	1604104	100	1x M32	Straight	1690118	100	1x M40	Straight	1690273
	100	1x M25	Lateral	1604133	100	1x M32	Lateral	1690150	100	1x M40	Lateral	1690312
Bayonet locking * (IP65/67)	100	1x M20	Straight	1604162	100	1x M25	Straight	1604285	100	1x M32	Straight	1604405
	100	1x M20	Lateral	1604191	100	1x M25	Lateral	1604311	100	1x M32	Lateral	1604434
	100	1x M25	Straight	1604227	100	1x M32	Straight	1604340	100	1x M40	Straight	1604463
	100	1x M25	Lateral	1604256	100	1x M32	Lateral	1604379	100	1x M40	Lateral	1604492
EMC housings												
Screw locking * (IP65/68/ 69K)	100	1x M20	Straight	1604036	100	1x M25	Straight	1690024	100	1x M32	Straight	1690189
	100	1x M20	Lateral	1604065	100	1x M25	Lateral	1690066	100	1x M32	Lateral	1690228
	100	1x M25	Straight	1604094	100	1x M32	Straight	1690105	100	1x M40	Straight	1690260
	100	1x M25	Lateral	1604120	100	1x M32	Lateral	1690147	100	1x M40	Lateral	1690309
Bayonet locking * (IP65/67)	100	1x M20	Straight	1604159	100	1x M25	Straight	1604272	100	1x M32	Straight	1604395
	100	1x M20	Lateral	1604188	100	1x M25	Lateral	1604308	100	1x M32	Lateral	1604421
	100	1x M25	Straight	1604214	100	1x M32	Straight	1604337	100	1x M40	Straight	1604450
	100	1x M25	Lateral	1604243	100	1x M32	Lateral	1604366	100	1x M40	Lateral	1604489

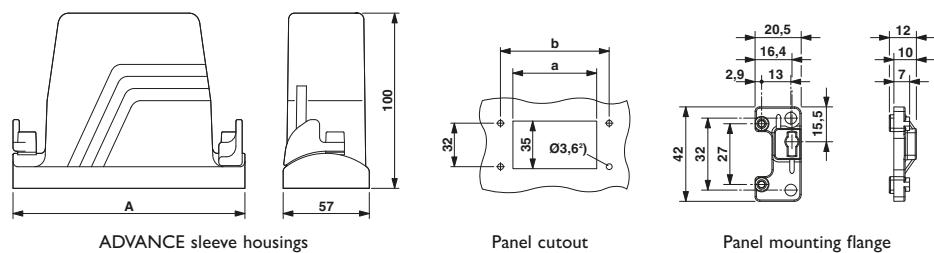
* Without screw connection

B24

Height [mm]	Thread	Cable outlet	Order No.
100			
100	1x M32	Straight	1690367
100	1x M32	Lateral	1690406
100	1x M40	Straight	1690448
100	1x M40	Lateral	1690480
100	1x M32	Straight	1604531
100	1x M32	Lateral	1604560
100	1x M40	Straight	1604599
100	1x M40	Lateral	1604625
100	1x M32	Straight	1690354
100	1x M32	Lateral	1690396
100	1x M40	Straight	1690435
100	1x M40	Lateral	1690477
100	1x M32	Straight	1604528
100	1x M32	Lateral	1604557
100	1x M40	Straight	1604586
100	1x M40	Lateral	1604612
100	1x M32	Straight	1690341
100	1x M32	Lateral	1690383
100	1x M40	Straight	1690422
100	1x M40	Lateral	1690464
100	1x M32	Straight	1604515
100	1x M32	Lateral	1604544
100	1x M40	Straight	1604573
100	1x M40	Lateral	1604609

Accessories

Description	Order No.
Panel mounting flanges for ADVANCE housings	
	For screw locking 2 pieces of every connector are required 1686533
	For screw locking Set (two flanges, four self-tapping M4 Torx20 screws) 1604638
	For bayonet locking 2 pieces are required for every connector 1604641
	For bayonet locking Set (two flanges, four self-tapping M4 Torx20 screws) 1604654

ADVANCE sleeve housing dimensional drawings


Type	A [mm]	a [mm]	b [mm]
B6	92	52	70
B10	105	65	83
B16	126	86	103
B24	152	112	130

Further information on the HEAVYCON range can be found in the latest PLUSCON catalog and at www.phoenixcontact.net/eshop.

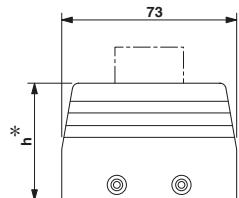
Standard sleeve housings

	B10				B16				B24			
	Height [mm]	Thread	Cable outlet	Order No.	Height [mm]	Thread	Cable outlet	Order No.	Height [mm]	Thread	Cable outlet	Order No.
For double locking latch (IP65)												
For metric screw connection, with supports 	45	1x M20	Straight	1604769	45	1x M25	Straight	1604806	56	1x M25	Straight	1604847
	45	1x M25	Straight	1604770	60	1x M25	Lateral	1604807	56	1x M32	Straight	1604848
	52	1x M20	Lateral	1604771	76	1x M25	Lateral	1604809	60	1x M25	Lateral	1604849
	52	1x M25	Lateral	1604772	76	1x M32	Straight	1604810	60	1x M32	Straight	1604850
	72	1x M25	Straight	1604773	76	1x M32	Lateral	1604811	76	1x M25	Straight	1604851
	72	1x M25	Lateral	1604774					76	1x M25	Lateral	1604852
	72	1x M32	Straight	1607475					76	1x M32	Straight	1604853
									76	1x M32	Lateral	1604854
For metric screw connection, without supports 	72	1x M20	Straight	1647093	72	1x M25	Straight	1645338	76	1x M25	Straight	1645095
	72	1x M20	Lateral	1647080	72	1x M25	Lateral	1645066	76	1x M25	Lateral	1645105
	72	1x M25	Straight	1644999	72	1x M32	Straight	1645079	76	1x M32	Straight	1645118
	72	1x M25	Lateral	1645008	72	1x M32	Lateral	1645341	76	1x M32	Lateral	1645121
	72	1x M32	Straight	1645011	72	1x M40	Straight	1644698	76	1x M40	Straight	1644708
	72	1x M32	Lateral	1645325	72	1x M40	Lateral	1644711	76	1x M40	Lateral	1644724
									76	1x M40	Lateral	1645448
With metric screw connection 	45	1x M20	Straight	1586361	76	1x M25	Straight	1586442	60	1x M25	Straight	1586565
	52	1x M20	Lateral	1586374	76	1x M25	Lateral	1586455	76	1x M25	Lateral	1586578
	72	1x M25	Straight	1587030	76	1x M32	Straight	1586468	60	1x M32	Straight	1586581
	72	1x M25	Lateral	1587043	76	1x M32	Lateral	1586471	76	1x M32	Lateral	1586594
With double locking latch (IP65)												
For metric screw connection, with supports 	52	1x M20	Lateral	1604780	65	1x M25	Straight	1604815	76	1x M25	Straight	1604858
	52	1x M25	Lateral	1604781	65	1x M25	Lateral	1604816	76	1x M32	Lateral	1604859
					76	1x M25	Lateral	1604818	76	1x M32	Straight	1604860
					76	1x M32	Straight	1604819				
					76	1x M32	Lateral	1604820				
For metric screw connection, without supports 	45	1x M20	Straight	1647145	76	1x M25	Straight	1647187	76	1x M25	Straight	1647226
	72	1x M20	Lateral	1647116	76	1x M25	Lateral	1647161	76	1x M25	Lateral	1647200
	72	1x M25	Straight	1647132	76	1x M32	Straight	1647190	76	1x M32	Straight	1647239
	72	1x M25	Lateral	1647103	76	1x M32	Lateral	1647174	76	1x M32	Lateral	1647213
	72	1x M32	Straight	1647158	76	1x M40	Straight	1644737	76	1x M40	Straight	1644740
	72	1x M32	Lateral	1647129	76	1x M40	Lateral	1644753	76	1x M40	Lateral	1644766
With metric screw connection 	45	1x M20	Straight	1586387	76	1x M25	Straight	1586484	76	1x M25	Straight	1586604
	52	1x M20	Lateral	1586390	76	1x M25	Lateral	1586497	76	1x M25	Lateral	1586617
	72	1x M25	Straight	1587056	76	1x M32	Straight	1586507	76	1x M32	Straight	1586620
	72	1x M25	Straight	1587069	76	1x M32	Lateral	1586510	76	1x M32	Lateral	1586633

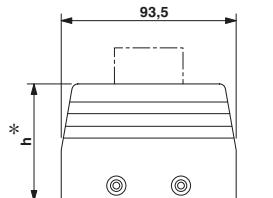
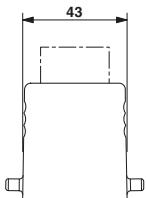
B32

Height [mm]	Thread	Cable outlet	Order No.
80	1x M25	Straight	1604870
80	1x M25	Lateral	1604871
80	1x M32	Lateral	1604872
80	1x M25	Straight	1645134
80	1x M25	Lateral	1645147
80	1x M32	Straight	1645383
80	1x M32	Lateral	1645150
80	1x M40	Straight	1647307
80	1x M40	Lateral	1645451

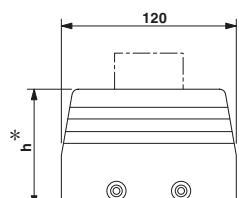
Dimensional drawings for standard sleeve housings, for double locking latch



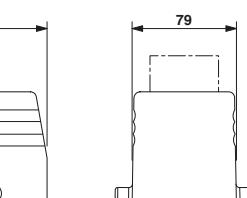
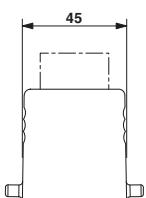
Type B10



Type B16

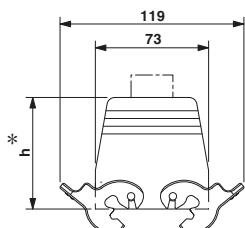


Type B24

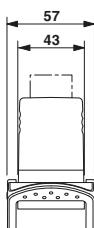


Type B32

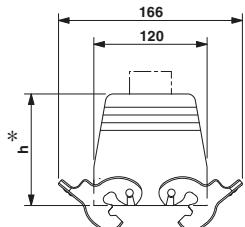
Dimensional drawings for standard sleeve housings, with double locking latch



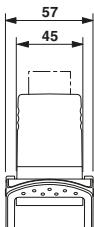
Type B10



Type B16



Type B24



* Please refer to the adjacent table for the dimensions

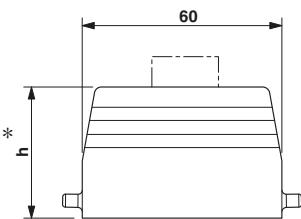
Housings for multiple screw connections available on request.

Further information on the HEAVYCON range can be found in the latest PLUSCON catalog and at www.phoenixcontact.net/eshop.

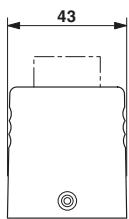
Standard sleeve housings

	B6				B10				B16			
	Height [mm]	Thread	Cable outlet	Order No.	Height [mm]	Thread	Cable outlet	Order No.	Height [mm]	Thread	Cable outlet	Order No.
For single locking latch (IP65)												
For metric screw connection, with supports	40	1x M20	Straight	1604731	45	1x M20	Straight	1604758	45	1x Pg21	Straight	1771574
	43	1x M20	Lateral	1604732	45	1x M25	Straight	1604759	60	1x Pg21	Lateral	1771561
	43	1x M25	Lateral	1604733	52	1x M20	Lateral	1604760	76	1x Pg29	Straight	1775606
	72	1x M20	Lateral	1604734	52	1x M25	Lateral	1604761	76	1x Pg29	Lateral	1775596
	72	1x M25	Straight	1604735	72	1x M25	Straight	1604762	76	1x Pg29	Lateral	1775596
	72	1x M25	Lateral	1604736	72	1x M25	Lateral	1604763	76	1x Pg29	Lateral	1775596
	72	1x M30	Lateral	1604737	72	1x M32	Straight	1604764				
For metric screw connection, without supports	72	1x M20	Straight	1645299	72	1x M20	Straight	1647077	76	1x M25	Straight	1645024
	72	1x M20	Lateral	1644928	72	1x M20	Lateral	1647064	76	1x M25	Lateral	1645037
	72	1x M25	Straight	1644931	72	1x M25	Straight	1644960	76	1x M32	Straight	1645040
	72	1x M25	Lateral	1644944	72	1x M25	Lateral	1644973	76	1x M32	Lateral	1645053
	72	1x M32	Straight	1646309	72	1x M32	Straight	1644986	76	1x M40	Straight	1644656
	72	1x M32	Lateral	1644957	72	1x M32	Lateral	1645312	76	1x M40	Lateral	1644672
With metric screw connection	40		Straight	1586303	45	1x M20	Straight	1586345	76	1x M25	Straight	1586400
	43	1x M20	Lateral	1586316	52	1x M20	Lateral	1586358	76	1x M25	Lateral	1586413
	72	1x M25	Straight	1586329	72	1x M20	Straight	1587014	76	1x M32	Straight	1586426
	72	1x M25	Lateral	1586332	72	1x M20	Lateral	1587027	76	1x M32	Lateral	1586439
With central locking latch (IP65)												
For metric screw connection, without supports									76	1x M32	Straight	1584635
									76	1x M32	Lateral	1584648

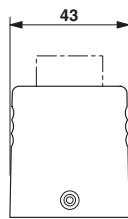
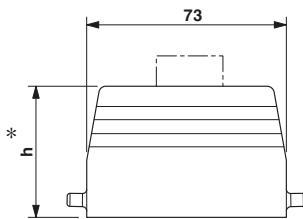
Dimensional drawings for standard sleeve housings, for single locking latch



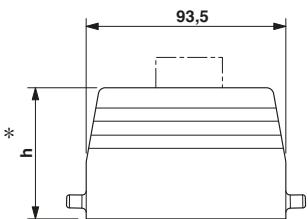
Type B6



Type B10



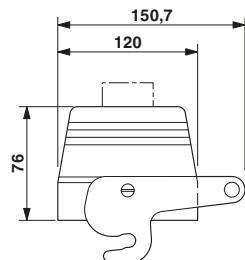
Type B16



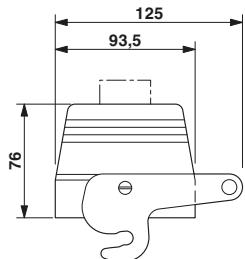
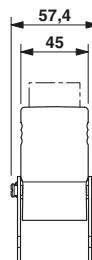
B24
B48

Height [mm]	Thread	Cable outlet	Order No.	Height [mm]	Thread	Cable outlet	Order No.
56	1x M25	Straight	1604839	96	1x M40	Straight	1604879
60	1x M25	Lateral	1604840	96	1x M40	Lateral	1604880
60	1x M32	Lateral	1644841				
76	1x M25	Straight	1604842				
76	1x M32	Straight	1604843				
76	1x M32	Lateral	1604844				
76	1x M25	Straight	1645082	96	1x M32	Straight	1647349
76	1x M25	Lateral	1645354	96	1x M32	Lateral	1647336
76	1x M32	Straight	1645367	96	1x M40	Straight	1647310
76	1x M32	Lateral	1645370	96	1x M40	Lateral	1647323
76	1x M40	Straight	1644669				
76	1x M40	Lateral	1644685				
76	1x M25	Straight	1586523				
76	1x M25	Lateral	1586536				
76	1x M32	Straight	1586549				
76	1x M32	Lateral	1586552				
76	1x M32	Straight	1584596				
76	1x M32	Lateral	1584606				

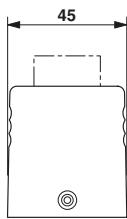
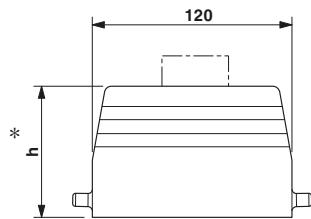
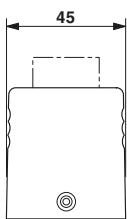
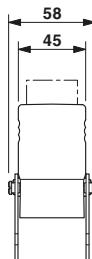
Dimensional drawings for standard sleeve housings,
with central locking latch



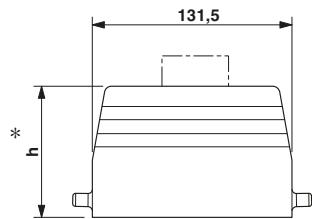
Type B16



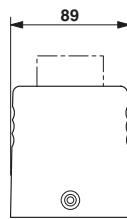
Type B24



Type B24



Type B48



* Please refer to the adjacent table for the dimensions

Further information on the HEAVYCON range can be found in the latest PLUSCON catalog and at www.phoenixcontact.net/eshop.

Supporting base elements

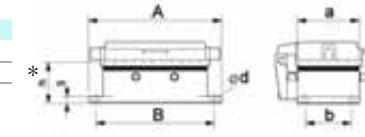
	B10				B16				B24			
	Height [mm]	Protective cover	Thread	Order No.	Height [mm]	Protective cover	Thread	Order No.	Height [mm]	Protective cover	Thread	Order No.
For double locking latch (IP65)												
Panel mounting base	27	Yes		1771341	27	Yes		1771600	27	Yes		1771956
Box mounting base	With metric screw connection											
	52	Yes	1x M20	1586837	67	Yes	1x M25	1586918	67	Yes	1x M25	1586992
	52	Yes	2x M20	1586840	67	Yes	2x M25	1586921	67	Yes	2x M25	1587001
	For metric screw connections, with supports											
	52	Yes	1x M20	1646489	67	Yes	2x M25	1604783	67	Yes	1x M25	1604830
	52	Yes	2x M20	1646492	68	Yes	1x M25	1646366	68	Yes	2x M25	1604831
	52	Yes	2x M25	1604748	84	Yes	1x M32	1645655	84	Yes	1x M32	1645736
	74	Yes	1x M25	1646502	84	Yes	2x M32	1645668	84	Yes	2x M32	1645749
	74	Yes	2x M25	1646515								
	74	Yes	2x M32	1646531								
With double locking latch (IP65)												
Panel mounting base	27			1771325	27			1771587	27			1771927
Box mounting base	With metric screw connection											
	73		1x M20	1586811	67		1x M25	1586895	67		1x M25	1586976
	73		2x M20	1586824	67		2x M25	1586905	67		2x M25	1586989
	For metric screw connections, with supports											
	52		1x M20	1604752	67		2x M25	1604835	67		1x M25	1604835
	52		2x M20	1604753	68		1x M25	1646353	68		2x M25	1646353
	52		2x M25	1604754	84		1x M32	1604836	84		1x M32	1604836
	74		1x M25	1604755	84		1x M40	1645419	84		2x M40	1645419
	74		2x M32	1604756	84		1x M32	1604837	84		2x Pg32	1604837
	74		2x M25	1604757	84		1x M40	1645723	84		2x Pg40	1645723
	74		2x M32	1645820								
Coupling housing	With metric screw connection											
	73		1x M25	1586662	80		1x M32	1586688	79		1x M32	1586714
									79		1x M40	1586727
	For metric screw connections, with supports											
	73		1x M20	1604745	80		1x M25	1604827	80		1x M25	1604827
	73		1x M25	1604746								
	For metric screw connections, without supports											
	73		1x M20	1647019	80		1x M25	1647242	80		1x M25	1647242
	73		1x M25	1647006	80		1x M32	1646874	80		1x M32	1646874
	73		1x M32	1647022	80		1x M40	1644782	80		1x M40	1644782

B32			
Height [mm]	Protective cover	Thread	Order No.
30			1775693
72		1x M32	1604867
72		1x M32	1604868
72		1x M40	1604869
82		1x M25	1604863
82		1x M32	1604864
82		1x M32	1647284
82		1x M40	1647297

Dimensional drawings for supporting base elements, for double locking latch

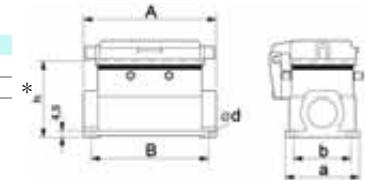
Panel mounting base

Type	A [mm]	B [mm]	a [mm]	b [mm]	Ø d [mm]
B10	93	83	43	32	4.5
B16	114	103	43	32	4.5
B24	140	130	43	32	4.5



Box mounting base

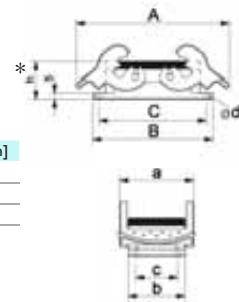
Type	A [mm]	B [mm]	a [mm]	b [mm]	Ø d [mm]
B10	93	82	57	45	5.5
B16	117	105	57	45	5.5
B24	144	132	57	45	5.5



Dimensional drawings for supporting base elements, with double locking latch

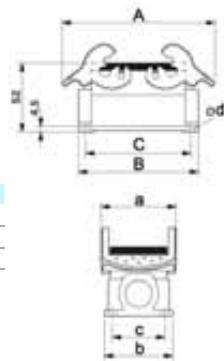
Panel mounting base

Type	A [mm]	B [mm]	C [mm]	a [mm]	b [mm]	c [mm]	Ø d [mm]
B10	119	93	83	57	43	32	4.5
B16	140	114	103	57	43	32	4.5
B24	166	140	130	57	43	32	4.5
B32	122	122	110	94	78	65	5.5



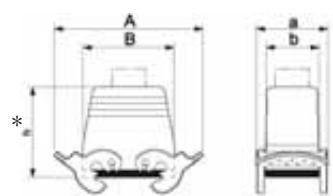
Box mounting base

Type	A [mm]	B [mm]	C [mm]	a [mm]	b [mm]	c [mm]	Ø d [mm]
B10	119	93	82	57	52	40	5.5
B16	140	117	105	57	57	45	5.5
B24	166	144	132	57	57	45	5.5
B32	123	124	112	92	81.5	67	5.5



Coupling housing

Type	A [mm]	B [mm]	a [mm]	b [mm]
B10	119	73	57	43
B16	140	93	57	45
B24	166	120	57	45
B32	134	94	92	79



* Please refer to the adjacent table for the dimensions

Further information on the HEAVYCON range can be found in the latest PLUSCON catalog and at www.phoenixcontact.net/eshop.

Supporting base elements

	B6				B10				B16			
	Height [mm]	Protective cover	Thread	Order No.	Height [mm]	Protective cover	Thread	Order No.	Height [mm]	Protective cover	Thread	Order No.
With single locking latch (IP65)												
Panel mounting base	27			1771134	27			1771338	27			1771590
	27	Yes/PA		1771147	27	Yes/PA		1771354	27	Yes/PA		1771613
	27	Yes/AL		1645464	27	Yes/AL		1645477	27	Yes/AL		1645480
Box mounting base	With metric screw connection											
	52		1x M20	1586730	52		1x M20	1586772			1x M25	1586853
	52		2x M20	1586743	52		2x M20	1586785	67		2x M25	1586866
	52	Yes	1x M20	1586756	52	Yes	1x M20	1586798	67	Yes	1x M25	1586879
	52	Yes	2x M20	1586769	52	Yes	2x M20	1586808	67	Yes	2x M25	1586882
	For metric screw connections, with supports											
	52		1x M20	1604721	52		1x M20	1646269	67		1x M25	1604784
	52		1x M25	1604722	52		2x M20	1646272	67		2x M25	1604785
	52		2x M20	1604723	74		1x M25	1646395	84		1x M32	1646299
	52		2x M25	1604724	74		1x M32	1646418	84		2x M32	1646308
	74		1x M25	1604725	74		2x M25	1646285	84		2x M40	1646324
	74		1x M32	1646845	74	Yes/PA	2x M32	1646421	67	Yes/PA	1x M25	1604786
	74		2x M32	1646858	52	Yes/PA	1x M20	1646434	67	Yes/PA	2x M25	1604787
	52	Yes/PA	1x M25	1604728	52	Yes/PA	2x M20	1604750	84	Yes/PA	1x M32	1645671
	52	Yes/PA	2x M20	1604729	52	Yes/PA	2x M25	1604751	84	Yes/PA	1x M40	1645697
	52	Yes/PA	2x M25	1604730	74	Yes/PA	1x M25	1646447	84	Yes/PA	2x M32	1645684
	74	Yes/PA	2x M32	1645861	74	Yes/PA	1x M32	1646463	84	Yes/PA	2x M40	1645707
					74	Yes/PA	2x M25	1646450				
					74	Yes/PA	2x M32	1646476				
Coupling housing	With metric screw connection											
					73		1x M25	1586659	80		1x M32	1586675
	For metric screw connections, with supports											
	73		1x M20	1607419	73		1x M25	1604743	80		1x M32	1687626
	For metric screw connections, without supports											
	73		1x M20	1646997	73		1x M20	1647048	80		1x M25	1646890
	73		1x M25	1646971	73		1x M25	1647035	80		1x M40	1644792
	73		1x M32	1646984	73		1x M32	1647051				
For central locking latch (IP65)												
Panel mounting base									27	Yes		1584622
Box mounting base									84		1x M32	1584619

B24				B48			
Height [mm]	Protective cover	Thread	Order No.	Height [mm]	Protective cover	Thread	Order No.
27			1771930	41			1772175
27	Yes/PA		1771943	41	Yes/PA		1772188
27	Yes/AL		1645493				
67		1x M25	1586934				
67		2x M25	1586947				
67	Yes	1x M25	1586950				
67	Yes	2x M25	1586963				
68		1x M25	1646337	100		1x M32	1604875
68		2x M25	1646340	100		2x M40	1604876
84		1x M32	1645752	100	Yes/PA	1x M32	1604877
84		1x M40	1645765	100	Yes/PA	2x M40	1604878
84		2x M32	1604832				
84		2x M40	1645778				
67	Yes/PA	1x M25	1604833				
67	Yes/PA	2x M25	1604834				
84	Yes/PA	1x M32	1645781				
84	Yes/PA	2x M32	1645794				
84	Yes/PA	2x M40	1645817				
79		1x M32	1586691				
79		1x M40	1586701				
80		1x M25	1604823				
80		1x M32	1604824				
80		1x M25	1647255				
80		1x M32	1647268				
80		1x M40	1644805				
27			1584583				
84		1x M32	1584570				

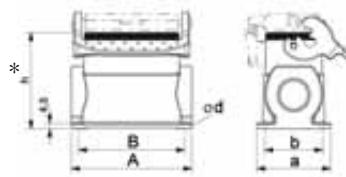
Dimensional drawings for supporting base elements, with single locking latch

Panel mounting base



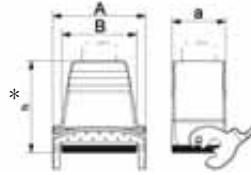
Type	A [mm]	B [mm]	a [mm]	b [mm]	Od [mm]
B6	80	70	43	32	4.5
B10	93	83	43	32	4.5
B16	114	103	43	32	4.5
B24	140	130	43	32	4.5
B48	165	148	91	70	6.3

Box mounting base



Type	A [mm]	B [mm]	a [mm]	b [mm]	Od [mm]
B6	84	70	57	45	5.5
B10	93	82	57	45	5.5
B16	117	105	57	45	5.5
B24	144	132	57	45	5.5
B48	151	111	120	106	6.3

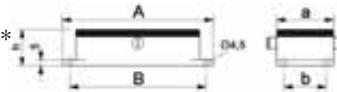
Coupling housing



Type	A [mm]	B [mm]	a [mm]
B6	74	60	43
B10	89	73	43
B16	109	94	45
B24	136	120	45

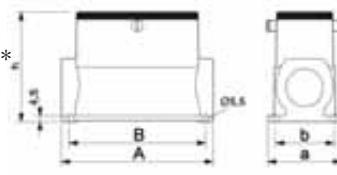
Dimensional drawings for supporting base elements, with central locking latch

Panel mounting base



Type	A [mm]	B [mm]	a [mm]	b [mm]
B16	114	103	43	32
B24	140	130	43	32

Box mounting base



Type	A [mm]	B [mm]	a [mm]	b [mm]
B16	117	105	57	45
B24	144	132	57	45

* Please refer to the adjacent table for the dimensions

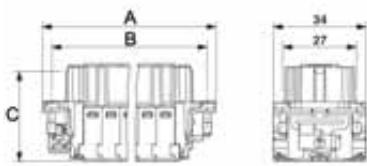
Further information on the HEAVYCON range can be found in the latest PLUSCON catalog and at www.phoenixcontact.net/eshop.

Contact inserts with a fixed number of positions

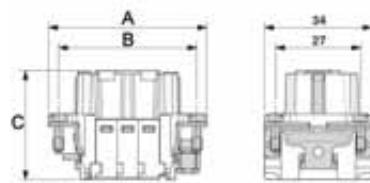
Technical data		Connection method		Connection cross section		Number of positions			
						6	10	16/32*	24/48*
B series		Rated voltage: 500 V With QUICKON connection: 400 V Rated current: 16 A Crimp contacts CK 2,5-ED	Female	Push-in connection	0.5 – 2.5 mm ²	1648144	1648209	1648267/ 1584907	1648322/ 1584965
				Screw connection	0.5 – 2.5 mm ²	1648128	1648186	1648241/ 1584884	1648306/ 1584949
				Crimp connection	0.5 – 4 mm ²	1648160	1648225	1648283/ 1584923	1648348/ 1584981
				QUICKON connection	0.34 – 2.5 mm ²	1605556	1605569	1605572/ 1605637	1605585/ 1605640
				Spring-cage connection	0.14 – 2.5 mm ²	1687862	1687888	1687901/ 1647446	1687927/ 1647488
			Male	Push-in connection	0.5 – 2.5 mm ²	1648131	1648199	1648254/ 1584897	1648319/ 1584952
				Screw connection	0.5 – 2.5 mm ²	1648115	1648173	1648238/ 1584871	1648296/ 1584936
				Crimp connection	0.5 – 4 mm ²	1648157	1648212	1648270/ 1584910	1648335/ 1584978
				QUICKON connection	0.34 – 2.5 mm ²	1605611	1605624	1605637/ 1605653	1605640/ 1605666
				Spring-cage connection	0.14 – 2.5 mm ²	1687859	1687875	1687891/ 1647433	1687914/ 1647475
BB series		Rated voltage: 500 V Rated current: 16 A Crimp contacts CK 2,5-ED	Female	Crimp connection	0.5 – 4 mm ²	1687435	1687451	1687477	1687493
			Male	Crimp connection	0.5 – 4 mm ²	1687448	1687464	1687480	1687503
D series		Rated voltage: 250 V Rated current: 10 A Crimp contacts CK 1,6-ED	Female	Crimp connection	0.14 – 1.5/2.5 mm ²	1772492	1772515	2x 1772492	2x 1772515
			Male	Crimp connection	0.14 – 1.5/2.5 mm ²	1772502	1772528	2x 1772502	2x 1772528
DD series		Rated voltage: 250 V Rated current: 10 A Crimp contacts CK 1,6-ED	Female	Crimp connection	0.14 – 2.5 mm ²	1584046	1584062	1584091/ 1584101	1584130/ 1584143
			Male	Crimp connection	0.14 – 2.5 mm ²	1584033	1584059	1584075/ 1584088	1584114/ 1584127
HS series		Rated voltage: 500 V Rated current: 35 A	Female	Screw connection	0.5 – 6 mm ²	1773132/ 1674561			
			Male	Screw connection	0.5 – 6 mm ²	1773129/ 1674574			

The numbers of positions marked with a * have resulted from the use of two contact inserts mentioned in the table with different contact marking (1...X and X+1...X).

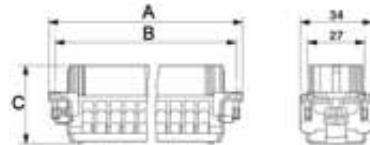
Dimensional drawings for series B contact inserts



Push-in connection



Crimp connection

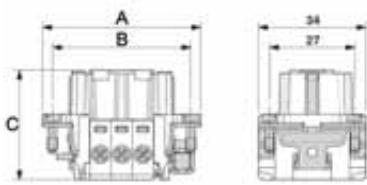


QUICKON connection

Type	Connection	A [mm]	B [mm]	C [mm]
B6	Female	51.5	44	35.5
	Male	51.5	44	35.5
B10	Female	64	57	35.5
	Male	64	57	35.5
B16	Female	84.5	77.5	35.5
	Male	84.5	77.5	35.5
B24	Female	111	104	35.5
	Male	111	104	35.5

Type	Connection	A [mm]	B [mm]	C [mm]
B6	Female	51	44	37
	Male	51	44	35
B10	Female	64	57	37
	Male	64	57	35
B16	Female	84.5	77.5	37.5
	Male	84.5	77.5	35.5
B24	Female	111	104	37.5
	Male	111	104	35

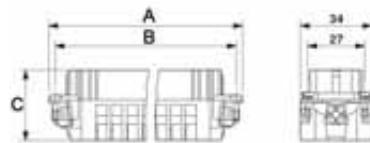
Type	Connection	A [mm]	B [mm]	C [mm]
B6	Female	51	44	37
	Male	51	44	35
B10	Female	64	57	37
	Male	64	57	35
B16	Female	84.5	77.5	37.5
	Male	84.5	77.5	35.5
B24	Female	111	104	37.5
	Male	111	104	35



Screw connection

Type	Connection	A [mm]	B [mm]	C [mm]
B6	Female	51	44	37
	Male	51	44	35
B10	Female	64	57	37
	Male	64	57	35
B16	Female	84.5	77.5	37.5
	Male	84.5	77.5	35.5
B24	Female	111	104	37.5
	Male	111	104	35
HS6	Female	84.5	77.5	33
	Male	84.5	77.5	34

Type	Connection	A [mm]	B [mm]	C [mm]
B6	Female	51	44	35.4
	Male	51	44	33.2
B10	Female	64	57	35.6
	Male	64	57	33.2
B16	Female	84.5	77.5	35.6
	Male	84.5	77.5	33.4
B24	Female	111	104	35.4
	Male	111	104	33.2
DD108	Female	111	104	36.5
	Male	111	104	35



Spring-cage connection

Type	Connection	A [mm]	B [mm]	C [mm]
B6	Female	51	44	35.4
	Male	51	44	33.2
B10	Female	64	57	35.6
	Male	64	57	33.2
B16	Female	84.5	77.5	35.6
	Male	84.5	77.5	33.4
B24	Female	111	104	35.4
	Male	111	104	33.2

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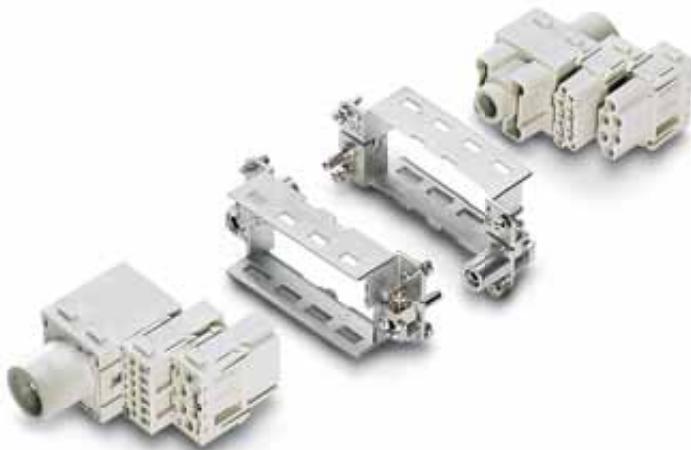
Modular contact inserts

	Connection	Number of positions	Rated current	Rated voltage	Connection cross section	Module slots	Type	Order No.
High-current modules 	Axial screw connection	2	70 A	1000 V	6 mm ² ... 16 mm ²	1	Female	1585715
	Axial screw connection	2	70 A	1000 V	14 mm ² ... 22 mm ²	1	Male	1585702
	Axial screw connection	2	100 A	1000 V	16 mm ² ... 35 mm ²	2	Female	1585731
	Axial screw connection	1	200 A	1000 V	25 mm ² ... 40 mm ²	2	Male	1585728
	Axial screw connection	1	200 A	1000 V	40 mm ² ... 70 mm ²	2	Female	1605001
							Male	1605000
Modules for crimp contacts with 2 – 25 positions 	Axial screw connection	2	40 A	1000 V	2.5 mm ² ... 8 mm ²	1	Female	1679359
							Male	1679346
	Crimp connection	3	40 A	500 V	1.5 mm ² ... 6 mm ²	1	Female	1645972
							Male	1645969
	Crimp connection	4	40 A	830 V	1.5 mm ² ... 6 mm ²	1	Female	1585605
							Male	1585618
	* Crimp connection	3	40 A	830 V	1.5 mm ² ... 6 mm ²	1	Female	1585786
		4	10 A	830 V	0.14 mm ² ... 2.5 mm ²		Male	1585799
	Spring-cage connection	5	16 A	400 V	0.14 mm ² ... 2.5 mm ²	1	Female	1647721
							Male	1647718
	Crimp connection	6	16 A	500 V	0.5 mm ² ... 4 mm ²	1	Female	1663462
							Male	1663459
	Crimp connection	8	16 A	400 V	0.5 mm ² ... 4 mm ²	1	Female	1605003
							Male	1605002
	Crimp connection	12	10 A	250 V	0.14 mm ² ... 2.5 mm ²	1	Female	1663323
							Male	1663310
	Crimp connection	17	10 A	160 V	0.14 mm ² ... 2.5 mm ²	1	Female	1636486
							Male	1636473
	Crimp connection	20	16 A	500 V	0.5 mm ² ... 4 mm ²	2	Female	1636936
							Male	1636923
	Crimp connection	25	5 A	50 V	0.09 mm ² ... 0.5 mm ²	1	Female	1605005
							Male	1605004
DSUB 09 modules 	Crimp connection	9	1 A	50 V	0.09 mm ² ... 0.5 mm ²	1	Female	1647543
	Screw connection	2	5 A	50 V	0.09 mm ² ... 0.5 mm ²	1	Male	1647530
								1636444

* Combined contact insert: 3 power contacts, 4 control contacts

	Connection cross section	Number of module slots	Type	Order No.
Hinged retaining frame for sleeve housings 	4 mm ² ... 6 mm ² for PE-conductor power side	2	B6	1679249
		3	B10	1679252
	1 mm ² ... 2.5 mm ² for PE-conductor power side	4	B16	1679265
		6	B24	1679278
Hinged retaining frames for supporting base elements and panel mounting flanges 	4 mm ² ... 6 mm ² for PE-conductor power side	2	B6	1679281
		3	B10	1679294
	1 mm ² ... 2.5 mm ² for PE-conductor power side	4	B16	1679304
		6	B24	1679317
Fixing wedge (for fixing the hinged retaining frame)				1585155
Cable lug 				1636981

Example for fitted hinged retaining frame



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Crimp contacts and tools

		Conductor cross-section [mm ²]	AWG	Silver-plated contact surface ...-AG	Gold-plated contact surface ...-AU	Thermostatic contacts, iron ...-FE	Thermostatic contacts, constantan ...-CuNi	
Crimp contacts								
	Female contacts turned CK1,6-ED ...	0.14 ... 0.37	24 ... 22	1663394	1674969			
		0.50	20	1663404	1674480			
		0.75	18	1663417	1672440			
		0.75 ... 1.00	18	1663420	1674943			
		1.50	16	1663433	1674930			
		2.50	14	1663446	1674985			
	Contact pins turned CK1,6-ED ...	0.14 ... 0.37	24 ... 22	1663336	1679401			
		0.50	20	1663349	1672453			
		0.75	18	1663352	1674914			
		0.75 ... 1.00	18	1663365	1674888			
		1.50	16	1663378	1674875			
		2.50	14	1663381	1674927			
	Female contacts turned CK2,5-ED ...	0.50	20	1663640	1674859	1585773	1585757	
		0.75	18	1663653				
		0.75 ... 1.00	18	1663666	1674833			
		1.50	16	1663679	1674820			
		2.50	14	1663682	1674862			
		4.00	12	1663705	1674846			
	Male contacts turned CK2,5-ED ...	0.50	20	1663572	1674804	1585760	1585744	
		0.75	18	1663585				
		0.75 ... 1.00	18	1663598	1674781			
		1.50	16	1663608	1674778			
		2.50	14	1663611	1674817			
		4.00	12	1663637	1674794			
Description						Order No.		
Tool								
	Crimping pliers for turned contacts CK1,6-ED ... CK2,5-ED					1687419		
	Crimping pliers for turned contacts CK4,0-ED (1.5 – 2.5 mm ²)					1205846		
	Crimping pliers for turned contacts CK4,0-ED (4.0 – 6.0 mm ²)					1205859		
	Spare die for crimping pliers CK1,6-ED ... CK2,5-ED					1886948		
	Removal tool for contacts CK1,6-ED ... /CK1,6-ER					1884869		
	Removal tool for contacts CK2,5-ED					1662722		
	Stripping pliers for fiber optics cables / individual elements					2744199		

Terminal adapters

	Connection method	PE terminal blocks	B6	B10	B16	B24	D40	D64
B series Screw connection	Female	Left	1648066	1648078	1648090	1648102		
		Right	1648018	1648030	1648042	1648054		
	Male	Left	1648072	1648084	1648096	1648108		
		Right	1648024	1648036	1648048	1648060		
B series Push-in connection	Female	Left	1648351	1648393	1648432	1648474		
		Right	1648377	1648416	1648458	1648490		
	Male	Left	1648364	1648403	1648445	1648487		
		Right	1648380	1648429	1648461	1948500		
D series Screw connection	Female	Left					1584253	1584295
		Right					1584279	1584321
	Male	Left					1584240	1584282
		Right					1584266	1584318
D series Push-in connection	Female	Left					1580147	1774869
		Right					1580163	1774526
	Male	Left					1580150	1774872
		Right					1580176	1774513

Metric cable glands

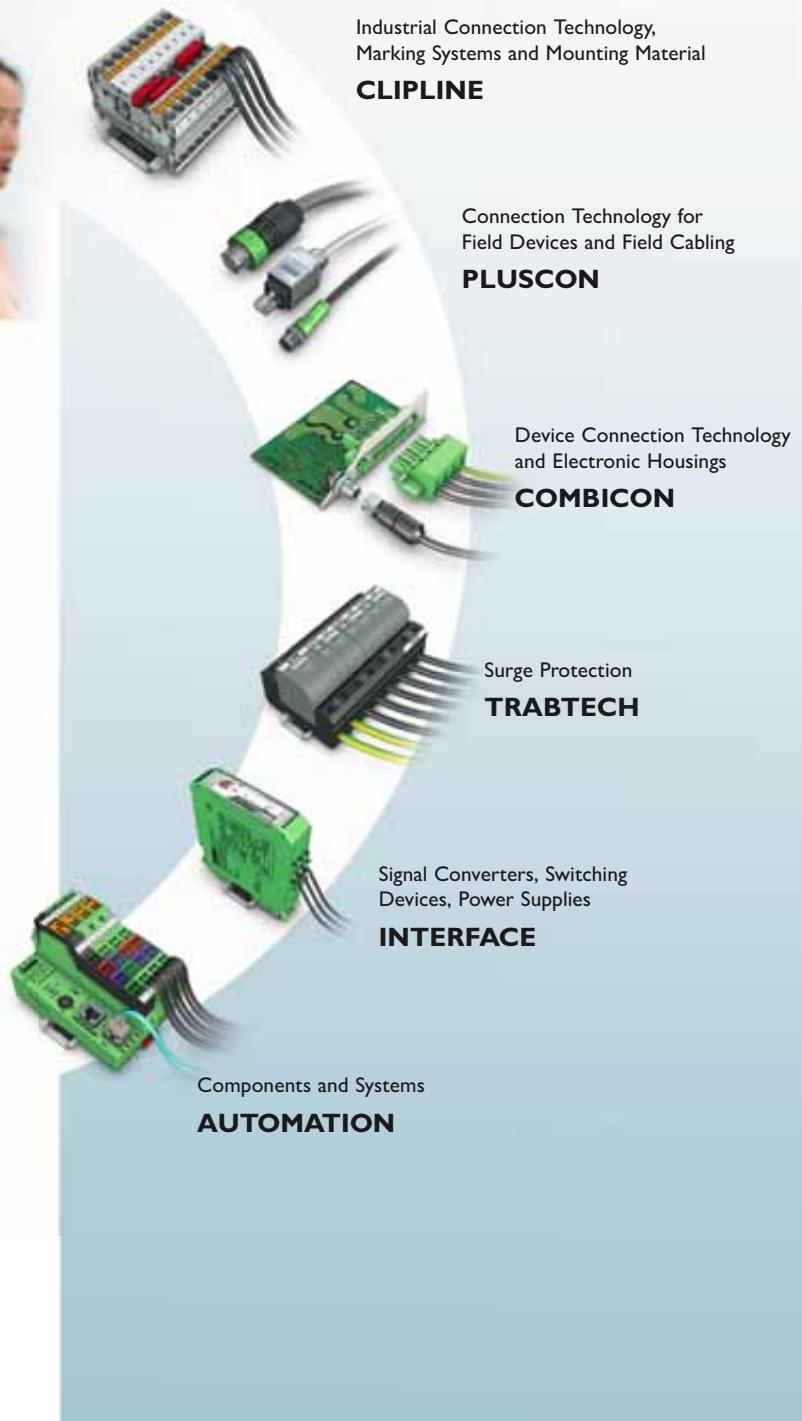
	Screw connection	Thread length [mm]	Cable Ø [mm]	WAF	Order No.
	Plastic screw connection IP68, up to 5 bar	M16	8	5 ... 10	1690613
		M20	8	8 ... 13	1690626
		M25	8	1 ... 17	1690639
		M32	10	15 ... 21	1690642
		M40	10	19 ... 28	1690655
	Metal screw connection IP68, up to 5 bar	M16	5	5 ... 9	1690558
		M20	6	9 ... 13	1690561
		M20	6	11 ... 16	1645998
		M25	7	11 ... 16	1690574
		M25	7	14 ... 21	1646007
		M32	8	14 ... 21	1690587
		M32	8	19 ... 27	1646010
		M40	8	19 ... 27	1690590
		M40	8	27 ... 34	1607729
	EMC screw connection IP68, up to 5 bar	M16	4	4.5 ... 9	1690493
		M20	5	7 ... 12.5	1690503
		M25	7.5	9 ... 16.5	1690516
		M32	9	11 ... 21	1690529
		M40	15	19 ... 28	1690545

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Further information on the products
presented here and on the world of solutions
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