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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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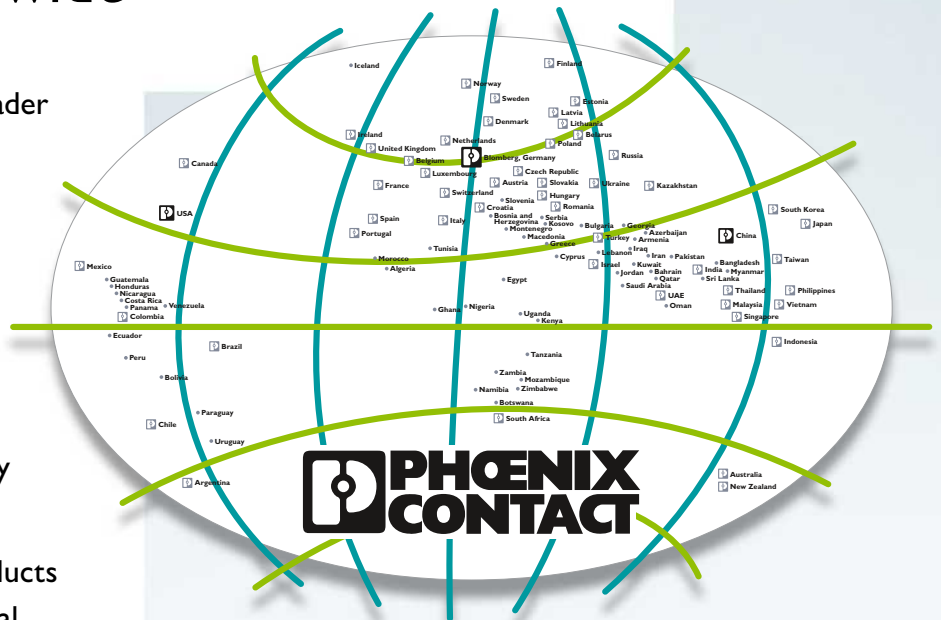
HEAVYCON complete heavy-duty connectors

Compatible insertion – flexible combinations

PHOENIX CONTACT – in dialog with customers and partners worldwide

Phoenix Contact is a global market leader in the field of electrical engineering, electronics and automation. Founded in 1923, the family-owned company now employs around 14,500 people worldwide. A global sales network with over 50 sales subsidiaries and more than 30 additional sales partners guarantees customer proximity directly on site, anywhere in the world.

Our range of services consists of products associated with various electrotechnical applications. This includes numerous connection technologies for device manufacturers and machine building, components for modern control cabinets, and tailor-made solutions for many applications and industries, such as the automotive industry, wind energy, solar energy, the process industry or applications in the field of water management, power transmission/distribution, and transportation infrastructure.



Global player with personal customer contact

Company independence is an integral part of our corporate policy. Phoenix Contact therefore relies on in-house competence and expertise in a range of contexts: the design and development departments constantly come up with innovative product ideas, developing special solutions to meet customer requirements. Numerous patents emphasize the fact that many of Phoenix Contact's products have been developed in-house.



HEAVYCON complete – The right connector for every application



Find out more with the web code

You can find web codes in this brochure: a pound sign followed by a four-digit number combination.

i Web code: #1234 (example)

This allows you to access information on our website quickly.

It couldn't be simpler:

1. Go to the Phoenix Contact website
2. Enter # and the number combination in the search field
3. Get more information and product versions

Or use the direct link:
phoenixcontact.net/webcode/#1234

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HEAVYCON complete – The right connector for every application

Heavy-duty connectors from the HEAVYCON complete series protect your interfaces and ensure secure power, data and signal transmission even under the harshest conditions. They resist dirt, water, vibrations and high mechanical strain and remain sealed up to IP69K degree of protection. You can always create the right plug-in connection for your requirements with housings from our three series types and matching contact inserts which can be combined.

Metal housings are EMC-ready

Thanks to conductive surfaces and seals, all HEAVYCON metal housings are "EMC-ready".

Combined with shielded cable glands, they offer you reliable protection in electromagnetic environments.



Wind turbine generators

In wind turbines, groups of cables and lines are connected using connectors. This is the only way that large systems can be installed quickly and cost-effectively. The interfaces must be resistant to corrosion, robust and as lightweight as possible. This is where the HEAVYCON EVO series comes into its own.



Automotive industry

Robust, hard-wearing connectors are used on assembly lines in the automotive industry. This lets you reduce the costs of transport, startup and maintenance. The HEAVYCON STANDARD metal connectors are perfectly suited here for ensuring fast assembly and a high degree of availability.



Control cabinet manufacturing, machine building and systems manufacturing

Reliable interfaces are an absolute must in state-of-the-art systems. As the system's complexity increases, there is less and less installation space available. Combine virtually every plug-in connection with the HEAVYCON complete product range – optimally tailored to your space requirements and assembly effort.



HEAVYCON complete provides the right connector with matching connection technology for every application: compatible insertion and flexible combinations.

HEAVYCON complete



HEAVYCON STANDARD – Proven versatility

STANDARD housings are distinguished by a wide range of robust metal housings with various cable outlet directions and locks.

- High corrosion resistance
- Flexible single or double locking latches
- Mounting and plug-in compatible
- EMC-ready



HEAVYCON EVO – Ingenious flexibility

The flexibly swiveling bayonet locking of the EVO series allows you to freely select the cable outlet direction.

- On-site selection of cable outlet direction
- Lower logistics costs
- Flexible single or double locking latches
- Mounting and plug-in compatible
- Metal housings: EMC-ready



HEAVYCON ADVANCE – Robust without compromise

ADVANCE housings are particularly durable and robust, thanks to direct screw locking without panel mounting base.

- Ideal for increased environmental requirements thanks to high degree of protection
- Cost advantage thanks to direct mounting
- Mounting compatible
- Metal housings: EMC-ready

HEAVYCON complete – Free combination is your competitive advantage

The entire HEAVYCON complete product range consists of metal and plastic housings, contact inserts, cable glands and accessories.

All housing series fit standard panel cutouts. STANDARD and EVO housings require a panel mounting base for the panel feed-through. ADVANCE housings can be mounted directly onto the wall using the panel mounting flange.

The sleeve housings, panel mounting bases, box mounting bases and coupling housings can be freely combined with each other within the STANDARD and EVO series. They are mounting and plug-in compatible with aluminum housings from well-known manufacturers. This allows all components to be individually combined and flexibly modified, extended or replaced.

Our fixed position and modular contact inserts naturally fit into all housing series.

HEAVYCON complete

HEAVYCON STANDARD

Sleeve housing



Contact inserts



Fixed position

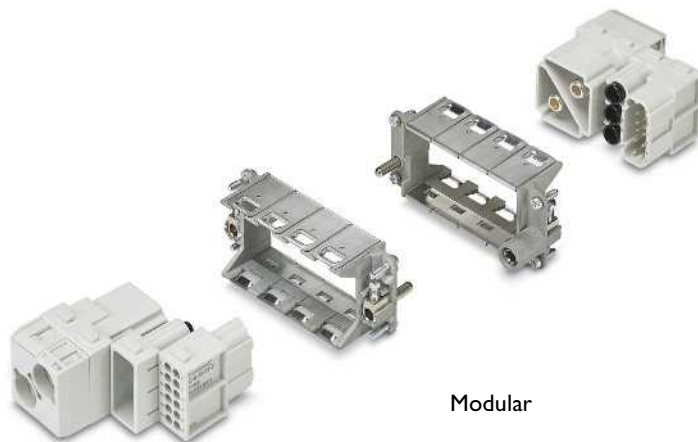
Panel mounting base



HEAVYCON EVO



HEAVYCON ADVANCE



Modular



Panel mounting flange

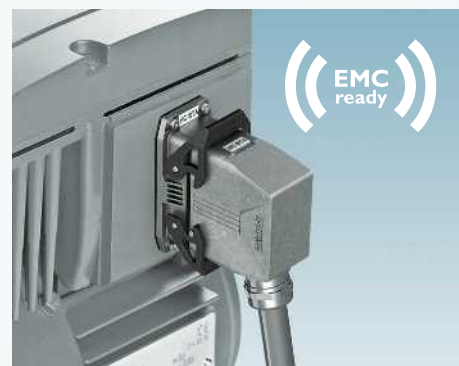


HEAVYCON STANDARD – Proven versatility

HEAVYCON STANDARD housings with fast and reliable locking latch are suitable for many applications.

The robust metal housings resist dirt, water, vibrations and high mechanical strain.

HEAVYCON STANDARD and EVO housings are equipped with single or double locking latches. Various supporting base elements such as panel mounting bases, box mounting bases or coupling housings are available depending on the application.



EMC protection

The housing surfaces and seals are electrically conductive. Combined with shielded cable glands, they offer you reliable EMC protection.



Proven product range

The STANDARD housings are available in market-standard sizes and are fully compatible with the industry standard.



Convenient locking latch

The locking latch can be manually pressed quickly and easily. Housings with single locking latch are ideal for alignment lengthwise. Double locking latches can be installed sideways and save space. The locking latches comprise special, glass-reinforced polyamide.



Various outlet directions

Select from our wide housing range according to your requirements. We offer you sleeve housings with straight or lateral cable outlets for all common metric and Pg thread sizes.



For the harshest conditions

The robust metal housings are made from particularly corrosion-resistant die-cast aluminum, which is resistant to aggressive industrial conditions and high mechanical strain. They are reliably sealed up to IP69K degree of protection.

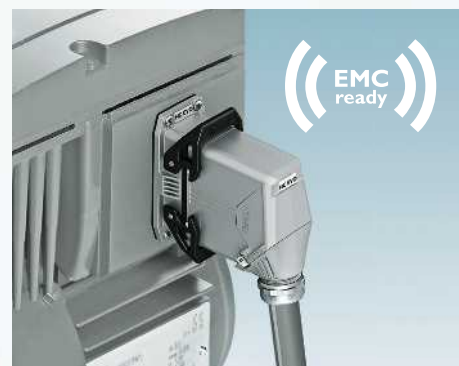
HEAVYCON EVO – Ingenious flexibility

Switch to HEAVYCON EVO now and save on material and storage costs. You can use the angled EVO cable input to cut down the need for up to 70% of variants. The use of high-quality materials and full compatibility with the industry standard enable failsafe use in a wide range of applications.

Depending on the application, select a cost-effective plastic housing or an EMC-compatible metal housing.



HEAVYCON EVO housings reduce the number of variants, and your storage costs, by up to 70%. Using just one housing type and four cable glands, you can implement solutions for every possible application, whether with a straight or lateral outlet.



EMC protection

The housing surfaces and seals of the metal series are electrically conductive. Combined with shielded cable glands, they offer you reliable EMC protection.



Flexible connection in moments

The cable gland, which is separate from the housing, is securely locked in place in moments and without the need for special tools thanks to the bayonet locking.



Convenient locking latch

The locking latch can be manually pressed quickly and easily. Housings with single locking latch are ideal for alignment lengthwise. Double locking latches can be installed sideways and save space. The locking latches comprise special, glass-reinforced polyamide.



Two outlet directions with one housing

Thanks to the flexible bayonet locking, you can determine the cable outlet direction on site and subsequently change it, if required. The straight outlet enables tighter cable management along the wall. Fabricate a side outlet without bending the cable.



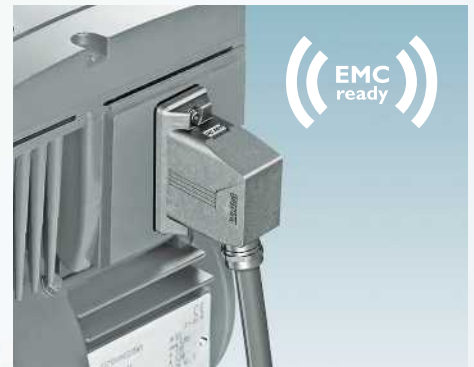
For harsh conditions

EVO connectors are tested for use in various industrial applications. The plastic housings, made from specially glass-reinforced polyamide, meet IP66 and NEMA 4X degree of protection, the metal housings meet IP66/IP67/IP69K and NEMA 4X/6P.

HEAVYCON ADVANCE – Robust without compromise

Heavy-duty HEAVYCON ADVANCE connectors with screw locking are ideal for particularly aggressive environments, such as the off-shore area, chemical industry or rail industry. Non-hard-wearing interfaces are reliably protected, even against EMC influences.

For the panel feed-through, the panel mounting base typically used has been replaced by two panel mounting flanges, thereby reducing assembly and material costs. In doing so, the sleeve housing forms a seal directly on the control cabinet panel.



EMC protection

The housing surfaces and seals of the metal series are electrically conductive. Combined with shielded cable glands, they offer you reliable EMC protection.



Save space and reduce costs
 ADVANCE housings do not need a panel mounting base on the device side.



Robust screw locking

ADVANCE housings do not need a panel mounting base on the device side. Mount the sleeve housing with two panel mounting flanges and robust stainless steel locking screws directly onto the wall. This not only saves time and reduces costs, it also offers a high degree of tightness and makes it more difficult for unauthorized persons to access.



Cost-efficient designs

By eliminating the typical panel mounting base, you save on assembly and material costs. Additional savings potential is offered by the low metal housing designs and molded cable glands of the plastic design.



For the harshest conditions

The resistant plastic housings meet IP68 degree of protection. The two metal housing variants made from corrosion-resistant cast aluminum are reliably sealed up to IP68/IP69K degree of protection. Thanks to the special powder coating and UV-resistant seals, the outdoor housings are ideal for use under extreme outdoor conditions.

HEAVYCON complete – Quality in every application

The quality of our products is our top priority. We do more than test the long-term quality on finished products, we are aware of our responsibility and perform testing during every step of the development process.

A process-oriented, integrated management system ensures that not only legislation and standards, but also customer requirements are taken into account in the manufacturing of our products.



IP and NEMA degrees of protection DIN EN 60529, NEMA 250

Protection of contact inserts within the housing against ingress of dust or heavy jet water is examined here.

On HEAVYCON connectors, no visible dust or water ingress can be detected within the housing.



Vibration IEC 60068-2-6

Harmonic, sinusoidal vibrations are applied to the test object to simulate rotating, pulsating or oscillating forces during the vibration test.

HEAVYCON connectors fulfill these requirements, making them ideal for applications on construction vehicles and machinery.



Temperature shock IEC 60512-11-4, test 11d

To simulate significant temperature differences, the test objects are switched between the lower and upper limiting temperature of the product within a few seconds in a two chamber procedure.

HEAVYCON connectors are suitable for applications at an ambient temperature of -40 °C to +125 °C with constant temperature response.

HEAVYCON connectors are tested in accordance with numerous national and international standards and are suitable for many applications.



**IK09 shock resistance
IEC 62262**

Shock resistance is tested with a hammer in freefall with a mass of 1.7 kg from a height of 0.3 m.

HEAVYCON plastic connectors with IK09 are shock resistant to a similar degree as aluminum connectors or control boxes. They therefore meet the mechanical requirements of heavy-duty industrial connectors.



**Roll-over
According to DIN IEC 62196-1**

A special test is carried out on the plastic housing where a forklift truck weighing several tons is rolled over the housing.

HEAVYCON plastic housings withstand high stresses from heavy, moving loads without any adverse effect on function and are therefore ideal for use in industrial environments.



**Dynamic load
HEAVYCON EVO special test**

In this test, a force of 200 N is applied to the cable in 50 cycles at an angle of 90°.

This test verifies that the HEAVYCON EVO bayonet locking and the double locking latch between the housing and panel mounting frame do not open independently or malfunction even in the case of extremely static loads.

Contact inserts with a fixed number of positions – The right connection technology for every application

Our contact inserts offer you consistently compatible interfaces, which can be flexibly combined, for all conventional sizes.

The variants with a fixed number of positions are available – including mixing and matching – in a variety of performance classes and utilizing an assortment of connection technologies.

Fast connection technologies such as push-in or QUICKON displacement connection make it possible to connect cables in seconds.

Your advantages:

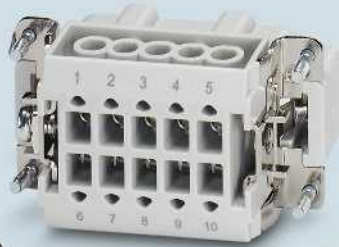
- Wide range of applications: for currents up to 80 A
- Save time, thanks to fast connection technologies such as push-in or QUICKON (IDC)
- Protection against mismatching, thanks to coding with plastic profiles
- Fully compatible with the industry standard



User-friendly push-in connection

Contact inserts with push-in connection provide easy handling, extremely short connection time, and an air-tight, vibration-proof and shock-proof connection. Stranded conductors with splicing protection or solid conductors can be inserted directly into the connection without any tools. The orange colored button can be used to remove the conductor without any special tools.

Screw connection



QUICKON connection



Push-in connection



Crimp connection

Contact inserts with a variety of connection technologies for safe and convenient wiring.

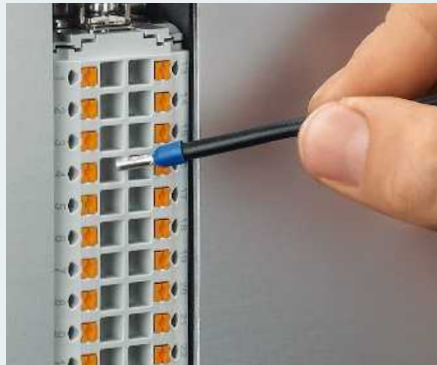
Push-in Technology

Designed by PHOENIX CONTACT



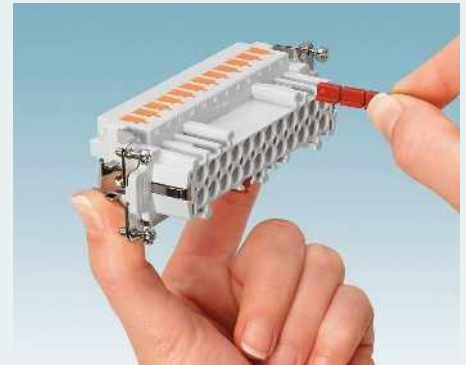
Fast QUICKON connection

Save up to 60% of wiring time: for contact inserts with QUICKON displacement connection, connect solid and stranded conductors in a flash without any prior processing. Simply route the unstripped cores through the connection and wire the slider with a screwdriver. The wire insulation is severed and large-surface, gas-tight contact is made.



Easy installation

Contact inserts with push-in connection technology allow you to make connections quickly and easily, even for components already installed in a control cabinet.



Fast, cost-effective coding

In many cases, a security measure is needed to avoid confusing identical neighboring connectors. Unlike coding methods such as coding bolts, pins or connectors, coding for HEAVYCON contact inserts is provided by quickly snapping in plastic coding profiles.

Modular contact inserts – Everything in one housing

Create the combination for the perfect modules to meet your application from our wide range: HEAVYCON modular encompasses more than 50 contact inserts for power, signal and data transmission as well as pneumatic applications.

The innovative snap-in frame with solid latch springs enables quick installation. It fits in all housings of the HEAVYCON STANDARD, EVO and ADVANCE series.

Modules and frames are compatible with the market standard.

Your advantages:

- Ultra-compact interface by combining various transmission media in one housing
- Reduce installation time by 40% with innovative snap-in frame with latch springs
- Safety through touch proofness and leading PE contact
- Fully compatible with the industry standard



Simple to snap in

Mount any module combination quickly and easily with the innovative snap-in frame. Snap in the contact inserts – job done! Springs on the side accommodate the modules and securely hold them in position.

The right connector for every application, thanks to the comprehensive range of contact inserts

Push-in Technology

Designed by PHOENIX CONTACT



Simple to contact

Direct insertion without any tools: contact inserts with push-in connection offer a convenient conductor connection resistant to vibrations.

Modules with QUICKON fast connection technology, ready-to-use RJ45 patch cables and FO contacts for field assembly complete the product range.



Simple to insert

Thanks to snap-in frames, you can insert modules in previously installed panel mounting bases or replace contact inserts with ease later.




Reliable data transmission

We offer the right inserts for virtually every application: RJ Industrial modules with IDC connection, Gigabit modules with 360° shielding and paired shielded contacts for high-speed applications as well as modules for fiber optics based on LC or SC technology using contacts from Phoenix Contact.

System cross-reference list: HEAVYCON housings and contact inserts

The system cross-reference list provides an overview of which contact inserts and housings work together.

Configure complete HEAVYCON connectors easily and quickly with our configurator:

 Web code: #0003



HEAVYCON contact inserts



Series	A		D		Q						A			D			D				
Number of positions	3	4	7	8	2	3	4	5	7	12	10	16	2x16	15	25	2x25	40	64	2x40	2x64	
Size	D7		D7		D7						D15	D25	D50	D15	D25	D50	B16	B24	B32	B48	
Rated voltage	230/400		250	50	400	400	830	230/400	400			250			250			250			
Rated current	24		10		40	40	40	24	10			20			10			10			




Connection methods	UT = Screw	UT								UT											
	CT = Crimp			CT		CT						CT			CT			CT			
	PT = Push-in																				
	Z = Spring-cage																				
	Q = IDC / QUICKON	Q																			
	L = Fiber optics									L			L			L					
	A = Axial screw					A															
	P = Pneumatics																				

Series	A		D		Q						A			D			D			
Number of positions	3	4	7	8	2	3	4	5	7	12	10	16	2x16	15	25	2x25	40	64	2x40	2x64
Page	22						24						26							


HEAVYCON housing	Size		Page																		
	D7		23	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	D15		25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	D25			.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	D50			.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
B6		34...	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
B10			.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
B16			.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
B24			.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
B32			.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
B48	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.




Contact inserts, D7 series

 Web code: #0586


	Series	Connection		Connection cross section	Rated current	Rated voltage	Housing size	D7	D7
							Number of positions	3	4
	A	Screw	UT	0.14 – 2.5 mm ²	16 A	250 V	Socket	1585223	1585249
							Pin	1585210	1585236
								7	8
	D	Crimp CK 1,6	CT	0.14–2.5 mm ²	10 A	250 V	Socket	1584347	1584363 *
							Pin	1584334	1584350 *
								2	
	Q	Axial screw	AT	4.0–10.0 mm ²	40 A	400 V	Socket	1586264	
							Pin	1586277	
								2	3
	Q	Crimp CK 4,0	CT	1.5–10 mm ²	40 A	400 V	Socket	1419895	1419897
							Pin	1419893	1419896
								4	
	Q	Crimp CK 4,0	CT	0.5–10 mm ²	40 A	830 V	Socket	1419899 **	
							Pin	1419898 **	
								5	
	Q	Crimp CK 2,5	CT	0.14–2.5 mm ²	10 A	230/400 V	Socket	1406537	
							Pin	1406538	
								7	12
	Q	Crimp CK 1,6	CT	0.14–2.5 mm ²	10 A	400 V	Socket	1418623	1418625
							Pin	1418624	1418626

** Only suited for plastic housings.

Design/thread	Plastic		Metal			
	M20	M25	M20	M25	PG11	
Sleeve housing						
		1419255	1419256	1419229	1419231	1419232
Sleeve housing						
		1419257	1419258	1419235	1419236	1419237
Straight panel mounting base						
		1419265		1419249		
Straight panel mounting base, with cover						
	For pin inserts	1419278		1419250		
	For socket inserts	1419277		1419251		
Angled panel mounting base						
		1419266		1419252		
Box mounting base with open bottom						
		1419267		1419253		1419233
Box mounting base with closed bottom						
		1419268		1419234		1419241
Coupling housing						
		1419259	1419260	1419238	1419239	1419240
	With cover					
	For pin inserts	1419263	1419264	1419246	1419247	1419248
	For socket inserts	1419261	1419262	1419243	1419244	1419245
Feed-through header						
		1419269		1419242		
Cover for sleeve housing, with latch						
	For pin inserts	1419275				
	For socket inserts	1419274				
Cover for panel mounting base and box mounting base						
	For pin inserts	1419273				
	For socket inserts	1419272				
Cover for box mounting base and coupling housing						
	For pin inserts	1419271				
	For socket inserts	1419270				

							Housing size	D15	D25	D50
							Number of positions	10	16	2x16
	A	Screw UT		0.14 – 2.5 mm ²	16 A	250 V	Socket	1585304	1585320	1585320
									1585346	
		Pin					1585294	1585317	1585317	
									1585333	
	A	Crimp CK 1,6 CT		0.14 – 4 mm ²	16 A	250 V	Socket	1676983	1677018	1677018
									1677050	
		Pin					1676996	1677034	1677034	
									1677076	
							15	25	2x25	
	D	Crimp CK 1,6 CT		0.14 – 2.5 mm ²	10 A	250 V	Socket	1584389	1584402	1584402
									1584402	
		Pin					1584376	1584392	1584392	
									1584392	

	Height/ thread	Metric thread	
		Plastic	
		D15	D25
Sleeve housing for single locking latch			
	High	1411340	1411347
Panel mounting base with single locking latch, without cover			
		1411336	1411344
Panel mounting base with single locking latch, with cover			
		1411337	1411345
Box mounting base with single locking latch, without cover			
	1x/2x M20	1421463	1421466
	1x/2x M25	1411341	1411348
Box mounting base with single locking latch, with cover			
	1x/2x M20	1421465	1421467
	1x/2x M25	1411343	1411349
Coupling housing with single locking latch			
	High	1411338	1411346

	Cable Ø	Thread	Plastic
			D
Cable gland with bayonet locking			
	7 mm ... 13 mm		1411350
	9 mm ... 17 mm		1411351
Thread adapter			
		M25	1411352
		PG16	1411353
		NPT 3/4	1411354
Standard cable glands			
	6 mm ... 12 mm	M20	1411133
	11 mm ... 17 mm	M25	1411134