Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

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!

Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

Company profile

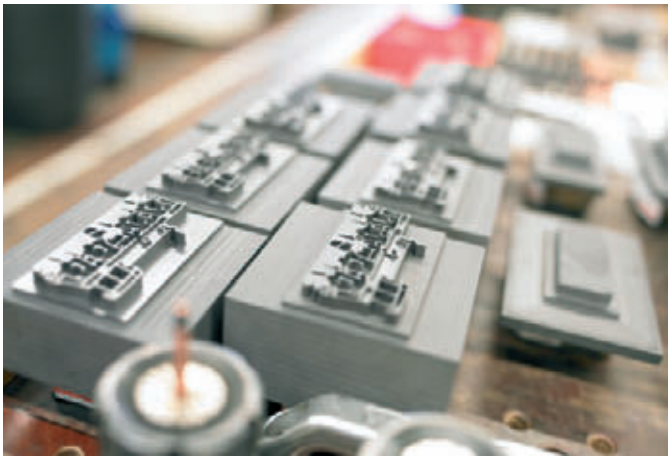
Weidmüller is the leading manufacturer of components for electrical and electronic interconnection technologies.

The company develops, produces and sells customer-oriented solutions comprising the entire Weidmüller product portfolio. As an OEM supplier, the company sets global standards in the field of electrical connection technology.

The Weidmüller product portfolio ranges from terminal blocks, PCB connectors and terminals, protected components, Industrial Ethernet components and relay sockets to power supply and overvoltage protection modules suitable for all applications. Electrical installation and marking solutions, basic I/O components and a variety of tools round off the range. Weidmüller products are mainly used in control cabinets and for field wiring. Customers also benefit from our wide range of services.

In addition to our expertise in manufacturing precision mechanics, we offer a customer oriented product portfolio for our international customers in the fields of industrial, process and transportation technology. Our developments and activities are driven solely by the individual requirements of our customers in these areas.

The Weidmüller Group has a strong international orientation with production facilities, sales companies and agencies in over 70 countries. Due to our high standards of quality and service, customers around the world value us as a highly competent and flexible partner.



All the catalogues at a glance

Catalogue 1: Modular Terminal Blocks
Order number: 5650110000

- P-Series (Push In technology)
- I-Series (IDC technology)
- Z-Series (Tension clamp technology)
- W-Series (Screw connection technology)
- Stud style (Screw connection technology)

Catalogue 2: PCB Terminals and Connectors
Order number: 5650120000

PCB Terminals with
- leaf spring connection, clamping yoke connection, TOP clamp connection, tension clamp connection, Push In spring connection, spade connection

PCB Connectors of
- Minimate, Omnimate, Unimate, Powermate and Crimpmate Ranges

Catalogue 3: RockStar® – Heavy Duty Connectors
Order number: 5650130000

- Inserts
- Modular system
- Housings IP65 + IP69K

Catalogue 4: Electronics
Order number: 5650140000

- Interface units
- Digital signal processing
- Analogue signal processing
- Power supplies
- Overvoltage protection

Catalogue 5: Enclosures and Cable Glands
Order number: 5650150000

- Enclosures
- Cable gland and Cabtite

Catalogue 6: Tools
Order number: 5650160000

- Cutting
- Stripping
- Crimping
- Screwdrivers
- Measuring/Testing
- Automatic machines

Catalogue 7: Marking Systems
Order number: 5650170000

- Terminal markers
- Wire and cable markers
- Device and equipment markers
- Printing systems
- Software

Catalogue 8: Sensor Actuator Interface
Order number: 5650180000

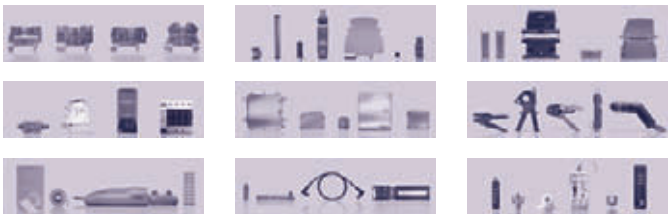
- SAI Passive
- SAI Active
- Cables and connectors
- JACKPAC® IP67

Catalogue 9: Industrial Ethernet
Order number: 5650190000

- Active components
- Passive components
- Accessories

Complete Set
Order number: 5650100000

- composed of catalogue 1 to catalogue 9 inclusive



Online Catalogue

If you have questions about the specifications and details of our products, perhaps even outside normal business hours, then our online catalogue at **http://catalog.weidmueller.com** – open 24 hours a day, 365 days a year – is the perfect source of information. Besides product features and part numbers, it contains extensive additional information on all product groups. And for further information, offers and your personal contact, simply consult the Weidmüller website at **www.weidmueller.com**.

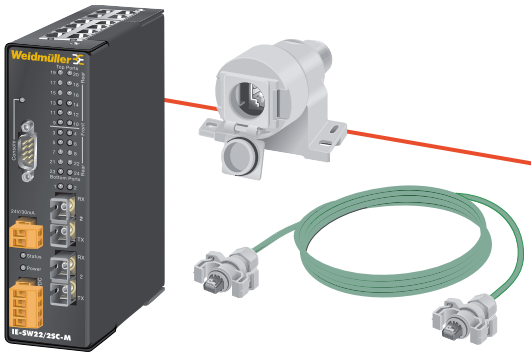
CD-ROM

As well as browsing through our printed and online catalogues you can now gain an overview of our products with the help of our CD-ROM. You don't need Internet access nor do you have to install the CD. Simply insert the CD-ROM into the drive and browse away.

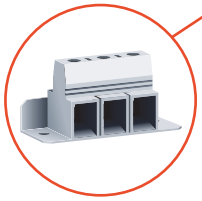
The world of connection technology

Control / PLC

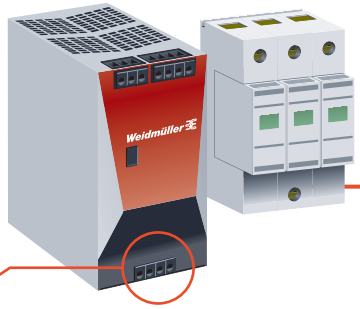
Catalogue 9
Industrial Ethernet



Industrial Ethernet
- Active components
- Passive components
- Accessories

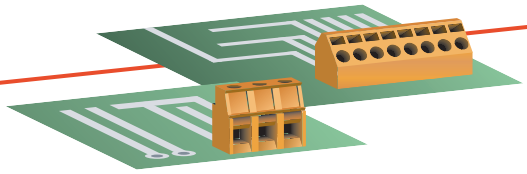


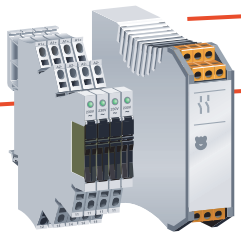
Catalogue 4
Electronics



Electronics
- Interface units
- Digital signal processing
- Analogue signal processing
- Power supplies
- Overvoltage protection

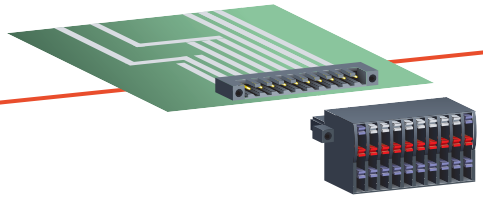
PCB Terminals

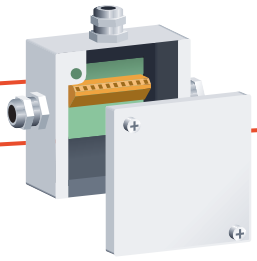




Fieldbus components

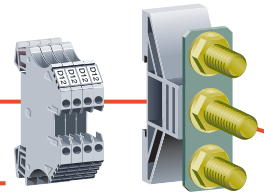
PCB Connectors





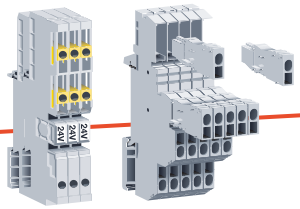
Catalogue 2
PCB Terminals
and Connectors

Catalogue 1
Modular Terminal Blocks

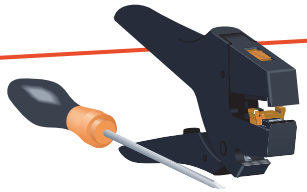


Modular Terminal Blocks
- Push In technology
- IDC technology
- Tension clamp technology
- Screw connection technology

Stud style

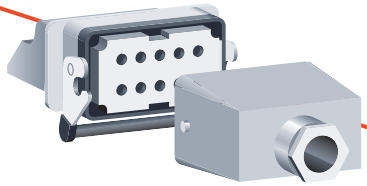


Tools
- Cutting, stripping, crimping, screwdrivers, measuring / testing
- Automatic machines

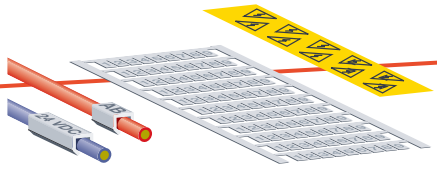


Catalogue 3
RockStar® – Heavy Duty Connectors

Heavy Duty Connectors
- Inserts
- Modular system
- Housings IP65 + IP69K

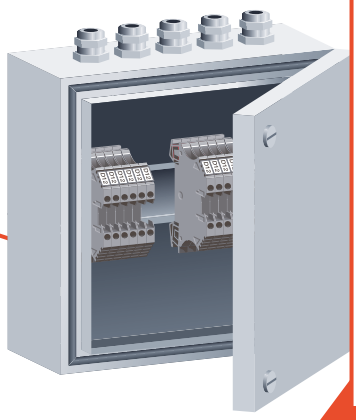


Marking systems
- Terminal-, wire and cable, device and equipment markers
- Printing systems
- Software

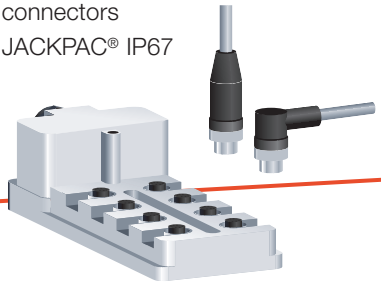


Catalogue 5
Enclosures and Cable Glands

Enclosures, Cable glands, Cabtite



Sensor Actuator Interface
- SAI Passive
- SAI Active
- Cable and connectors
- JACKPAC® IP67



Catalogue 6
Tools

Catalogue 7
Marking Systems

Catalogue 8
Sensor Actuator Interface

CATALOGUE 3

RockStar® – Heavy Duty Connectors

RockStar® – Heavy Duty Connectors

HA series
Page B.4

HA series
Page B.8

HE series
Page B.18

HEE series
Page B.32

HD series
Page B.42

HD series
Page B.46

HDD series
Page B.66

HVE series
Page B.80

HSB series
Page B.88

MixMate S4
Page B.96

MixMate S4/0
Page B.98

MixMate S6/12
Page B.100

MixMate S6/6

Page B.102

HQ series

Page B.106

CabinetMate DSTV-HE

Page B.112

CabinetMate DSTV-HD

Page B.122

ConCept modular system

Page C.3

ConCept bus modules

Page C.14

RockStar® Housings IP65

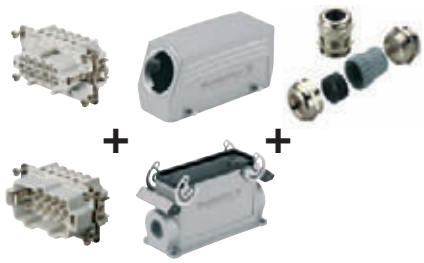
Page D.4

RockStar® Housing IP69K

Page E.4

RockStar® kits

Page F.4



RockStar® accessories

Page G.3

Cable entries

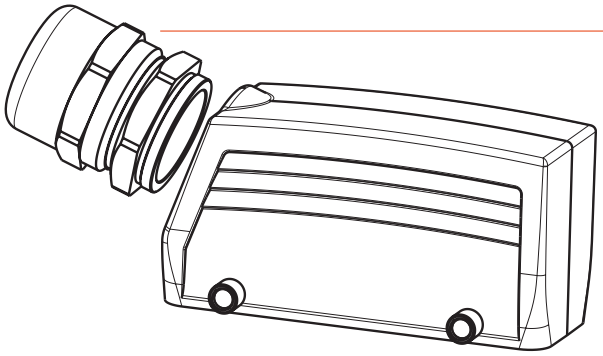
Page H.6

Cabtite

Page H.15

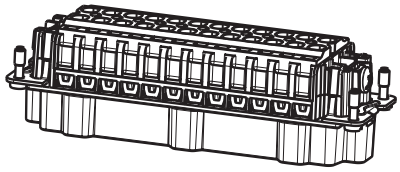
Overview HDC

Construction of heavy-duty connectors – fixed pole

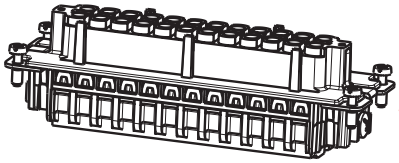


Cable gland

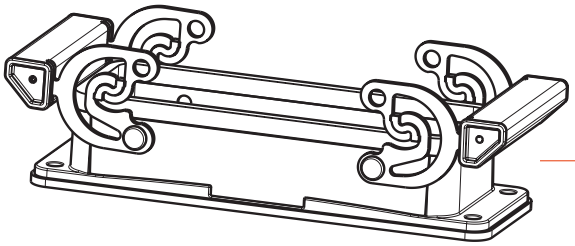
Hood



Pin insert

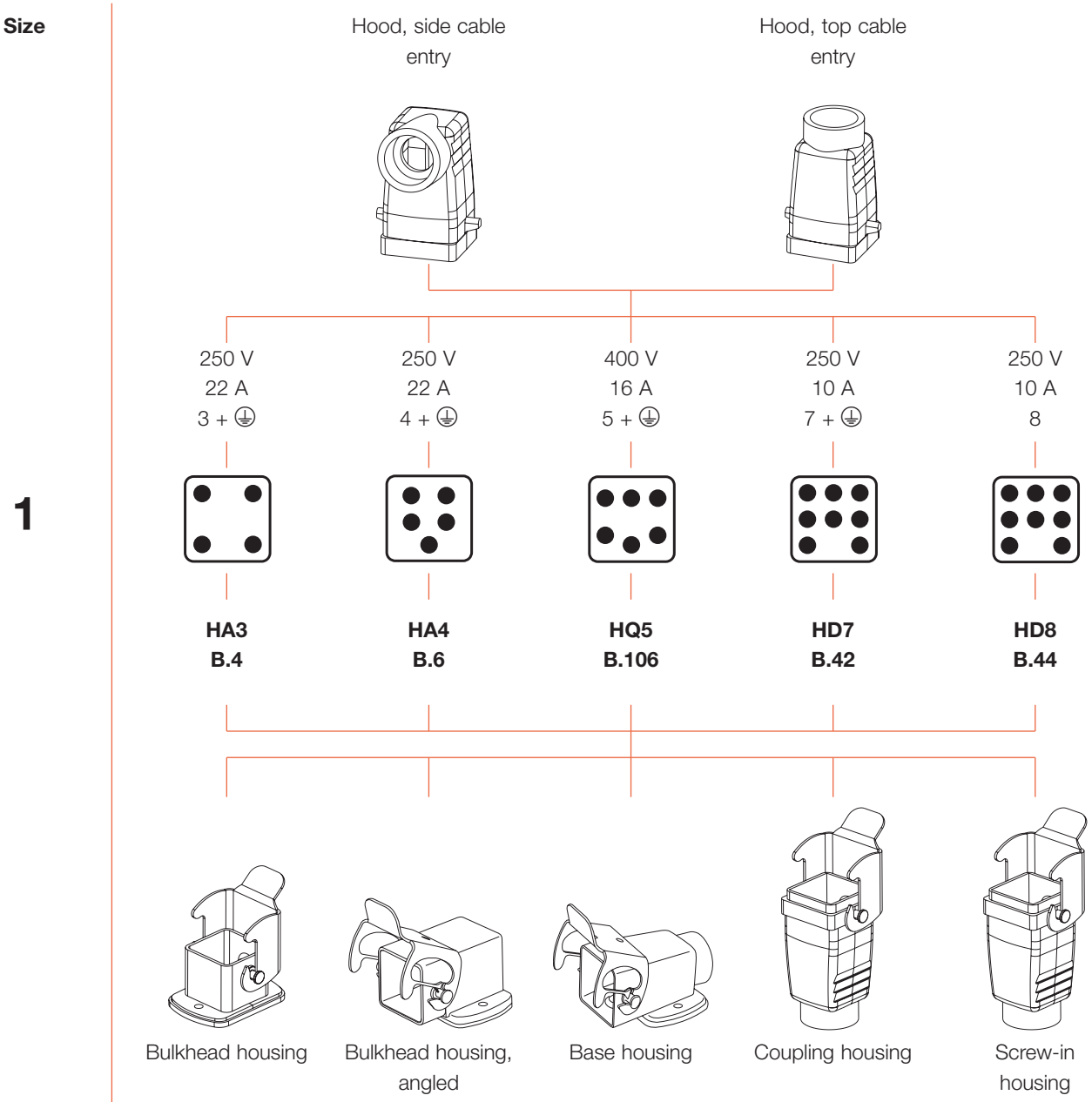


Socket insert

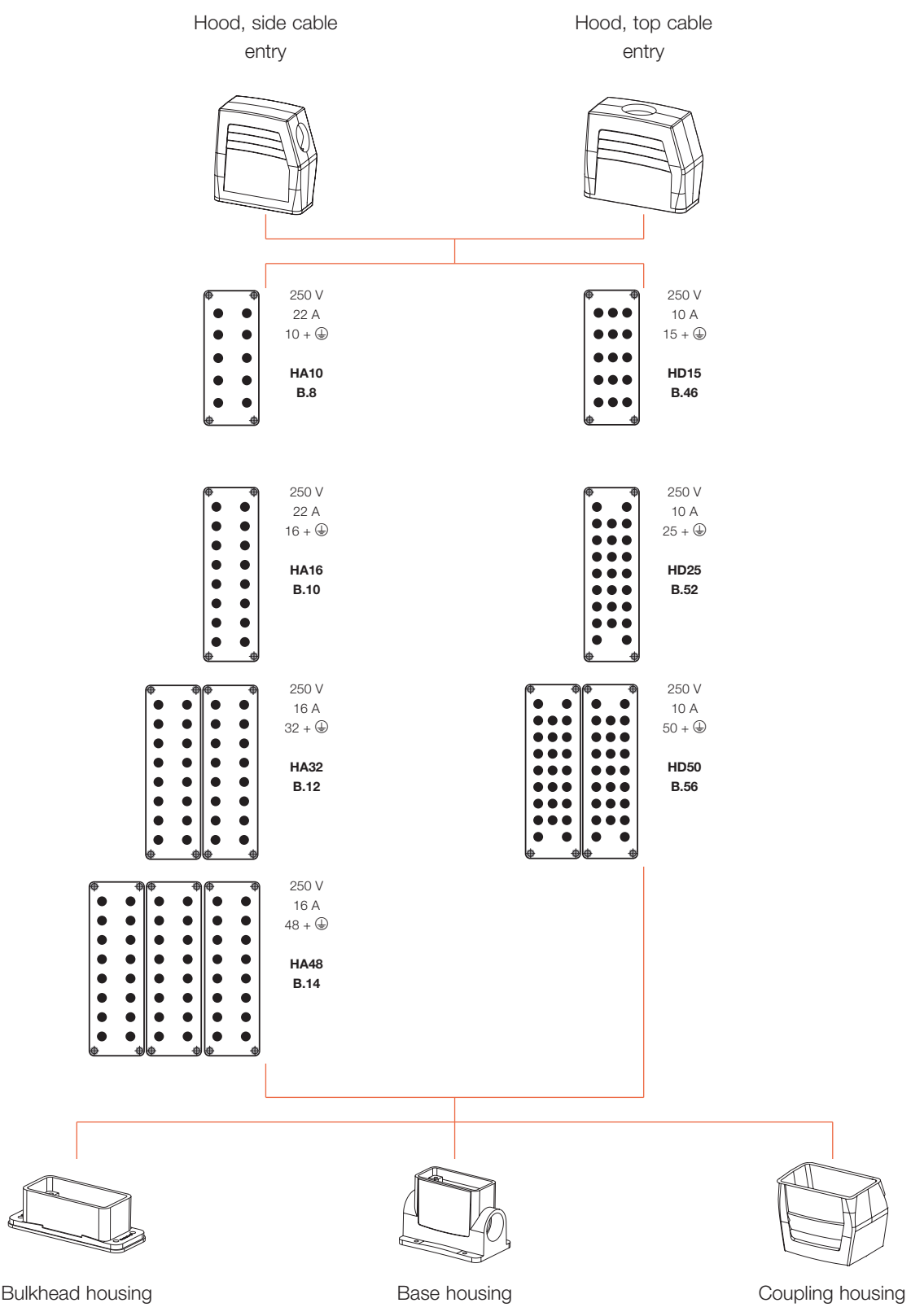


Bulkhead housing

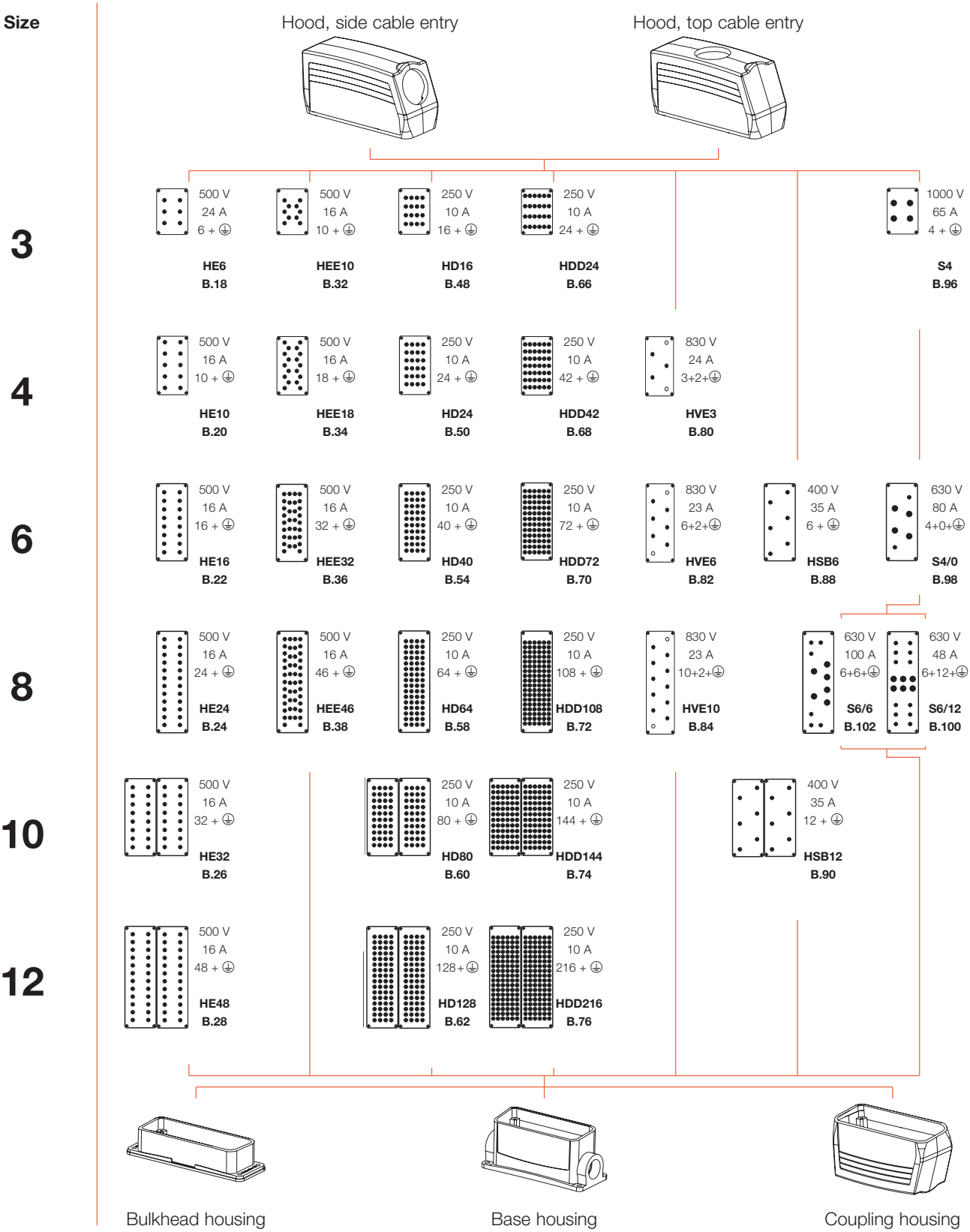
Overview of size 1 – fixed pole



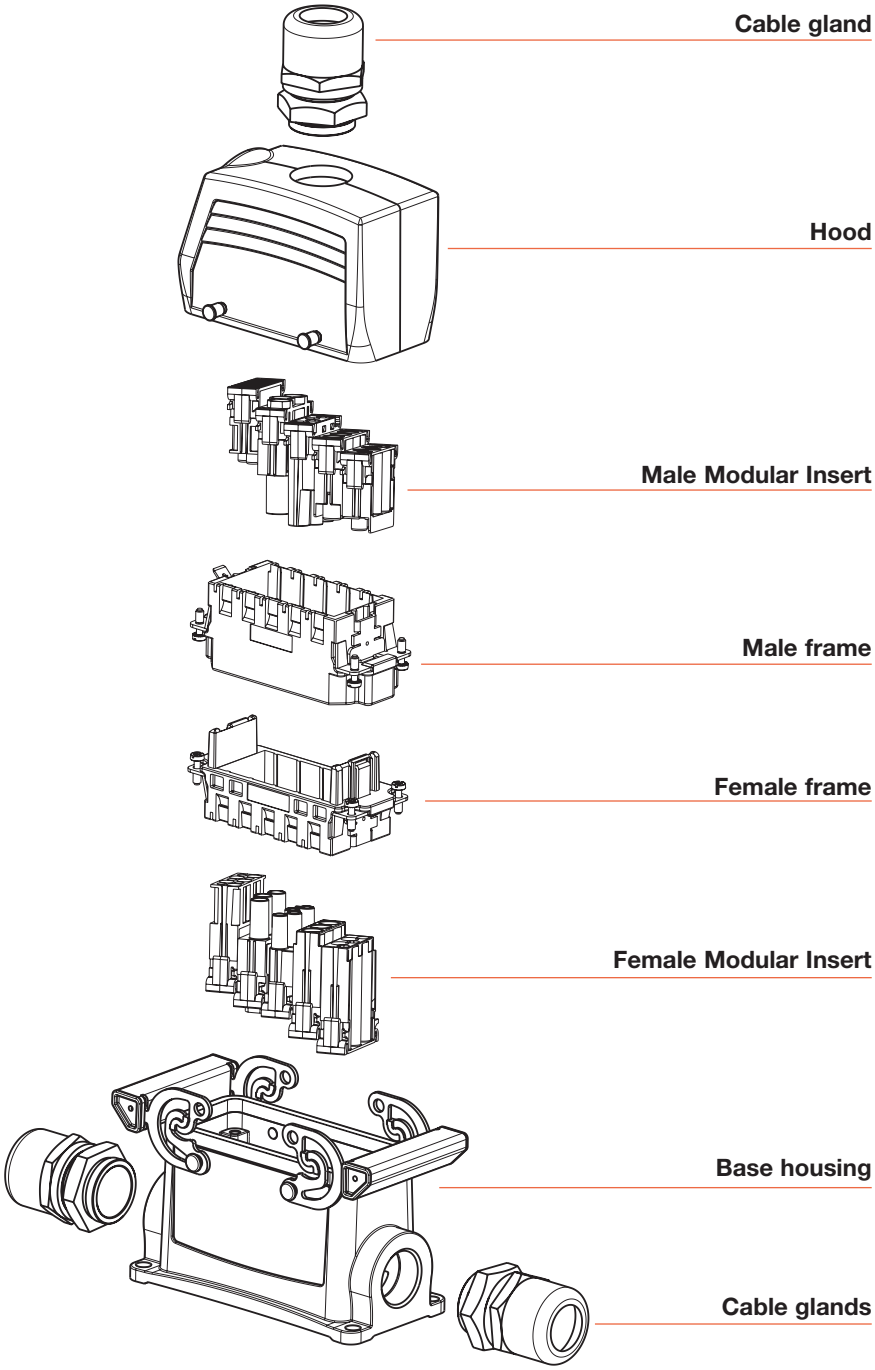
Overview of sizes 2, 5, 7, 9 – fixed pole



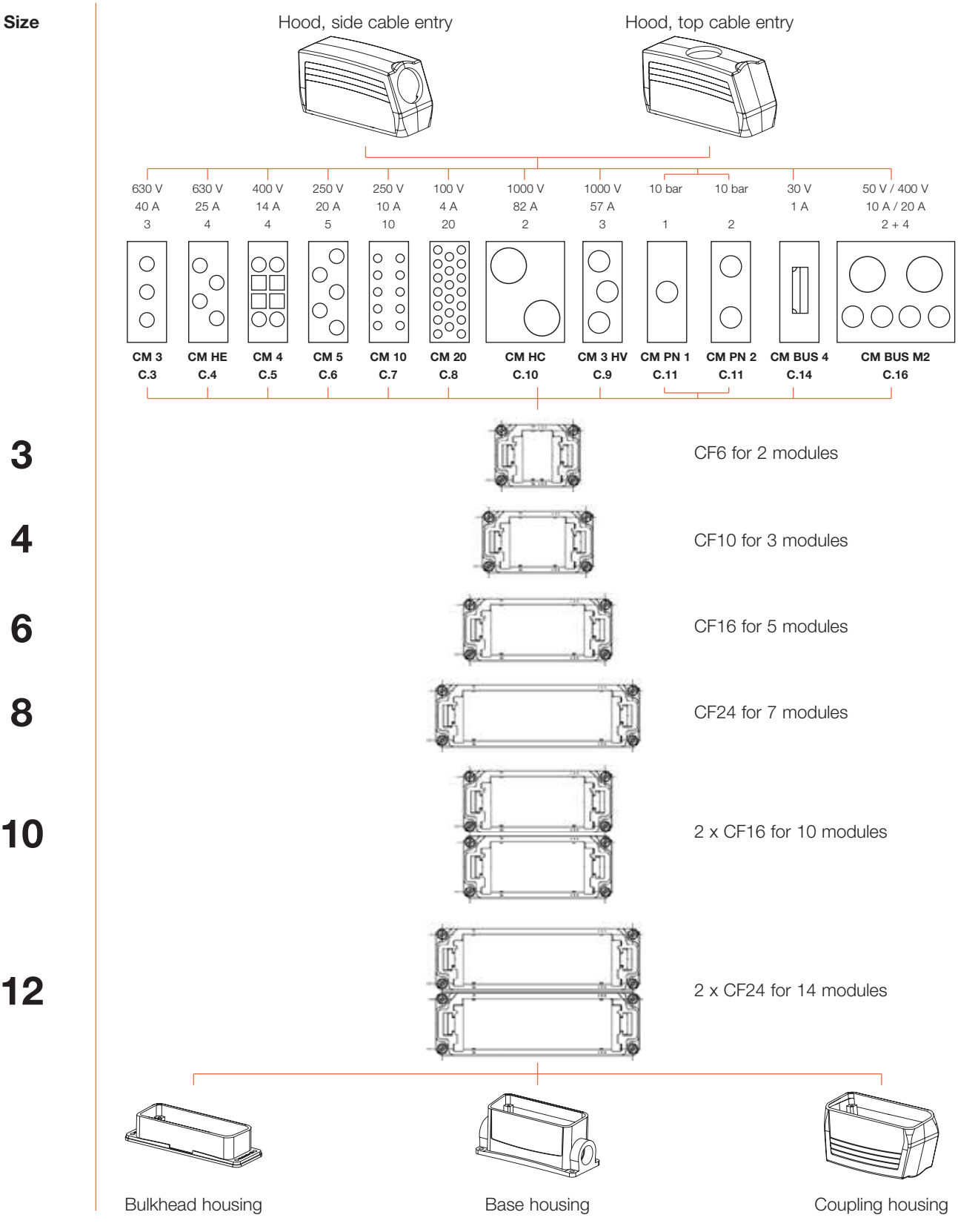
Overview of sizes 3, 4, 6, 8, 10, 12 – fixed pole



Construction of heavy-duty connectors – modular



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



IP class of protection to DIN EN 60529

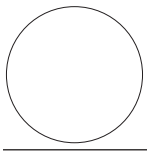
The class of protection is indicated by a code consisting of the two letters IP and two digits representing the class of protection.

Example: **I P 6 5**

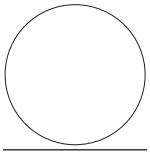
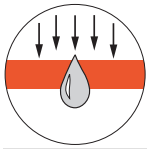
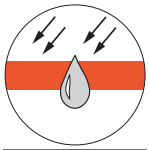
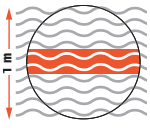
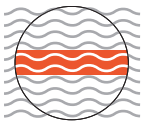
2nd digit: protection from liquids

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 use in inside rooms. Protects from penetration of rain and snow, dust and damage through ice formation.
Type 3R	Housing primarily for use in inside rooms. Protects from rain and snow as well as damage through ice formation.
Type 3S	Housing primarily for use in inside rooms. Protects from rain, snow and foreign bodies. External mechanisms can be operated despite ice formation.
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.

RockStar® Housing types

Housing IP65 / NEMA 4X

Weidmüller has further developed its IP65 housing. The result is an industrial housing of a new design that also has the properties corrosion resistance and long service life. These new HDC industrial housings even surpass our previous stainless steel housings in all respects. All operation elements are made of stainless steel. A high-quality, multistage surface sealing provides safety for years. Good isn't good enough for us. That's why Weidmüller discontinued the stainless series and why you should use our new IP65 housing.

Applications:
- General mechanical engineering
- Conveying equipment and plant engineering
- Packaging machines
- Lighting and stage equipment
- Fairground rides
- Process engineering
- Transport and traffic engineering

Features:
- Tightness at least IP65 to EN 60529:1991 + A1:2000
- Tightness NEMA 4X
- Scratch-resistant, corrosion-proof, long-lasting

Design:
- Cast aluminium alloy
- 2 versions, standard and high
- Multistage surface coating
- Colour: grey

Fastening systems:
- Clamp lock in different versions of rustproof stainless steel

Housing IP69K – the highest degree of sealing

The IP69K housings have been developed for use under extreme environmental conditions. The high class of protection guarantees trouble-free operation in use on 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
- Extreme requirements on the class of protection
- Military and communications engineering

Features:
- Tightness IP69K to DIN 40050, part 9 (1993): water sprayed at the housing from any direction under strong pressure must not have any harmful effect.
- Tightness IP68 / 5 bar to EN 60529 (1991) + part A1 (2000)
- Scratch-resistant, corrosion-proof, long-lasting

Design:
- Cast aluminium alloy
- 2 versions, standard and high
- Surrounding metal collar on housing
- Shielded versions for EMC protection
- Robust powder coating of polyester resin
- Colour: black

Fastening systems:
- Screw fastening (see diagram below)

Fastening systems

One longitudinal locking clamp on housing bottom

- Manual operation – no tools required
- 2 locking points – along the longitudinal axis
- Easily accessible with side cable entry
- Particularly suitable for row connection
- Fastening system of rustproof 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
- Easily accessible with side cable entry
- Fastening system of rustproof stainless steel

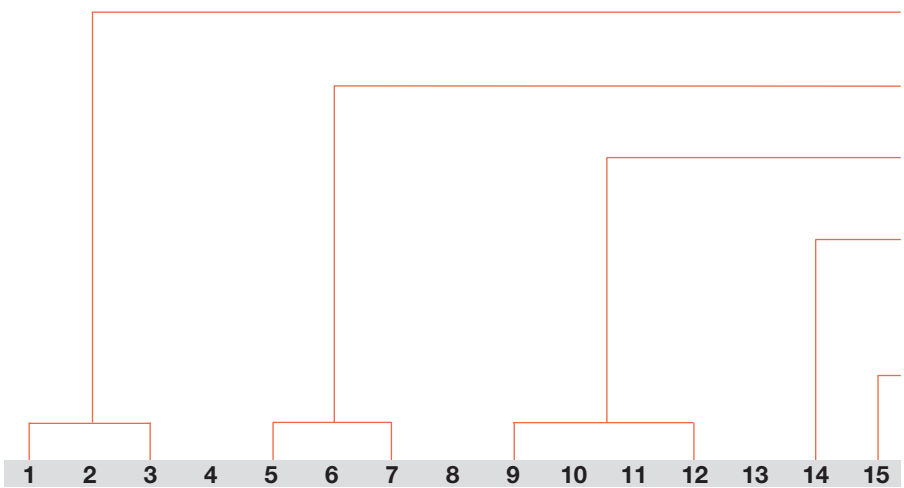
Two transverse locking clamps on housing bottom

- Manual operation – no tools required
- 4 locking points – good sealing effect
- Easily accessible with cable entry pointing upwards
- Particularly suitable for row connection
- Fastening system of rustproof stainless steel

Screw fastening

- Operation with screwdriver
- Highly effective sealing
- 2 locking points along the longitudinal axis
- Easily accessible from above where space is limited
- Particularly suitable for row connection on all sides
- Stainless steel screws

Part codes for inserts and covers



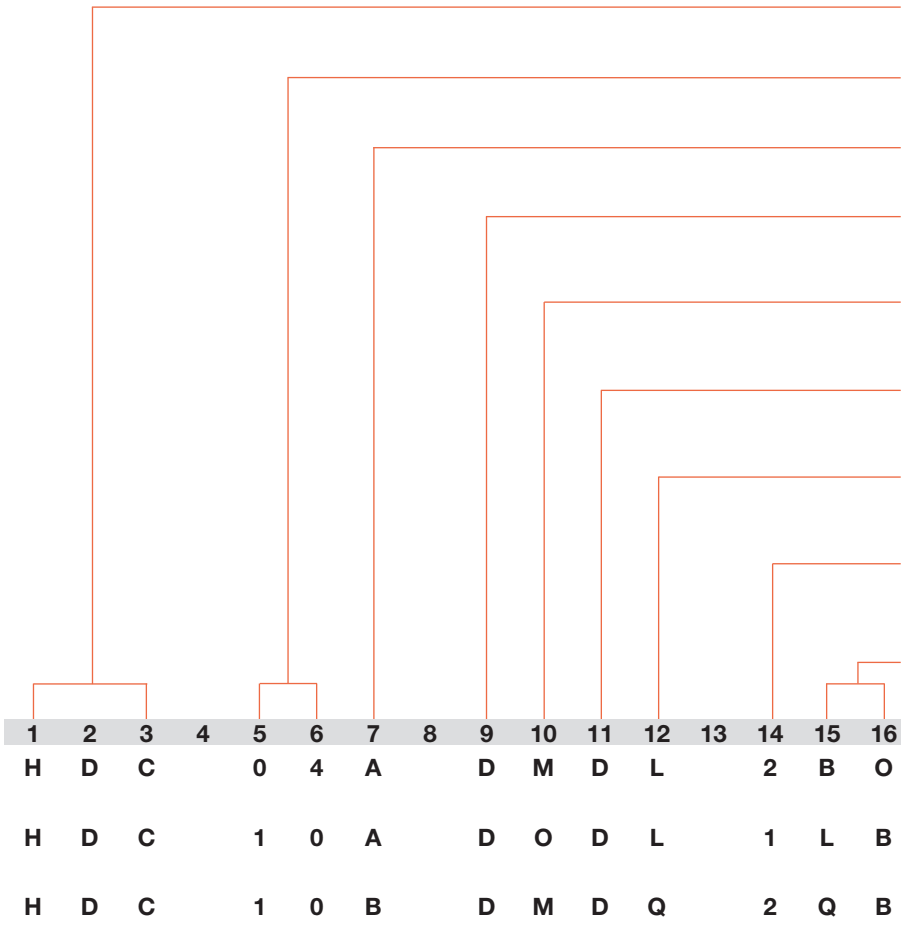
HDC = Series

Type

No. of poles

F = female
M = male

S = Screw connection
T = Tension clamp connection
P = Push In connection
C = Crimp connection



HDC = Series

Height

B = Design

D = Cover

M = with Gasket
O = without Gasket

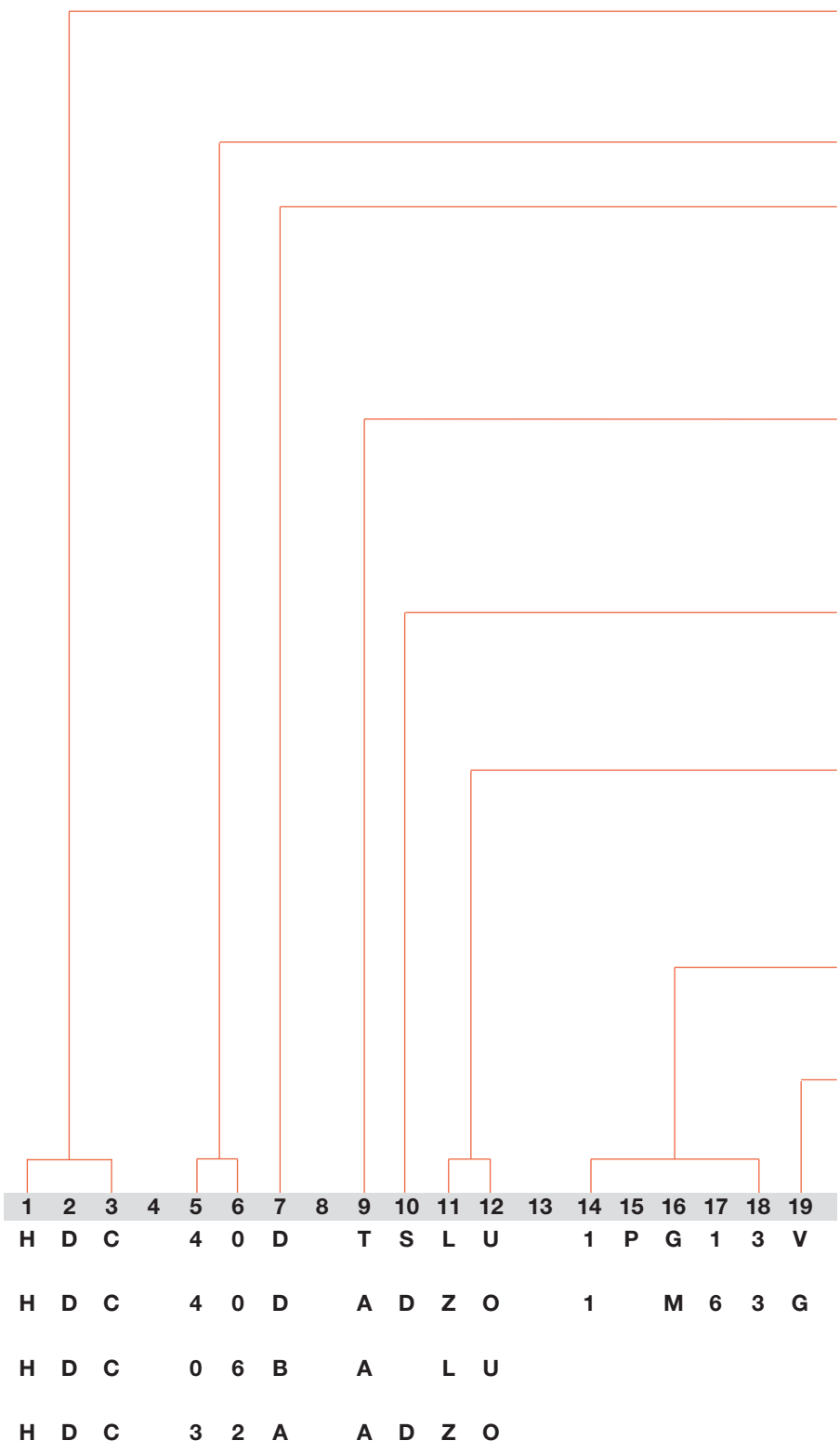
Gasket

L = End locking
Q = Side locking

No.

BO = Bolt
LB = Longitudinal clamp
QB = Transversal clamp

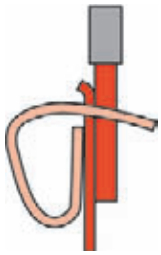
Part codes for housings



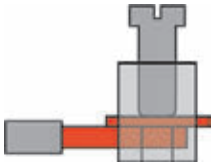
Connection systems

Weidmüller offers RockStar connectors with five different connection systems

There are five common types of connection: tension clamp connection, screw connection, crimping, axial screw connection and push-in technology.

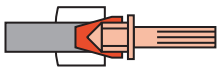


Tension clamp connection
The **Weidmüller tension clamp system** functions similarly to the tried-and-tested clamping yoke. Here again, the mechanical and electrical functions are kept separate. The tension spring made from high-quality rustproof and acid-proof steel pulls the conductor against the tin-plated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



Clamp body with female thread in the Weidmüller screw terminal system consist of non-ferrous CuZn material. They are protected against corrosion with a passivated silver or gold surface with wire guard of stainless steel against impermissible deformation of solid conductors and splaying of flexible leads as well as nicking by the clamping screw. With this clamping system, a gas-tight, vibration-proof connection between conductor and clamping yoke is established. This clamping system has proven itself millions of times over in Weidmüller products.

In the **crimping** method, the wires are fed into a metal sleeve, which is then squeezed together with a special tool. The connection is now corrosion and vibration proof. The contacts can be attached to the conductor away from the connector and then inserted into it.



The advantage of the **axial screw connection** is the small space taken up by the contact. This increases creepage distances and improves current transfer. 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

Push In system
In the **Push In system** the stripped solid conductor is simply inserted into the clamping point as far as it will go. And that completes the connection! 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-plates 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.

Crimp contacts

Whereas the contacts for screw, axial screw, tension clamp and Push In connections are already built in, the customer can choose the appropriate contact for a crimp connection.

The contacts are the heart of a plug-in connector. They represent the actual connection between two conductors. Two kinds of contact are necessary: 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 rarely show 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.