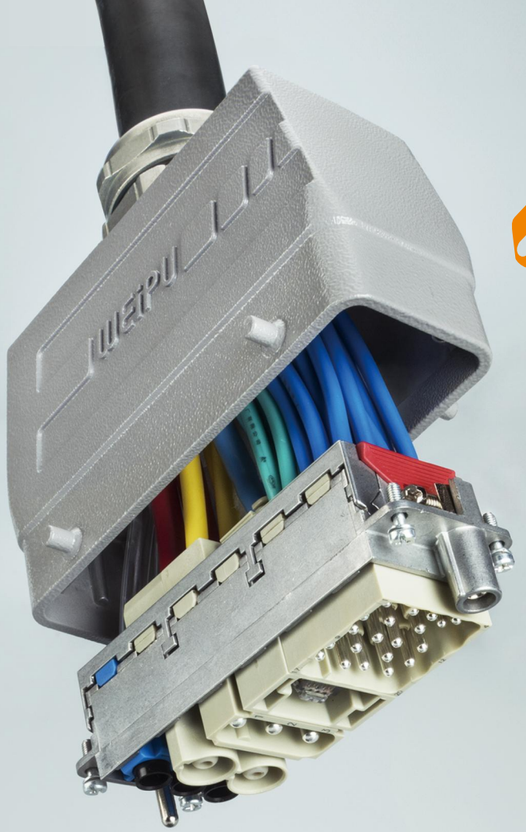
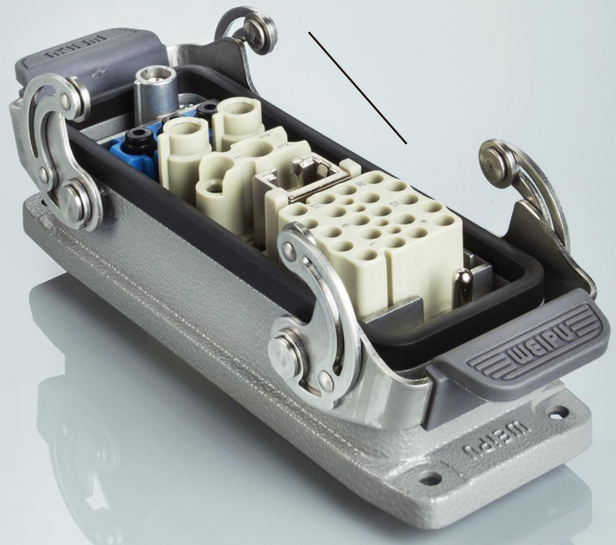
WEiPU® Connector













cec c UL us LISTED c VDE us VDE C SP us CE TÜV ISO 9001 ISO/TS 22163

www.weipuconnector.com
Edition: 202112-1

WEiPU® Connector

WEIPU was established in 1996, specialize in R&D and manufacturing the industrial connectors, we are the member of “National Electrical Appliances Standardization Technical Committees” and one of the members to draft the national standard for industrial connectors GB/T11918.

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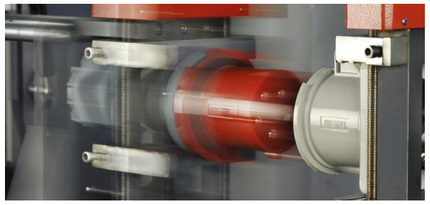
WEIPU Factory



Laboratory









- Vibration Test Equipment
- Instant Circuit Breaker Tester
- Mating Cycle Lifetime Tester
- Optical Comparator

Catalog

Insert Catalog

Series	Rated Voltage	Rated Current	Number of Contacts	Termination	Page	
HA Series-Mini Insert	230/400 250V	10A 16A	3,4, 10,16,32	Screw Termination Crimp Termination	01 /01-05	<CLICK
HE Series-Regular Insert	500V	16A	6,10,16, 24,32,48	Screw Termination Crimp Termination Cage ClampTermination	02 /01-07	<CLICK
HVE Series- High Voltage Insert	830V 400V/690V	16A 16A	3,6,10,12,20 16,32	Screw Termination Crimp Termination	03 /01-08	<CLICK
HEE Series- High Density Insert	500V 690V 1000V	16A	10,18,32, 46,40,64, 92	Crimp Termination	04 /01-08	<CLICK
HEEE Series- High Density Insert	200V 500V	16A	15 20,32,40,64,80, 128	Crimp Termination	05 /01-05	<CLICK
HD&HDD Series- High Density Insert	120VDC/50VAC 250V *400V,500V	10A 10A	8 7-216	Crimp Termination	06 /01-20	<CLICK
HSB Series- High Current Insert	400/690V	35A	6,12	Screw Termination	07 /01-03	<CLICK
HK Series-High Current Combination Insert	160-830V	10/100A	4,4+2,4+8,6+6, 6+12,6+36,8, 8+24,12+2	Screw Termination Crimp Termination	08 /01-18	<CLICK
HEAV Series-Extended Insert	500V	16A	6,10,16,24	Screw Termination	09 /01-05	<CLICK
HM Series-Modular Insert	50V-1000V Optical Module, Pneumatic Module	1A-200A	1-25	Screw Termination Crimp Termination	10 /01-40	<CLICK
HQ Series-Compact Insert	230/400V	16A	5	Crimp Termination	11 /01-06	<CLICK

Crimp Contact

Types	Page	
5A 10A 16A 40A 200A	12 /01-02	<CLICK

Insert Accessories

Types	Page	
Rail Bracket Suite	13 /01-02	<CLICK
Coding Pin	14 /01-02	<CLICK

Hoods/Housings Catalog

Size	Types	Page	
3AHoods/Housings	Plastic、Metal	15 /01-05	<CLICK
10AHoods/Housings	Metal	16 /01-02	<CLICK
16AHoods/Housings	Metal	17 /01-02	<CLICK
32AHoods/Housings	Metal	18 /01-03	<CLICK
6BHoods/Housings	Plastic、Metal 、IP68/IP69K	19 /01-05	<CLICK
10BHoods/Housings	Plastic、Metal 、IP68/IP69K	20 /01-08	<CLICK
16BHoods/Housings	Plastic、Metal 、IP68/IP69K	21 /01-09	<CLICK
24BHoods/Housings	Plastic、Metal 、IP68/IP69K	22 /01-09	<CLICK
32BHoods/Housings	Metal	23 /01-03	<CLICK
48BHoods/Housings	Metal	24 /01-02	<CLICK

Tools、Cable Gland

Types	Page	
Tools	25 /01	<CLICK
Cable Gland	26 /01-20	<CLICK

WEiPU® Connector Description

Heavy-duty connectors are mainly used for electrical or signal connections between different equipment or functional units, which provide great convenience for the installation and maintenance of complex control equipment.

They are also widely used in rail transit, industrial automation, mechanical equipment, electric locomotives, petrochemical power and other applications that require electrical and signal connections. Heavy-duty connectors are standard electrical connection components for Industry 4.0.



//////Hoods/Housings

The hoods/housings of heavy-duty connectors are made of cast aluminum or flame-retardant thermoplastic material, and the surface of the hoods/housings is powder-coated to make it resistant to shock and mechanical stress. The fireproof level of the sealing gasket between the hoods/housings reaches the V-0 rating, which enables the product to reach the IP65 rating.

Various cable glands and hoods/housing forms provide a variety of solutions for different installation needs.

//////Insert

The insert is made of UL94 V-0 thermoplastic material. The termination types are screw, crimp, and cage clamp termination.

//////Design Standard

IEC 61984、IEC60664-1、IEC60352、IEC60529、EN 175301-801

//////Notes

1. The connectors included in this catalogue should not be coupled or decoupled under electrical load
2. Plugs and sockets should not be powered until they are properly connected
3. The provision of protection against electric shock is the responsibility of the user. Protection can be achieved by the use of WEIPU protective covers and hoods/housings coupled with, or alternatively appropriate installation methods provided by the user.
4. WEIPU female plug mating surface provides finger protection against electric shock with/without mating.

Product Selection Steps

Insert

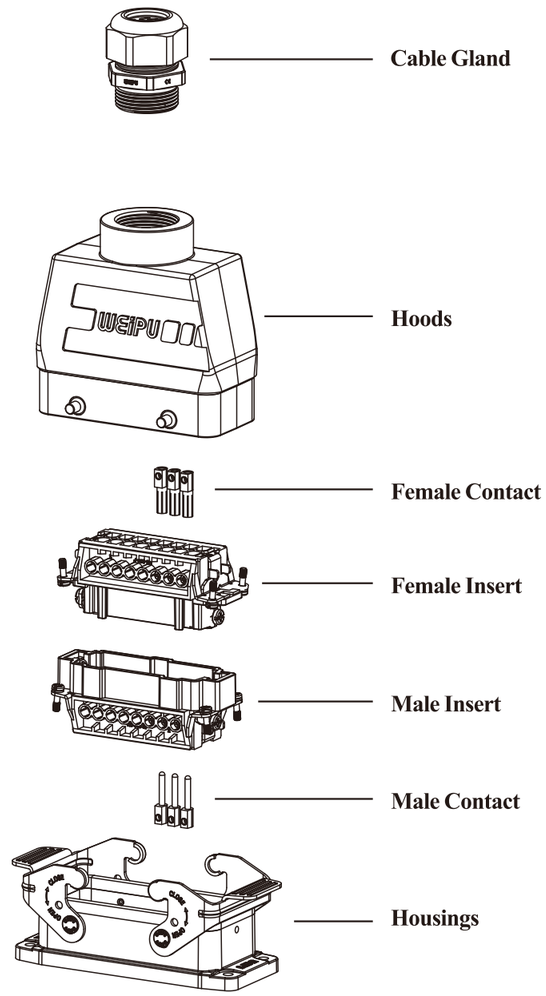
- Male Insert
  Termination: screw termination, crimp termination, cage clamp termination, axial screw termination
- Female Insert
  Termination: screw termination, crimp termination, cage clamp termination, axial screw termination

Hoods/Housings

- Material
  aluminum alloy, thermoplastic, high corrosion resistance
- Hoods
  Types: low structure or high structure, top entry or side entry, two lugs or four lugs
- Housings
  Types: low structure or high structure, bottom entry or side entry, single entry or double entry, single locking lever or double locking lever, two lugs or four lugs
- Lock
  Types:stainless steel, stainless steel with soft rubber, stainless steel with plastic, iron with spring
- Cable to Cable Hoods/Housings
  Types: low structure or high structure, top entry or side entry, single locking lever or double locking lever

Cable Gland

- Metal/Plastic
- Single-outlet/Multi-outlet



A Series

Hoods \ Insert	HA Series Screw Termination Crimp Termination	HD Series Crimp Termination	HQ Series Crimp Termination	HM Series Screw Termination	Housings
3A	230/400V 10A 3P+	250V 10A 7P+			
	230/400V 10A 4P+	-120V/~50V 10A 8P+	400V 10A 12P+		
			230/400V 16A 5P+		
10A	250V 16A 10P+	250V 10A 15P+			
16A	500V 16A 16P+	250V 10A 25P+			
32A	16A Hoods/Housings				

B Series

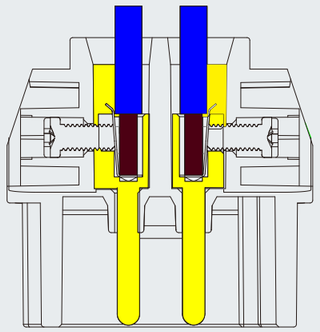
Hoods \ Insert	HE Series Screw Termination Crimp Termination Cage Clamp Termination	HVE Series Screw Termination Crimp Termination	HEE Series Crimp Termination	HEEE Series Crimp Termination	HD/HDD Series Crimp Termination	HSB Series Screw Termination	HK Series Screw Termination Crimp Termination	HM Series Screw Termination Crimp Termination	Housings
6B	500V 16A 6P+		500V 16A 10P+					require 2 modules	
					250V 10A 24P+				
10B	500V 16A 10P+	830V 16A 3+2P+	500V 16A 18P+					require 3 modules	
					250V 10A 42P+				
16B	500V 16A 16P+	830V 16A 6+2P+	500V 16A 32P+		250V 10A 40P+	400/690V 35A 6P+	830/400V 80/16A 4:0P+ 830/400V 80/16A 4:2P+	require 4 modules	
				500V 16A 40P+	250V 10A 72P+		690/160V 40/10A 6:3P+		
24B	500V 16A 24P+	830V 16A 10+2P+	500V 16A 46P+		250V 10A 64P+		830/400V 80/16A 4:8P+	require 6 modules	
		830V 16A 16+2P+		500V 16A 64P+	250V 10A 108P+		690/400V 100/16A 6:6P+		
32B	16B Hoods/Housings								
48B	24B Hoods/Housings								

Termination Type

Screw Termination

Screw termination conforms to the VDE 0609/EN60 999 standard

VDE 0609/EN 60 999



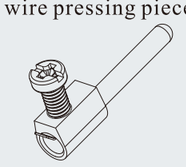
- See below table for more details
- Two types of screw termination: with wire pressing piece and without wire pressing piece

Thread Size and Torque

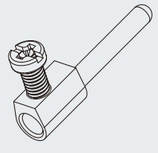
Wire Size (mm^2)	1.5	2.5	4.0	6.0	10	16
Thread Size	M3	M3	M3.5	M4	M4	M6
Torque (N.m)	0.6	0.6	0.6	1.2	1.2	1.2[a]
Minimum Pull-out Force (N)	40	50	60	80	90	100

a.Suitable for headless screws

with wire pressing piece



without wire pressing piece



Screw Termination

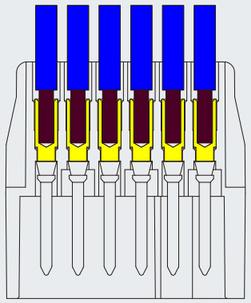
Insert	with Wire Pressing Piece		Min Wire Cross Section		Max Wire Cross Section		Stripping Length
	Yes	No	(mm^2)	AWG	(mm^2)	AWG	mm
HA-003/HA-004		√	0.75	18	1.5	16	4.5
HA-010/HA-016/HA-032	√		0.75	18	2.5	14	7.5
HE Series、HVE Series	√		0.75	18	2.5	14	7.5
HSB Series	√		1.5	16	6	10	11.5
HK006/6、HK006/12 (Signal Pin)	√		0.2	24	2.5	14	7.5
HK004/2、HK004/8 (Signal Pin)	√		0.5	20	2.5	14	7.5
HK-004/0、HK-004/2、HK-004/8 (High Power Pin)		√	1.5	16	16	6	14
HEAV Series		√	0.2	24	2.5	14	8-11

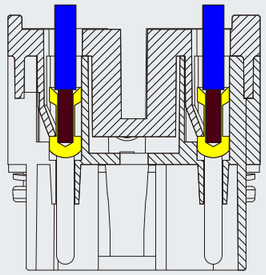
Screw torque and recommended screwdriver

Thread Size	Screw Types	Applicable Inserts	Tightening Torque (N·m)	Tightening Torque (Lbft)	Recommended Screwdriver
M3	locking pin screw	HA-003/HA-004、HQ-005/ HQ-007/HQ-012（PE）	0. 25	0. 2	cruciformPH0
	locking pin screw	HEAV、HK-006/6(signal pin)、HK-006/12(signal pin)	0. 5	0. 4	linear shape0. 6X3. 5
	locking pin screw	HA-010/HA-016/HA-032、HE、HVE、HME-005、HWK-006/6(signal pin)	0. 5	0. 4	linear shape0. 6X3. 5 or cruciformPH1
	shell fastening screw	HA-003/HA-004、HD-007/ HD-008、HQ-005/HQ007/ HQ-012	0. 5	0. 4	cruciformPh1
	shell fastening screw	HA-010/HA-016/HA-032、HE、HVE、HEE、HD/HDD、HSB、HK、HWK、HEAV	0. 5	0. 4	linear shape0. 6X3. 5 or cruciformPH1 or cruciformPH2
	coding pin	CODE-M3	0. 5	0. 4	linear shape1X6. 0
M3. 5	grounding screw	HA-010/HA-016/HA-032、HD-015/HD-025	0. 8	0. 6	linear shape0. 6X3. 5 or cruciformPH1
M4	pin screws	HSB-006/HSB-012	1. 2	0.9	linear shape 0. 6X3. 5 or cruciformPH1
	grounding screw	HE、HVE HD-040、HD-064、HD-080、HD-128、HEAV、HK-008/12、HWK-006/6、HK-006/6、HK-008/0、HK-006/12、HSB-006/HSB-012	1. 2	0.9	linear shape 0. 8X4. 5 or cruciformPH2
M5	grounding screw	HWK-006/6 (power pin)	2	1.4	linear shape 0. 8X4. 5 or cruciformPH2
		HK-004/0、HK-004/2、HK-004/8、HK-012/2、HK-006/36			
M6	pin screws	HK-004/0 (power pin) HK-004/2 (power pin) HK-004/8 (power pin)	1. 2(1. 5mm²) 2(2. 5mm²) 3(4mm² above)	0.9(1. 5mm²) 1.4(2. 5mm²) 2.2(4mm² above)	linear shape0. 8X4. 5

Increasing tightening torque does not fundamentally improve contact resistance. Torque is calculated according to optimum mechanical, thermal and electrical performance. Exceeding recommended values by a large margin can damage wires or joints in extreme cases.

Crimp Termination





a for reference only

Note:
For crimping tests, the same values are included in chapter 17 IEC 60760:1989 andTable 9 IEC 61210

Well crimping has air tightness, corrosion resistance, and cold welding effect. The key to high quality crimping is to have good crimping parts and tools. Wires must be connected with suitable crimp contacts. The connector can have low contact resistance and corrosion resistance under
the above conditions.

Advantages:

1. low cost
2. high efficiency
3. better anti-vibration
4. close to the cold welding effect

Stranded Wire Pull Out Force:

The main criterion for evaluating the quality of crimping is the holding force obtained by the wire at the terminal part. DIN EN 60352-2 specifies the pulling force of terminals in relation to the cross section of the conductor. When using WEIPU crimp tool for crimping and operating it in the correct way, the wire shall meet the standard pull out force.

Crimp Tool:

The crimp tool (manual or automatic) is designed to apply even pressure at the connection point so that the terminals and wires are symmetrically connected. The tool's slot positions terminals and wires in the correct position.

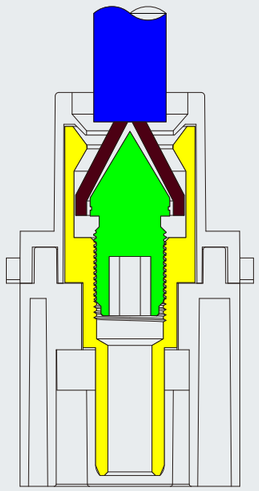
Note:
1. Do not put crimp contact into crimp tool before it's fully opened
2. Do not open the crimp tool during crimping

Tensile Strength of Crimped Joints (IEC 60352-2 Table 1)

Wire Cross Section		Tensile strength(N)
mm^2	AWG[a]	
0.05	30	6
0.08	28	11
0.12	26	15
0.14		18
0.22	24	28
0.25		32
0.32	22	40
0.5	20	60
0.75		85
0.82	18	90
1		108
1.3	16	135
1.5		150
2.1	14	200
2.5		230
3.3	12	275
4		310
5.3	10	355
6		360
8.4	8	370
10		380

Wire Size		Contact Diameter	Stripping Length		
mm^2	AWG[a]	ø(mm)	HDD HD Module (10A)	HE HA HVE (16A)	HM
0.14~0.37	26~22	0.9	8	–	–
0.5	20	1.15	8	7.5	–
0.75	18	1.3	8	7.5	–
1	17	1.45	8	7.5	–
1.5	15	1.75	8	7.5	9
2.5	13	2.25	6	7.5	9
4	11	2.85	–	7.5	9.6
6	10	3.5	–	–	9.6
10	7	4.6	–	–	15

Axial Screw Termination



Advantages:

1. Less space required
2. Easy to operate
3. No special tools required

Axial Screw Termination Overview
The wire gauge mentioned in the catalog refers to the geometric wire gauge of the cable.

Background

According to DIN EN 60228, the wire gauge of cables and insulated wires is determined by the resistance value (Ω/km) and the maximum wire diameter. Minimum cable diameter is not specified!
(e.g.: nominal wire gauge = 95 mm² → actual, geometric wire gauge = 89 mm²)

Suggestion

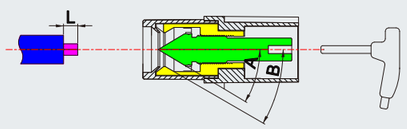
If a wire whose cross section differs greatly from the norminal wire gauge is used for axial screw termination, it must be double-checked.

Strain Relief

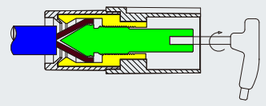
To ensure that the contact is protected from radial stress, the cable must be fixed at a sufficient distance from the terminal.

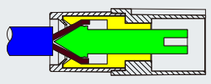
For details of strain relief design,
see DIN VDE 0100-520:2003-06(see table below).

Maximum Fixed Distance (mm)	Maximum Fixed Distance (mm)	
	Horizontal	Vertical
D≤9	250	400
9<D≤15	300	400
15<D≤20	350	450
20<D≤40	400	550



Note: ∠A≥∠B





Cable

According to DIN EN 60228 Class 5 (see table: cable assembly conforms to DIN EN 60228), axial screw termination technology for wire is developed. Different cable assembly forms must be tested separately.

Assembly Remarks:

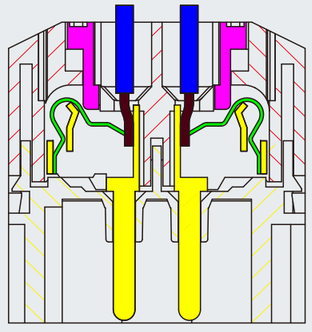
Before starting assembly, the user must ensure that the axial cone is completely tightened downward to fully open the termination cavity. After the cable insulation layer is stripped, the cable should not be twisted. The maximum cable insulation layer should not exceed the recommended size. Insert the wire completely into the termination cavity until the stranded copper wire reaches the bottom. Keep the wire in position while applying the recommended tightening torque.

Maintenance of Axial Screw Termination

To avoid damage to individual wires, tightening torque must be re-applied only once after the initial assembly in use.

Wire Size (mm²)	DIN EN 60228 Class 2 Standard Stranded Wire	DIN EN 60228 Class 5 Fine Stranded Wire	DIN EN 60228 Class 6 Extremely Fine Stranded Wire			
0.5	7x0.30	16x0.20	28x0.15	64x0.10	131x0.07	256x0.05
0.75	7x0.37	24x0.20	42x0.15	96x0.10	195x0.07	384x0.05
1	7x0.43	32x0.20	56x0.15	128x0.10	260x0.07	512x0.05
1.5	7x0.52	30x0.25	84x0.15	192x0.10	392x0.07	768x0.05
2.5	7x0.67	50x0.25	140x0.15	320x0.10	651x0.07	128x0.05
4	7x0.85	56x0.30	224x0.15	512x0.10	1040x0.07	
6	7x1.05	84x0.30	192x0.20	768x0.10	1560x0.07	
10	7x1.35	80x0.40	320x0.20	1280x0.10	2600x0.07	
16	7x1.70	128x0.40	512x0.20	2048x0.10		
25	7x2.13	200x0.40	800x0.20	3200x0.10		
35	7x2.52	280x0.40	1120x0.20			
50	19x2.17	400x0.40	705x0.30			
70	19x2.52	356x0.50	990x0.30			
95	19x2.17	485x0.50	1340x0.30			
120	37x2.03	614x0.50	1690x0.30			
150	37x2.27	765x0.50	2123x0.30			
185	37x2.52	944x0.50	1470x0.40			
240	61x2.24	1225x0.50	1905x0.40			

Cage Clamp Termination

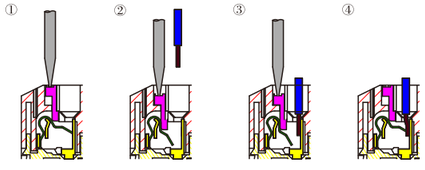


Advantages:

1. The preparation requirements before wire crimping are not strict and no special installation tools are required, which can greatly reduce the installation cost
2. Applicable to all standards and single stranded wire with a cross -section of 0.14~2.5mm²
3. Easy cable assembly
4. No special requirements for wires
5. The larger the wire, the greater the compression force
6. Anti-vibration design for the terminal
7. Low contact resistance

Steps

Screwdriver size: 3.5×0.5mm

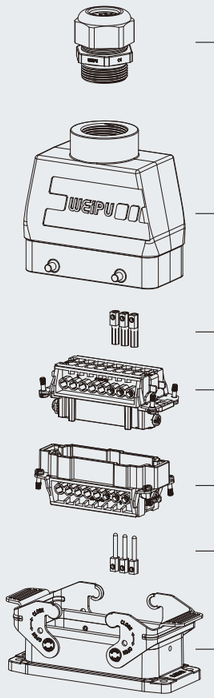


Insert	Max Wire Gauge		Stripping Length
	mm²	AWG[a]	mm
HE Normal Insert HVE Normal Insert	0.14~2.5	26~14	7~9

Assembly Structure

(Ⅰ)

Bulkhead Mounting; Top Entry; Lock Types



Cable Gland

Hoods (4 lugs; top entry)

Female Contact

Female insert

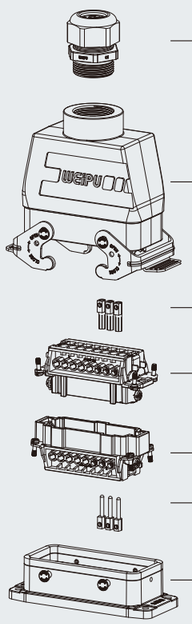
Male insert

Male Contact

Housings
(double "W-shape" locking lever)

(Ⅱ)

Bulkhead Mounting; Top Entry; Lock Types



Cable Gland

Hoods
(double "W-shape" locking lever; top entry)

Female Contact

Female insert

Male insert

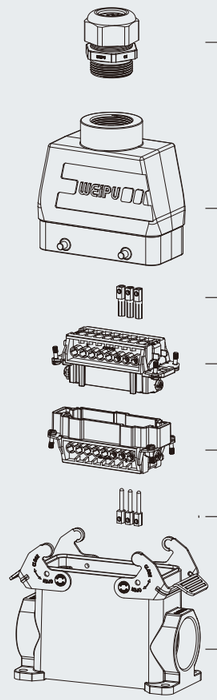
Male Contact

Housings (4 lugs)

Assembly Structure

(Ⅲ)

Surface Mounting; Top Entry; Lock Types



Cable Gland

Hoods (4 lugs; top entry)

Female Contact

Female insert

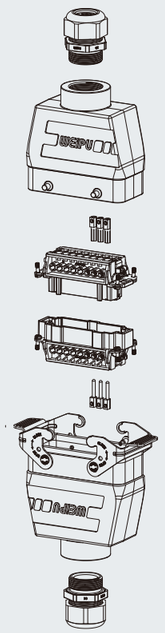
Male insert

Male Contact

Housings
(double "W-shape" locking lever; high structure)

(Ⅳ)

Cable to Cable; Top Entry; Lock Types



Cable Gland

Hoods (4 lugs; top entry)

Female Contact

Female insert

Male insert

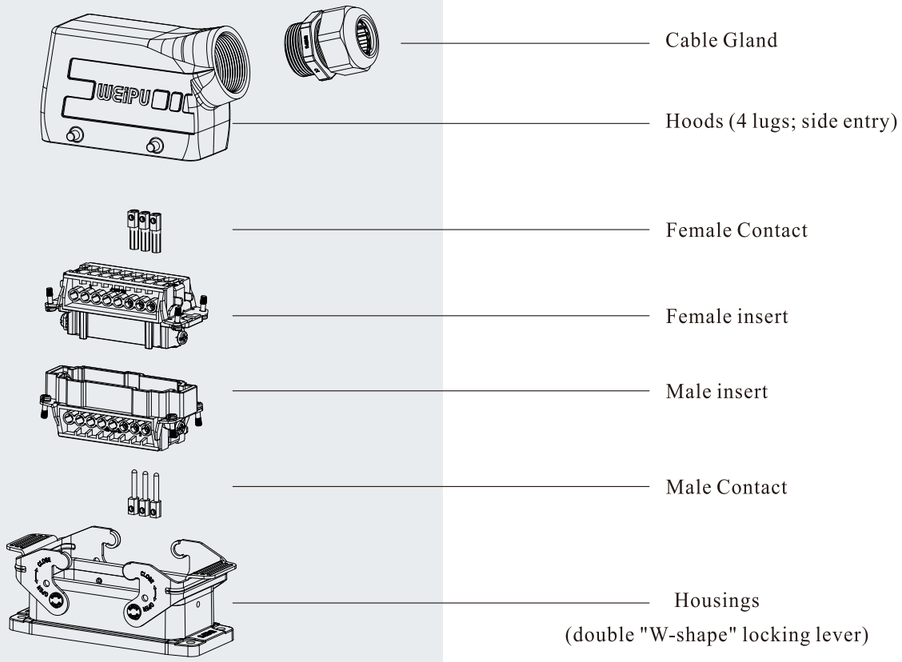
Male Contact

Housings
(double "W-shape" locking lever)

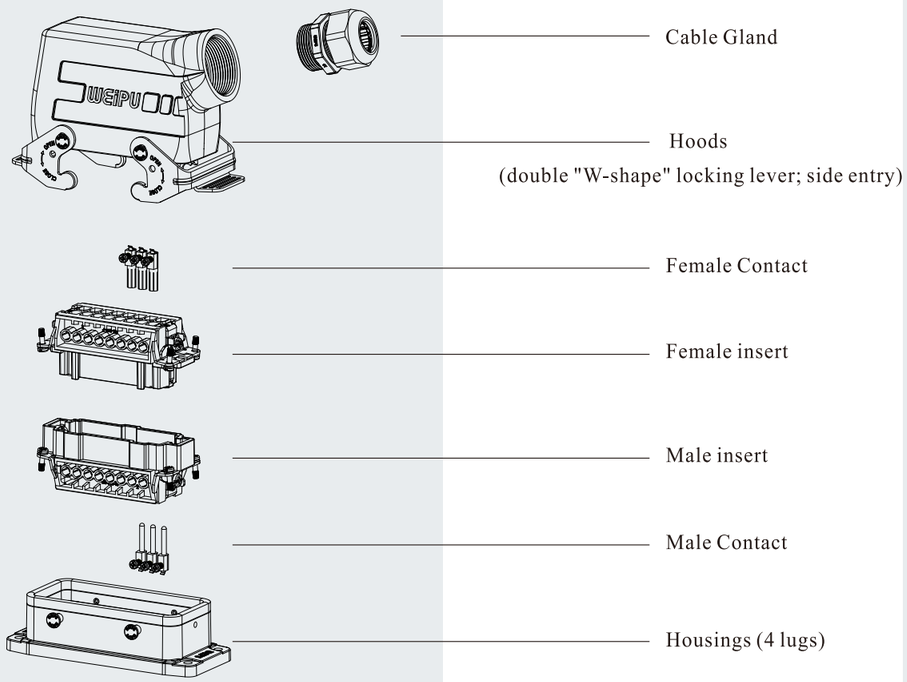
Cable Gland

Assembly Structure

(V)
Bulkhead Mounting; Side Entry; Lock Types

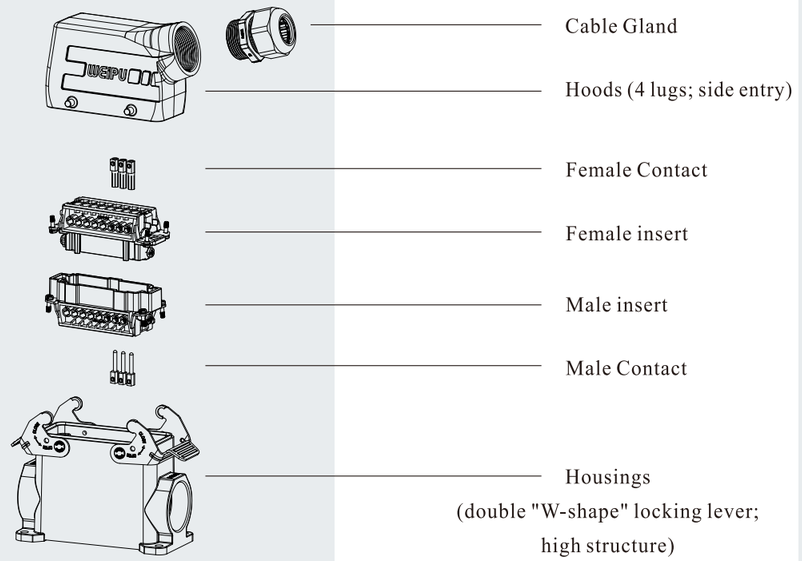


(VI)
Bulkhead Mounting; Side Entry; Lock Types

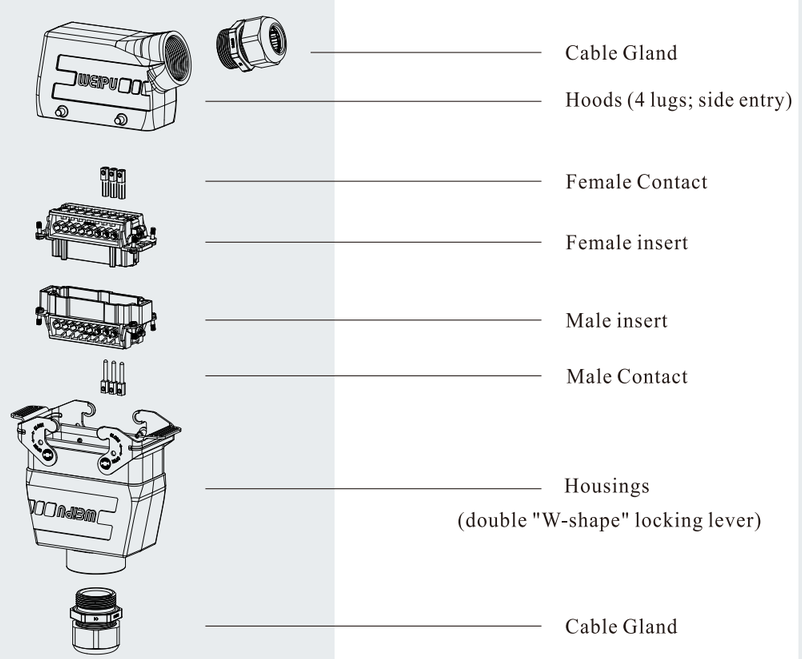


Assembly Structure

(VII)
Surface Mounting; Side Entry; Lock Types



(VIII)
Cable to Cable; Side Entry; Lock Types





Hoods/Housings Description

Hoods

HA16B-PS-2B-M25

- Thread Type: M/PG
- Lock:
  2B：2 lugs；4B：4 lugs
  2L：double locking lever
- Type:
  PT ： top entry
  PS ： side entry
  PTH：top entry&high structure (V: with extended thread)
  PSH：side entry&low structure (V:with extended thread)
- Code
- Series

Housings

HA16B-ST-4B-CV

- Cap/Cover:
  CV: plastic cap
  MCV: metal cap
- Lock Type:
  4B: 4 lugs
  1L: single locking lever
  2L: double locking lever
- ST: Bulkhead/Panel Mount
- Code
- Series

HA16B-SF-4B-CV-PG21

- Thread Type: M/PG
- Cap/Cover:
  CV: plastic cap
  MCV: metal cap
- Lock Type:
  4B: 4 lugs
  1L: single locking lever
  2L: double locking lever
- SF: surface mount (back cover)
  SFH: surface mount (back cover & high structure)
  MC: cable to cable
  MCH: cable to high structure housings (V: with extended thread)
- Specification

Insert

HA-016-MC

- Termination:
  Screw termination: M: male F: female
  Crimp termination: M: male F: female
  Cage-clamp termination: M: male F: female
- Pin/Pole Number
- Series

Standard

Overview

Connector selection is not only about function, number of contacts, rated current and rated voltage, but also where the connector will be used and environmental conditions. This means that different current or different voltage may apply to the same connector, but these should comply with the relevant installation conditions and standards.

Overvoltage Category

The following categories comply with IEC 60664-1

Equipment supplied directly from the low-voltage grid is subject to the concept of the overvoltage category.

The overvoltage category has a probabilistic meaning and does not refer to the physical decay of transient overvoltages in downstream equipment.

Similar concepts can be applied to devices that connect to other systems, such as telecommunications and data systems.

Each product's Standards Teachnical Committee shall determine the overvoltage category on the basis of the following basic description of the overvoltage category:

— Overvoltage Category I: The quipment connected to circuits that limits transient overvoltages to relatively low levels;

Note: remote control, small power signal circuit electrical appliances

—Overvoltage Category II: The energy consuming equipment powered by fixed distribution units;

Note: appliances, portable tools and other household and similar loads

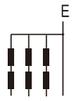
—Overvoltage Category III: The equipment in fixed power distribution installations, and those whose reliability and suitability must meet special requirements

Note: switchgear installed in fixed power distribution units and industrial equipment permanently connected to fixed power distribution units

—Overvoltage Category IV: The equipment used on the power side of a power distribution unit

Note: measuring instrument and pre-stage overcurrent protection equipment.

Rated Pulse Voltage（IEC 60664-1Table B2）

Conductor-netural conductor voltage derived from the total nominal AC volatge or nominal DC voltage (less or equal to) V	Nominal voltages currently used globally				Equipment rated impulse voltage1） V			
	Three-phase four-wire system neutral grounded 	Three-phase three-wire system grounded or ungrounded 	Single-phase two-wire system AC or DC 	Single-phase three-wire system AC or DC 	Overvoltage category			
					I	II	III	IV
50			12.5 24 25 30 42 48	30~60	330	500	800	1500
100	66/115	66	60		500	800	1500	2500
100	120/208* 127/220	115 120 127	100** 110,120	100~200** 110~220 120~240	800	1500	2500	4000
300	220/380 230/400 240/415 260/440 270/480	200**,220, 230,240, 260,277	220	220~440	1500	2500	4000	6000
600	347/600 380/660 400/690 417/720	347, 380, 400, 415, 440, 480, 500	480	480~960	2500	4000	6000	8000
1000	480/830	577, 600						
1000		600 690, 720 830, 1000	1000		4000	6000	8000	12000

* Applied in the U.S. and Canada

** Applied in Japan

Pollution Degree

Overview

The micro environment determines the influence of pollution on insulation, but the macro environment must be taken into account when considering the micro environment.

Effective use of enclosures, enclosed or airtight meaures can reduce contamination of insulation. These pollution reduction measures may be ineffective when the equipment is contaminated by condensation or by itself during normal operation. Solid particles, dust, and water can completely bridge small electrical gaps, so minimum electrical gaps should be specified wherever contamination can exist in the microscopic environment.

Note 1:Contamination will change to conductive contamination in humid conditions. Pollution caused by polluted water, soot, metal dust, carbon dust is a common conductive pollution.

Note 2:Conductive pollution from ionized gases or metal deposits occurs only in certain circumstances, such as arc suppression chambers in switchgear and control equipment, and is not covered in this section.

In order to calculate creepage distance and electrical clearance, the pollution level of micro environment is stipulated as the following 4 levels:

—— Pollution level 1

Pollution free or only dry, non-conductive pollution, which has no effect;

—— Pollution level 2

Generally, only non-conductive contamination occurs, although occasional transient conductive contamination must be expected from condensation.

—— Pollution level 3

There is conductive pollution or dry non-conductive pollution becomes conductive pollution due to expected condensation;

★WEIPU heavy-duty connectors are designed according to this pollution level.

—— Pollution level 4

Persistent conductive pollution, such as the pollution that caused by conductive dust or rain or other humid conditions.

Special rules

The lower level pollution connector is allowed to be used under certain condistions. Based on DIN EN61984, section 6.19.2.3:

—— For connectors with IP54 or above, the insulating parts in the housing can be graded according to the lower pollution level.

—— It is also suitable for cartridge connectors where the connector housing is used to ensure tightness, and for connectors that are separated only during testing and maintenance.

Requirements:

1. Connectors with at least IP54 rating according to IEC 60529
2. Installed in the housing and disconnected only for testing and maintenance
3. Installed in the shell and protected by a cover when disconnected, so that its protection level is at least IP54
4. In a control box with a protection level of at least IP54

Note: The above conditions cannot apply if the connector is exposed to the industrial atmosphere in the disconnected state

Typical applications where pollution level 2 is used:

A connector that serves the drive motor and is disconnected only to replace the damaged motor, even if the equipment or system requires a pollution level 3.

- Connectors for modular design machines, for transport purposes only, and can be quickly installed and reliably debugged. A protective cover or equivalent package must be provided during transportation to ensure that the connector is not contaminated.
- Connector that located in IP54 switch cabinet, its IP54 housing can be ignored.

Other Terminology

Electrical Clearance

The shortest distance in air between two conductive parts.

Electrical clearances withstanding transient overvoltages (IEC 60664-1 Table F.2)

Required impulse withstand voltage [1)5)] kV	Minimum electrical clearance in the atmosphere from sea level to 2000m above sea level					
	A non-uniform electric field			B uniform electric field		
	Pollution Degree[6)]			Pollution Degree[6)]		
	1 mm	2 mm	3 mm	1 mm	2 mm	3 mm
0.33[2)]	0.01	0.2[3)4)]	0.8[4)]	0.01	0.2[3)4)]	0.8[4)]
0.40	0.02			0.02		
0.50[2)]	0.04			0.04		
0.60	0.06			0.06		
0.80[2)]	0.10			0.10		
1.0	0.15			0.15		
1.2	0.25	0.25		0.2		
1.5[2)]	0.5	0.5		0.3	0.3	
2.0	1.0	1.0	1.0	0.45	0.45	
2.5[2)]	1.5	1.5	1.5	0.60	0.60	
3.0	2.0	2.0	2.0	0.80	0.80	
4.0[2)]	3.0	3.0	3.0	1.2	1.2	1.2
5.0	4.0	4.0	4.0	1.5	1.5	1.5
6.0[2)]	5.5	5.5	5.5	2.0	2.0	2.0
8.0[2)]	8.0	8.0	8.0	3.0	3.0	3.0
10.0	11	11	11	3.5	3.5	3.5
12.0[2)]	14	14	14	4.5	4.5	4.5
15	18	18	18	5.5	5.5	5.5
20	25	25	25	8.0	8.0	8.0
25	33	33	33	10	10	10
30	40	40	40	12.5	12.5	12.5
40	60	60	60	17	17	17
50	75	75	75	22	22	22
60	90	90	90	27	27	27
80	120	120	120	35	35	35
100	170	170	170	45	45	45

1) For this voltage

——The maximum impulse voltage expected to occur at both ends of the electrical gap for functional insulation;

——The basic insulation that directly withstands the instantaneous overvoltage of the low-voltage power grid refers to the rated impulse voltage of the equipment;

——For other basic insulation, the maximum impulse voltage that may occur in the circuit.

Reinforced insulation

2) Preferred value.

3) Printed circuit materials can be used for pollution level 1, but its value should not be less than 0.04mm.

4) The minimum electrical gaps of pollution levels 2 and 3 given in the table are proposed on the basis of the reduced tolerance characteristics of relevant creepage distance.

5) Interpolation method is allowed for components or lines in equipment with impulse voltage requirements. However, the standard approach should be to use a specified set of preferences.

6) Except for the minimum electrical clearance of 1.6mm, the electrical clearance of pollution grade 4 is the same as that of pollution grade 3.

Creepage Distance

The shortest distance between two conductive parts along the surface of a solid insulating material.

IEC 60664-1 Table F.3a. Single-phase (three-wire or two-wire) AC or DC systems

The nominal voltage of a power spuply system* V	Rationalized voltages in Table F.4	
	Wire-to-Wire Insulation[1)]	Wire-to-Wire Insulation[1)]
	All systems V	Three-wire neutral grounding system V
12.5	12.5	
24 25	25	
30	32	
42 48 50**	50	
60	63	
30~60	63	32
100	100	
110 120	125	
150**	160	
200	200	
100~200	200	100
220	250	
110~220 120~240	250	125
300**	320	
220~440	500	250
600**	630	
480~960	1 000	500
1 000**	1 000	

1) The wire to ground insulation level of an ungrounded or impedance grounded system is equal to the wire to wire insulation level, since the operating voltage of any wire to ground of the system may actually approach the full wire to wire voltage. This is because the actual voltage from wire to ground is determined by the insulation resistance and capacitive reactance of each wire to ground, so a wire with a low (but permitted) insulation resistance can be considered grounded in effect, and the other wire to ground voltage can be raised to the full voltage from wire to wire.

* See section 4.3.2 of IEC 60664-1 for the relation to rated voltage.

** These values correspond to those listed in TABLE F.1 of IEC 60664-1.

IEC 60664-1 Table F.3B Three-phase (four-wire or three-wire) AC systems

The Nominal Voltage of a Power Supply System* V	Rationalized Voltages in Table F.4		
	Wire-to-wire Insulation	Wire-to-ground Insulation	
	All Systems V	Three Phase Four Wire System Neutral Grounded [2] V	Three Phase Three Wire System Ungrounded[1] or (power supply) Two Wire Grounded V
60	63	32	63
110 120 127	125	80	125
150**	160	—	160
200	200		200
208	200	125	200
220 230 240	250	160	250
300**	320	—	320
380 400 415	400	250	400
440	500	250	500
480 500	500	320	500
575	630	400	630
600**	630	—	630
660 690	630	400	630
720 830	800	500	800
960	1 000	630	1 000
1 000**	1 000	—	1 000

1) The wire to ground insulation level of an ungrounded or impedance grounded system is equal to the wire to wire insulation level, since the operating voltage of any wire to ground of the system may actually approach the full wire to wire voltage. This is because the actual voltage from wire to ground is determined by the insulation resistance and capacitive reactance of each wire to ground, so a wire with a low (but permitted) insulation resistance can be considered grounded in effect, and the other wire to ground voltage can be raised to the full voltage from wire to wire.

2) If the equipment can be used for both grounded and ungrounded, three-phase three-wire and three-phase four-wire power supply, only the data in the three-phase three-wire system will be used.

* The relationship with rated voltage is described in IEC60664-1 section 4.3.2.

** These values correspond to those listed in TABLE F.1 of IEC60664-1.

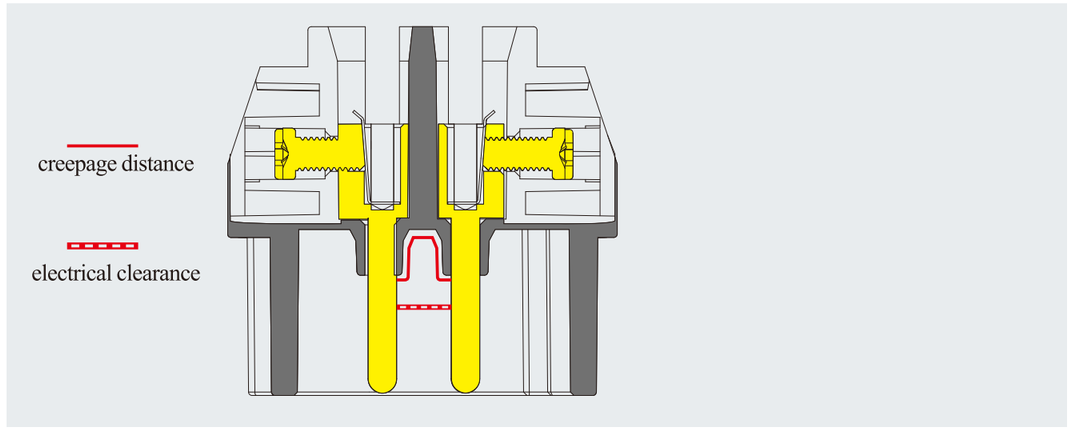
Table F.4 Avoiding creepage distance caused by electric trace fault

Voltage RMS [1] V	Minimum Creepage Distance								
	Printed Circuit Material								
	Pollution Degree								
	1	2	1	2			3		
	Material /Group mm	Material /Group, Except IIIb mm	Material /Group mm	Material/Group			material/Group		
				I mm	II mm	III mm	I mm	II mm	III[2] mm
10	0.025	0.040	0. 080	0. 400	0. 400	0. 400	1.000	1.000	1.000
12.5	0.025	0.040	0. 090	0. 420	0.420	0. 420	1.050	1.050	1.050
16	0.025	0.040	0. 100	0. 450	0.450	0. 450	1.100	1.100	1.100
20	0.025	0.040	0.110	0. 480	0.480	0. 480	1.200	1.200	1.200
25	0.025	0.040	0.125	0. 500	0.500	0. 500	1.250	1.250	1.250
32	0.025	0.040	0.14	0.53	0.53	0. 53	1.30	1.30	1.30
40	0.025	0.040	0.16	0. 56	0. 80	1. 10	1.40	1.60	1.80
50	0.025	0.040	0.18	0. 60	0.85	1. 2	1.50	1.70	1.90
63	0.04	0.063	0.20	0. 63	0. 90	1. 25	1.60	1.80	2.00
80	0.063	0.100	0.22	0. 67	0.95	1. 30	1.70	1.90	2.10
100	0.100	0.160	0. 25	0. 71	1.00	1. 40	1.80	2.00	2.20
125	0.160	0.250	0. 28	0. 75	1.05	1. 50	1.90	2.10	2.40
160	0.250	0.400	0. 32	0. 80	1.10	1. 60	2.00	2.20	2.50
200	0.400	0.630	0. 42	1. 00	1.40	2. 00	2.50	2.80	3.20
250	0.560	1.000	0. 56	1. 25	1.80	2. 50	3.20	3.60	4.00
320	0.750	1.60	0. 75	1. 6	2.20	3. 20	4.00	4.50	5.00
400	1.0	2.0	1.0	2. 0	2.8	4. 0	5.0	5.6	6.3
500	1.3	2.5	1.3	2. 5	3.6	5. 0	6.3	7.1	8.0 (7.9)[4]
630	1.8	3.2	1.8	3. 2	4.5	6. 3	&0 (7.9)[4]	9.0 (8.4)[4]	10.0 (9.0)[4]
800	2.4	4.0	2.4	4. 0	5.6	&0	10.0 (9. 0)[4]	11.0 (9.6)[4]	12.5 (10.2)[4]
1000	3.2	5.0	3.2	5. 0	7.1	10. 0	12.5 (10. 2)[4]	14.0 (11.2)[4]	16.0 (12.8)[4]
1250			4.2	6. 3	9.0	12. 5	16.0 (12. 8)[4]	18.0 (14.4)[4]	20.0 (16.0)[4]
1600			5.6	&0	11.0	16. 0	20.0 (16. 0)[4]	22.0 (17.6)[4]	25.0 (20.0)[4]
2000			7.5	10. 0	14.0	20. 0	25.0 (20. 0)[4]	28.0 (22.4)[4]	32.0 (25.0)[4]
2500			10.0	12. 5	1&0	25. 0	32.0 (25. 6)[4]	36.0 (28.8)[4]	40.0 (32.0)[4]

IEC 60664-1 Table F.4

Voltage RMS [1] V	Minimum Creepage Distance								
	Printed Circuit Material								
	Pollution Degree								
	1	2	1	2			3		
	Material /Group mm	Material /Group, Except IIIb mm	Material /Group, Except IIIb mm	Material/Group			Material/Group		
				I mm	II mm	III mm	I mm	II mm	III[2] mm
3200			12.5	16.0	22.0	32.0	40.0 (32.0)[4]	45.0 (36.0)[4]	50.0 (40.0)[4]
4000			16.0	20.0	2&0	40.0	50.0 (40.0)[4]	56.0 (44.8)[4]	63.0 (50.4)[4]
5000			20.0	25.0	36.0	50.0	63.0 (50.4)[4]	71.0 (56.8)[4]	80.0 (64.0)[4]
6300			25.0	32.0	45.0	63.0	80.0 (64.4)[4]	90.0 (72.2)[4]	100.0 (80.0)[4]
8000			32.0	40.0	560	80.0	100.0 (80.0)[4]	110.0 (88.0)[4]	125.0 (100.0)[4]
10000			40.0	50.0	71.0	100.0	125.0 (100.0)[4]	140.0 (112.0)[4]	160.0 (128.0)[4]
12500			50.0[3]	63.0[3]	90.0[3]	125.0[3]			
16000			63.0[3]	80.0[3]	110.0[3]	160.0[3]			
20000			80.0[3]	100.0[3]	140.0[3]	200.0[3]			
25000			100.0[3]	125.0[3]	180.0[3]	250.0[3]			
32000			125.0[3]	160.0[3]	220.0[3]	320.0[3]			
40000			160.0[3]	200.0[3]	280.0[3]	400.0[3]			
50000			200.0[3]	250.0[3]	360.0[3]	500.0[3]			
63000			250.0[3]	320.0[3]	450.0[3]	600.0[3]			

1) For this voltage
The functional insulation is the working voltage;
——The basic insulation and additional insulation of the circuit directly supplied by the grid (see IEC60664-14. 3. 2.2. 1) is the rationalized voltage or rated insulation voltage converted by the rated voltage of the equipment through table F.3a or F.3b;
——For systems not directly supplied by the grid, the basic insulation and additional insulation of equipment and internal circuits (see IEC 60664-1 4. 3. 2. 2) is the highest RMS voltage that may occur in the system, equipment or internal circuits under the most onerous combination of operating conditions within the rated range of equipment and when the rated voltage is applied externally.
2) Material/Group IIIb is not recommended for pollution level 3 and voltage over 630V products.
3) Based on provisional data obtained by extrapolation, each Prodicuct Standards Technical Committee may use its own data if it has other empirical data.
4) The values in brackets are suitable for the reduced creepage distance when the reinforcement is used (see IEC60664-1 5.2.5).
Note: The measurement deviation is not necessary to be maintained at the same high degree of accuracy as creepage distance in this table.



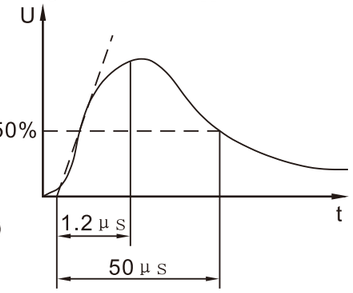
Working Voltage

With fixed current, preferably at ambient temperature of 40°C, the connector can make permanent (uninterrupted) connections simultaneously through all contacts of the maximum conductor without exceeding the temperature upper limit.

The dependence of rated current on ambient temperature is illustrated in the corresponding derating diagram.

Rated Impulse Voltage

The impulse withstand voltage value specified by the manufacturer for the equipment or its components to characterize the specified ability of its insulation to withstand transient overvoltages.
(Test waveform voltage is 1.2/50 microseconds according to IEC 60060-1)



Instantaneous Overvoltage

Those overvoltages that appear within a few milliseconds or less and they're oscillating or non-oscillating, usually highly damped.

Power Frequency Withstand Voltage

Apply a voltage on the sample for 1 minute under specified test conditions that will not cause breakdown and/or flashover of the sample.

Test voltage (DIN EN61984 table 8)

Rated Pulse Voltage (U_{imp})	Test Voltage of Impulse Withstand Voltage kV(1. 2 μ s / 50 μ s)		Withstand Voltage RMS kV (50 /60Hz)
kV	Altitude 2000m	Sea Level	
0.5	0.5	0. 55	0. 37
0.8	0.8	0. 91	0. 50
1.5	1.5	1. 75	0. 84
2.5	2.5	2. 95	1. 39
4	4	4. 8	2. 21
6	6	7. 3	3. 31
8	8	9. 8	4. 26
12	12	14. 8	6. 60

CTI Values for Classification of Insulating Materials

The performance of insulating materials is very complex under different kinds of pollution and voltage. Many materials may exhibit two or even three of these properties under various conditions. There is virtually no direct relationship between insulating materials and material groups. However, experience and tests have shown that the arrangement of insulating materials with higher relative properties is also approximately the same as that of the corresponding class according to the comparative electrocrease index (CTI).

IP Rating

In the actual use of the connector, the dust and water vapor in the surrounding environment will affect the normal use of the connector, so IEC classifies electrical appliances according to their dust-proof and moisture-proof characteristics. The IP protection level is composed of two numbers. The first number represents the level of the electrical appliance being dust-proof and preventing the intrusion of external objects (external objects referred to here include tools, and human fingers cannot touch the live parts of the electrical appliance to avoid electric shock), the second number indicates the degree of airtightness of the electrical appliance against moisture and water immersion. The larger the number, the higher the protection level.

Number 1	Solids	Number 2	Liquids
IP 0	No Protection	IP 0	No Protection
1	Protected against solid objects over 50mm, e.g.accidental touch by hands	1	Protected against vertically falling drops of water e.g. condensation
2	Protected against solid objects over 12.5mm, e.g. fingers	2	Protected against direct sprays of water up to 15 ° from the vertical
3	Protected against solid objects over 2.5mm, e.g. tools & wires	3	Protected against direct sprays of water up to 60 ° from the vertical
4	Protected against solid objects over 1mm, e.g. wires, nails etc.	4	Protected against water splashed from all directions, limited ingress permitted
5	Protected against dust limited ingress, not harmfull deposits	5	Protected against low pressure jets of water for at least 3 minutes
6	Totally protected against dust	6	Protected against strong jets of water for at least 3 minutes
		7	Protected against the effects of temporary mmersion in 1m water
		8	Protected against the effects of long periods of immersion in water over 1m
		9K	Protected against long periods of immersion under pressure

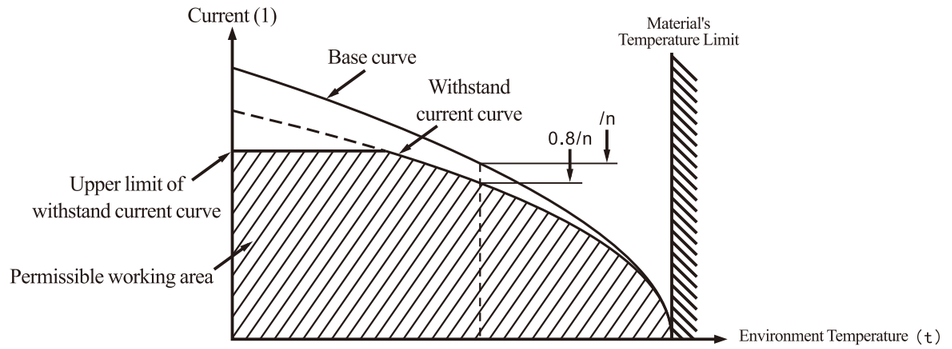
Material Group

- Insulating materials are divided into four groups according to their CTI values, and the specific groups are as follows:
- Group I: 600≤CTI;
- Group II: 400≤CTI<600;
- Group IIIa: 175≤CTI<400;
- Group IIIb: 100≤CTI<175
- Insulation materials can use Tracking Resistance Index (PTI) to indicate tracking resistance. A certain insulating material belongs to one of the above four insulating material groups

Current-Carrying Capacity

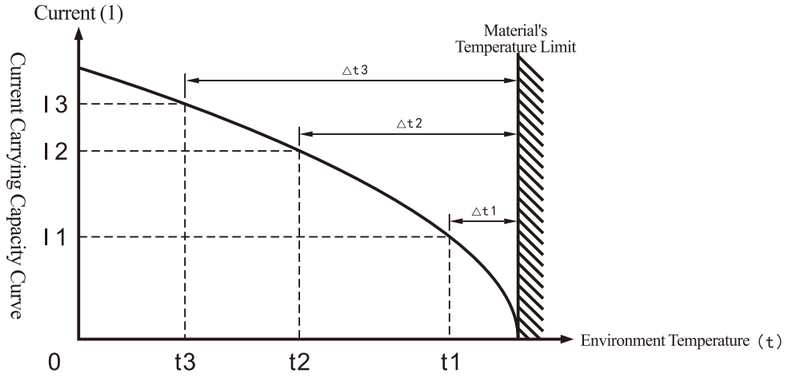
Current carrying capacity is determined according to the tests carried out in DIN EN 60512-5-2. The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. There is a limit temperature for these components. According to DIN EN 61984, the sum of ambient temperature and connector temperature rise must not exceed the limit temperature. Limit temperature is valid for the entire connector, including connector and housing.

The relationship between current, temperature rise (loss of contact resistance), and connector ambient temperature is shown as a curve. In a linear coordinate system, the current is located on a vertical line (ordinate), and the ambient temperature is located on a horizontal line (abscissa), above which the temperature limit ends.



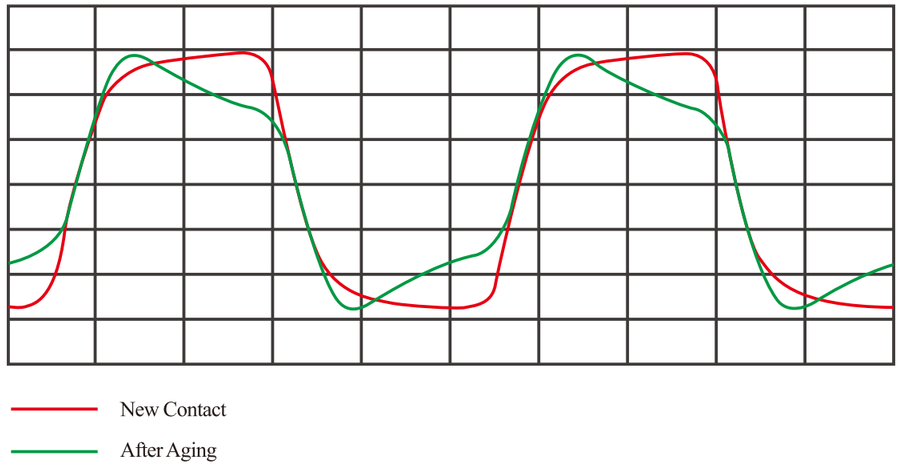
Current Carrying Capacity Curve

Electronic devices themselves have a maximum allowable resistance value. Since it is not possible to select this maximum allowable resistance for actual measurement, the base curve obtained above must be modified. According to experience, and considering the influence of the maximum allowable resistance and measurement error, if the current intensity is reduced to 80%, it can meet the needs of the actual situation. The resulting curve is called the tolerable current curve.



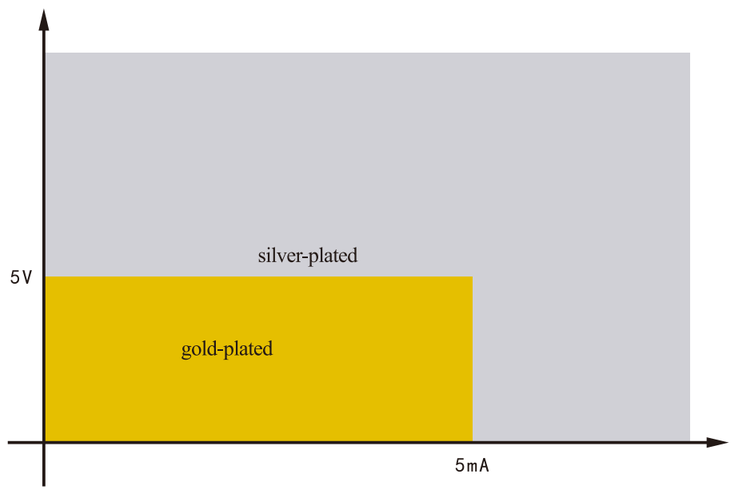
Low Current and Low Voltage

WEIPU connector connector pin is plated with silver,which has excellent electrical conductivity. Over time, during the connector's life cycle, the interaction of the connector and the sulfide in the air will produce a black oxide layer on the silver plated surface, which will increase the contact resistance of the connector and affect its ability to transmit current. The figure below illustrates a comparison of an artificially aged contact representing a 20-year life span with a new contact.



Gold-plated pins are recommended for particularly demanding transient signals and signal transmission

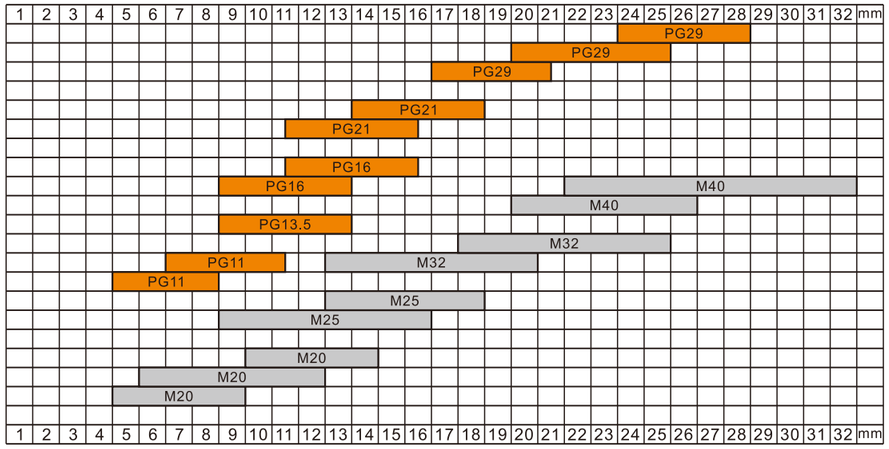
Choice of silver-plated or gold-plated pins



Metric Thread

Metric threads are specified in the international DIN EN 50262 standard, which describes the metric series M12 to M63. Thread dimensions are given by the product type description. For example, M20 refers to a thread diameter of 20mm. For easy identification, metric threaded housing and housing are marked with M.

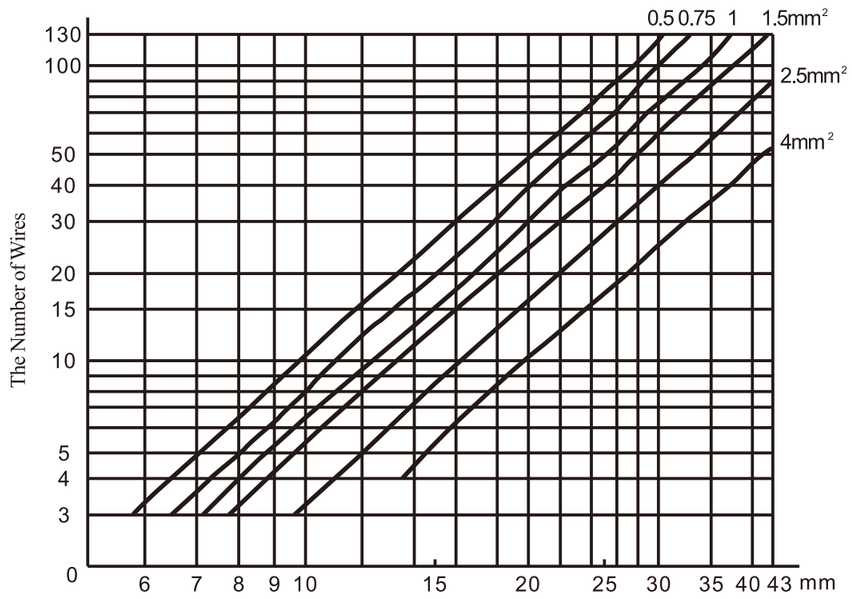
Cable range of metric sealing sleeve:



Cable

The figure shows different cable diameters, depending on wire gauge and number of conductors.

All data are average values for commercial cables.



HA Series-Mini Inserts

Technical Information

Standard：IEC 60664-1、IEC61984
No. of Contact：3+PE、4+PE 、10+PE 、16+PE、32（2×16）+PE

Insert

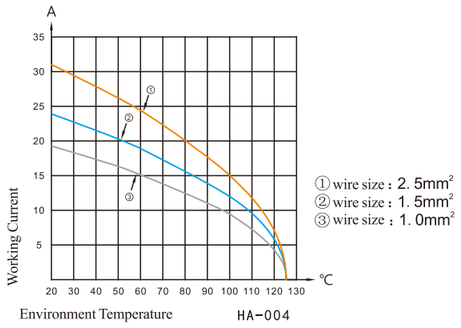
Rated Current	HA-003, HA-004：10A HA-010, HA-016, HA-032：16A (see current load diagram)
Rated Current	HA-3, HA-4: 10A HA-10, HA-16, HA-32:16A (see current load diagram)
Rated Voltage	HA-003, HA-004：250V/400V HA-010, HA-016, HA-32：250V
Rated Pulse Voltage	4kV
Pollution Degree	3
Insulation resistance	⩾10^{10} Ω
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Complies with UL/CSA rated voltage	600V
Mating Cycle	⩾500

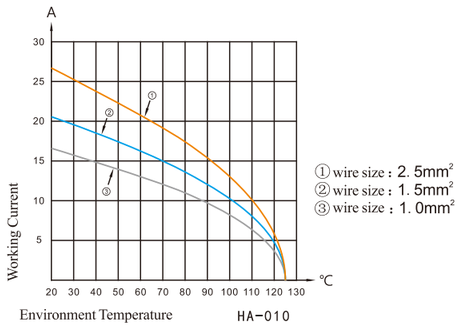
Contact

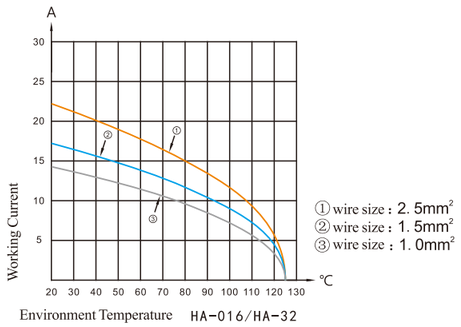
Material	Copper Alloy
Plating	Gold-plated, Silver-plated
Contact resistance	⩽1mΩ
Termination	Screw Termination
Wire Size	0.75-1.5mm² （HA-003、HA-004） 18-16AWG （HA-003、HA-004） 0.75-2.5mm² （HA-010、HA-016、HA-032） 18-14AWG （HA-010、HA-016、HA-032）
stripping length	4.5mm² （HA-003、HA-004） 7.5mm² （HA-010、HA-016、HA-032）
	Crimp Termination
Wire Size	0.14-4 mm² 26-12AWG
stripping length	7.5mm²

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2







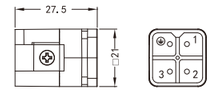
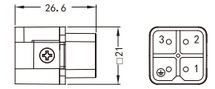
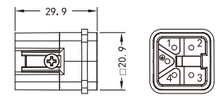
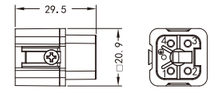
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HA-003、HA-004 HA Series-Mini Insert

3+⏚、4+⏚

10A 230/400V 4kV 3

Use with 3A hoods/housings, refer to P15-01—P15-05

Insert	Wire Size (mm²)	Product Code	Part Number	Drawings (mm)
Screw Termination Contact surface: silver-plated 	0. 75~1. 5	male 190 010 003 2000	male HA-003-M	male 
		female 190 011 003 2000	female HA-003-F	female 
				stripping length：4. 5mm Torque：0. 25N・m
Screw Termination Contact surface: silver-plated 	0. 75~1. 5	male 190 010 004 2000	male HA-004-M	male 
		female 190 011 004 2000	female HA-004-F	female 
				stripping length：4. 5mm Torque：0. 25N・m

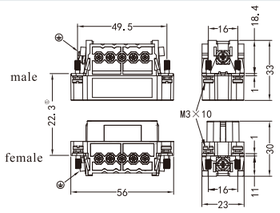
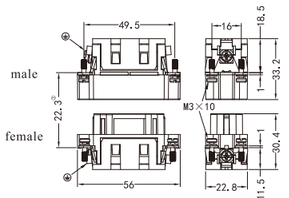
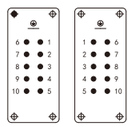
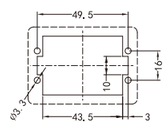
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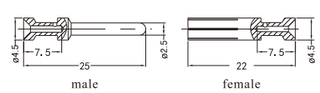
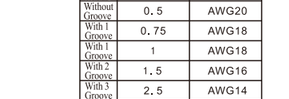
HA-010 HA Series-Mini Insert

10+⏚

16A 250V 4kV3

Use with 10A hoods/housings, refer to P16-01—P16-02

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Screw Termination Contact surface: silver-plated 	0. 75~2. 5	male 190 010 010 2000 female 190 011 010 2000	male HA-010-M/B female HA-010-F/B	 ① Maximum distance between inserts24mm stripping length: 7. 5mm Torque: 0. 5N·m
Crimp Termination Contact surface: silver-plated, gold-plated  	0. 14~4	male 190 010 010 3000 female 190 011 010 3000	male HA-010-MC female HA-010-FC	 ① Maximum distance between inserts24mm Contact Layout (Termination Front View)  male female Panel Mounting Cutout Drawing 

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated 	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG	 male female
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG	
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG	
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG	
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG	
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG	
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG	
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG	
gold-plated 	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU	 Contact resistance≤1mΩ
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU	
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU	
	191 110 016 0080	YJ2.5-25-1.0AU	191 210 016 0080	YK2.5-22-1.0AU	
	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU	
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU	
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU	
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU	

For crimp tool and removal tool, see page P25-01

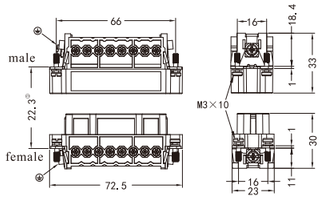
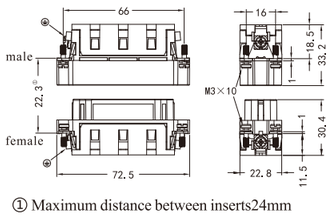
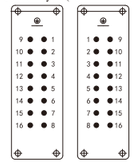
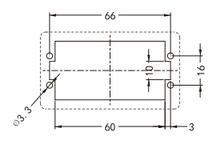
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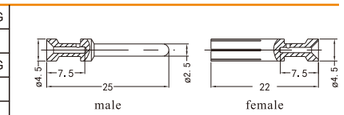
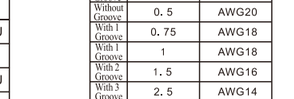
HA-016 HA Series-Mini Insert

16+⏚

16A 250V 4kV 3

Use with 16A hoods/housings, refer to P17-01—P17-02

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Screw Termination Contact surface: silver-plated 	0. 75~2. 5	male 190 010 016 2000 female 190 011 016 2000	male HA-016-M female HA-016-F	 ① Maximum distance between inserts24mm stripping length: 7. 5mm Torque: 0. 5N·m
Crimp Termination Contact surface: silver-plated, gold-plated  	0. 14~4	male 190 010 016 3000 female 190 011 016 3000	male HA-016-MC female HA-016-FC	 ① Maximum distance between inserts24mm Contact Layout (Termination Front View)  male female Panel Mounting Cutout Drawing 

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated 	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG	 male female
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG	
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG	
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG	
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG	
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG	
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG	
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG	
gold-plated 	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU	 Contact resistance≤1mΩ
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU	
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU	
	191 110 016 0080	YJ2.5-25-1.0AU	191 210 016 0080	YK2.5-22-1.0AU	
	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU	
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU	
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU	
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU	

For crimp tool and removal tool, see page P25-01

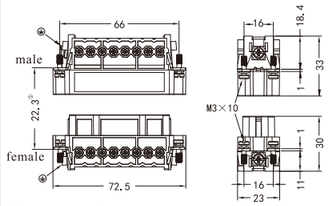
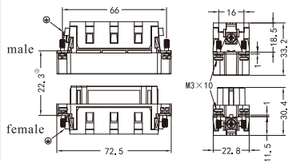
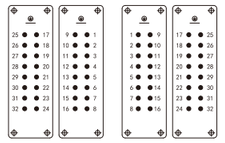
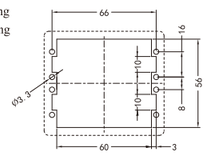
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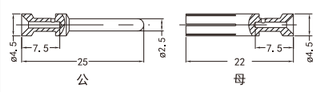
HA-032 HA Series-Mini Insert

32+⏚

16A 250V 4kV 3

Use with 32A hoods/housings, refer to P18-01—P18-03

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Screw Termination Contact surface: silver-plated 	0. 75~2. 5	male 190 010 016 2000 190 010 016 2010 female 190 011 016 2000 190 011 016 2010	male HA-016-M HA-016-M(17-32) female HA-016-F HA-016-F(17-32)	 ① Maximum distance between inserts24mm stripping length: 7. 5mm Torque: 0. 5N·m
Crimp Termination Contact surface: silver-plated, gold-plated  	0. 14~4	male 190 010 016 3000 190 010 016 3010 female 190 011 016 3000 190 011 016 3010	male HA-016-MC HA-016-MC(17-32) female HA-016-FC HA-016-FC(17-32)	 Contact Layout (Termination Front View)  male female Panel Mounting Cutout Drawing 

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated 	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG	
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG	
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG	
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG	
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG	
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG	
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG	
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG	
gold-plated 	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU	
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU	
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU	
	191 110 016 0080	YJ2.5-25-1.0AU	191 210 016 0080	YK2.5-22-1.0AU	
	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU	
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU	
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU	
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU	

Marks	wire size（mm^2）	
Without Groove	0. 14~0. 37	AWG26~22
Without Groove	0. 5	AWG20
With 1 Groove	0. 75	AWG18
With 1 Groove	1	AWG18
With 2 Groove	1. 5	AWG16
With 3 Groove	2. 5	AWG14
Wide Groove	3	AWG12
Without Groove	4	AWG12
stripping length ： 7.5mm		

Contact resistance≤1mΩ

For crimp tool and removal tool, see page P25-01

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HE Series-Regular Insert

Technical Information

Standard：IEC 60664-1、IEC61984

No. of Contact：6+PE、10+PE 、16+PE 、24+PE、32 (2×16) +PE、48 (2×24) +PE

Insert

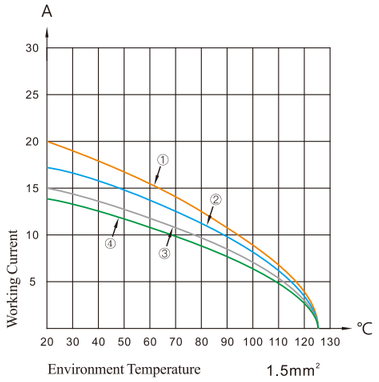
Rated Current	16A (see current load diagram)
Rated Voltage	500V
Rated Pulse Voltage	6kV
Pollution Degree	3
Insulation resistance	⩾10^{10} Ω
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Complies with UL/CSA rated voltage	600V
Mating Cycle	⩾500

Contact

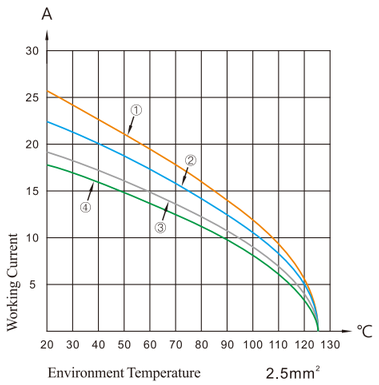
Material	Copper Alloy
Plating	Gold-plated, Silver-plated
Contact resistance	⩽1mΩ
Termination	Screw Termination
Wire Size	0.75-2.5mm² 18-14AWG
stripping length	7.5mm
	Crimp Termination
Wire Size	0.14-4 mm² 26-12AWG
stripping length	7.5mm
	Cage Clamp Termination
Wire Size	0.14-2.5 mm² 26-14AWG (Not apply to wires with terminals)
stripping length	7-9 mm

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2



① HE-006
② HE-010
③ HE-016、HE-032
④ HE-024、HE-048



① HE-006
② HE-010
③ HE-016、HE-032
④ HE-024、HE-048

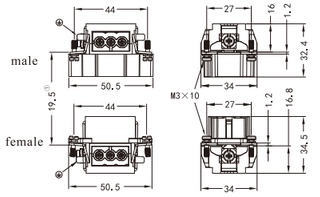
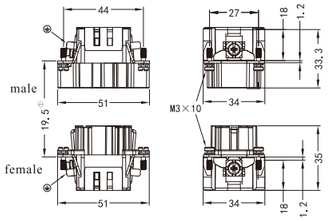
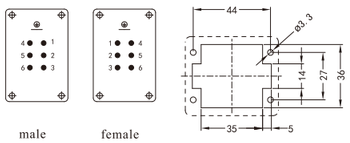
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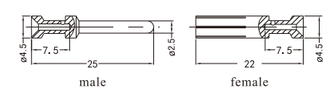
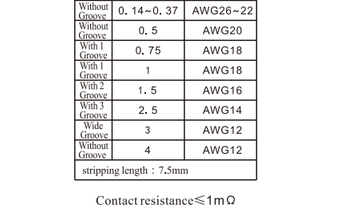
HE-006 Regular Insert

6+⏚

16A 500V 6kV 3

Use with 6B hoods/housings, refer to P19-01—P19-05

Insert	Wire Size (mm²)	Product Code	Part Number	Drawings (mm)
Screw Termination Contact surface: silver-plated 	0. 75~2. 5	male 190 040 006 2000 female 190 041 006 2000	male HE-006-M female HE-006-F	 ① Maximum distance between inserts24mm stripping length: 7. 5mm Torque: 0. 5N·m
Crimp Termination Contact surface: silver-plated, gold-plated  Cage Clamp Termination Contact surface: silver-plated 	0. 14~4 0.14~2.5	male 190 040 006 3000 female 190 041 006 3000 male 190 040 006 4000 female 190 041 006 4000	male HE-006-MC female HE-006-FC male HE-006-MS female HE-006-FS	 Contact Layout (Termination Front View) Panel Mounting Cutout Drawing  male female

Crimp Contact	male Product Code	female Product Code	male Part Number	female Part Number	Drawings (mm)
silver-plated 	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG	 male female
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG	
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG	
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG	
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG	
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG	
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG	
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG	
gold-plated 	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU	 Marks / wire size (mm²) Without Groove: 0. 14~0. 37 / AWG26~22 Without Groove: 0. 5 / AWG20 With 1 Groove: 0. 75 / AWG18 With 1 Groove: 1 / AWG18 With 2 Groove: 1. 5 / AWG16 With 3 Groove: 2. 5 / AWG14 Wide Groove: 3 / AWG12 Without Groove: 4 / AWG12 stripping length：7.5mm Contact resistance⩽1mΩ
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU	
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU	
	191 110 016 0080	YJ2.5-25-1.0AU	191 210 016 0080	YK2.5-22-1.0AU	
	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU	
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU	
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU	
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU	

For crimp tool and removal tool, see page P25-01

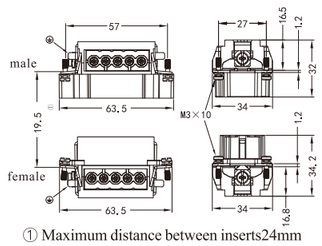
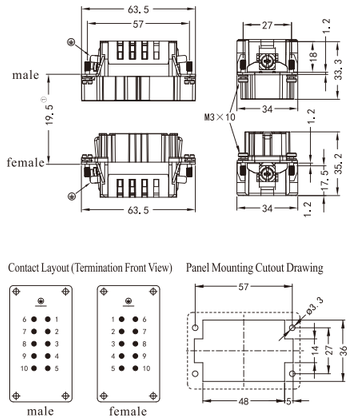
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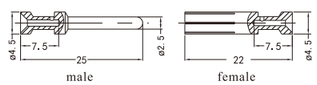
HE-010 Regular Insert

10+⏚

16A 500V 6kV 3

Use with 10B hoods/housings, refer to P20-10

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Screw Termination Contact surface: silver-plated 	0.75~2.5	male 190 040 010 2000 female 190 041 010 2000	male HE-010-M female HE-010-F	 ① Maximum distance between inserts24mm stripping length: 7.5mm Torque: 0.5N·m
Crimp Termination Contact surface: silver-plated, gold-plated  Cage Clamp Termination Contact surface: silver-plated 	0.14~4 0.14~2.5	male 190 040 010 3000 female 190 041 010 3000 male 190 040 010 4000 female 190 041 010 4000	male HE-010-MC female HE-010-FC male HE-010-MS female HE-010-FS	 Contact Layout (Termination Front View) Panel Mounting Cutout Drawing male female

Crimp Contact	male Product Code	female Product Code	male Part Number	female Part Number	Drawings (mm)
silver-plated 	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG	 male female
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG	
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG	
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG	
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG	
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG	
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG	
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG	
gold-plated 	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU	
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU	
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU	
	191 110 016 0080	YJ2.5-25-1.0AU	191 210 016 0080	YK2.5-22-1.0AU	
	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU	
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU	
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU	
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU	

Marks	wire size (mm^2)	
Without Groove	0.14~0.37	AWG26~22
Without Groove	0.5	AWG20
With 1 Groove	0.75	AWG18
With 1 Groove	1	AWG18
With 2 Groove	1.5	AWG16
With 3 Groove	2.5	AWG14
Wide Groove	3	AWG12
Without Groove	4	AWG12
stripping length：7.5mm		

Contact resistance≤1mΩ

For crimp tool and removal tool, see page P25-01

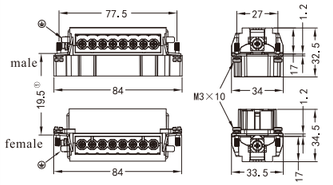
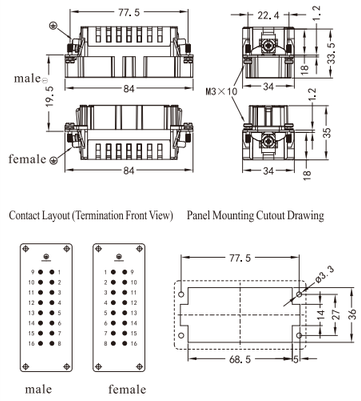
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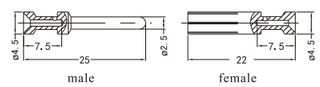
HE-016 Regular Insert

16+⏚

16A 500V 6kV 3

Use with 16B hoods/housings, refer to P21-01

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Screw Termination Contact surface: silver-plated 	0.75~2.5	male 190 040 016 2000 female 190 041 016 2000	male HE-016-M female HE-016-F	 ① Maximum distance between inserts24mm stripping length: 7.5mm Torque: 0.5N·m
Crimp Termination Contact surface: silver-plated, gold-plated  Cage Clamp Termination Contact surface: silver-plated 	0.14~4 0.14~2.5	male 190 040 016 3000 female 190 041 016 3000 male 190 040 016 4000 female 190 041 016 4000	male HE-016-MC female HE-016-FC male HE-016-MS female HE-016-FS	 Contact Layout (Termination Front View) Panel Mounting Cutout Drawing male female

Crimp Contact	male Product Code	female Product Code	male Part Number	female Part Number	Drawings (mm)
silver-plated 	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG	 male female
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG	
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG	
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG	
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG	
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG	
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG	
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG	
gold-plated 	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU	
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU	
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU	
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	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU	
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU	
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU	
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU	

Marks	wire size (mm^2)	
Without Groove	0.14~0.37	AWG26~22
Without Groove	0.5	AWG20
With 1 Groove	0.75	AWG18
With 1 Groove	1	AWG18
With 2 Groove	1.5	AWG16
With 3 Groove	2.5	AWG14
Wide Groove	3	AWG12
Without Groove	4	AWG12
stripping length：7.5mm		

Contact resistance≤1mΩ

For crimp tool and removal tool, see page P25-01

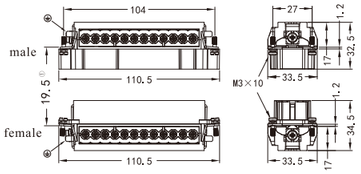
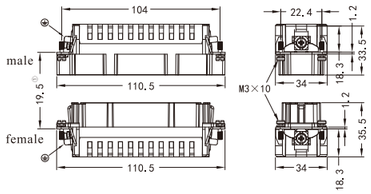
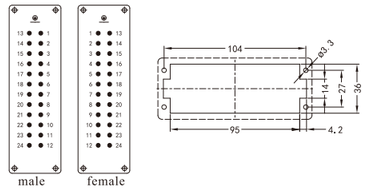
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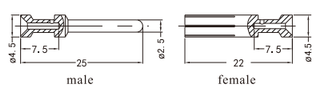
HE-024 Regular Insert

24+⏚

16A 500V 6kV 3

Use with 24B hoods/housings, refer to P22-01—P22-09

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Screw Termination Contact surface: silver-plated 	0. 75~2. 5	male 190 040 024 2000 female 190 041 024 2000	male HE-024-M female HE-024-F	 ① Maximum distance between inserts24mm stripping length: 7. 5mm Torque: 0. 5N·m
Crimp Termination Contact surface: silver-plated, gold-plated 	0. 14~4	male 190 040 024 3000 female 190 041 024 3000	male HE-024-MC female HE-024-FC	 Contact Layout (Termination Front View) Panel Mounting Cutout Drawing
Cage Clamp Termination Contact surface: silver-plated	0.14~2.5	male 190 040 024 4000 female 190 041 024 4000	male HE-024-MS female HE-024-FS	

Crimp Contact	male Product Code	male Product Code	female Part Number	female Part Number	Drawings (mm)
silver-plated 	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG	
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG	
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG	
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG	
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG	
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG	
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG	
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG	
gold-plated 	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU	
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU	
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU	
	191 110 016 0080	YJ2.5-25-1.0AU	191 210 016 0080	YK2.5-22-1.0AU	
	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU	
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU	
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU	
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU	

Marks	wire size（mm^2）	
Without Groove	0. 14~0. 37	AWG26~22
Without Groove	0. 5	AWG20
With 1 Groove	0. 75	AWG18
With 1 Groove	1	AWG18
With 2 Groove	1. 5	AWG16
With 3 Groove	2. 5	AWG14
Wide Groove	3	AWG12
Without Groove	4	AWG12
stripping length：7.5mm		

Contact resistance≤1mΩ

For crimp tool and removal tool, see page P25-01

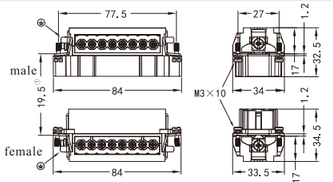
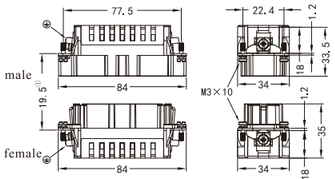
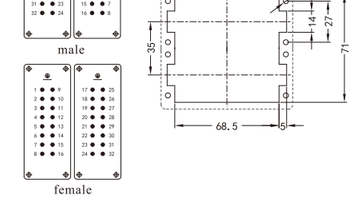
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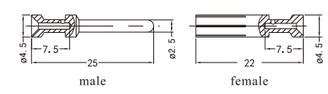
HE-032 Regular Insert

32+⏚

16A 500V 6kV 3

Use with 32B hoods/housings, refer to P23-01—P23-03

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Screw Termination Contact surface: silver-plated 	0. 75~2. 5	male 190 040 016 2000 190 040 016 2010 female 190 041 016 2000 190 041 016 2010	male HE-016-M HE-016-M(17-32) female HE-016-F HE-016-F(17-32)	 ① Maximum distance between inserts24mm stripping length: 7. 5mm Torque: 0. 5N·m
Crimp Termination Contact surface: silver-plated, gold-plated 	0. 14~4	male 190 040 016 3000 190 040 016 3010 female 190 041 016 3000 190 041 016 3010	male HE-016-MC HE-016-MC(17-32) female HE-016-FC HE-016-FC(17-32)	 Contact Layout (Termination Front View) Panel Mounting Cutout Drawing
Cage Clamp Termination Contact surface: silver-plated	0.14~2.5	male 190 040 016 4000 190 040 016 4010 female 190 041 016 4000 190 041 016 4010	male HE-016-MS HE-016-MS(17-32) female HE-016-FS HE-016-FS(17-32)	

Crimp Contact	male Product Code	male Product Code	female Part Number	female Part Number	Drawings (mm)
silver-plated 	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG	
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG	
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG	
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG	
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG	
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG	
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG	
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG	
gold-plated 	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU	
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU	
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU	
	191 110 016 0080	YJ2.5-25-1.0AU	191 210 016 0080	YK2.5-22-1.0AU	
	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU	
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU	
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU	
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU	

Marks	wire size（mm^2）	
Without Groove	0. 14~0. 37	AWG26~22
Without Groove	0. 5	AWG20
With 1 Groove	0. 75	AWG18
With 1 Groove	1	AWG18
With 2 Groove	1. 5	AWG16
With 3 Groove	2. 5	AWG14
Wide Groove	3	AWG12
Without Groove	4	AWG12
stripping length：7.5mm		

Contact resistance≤1mΩ

For crimp tool and removal tool, see page P25-01

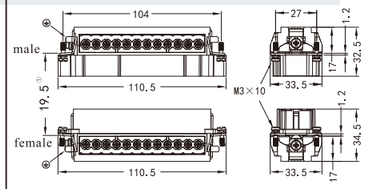
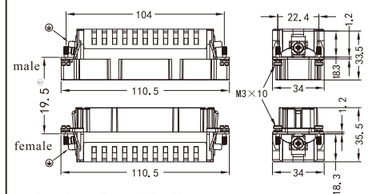
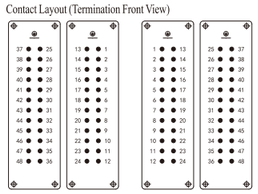
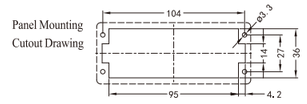
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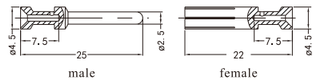
HE-048 Regular Insert

48+⏚

16A 500V 6kV 3

Use with 48B hoods/housings, refer to P24-01—P24-02

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Screw Termination Contact surface: silver-plated 	0. 75~2. 5	male 190 040 024 2000 190 040 024 2010 female 190 041 024 2000 190 041 024 2010	male HE-024-M HE-024-M(25-48) female HE-024-F HE-024-F(25-48)	 ① Maximum distance between inserts24mm stripping length: 7. 5mm Torque: 0. 5N·m
Crimp Termination Contact surface: silver-plated, gold-plated 	0. 14~4	male 190 040 024 3000 190 040 024 3010 female 190 041 024 3000 190 041 024 3010	male HE-024-MC HE-024-MC(25-48) female HE-024-FC HE-024-FC(25-48)	 Contact Layout (Termination Front View)  male female  Panel Mounting Cutout Drawing
Cage Clamp Termination Contact surface: silver-plated 	0.14~2.5	male 190 040 024 4000 190 040 024 4010 female 190 041 024 4000 190 041 024 4010	male HE-024-MS HE-024-MS(25-48) female HE-024-FS HE-024-FS(25-48)	

Crimp Contact	male Product Code	male Product Code	female Part Number	female Part Number	Drawings (mm)
silver-plated 	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG	 male female
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG	
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG	
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG	
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG	
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG	
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG	
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG	
gold-plated 	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU	
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU	
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU	
	191 110 016 0080	YJ2.5-25-1.0AU	191 210 016 0080	YK2.5-22-1.0AU	
	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU	
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU	
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU	
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU	

Marks	wire size (mm^2)	
Without Groove	0. 14~0. 37	AWG26~22
Without Groove	0. 5	AWG20
With 1 Groove	0. 75	AWG18
With 1 Groove	1	AWG18
With 2 Groove	1. 5	AWG16
With 3 Groove	2. 5	AWG14
Wide Groove	3	AWG12
Without Groove	4	AWG12

stripping length：7.5mm

Contact resistance≤1mΩ

For crimp tool and removal tool, see page P25-01

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HVE Series Insert

Technical Information

Standard：IEC 60664-1、IEC61984

No. of Contact：3+PE、6+PE 、10+PE 、12（2×6）+PE、
20（2×10）+PE、16+PE、32（2×16）+PE

Insert

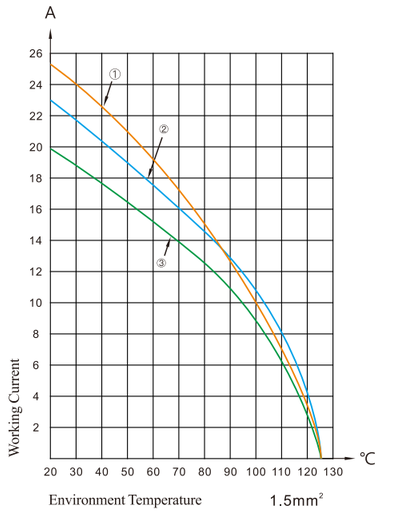
Rated Current	16A (see current load diagram)
Rated Voltage	3、6、10、12、20 PIN: 830V 16、32 PIN: Pole-to-ground: 400V, Pole-to-pole: 690V
Rated Pulse Voltage	3、6、10、12、20 PIN: 8kV 16、32 PIN: 6kV
Pollution Degree	3
Insulation resistance	⩾10^{10} Ω
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (UI94)	V-0
Complies with UL/CSA rated voltage	600V
Mating Cycle	⩾500

Contact

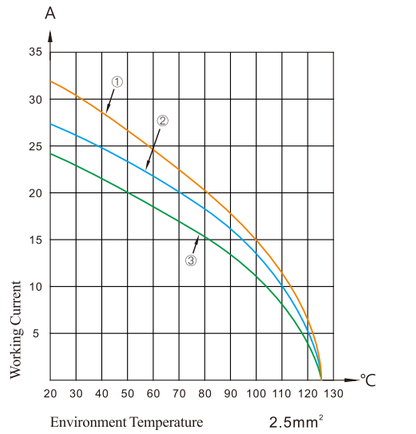
Material	Copper Alloy
Plating	Gold-plated, Silver-plated
Contact resistance	⩽1mΩ
Termination	Screw Termination
Wire Size	0.75-2.5mm² 18-13AWG
stripping length	0.75mm
	Crimp Termination
Wire Size	0.14-4 mm² 26-12AWG
stripping length	0.75mm
	Cage Clamp Termination
Wire Size	0.14-2.5 mm² 26-14AWG
stripping length	7-9mm

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2



① HVE-003
② HVE-006、HVE012
③ HVE-010、HVE-016、HVE-020、HVE-032



① HVE-003
② HVE-006、HVE012
③ HVE-010、HVE-016、HVE-020、HVE-032

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HVE-003 Series-High Voltage Insert

3+⏚

16A 830V 8kV 3 +2个 Safety delay pin

Use with 10B hoods/housings, refer to P20-01—P20-08

Insert	Wire Size (mm²)	Product Code	Part Number	Drawings (mm)
Screw Termination Contact surface: silver-plated	0. 75~2. 5	male 190 090 003 2000 female 190 091 003 2000	male HVE-003-M female HVE-003-F	male / female ① Maximum distance between inserts21mm stripping length: 7. 5mm Torque: 0. 5N·m
Crimp Termination Contact surface: silver-plated, gold-plated	0. 14~4	male 190 090 003 3000 female 190 091 003 3000	male HVE-003-MC female HVE-003-FC	male / female ① Maximum distance between inserts21mm Contact Layout (Termination Front View) Panel Mounting Cutout Drawing male / female ● Working pin ○ Without pin ◐ Safety delay pin

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG	male / female
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG	
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG	
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG	
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG	
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG	
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG	
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG	
gold-plated	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU	
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU	
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU	
	191 110 016 0080	YJ2.5-25-1.0AU	191 210 016 0080	YK2.5-22-1.0AU	
	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU	
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU	
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU	
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU	

Marks	wire size（mm²）	
Without Groove	0. 14~0. 37	AWG26~22
Without Groove	0. 5	AWG20
With 1 Groove	0. 75	AWG18
With 1 Groove	1	AWG18
With 2 Groove	1. 5	AWG16
With 3 Groove	2. 5	AWG14
Wide Groove	3	AWG12
Without Groove	4	AWG12

stripping length：7.5mm

Contact resistance⩽1mΩ

Safety delay pin silver-plated	wire size(mm²)	Product Code	Part Number	Drawings (mm)
	1	191 100 016 4080	YJ2.5-22.8-1.0AG	Short delay pin can delay the contact time in order to protect the circuit from arcing
	1.5	191 100 016 4090	YJ2.5-22.8-1.5AG	
	2.5	191 100 016 4100	YJ2.5-22.8-2.5AG	

For crimp tool and removal tool, see page P25-01

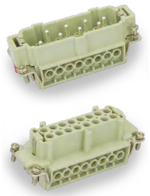
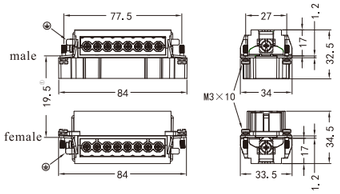
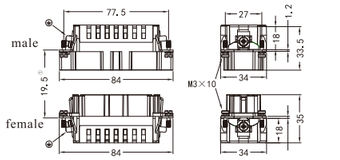
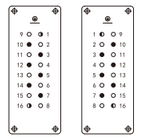
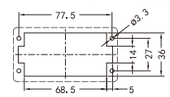
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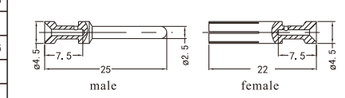
HVE-006 Series-High Voltage Insert

6+⏚

16A 830V 8kV 3 +2 Safety delay pin

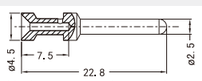
Use with 16B hoods/housings, refer to P21-01—P21-09

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Screw Termination Contact surface: silver-plated 	0. 75~2. 5	male 190 090 006 2000 female 190 091 006 2000	male HVE-006-M female HVE-006-F	 ① Maximum distance between inserts21mm stripping length: 7. 5mm Torque: 0. 5N·m
Crimp Termination Contact surface: silver-plated, gold-plated  	0. 14~4	male 190 090 006 3000 female 190 091 006 3000	male HVE-006-MC female HVE-006-FC	 ① Maximum distance between inserts21mm Contact Layout (Termination Front View)  male female ● Working pin ◐ Safety delay pin ○ Without pin Panel Mounting Cutout Drawing 

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated 	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG	
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG	
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG	
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG	
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG	
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG	
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG	
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG	
gold-plated 	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU	
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU	
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU	
	191 110 016 0080	YJ2.5-25-1.0AU	191 210 016 0080	YK2.5-22-1.0AU	
	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU	
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU	
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU	
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU	

Marks	wire size (mm^2)	
Without Groove	0. 14~0. 37	AWG26~22
Without Groove	0. 5	AWG20
With 1 Groove	0. 75	AWG18
With 1 Groove	1	AWG18
With 2 Groove	1. 5	AWG16
With 3 Groove	2. 5	AWG14
Wide Groove	3	AWG12
Without Groove	4	AWG12
stripping length：7.5mm		

Contact resistance≤1mΩ

Safety delay pin silver-plated	wire size(mm^2)	Product Code	Part Number	Drawings (mm)
	1	191 100 016 4080	YJ2.5-22.8-1.0AG	
	1.5	191 100 016 4090	YJ2.5-22.8-1.5AG	
	2.5	191 100 016 4100	YJ2.5-22.8-2.5AG	

Short delay pin can delay the contact time in order to protect the circuit from arcing

For crimp tool and removal tool, see page P25-01

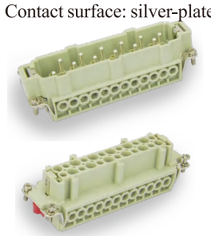
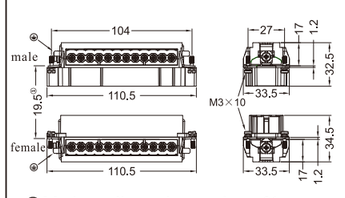
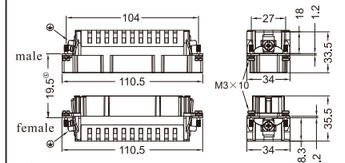
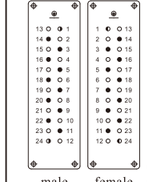
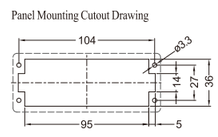
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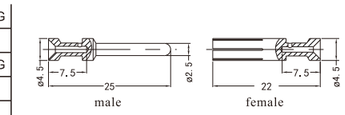
HVE-010 Series-High Voltage Insert

10+⏚

16A 830V 8kV 3 +2 Safety delay pin

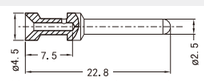
Use with 24B hoods/housings, refer to P22-01—P22-09

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Screw Termination Contact surface: silver-plated 	0. 75~2. 5	male 190 090 010 2000 female 190 091 010 2000	male HVE-010-M female HVE-010-F	 ① Maximum distance between inserts21mm stripping length: 7. 5mm Torque: 0. 5N·m
Crimp Termination Contact surface: silver-plated, gold-plated  	0. 14~4	male 190 090 010 3000 female 190 091 010 3000	male HVE-010-MC female HVE-010-FC	 ① Maximum distance between inserts21mm Contact Layout (Termination Front View)  male female ● Working pin ◐ Safety delay pin ○ Without pin Panel Mounting Cutout Drawing 

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated 	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG	
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG	
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG	
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG	
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG	
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG	
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG	
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG	
gold-plated 	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU	
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU	
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU	
	191 110 016 0080	YJ2.5-25-1.0AU	191 210 016 0080	YK2.5-22-1.0AU	
	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU	
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU	
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU	
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU	

Marks	wire size (mm^2)	
Without Groove	0. 14~0. 37	AWG26~22
Without Groove	0. 5	AWG20
With 1 Groove	0. 75	AWG18
With 1 Groove	1	AWG18
With 2 Groove	1. 5	AWG16
With 3 Groove	2. 5	AWG14
Wide Groove	3	AWG12
Without Groove	4	AWG12
stripping length：7.5mm		

Contact resistance≤1mΩ

Safety delay pin silver-plated	wire size(mm^2)	Product Code	Part Number	Drawings (mm)
	1	191 100 016 4080	YJ2.5-22.8-1.0AG	
	1.5	191 100 016 4090	YJ2.5-22.8-1.5AG	
	2.5	191 100 016 4100	YJ2.5-22.8-2.5AG	

Short delay pin can delay the contact time in order to protect the circuit from arcing

For crimp tool and removal tool, see page P25-01

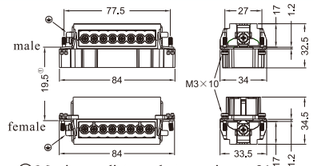
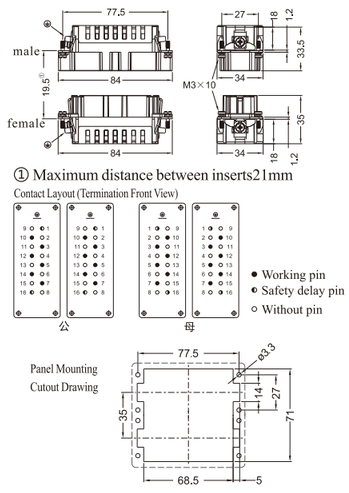
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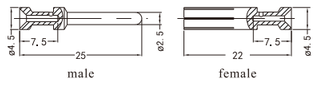
HVE-012 Series-High Voltage Insert

12+⏚

16A 830V 8kV 3 +4 Safety delay pin

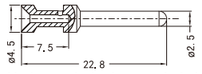
Use with 32B hoods/housings, refer to P23-01—P23-03

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Screw Termination Contact surface: silver-plated 	0. 75~2. 5	male 190 090 006 2000 190 090 006 2010 female 190 091 006 2000 190 091 006 2010	male HVE-006-M HVE-006-M(7-12) female HVE-006-F HVE-006-F(7-12)	 ① Maximum distance between inserts21mm stripping length: 7. 5mm Torque: 0. 5N·m
Crimp Termination Contact surface: silver-plated, gold-plated  	0. 14~4	male 190 090 006 3000 190 090 006 3010 female 190 091 006 3000 190 091 006 3010	male HVE-006-MC HVE-006-MC(7-12) female HVE-006-FC HVE-006-FC(7-12)	 ① Maximum distance between inserts21mm

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated 	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG	
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG	
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG	
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG	
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG	
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG	
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG	
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG	
gold-plated 	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU	
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU	
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU	
	191 110 016 0080	YJ2.5-25-1.0AU	191 210 016 0080	YK2.5-22-1.0AU	
	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU	
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU	
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU	
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU	

Marks	wire size (mm^2)	
Without Groove	0. 14~0. 37	AWG26~22
Without Groove	0. 5	AWG20
With 1 Groove	0. 75	AWG18
With 1 Groove	1	AWG18
With 2 Groove	1. 5	AWG16
With 3 Groove	2. 5	AWG14
Wide Groove	3	AWG12
Without Groove	4	AWG12
stripping length：7.5mm		

Contact resistance≤1mΩ

Safety delay pin silver-plated	wire size(mm^2)	Product Code	Part Number	
	1	191 100 016 4080	YJ2.5-22.8-1.0AG	
	1.5	191 100 016 4090	YJ2.5-22.8-1.5AG	
	2.5	191 100 016 4100	YJ2.5-22.8-2.5AG	

Short delay pin can delay the contact time in order to protect the circuit from arcing

For crimp tool and removal tool, see page P25-01

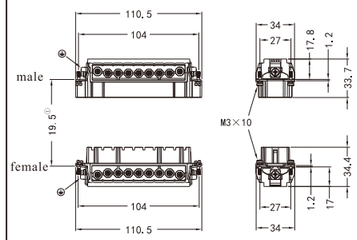
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HVE-016 Series-High Voltage Insert

16+⏚

16A 400/690V 6KV 3 +2 Safety delay pin

Use with 32B hoods/housings, refer to P23-01—P23-03

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Screw Termination Contact surface: silver-plated  	0. 75~2. 5	male 190 090 016 2000 female 190 091 016 2000	male HVE-016-M female HVE-016-F	 ① Maximum distance between inserts21mm stripping length: 7. 5mm Torque: 0. 5N·m

For crimp tool and removal tool, see page P25-01

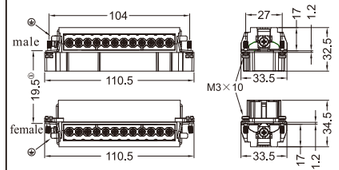
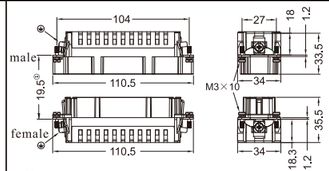
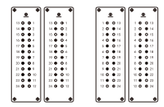
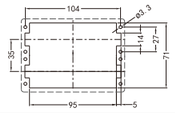
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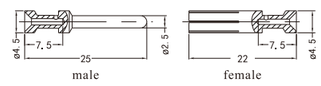
HVE-020 Series-High Voltage Insert

20+⏚

16A 830V 8kV 3 +4 Safety delay pin

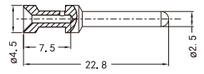
Use with 48B hoods/housings, refer to P24-01—P24-02

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Screw Termination Contact surface: silver-plated 	0. 75~2. 5	male 190 090 010 2000 190 090 010 2010 female 190 091 010 2000 190 091 010 2010	male HVE-010-M HVE-010-M(11-20) female HVE-010-F HVE-010-F(11-20)	 ① Maximum distance between inserts21mm stripping length: 7. 5mm Torque: 0. 5N·m
Crimp Termination Contact surface: silver-plated, gold-plated  	0. 14~4	male 190 090 010 3000 190 090 010 3010 female 190 091 010 3000 190 091 010 3010	male HVE-010-MC HVE-010-MC(11-20) female HVE-010-FC HVE-010-FC(11-20)	 ① Maximum distance between inserts21mm Contact Layout (Termination Front View)  male female Panel Mounting Cutout Drawing  ● Working pin ◐ Safety delay pin ○ Without pin

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated 	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG	
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG	
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG	
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG	
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG	
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG	
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG	
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG	
gold-plated 	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU	
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU	
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU	
	191 110 016 0080	YJ2.5-25-1.0AU	191 210 016 0080	YK2.5-22-1.0AU	
	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU	
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU	
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU	
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU	

Marks	wire size（mm^2）	
Without Groove	0. 14~0. 37	AWG26~22
Without Groove	0. 5	AWG20
With 1 Groove	0. 75	AWG18
With 1 Groove	1	AWG18
With 2 Groove	1. 5	AWG16
With 3 Groove	2. 5	AWG14
Wide Groove	3	AWG12
Without Groove	4	AWG12
stripping length：7.5mm		

Contact resistance≤1mΩ

	wire size(mm^2)	Product Code	Part Number	Drawings (mm)
Safety delay pin silver-plated 	1	191 100 016 4080	YJ2.5-22.8-1.0AG	
	1.5	191 100 016 4090	YJ2.5-22.8-1.5AG	
	2.5	191 100 016 4100	YJ2.5-22.8-2.5AG	

Short delay pin can delay the contact time in order to protect the circuit from arcing

For crimp tool and removal tool, see page P25-01

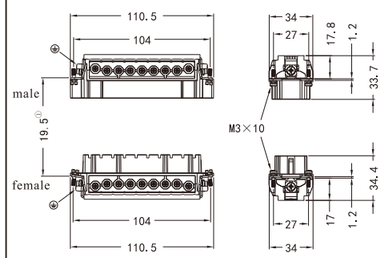
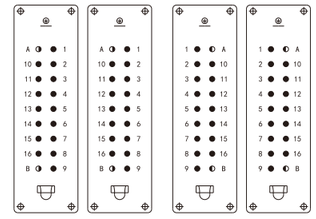
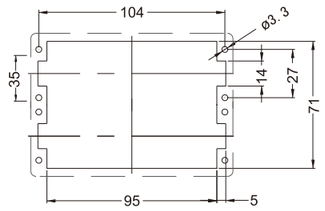
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HVE-032 Series-High Voltage Insert

32+⏚

16A 400/690V 6kV 3 +4 Safety delay pin

Use with 48B hoods/housings, refer to P24-01—P24-02

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Screw Termination Contact surface: silver-plated  	0. 75~2. 5	male 190 090 016 2000 190 090 016 2010 female 190 091 016 2000 190 091 016 2010	male HVE-016-F HVE-016-F(17-32) female HVE-016-M HVE-016-M(17-32)	 ① Maximum distance between inserts21mm stripping length: 7. 5mm Torque: 0. 5N·m Contact Layout (Termination Front View)  male female ● Working pin ◐ Safety delay pin ○ Without pin Panel Mounting Cutout Drawing 

For crimp tool and removal tool, see page P25-01

RETURN>

Technical Information

Standard：IEC 60664-1、IEC61984

No. of Contact：10+PE、18+PE、32+PE、46+PE、
64 (2×32)+PE、92(2×46)+ PE

Insert

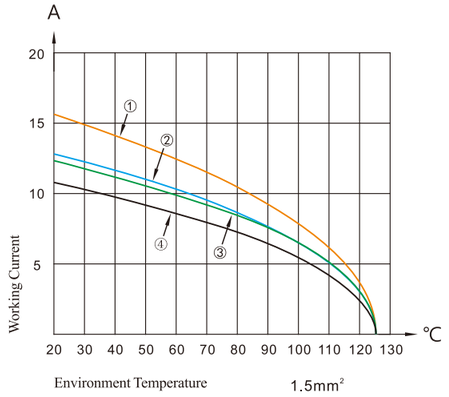
Rated Current	16A (see current load diagram)
Rated Voltage	500V
Rated Pulse Voltage	6kV
Pollution Degree	3
Insulation resistance	⩾10^{10} Ω
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Complies with UL/CSA rated voltage	600V
Mating Cycle	⩾500

Contact

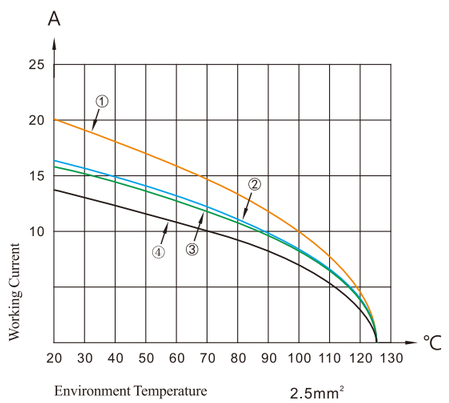
Material	Copper Alloy
Plating	Gold-plated, Silver-plated
Contact resistance	⩽1mΩ
Termination	Crimp Termination
Wire Size	0.14-4 mm² 26-12AWG
stripping length	7. 5mm

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2



① HEE-010
② HEE-018
③ HEE-032、HEE-064
④ HEE-046、HEE-092



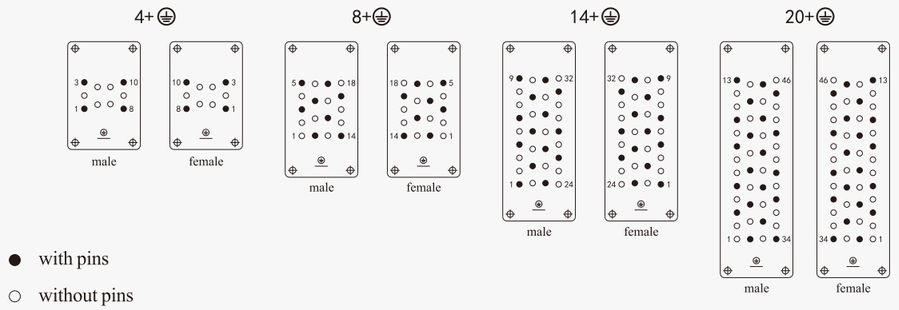
① HEE-010
② HEE-018
③ HEE-032、HEE-064
④ HEE-046、HEE-092

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HEE series insert in the state of full pins, and pollution level is 3, its working voltage is 500V
After adjusting the pin layout, it can work up to 1000V at pollution level 3

HEE Series

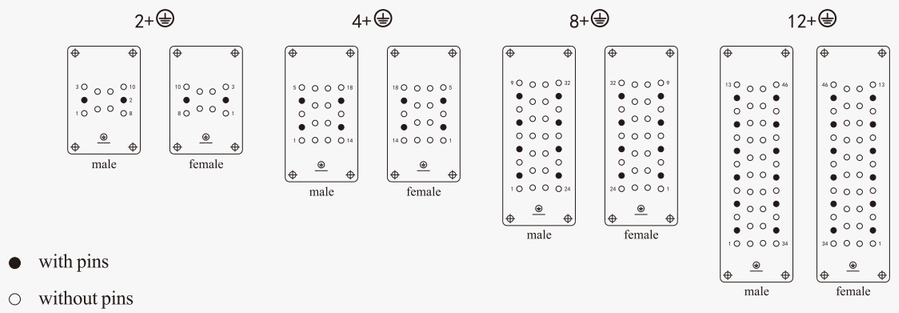
690V-Pollution Degree 3



● with pins
○ without pins

HEE Series

1000V-Pollution Degree 3



● with pins
○ without pins

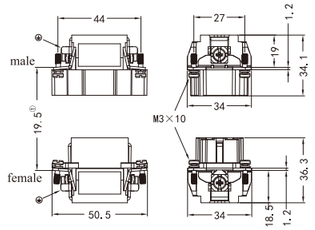
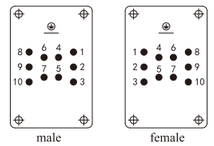
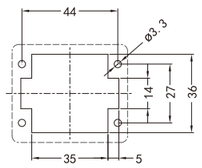
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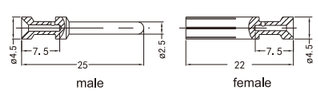
HEE-010 Series-High Density Insert

10+⏚

16A 500V 6kV 3

Use with 6B hoods/housings, refer to P19-01—P19-05

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated	0.14~4	male 190 050 010 3000	male HEE-010-MC	
		female 190 051 010 3000	female HEE-010-FC	① Maximum distance between inserts21mm Contact Layout (Termination Front View)  Panel Mounting Cutout Drawing 

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG	
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG	
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG	
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG	
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG	
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG	
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG	
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG	
gold-plated	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU	
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU	
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU	
	191 110 016 0080	YJ2.5-25-1.0AU	191 210 016 0080	YK2.5-22-1.0AU	
	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU	
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU	
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU	
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU	

Marks	wire size (mm^2)	
Without Groove	0.14~0.37	AWG26~22
Without Groove	0.5	AWG20
With 1 Groove	0.75	AWG18
With 1 Groove	1	AWG18
With 2 Groove	1.5	AWG16
With 3 Groove	2.5	AWG14
Wide Groove	3	AWG12
Without Groove	4	AWG12
stripping length：7.5mm		

Contact resistance≤1mΩ

For crimp tool and removal tool, see page P25-01

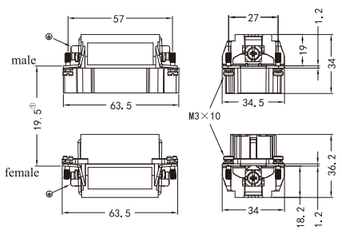
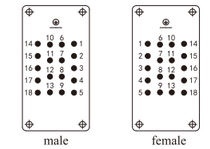
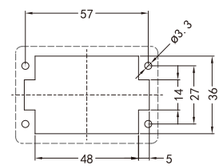
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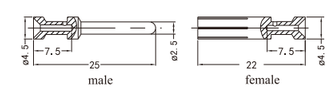
HEE-018 Series-High Density Insert

18+⏚

16A 500V 6kV 3

Use with 10B hoods/housings, refer to P20-01—P20-08

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated	0.14~4	male 190 050 018 3000	male HEE-018-MC	
		female 190 051 018 3000	female HEE-018-FC	① Maximum distance between inserts21mm Contact Layout (Termination Front View)  Panel Mounting Cutout Drawing 

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG	
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG	
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG	
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG	
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG	
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG	
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG	
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG	
gold-plated	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU	
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU	
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU	
	191 110 016 0080	YJ2.5-25-1.0AU	191 210 016 0080	YK2.5-22-1.0AU	
	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU	
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU	
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU	
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU	

Marks	wire size (mm^2)	
Without Groove	0.14~0.37	AWG26~22
Without Groove	0.5	AWG20
With 1 Groove	0.75	AWG18
With 1 Groove	1	AWG18
With 2 Groove	1.5	AWG16
With 3 Groove	2.5	AWG14
Wide Groove	3	AWG12
Without Groove	4	AWG12
stripping length：7.5mm		

Contact resistance≤1mΩ

For crimp tool and removal tool, see page P25-01

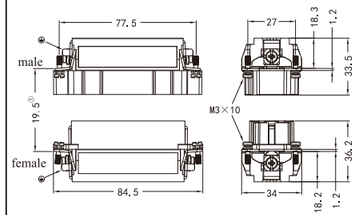
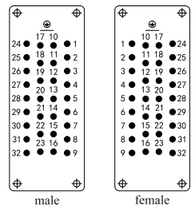
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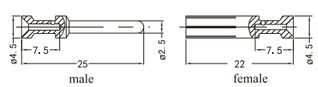
HEE-032 Series-High Density Insert

32+⏚

16A 500V 6kV 3

Use with 16B hoods/housings, refer to P21-01—P21-09

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated	0. 14~4	male 190 050 032 3000	male HEE-032-MC	
		female 190 051 032 3000	female HEE-032-FC	① Maximum distance between inserts21mm Contact Layout (Termination Front View)  Panel Mounting Cutout Drawing

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG	
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG	
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG	
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG	
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG	
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG	
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG	
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG	
gold-plated	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU	
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU	
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU	
	191 110 016 0080	YJ2.5-25-1.0AU	191 210 016 0080	YK2.5-22-1.0AU	
	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU	
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU	
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU	
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU	

Marks	wire size (mm^2)	
Without Groove	0. 14~0. 37	AWG26~22
Without Groove	0. 5	AWG20
With 1 Groove	0. 75	AWG18
With 1 Groove	1	AWG18
With 2 Groove	1. 5	AWG16
With 3 Groove	2. 5	AWG14
Wide Groove	3	AWG12
Without Groove	4	AWG12
stripping length : 7.5mm		

Contact resistance≤1mΩ

For crimp tool and removal tool, see page P25-01

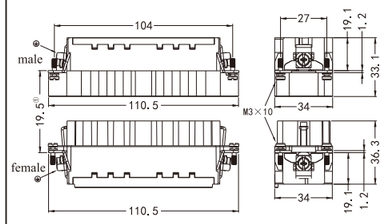
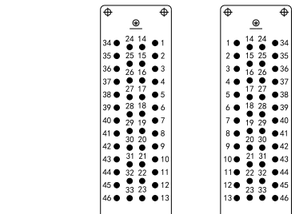
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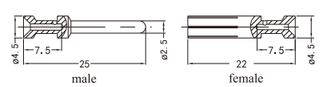
HEE-046 Series-High Density Insert

46+⏚

16A 500V 6kV 3

Use with 24B hoods/housings, refer to P22-01—P22-09

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated	0. 14~4	male 190 050 046 3000	male HEE-046-MC	
		female 190 051 046 3000	female HEE-046-FC	① Maximum distance between inserts21mm Contact Layout (Termination Front View)  Panel Mounting Cutout Drawing

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG	
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG	
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG	
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG	
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG	
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG	
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG	
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG	
gold-plated	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU	
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU	
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU	
	191 110 016 0080	YJ2.5-25-1.0AU	191 210 016 0080	YK2.5-22-1.0AU	
	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU	
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU	
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU	
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU	

Marks	wire size (mm^2)	
Without Groove	0. 14~0. 37	AWG26~22
Without Groove	0. 5	AWG20
With 1 Groove	0. 75	AWG18
With 1 Groove	1	AWG18
With 2 Groove	1. 5	AWG16
With 3 Groove	2. 5	AWG14
Wide Groove	3	AWG12
Without Groove	4	AWG12
stripping length : 7.5mm		

Contact resistance≤1mΩ

For crimp tool and removal tool, see page P25-01

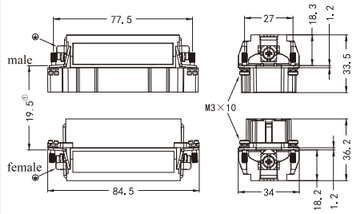
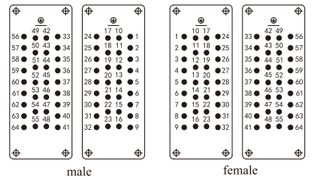
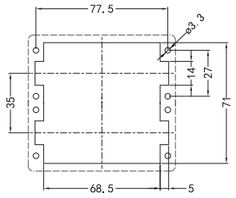
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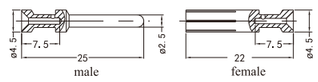
HEE-064 Series-High Density Insert

64+⏚

16A 500V 6kV 3

Use with 32B hoods/housings, refer to P23-01—P23-03

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated	0. 14~4	male 190 050 032 3000 190 050 032 3010	male HEE-032-MC HEE-032-MC(33-64)	
		female 190 051 032 3000 190 051 032 3010	female HEE-032-FC HEE-032-FC(33-64)	① Maximum distance between inserts21mm Contact Layout (Termination Front View)  Panel Mounting Cutout Drawing 

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG	
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG	
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG	
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG	
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG	
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG	
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG	
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG	
gold-plated	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU	
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU	
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU	
	191 110 016 0080	YJ2.5-25-1.0AU	191 210 016 0080	YK2.5-22-1.0AU	
	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU	
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU	
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU	
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU	

Marks	wire size (mm^2)	
Without Groove	0. 14~0. 37	AWG26~22
Without Groove	0. 5	AWG20
With 1 Groove	0. 75	AWG18
With 1 Groove	1	AWG18
With 2 Groove	1. 5	AWG16
With 3 Groove	2. 5	AWG14
Wide Groove	3	AWG12
Without Groove	4	AWG12
stripping length：7.5mm		

Contact resistance≤1mΩ

For crimp tool and removal tool, see page P25-01

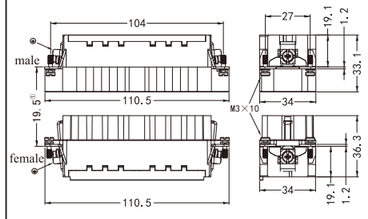
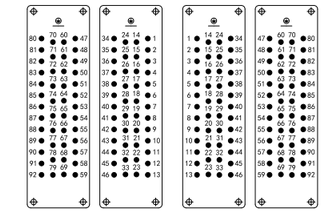
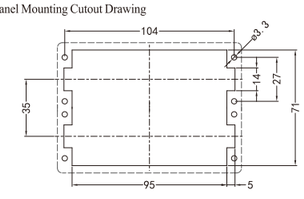
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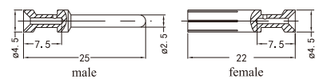
HEE-092 Series-High Density Insert

92+⏚

16A 500V 6kV 3

Use with 48B hoods/housings, refer to P24-01—P24-02

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated	0. 14~4	male 190 050 046 3000 190 050 046 3010	male HEE-046-MC HEE-046-MC(47-92)	
		female 190 051 046 3000 190 051 046 3010	female HEE-046-FC HEE-046-FC(47-92)	① Maximum distance between inserts21mm Contact Layout (Termination Front View)  Panel Mounting Cutout Drawing 

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG	
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG	
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG	
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG	
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG	
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG	
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG	
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG	
gold-plated	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU	
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU	
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU	
	191 110 016 0080	YJ2.5-25-1.0AU	191 210 016 0080	YK2.5-22-1.0AU	
	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU	
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU	
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU	
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU	

Marks	wire size (mm^2)	
Without Groove	0. 14~0. 37	AWG26~22
Without Groove	0. 5	AWG20
With 1 Groove	0. 75	AWG18
With 1 Groove	1	AWG18
With 2 Groove	1. 5	AWG16
With 3 Groove	2. 5	AWG14
Wide Groove	3	AWG12
Without Groove	4	AWG12
stripping length：7.5mm		

Contact resistance≤1mΩ

For crimp tool and removal tool, see page P25-01

RETURN>

HEEE Series-High Density Insert

Technical Information

Standard：IEC 60664-1、IEC61984

No. of Contact：40+PE、64+PE、80(2×40)+PE、128(2×64)+PE

Insert

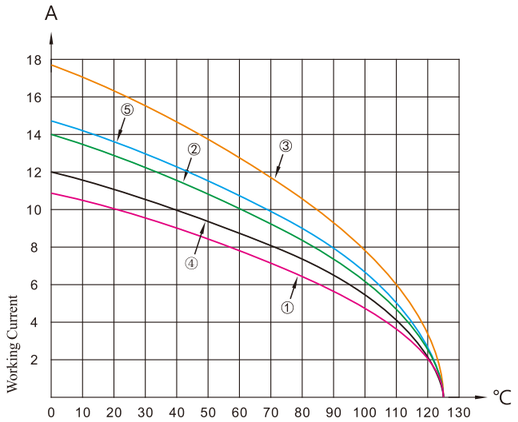
Rated Current	16A (see current load diagram)
Rated Voltage	500V
Rated Pulse Voltage	6kV
Pollution Degree	3
Insulation resistance	⩾10^{10} Ω
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Mating Cycle	⩾500

Contact

Material	Copper Alloy
Plating	Gold-plated, Silver-plated
Contact resistance	⩽1mΩ
Termination	Crimp Termination
Wire Size	0.14-4 mm^2 26-12AWG
stripping length	7.5mm

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2



① HEEE-064, wire size : 1.5mm^2
② HEEE-064, wire size : 2.5mm^2
③ HEEE-064, wire size : 4mm^2
④ HEEE-040, wire size : 1.5mm^2
⑤ HEEE-040, wire size : 2.5mm^2

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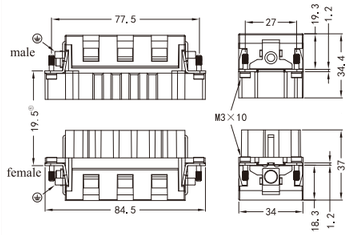
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HEEE-040 Series-High Density Insert

40+⏚

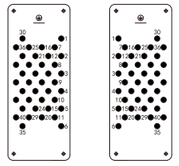
16A 500V 6kV 3

Use with 16B hoods/housings, refer to P21-01—P21-09

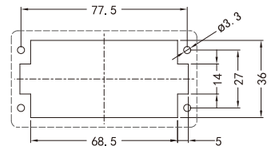
Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated				
	0.14~4	male 190 110 040 3000	male HEEE-040-MC	
		female 190 111 040 3000	female HEEE-040-FC	

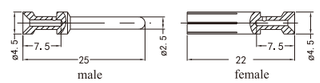
① Maximum distance between inserts21mm

Contact Layout (Termination Front View)



Panel Mounting Cutout Drawing



Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG	
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG	
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG	
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG	
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG	
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG	
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG	
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG	
gold-plated	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU	
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU	
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU	
	191 110 016 0080	YJ2.5-25-1.0AU	191 210 016 0080	YK2.5-22-1.0AU	
	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU	
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU	
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU	
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU	

Marks	wire size (mm^2)	
Without Groove	0.14~0.37	AWG26~22
Without Groove	0.5	AWG20
With 1 Groove	0.75	AWG18
With 1 Groove	1	AWG18
With 2 Groove	1.5	AWG16
With 3 Groove	2.5	AWG14
Wide Groove	3	AWG12
Without Groove	4	AWG12
stripping length : 7.5mm		

Contact resistance⩽1mΩ

For crimp tool and removal tool, see page P25-01

RETURN>

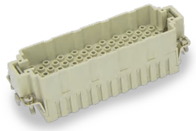
HEEE-064 Series-High Density Insert

64+⏚

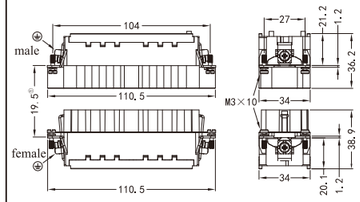
16A 500V 6kV 3

Use with 24B hoods/housings, refer to P22-01—P22-09

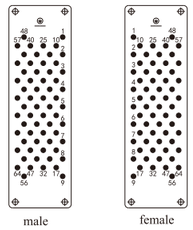
Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated	0. 14~4	male 190 110 064 3000	male HEEE-064-MC	① Maximum distance between inserts21mm
		female 190 111 064 3000	female HEEE-064-FC	



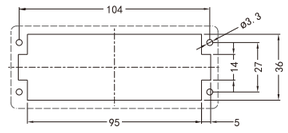




Contact Layout (Termination Front View)



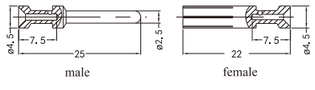
Panel Mounting Cutout Drawing



Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG	
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG	
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG	
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG	
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG	
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG	
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG	
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG	
gold-plated	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU	
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU	
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU	
	191 110 016 0080	YJ2.5-25-1.0AU	191 210 016 0080	YK2.5-22-1.0AU	
	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU	
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU	
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU	
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU	







Marks	wire size (mm^2)	
Without Groove	0. 14~0. 37	AWG26~22
Without Groove	0. 5	AWG20
With 1 Groove	0. 75	AWG18
With 1 Groove	1	AWG18
With 2 Groove	1. 5	AWG16
With 3 Groove	2. 5	AWG14
Wide Groove	3	AWG12
Without Groove	4	AWG12
stripping length : 7.5mm		

Contact resistance≤1mΩ

For crimp tool and removal tool, see page P25-01

<RETURN

HEEE-080 Series-High Density Insert

80+⏚

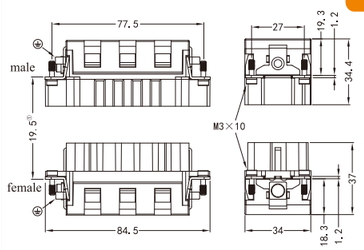
16A 500V 6kV 3

Use with 32B hoods/housings, refer to P23-01—P23-03

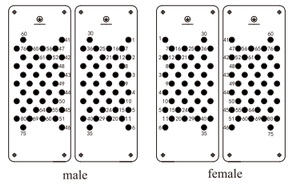
Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated	0. 14~4	male 190 110 040 3000 190 110 040 3010	male HEEE-040-MC HEEE-040-MC(41-80)	① Maximum distance between inserts21mm
		male 190 111 040 3000 190 111 040 3010	male HEEE-040-FC HEEE-040-FC(41-80)	



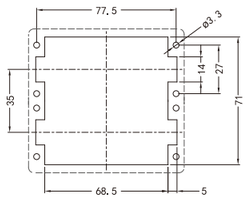




Contact Layout (Termination Front View)



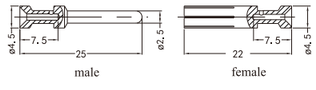
Panel Mounting Cutout Drawing



Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG	
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG	
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG	
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG	
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG	
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG	
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG	
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG	
gold-plated	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU	
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU	
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU	
	191 110 016 0080	YJ2.5-25-1.0AU	191 210 016 0080	YK2.5-22-1.0AU	
	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU	
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU	
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU	
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU	







Marks	wire size (mm^2)	
Without Groove	0. 14~0. 37	AWG26~22
Without Groove	0. 5	AWG20
With 1 Groove	0. 75	AWG18
With 1 Groove	1	AWG18
With 2 Groove	1. 5	AWG16
With 3 Groove	2. 5	AWG14
Wide Groove	3	AWG12
Without Groove	4	AWG12
stripping length : 7.5mm		

Contact resistance≤1mΩ

For crimp tool and removal tool, see page P25-01

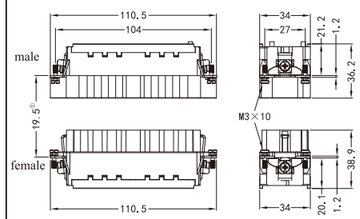
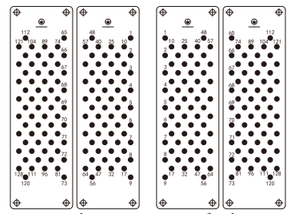
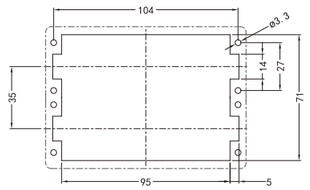
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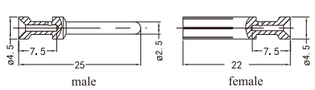
HEEE-128 Series-High Density Insert

128+⏚

16A 500V 6kV 3

Use with 48B hoods/housings, refer to P24-01—P24-02

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated 	0. 14~4	male 190 110 064 3000 190 110 064 3010	male HEEE-064-MC HEEE-064-MC(65-128)	 ① Maximum distance between inserts21mm Contact Layout (Termination Front View)  Panel Mounting Cutout Drawing 
		male 190 111 064 3000 190 111 064 3010	male HEEE-064-FC HEEE-064-FC(65-128)	

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated 	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG	
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG	
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG	
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG	
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG	
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG	
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG	
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG	
gold-plated 	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU	
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU	
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU	
	191 110 016 0080	YJ2.5-25-1.0AU	191 210 016 0080	YK2.5-22-1.0AU	
	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU	
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU	
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU	
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU	

Marks	wire size (mm^2)	
Without Groove	0. 14~0. 37	AWG26~22
Without Groove	0. 5	AWG20
With 1 Groove	0. 75	AWG18
With 1 Groove	1	AWG18
With 2 Groove	1. 5	AWG16
With 3 Groove	2. 5	AWG14
Wide Groove	3	AWG12
Without Groove	4	AWG12
stripping length : 7.5mm		

Contact resistance≤1mΩ

For crimp tool and removal tool, see page P25-01

<RETURN



RETURN>

HD Series-Ultra-High Density Insert

Technical Information

Standard： IEC 60664-1、IEC61984

No. of Contact： 7+PE、8+PE、15+PE、25+PE、40+PE、50(2×25)+PE、64+PE、80(2×40)+PE、128(2×64)+PE

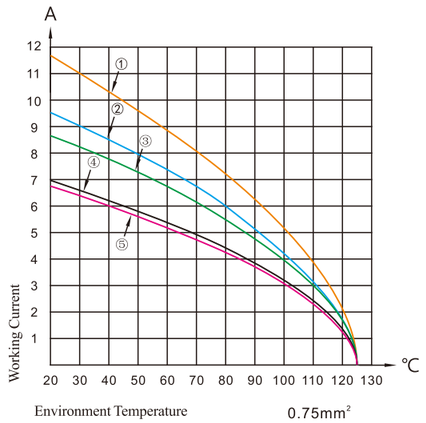
Insert	(HD007、HD015-HD128)
Rated Current	10A (see current load diagram)
Rated Voltage	250V
Rated Pulse Voltage	4kV
Pollution Degree	3
Insulation resistance	⩾10^{10} Ω
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Complies with UL/CSA rated voltage	600V
Mating Cycle	⩾500

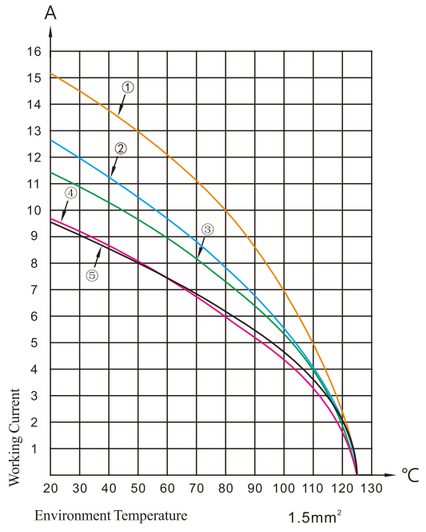
Insert	(HD008)
Rated Current	10A
Rated Voltage	50V
Rated Pulse Voltage	0.8kV
Pollution Degree	3
Insulation resistance	⩾10^{10} Ω
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Complies with UL/CSA rated voltage	50V
Mating Cycle	⩾500次

Contact	
Material	Copper Alloy
Plating	Gold-plated, Silver-plated
Contact resistance	⩽3mΩ
Termination	Crimp Termination
Wire Size	0.14-2.5 mm² 26-14AWG
stripping length	0.14-1.5 mm² : 8mm 2.5 mm² : 6mm

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2





① HD-007
② HD-015
③ HD-025
④ HD-040
⑤ HD-064

<RETURN

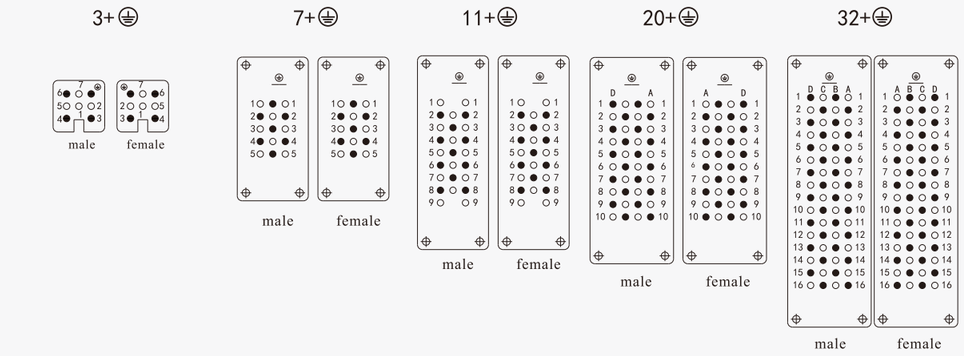
HD Series-High Density Insert

HD series Insert in the state of full pins, and pollution level is 3, its working voltage is 250V

After adjusting the pin layout, it can work up to 500V at pollution level 3

HD series

10A 500V 6KV 3



● with pins

○ without pins

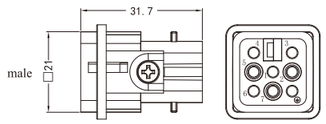
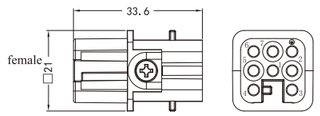
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HD-007 Series-Ultra-High Density Insert

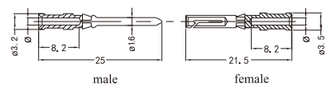
7+ ⏚

10A 250V 4kV 3

Use with 3A hoods/housings, refer to P15-01—P15-05

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated				
	0.14~2.5	male 190 020 007 3000	male HD-007-MC	
		female 190 021 007 3000	female HD-007-FC	

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number
silver-plated	191 100 010 0030	YJ1.6-25-0.37AG	191 200 010 0030	YK1.6-21.5-0.37AG
	191 100 010 0040	YJ1.6-25-0.5AG	191 200 010 0040	YK1.6-21.5-0.5AG
	191 100 010 0060	YJ1.6-25-0.75AG	191 200 010 0060	YK1.6-21.5-0.75AG
	191 100 010 0080	YJ1.6-25-1.0AG	191 200 010 0080	YK1.6-21.5-1.0AG
	191 100 010 0090	YJ1.6-25-1.5AG	191 200 010 0090	YK1.6-21.5-1.5AG
	191 100 010 0100	YJ1.6-25-2.5AG	191 200 010 0100	YK1.6-21.5-2.5AG
gold-plated	191 110 010 0030	YJ1.6-25-0.37AU	191 210 010 0030	YK1.6-21.5-0.37AU
	191 110 010 0040	YJ1.6-25-0.5AU	191 210 010 0040	YK1.6-21.5-0.5AU
	191 110 010 0060	YJ1.6-25-0.75AU	191 210 010 0060	YK1.6-21.5-0.75AU
	191 110 010 0080	YJ1.6-25-1.0AU	191 210 010 0080	YK1.6-21.5-1.0AU
	191 110 010 0090	YJ1.6-25-1.5AU	191 210 010 0090	YK1.6-21.5-1.5AU
	191 110 010 0100	YJ1.6-25-2.5AU	191 210 010 0100	YK1.6-21.5-2.5AU



silver-plated		ø	stripping length
0.14-0.37mm^2	AWG26-22	0.9	8mm
0.5mm^2	AWG20	1.1	8mm
0.75mm^2	AWG18	1.3	8mm
1mm^2	AWG18	1.45	8mm
1.5mm^2	AWG16	1.75	8mm
2.5mm^2	AWG14	2.25	6mm

Contact resistance≤3mΩ

For crimp tool and removal tool, see page P25-01

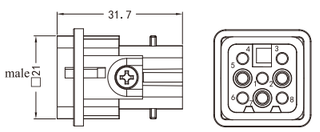
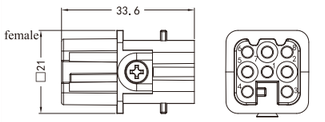
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HD-008 Series-Ultra-High Density Insert

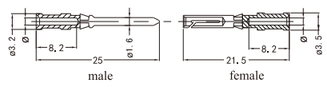
8+ ⏚

10A 50V 0.8kV 3

Use with 3A hoods/housings, refer to P15-01—P15-05

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated				
	0.14~2.5	male 190 020 008 3000	male HD-008-MC	
		female 190 021 008 3000	female HD-008-FC	

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number
silver-plated	191 100 010 0030	YJ1.6-25-0.37AG	191 200 010 0030	YK1.6-21.5-0.37AG
	191 100 010 0040	YJ1.6-25-0.5AG	191 200 010 0040	YK1.6-21.5-0.5AG
	191 100 010 0060	YJ1.6-25-0.75AG	191 200 010 0060	YK1.6-21.5-0.75AG
	191 100 010 0080	YJ1.6-25-1.0AG	191 200 010 0080	YK1.6-21.5-1.0AG
	191 100 010 0090	YJ1.6-25-1.5AG	191 200 010 0090	YK1.6-21.5-1.5AG
	191 100 010 0100	YJ1.6-25-2.5AG	191 200 010 0100	YK1.6-21.5-2.5AG
gold-plated	191 110 010 0030	YJ1.6-25-0.37AU	191 210 010 0030	YK1.6-21.5-0.37AU
	191 110 010 0040	YJ1.6-25-0.5AU	191 210 010 0040	YK1.6-21.5-0.5AU
	191 110 010 0060	YJ1.6-25-0.75AU	191 210 010 0060	YK1.6-21.5-0.75AU
	191 110 010 0080	YJ1.6-25-1.0AU	191 210 010 0080	YK1.6-21.5-1.0AU
	191 110 010 0090	YJ1.6-25-1.5AU	191 210 010 0090	YK1.6-21.5-1.5AU
	191 110 010 0100	YJ1.6-25-2.5AU	191 210 010 0100	YK1.6-21.5-2.5AU



silver-plated		ø	stripping length
0.14-0.37mm^2	AWG26-22	0.9	8mm
0.5mm^2	AWG20	1.1	8mm
0.75mm^2	AWG18	1.3	8mm
1mm^2	AWG18	1.45	8mm
1.5mm^2	AWG16	1.75	8mm
2.5mm^2	AWG14	2.25	6mm

Contact resistance≤3mΩ

For crimp tool and removal tool, see page P25-01

RETURN>

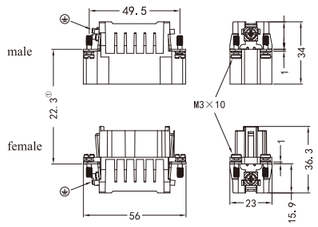
HD-015 Series-Ultra-High Density Insert

15+⏚

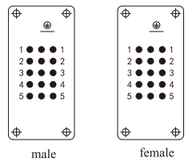
10A 250V 4kV 3

Use with 10A hoods/housings, refer to P15-01—P15-05

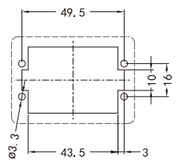
Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated	0. 14~2.5	male 190 020 015 3000	male HD-015-MC	① Maximum distance between inserts24mm
		female 190 021 015 3000	female HD-015-FC	



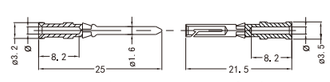
Contact Layout (Termination Front View)



Panel Mounting Cutout Drawing



Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number
silver-plated	191 100 010 0030	YJ1.6-25-0.37AG	191 200 010 0030	YK1.6-21.5-0.37AG
	191 100 010 0040	YJ1.6-25-0.5AG	191 200 010 0040	YK1.6-21.5-0.5AG
	191 100 010 0060	YJ1.6-25-0.75AG	191 200 010 0060	YK1.6-21.5-0.75AG
	191 100 010 0080	YJ1.6-25-1.0AG	191 200 010 0080	YK1.6-21.5-1.0AG
	191 100 010 0090	YJ1.6-25-1.5AG	191 200 010 0090	YK1.6-21.5-1.5AG
	191 100 010 0100	YJ1.6-25-2.5AG	191 200 010 0100	YK1.6-21.5-2.5AG
gold-plated	191 110 010 0030	YJ1.6-25-0.37AU	191 210 010 0030	YK1.6-21.5-0.37AU
	191 110 010 0040	YJ1.6-25-0.5AU	191 210 010 0040	YK1.6-21.5-0.5AU
	191 110 010 0060	YJ1.6-25-0.75AU	191 210 010 0060	YK1.6-21.5-0.75AU
	191 110 010 0080	YJ1.6-25-1.0AU	191 210 010 0080	YK1.6-21.5-1.0AU
	191 110 010 0090	YJ1.6-25-1.5AU	191 210 010 0090	YK1.6-21.5-1.5AU
	191 110 010 0100	YJ1.6-25-2.5AU	191 210 010 0100	YK1.6-21.5-2.5AU



silver-plated		ø	stripping length
0. 14~0. 37mm^2	AWG26~22	0. 9	8mm
0. 5mm^2	AWG20	1. 1	8mm
0. 75mm^2	AWG18	1. 3	8mm
1mm^2	AWG18	1. 45	8mm
1. 5mm^2	AWG16	1. 75	8mm
2. 5mm^2	AWG14	2. 25	6mm

Contact resistance≤3mΩ

For crimp tool and removal tool, see page P25-01

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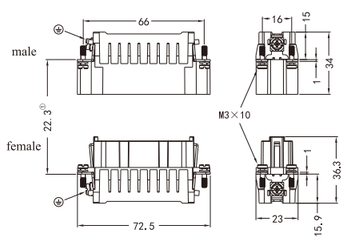
HD-025 Series-Ultra-High Density Insert

25+ ⏚

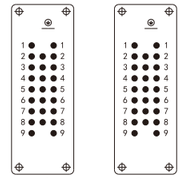
10A 250V 4kV 3

Use with 16A hoods/housings, refer to P17-01—P17-02

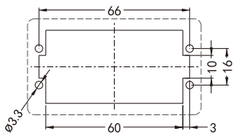
Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated	0. 14~2.5	male 190 020 025 3000	male HD-025-MC	① Maximum distance between inserts24mm
		female 190 021 025 3000	female HD-025-FC	



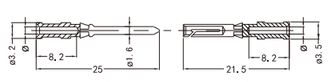
Contact Layout (Termination Front View)



Panel Mounting Cutout Drawing



Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number
silver-plated	191 100 010 0030	YJ1.6-25-0.37AG	191 200 010 0030	YK1.6-21.5-0.37AG
	191 100 010 0040	YJ1.6-25-0.5AG	191 200 010 0040	YK1.6-21.5-0.5AG
	191 100 010 0060	YJ1.6-25-0.75AG	191 200 010 0060	YK1.6-21.5-0.75AG
	191 100 010 0080	YJ1.6-25-1.0AG	191 200 010 0080	YK1.6-21.5-1.0AG
	191 100 010 0090	YJ1.6-25-1.5AG	191 200 010 0090	YK1.6-21.5-1.5AG
	191 100 010 0100	YJ1.6-25-2.5AG	191 200 010 0100	YK1.6-21.5-2.5AG
gold-plated	191 110 010 0030	YJ1.6-25-0.37AU	191 210 010 0030	YK1.6-21.5-0.37AU
	191 110 010 0040	YJ1.6-25-0.5AU	191 210 010 0040	YK1.6-21.5-0.5AU
	191 110 010 0060	YJ1.6-25-0.75AU	191 210 010 0060	YK1.6-21.5-0.75AU
	191 110 010 0080	YJ1.6-25-1.0AU	191 210 010 0080	YK1.6-21.5-1.0AU
	191 110 010 0090	YJ1.6-25-1.5AU	191 210 010 0090	YK1.6-21.5-1.5AU
	191 110 010 0100	YJ1.6-25-2.5AU	191 210 010 0100	YK1.6-21.5-2.5AU



silver-plated		ø	stripping length
0. 14~0. 37mm^2	AWG26~22	0. 9	8mm
0. 5mm^2	AWG20	1. 1	8mm
0. 75mm^2	AWG18	1. 3	8mm
1mm^2	AWG18	1. 45	8mm
1. 5mm^2	AWG16	1. 75	8mm
2. 5mm^2	AWG14	2. 25	6mm

Contact resistance≤3mΩ

For crimp tool and removal tool, see page P25-01

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HD-040 Series-Ultra-High Density Insert

40+⏚

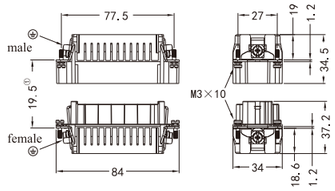
10A 250V 4kV 3

Use with 16B hoods/housings, refer to P21-01—P21-09

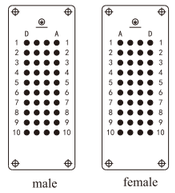
Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated	0.14~2.5	male 190 020 040 3000	male HD-040-MC	① Maximum distance between inserts21mm
		female 190 021 040 3000	female HD-040-FC	



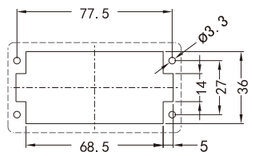




Contact Layout (Termination Front View)



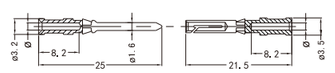
Panel Mounting Cutout Drawing



Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number
silver-plated	191 100 010 0030	YJ1.6-25-0.37AG	191 200 010 0030	YK1.6-21.5-0.37AG
	191 100 010 0040	YJ1.6-25-0.5AG	191 200 010 0040	YK1.6-21.5-0.5AG
	191 100 010 0060	YJ1.6-25-0.75AG	191 200 010 0060	YK1.6-21.5-0.75AG
	191 100 010 0080	YJ1.6-25-1.0AG	191 200 010 0080	YK1.6-21.5-1.0AG
	191 100 010 0090	YJ1.6-25-1.5AG	191 200 010 0090	YK1.6-21.5-1.5AG
	191 100 010 0100	YJ1.6-25-2.5AG	191 200 010 0100	YK1.6-21.5-2.5AG
gold-plated	191 110 010 0030	YJ1.6-25-0.37AU	191 210 010 0030	YK1.6-21.5-0.37AU
	191 110 010 0040	YJ1.6-25-0.5AU	191 210 010 0040	YK1.6-21.5-0.5AU
	191 110 010 0060	YJ1.6-25-0.75AU	191 210 010 0060	YK1.6-21.5-0.75AU
	191 110 010 0080	YJ1.6-25-1.0AU	191 210 010 0080	YK1.6-21.5-1.0AU
	191 110 010 0090	YJ1.6-25-1.5AU	191 210 010 0090	YK1.6-21.5-1.5AU
	191 110 010 0100	YJ1.6-25-2.5AU	191 210 010 0100	YK1.6-21.5-2.5AU







silver-plated		ø	stripping length
0.14~0.37mm^2	AWG26~22	0.9	8mm
0.5mm^2	AWG20	1.1	8mm
0.75mm^2	AWG18	1.3	8mm
1mm^2	AWG18	1.45	8mm
1.5mm^2	AWG16	1.75	8mm
2.5mm^2	AWG14	2.25	6mm

Contact resistance≤3mΩ

For crimp tool and removal tool, see page P25-01

<RETURN

HD-050 Series-Ultra-High Density Insert

50+⏚

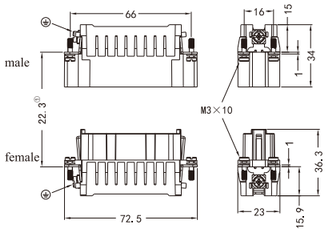
10A 250V 4kV 3

Use with 32A hoods/housings, refer to P23-01—P23-03

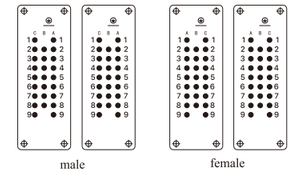
Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
冷压压接 接插件表面处理：镀银、镀金	0.14~2.5	male 190 020 025 3000 190 020 025 3010	male HD-025-MC HD-025-MC(26-50)	① Maximum distance between inserts24mm
		female 190 021 025 3000 190 021 025 3010	female HD-025-FC HD-025-FC(26-50)	



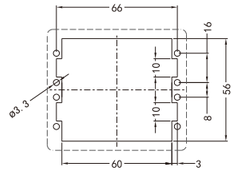




Contact Layout (Termination Front View)



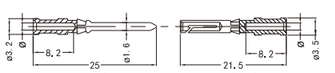
Panel Mounting Cutout Drawing



Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number
silver-plated	191 100 010 0030	YJ1.6-25-0.37AG	191 200 010 0030	YK1.6-21.5-0.37AG
	191 100 010 0040	YJ1.6-25-0.5AG	191 200 010 0040	YK1.6-21.5-0.5AG
	191 100 010 0060	YJ1.6-25-0.75AG	191 200 010 0060	YK1.6-21.5-0.75AG
	191 100 010 0080	YJ1.6-25-1.0AG	191 200 010 0080	YK1.6-21.5-1.0AG
	191 100 010 0090	YJ1.6-25-1.5AG	191 200 010 0090	YK1.6-21.5-1.5AG
	191 100 010 0100	YJ1.6-25-2.5AG	191 200 010 0100	YK1.6-21.5-2.5AG
gold-plated	191 110 010 0030	YJ1.6-25-0.37AU	191 210 010 0030	YK1.6-21.5-0.37AU
	191 110 010 0040	YJ1.6-25-0.5AU	191 210 010 0040	YK1.6-21.5-0.5AU
	191 110 010 0060	YJ1.6-25-0.75AU	191 210 010 0060	YK1.6-21.5-0.75AU
	191 110 010 0080	YJ1.6-25-1.0AU	191 210 010 0080	YK1.6-21.5-1.0AU
	191 110 010 0090	YJ1.6-25-1.5AU	191 210 010 0090	YK1.6-21.5-1.5AU
	191 110 010 0100	YJ1.6-25-2.5AU	191 210 010 0100	YK1.6-21.5-2.5AU







silver-plated		ø	stripping length
0.14~0.37mm^2	AWG26~22	0.9	8mm
0.5mm^2	AWG20	1.1	8mm
0.75mm^2	AWG18	1.3	8mm
1mm^2	AWG18	1.45	8mm
1.5mm^2	AWG16	1.75	8mm
2.5mm^2	AWG14	2.25	6mm

Contact resistance≤3mΩ

For crimp tool and removal tool, see page P25-01

RETURN>

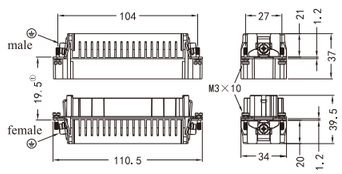
HD-064 Series-Ultra-High Density Insert

64+⏚

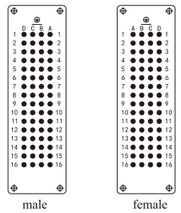
10A 250V 4kV 3

Use with24B hoods/housings, refer to P22-01—P22-09

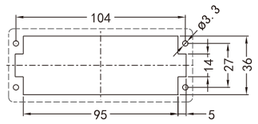
Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated	0. 14~2.5	male 190 020 064 3000	male HD-064-MC	① Maximum distance between inserts21mm
		female 190 021 064 3000	female HD-064-FC	



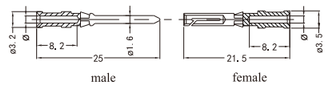
Contact Layout (Termination Front View)



Panel Mounting Cutout Drawing



Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number
silver-plated	191 100 010 0030	YJ1.6-25-0.37AG	191 200 010 0030	YK1.6-21.5-0.37AG
	191 100 010 0040	YJ1.6-25-0.5AG	191 200 010 0040	YK1.6-21.5-0.5AG
	191 100 010 0060	YJ1.6-25-0.75AG	191 200 010 0060	YK1.6-21.5-0.75AG
	191 100 010 0080	YJ1.6-25-1.0AG	191 200 010 0080	YK1.6-21.5-1.0AG
	191 100 010 0090	YJ1.6-25-1.5AG	191 200 010 0090	YK1.6-21.5-1.5AG
	191 100 010 0100	YJ1.6-25-2.5AG	191 200 010 0100	YK1.6-21.5-2.5AG
gold-plated	191 110 010 0030	YJ1.6-25-0.37AU	191 210 010 0030	YK1.6-21.5-0.37AU
	191 110 010 0040	YJ1.6-25-0.5AU	191 210 010 0040	YK1.6-21.5-0.5AU
	191 110 010 0060	YJ1.6-25-0.75AU	191 210 010 0060	YK1.6-21.5-0.75AU
	191 110 010 0080	YJ1.6-25-1.0AU	191 210 010 0080	YK1.6-21.5-1.0AU
	191 110 010 0090	YJ1.6-25-1.5AU	191 210 010 0090	YK1.6-21.5-1.5AU
	191 110 010 0100	YJ1.6-25-2.5AU	191 210 010 0100	YK1.6-21.5-2.5AU



silver-plated		ø	stripping length
0. 14~0. 37mm^2	AWG26-22	0. 9	8mm
0. 5mm^2	AWG20	1. 1	8mm
0. 75mm^2	AWG18	1. 3	8mm
1mm^2	AWG18	1. 45	8mm
1. 5mm^2	AWG16	1. 75	8mm
2. 5mm^2	AWG14	2. 25	6mm

Contact resistance≤3mΩ

For crimp tool and removal tool, see page P25-01

<RETURN

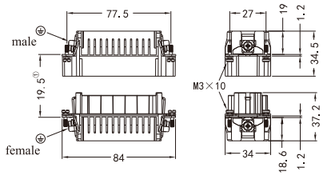
HD-080 Series-Ultra-High Density Insert

80+⏚

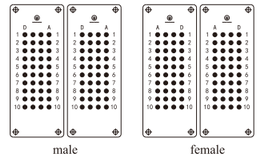
10A 250V 4kV 3

Use with 32B hoods/housings, refer to P23-01—P23-03

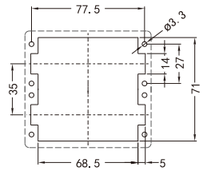
Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated	0. 14~2.5	male 190 020 040 3000 190 020 040 3010	male HD-040-MC HD-040-MC(41-80)	① Maximum distance between inserts21mm
		female 190 021 040 3000 190 021 040 3010	female HD-040-FC HD-040-FC(41-80)	



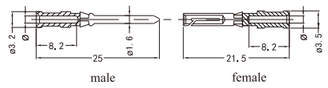
Contact Layout (Termination Front View)



Panel Mounting Cutout Drawing



Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number
silver-plated	191 100 010 0030	YJ1.6-25-0.37AG	191 200 010 0030	YK1.6-21.5-0.37AG
	191 100 010 0040	YJ1.6-25-0.5AG	191 200 010 0040	YK1.6-21.5-0.5AG
	191 100 010 0060	YJ1.6-25-0.75AG	191 200 010 0060	YK1.6-21.5-0.75AG
	191 100 010 0080	YJ1.6-25-1.0AG	191 200 010 0080	YK1.6-21.5-1.0AG
	191 100 010 0090	YJ1.6-25-1.5AG	191 200 010 0090	YK1.6-21.5-1.5AG
	191 100 010 0100	YJ1.6-25-2.5AG	191 200 010 0100	YK1.6-21.5-2.5AG
gold-plated	191 110 010 0030	YJ1.6-25-0.37AU	191 210 010 0030	YK1.6-21.5-0.37AU
	191 110 010 0040	YJ1.6-25-0.5AU	191 210 010 0040	YK1.6-21.5-0.5AU
	191 110 010 0060	YJ1.6-25-0.75AU	191 210 010 0060	YK1.6-21.5-0.75AU
	191 110 010 0080	YJ1.6-25-1.0AU	191 210 010 0080	YK1.6-21.5-1.0AU
	191 110 010 0090	YJ1.6-25-1.5AU	191 210 010 0090	YK1.6-21.5-1.5AU
	191 110 010 0100	YJ1.6-25-2.5AU	191 210 010 0100	YK1.6-21.5-2.5AU



silver-plated		ø	stripping length
0. 14~0. 37mm^2	AWG26-22	0. 9	8mm
0. 5mm^2	AWG20	1. 1	8mm
0. 75mm^2	AWG18	1. 3	8mm
1mm^2	AWG18	1. 45	8mm
1. 5mm^2	AWG16	1. 75	8mm
2. 5mm^2	AWG14	2. 25	6mm

Contact resistance≤3mΩ

For crimp tool and removal tool, see page P25-01

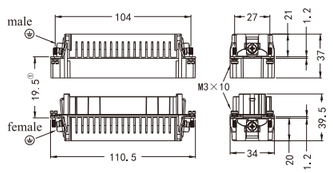
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HD-128 Series-Ultra-High Density Insert

128+⏚

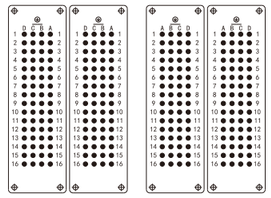
10A 250V 4kV 3

Use with48B hoods/housings, refer to P24-01—P24-02

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated	0. 14~2.5	male 190 020 064 3000 190 020 064 3010	male HD-064-MC HD-064-MC(65-128)	
		female 190 021 064 3000 190 021 064 3010	female HD-064-FC HD-064-FC(65-128)	

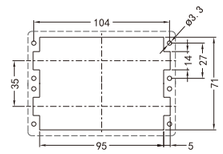
① Maximum distance between inserts21mm

Contact Layout (Termination Front View)

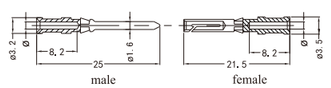


male female

Panel Mounting Cutout Drawing



Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number
silver-plated	191 100 010 0030	YJ1.6-25-0.37AG	191 200 010 0030	YK1.6-21.5-0.37AG
	191 100 010 0040	YJ1.6-25-0.5AG	191 200 010 0040	YK1.6-21.5-0.5AG
	191 100 010 0060	YJ1.6-25-0.75AG	191 200 010 0060	YK1.6-21.5-0.75AG
	191 100 010 0080	YJ1.6-25-1.0AG	191 200 010 0080	YK1.6-21.5-1.0AG
	191 100 010 0090	YJ1.6-25-1.5AG	191 200 010 0090	YK1.6-21.5-1.5AG
	191 100 010 0100	YJ1.6-25-2.5AG	191 200 010 0100	YK1.6-21.5-2.5AG
gold-plated	191 110 010 0030	YJ1.6-25-0.37AU	191 210 010 0030	YK1.6-21.5-0.37AU
	191 110 010 0040	YJ1.6-25-0.5AU	191 210 010 0040	YK1.6-21.5-0.5AU
	191 110 010 0060	YJ1.6-25-0.75AU	191 210 010 0060	YK1.6-21.5-0.75AU
	191 110 010 0080	YJ1.6-25-1.0AU	191 210 010 0080	YK1.6-21.5-1.0AU
	191 110 010 0090	YJ1.6-25-1.5AU	191 210 010 0090	YK1.6-21.5-1.5AU
	191 110 010 0100	YJ1.6-25-2.5AU	191 210 010 0100	YK1.6-21.5-2.5AU



male female

silver-plated		ø	stripping length
0. 14~0. 37mm^2	AWG26~22	0. 9	8mm
0. 5mm^2	AWG20	1. 1	8mm
0. 75mm^2	AWG18	1. 3	8mm
1mm^2	AWG18	1. 45	8mm
1. 5mm^2	AWG16	1. 75	8mm
2. 5mm^2	AWG14	2. 25	6mm

Contact resistance≤3mΩ

For crimp tool and removal tool, see page P25-01

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Technical Information

Standard：IEC 60664-1、IEC61984
No. of Contact： 24+PE、42+PE、72+PE、108+PE、
144 (2×72) +PE、216 (2×108) +PE

Insert

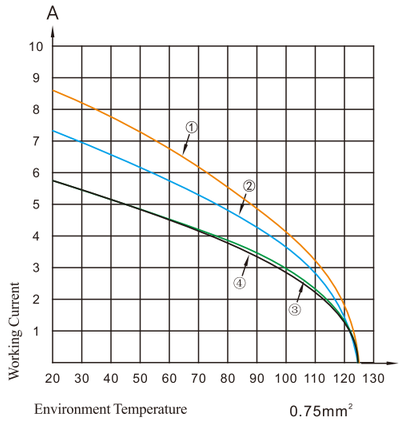
Rated Current	10A (see current load diagram)
Rated Voltage	250V
Rated Pulse Voltage	4kV
Pollution Degree	3
Insulation resistance	⩾10^{10} Ω
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (UI94)	V-0
Complies with UL/CSA rated voltage	600V
Mating Cycle	⩾500

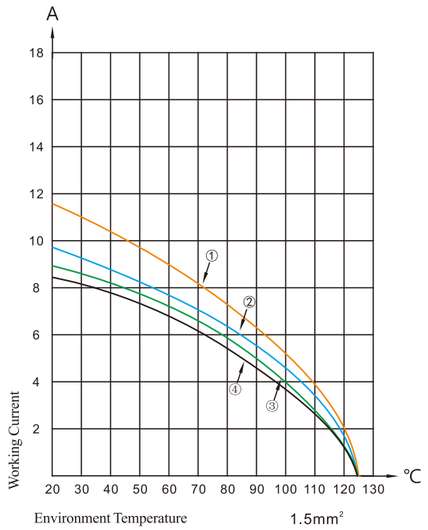
Contact

Material	Copper Alloy
Plating	Gold-plated, Silver-plated
Contact resistance	⩽3mΩ
Termination	Crimp Termination
Wire Size	0.14-2.5 mm² 26-14AWG
Stripping Length	0.14-1.5 mm² : 8mm 2.5 mm² : 6mm

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2



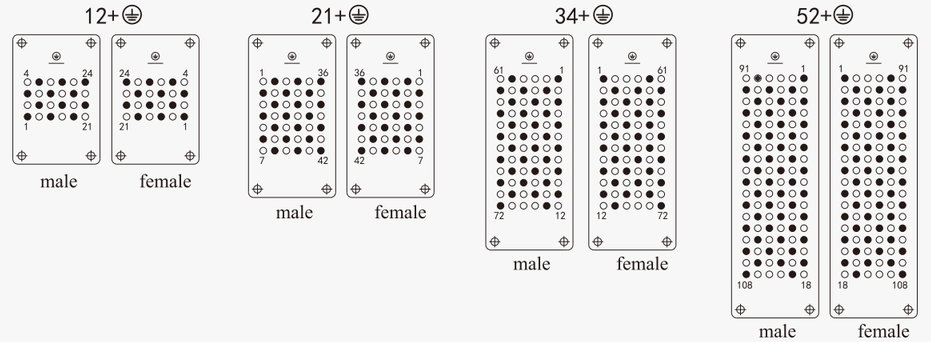


① HDD-024
② HDD-042
③ HDD-072
④ HDD-108

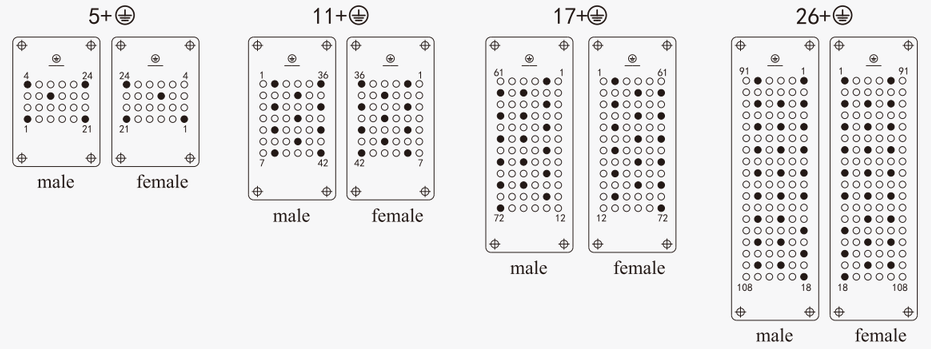
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HDD series Insert in the state of full pins, and pollution level is 3, its working voltage is 250V
After adjusting the pin layout, it can work up to 500V at pollution level 3

10A 400V 6KV 3



10A 500V 6KV 3



● with pins
○ without pins

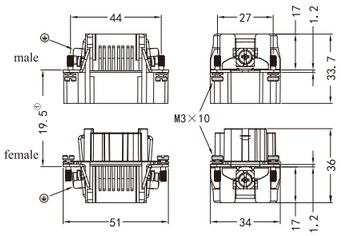
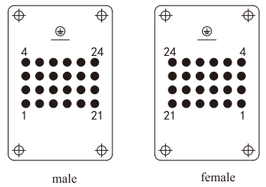
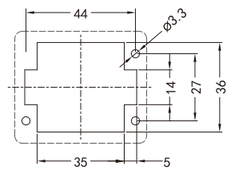
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HDD-024 Series-Ultra-High Density Insert

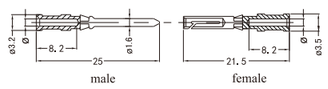
24+⏚

10A 250V 4kV 3

Use with 6B hoods/housings, refer to P19-01—P19-05

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated	0. 14~2.5	male 190 030 024 3000	male HDD-024-MC	
		female 190 031 024 3000	female HDD-024-FC	① Maximum distance between inserts21mm Contact Layout (Termination Front View)  Panel Mounting Cutout Drawing 

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number
silver-plated	191 100 010 0030	YJ1.6-25-0.37AG	191 200 010 0030	YK1.6-21.5-0.37AG
	191 100 010 0040	YJ1.6-25-0.5AG	191 200 010 0040	YK1.6-21.5-0.5AG
	191 100 010 0060	YJ1.6-25-0.75AG	191 200 010 0060	YK1.6-21.5-0.75AG
	191 100 010 0080	YJ1.6-25-1.0AG	191 200 010 0080	YK1.6-21.5-1.0AG
	191 100 010 0090	YJ1.6-25-1.5AG	191 200 010 0090	YK1.6-21.5-1.5AG
	191 100 010 0100	YJ1.6-25-2.5AG	191 200 010 0100	YK1.6-21.5-2.5AG
gold-plated	191 110 010 0030	YJ1.6-25-0.37AU	191 210 010 0030	YK1.6-21.5-0.37AU
	191 110 010 0040	YJ1.6-25-0.5AU	191 210 010 0040	YK1.6-21.5-0.5AU
	191 110 010 0060	YJ1.6-25-0.75AU	191 210 010 0060	YK1.6-21.5-0.75AU
	191 110 010 0080	YJ1.6-25-1.0AU	191 210 010 0080	YK1.6-21.5-1.0AU
	191 110 010 0090	YJ1.6-25-1.5AU	191 210 010 0090	YK1.6-21.5-1.5AU
	191 110 010 0100	YJ1.6-25-2.5AU	191 210 010 0100	YK1.6-21.5-2.5AU



silver-plated		ø	stripping length
0. 14~0. 37mm^2	AWG26-22	0. 9	8mm
0. 5mm^2	AWG20	1. 1	8mm
0. 75mm^2	AWG18	1. 3	8mm
1mm^2	AWG18	1. 45	8mm
1. 5mm^2	AWG16	1. 75	8mm
2. 5mm^2	AWG14	2. 25	6mm

Contact resistance≤3mΩ

For crimp tool and removal tool, see page P25-01

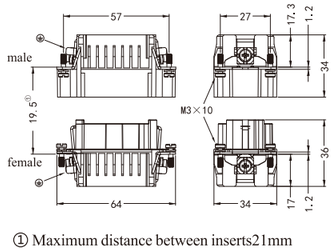
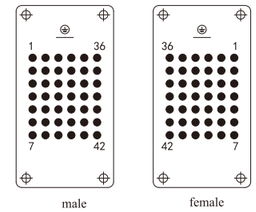
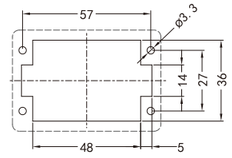
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HDD-042 Series-Ultra-High Density Insert

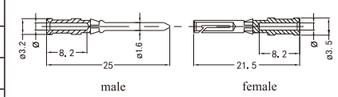
42+⏚

10A 250V 4kV 3

Use with 10B hoods/housings, refer to P20-01—P20-08

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated	0. 14~2.5	male 190 030 042 3000	male HDD-042-MC	
		female 190 031 042 3000	female HDD-042-FC	① Maximum distance between inserts21mm Contact Layout (Termination Front View)  Panel Mounting Cutout Drawing 

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number
silver-plated	191 100 010 0030	YJ1.6-25-0.37AG	191 200 010 0030	YK1.6-21.5-0.37AG
	191 100 010 0040	YJ1.6-25-0.5AG	191 200 010 0040	YK1.6-21.5-0.5AG
	191 100 010 0060	YJ1.6-25-0.75AG	191 200 010 0060	YK1.6-21.5-0.75AG
	191 100 010 0080	YJ1.6-25-1.0AG	191 200 010 0080	YK1.6-21.5-1.0AG
	191 100 010 0090	YJ1.6-25-1.5AG	191 200 010 0090	YK1.6-21.5-1.5AG
	191 100 010 0100	YJ1.6-25-2.5AG	191 200 010 0100	YK1.6-21.5-2.5AG
gold-plated	191 110 010 0030	YJ1.6-25-0.37AU	191 210 010 0030	YK1.6-21.5-0.37AU
	191 110 010 0040	YJ1.6-25-0.5AU	191 210 010 0040	YK1.6-21.5-0.5AU
	191 110 010 0060	YJ1.6-25-0.75AU	191 210 010 0060	YK1.6-21.5-0.75AU
	191 110 010 0080	YJ1.6-25-1.0AU	191 210 010 0080	YK1.6-21.5-1.0AU
	191 110 010 0090	YJ1.6-25-1.5AU	191 210 010 0090	YK1.6-21.5-1.5AU
	191 110 010 0100	YJ1.6-25-2.5AU	191 210 010 0100	YK1.6-21.5-2.5AU



silver-plated		ø	stripping length
0. 14~0. 37mm^2	AWG26-22	0. 9	8mm
0. 5mm^2	AWG20	1. 1	8mm
0. 75mm^2	AWG18	1. 3	8mm
1mm^2	AWG18	1. 45	8mm
1. 5mm^2	AWG16	1. 75	8mm
2. 5mm^2	AWG14	2. 25	6mm

Contact resistance≤3mΩ

For crimp tool and removal tool, see page P25-01

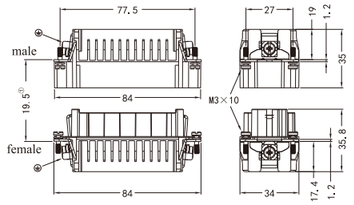
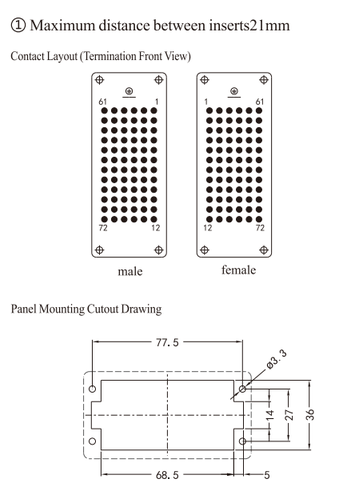
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HDD-072 Series-Ultra-High Density Insert

72+⏚

10A 250V 4kV 3

Use with 16B hoods/housings, refer to P21-01—P21-09

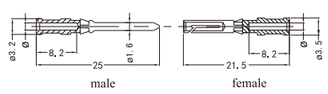
Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated	0. 14~2.5	male 190 030 072 3000	male HDD-072-MC	
		female 190 031 072 3000	female HDD-072-FC	

① Maximum distance between inserts21mm

Contact Layout (Termination Front View)

Panel Mounting Cutout Drawing

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number
silver-plated	191 100 010 0030	YJ1.6-25-0.37AG	191 200 010 0030	YK1.6-21.5-0.37AG
	191 100 010 0040	YJ1.6-25-0.5AG	191 200 010 0040	YK1.6-21.5-0.5AG
	191 100 010 0060	YJ1.6-25-0.75AG	191 200 010 0060	YK1.6-21.5-0.75AG
	191 100 010 0080	YJ1.6-25-1.0AG	191 200 010 0080	YK1.6-21.5-1.0AG
	191 100 010 0090	YJ1.6-25-1.5AG	191 200 010 0090	YK1.6-21.5-1.5AG
	191 100 010 0100	YJ1.6-25-2.5AG	191 200 010 0100	YK1.6-21.5-2.5AG
gold-plated	191 110 010 0030	YJ1.6-25-0.37AU	191 210 010 0030	YK1.6-21.5-0.37AU
	191 110 010 0040	YJ1.6-25-0.5AU	191 210 010 0040	YK1.6-21.5-0.5AU
	191 110 010 0060	YJ1.6-25-0.75AU	191 210 010 0060	YK1.6-21.5-0.75AU
	191 110 010 0080	YJ1.6-25-1.0AU	191 210 010 0080	YK1.6-21.5-1.0AU
	191 110 010 0090	YJ1.6-25-1.5AU	191 210 010 0090	YK1.6-21.5-1.5AU
	191 110 010 0100	YJ1.6-25-2.5AU	191 210 010 0100	YK1.6-21.5-2.5AU



silver-plated		ø	stripping length
0. 14–0. 37mm^2	AWG26–22	0. 9	8mm
0. 5mm^2	AWG20	1. 1	8mm
0. 75mm^2	AWG18	1. 3	8mm
1mm^2	AWG18	1. 45	8mm
1. 5mm^2	AWG16	1. 75	8mm
2. 5mm^2	AWG14	2. 25	6mm

Contact resistance≤3mΩ

For crimp tool and removal tool, see page P25-01

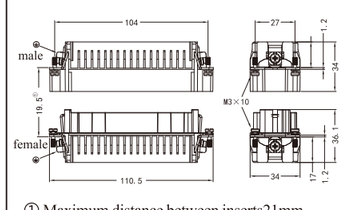
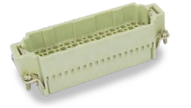
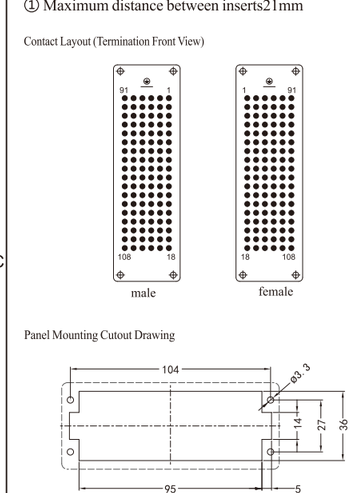
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HDD-108 Series-Ultra-High Density Insert

108+⏚

10A 250V 4kV 3

Use with 24B hoods/housings, refer to P22-01—P22-09

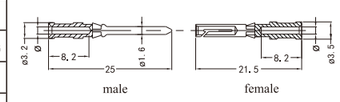
Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated	0. 14~2.5	male 190 030 108 3000	male HDD-108-MC	
		female 190 031 108 3000	female HDD-108-FC	

① Maximum distance between inserts21mm

Contact Layout (Termination Front View)

Panel Mounting Cutout Drawing

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number
silver-plated	191 100 010 0030	YJ1.6-25-0.37AG	191 200 010 0030	YK1.6-21.5-0.37AG
	191 100 010 0040	YJ1.6-25-0.5AG	191 200 010 0040	YK1.6-21.5-0.5AG
	191 100 010 0060	YJ1.6-25-0.75AG	191 200 010 0060	YK1.6-21.5-0.75AG
	191 100 010 0080	YJ1.6-25-1.0AG	191 200 010 0080	YK1.6-21.5-1.0AG
	191 100 010 0090	YJ1.6-25-1.5AG	191 200 010 0090	YK1.6-21.5-1.5AG
	191 100 010 0100	YJ1.6-25-2.5AG	191 200 010 0100	YK1.6-21.5-2.5AG
gold-plated	191 110 010 0030	YJ1.6-25-0.37AU	191 210 010 0030	YK1.6-21.5-0.37AU
	191 110 010 0040	YJ1.6-25-0.5AU	191 210 010 0040	YK1.6-21.5-0.5AU
	191 110 010 0060	YJ1.6-25-0.75AU	191 210 010 0060	YK1.6-21.5-0.75AU
	191 110 010 0080	YJ1.6-25-1.0AU	191 210 010 0080	YK1.6-21.5-1.0AU
	191 110 010 0090	YJ1.6-25-1.5AU	191 210 010 0090	YK1.6-21.5-1.5AU
	191 110 010 0100	YJ1.6-25-2.5AU	191 210 010 0100	YK1.6-21.5-2.5AU



silver-plated		ø	stripping length
0. 14–0. 37mm^2	AWG26–22	0. 9	8mm
0. 5mm^2	AWG20	1. 1	8mm
0. 75mm^2	AWG18	1. 3	8mm
1mm^2	AWG18	1. 45	8mm
1. 5mm^2	AWG16	1. 75	8mm
2. 5mm^2	AWG14	2. 25	6mm

Contact resistance≤3mΩ

For crimp tool and removal tool, see page P25-01

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HDD-144 Series-Ultra-High Density Insert

144+⏚

10A 250V 4kV 3

Use with 32B hoods/housings, refer to P23-01—P23-03

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated	0. 14~2.5	male 190 030 072 3000 190 030 072 3010	male HDD-072-MC HDD-072-MC(73-144)	① Maximum distance between inserts21mm
		female 190 031 072 3000 190 031 072 3010	female HDD-072-FC HDD-072-FC(73-144)	

Contact Layout (Termination Front View)

male female

Panel Mounting Cutout Drawing

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number
silver-plated	191 100 010 0030	YJ1.6-25-0.37AG	191 200 010 0030	YK1.6-21.5-0.37AG
	191 100 010 0040	YJ1.6-25-0.5AG	191 200 010 0040	YK1.6-21.5-0.5AG
	191 100 010 0060	YJ1.6-25-0.75AG	191 200 010 0060	YK1.6-21.5-0.75AG
	191 100 010 0080	YJ1.6-25-1.0AG	191 200 010 0080	YK1.6-21.5-1.0AG
	191 100 010 0090	YJ1.6-25-1.5AG	191 200 010 0090	YK1.6-21.5-1.5AG
	191 100 010 0100	YJ1.6-25-2.5AG	191 200 010 0100	YK1.6-21.5-2.5AG
gold-plated	191 110 010 0030	YJ1.6-25-0.37AU	191 210 010 0030	YK1.6-21.5-0.37AU
	191 110 010 0040	YJ1.6-25-0.5AU	191 210 010 0040	YK1.6-21.5-0.5AU
	191 110 010 0060	YJ1.6-25-0.75AU	191 210 010 0060	YK1.6-21.5-0.75AU
	191 110 010 0080	YJ1.6-25-1.0AU	191 210 010 0080	YK1.6-21.5-1.0AU
	191 110 010 0090	YJ1.6-25-1.5AU	191 210 010 0090	YK1.6-21.5-1.5AU
	191 110 010 0100	YJ1.6-25-2.5AU	191 210 010 0100	YK1.6-21.5-2.5AU

male female

silver-plated		ø	stripping length
0. 14-0. 37mm^2	AWG26-22	0. 9	8mm
0. 5mm^2	AWG20	1. 1	8mm
0. 75mm^2	AWG18	1. 3	8mm
1mm^2	AWG18	1. 45	8mm
1. 5mm^2	AWG16	1. 75	8mm
2. 5mm^2	AWG14	2. 25	6mm

Contact resistance≤3mΩ

For crimp tool and removal tool, see page P25-01

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HDD-216 Series-Ultra-High Density Insert

216+⏚

10A 250V 4kV 3

Use with 48B hoods/housings, refer to P24-01—P24-02

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated	0. 14~2.5	male 190 030 108 3000 190 030 108 3010	male HDD-108-MC HDD-108-MC(109-216)	① Maximum distance between inserts21mm
		female 190 031 108 3000 190 031 108 3010	female HDD-108-FC HDD-108-FC(109-216)	

Contact Layout (Termination Front View)

male female

Panel Mounting Cutout Drawing

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number
silver-plated	191 100 010 0030	YJ1.6-25-0.37AG	191 200 010 0030	YK1.6-21.5-0.37AG
	191 100 010 0040	YJ1.6-25-0.5AG	191 200 010 0040	YK1.6-21.5-0.5AG
	191 100 010 0060	YJ1.6-25-0.75AG	191 200 010 0060	YK1.6-21.5-0.75AG
	191 100 010 0080	YJ1.6-25-1.0AG	191 200 010 0080	YK1.6-21.5-1.0AG
	191 100 010 0090	YJ1.6-25-1.5AG	191 200 010 0090	YK1.6-21.5-1.5AG
	191 100 010 0100	YJ1.6-25-2.5AG	191 200 010 0100	YK1.6-21.5-2.5AG
gold-plated	191 110 010 0030	YJ1.6-25-0.37AU	191 210 010 0030	YK1.6-21.5-0.37AU
	191 110 010 0040	YJ1.6-25-0.5AU	191 210 010 0040	YK1.6-21.5-0.5AU
	191 110 010 0060	YJ1.6-25-0.75AU	191 210 010 0060	YK1.6-21.5-0.75AU
	191 110 010 0080	YJ1.6-25-1.0AU	191 210 010 0080	YK1.6-21.5-1.0AU
	191 110 010 0090	YJ1.6-25-1.5AU	191 210 010 0090	YK1.6-21.5-1.5AU
	191 110 010 0100	YJ1.6-25-2.5AU	191 210 010 0100	YK1.6-21.5-2.5AU

male female

silver-plated		ø	stripping length
0. 14-0. 37mm^2	AWG26-22	0. 9	8mm
0. 5mm^2	AWG20	1. 1	8mm
0. 75mm^2	AWG18	1. 3	8mm
1mm^2	AWG18	1. 45	8mm
1. 5mm^2	AWG16	1. 75	8mm
2. 5mm^2	AWG14	2. 25	6mm

Contact resistance≤3mΩ

For crimp tool and removal tool, see page P25-01

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HSB Series-High Current Insert

Technical Information

Standard： IEC 60664-1、IEC61984
No. of Contact： 6+PE、12+PE

Insert

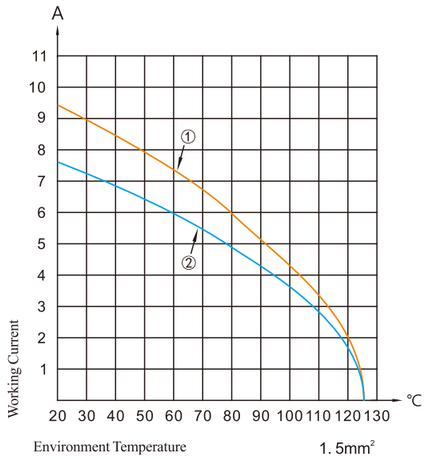
Rated Current	35A (see current load diagram)
Rated Voltage	—Pole-to-ground rated voltage：400V —Pole-to-pole rated voltage：690V —Optional rated voltage： 500V
Rated Pulse Voltage	6kV
Pollution Degree	3
Insulation resistance	⩾10^{10} Ω
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Complies with UL/CSA rated voltage	600V
Mating Cycle	⩾500

Contact

Material	Copper
Plating	Silver-plated
Contact resistance	⩽1mΩ
Termination	Screw Termination
Wire Size	1.5-6 mm^2 15-9AWG

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2



① Wire Size：4mm^2
② Wire Size：6mm^2

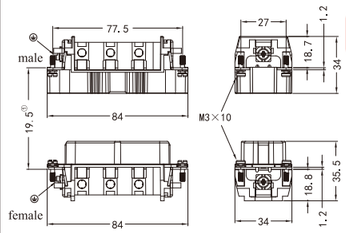
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HSB-006 Series-High Current Insert

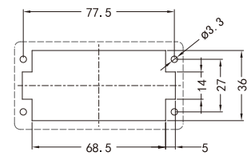
6+⏚

35A 400/690V 6kV 3
35A 500V 6kV 3

Use with 16B hoods/housings, refer to P21-01—P21-09

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Screw Termination Contact surface: silver-plated 	1.5~6	male 190 080 006 2000	male HSB-006-M	 ① Maximum distance between inserts21mm stripping length: 11.5mm Torque: 1.2N·m
		female 190 081 006 2000	female HSB-006-F	Contact Layout (Termination Front View)

Panel Mounting Cutout Drawing



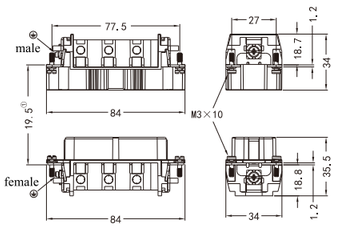
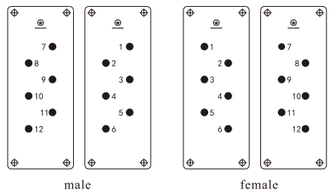
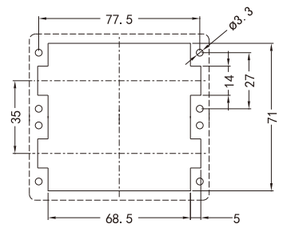
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HSB-012 Series-High Current Insert

12+⏚

35A 400/690V 6kV 3
35A 500V 6kV 3

Use with 32B hoods/housings, refer to P23-01—P23-03

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Screw Termination Contact surface: silver-plated 	1.5~6	male 190 080 006 2000 190 080 006 2010	male HSB-006-M HSB-006-M(7-12)	 ①Maximum distance between inserts21mm stripping length: 11.5mm Torque: 1.2N·m Contact Layout (Termination Front View) 
		female 190 081 006 2000 190 081 006 2010	female HSB-006-F HSB-006-F(7-12)	Panel Mounting Cutout Drawing 

<RETURN



RETURN>

HK-004/8 Series- Combination Insert

Technical Information

Standard：IEC 60664-1、IEC61984
No. of Contact：Power: 4+PE Signal: 8

Insert :Power (4+PE)

Rated Current	80A

Insert :Signal 8

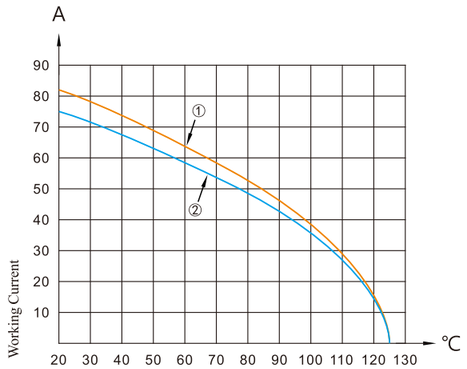
Rated Current	16A
Rated Voltage	400V
Rated Pulse Voltage	6kV
Pollution Degree	3
Insulation resistance	⩾10^{10} Ω
Material	Polycarbonate
Working Temperature	-40℃~125℃
Flammability Rating (Ul94)	V-0
Complies with UL/CSA rated voltage	600V
Mating Cycle	⩾500

Contact

Material	Copper Alloy
Plating	Silver-plated
Contact resistance	Power：⩽0. 3mΩ
Contact resistance	Signal：⩽1mΩ
Termination	power screw termination
Wire Size	1.5-16mm² 15-6AWG
	signal screw termination
Wire Size	0.5-2.5mm² 20-13AWG

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2



① wire size：16mm²
② wire size：10mm²

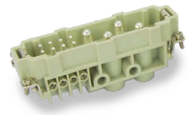
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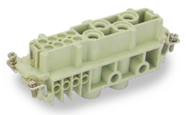
HK-004/8 Series- Combination Insert

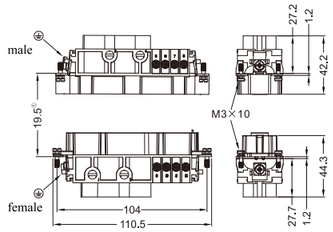
4+⏚
80A 400V 6kV 3
+8 signal pin
16A 400V 6kV 3

Use with 24B hoods/housings, refer to P22-01—P22-09

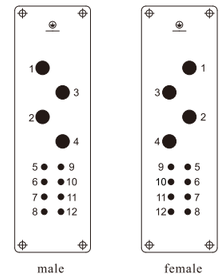
Insert	Wire Size (mm²)	Product Code	Part Number	Drawings (mm)
Screw Termination Contact surface: silver-plated	Power 1.5~16 Signal 0.5~2.5	male 190 060 012 2000	male HK-004/8-M	① Maximum distance between inserts21mm
		female 190 061 012 2000	female HK-004/8-F	







Contact Layout (Termination Front View)



	power pin	
wire size	locking torque	stripping length
1. 5mm²	1. 2N・m	14mm
2. 5mm²	2N・m	14mm
4mm²	3N・m	14mm
6mm²	3N・m	14mm
16mm²	3N・m	14mm

signal pin
stripping length: 7. 5mm
Torque: 0. 5N·m

RETURN>

HK-004/0 Series- Combination Insert

Technical Information

Standard：IEC 60664-1、IEC61984
No. of Contact：4+PE

Power Insert：(4+PE)

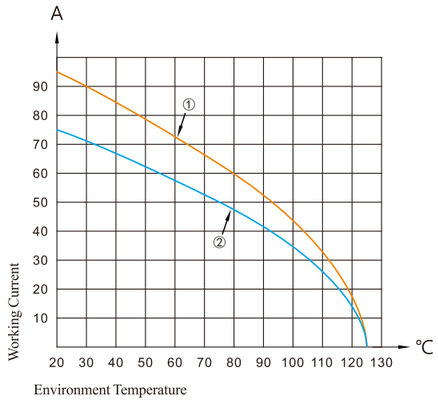
Rated Current	80A
Rated Voltage	830V
Rated Pulse Voltage	8kV
Pollution Degree	3
Insulation resistance	⩾10^{10} Ω
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Complies with UL/CSA rated voltage	600V/300V
Mating Cycle	⩾500

Contact

Material	Copper Alloy
Plating	Silver-plated
Contact resistance	⩽0. 3mΩ
Termination	Screw Termination
Wire Size	1.5-16mm² 15-6AWG

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2



① wire size:16mm²
② wire size:10mm²

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08

HK-004/0 Series- Combination Insert

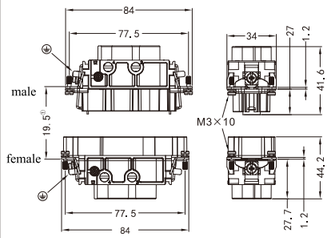
4+⏚
80A 830V 8kV 3

Use with 16B hoods/housings, refer to P21-01—P21-09

Insert	Wire Size (mm²)	Product Code	Part Number	Drawings (mm)
Screw Termination Contact surface: silver-plated	1.5~16	male 190 060 004 2000	male HK-004/0-M	
		female 190 061 004 2000	female HK-004/0-F	

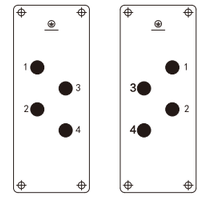






① Maximum distance between inserts21mm

Contact Layout (Termination Front View)



power pin		
wire size	locking torque	stripping length
1. 5mm²	1. 2N・m	14mm
2. 5mm²	2N・m	14mm
4mm²	3N・m	14mm
6mm²	3N・m	14mm
16mm²	3N・m	14mm

RETURN>

HK-004/2 Series- Combination Insert

Technical Information

Standard：IEC 60664-1、IEC61984
No. of Contact： Power: 4+PE Signal: 2

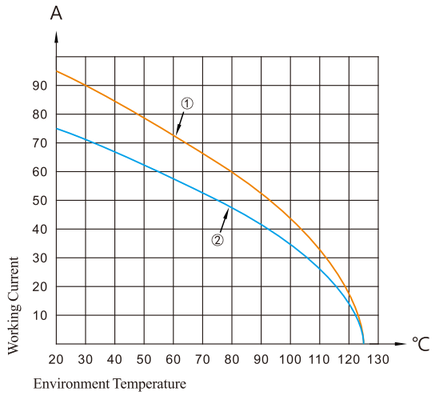
Insert :Power (4+PE)	
Rated Current	80A
Rated Voltage	830V
Rated Pulse Voltage	8kV

Insert :Signal2	
Rated Current	16A
Rated Voltage	400V
Rated Pulse Voltage	6kV
Pollution Degree	3
Insulation resistance	$\geqslant 10^{10}\ \Omega$
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Complies with UL/CSA rated voltage	600V/300V
Mating Cycle	≥500

Contact	
Material	Copper Alloy
Plating	Silver-plated
Power Contact Resistance	≤0. 3mΩ
Signal Contact Resistance	≤1mΩ
Termination	power screw termination
Wire Size	1.5-16mm² 15-6AWG
	signal screw termination
Wire Size	0.5-2.5mm² 20-13AWG

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2



① wire size:16mm²
② wire size:10mm²

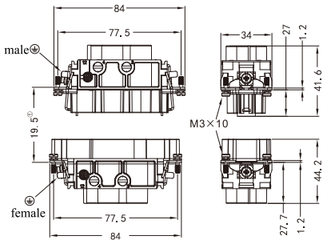
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HK-004/2 Series- Combination Insert

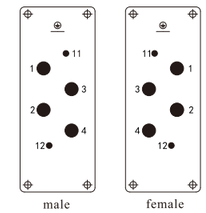
4+⏚
80A 830V 8kV 3
+2 signal pin
16A 400V 6kV 3

Use with 16B hoods/housings, refer to P21-01—P21-09

Insert	Wire Size (mm²)	Product Code	Part Number	Drawings (mm)
Screw Termination Contact surface: silver-plated				
	Power 1.5~16 Signal 0.5~2.5	male 190 060 006 2000	male HK-004/2-M	
		female 190 061 006 2000	female HK-004/2-F	

① Maximum distance between inserts21mm

Contact Layout (Termination Front View)



power pin		
wire size	locking torque	stripping length
1. 5mm²	1. 2N・m	14mm
2. 5mm²	2N・m	14mm
4mm²	3N・m	14mm
6mm²	3N・m	14mm
16mm²	3N・m	14mm

signal pin
stripping length: 7. 5mm
Torque: 0. 5N·m

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HWK-006/6 Series- Combination Insert

Technical Information

Standard：IEC 60664-1、IEC61984
No. of Contact：Power: 6+PE Signal: 6

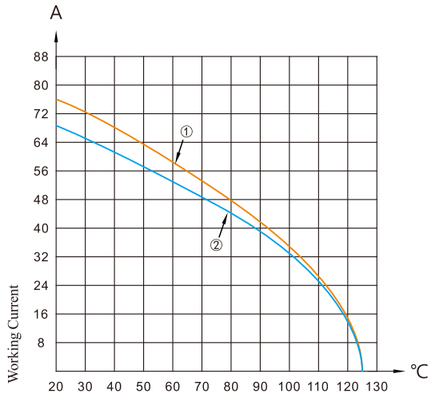
Insert: Power（6+PE）	
Rated Current	40A
Rated Voltage	690V
Rated Pulse Voltage	8kV

Insert: Signal 6	
Rated Current	16A
Rated Voltage	400V
Rated Pulse Voltage	6kV
Pollution Degree	3
Insulation resistance	$\geqslant 10^{10}\ \Omega$
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Complies with UL/CSA rated voltage	600V
Mating Cycle	≥500次

Contact	
Material	Copper Alloy
Plating	Silver-plated
Contact resistance	≤1mΩ
Termination	power screw termination
Wire Size	4-10mm² 11-7AWG
	signal screw termination
Wire Size	1-2.5mm² 17-13AWG

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2



① wire size:16mm²
② wire size:10mm²

<RETURN

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HWK-006/6 Series- Combination Insert

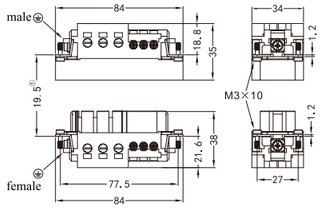
6+⏚
40A 690V 8kV 3
+6 signal pin
16A 400V 6kV 3

Use with 16B hoods/housings, refer to P21-01—P21-09

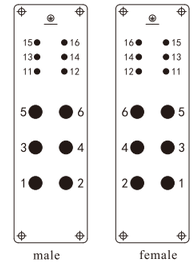
Insert	Wire Size (mm²)	Product Code	Part Number	Drawings (mm)
Screw Termination Contact surface: silver-plated	Power 4~10 Signal 1~2.5	male 190 060 012 2100	male HWK-006/6-M	① Maximum distance between inserts21mm
		female 190 061 012 2100	female HWK-006/6-F	







Contact Layout (Termination Front View)



power pin		
wire size	locking torque	stripping length
1.5mm²	1.2N·m	14mm
2.5mm²	2N·m	14mm
4mm²	3N·m	14mm
6mm²	3N·m	14mm
16mm²	3N·m	14mm

signal pin
stripping length: 7.5mm
Torque: 0.5N·m

RETURN>

HK-008/24 Series- Combination Insert

Technical Information

Standard：IEC 60664-1、IEC61984
No. of Contact：Power: 8+PE　Signal: 24

Insert：Power（8+PE）

Rated Current	16A
Rated Voltage	Pole-to-ground：230V　Pole-to-pole：400V
Rated Pulse Voltage	4kV

Insert：Signal 24

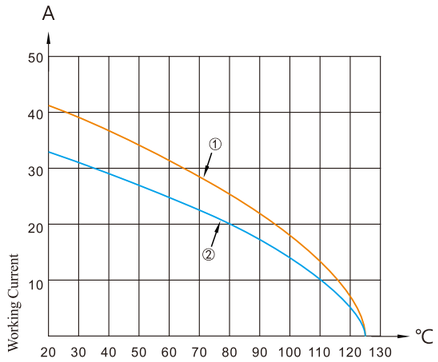
Rated Current	10A
Rated Voltage	160V
Rated Pulse Voltage	2.5kV
Pollution Degree	3
Insulation resistance	$\geqslant 10^{10}\ \Omega$
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Complies with UL/CSA rated voltage	600V/300V
Mating Cycle	≥500

Contact

Material	Copper Alloy
Plating	Silver-plated
Power Contact Resistance	≤1mΩ
Signal Contact Resistance	≤3mΩ
Termination	power screw termination
Wire Size	0. 14-4mm² 26-11AWG
	signal screw termination
Wire Size	0. 14-2.5mm² 26-13AWG

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2



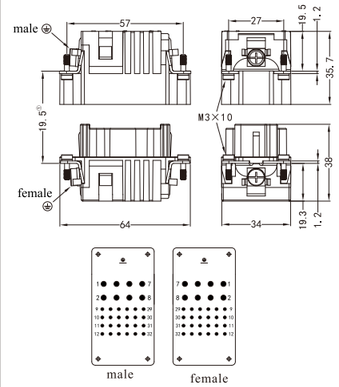
① wire size: 4mm²
② wire size: 2.5mm²

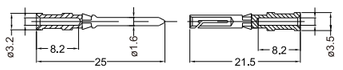
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HK-008/24 Series- Combination Insert

8+⏚
16A 230/400V 4kV 3
+24 signal pin
10A 160V 2.5kV 3

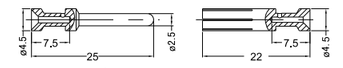
Use with 18B hoods/housings, refer to P20-01—P20-08

Insert	Wire Size (mm²)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated 	Power 0.14~4 Signal 0.14~2.5	male 190 060 032 3000	male HK-008/24-MC	
		female 190 061 032 3000	female HK-008/24-FC	

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated 	191 100 010 0030	YJ1.6-25-0.37AG	191 200 010 0030	YK1.6-21.5-0.37AG	
	191 100 010 0040	YJ1.6-25-0.5AG	191 200 010 0040	YK1.6-21.5-0.5AG	
	191 100 010 0060	YJ1.6-25-0.75AG	191 200 010 0060	YK1.6-21.5-0.75AG	
	191 100 010 0080	YJ1.6-25-1.0AG	191 200 010 0080	YK1.6-21.5-1.0AG	
	191 100 010 0090	YJ1.6-25-1.5AG	191 200 010 0090	YK1.6-21.5-1.5AG	
	191 100 010 0100	YJ1.6-25-2.5AG	191 200 010 0100	YK1.6-21.5-2.5AG	
gold-plated 	191 110 010 0030	YJ1.6-25-0.37AU	191 210 010 0030	YK1.6-21.5-0.37AU	
	191 110 010 0040	YJ1.6-25-0.5AU	191 210 010 0040	YK1.6-21.5-0.5AU	
	191 110 010 0060	YJ1.6-25-0.75AU	191 210 010 0060	YK1.6-21.5-0.75AU	
	191 110 010 0080	YJ1.6-25-1.0AU	191 210 010 0080	YK1.6-21.5-1.0AU	
	191 110 010 0090	YJ1.6-25-1.5AU	191 210 010 0090	YK1.6-21.5-1.5AU	
	191 110 010 0100	YJ1.6-25-2.5AU	191 210 010 0100	YK1.6-21.5-2.5AU	

wire size		ø	stripping length
0. 14~0. 37mm²	AWG26~22	0. 9	8mm
0. 5mm²	AWG20	1. 1	8mm
0. 75mm²	AWG18	1. 3	8mm
1mm²	AWG17	1. 45	8mm
1.5mm²	AWG15	1. 75	8mm
2.5mm²	AWG13	2. 25	6mm

Contact resistance≤3mΩ

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated 	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG	
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG	
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG	
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG	
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG	
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG	
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG	
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG	
gold-plated 	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU	
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU	
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU	
	191 110 016 0080	YJ2.5-25-1.0AU	191 210 016 0080	YK2.5-22-1.0AU	
	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU	
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU	
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU	
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU	

Marks	wire size（mm²）	
Without Groove	0. 14~0. 37	AWG26~22
Without Groove	0. 5	AWG20
With 1 Groove	0. 75	AWG18
With 1 Groove	1	AWG17
With 2 Groove	1. 5	AWG15
With 3 Groove	2. 5	AWG13
Wide Groove	3	AWG12
Without Groove	4	AWG11
stripping length：7.5mm		

Contact resistance≤1mΩ

For crimp tool and removal tool, see page P25-01

RETURN>

HK-006/36 Series- Combination Insert

Technical Information

Standard： IEC 60664-1、IEC61984
No. of Contact：Power: 6+PE Signal: 36

Insert：Power（6+PE）

Rated Current	40A
Rated Voltage	690V
Rated Pulse Voltage	8kV

Insert：Signal 36

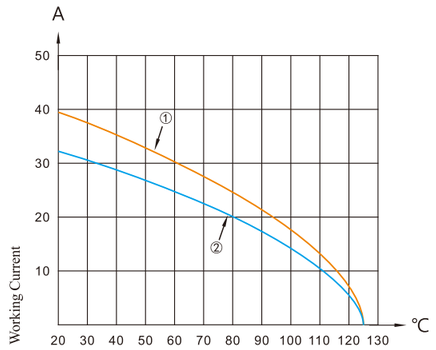
Rated Current	10A
Rated Voltage	160V
Rated Pulse Voltage	2.5kV
Pollution Degree	3
Insulation resistance	⩾10^{10} Ω
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Complies with UL/CSA rated voltage	600V/300V
Mating Cycle	⩾500

Contact

Material	Copper Alloy
Plating	Gold-plated, Silver-plated
Power Contact Resistance	⩽1mΩ
Signal Contact Resistance	⩽3mΩ
Termination	power screw termination
Wire Size	1.5-10mm^2 15-7AWG
	signal screw termination
Wire Size	0.14-2.5mm^2 25-13AWG

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2



① wire size：6mm^2
② wire size：4mm^2

<RETURN

HK-006/36 Series- Combination Insert

6+⏚
40A 690V 8kV 3
+36 signal pin
10A 160V 2.5kV 3

Use with 16B hoods/housings, refer to P201-01—P21-09

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated	Power 1.5~10 Signal 0.14~2.5	male 190 060 042 3000	male HK-006/36-MC	① Maximum distance between inserts21mm
		female 190 061 042 3000	female HK-006/36-FC	

Contact Layout (Termination Front View)

male female

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated	191 100 010 0030	YJ1.6-25-0.37AG	191 200 010 0030	YK1.6-21.5-0.37AG	
	191 100 010 0040	YJ1.6-25-0.5AG	191 200 010 0040	YK1.6-21.5-0.5AG	
	191 100 010 0060	YJ1.6-25-0.75AG	191 200 010 0060	YK1.6-21.5-0.75AG	
	191 100 010 0080	YJ1.6-25-1.0AG	191 200 010 0080	YK1.6-21.5-1.0AG	
	191 100 010 0090	YJ1.6-25-1.5AG	191 200 010 0090	YK1.6-21.5-1.5AG	
	191 100 010 0100	YJ1.6-25-2.5AG	191 200 010 0100	YK1.6-21.5-2.5AG	
gold-plated	191 110 010 0030	YJ1.6-25-0.37AU	191 210 010 0030	YK1.6-21.5-0.37AU	
	191 110 010 0040	YJ1.6-25-0.5AU	191 210 010 0040	YK1.6-21.5-0.5AU	
	191 110 010 0060	YJ1.6-25-0.75AU	191 210 010 0060	YK1.6-21.5-0.75AU	
	191 110 010 0080	YJ1.6-25-1.0AU	191 210 010 0080	YK1.6-21.5-1.0AU	
	191 110 010 0090	YJ1.6-25-1.5AU	191 210 010 0090	YK1.6-21.5-1.5AU	
	191 110 010 0100	YJ1.6-25-2.5AU	191 210 010 0100	YK1.6-21.5-2.5AU	

wire size			stripping length
0.14-0.37mm^2	AWG26-22	0.9	8mm
0.5mm^2	AWG20	1.1	8mm
0.75mm^2	AWG18	1.3	8mm
1mm^2	AWG17	1.45	8mm
1.5mm^2	AWG15	1.75	8mm
2.5mm^2	AWG13	2.25	6mm

Contact resistance⩽3mΩ

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated	191 100 040 0090	YJ4.0-29.1-1.5AG	191 200 040 0090	YK4.0-23.4-1.5AG	
	191 100 040 0100	YJ4.0-29.1-2.5AG	191 200 040 0200	YK4.0-23.4-2.5AG	
	191 100 040 0120	YJ4.0-29.1-4.0AG	191 200 040 0120	YK4.0-23.4-4.0AG	
	191 100 040 0130	YJ4.0-29.1-6.0AG	191 200 040 0130	YK4.0-23.4-6.0AG	
	191 100 040 0140	YJ4.0-29.1-10.0AG	191 200 040 0140	YK4.0-23.4-10.0AG	
gold-plated	191 110 040 0090	YJ4.0-29.1-1.5AU	191 210 040 0090	YK4.0-23.4-1.5AU	
	191 110 040 0100	YJ4.0-29.1-2.5AU	191 210 040 0100	YK4.0-23.4-2.5AU	
	191 110 040 0120	YJ4.0-29.1-4.0AU	191 210 040 0120	YK4.0-23.4-4.0AU	
	191 110 040 0130	YJ4.0-29.1-6.0AU	191 210 040 0130	YK4.0-23.4-6.0AU	
	191 110 040 0140	YJ4.0-29.1-10.0AU	191 210 040 0140	YK4.0-23.4-10.0AU	

male female

Cross Section	AWG	ø	stripping length
1.5mm^2	15	1.75	9mm
2.5mm^2	13	2.25	9mm
4mm^2	11	2.85	9.6mm
6mm^2	9	3.5	9.6mm
10mm^2	7	4.5	15mm

stripping length A=15mm for Cable OD≥5mm
stripping length A=18mm for Cable OD≥6.4mm

Contact resistance⩽1mΩ

For crimp tool and removal tool, see page P25-01

RETURN>

HK-021/2 Series- Combination Insert

Technical Information

Standard： IEC 60664-1、IEC61984
No. of Contact： Power: 12+PE Signal: 12

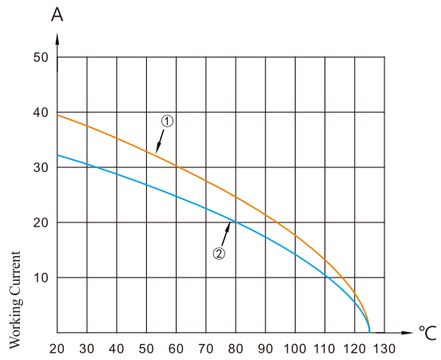
Insert: Power（12+PE）	
Rated Current	40A
Rated Voltage	690V
Rated Pulse Voltage	8kV

Insert: Signal 2	
Rated Current	10A
Rated Voltage	250V
Rated Pulse Voltage	4kV
Pollution Degree	3
Insulation resistance	$\geqslant 10^{10}\ \Omega$
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Complies with UL/CSA rated voltage	600V/300V
Mating Cycle	≥500

Contact	
Material	Copper Alloy
Plating	Gold-plated, Silver-plated
Power Contact Resistance	≤1mΩ
Signal Contact Resistance	≤3mΩ
Termination	power screw termination
Wire Size	1. 5-10mm² 15-7AWG
	signal screw termination
Wire Size	0. 14-2.5mm² 25-13AWG

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2



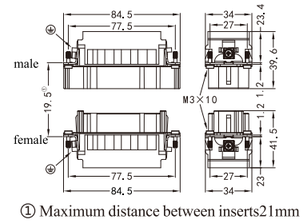
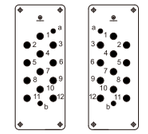
① wire sizewire size: 6mm²
② wire sizewire size: 4mm²

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HK-021/2 Series- Combination Insert

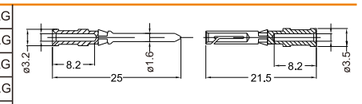
12+⏚
40A 690V 8kV 3
+2 signal pin
10A 160V 4kV 3

Use with 16B hoods/housings, refer to P201-01—P21-09

Insert	Wire Size (mm²)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated 	Power 1.5~10 Signal 0.14~2.5	male 190 060 014 3000	male HK-012/2-MC	 ① Maximum distance between inserts21mm Contact Layout (Termination Front View) 
		female 190 061 014 3000	female HK-012/2-FC	

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number
silver-plated 	191 100 010 0030	YJ1.6-25-0.37AG	191 200 010 0030	YK1.6-21.5-0.37AG
	191 100 010 0040	YJ1.6-25-0.5AG	191 200 010 0040	YK1.6-21.5-0.5AG
	191 100 010 0060	YJ1.6-25-0.75AG	191 200 010 0060	YK1.6-21.5-0.75AG
	191 100 010 0080	YJ1.6-25-1.0AG	191 200 010 0080	YK1.6-21.5-1.0AG
	191 100 010 0090	YJ1.6-25-1.5AG	191 200 010 0090	YK1.6-21.5-1.5AG
	191 100 010 0100	YJ1.6-25-2.5AG	191 200 010 0100	YK1.6-21.5-2.5AG
gold-plated 	191 110 010 0030	YJ1.6-25-0.37AU	191 210 010 0030	YK1.6-21.5-0.37AU
	191 110 010 0040	YJ1.6-25-0.5AU	191 210 010 0040	YK1.6-21.5-0.5AU
	191 110 010 0060	YJ1.6-25-0.75AU	191 210 010 0060	YK1.6-21.5-0.75AU
	191 110 010 0080	YJ1.6-25-1.0AU	191 210 010 0080	YK1.6-21.5-1.0AU
	191 110 010 0090	YJ1.6-25-1.5AU	191 210 010 0090	YK1.6-21.5-1.5AU
	191 110 010 0100	YJ1.6-25-2.5AU	191 210 010 0100	YK1.6-21.5-2.5AU

Drawings (mm)

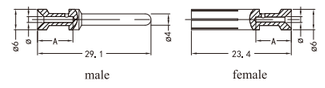


wire size		ø	stripping length
0. 14-0. 37mm²	AWG26-22	0. 9	8mm
0. 5mm²	AWG20	1. 1	8mm
0. 75mm²	AWG18	1. 3	8mm
1mm²	AWG17	1. 45	8mm
1. 5mm²	AWG15	1. 75	8mm
2. 5mm²	AWG13	2. 25	6mm

Contact resistance≤3mΩ

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number
silver-plated 	191 100 040 0090	YJ4.0-29.1-1.5AG	191 200 040 0090	YK4.0-23.4-1.5AG
	191 100 040 0100	YJ4.0-29.1-2.5AG	191 200 040 0200	YK4.0-23.4-2.5AG
	191 100 040 0120	YJ4.0-29.1-4.0AG	191 200 040 0120	YK4.0-23.4-4.0AG
	191 100 040 0130	YJ4.0-29.1-6.0AG	191 200 040 0130	YK4.0-23.4-6.0AG
	191 100 040 0140	YJ4.0-29.1-10.0AG	191 200 040 0140	YK4.0-23.4-10.0AG
gold-plated 	191 110 040 0090	YJ4.0-29.1-1.5AU	191 210 040 0090	YK4.0-23.4-1.5AU
	191 110 040 0100	YJ4.0-29.1-2.5AU	191 210 040 0100	YK4.0-23.4-2.5AU
	191 110 040 0120	YJ4.0-29.1-4.0AU	191 210 040 0120	YK4.0-23.4-4.0AU
	191 110 040 0130	YJ4.0-29.1-6.0AU	191 210 040 0130	YK4.0-23.4-6.0AU
	191 110 040 0140	YJ4.0-29.1-10.0AU	191 210 040 0140	YK4.0-23.4-10.0AU

Drawings (mm)



Cross Section	AWG	ø	stripping length
1.5mm²	15	1.75	9mm
2.5mm²	13	2.25	9mm
4mm²	11	2.85	9.6mm
6mm²	9	3. 5	9.6mm
10mm²	7	4. 5	15mm

stripping length A=15mm for Cable OD≥5mm
stripping length A=18mm for Cable OD≥6.4mm

Contact resistance≤1mΩ

For crimp tool and removal tool, see page P25-01

RETURN>

Technical Information

Standard：IEC 60664-1、IEC61984
No. of Contact：Power：6+PE Signal：6

Insert：Power（6+PE）

Rated Current	100A
Rated Voltage	690V
Rated Pulse Voltage	8kV

Signal

Rated Current	16A
Rated Voltage	400V
Rated Pulse Voltage	6kV
Pollution Degree	3
Complies with UL/CSA rated voltage	Power 600V/600V Signal 300V/300V
Complies with UL/CSARated Current	Power 100A/100A Signal 16A/15A
Insulation resistance	⩾10^{10} Ω
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Mating Cycle	⩾500

Contact

Power

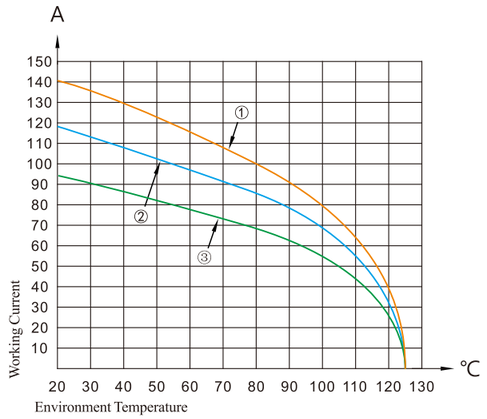
Material	Copper Alloy
Plating	Silver-plated
Contact resistance	⩽0.5mΩ
Axial Termination	16-35mm² 5-2AWG

Signal

Material	Copper Alloy
Plating	Gold-plated, Silver-plated
Contact resistance	⩽3mΩ
Axial Termination	0. 14-2.5mm² 25-13AWG

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2



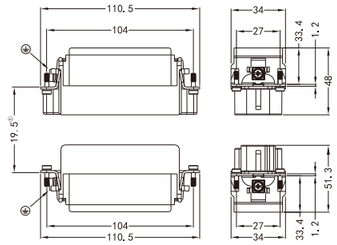
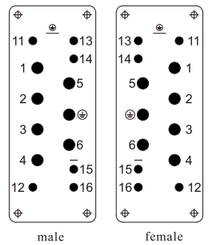
① wire size：35mm²
② wire size：25mm²
③ wire size：16mm²

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HK-006/6 Series- Combination Insert

6+⏚
100A 690V 8kV 3
+6 signal pin
16A 400V 6kV 3

Use with 24B hoods/housings, refer to P22-01—P22-09

Insert	Wire Size (mm²)	Product Code	Part Number	Drawings (mm)
Screw Termination Contact surface: silver-plated				
	Power 16~35	male 190 060 012 2200	male HK-006/6-M	
				① Maximum distance between inserts21mm
	Signal 0.14~2.5	female 190 061 012 2200	female HK-006/6-F	Contact Layout (Termination Front View)  Torque 16mm²:6 N·m 25mm²:7 N·m 35mm²:8 N·m

Tools

Hexagon socket wrench	Product Code	Part Number
	193 005 003 0000	HT-4/150

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HK-008/0 Series- Combination Insert

Technical Information

Standard：IEC 60664-1、IEC61984
No. of Contact：8+PE

Signal

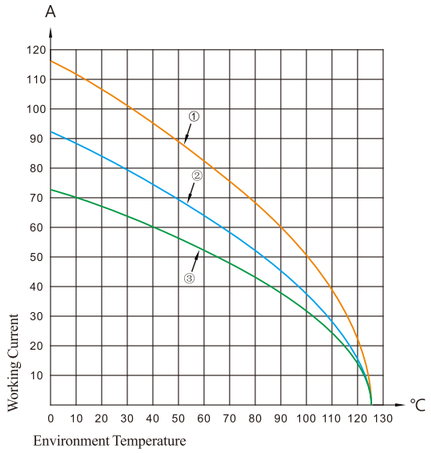
Rated Current	100A
Rated Voltage	690V
Rated Pulse Voltage	8kV
Pollution Degree	3
Insulation resistance	⩾10^{10} Ω
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Complies with UL/CSA rated voltage	600V
Mating Cycle	⩾500

Contact

Material	Copper Alloy
Plating	Silver-plated
Contact resistance	⩽0.5mΩ
Termination	Axial Termination
Wire Size	10-25mm² 7-3AWG
Hexagon socket wrench	SW4
stripping length	13mm

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2



① wire size：25mm²
② wire size：16mm²
③ wire size：10mm²

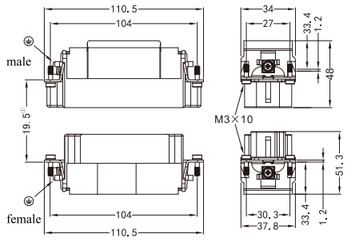
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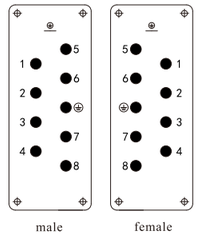
HK-008/0 Series- Combination Insert

8+⏚
100A 690V 8kV 3

Use with 24B hoods/housings, refer to P22-01—P22-09

Insert	Wire Size (mm²)	Product Code	Part Number	Drawings (mm)
Screw Termination Contact surface: silver-plated	10~25	male 190 060 008 2000	male HK-008/0-M	① Maximum distance between inserts21mm Contact Layout (Termination Front View) Torque 10mm²: 6 N・m 16mm²: 7 N・m 25mm²: 8 N・m
		female 190 061 008 2000	female HK-008/0-F	





Tools

Hexagon socket wrench	Product Code	Part Number
	193 005 003 0000	HT-4/150

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HEAV Series Insert

Technical Information

Standard：IEC 60664-1、IEC61984
No. of Contact：6+PE、10+PE 、16+PE、24+PE

Insert

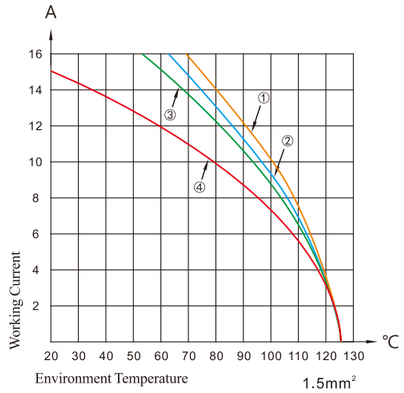
Rated Current	16A (see current load diagram)
Rated Voltage	500V
Rated Pulse Voltage	6kV
Pollution Degree	3
Insulation resistance	⩾10^{10} Ω
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Complies with UL/CSA rated voltage	600V
Mating Cycle	⩾500

Contact

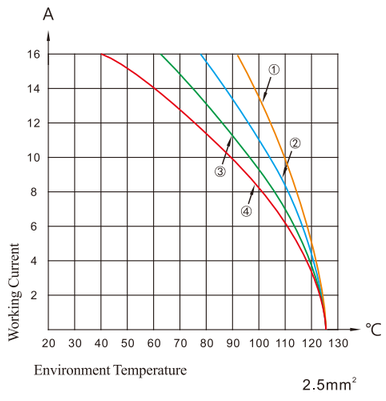
Material	Copper Alloy
Plating	Silver-plated
Contact resistance	⩽4mΩ
Termination	Screw Termination
Wire Size	0.2-2.5mm² 24-13AWG

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2



①HEAV-006
②HEAV-010
③HEAV-016
④HEAV-024



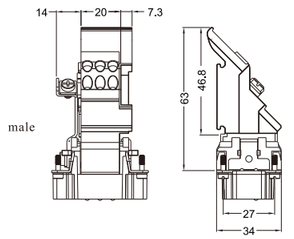
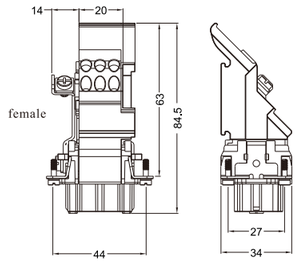
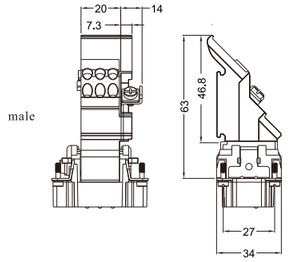
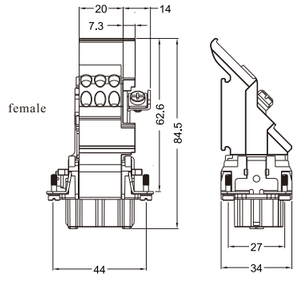
①HEAV-006
②HEAV-010
③HEAV-016
④HEAV-024

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HEAV-006 Series-Extended Insert

6+⏚
16A 500V 6kV 3

Use with 6B hoods/housings, refer to P19-01—P19-05

Insert	Wire Size (mm²)	Product Code	Part Number	Drawings (mm)
Screw Termination Contact surface: silver-plated Left Side	0.2~2.5	male 190 110 006 2020	male HEAV-006-ML	
		female 190 111 006 2020	female HEAV-006-FL	
Screw Termination Contact surface: silver-plated Right Side	0. 2~2. 5	male 190 110 006 2030	male HEAV-006-MR	
		female 190 111 006 2030	female HEAV-006-FR	

For crimp tool and removal tool, see page P25-01

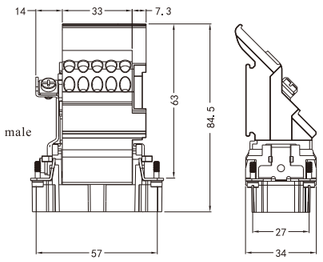
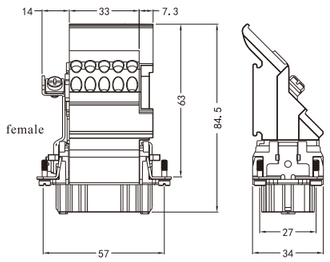
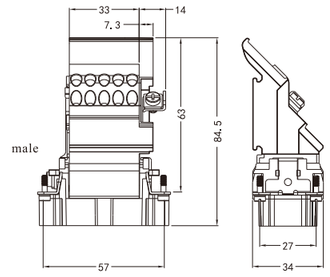
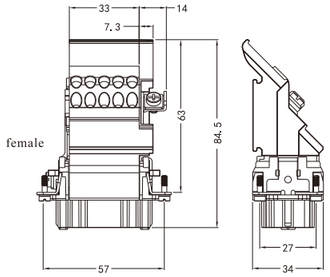
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HEAV-010 Series-Extended Insert

10+⏚

16A 500V 6kV 3

Use with 10B hoods/housings, refer to P20-01—P20-08

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Screw Termination Contact surface: silver-plated Left Side	0.2~2.5	male 190 110 010 2020	male HEAV-010-ML	
		female 190 111 010 2020	female HEAV-010-FL	
Screw Termination Contact surface: silver-plated Right Side	0.2~2.5	male 190 110 010 2030	male HEAV-010-MR	
		female 190 111 010 2030	female HEAV-010-FR	

For crimp tool and removal tool, see page P25-01

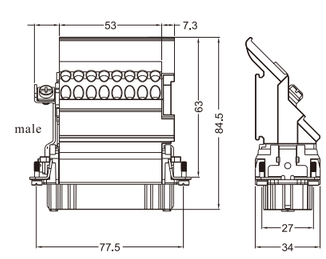
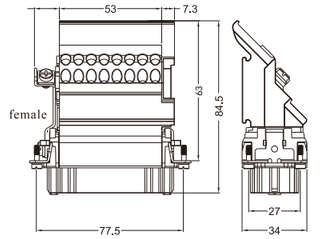
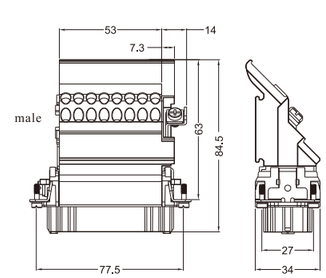
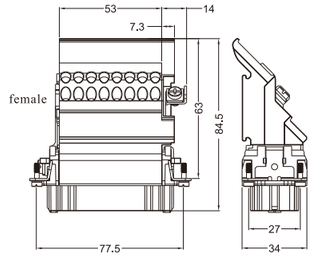
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HEAV-016 Series-Extended Insert

16+⏚

16A 500V 6kV 3

Use with 16B hoods/housings, refer to P21-01—P21-09

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Screw Termination Contact surface: silver-plated Left Side	0.2~2.5	male 190 110 016 2020	male HEAV-016-ML	
		female 190 111 016 2020	female HEAV-016-FL	
Screw Termination Contact surface: silver-plated Right Side	0.2~2.5	male 190 110 016 2030	male HEAV-016-MR	
		female 190 111 016 2030	female HEAV-016-FR	

For crimp tool and removal tool, see page P25-01

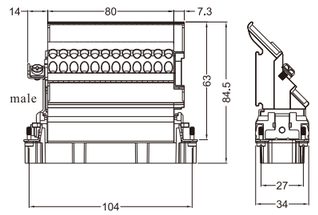
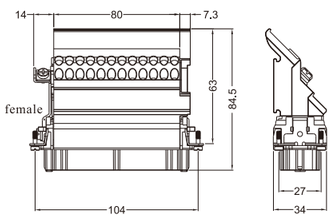
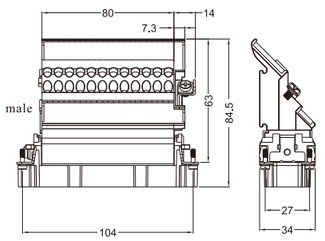
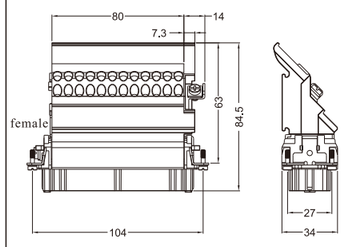
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HEAV-024 Series-Extended Insert

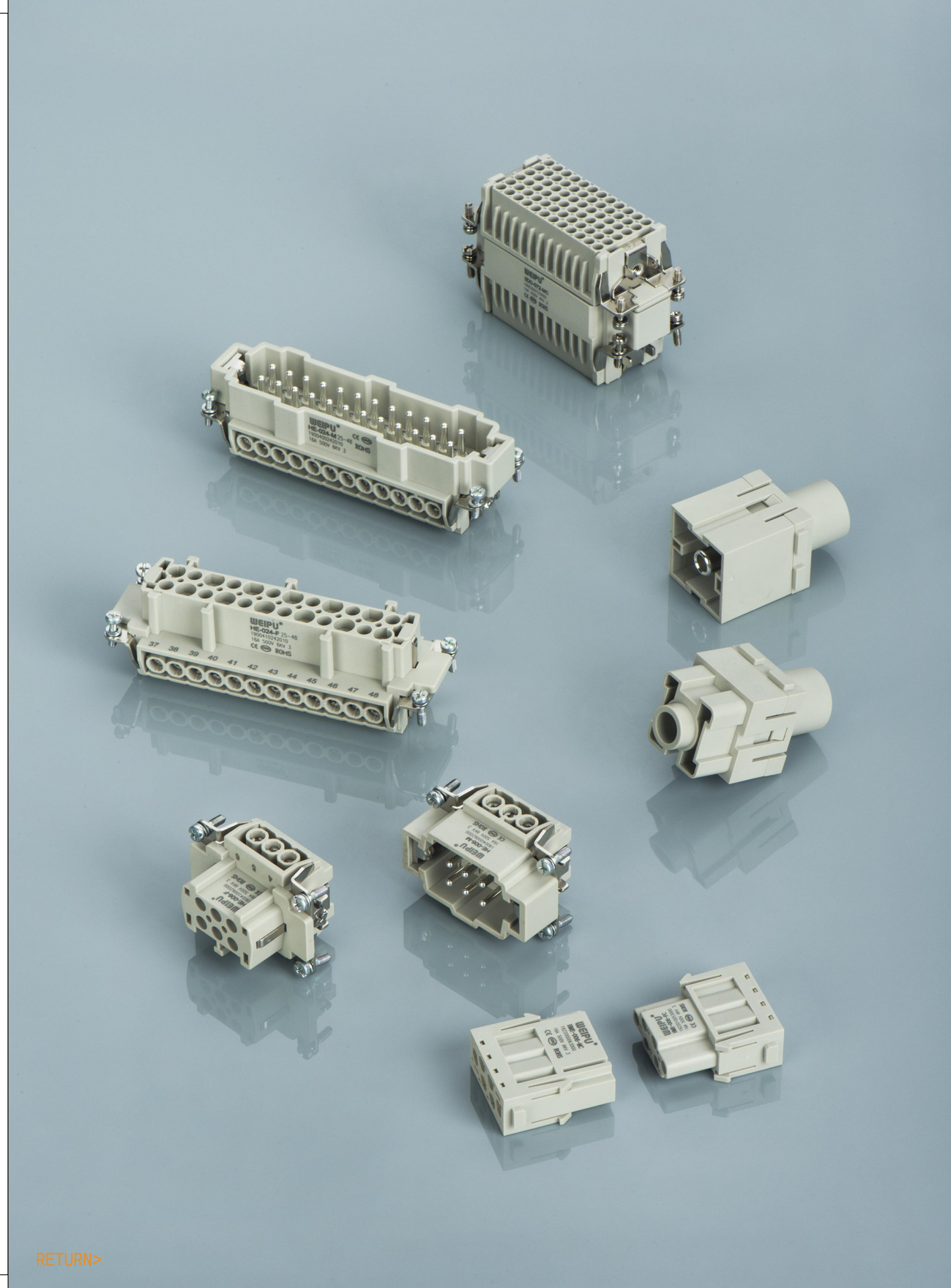
24+ ⏚

16A 500V 6kV 3

Use with 24B hoods/housings, refer to P22-01—P22-09

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Screw Termination Contact surface: silver-plated Left Side				
	0.2~2.5	male 190 110 024 2020	male HEAV-024-ML	
		female 190 111 024 2020	female HEAV-024-FL	
Screw Termination Contact surface: silver-plated Right Side				
	0. 2~2. 5	male 190 110 024 2030	male HEAV-024-MR	
		female 190 111 024 2030	female HEAV-024-FR	

For crimp tool and removal tool, see page P25-01



RETURN>

Overview

100~200A

	H2MK-001	H2MK-001	H2MK-002
No. of Contact			
Electrical parameters	1 200A/1000V	1 200A/1000V	2 100A/1000V
Termination	Axial Screw Termination	Crimp Termination	Axial Screw Termination
Wire Size	40~70mm²	25~70mm²	16~35mm²
male	192 200 001 2220	192 200 001 3020	192 200 002 2220
female	192 201 001 2220	192 201 001 3020	192 201 002 2220
Wire Size	25~40mm²		10~25mm²
male	192 200 001 2120		192 200 002 2120
female	192 201 001 2120		192 201 002 2120

40~70A

	HMK70-002	HMK-003	HMK-002	HMK-003	HMK-004	HMK-003/4
No. of Contact						
Electrical parameters	2 70A/1000V	3 40A/690V	2 40A/1000V	3 40A/690V	4 40A/830V	7 40A+10A/830V
Termination	Axial Screw Termination	Axial Screw Termination	Crimp Termination	Crimp Termination	Crimp Termination	Crimp Termination
Wire Size	14~22mm²	6~10mm²	1. 5~10mm²	1. 5~6mm²	1. 5~6mm²	0.14~6mm²
male	192 210 002 2220	192 200 003 2200	192 200 002 3000	192 200 003 3000	192 200 004 3000	192 200 0073000
female	192 211 002 2220	192 201 003 2200	192 201 002 3000	192 201 003 3000	192 201 004 3000	192 201 007 3000
Wire Size	6~16mm²	2.5~8mm²				
male	192 210 002 2120	192 200 003 2100				
female	192 211 002 2120	192 201 003 2100				

16A

	HME-006	HMEE-008	H2MEE-020	HVME-006
No. of Contact				
Electrical parameters	6 16A/500V	8 16A/500V	20 16A/400V	6 16A/830V
Termination	Crimp Termination	Crimp Termination	Crimp Termination	Crimp Termination
Wire Size	0. 14~4mm²	0. 14~4mm²	0. 14~4mm²	0. 14~4mm²
male	192 200 006 3000	192 200 008 3000	192 200 020 3000	192 210 006 3000
female	192 201 006 3000	192 201 008 3000	192 201 020 3000	192 211 006 3000

10A

	HMD-012	HMDD-017	HMDS-025
No. of Contact			
Electrical parameters	12 10A/250V	17 10A/250V	25 4A/50V
Termination	Crimp Termination	Crimp Termination	Crimp Termination
Wire Size	0. 14~2.5mm²	0. 14~2.5mm²	0. 08~0.52mm²
male	192 200 012 3000	192 200 017 3000	192 200 025 3000
female	192 201 012 3000	192 201 017 3000	192 201 025 3000

RJ45 Module

	HM-USB	HM-RJ45
No. of Contact		
Electrical parameters	5Gbit/S (USB3.0) 10A/250V	8 cat5e 10/100/1000Mbit/S 1A/50V
Wire Size	192 210 000 0000	192 220 000 0000
male	192 211 000 0000	192 231 000 0000
female		192 230 000 0000

Pneumatic module

	HMP-002	HMP-003		
	6.0mm / 1/4" maximum 8bar/116psi	1.6mm / 1/16" 3.0mm 4.0mm / 1/8" maximum 8bar/116psi		
OD	6.0	1.6	3.0	4.0
male	191 123 000 5130	191 123 000 5230	191 123 000 5110	191 123 000 5120
female (without lock)	191 223 000 5130	191 223 000 5230	191 223 000 5110	191 223 000 5120
male (with lock)	191 223 000 6130	191 223 000 6230	191 223 000 6110	191 223 000 6120

<RETURN

Technical Information

No. of module inserts 2、3、4、6

Material	Zinc alloy
Plating	Nickel-plated or zinc-nickel alloy
Working Temperature	-40℃~125℃

Modular Frames A

	Number of modules	Mark	Product Code	Part Number	Drawings (mm)
Frame 6B for 6B Hoods/Housings	2	A-B a-b	male 192 100 006 2000 female 192 101 006 2000	male H6B-TA2-M female H6B-TA2-F	51 44 27 34. 4 36
Frame 10B for 10B Hoods/Housings	3	A-C a-c	male 192 100 010 3000 female 192 101 010 3000	male H10B-TA3-M female H10B-TA3-F	64. 8 57 27 34. 4 36
Frame 16B for 16B Hoods/Housings	4	A-D a-d	male 192 100 016 4000 female 192 100 016 4000	male H16B-TA4-M female H16B-TA4-F	80 77. 5 27 34. 4 36
Frame 24B for 24B Hoods/Housings	6	A-F a-f	male 192 100 024 6000 female 192 101 024 6000	male H24B-TA6-M female H24B-TA6-F	109. 8 104 27 34. 4 36

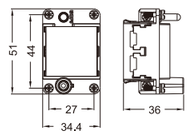
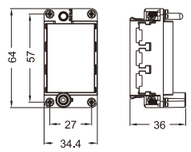
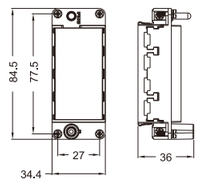
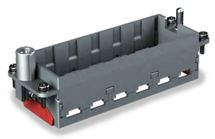
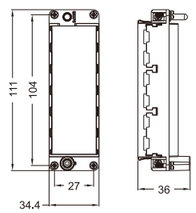
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Technical Information

No. of module inserts 2、3、4、6

Material	Zinc alloy
Plating	Nickel-plated or zinc-nickel alloy
Working Temperature	-40℃~125℃

Modular Frames B

	Number of modules	Mark	Product Code	Part Number	Drawings (mm)
Frame 6B for 6B Hoods/Housings 	2	A-B a-b	male 192 110 006 2000 female 192 111 006 2000	male H6B-TB2-M female H6B-TB2-F	
Frame 10B for 10B Hoods/Housings 	3	A-C a-c	male 192 110 010 3000 female 192 111 010 3000	male H10B-TB3-M female H10B-TB3-F	
Frame 16B for 16B Hoods/Housings 	4	A-D a-d	male 192 110 016 4000 female 192 111 016 4000	male H16B-TB4-M female H16B-TB4-F	
Frame 24B for 24B Hoods/Housings 	6	A-F a-f	male 192 110 024 6000 female 192 111 024 6000	male H24B-TB6-M female H24B-TB6-F	

H2MK-001 Modular Insert-Axial Termination

Technical Information

Standard： IEC 60664-1、 IEC61984
No. of Contact： 1

Insert

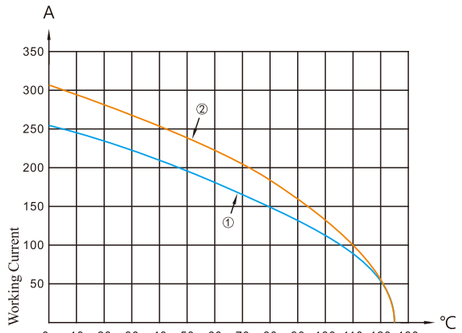
Rated Current	200A (see current load diagram)
Rated Voltage	1000V
Rated Pulse Voltage	8kV
Pollution Degree	3
Insulation resistance	⩾10^{10} Ω
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Mating Cycle	⩾500

Contact

Material	Copper Alloy
Plating	Gold-plated,
Contact resistance	⩽0.2mΩ
Termination	Axial Termination
Wire Size	25-70 mm² 3-00AWG
stripping Length	16mm
Hexagon socket wrench	SW5

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2



① 24BHoods/Housings require 3 modules， wire size： 50mm²
② 24BHoods/Housings require 3 modules， wire size： 70mm²

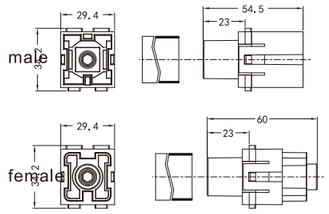
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H2MK-001Modular Insert-Axial Termination

1

200A 1000V 8kV 3

can be used with frames and all other modular products

Insert	Wire Size (mm²)	Product Code	Part Number	Drawings (mm)
Axial Termination Contact surface: silver-plated 	25~40	male 192 200 001 2120 female 192 201 001 2120	male H2MK-001.1-M (25-40mm²) female H2MK-001.1-F (25-40mm²)	 stripping length: 16mm Torque: 25mm²： 8N·m 40mm²： 8N·m
	40~70	male 192 200 001 2220 female 192 201 001 2220	male H2MK-001.2-M (40-70mm²) female H2MK-001.2-F (40-70mm²)	40mm²： 9N·m 70mm²： 10N·m

Tools

Hexagon socket wrench	Product Code	Part Number
	193 005 004 0000	HT-5/150

RETURN>

H2MK−001 Modular Insert-Crimp Termination

Technical Information

Standard： IEC 60664-1、IEC61984
No. of Contact： 1

Insert

Rated Current	200A (see current load diagram)
Rated Voltage	1000V
Rated Pulse Voltage	8kV
Pollution Degree	3
Insulation resistance	⩾10^{10} Ω
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Mating Cycle	⩾500

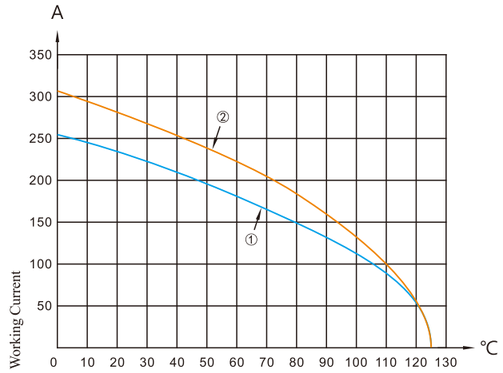
Contact

Material	Copper Alloy
Plating	Silver-plated
Contact resistance	⩽0.3mΩ
Termination	Crimp Termination
Wire Size	25-70 mm² 3-00AWG
stripping Length	22.5mm

Hexagon socket wrench

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2



① 24BHoods/Housings require 3 modules， wire size： 50mm²
② 24BHoods/Housings require 3 modules， wire size： 70mm²

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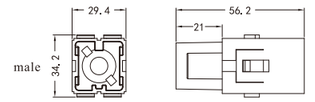
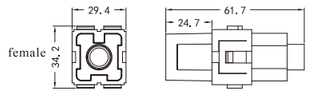
H2MK-001Modular Insert-Crimp Termination

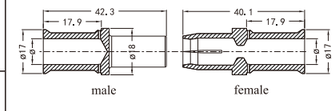
1

200A 1000V 8kV 3

can be used with frames and all other modular products

10

Insert	Wire Size (mm²)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, 	25~70	male 192 200 001 3020	male H2MK-001-MC	 
		female 192 201 001 3020	female H2MK-001-FC	

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated 	191 100 200 0160	YJ9.5-42.3-25AG	191 200 200 0160	YK9.5-40.1-25AG	
	191 100 200 0170	YJ9.5-42.3-35AG	191 200 200 0170	YK9.5-40.1-35AG	
	191 100 200 0180	YJ9.5-42.3-50AG	191 200 200 0180	YK9.5-40.1-50AG	
	191 100 200 0190	YJ9.5-42.3-70AG	191 200 200 0190	YK9.5-40.1-70AG	

Cross Section	ø	stripping length
25mm²	7	17.9mm
35mm²	8.2	17.9mm
50mm²	10	17.9mm
70mm²	11. 5	17.9mm
stranded wires comply with IEC 60228-5		

Contact resistance⩽0.3mΩ

For crimp tool and removal tool, see page P25-01

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Technical Information

Standard： IEC 60664-1、 IEC61984
No. of Contact： 2

Insert

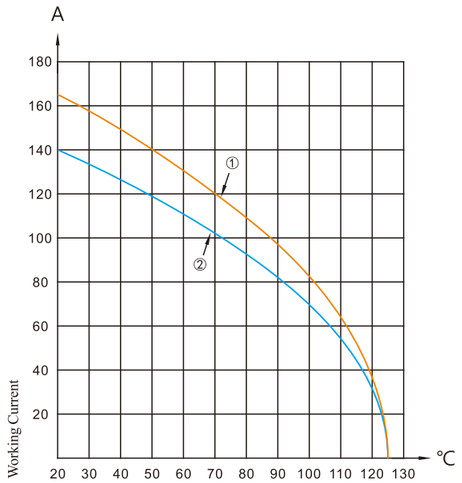
Rated Current	100A (see current load diagram)
Rated Voltage	1000V
Rated Pulse Voltage	8kV
Pollution Degree	3
Complies with UL rated voltage	600V
Insulation resistance	⩾10^{10} Ω
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Mating Cycle	⩾500

Contact

Material	Copper Alloy
Plating	Silver-plated
Contact resistance	⩽0.3mΩ
Termination	Axial Termination
Wire Size	10-35 mm² 7-2AWG
stripping Length	13mm
Hexagon socket wrench	SW4

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2



Environment Temperature

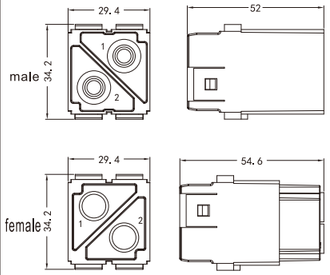
① 24BHoods/Housings require 3 modules，wire size：35mm²
② 24BHoods/Housings require 3 modules，wire size：25mm²

<RETURN

2

100A 1000V 8kV 3

can be used with frames and all other modular products

Insert	Wire Size (mm²)	Product Code	Part Number	Drawings (mm)
Axial Termination Contact surface: silver-plated				
	10~25	male 192 200 002 2120 female 192 201 002 2120	male H2MK-002.1-M (10-25mm²) female H2MK-002.1-F(10-25mm²)	
	16~35	male 192 200 002 2220 female 192 201 002 2220	male H2MK-002.2-M (16-35mm²) female H2MK-002.2-F(16-35mm²)	stripping length: 13mm Torque: 10mm²： 6N·m 16mm²： 6N·m 25mm²： 7N·m 35mm²： 8N·m

Tools

Hexagon socket wrench	Product Code	Part Number
	193 005 003 0000	HT-4/150

RETURN>

Technical Information

Standard： IEC 60664-1、 IEC61984
No. of Contact： 2

Insert

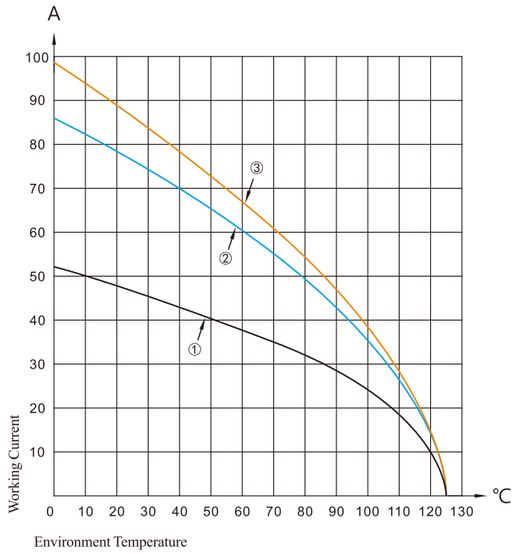
Rated Current	70A (see current load diagram)
Rated Voltage	1000V
Rated Pulse Voltage	8kV
Pollution Degree	3
Complies with UL rated voltage	600V
Insulation resistance	⩾10^{10} Ω
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Mating Cycle	⩾500

Contact

Material	Copper Alloy
Plating	Silver-plated
Contact resistance	⩽0.5mΩ
Termination	Axial Termination
Wire Size	6-22 mm² 9-4AWG
stripping Length	6mm²: 11mm 10mm²: 11mm 16mm²: 11mm 22mm²: 12.5mm
Hexagon socket wrench	SW2. 5

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2

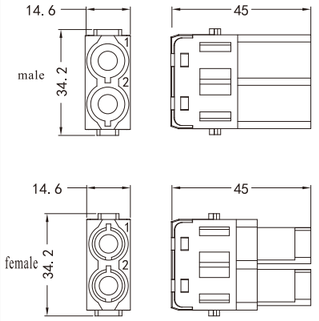


① 24BHoods/Housings require 6 modules，wire size：6mm²
② 24BHoods/Housings require 6 modules，wire size：16mm²
③ 24BHoods/Housings require 6 modules，wire size：22mm²

<RETURN

2
70A 1000V 8kV 3

can be used with frames and all other modular products

Insert	Wire Size (mm²)	Product Code	Part Number	Drawings (mm)
Axial Termination Contact surface: silver-plated 	6~16	male 192 210 002 2120 female 192 211 002 2120	male HMK70-002.1-M (6-16mm²) female HMK70-002.1-F(6-16mm²)	
	14~22	male 192 210 002 2220 female 192 211 002 2220	male HMK70-002.2-M (14-22mm²) female HMK70-002.2-F(14-22mm²)	stripping length: 6mm²： 11mm 10mm²： 11mm 16mm²： 11mm 22mm²： 12.5mm Torque: 6mm²： 2N·m 10mm²： 3N·m 14mm²： 4N·m 16mm²： 4N·m 22mm²： 4N·m

Tools

Hexagon socket wrench	Product Code	Part Number
	193 005 002 0000	HT-2.5/100

RETURN>

Technical Information

Standard： IEC 60664-1、 IEC61984
No. of Contact：3

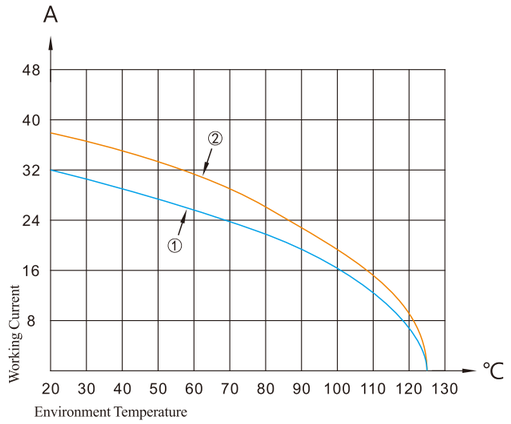
Rated Current	40A (see current load diagram)
Rated Voltage	690V
Rated Pulse Voltage	8kV
Pollution Degree	3
Complies with UL rated voltage	600V
Insulation resistance	⩾10^{10} Ω
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Mating Cycle	⩾500

Contact

Material	Copper Alloy
Plating	Silver-plated
Contact resistance	⩽1mΩ
Termination	Axial Termination
Wire Size	2.5-10 mm² 13-7AWG
stripping Length	2.5mm²：5mm 4mm²：5mm 6mm²：8mm 10mm²：11mm
Hexagon socket wrench	SW2

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2

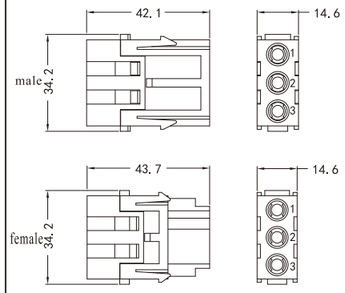


① 24BHoods/Housings require 6 modules，wire size：4mm²
② 24BHoods/Housings require 6 modules，wire size：6mm²

<RETURN

3
40A 690V 8kV 3

can be used with frames and all other modular products

Insert	Wire Size (mm²)	Product Code	Part Number	Drawings (mm)
Axial Termination Contact surface: silver-plated 	2.5~8	male 192 200 003 2100 female 192 201 003 2100	male HMK-003.1-M (2.5-8mm²) female HMK-003.1-F (2.5-8mm²)	
	6~10	male 192 200 003 2200 female 192 201 003 2200	male HMK-003.2-M (6-10mm²) female HMK-003.2-F (6-10mm²)	stripping length: 2.5mm²：5mm 4mm²：5mm 6mm²：8mm 10mm²：11mm Torque: 2.5mm²：1.5N·m 4mm²：1.5N·m 6mm²：2N·m 10mm²：2N·m

Tools

Hexagon socket wrench	Product Code	Part Number
	193 005 001 0000	HT-2/100

RETURN>

Technical Information

Standard： IEC 60664-1、 IEC61984
No. of Contact： 2

Insert

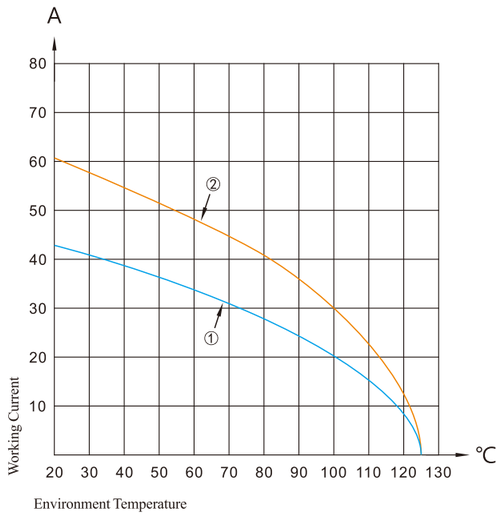
Rated Current	40A （see current load diagram）
Rated Voltage	1000V
Rated Pulse Voltage	8kV
Pollution Degree	3
Insulation resistance	⩾10^{10} Ω
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Mating Cycle	⩾500

Contact

Material	Copper Alloy
Plating	Silver-plated
Contact resistance	⩽1mΩ
Termination	Crimp Termination
Wire Size	1.5-10 mm^2 15-7AWG
stripping Length	1.5mm^2 ：9mm 2.5mm^2 ：9mm 4mm^2 ：9．6mm 6mm^2 ：9．6mm 10mm^2 ：15mm

Current-Carrying Capacity

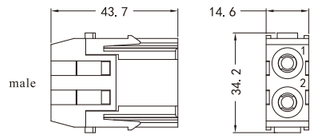
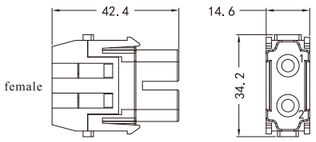
The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2

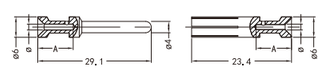


① 24BHoods/Housings require 6 modules，wire size：4mm^2
② 24BHoods/Housings require 6 modules，wire size：6mm^2

2
40A 1000V 8kV 3

can be used with frames and all other modular products

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, 	1.5~10	male 192 200 002 3000	male HMK-002-MC	
		female 192 201 002 3000	female HMK-002-FC	

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated 	191 100 040 0090	YJ4.0-29.1-1.5AG	191 200 040 0090	YK4.0-23.4-1.5AG	
	191 100 040 0100	YJ4.0-29.1-2.5AG	191 200 040 0200	YK4.0-23.4-2.5AG	
	191 100 040 0120	YJ4.0-29.1-4.0AG	191 200 040 0120	YK4.0-23.4-4.0AG	
	191 100 040 0130	YJ4.0-29.1-6.0AG	191 200 040 0130	YK4.0-23.4-6.0AG	
	191 100 040 0140	YJ4.0-29.1-10.0AG	191 200 040 0140	YK4.0-23.4-10.0AG	

Cross Section	AWG	ø	stripping length
1.5mm^2	15	1.75	9mm
2.5mm^2	13	2.25	9mm
4mm^2	11	2.85	9.6mm
6mm^2	9	3. 5	9.6mm
10mm^2	7	4. 5	15mm
stripping Length A=15mm for Cable OD≥5mm stripping Length A=18mm for Cable OD≥6.4mm			

Contact resistance⩽1mΩ

For crimp tool and removal tool, see page P25-01

Technical Information

Standard： IEC 60664-1、IEC61984
No. of Contact：3

Insert

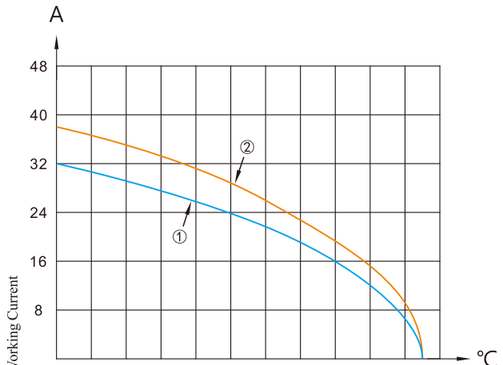
Rated Current	40A (see current load diagram)
Rated Voltage	690V
Rated Pulse Voltage	8kV
Pollution Degree	3
Complies with UL/CSA rated voltage	600V
Complies with UL/CSARated Current	32A
Insulation resistance	⩾10^{10} Ω
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Mating Cycle	⩾500次

Contact

Material	Copper Alloy
Plating	Silver-plated
Contact resistance	⩽1mΩ
Termination	Crimp Termination
Wire Size	1.5-10 mm² 15-7AWG
stripping Length	1.5mm² : 9mm 2.5mm² : 9mm 4mm² : 9．6mm 6mm² : 9．6mm 10mm² : 15mm

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2

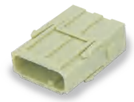
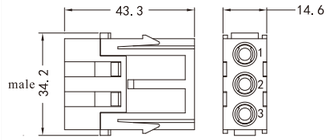
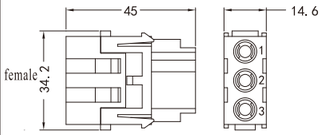


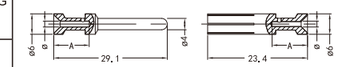
① 24BHoods/Housings require 6 modules，wire size：4mm²
② 24BHoods/Housings require 6 modules，wire size：6mm²

<RETURN

3
40A 690V 8kV 3

can be used with frames and all other modular products

Insert	Wire Size (mm²)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, 	1.5~10	male 192 200 003 3000	male HMK-003-MC	 
		female 192 201 003 3000	female HMK-003-FC	

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated 	191 100 040 0090	YJ4.0-29.1-1.5AG	191 200 040 0090	YK4.0-23.4-1.5AG	 male female
	191 100 040 0100	YJ4.0-29.1-2.5AG	191 200 040 0200	YK4.0-23.4-2.5AG	
	191 100 040 0120	YJ4.0-29.1-4.0AG	191 200 040 0120	YK4.0-23.4-4.0AG	
	191 100 040 0130	YJ4.0-29.1-6.0AG	191 200 040 0130	YK4.0-23.4-6.0AG	
	191 100 040 0140	YJ4.0-29.1-10.0AG	191 200 040 0140	YK4.0-23.4-10.0AG	

Cross Section	AWG	ø	stripping length
1.5mm²	15	1.75	9mm
2.5mm²	13	2.25	9mm
4mm²	11	2.85	9.6mm
6mm²	9	3.5	9.6mm
10mm²	7	4.5	15mm
stripping Length A=15mm for Cable OD≥5mm stripping Length A=18mm for Cable OD≥6.4mm			

Contact resistance⩽1mΩ

For crimp tool and removal tool, see page P25-01

RETURN>

Technical Information

Standard： IEC 60664-1、 IEC61984
No. of Contact： 4

Insert

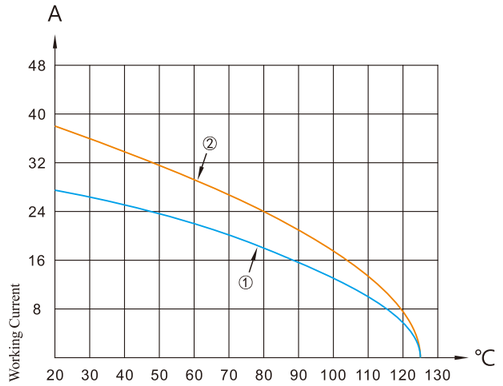
Rated Current	40A (see current load diagram)
Rated Voltage	830V
Rated Pulse Voltage	8kV
Pollution Degree	3
Complies with UL/CSA rated voltage	600V
Insulation resistance	⩾10^{10} Ω
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Mating Cycle	⩾500

Contact

Material	Copper Alloy
Plating	Silver-plated
Contact resistance	⩽1mΩ
Termination	Crimp Termination
Wire Size	1.5-10 mm² 15-7AWG
stripping Length	1.5mm² : 9mm 2.5mm² : 9mm 4mm² : 9. 6mm 6mm² : 9. 6mm 10mm² : 15mm

Current-Carrying Capacity

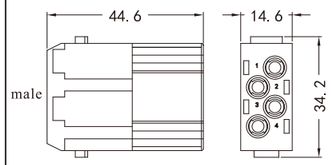
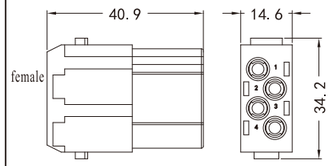
The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2

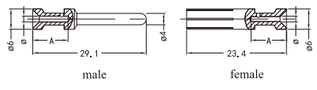


① 24BHoods/Housings require 6 modules， wire size： 4mm²
② 24BHoods/Housings require 6 modules， wire size： 6mm²

4
40A 830V 8kV 3

can be used with frames and all other modular products

Insert	Wire Size (mm²)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, 	1.5~10	male 192 200 004 3000	male HMK-004-MC	
		female 192 201 004 3000	female HMK-004-FC	

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated 	191 100 040 0090	YJ4.0-29.1-1.5AG	191 200 040 0090	YK4.0-23.4-1.5AG	
	191 100 040 0100	YJ4.0-29.1-2.5AG	191 200 040 0200	YK4.0-23.4-2.5AG	
	191 100 040 0120	YJ4.0-29.1-4.0AG	191 200 040 0120	YK4.0-23.4-4.0AG	
	191 100 040 0130	YJ4.0-29.1-6.0AG	191 200 040 0130	YK4.0-23.4-6.0AG	
	191 100 040 0140	YJ4.0-29.1-10.0AG	191 200 040 0140	YK4.0-23.4-10.0AG	

Cross Section	AWG	ø	stripping length
1.5mm²	15	1.75	9mm
2.5mm²	13	2.25	9mm
4mm²	11	2.85	9.6mm
6mm²	9	3. 5	9.6mm
10mm²	7	4. 5	15mm

stripping Length A=15mm for Cable OD≥5mm
stripping Length A=18mm for Cable OD≥6.4mm

Contact resistance⩽1mΩ

For crimp tool and removal tool, see page P25-01

HMK-003/4 Modular Insert-Crimp Termination

Technical Information

Standard：IEC 60664-1、IEC61984
No. of Contact：Power: 3 Signal: 4

Insert

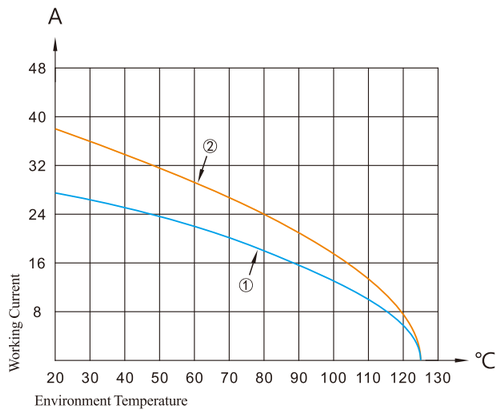
Rated Current	Power：40A (see current load diagram) Signal：10A
Rated Voltage	830V
Rated Pulse Voltage	8kV
Pollution Degree	3
Complies with UL/CSA rated voltage	600V
Insulation resistance	$\geqslant 10^{10}\ \Omega$
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Mating Cycle	⩾500

Contact

Material	Copper Alloy
Plating	Gold-plated, Silver-plated
Contact resistance	Power:: ⩽1mΩ Signal：⩽3mΩ
Termination	Crimp Termination
Wire Size	Power:: 1.5-10 mm² 15-7AWG Signal：0.14-2.5mm² 26-13AWG

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2



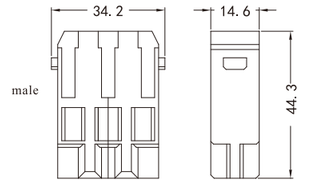
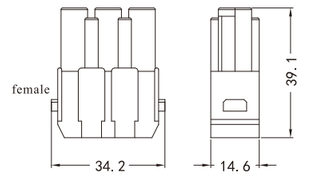
① 24BHoods/Housings require 6 modules，wire size：4mm²
② 24BHoods/Housings require 6 modules，wire size：6mm²

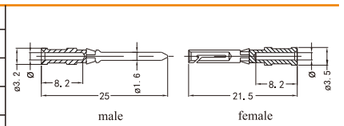
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HMK-003/4 Modular Insert-Crimp Termination

3
40A 830V 8kV 3
+4 signal pin
10A 830V 8kV 3

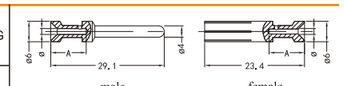
can be used with frames and all other modular products

Insert	Wire Size (mm²)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated 	Power 1.5~10	male 192 200 007 3000	male HMK-003/4-MC	
	Signal 0.14~2.5	female 192 201 007 3000	female HMK-003/4-FC	

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated 	191 100 010 0030	YJ1.6-25-0.37AG	191 200 010 0030	YK1.6-21.5-0.37AG	
	191 100 010 0040	YJ1.6-25-0.5AG	191 200 010 0040	YK1.6-21.5-0.5AG	
	191 100 010 0060	YJ1.6-25-0.75AG	191 200 010 0060	YK1.6-21.5-0.75AG	
	191 100 010 0080	YJ1.6-25-1.0AG	191 200 010 0080	YK1.6-21.5-1.0AG	
	191 100 010 0090	YJ1.6-25-1.5AG	191 200 010 0090	YK1.6-21.5-1.5AG	
	191 100 010 0100	YJ1.6-25-2.5AG	191 200 010 0100	YK1.6-21.5-2.5AG	
gold-plated 	191 110 010 0030	YJ1.6-25-0.37AU	191 210 010 0030	YK1.6-21.5-0.37AU	
	191 110 010 0040	YJ1.6-25-0.5AU	191 210 010 0040	YK1.6-21.5-0.5AU	
	191 110 010 0060	YJ1.6-25-0.75AU	191 210 010 0060	YK1.6-21.5-0.75AU	
	191 110 010 0080	YJ1.6-25-1.0AU	191 210 010 0080	YK1.6-21.5-1.0AU	
	191 110 010 0090	YJ1.6-25-1.5AU	191 210 010 0090	YK1.6-21.5-1.5AU	
	191 110 010 0100	YJ1.6-25-2.5AU	191 210 010 0100	YK1.6-21.5-2.5AU	

wire size		ø	stripping length
0.14-0.37mm²	AWG26-22	0. 9	8mm
0. 5mm²	AWG20	1.1	8mm
0. 75mm²	AWG18	1.3	8mm
1mm²	AWG17	1.45	8mm
1. 5mm²	AWG15	1.75	8mm
2.5mm²	AWG13	2.25	6mm

Contact resistance⩽3mΩ

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated 	191 100 040 0090	YJ4.0-29.1-1.5AG	191 200 040 0090	YK4.0-23.4-1.5AG	
	191 100 040 0100	YJ4.0-29.1-2.5AG	191 200 040 0200	YK4.0-23.4-2.5AG	
	191 100 040 0120	YJ4.0-29.1-4.0AG	191 200 040 0120	YK4.0-23.4-4.0AG	
	191 100 040 0130	YJ4.0-29.1-6.0AG	191 200 040 0130	YK4.0-23.4-6.0AG	
	191 100 040 0140	YJ4.0-29.1-10.0AG	191 200 040 0140	YK4.0-23.4-10.0AG	

Cross Section	AWG	ø	stripping length
1.5mm²	15	1.75	9mm
2.5mm²	13	2.25	9mm
4mm²	11	2.85	9.6mm
6mm²	9	3. 5	9.6mm
10mm²	7	4. 5	15mm

stripping Length A=15mm for Cable OD≥5mm
stripping Length A=18mm for Cable OD≥6.4mm

Contact resistance⩽1mΩ

For crimp tool and removal tool, see page P25-01

RETURN>

10

Technical Information

Standard：IEC 60664-1、IEC61984
No. of Contact：6

Insert

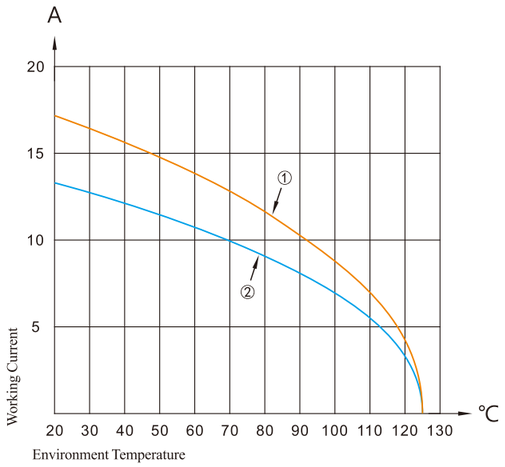
Rated Current	16A (see current load diagram)
Rated Voltage	500V
Rated Pulse Voltage	6kV
Pollution Degree	3
Complies with UL/CSA rated voltage	600V
Insulation resistance	$\geqslant 10^{10}\ \Omega$
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (UI94)	V-0
Mating Cycle	≥500

Contact

Material	Copper Alloy
Plating	Gold-plated, Silver-plated
Contact resistance	≤1mΩ
Termination	Crimp Termination
Wire Size	0.14-4 mm² 26-11AWG
stripping Length	7.5mm

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2



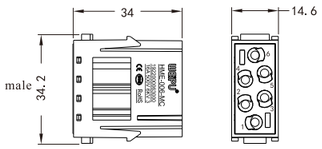
① 24BHoods/Housings require 6 modules，wire size：2.5mm²
② 24BHoods/Housings require 6 modules，wire size：1.5mm²

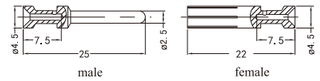
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6

16A 500V 6kV 3

can be used with frames and all other modular products

Insert	Wire Size (mm²)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated	0. 14~4	male 192 200 006 3000	male HME-006-MC	
		female 192 201 006 3000	female HME-006-FC	

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG	
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG	
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG	
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG	
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG	
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG	
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG	
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG	
gold-plated	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU	
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU	
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU	
	191 110 016 0080	YJ2.5-25-1.0AU	191 210 016 0080	YK2.5-22-1.0AU	
	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU	
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU	
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU	
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU	

Marks	wire size (mm²)	
Without Groove	0. 14~0. 37	AWG26~22
Without Groove	0. 5	AWG20
With 1 Groove	0. 75	AWG18
With 1 Groove	1	AWG18
With 2 Groove	1. 5	AWG16
With 3 Groove	2. 5	AWG14
Wide Groove	3	AWG12
Without Groove	4	AWG12
stripping length：7.5mm		

Contact resistance≤1mΩ

For crimp tool and removal tool, see page P25-01

RETURN>

Technical Information

Standard：IEC 60664-1、IEC61984
No. of Contact：8

Insert

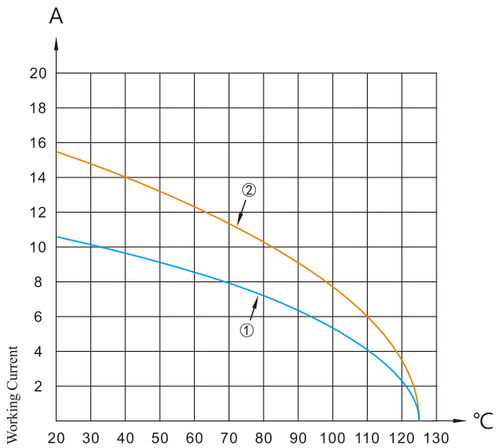
Rated Current	16A (see current load diagram)
Rated Voltage	400V
Rated Pulse Voltage	6kV
Pollution Degree	3
Complies with UL/CSA rated voltage	600V
Insulation resistance	$\geqslant 10^{10}\ \Omega$
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Mating Cycle	⩾500

Contact

Material	Copper Alloy	
Plating	Gold-plated, Silver-plated	
Contact resistance	⩽1mΩ	
Termination	Crimp Termination	
Wire Size	0.14-4 mm²	26-11AWG

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2



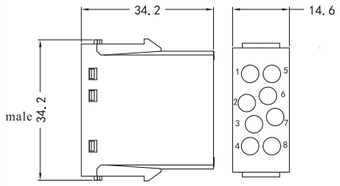
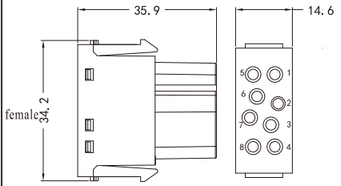
Environment Temperature

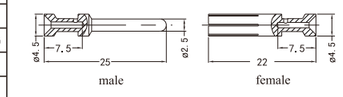
① 24BHoods/Housings require 6 modules，wire size：1.5mm²
② 24BHoods/Housings require 6 modules，wire size：2.5mm²

8

16A 400V 6kV 3

can be used with frames and all other modular products

Insert	Wire Size (mm²)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated	0.14~4	male 192 200 008 3000	male HMEE-008-MC	
		female 192 201 008 3000	female HMEE-008-FC	

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG	
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG	
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG	
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG	
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG	
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG	
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG	
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG	
gold-plated	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU	
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU	
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU	
	191 110 016 0080	YJ2.5-25-1.0AU	191 210 016 0080	YK2.5-22-1.0AU	
	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU	
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU	
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU	
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU	

Marks	wire size (mm²)	
Without Groove	0.14~0.37	AWG26~22
Without Groove	0.5	AWG20
With 1 Groove	0.75	AWG18
With 1 Groove	1	AWG18
With 2 Groove	1.5	AWG16
With 3 Groove	2.5	AWG14
Wide Groove	3	AWG12
Without Groove	4	AWG12
stripping length：7.5mm		

Contact resistance⩽1mΩ

For crimp tool and removal tool, see page P25-01

Technical Information

Standard：IEC 60664-1、IEC61984
No. of Contact：8

Insert

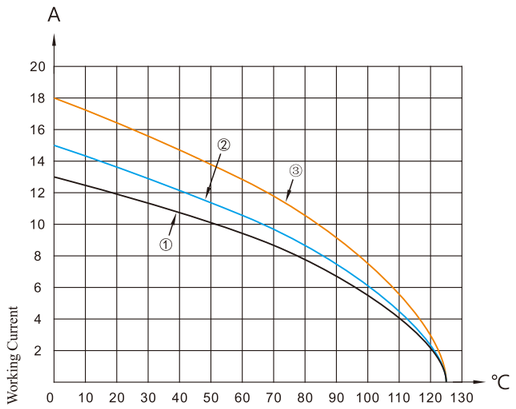
Rated Current	16A (see current load diagram)
Rated Voltage	500V
Rated Pulse Voltage	6kV
Pollution Degree	3
Complies with UL/CSA rated voltage	600V
Insulation resistance	⩾10^{10} Ω
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Mating Cycle	⩾500

Contact

Material	Copper Alloy
Plating	Gold-plated, Silver-plated
Contact resistance	⩽1mΩ
Termination	Crimp Termination
Wire Size	0.14-4 mm² 26-11AWG

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2



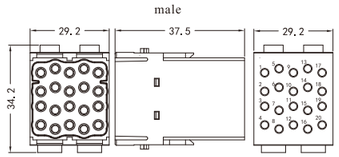
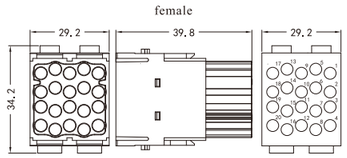
Environment Temperature

① 24BHoods/Housings require 3 modules，wire size：1.5mm²
② 24BHoods/Housings require 3 modules，wire size：2.5mm²
③ 24BHoods/Housings require 3 modules，wire size：4mm²

20

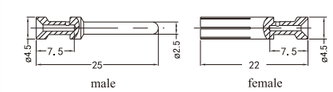
16A 500V 6kV 3

can be used with frames and all other modular products

Insert	Wire Size (mm²)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated 	0. 14~4	male 192 200 020 3000	male H2MEE-020-MC	male 
		female 192 201 020 3000	Mfemale H2EE-020-FC	female 

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number
silver-plated 	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG
gold-plated 	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU
	191 110 016 0080	YJ2.5-25-1.0AU	191 210 016 0080	YK2.5-22-1.0AU
	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU

Drawings (mm)



Marks	wire size (mm²)	
Without Groove	0. 14~0. 37	AWG26~22
Without Groove	0. 5	AWG20
With 1 Groove	0. 75	AWG18
With 1 Groove	1	AWG18
With 2 Groove	1. 5	AWG16
With 3 Groove	2. 5	AWG14
Wide Groove	3	AWG12
Without Groove	4	AWG12
stripping length：7.5mm		

Contact resistance⩽1mΩ

For crimp tool and removal tool, see page P25-01

Technical Information

Standard：IEC 60664-1、IEC61984
No. of Contact：6

Insert

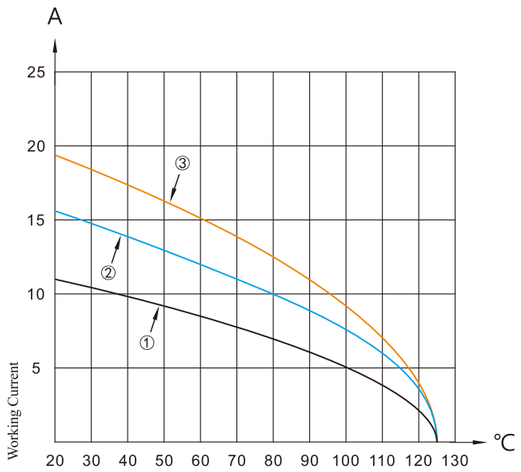
Rated Current	16A (see current load diagram)
Rated Voltage	830V
Rated Pulse Voltage	8kV
Pollution Degree	3
Complies with UL/CSA rated voltage	600V
Insulation resistance	$\geqslant 10^{10}\ \Omega$
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Mating Cycle	≥500

Contact

Material	Copper Alloy
Plating	Gold-plated, Silver-plated
Contact resistance	≤1mΩ
Termination	Crimp Termination
Wire Size	0.14-4 mm² 26-11AWG

Current-Carrying Capacity

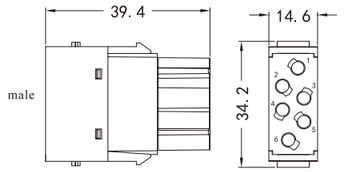
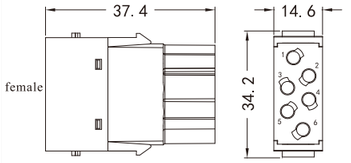
The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2

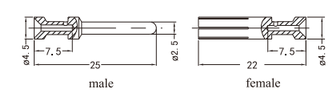


① 24BHoods/Housings require 6 modules，wire size：1.5mm²
② 24BHoods/Housings require 6 modules，wire size：2.5mm²
③ 24BHoods/Housings require 6 modules，wire size：4mm²

6
16A 830V 8kV 3

can be used with frames and all other modular products

Insert	Wire Size (mm²)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated 	0. 14~4	male 192 210 006 3000	male HVME-006-MC	
		female 192 211 006 3000	female HVME-006-FC	

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated 	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG	
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG	
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG	
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG	
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG	
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG	
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG	
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG	
gold-plated 	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU	
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU	
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU	
	191 110 016 0080	YJ2.5-25-1.0AU	191 210 016 0080	YK2.5-22-1.0AU	
	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU	
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU	
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU	
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU	

Marks	wire size (mm²)	
Without Groove	0. 14~0. 37	AWG26~22
Without Groove	0. 5	AWG20
With 1 Groove	0. 75	AWG18
With 1 Groove	1	AWG18
With 2 Groove	1. 5	AWG16
With 3 Groove	2. 5	AWG14
Wide Groove	3	AWG12
Without Groove	4	AWG12
stripping length : 7.5mm		

Contact resistance≤1mΩ

For crimp tool and removal tool, see page P25-01

HMD-012 Modular Insert-Crimp Termination

Technical Information

Standard：IEC 60664-1、IEC61984
No. of Contact：12

Insert

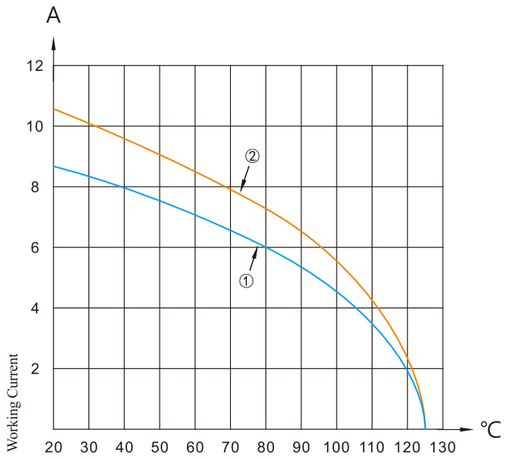
Rated Current	10A (see current load diagram)
Rated Voltage	250V
Rated Pulse Voltage	4kV
Pollution Degree	3
Complies with UL/CSA rated voltage	600V
Insulation resistance	$\geqslant 10^{10}\ \Omega$
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Mating Cycle	≥500

Contact

Material	Copper Alloy
Plating	Gold-plated, Silver-plated
Contact resistance	≤3mΩ
Termination	Crimp Termination
Wire Size	0.14-2.5 mm^2 26-13AWG

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2



① 24BHoods/Housings require 6 modules，wire size：1.0mm^2
② 24BHoods/Housings require 6 modules，wire size：1.5mm^2

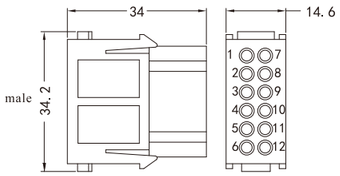
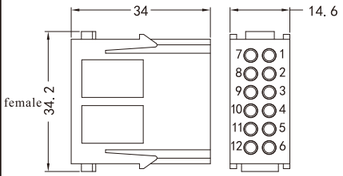
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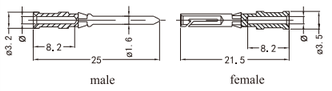
HMD-012 Modular Insert-Crimp Termination

12

10A 250V 4kV 3

can be used with frames and all other modular products

Insert	Wire Size (mm^2)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated	0.14~2.5	male 192 200 012 3000	male HMD-012-MC	
		female 192 201 012 3000	female HMD-012-FC	

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated	191 100 010 0030	YJ1.6-25-0.37AG	191 200 010 0030	YK1.6-21.5-0.37AG	
	191 100 010 0040	YJ1.6-25-0.5AG	191 200 010 0040	YK1.6-21.5-0.5AG	
	191 100 010 0060	YJ1.6-25-0.75AG	191 200 010 0060	YK1.6-21.5-0.75AG	
	191 100 010 0080	YJ1.6-25-1.0AG	191 200 010 0080	YK1.6-21.5-1.0AG	
	191 100 010 0090	YJ1.6-25-1.5AG	191 200 010 0090	YK1.6-21.5-1.5AG	
	191 100 010 0100	YJ1.6-25-2.5AG	191 200 010 0100	YK1.6-21.5-2.5AG	
gold-plated	191 110 010 0030	YJ1.6-25-0.37AU	191 210 010 0030	YK1.6-21.5-0.37AU	
	191 110 010 0040	YJ1.6-25-0.5AU	191 210 010 0040	YK1.6-21.5-0.5AU	
	191 110 010 0060	YJ1.6-25-0.75AU	191 210 010 0060	YK1.6-21.5-0.75AU	
	191 110 010 0080	YJ1.6-25-1.0AU	191 210 010 0080	YK1.6-21.5-1.0AU	
	191 110 010 0090	YJ1.6-25-1.5AU	191 210 010 0090	YK1.6-21.5-1.5AU	
	191 110 010 0100	YJ1.6-25-2.5AU	191 210 010 0100	YK1.6-21.5-2.5AU	

wire size		ø	stripping length
0.14-0.37mm^2	AWG26-22	0.9	8mm
0.5mm^2	AWG20	1.1	8mm
0.75mm^2	AWG18	1.3	8mm
1mm^2	AWG17	1.45	8mm
1.5mm^2	AWG15	1.75	8mm
2.5mm^2	AWG13	2.25	6mm

Contact resistance≤3mΩ

For crimp tool and removal tool, see page P25-01

RETURN>

Technical Information

Standard：IEC 60664-1、IEC61984
No. of Contact：17

Insert

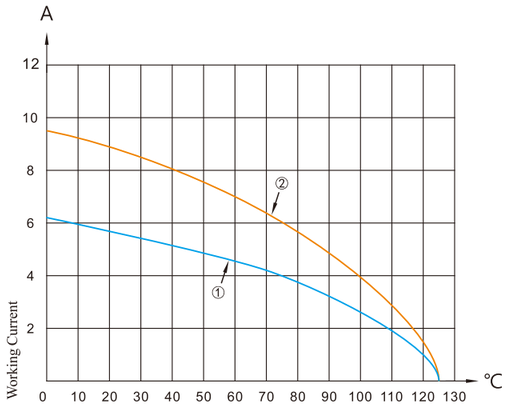
Rated Current	10A (see current load diagram)
Rated Voltage	160V
Rated Pulse Voltage	2.5kV
Pollution Degree	3
Complies with UL/CSA rated voltage	250V
Insulation resistance	⩾10^{10} Ω
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Mating Cycle	⩾500

Contact

Material	Copper Alloy
Plating	Gold-plated, Silver-plated
Contact resistance	⩽3mΩ
Termination	Crimp Termination
Wire Size	0.14-2.5 mm² 26-13AWG

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2

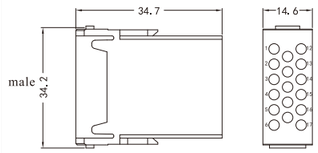
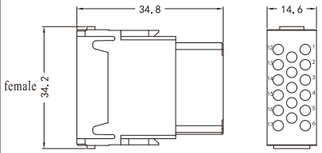


① 24BHoods/Housings require 6 modules，wire size：1.0mm²
② 24BHoods/Housings require 6 modules，wire size：1.5mm²

17

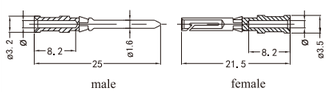
10A 160V 2.5kV 3

can be used with frames and all other modular products

Insert	Wire Size (mm²)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated	0.14~2.5	male 192 200 017 3000	male HMDD-017-MC	
		female 192 201 017 3000	female HMDD-017-FC	

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number
silver-plated	191 100 010 0030	YJ1.6-25-0.37AG	191 200 010 0030	YK1.6-21.5-0.37AG
	191 100 010 0040	YJ1.6-25-0.5AG	191 200 010 0040	YK1.6-21.5-0.5AG
	191 100 010 0060	YJ1.6-25-0.75AG	191 200 010 0060	YK1.6-21.5-0.75AG
	191 100 010 0080	YJ1.6-25-1.0AG	191 200 010 0080	YK1.6-21.5-1.0AG
	191 100 010 0090	YJ1.6-25-1.5AG	191 200 010 0090	YK1.6-21.5-1.5AG
	191 100 010 0100	YJ1.6-25-2.5AG	191 200 010 0100	YK1.6-21.5-2.5AG
gold-plated	191 110 010 0030	YJ1.6-25-0.37AU	191 210 010 0030	YK1.6-21.5-0.37AU
	191 110 010 0040	YJ1.6-25-0.5AU	191 210 010 0040	YK1.6-21.5-0.5AU
	191 110 010 0060	YJ1.6-25-0.75AU	191 210 010 0060	YK1.6-21.5-0.75AU
	191 110 010 0080	YJ1.6-25-1.0AU	191 210 010 0080	YK1.6-21.5-1.0AU
	191 110 010 0090	YJ1.6-25-1.5AU	191 210 010 0090	YK1.6-21.5-1.5AU
	191 110 010 0100	YJ1.6-25-2.5AU	191 210 010 0100	YK1.6-21.5-2.5AU

Drawings (mm)



wire size		ø	stripping length
0.14-0.37mm²	AWG26-22	0.9	8mm
0.5mm²	AWG20	1.1	8mm
0.75mm²	AWG18	1.3	8mm
1mm²	AWG17	1.45	8mm
1.5mm²	AWG15	1.75	8mm
2.5mm²	AWG13	2.25	6mm

Contact resistance⩽3mΩ

For crimp tool and removal tool, see page P25-01

Technical Information

Standard：IEC 60664-1、IEC61984
No. of Contact：25

Insert

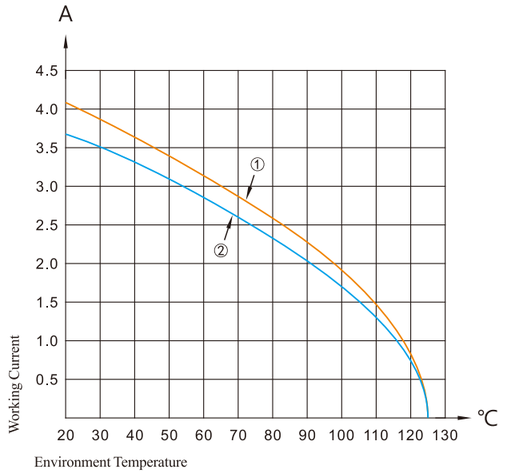
Rated Current	4A (see current load diagram)
Rated Voltage	50V
Rated Pulse Voltage	0.8kV
Pollution Degree	3
Complies with UL/CSA rated voltage	30V
Insulation resistance	⩾10^{10} Ω
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Mating Cycle	⩾500

Contact

Material	Copper Alloy
Plating	Gold-plated, Silver-plated
Contact resistance	⩽10mΩ
Termination	Crimp Termination
Wire Size	0.09-0.82 mm² 28-18AWG

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2



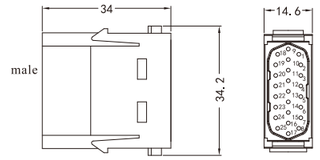
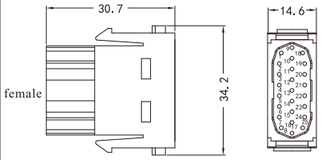
① 24BHoods/Housings require 6 modules，wire size：0.5mm²(Turned Pin)
② 24BHoods/Housings require 6 modules，wire size：0.5mm²(Stamping Pin)

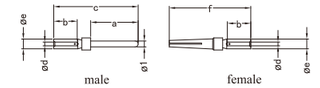
<RETURN

25

4A 50V 0.8kV 3

can be used with frames and all other modular products

Insert	Wire Size (mm²)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated 	0.09~0.82	male 192 200 025 3000	male HMDS-025-MC	
		female 192 201 025 3000	female HMDS-025-FC	

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated 	191 100 005 0010	YJ1.0-14.8-0.25AG	191 200 005 0010	YK1.0-14.4-0.25AG	
	191 100 005 0020	YJ1.0-14.8-0.33AG	191 200 005 0020	YK1.0-14.4-0.33AG	
	191 100 005 0050	YJ1.0-14.8-0.52AG	191 200 005 0050	YK1.0-14.4-0.52AG	
	191 100 005 0070	YJ1.0-14.0-0.82AG	191 200 005 0070	YK1.0-13.6-0.82AG	
gold-plated 	191 110 005 0010	YJ1.0-14.8-0.25AU	191 210 005 0010	YK1.0-14.4-0.25AU	
	191 110 005 0020	YJ1.0-14.8-0.33AU	191 210 005 0020	YK1.0-14.4-0.33AU	
	191 110 005 0050	YJ1.0-14.8-0.52AU	191 210 005 0050	YK1.0-14.4-0.52AU	
	191 110 005 0070	YJ1.0-14.0-0.82AU	191 210 005 0070	YK1.0-13.6-0.82AU	

a	b	c	d	e	f
8.1	4.0	14.8	0.64	1.66	14.4
8.1	4.0	14.8	0.90	1.66	14.4
8.1	4.0	14.8	1.12	1.66	14.4
8.23	4.2	14.0	1.35	1.75	13.6

wire size		stripping length
0.09-0.25mm²	AWG28-23	5mm
0.13-0.33mm²	AWG26-22	5mm
0.33-0.52mm²	AWG22-20	5mm
0.52-0.82mm²	AWG20-18	5mm

Contact resistance⩽1mΩ

For crimp tool and removal tool, see page P25-01

RETURN>

HM-USB Modular Insert

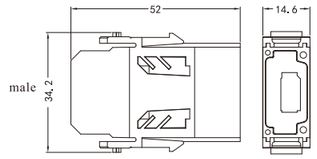
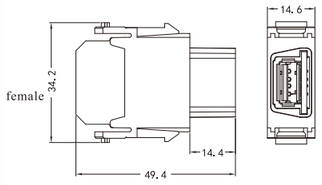
Technical Information

Standard：IEC 60664-1、IEC61984
No. of Contact：4

Insert

Rated Current	1A (see current load diagram)	Insulation resistance	⩾10^{10} Ω
Rated Voltage	50V	Material	Polycarbonate
Rated Pulse Voltage	0.8kV	Working Temperature	-40°C~85°C
Pollution Degree	3	Flammability Rating (Ul94)	V-0
Complies with UL/CSA rated voltage	30V	Mating Cycle	⩾500

can be used with frames and all other modular products

Insert	Product Code	Part Number	Drawings (mm)
USB 3.0			
	male 192 210 000 0000	male HM-USB-M	
	female 192 211 000 0000	female HM-USB-F	

<RETURN

HM-RJ45 Modular Insert

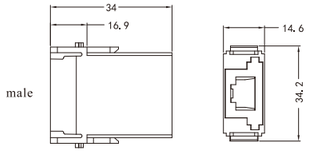
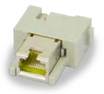
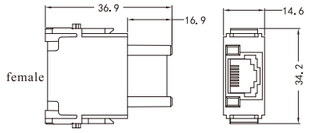
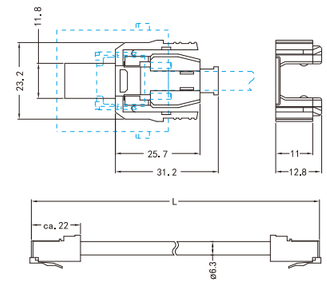
Technical Information

Standard：IEC 60664-1、IEC61984
No. of Contact：8

Insert

Rated Current	1A (see current load diagram)	Insulation resistance	⩾10^{10} Ω
Rated Voltage	50V	Material	Polycarbonate
Rated Pulse Voltage	0.8kV	Working Temperature	-40°C~85°C
Pollution Degree	3	Flammability Rating (Ul94)	V-0
Complies with UL/CSA rated voltage	30V	Mating Cycle	⩾500
Transmission: Class E/cat 6 can reach up to 500MHz, based on ISO/IEC 24702,ISO/IEC 11801		Transmission Rate ： 10/100/1000 Mbit/s	

can be used with frames and all other modular products

Insert	Product Code	Part Number	Drawings (mm)
RJ45			
	male 192 220 000 0000	male HM-RJ45-M	
	female 192 231 000 0000	female HM-RJ45-F	
Adapter			
	192 230 000 0000	HM-RJ45-APT/2	

RETURN>

HMP-002 Pneumatic module insert

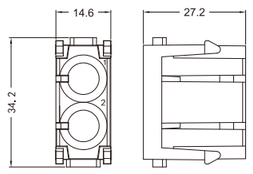
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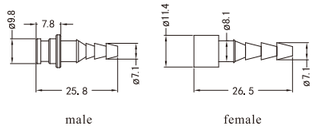
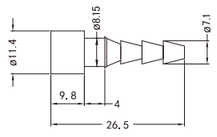
Standard：IEC 60664-1、IEC61984
No. of Contact：2

Insert

Material	Polycarbonate	Cable OD for hose：6mm / 1/4"	
Working Temperature	-40°C~80°C	working pressure：maximum 8bar/116psi	
Flammability Rating (Ul94)	V-0	Mating Cycle：⩾500	
Contact Material: POM	Colour: Black	Sealing ring material: fluorine rubber Lock valve material: polypropylene	

can be used with frames and all other modular products

Pneumatic Module	Product Code	Part Number	Drawings (mm)
	192 200 002 0000	HMP-002	

Pin	Inner Diameter	Product Code	Part Number	Drawings (mm)
	6.0	without lock male 191 123 000 5130	PCM-6.0	
	6.0	without lock female 191 223 000 5130	PCF-6.0	
	6.0	with lock female 191 223 000 6130	PCFS-6.0	

HMP-003 Pneumatic module insert

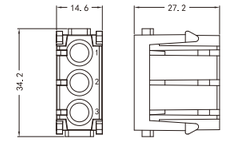
Technical Information

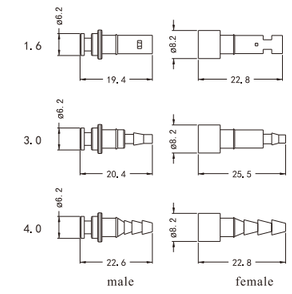
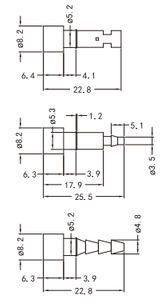
Standard：IEC 60664-1、IEC61984
No. of Contact：3

Insert

Material	Polycarbonate	Cable OD for hose：6mm / 1/4"	
Working Temperature	-40°C~85°C	working pressure：maximum 8bar/116psi	
Flammability Rating (Ul94)	V-0	Mating Cycle：⩾500	
Contact Material: POM	Colour: Black	Sealing ring material: fluorine rubber	

can be used with frames and all other modular products

Pneumatic Module	Product Code	Part Number	Drawings (mm)
	192 200 003 0000	HMP-003	

Pin	Inner Diameter	Product Code	Part Number	Drawings (mm)
	1.6	without lock male 191 123 000 5230	PCM-1.6	
	3.0	without lock male 191 123 000 5110	PCM-3.0	
	4.0	without lock male 191 123 000 5120	PCM-4.0	
	1.6	without lock female 191 223 000 5230	PCF-1. 6	
	3.0	without lock female 191 223 000 5110	PCF-3.0	
	4.0	without lock female 191 223 000 5120	PCF-4.0	
	1.6	with lock female 191 223 000 6230	PCFS-1. 6	
	3.0	with lock female 191 223 000 6110	PCFS-3.0	
	4.0	with lock female 191 223 000 6120	PCFS-4.0	

Technical Information

Standard：IEC 60664-1、IEC61984
No. of Contact： 5+PE

Insert

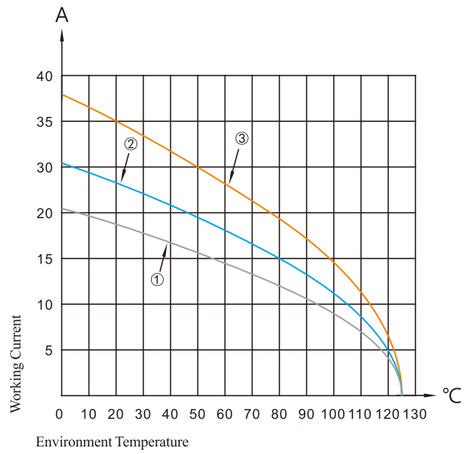
Rated Current	16A (see current load diagram)
Rated Voltage	—Pole-to-ground rated voltage：230V --Pole-to-pole rated voltage：400V
Rated Pulse Voltage	4kV
Pollution Degree	3
Insulation resistance	⩾10^{10} Ω
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Complies with UL/CSA rated voltage	600V
Mating Cycle	⩾500

Contact

Material	Copper
Plating	Gold-plated, Silver-plated
Contact resistance	⩽1mΩ
Termination	Crimp Termination
Wire Size	0.14-4mm² 26-12AWG
Termination	Ground screw termination
Wire Size	2. 5mm² 13AWG

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2

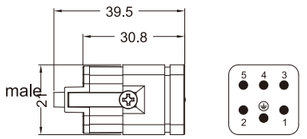
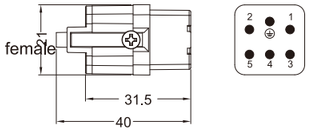


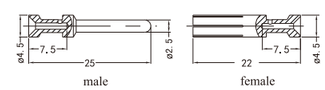
① wire size：1.0mm²
② wire size：1.5mm²
③ wire size：2.5mm²

<RETURN

5+⏚
16A 230/400V 4kV

Use with 3A hoods/housings, refer to P15-02—P15-05

Insert	Wire Size (mm²)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated	0. 14~4	male 190 070 005 3000	male HQ-005/0-MC	
		female 190 071 005 3000	female HQ-005/0-FC	

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG	
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG	
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG	
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG	
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG	
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG	
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG	
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG	
gold-plated	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU	
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU	
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU	
	191 110 016 0080	YJ2.5-25-1.0AU	191 210 016 0080	YK2.5-22-1.0AU	
	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU	
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU	
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU	
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU	

Marks	wire size (mm²)	
Without Groove	0. 14~0. 37	AWG26~22
Without Groove	0. 5	AWG20
With 1 Groove	0. 75	AWG18
With 1 Groove	1	AWG18
With 2 Groove	1. 5	AWG16
With 3 Groove	2. 5	AWG14
Wide Groove	3	AWG12
Without Groove	4	AWG12
stripping length：7.5mm		

Contact resistance⩽1mΩ

For crimp tool and removal tool, see page P25-01 Coding elements see pages P14-01 to P14-02

RETURN>

11

Technical Information

Standard：IEC 60664-1、IEC61984
No. of Contact： 7+PE

Insert

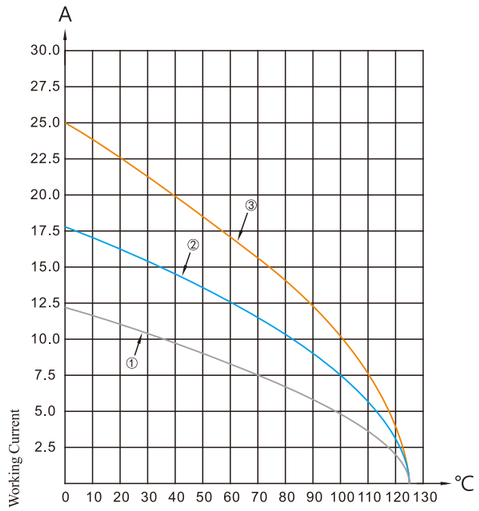
Rated Current	10A (see current load diagram)
Rated Voltage	400V
Rated Pulse Voltage	6kV
Pollution Degree	3
Insulation resistance	⩾10^{10} Ω
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Complies with UL/CSA rated voltage	600V
Mating Cycle	⩾500

Contact

Material	Copper
Plating	Gold-plated, Silver-plated
Contact resistance	⩽3mΩ
Termination	Crimp Termination
Wire Size	0.14-2.5mm² 26-13AWG
Termination	Ground screw termination
Wire Size	2.5mm² 13AWG

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2



Environment Temperature

① wire size：0.75mm²
② wire size：1.5mm²
③ wire size：2.5mm²

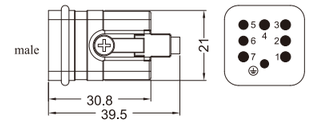
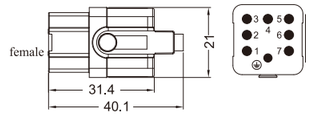
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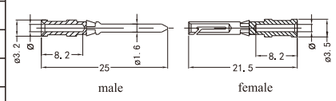
HQ-007/0 Series-Compact Insert

7+⏚

10A 400V 6kV 3

Use with 3A hoods/housings, refer to P15-02—P15-05

Insert	Wire Size (mm²)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated 	0. 14~2. 5	male 190 070 007 3000	male HQ-007/0-MC	
		female 190 071 007 3000	female HQ-007/0-FC	

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number	Drawings (mm)
silver-plated 	191 100 010 0030	YJ1.6-25-0.37AG	191 200 010 0030	YK1.6-21.5-0.37AG	
	191 100 010 0040	YJ1.6-25-0.5AG	191 200 010 0040	YK1.6-21.5-0.5AG	
	191 100 010 0060	YJ1.6-25-0.75AG	191 200 010 0060	YK1.6-21.5-0.75AG	
	191 100 010 0080	YJ1.6-25-1.5AG	191 200 010 0080	YK1.6-21.5-1.0AG	
	191 100 010 0090	YJ1.6-25-1.5AG	191 200 010 0090	YK1.6-21.5-1.5AG	
	191 100 010 0100	YJ1.6-25-2.5AG	191 200 010 0100	YK1.6-21.5-2.5AG	
gold-plated 	191 110 010 0030	YJ1.6-25-0.37AU	191 210 010 0030	YK1.6-21.5-0.37AU	
	191 110 010 0040	YJ1.6-25-0.5AU	191 210 010 0040	YK1.6-21.5-0.5AU	
	191 110 010 0060	YJ1.6-25-0.75AU	191 210 010 0060	YK1.6-21.5-0.75AU	
	191 110 010 0080	YJ1.6-25-1.0AU	191 210 010 0080	YK1.6-21.5-1.0AU	
	191 110 010 0090	YJ1.6-25-1.5AU	191 210 010 0090	YK1.6-21.5-1.5AU	
	191 110 010 0100	YJ1.6-25-2.5AU	191 210 010 0100	YK1.6-21.5-2.5AU	

wire size		ø	stripping length
0. 14~0. 37mm²	AWG26~22	0. 9	8mm
0. 5mm²	AWG20	1.1	8mm
0. 75mm²	AWG18	1.3	8mm
1mm²	AWG17	1.45	8mm
1. 5mm²	AWG15	1.75	8mm
2. 5mm²	AWG13	2.25	6mm

Contact resistance⩽3mΩ

For crimp tool and removal tool, see page P25-01 Coding elements see pages P14-01 to P14-02

RETURN>

11

Technical Information

Standard：IEC 60664-1、IEC61984
No. of Contact： 12+PE

Insert

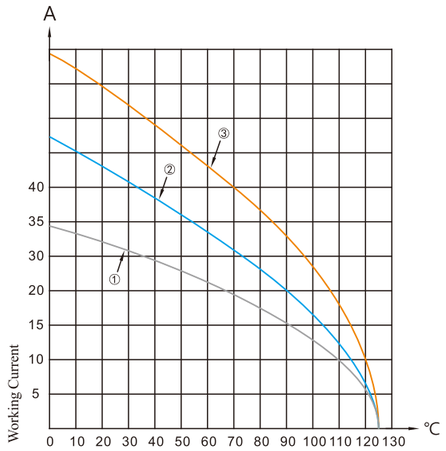
Rated Current	10A (see current load diagram)
Rated Voltage	400V
Rated Pulse Voltage	6kV
Pollution Degree	3 Pollution level 2: the parameters are 10A 400/690V 6kV
Insulation resistance	⩾10^{10} Ω
Material	Polycarbonate
Working Temperature	-40°C~125°C
Flammability Rating (Ul94)	V-0
Complies with UL/CSA rated voltage	600V
Mating Cycle	⩾500

Contact

Material	Copper
Plating	Gold-plated, Silver-plated
Contact resistance	⩽3mΩ
Termination	Crimp Termination
Wire Size	0.14-2.5mm² 26-13AWG
Termination	Ground screw termination
Wire Size	0.5-2. 5mm² 20-13AWG

Current-Carrying Capacity

The current carrying capacity is limited by the thermal properties of the terminal materials and the insulation materials. Test and control procedures are in accordance with IEC 60512-5-2



Environment Temperature

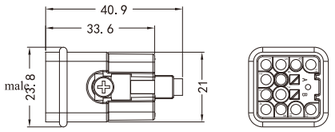
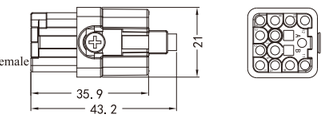
① wire size：0.75mm²
② wire size：1.5mm²
③ wire size：2.5mm²

<RETURN

HQ-012/0 Series-Compact Insert

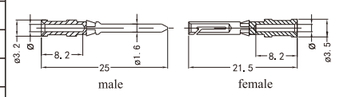
12+⏚
10A 400V 6kV 3

Use with 3A hoods/housings, refer to P15-02—P15-05

Insert	Wire Size (mm²)	Product Code	Part Number	Drawings (mm)
Crimp Termination Contact surface: silver-plated, gold-plated	0. 14~2. 5	male 190 070 012 3000	male HQ-012/0-MC	
		female 190 071 012 3000	female HQ-012/0-FC	

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number
silver-plated	191 100 010 0030	YJ1.6-25-0.37AG	191 200 010 0030	YK1.6-21.5-0.37AG
	191 100 010 0040	YJ1.6-25-0.5AG	191 200 010 0040	YK1.6-21.5-0.5AG
	191 100 010 0060	YJ1.6-25-0.75AG	191 200 010 0060	YK1.6-21.5-0.75AG
	191 100 010 0080	YJ1.6-25-1.0AG	191 200 010 0080	YK1.6-21.5-1.0AG
	191 100 010 0090	YJ1.6-25-1.5AG	191 200 010 0090	YK1.6-21.5-1.5AG
	191 100 010 0100	YJ1.6-25-2.5AG	191 200 010 0100	YK1.6-21.5-2.5AG
gold-plated	191 110 010 0030	YJ1.6-25-0.37AU	191 210 010 0030	YK1.6-21.5-0.37AU
	191 110 010 0040	YJ1.6-25-0.5AU	191 210 010 0040	YK1.6-21.5-0.5AU
	191 110 010 0060	YJ1.6-25-0.75AU	191 210 010 0060	YK1.6-21.5-0.75AU
	191 110 010 0080	YJ1.6-25-1.0AU	191 210 010 0080	YK1.6-21.5-1.0AU
	191 110 010 0090	YJ1.6-25-1.5AU	191 210 010 0090	YK1.6-21.5-1.5AU
	191 110 010 0100	YJ1.6-25-2.5AU	191 210 010 0100	YK1.6-21.5-2.5AU

Drawings (mm)



wire size		ø	stripping length
0. 14-0. 37mm²	AWG26-22	0. 9	8mm
0. 5mm²	AWG20	1.1	8mm
0. 75mm²	AWG18	1.3	8mm
1mm²	AWG17	1.45	8mm
1. 5mm²	AWG15	1.75	8mm
2. 5mm²	AWG13	2.25	6mm

Contact resistance⩽3mΩ

For crimp tool and removal tool, see page P25-01 Coding elements see pages P14-01 to P14-02

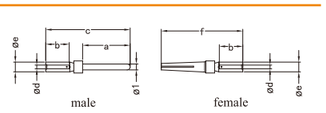
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Crimp Contact

5A crimp contacts for HM inserts

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number
silver-plated	191 100 005 0010	YJ1.0-14.8-0.25AG	191 200 005 0010	YK1.0-14.4-0.25AG
	191 100 005 0020	YJ1.0-14.8-0.33AG	191 200 005 0020	YK1.0-14.4-0.33AG
	191 100 005 0050	YJ1.0-14.8-0.52AG	191 200 005 0050	YK1.0-14.4-0.52AG
	191 100 005 0070	YJ1.0-14.0-0.82AG	191 200 005 0070	YK1.0-13.6-0.82AG
gold-plated	191 110 005 0010	YJ1.0-14.8-0.25AU	191 210 005 0010	YK1.0-14.4-0.25AU
	191 110 005 0020	YJ1.0-14.8-0.33AU	191 210 005 0020	YK1.0-14.4-0.33AU
	191 110 005 0050	YJ1.0-14.8-0.52AU	191 210 005 0050	YK1.0-14.4-0.52AU
	191 110 005 0070	YJ1.0-14.0-0.82AU	191 210 005 0070	YK1.0-13.6-0.82AU

Drawings (mm)



a	b	c	d	e	f
8.1	4.0	14.8	0.64	1.66	14.4
8.1	4.0	14.8	0.90	1.66	14.4
8.1	4.0	14.8	1.12	1.66	14.4
8.23	4.2	14.0	1.35	1.75	13.6

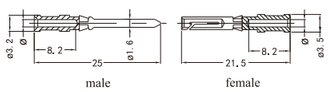
wire size		stripping length
0.09-0.25mm²	AWG28-23	5mm
0.13-0.33mm²	AWG26-22	5mm
0.33-0.52mm²	AWG22-20	5mm
0.52-0.82mm²	AWG20-18	5mm

Contact resistance≤10mΩ

10A crimp contacts for HD、HDD、HM、HK、HQ inserts

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number
silver-plated	191 100 010 0030	YJ1.6-25-0.37AG	191 200 010 0030	YK1.6-21.5-0.37AG
	191 100 010 0040	YJ1.6-25-0.5AG	191 200 010 0040	YK1.6-21.5-0.5AG
	191 100 010 0060	YJ1.6-25-0.75AG	191 200 010 0060	YK1.6-21.5-0.75AG
	191 100 010 0080	YJ1.6-25-1.0AG	191 200 010 0080	YK1.6-21.5-1.0AG
	191 100 010 0090	YJ1.6-25-1.5AG	191 200 010 0090	YK1.6-21.5-1.5AG
	191 100 010 0100	YJ1.6-25-2.5AG	191 200 010 0100	YK1.6-21.5-2.5AG
gold-plated	191 110 010 0030	YJ1.6-25-0.37AU	191 210 010 0030	YK1.6-21.5-0.37AU
	191 110 010 0040	YJ1.6-25-0.5AU	191 210 010 0040	YK1.6-21.5-0.5AU
	191 110 010 0060	YJ1.6-25-0.75AU	191 210 010 0060	YK1.6-21.5-0.75AU
	191 110 010 0080	YJ1.6-25-1.0AU	191 210 010 0080	YK1.6-21.5-1.0AU
	191 110 010 0090	YJ1.6-25-1.5AU	191 210 010 0090	YK1.6-21.5-1.5AU
	191 110 010 0100	YJ1.6-25-2.5AU	191 210 010 0100	YK1.6-21.5-2.5AU

Drawings (mm)



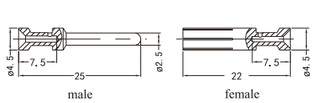
wire size		ø	stripping length
0.14-0.37mm²	AWG26-22	0.9	8mm
0.5mm²	AWG20	1.1	8mm
0.75mm²	AWG18	1.3	8mm
1mm²	AWG17	1.45	8mm
1.5mm²	AWG15	1.75	8mm
2.5mm²	AWG13	2.25	6mm

Contact resistance≤3mΩ

16A crimp contacts for HEE、HM、HK inserts

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number
silver-plated	191 100 016 0030	YJ2.5-25-0.37AG	191 200 016 0030	YK2.5-22-0.37AG
	191 100 016 0040	YJ2.5-25-0.5AG	191 200 016 0040	YK2.5-22-0.5AG
	191 100 016 0060	YJ2.5-25-0.75AG	191 200 016 0060	YK2.5-22-0.75AG
	191 100 016 0080	YJ2.5-25-1.0AG	191 200 016 0080	YK2.5-22-1.0AG
	191 100 016 0090	YJ2.5-25-1.5AG	191 200 016 0090	YK2.5-22-1.5AG
	191 100 016 0100	YJ2.5-25-2.5AG	191 200 016 0100	YK2.5-22-2.5AG
	191 100 016 0110	YJ2.5-25-3.0AG	191 200 016 0110	YK2.5-22-3.0AG
	191 100 016 0120	YJ2.5-25-4.0AG	191 200 016 0120	YK2.5-22-4.0AG
gold-plated	191 110 016 0030	YJ2.5-25-0.37AU	191 210 016 0030	YK2.5-22-0.37AU
	191 110 016 0040	YJ2.5-25-0.5AU	191 210 016 0040	YK2.5-22-0.5AU
	191 110 016 0060	YJ2.5-25-0.75AU	191 210 016 0060	YK2.5-22-0.75AU
	191 110 016 0080	YJ2.5-25-1.0AU	191 210 016 0080	YK2.5-22-1.0AU
	191 110 016 0090	YJ2.5-25-1.5AU	191 210 016 0090	YK2.5-22-1.5AU
	191 110 016 0100	YJ2.5-25-2.5AU	191 210 016 0100	YK2.5-22-2.5AU
	191 110 016 0110	YJ2.5-25-3.0AU	191 210 016 0110	YK2.5-22-3.0AU
	191 110 016 0120	YJ2.5-25-4.0AU	191 210 016 0120	YK2.5-22-4.0AU

Drawings (mm)



Marks	wire size (mm²)	
Without Groove	0.14~0.37	AWG26~22
Without Groove	0.5	AWG20
With 1 Groove	0.75	AWG18
With 1 Groove	1	AWG18
With 2 Groove	1.5	AWG16
With 3 Groove	2.5	AWG14
Wide Groove	3	AWG12
Without Groove	4	AWG12
stripping length : 7.5mm		

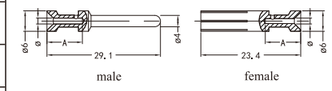
Contact resistance≤1mΩ

Crimp Contact

40A crimp contacts for HM、HK inserts

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number
silver-plated	191 100 040 0090	YJ4.0-29.1-1.5AG	191 200 040 0090	YK4.0-23.4-1.5AG
	191 100 040 0100	YJ4.0-29.1-2.5AG	191 200 040 0200	YK4.0-23.4-2.5AG
	191 100 040 0120	YJ4.0-29.1-4.0AG	191 200 040 0120	YK4.0-23.4-4.0AG
	191 100 040 0130	YJ4.0-29.1-6.0AG	191 200 040 0130	YK4.0-23.4-6.0AG
	191 100 040 0140	YJ4.0-29.1-10.0AG	191 200 040 0140	YK4.0-23.4-10.0AG
gold-plated	191 110 040 0090	YJ4.0-29.1-1.5AU	191 210 040 0090	YK4.0-23.4-1.5AU
	191 110 040 0100	YJ4.0-29.1-2.5AU	191 210 040 0100	YK4.0-23.4-2.5AU
	191 110 040 0120	YJ4.0-29.1-4.0AU	191 210 040 0120	YK4.0-23.4-4.0AU
	191 110 040 0130	YJ4.0-29.1-6.0AU	191 210 040 0130	YK4.0-23.4-6.0AU
	191 110 040 0140	YJ4.0-29.1-10.0AU	191 210 040 0140	YK4.0-23.4-10.0AU

Drawings (mm)



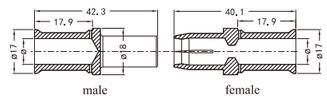
Cross Section	AWG	ø	stripping length
1.5mm²	15	1.75	9mm
2.5mm²	13	2.25	9mm
4mm²	11	2.85	9.6mm
6mm²	9	3.5	9.6mm
10mm²	7	4.5	15mm
stripping length A=15mm for Cable OD≥5mm stripping length A=18mm for Cable OD≥6.4mm			

Contact resistance≤1mΩ

200A crimp contacts for HM inserts

Crimp Contact	male Product Code	male Part Number	female Product Code	female Part Number
silver-plated	191 100 200 0160	YJ9.5-42.3-25AG	191 200 200 0160	YK9.5-40.1-25AG
	191 100 200 0170	YJ9.5-42.3-35AG	191 200 200 0170	YK9.5-40.1-35AG
	191 100 200 0180	YJ9.5-42.3-50AG	191 200 200 0180	YK9.5-40.1-50AG
	191 100 200 0190	YJ9.5-42.3-70AG	191 200 200 0190	YK9.5-40.1-70AG

Drawings (mm)

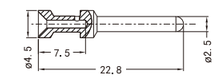


Cross Section	ø	Glass Fiber Length
25mm²	7	17.9mm
35mm²	8.2	17.9mm
50mm²	10	17.9mm
70mm²	11.5	17.9mm
stranded wires comply with IEC 60228-5		

Contact resistance≤0.3mΩ

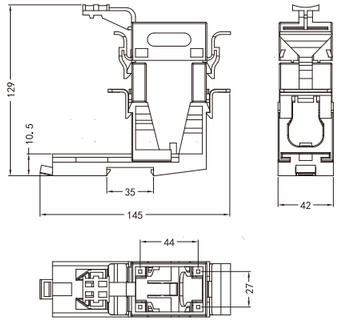
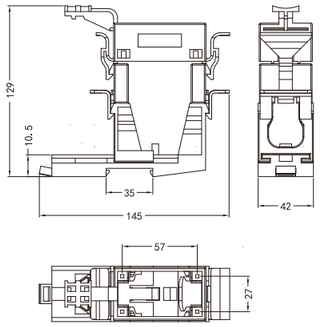
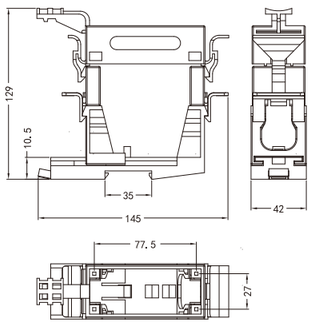
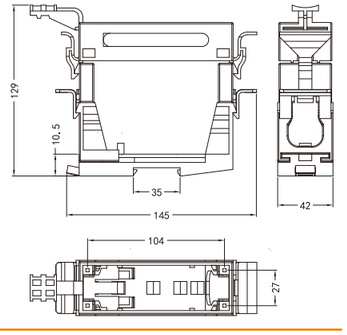
Safety delay pin

Crimp Contact	wire size(mm²)	Product Code	Part Number
silver-plated	1	191 100 016 4080	YJ2.5-22.8-1.0AG
	1.5	191 100 016 4090	YJ2.5-22.8-1.5AG
	2.5	191 100 016 4100	YJ2.5-22.8-2.5AG



Short delay pin can delay the contact time in order to protect the circuit from arcing

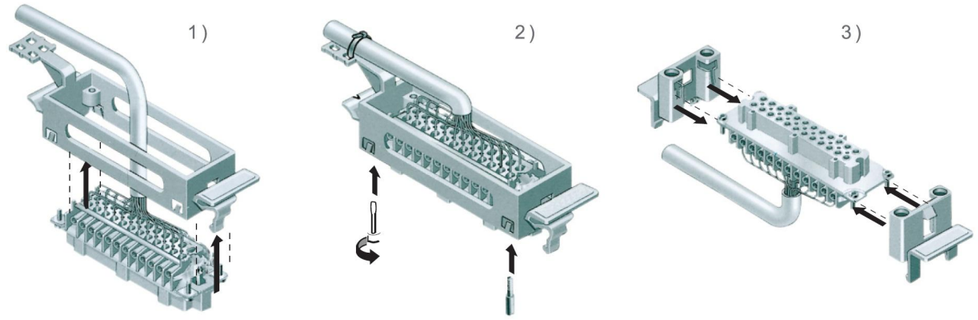
Rail Bracket Suite

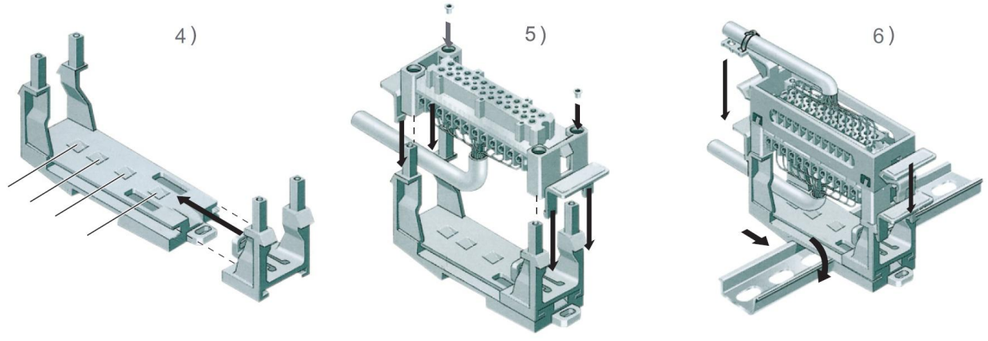
Suite	Series	Part Number	Product Code	Drawings (mm)
Rail Bracket Suite, including bases and fixed mounts	6B	H6B-CC	193 001 006 0000	
	10B	H10B-CC	193 001 010 0000	
	16B	H16B-CC	193 001 016 0000	
	24B	H24B-CC	193 001 024 0000	

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Rail bracket

Installation Steps

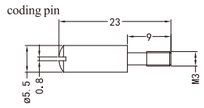
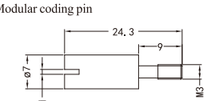
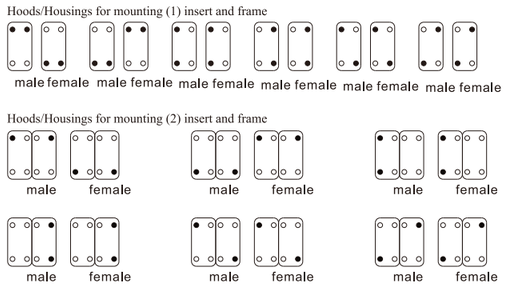


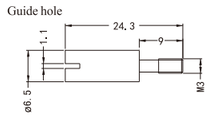
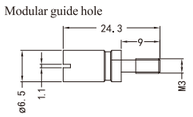
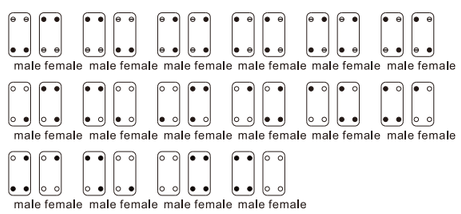


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Coding pin

Numbering with coding pin	Part Number	Product Code	Coding pin	Modular coding pin
M3 coding pin 	CODE-M3	193 002 001 1000		
M3 Modularcoding pin 	MCODE-M3	193 002 002 1000		

Numbering with guide pin and guide hole	Part Number	Product Code	Guide hole	Modular guide hole
M3 Guide hole 	GBUSH-M3	193 002 003 1000		
M3 Guide pin 	GPIN-M3	193 002 005 1000	 Hoods/Housings for mounting (1) insert and frame male female male female male female male female male female male female male female

Technical Specification for Hoods/Housings

3A Plastic Hoods/Housings IP65	
Material	Polycarbonate
Color	gray（RAL 7032）
locking elements	
−locking method	Plastic elastic compression
−Material	Polyamide
sealing element	NBR
Working Temperature	−40℃~125℃
Flammability Rating	V-0
IP rating (locked, En60529)	IP65

Plastic Hoods/Housings IP65	
Material	Polyamide
Color	RAL 9005（black）
locking elements	
−locking method	Plastic elastic compression
−Material	Polyamide
sealing element	NBR
Working Temperature	−40℃~125℃
Flammability Rating	V-0
IP rating (locked, En60529)	IP65

3A Metal Hoods/Housings IP65	
Material	Die-cast zinc
Color	grey
locking elements	
−locking method	Metal elastic compression
−Material	(Iron) Galvanized/Stainless Steel
sealing element	NBR
Working Temperature	−40℃~125℃
Flammability Rating	V-0
IP rating (locked, En60529)	IP65

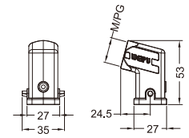
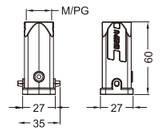
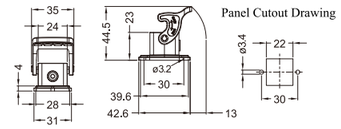
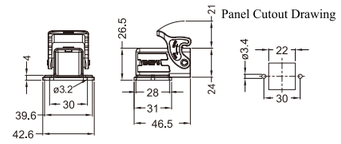
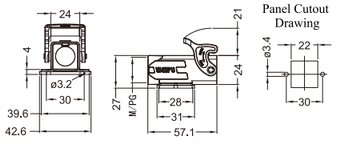
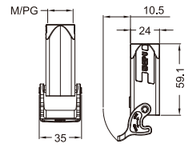
Metal Hoods/Housings	
Material	Die-cast aluminum
Color	grey
locking elements	
−locking method	Metal elastic compression
−Material	see P24-02
sealing element	NBR
Working Temperature	−40℃~125℃
Flammability Rating	V-0
IP rating (locked, En60529)	IP65

IP68/IP69K	
Material	Die-cast aluminum
Color	black or grey
locking elements	
−locking method	Bolted connection
−Material	Stainless steel
sealing element	NBR
Working Temperature	−40℃~125℃
Flammability Rating	V-0
IP rating (locked, En60529)	IP65/IP69K

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3A Plastic Hoods/Housings

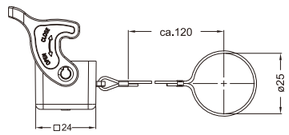
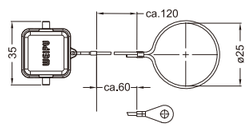
IP65

	thread	Product Code	Part Number	Drawings (mm)
Side Entry Hoods 	M20	171 103 010 0200	HB3A-PS-2B-M20	
	PG11	171 103 010 0110	HB3A-PS-2B-PG11	
Top Entry Hoods 	M20	171 103 040 0200	HB3A-PT-2B-M20	
	PG11	171 103 040 0110	HB3A-PT-2B-PG11	
Bulkhead Mounted Housing 	----	171 103 107 0000	HB3A-ST-1L/C	
Bulkhead Mounted Housing 	----	171 103 467 0000	HB3A-ST-1L/C-PS	
Surface Mounted Housings 	M20	171 103 137 0200	HB3A-SF-1L/C-M20	
	PG11	171 103 137 0110	HB3A-SF-1L/C-PG11	
Cable-to-Cable Housings 	M20	171 103 077 0200	HB3A-MC-1L/C-M20	
	PG11	171 103 077 0110	HB3A-MC-1L/C-PG11	

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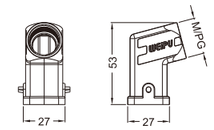
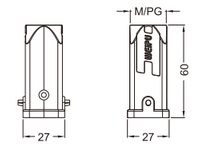
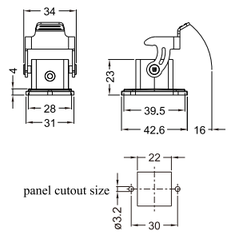
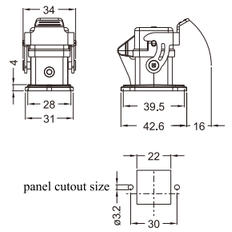
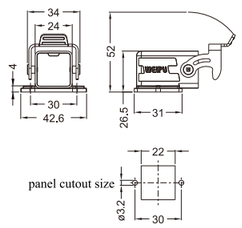
3A Plastic Hoods/Housings

IP65

	connection type	Product Code	Part Number	Drawings (mm)
plastic cover 		171 103 487 3000	HB3A-CV-1L/C-M (with male inserts)	
		171 103 487 5000	HB3A-CV-1L/C-F (with female inserts)	
plastic cover 		171 103 510 3000	HB3A-CV-2B-1M (with male inserts)	
		171 103 510 4000	HB3A-CV-2B-2M (with male inserts)	
		171 103 510 5000	HB3A-CV-2B-1F (with male inserts)	
		171 103 510 6000	HB3A-CV-2B-2F (with male inserts)	

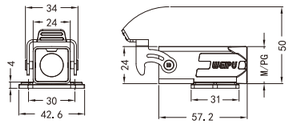
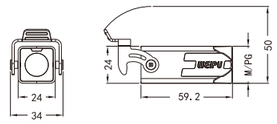
3A Metal Hoods/Housings

IP65

	thread	Product Code	Part Number	Drawings (mm)
Side Entry Hoods 	M20	170 103 010 0200	HA3A-PS-2B-M20	
	PG11	170 103 010 0110	HA3A-PS-2B-PG11	
Top Entry Hoods 	M20	170 103 040 0200	HA3A-PT-2B-M20	
	PG11	170 103 040 0110	HA3A-PT-2B-PG11	
	PG13. 5	170 103 040 0130	HA3A-PT-2B-PG13.5	
Bulkhead Mounted Housing 	----	170 103 106 0000	HA3A-ST-1L/W	
Bulkhead Mounted Housing 	----	公 170 103 126 1000	公 HA3A-ST-1L/W-MCV/M	
	----	母 170 103 126 2000	母 HA3A-ST-1L/W-MCV/F	
Bulkhead Mounted Housing 	----	171 103 466 0000	HA3A-ST-1L/W-PS	

3A Metal Hoods/Housings

IP65

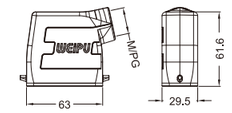
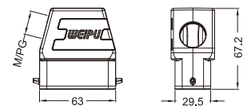
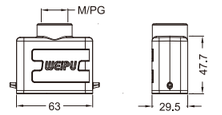
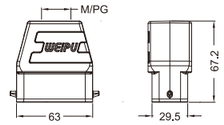
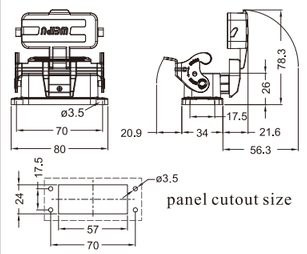
	thread	Product Code	Part Number	Drawings (mm)
Surface Mounted Housings 	PG11	panel cutout size 170 103 476 0110	HA3A-SF/ST-1L/W-PG11	
	M20	without cutout 170 103 136 0200	HA3A-SF-1L/W-M20	
	PG11	170 103 136 0110	HA3A-SF-1L/W-PG11	
	PG13.5	170 103 136 0130	HA3A-SF-1L/W-PG13.5	
Cable-to-Cable Housings 	M20	170 103 076 0200	HA3A-MC-1L/W-M20	
	PG11	170 103 076 0110	HA3A-MC-1L/W-PG11	

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10A Metal Hoods/Housings

IP65

Lock selection, see pageP24-02

	thread	Product Code	Part Number	Drawings (mm)
Side Entry Hoods 	M20	170 110 010 0200	HA10A-PS-2B-M20	
	PG16	170 110 010 0160	HA10A-PS-2B-PG16	
Side Entry Hoods&High Structure 	M25	170 110 030 0250	HA10A-PSH-2B-M25	
	PG16	170 110 030 0160	HA10A-PSH-2B-PG16	
	PG21	170 110 030 0210	HA10A-PSH-2B-PG21	
Top Entry Hoods 	M20	170 110 040 0200	HA10A-PT-2B-M20	
	PG13.5	170 110 040 0130	HA10A-PT-2B-PG13.5	
Top Entry Hoods&High Structure 	M25	170 110 060 0250	HA10A-PTH-2B-M25	
	PG16	170 110 060 0160	HA10A-PTH-2B-PG16	
	PG21	170 110 060 0210	HA10A-PTH-2B-PG21	
Bulkhead Mounted Housing 	----	170 110 103 0000	HA10A-ST-1L/W	
	----	170 110 113 0000	HA10A-ST-1L/W-CV	
	----	170 110 123 0000	HA10A-ST-1L/W-MCV	

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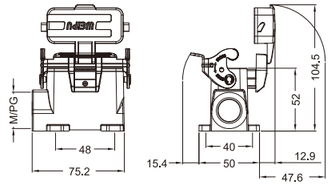
10A Metal Hoods/Housings

IP65

Lock selection, see pageP24-02

	thread	Product Code	Part Number	Drawings (mm)
Surface Mounted Housings	M20	170 110 133 0200	HA10A-SF-1L/W-M20	
	2M20	170 110 133 2200	HA10A-SF-1L/W-2M20	
	M25	170 110 133 0250	HA10A-SF-1L/W-M25	
	PG16	170 110 133 0160	HA10A-SF-1L/W-PG16	
	2PG16	170 110 133 2160	HA10A-SF-1L/W-2PG16	
	PG21	170 110 133 0210	HA10A-SF-1L/W-PG21	
	with plastic cover			
	M20	170 110 143 0200	HA10A-SF-1L/W-CV-M20	
	2M20	170 110 143 2200	HA10A-SF-1L/W-CV-2M20	
	M25	170 110 143 0250	HA10A-SF-1L/W-CV-M25	
	PG16	170 110 143 0160	HA10A-SF-1L/W-CV-PG16	
	2PG16	170 110 143 2160	HA10A-SF-1L/W-CV-2PG16	
	PG21	170 110 143 0210	HA10A-SF-1L/W-CV-PG21	
	with metal cover			
	M20	170 110 153 0200	HA10A-SF-1L/W-MCV-M20	
	2M20	170 110 153 2200	HA10A-SF-1L/W-MCV-2M20	
	M25	170 110 153 0250	HA10A-SF-1L/W-MCV-M25	
	PG16	170 110 153 0160	HA10A-SF-1L/W-MCV-PG16	
	2PG16	170 110 153 2160	HA10A-SF-1L/W-MCV-2PG16	
	PG21	170 110 153 0210	HA10A-SF-1L/W-MCV-PG21	

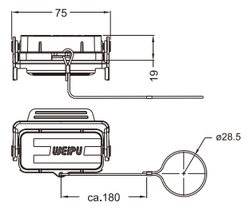


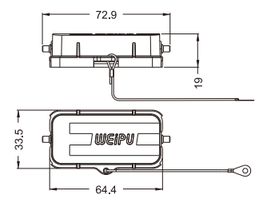


	connection type	Product Code	Part Number	Drawings (mm)
metal cover	for hoods	170 110 553 3000	HA10A-MCV-1L/W.1	
metal cover	for housings	170 110 530 5000	HA10A-MCV-2B/1S	
	for housings	170 110 530 6000	HA10A-MCV-2B/2S	









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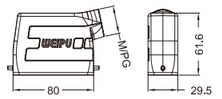
16A Metal Hoods/Housings

IP65

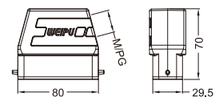
Lock selection, see pageP24-02

	thread	Product Code	Part Number	Drawings (mm)
Side Entry Hoods	M20	170 116 010 0200	HA16A-PS-2B-M20	
	PG16	170 116 010 0160	HA16A-PS-2B-PG16	
Side Entry Hoods&High Structure	M25	170 116 030 0250	HA16A-PSH-2B-M25	
	PG16	170 116 030 0160	HA16A-PSH-2B-PG16	
	PG21	170 116 030 0210	HA16A-PSH-2B-PG21	
Top Entry Hoods	M20	170 116 040 0200	HA16A-PT-2B-M20	
	PG16	170 116 040 0160	HA16A-PT-2B-PG16	
Top Entry Hoods&High Structure	M25	170 116 060 0250	HA16A-PTH-2B-M25	
	PG16	170 116 060 0160	HA16A-PTH-2B-PG16	
	PG21	170 116 060 0210	HA16A-PTH-2B-PG21	
Bulkhead Mounted Housing	----	170 116 103 0000	HA16A-ST-1L/W	
	----	170 116 113 0000	HA16A-ST-1L/W-CV	
	----	170 116 123 0000	HA16A-ST-1L/W-MCV	

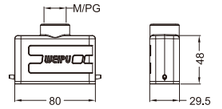


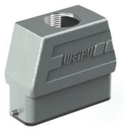


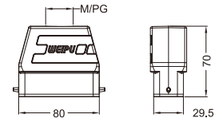




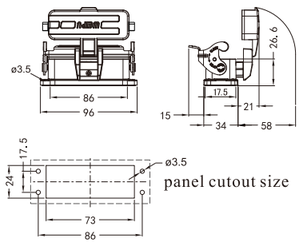












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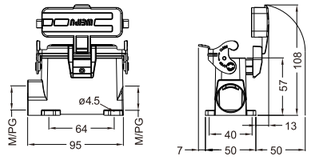
16A Metal Hoods/Housings

IP65

Lock selection, see pageP24-02

	thread	Product Code	Part Number	Drawings (mm)
Surface Mounted Housings	M20	170 116 133 0200	HA16A-SF-1L/W-M20	
	2M20	170 116 133 2200	HA16A-SF-1L/W-2M20	
	M25	170 116 133 0250	HA16A-SF-1L/W-M25	
	2M25	170 116 133 2250	HA16A-SF-1L/W-2M25	
	PG16	170 116 133 0160	HA16A-SF-1L/W-PG16	
	2PG16	170 116 133 2160	HA16A-SF-1L/W-2PG16	
	PG21	170 116 133 0210	HA16A-SF-1L/W-PG21	
	带塑料盖			
	M20	170 116 143 0200	HA16A-SF-1L/W-CV-M20	
	2M20	170 116 143 2200	HA16A-SF-1L/W-CV-2M20	
	M25	170 116 143 0250	HA16A-SF-1L/W-CV-M25	
	2M25	170 116 143 2250	HA16A-SF-1L/W-CV-2M25	
	PG16	170 116 143 0160	HA16A-SF-1L/W-CV-PG16	
	2PG16	170 116 143 2160	HA16A-SF-1L/W-CV-2PG16	
	PG21	170 116 143 0210	HA16A-SF-1L/W-CV-PG21	
	带金属盖			
	M20	170 116 153 0200	HA16A-SF-1L/W-MCV-M20	
	2M20	170 116 153 2200	HA16A-SF-1L/W-MCV-M20	
	M25	170 116 153 0250	HA16A-SF-1L/W-MCV-M25	
	2M25	170 116 153 2250	HA16A-SF-1L/W-MCV-2M25	
	PG16	170 116 153 0160	HA16A-SF-1L/W-MCV-PG16	
	2PG16	170 116 153 2160	HA16A-SF-1L/W-MCV-2PG16	
	PG21	170 116 153 0210	HA16A-SF-1L/W-MCV-PG21	

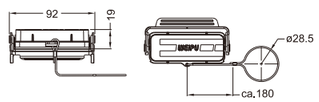


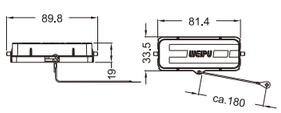


	connection type	Product Code	Part Number	Drawings (mm)
metal cover	for hoods	170 116 553 3000	HA16A-MCV-1L/W.1	
metal cover	for hoods	170 116 530 5000	HA16A-MCV-2B/1S	
	for hoods	170 116 530 6000	HA16A-MCV-2B/2S	









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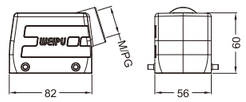
32A Metal Hoods/Housings

IP65

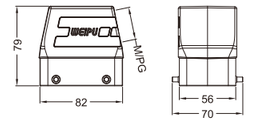
Lock selection, see pageP24-02

	thread	Product Code	Part Number	Drawings (mm)
Side Entry Hoods	M25	170 132 190 0250	HA32A-PS-4B-M25	
	PG21	170 132 190 0210	HA32A-PS-4B-PG21	
Side Entry Hoods & High Structure	M32	170 132 210 0320	HA32A-PSH-4B-M32	
	PG21	170 132 210 0210	HA32A-PSH-4B-PG21	
	PG29	170 132 210 0290	HA32A-PSH-4B-PG29	
Top Entry Hoods	M25	170 132 230 0250	HA32A-PTH-4B-M25	
	M32	170 132 230 0320	HA32A-PTH-4B-M32	
	PG21	170 132 230 0210	HA32A-PTH-4B-PG21	
	PG29	170 132 230 0290	HA32A-PTH-4B-PG29	
Bulkhead Mounted Housing	M25	170 132 253 0000	HA32A-ST-2L/W	
Surface Mounted Housings	M25	170 132 263 0250	HA32A-SF-2L/W-M25	
	M32	170 132 263 0320	HA32A-SF-2L/W-M32	
	2M32	170 132 263 2320	HA32A-SF-2L/W-2M32	
	PG21	170 132 263 0210	HA32A-SF-2L/W-PG21	
	2PG21	170 132 263 2210	HA32A-SF-2L/W-2PG21	
	PG29	170 132 263 0290	HA32A-SF-2L/W-PG29	
	2PG29	170 132 253 2290	HA32A-SF-2L/W-2PG29	

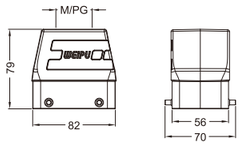




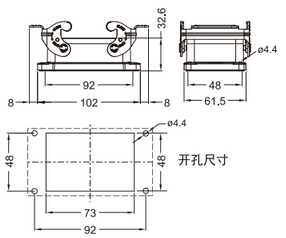




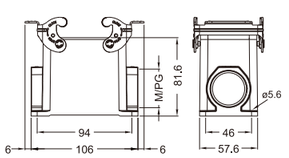










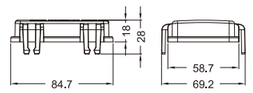
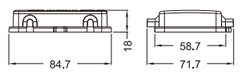


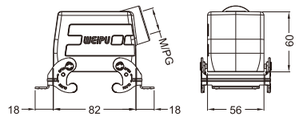
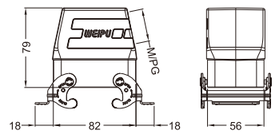
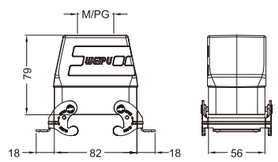
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32A Metal Hoods/Housings

IP65

Lock selection, see pageP24-02

	connection type	Product Code	Part Number	Drawings (mm)
plastic cover 	plastic cove use with 4 lugs hoods ----	170 132 500 7000	HA32A-CV-4C	
plastic cover 	use with double lock lever housings	170 132 520 4000	HA32A-CV-4B/1	
	use with double lock lever bulkhead /surfacemounted housings	170 132 520 6000	HA32A-CV-4B/2	

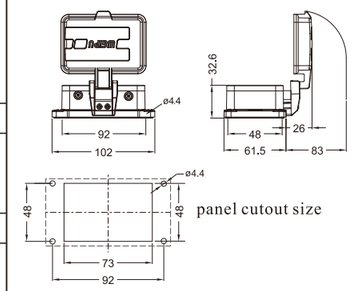
	thread	Product Code	Part Number	Drawings (mm)
Side Entry Hoods 	M25	170 132 313 0250	HA32A-PS-2L/W-M25	
	PG21	170 132 313 0210	HA32A-PS-2L/W-PG21	
Side Entry Hoods & High Structure 	M32	170 132 333 0320	HA32A-PSH-2L/W-M32	
	PG21	170 132 333 0210	HA32A-PSH-2L/W-PG21	
	PG29	170 132 333 0290	HA32A-PSH-2L/W-PG29	
Top Entry Hoods 	M25	170 132 363 0250	HA32A-PTH-2L/W-M25	
	M32	170 132 363 0320	HA32A-PTH-2L/W-M32	
	PG21	170 132 363 0210	HA32A-PTH-2L/W-PG21	
	PG29	170 132 363 0290	HA32A-PTH-2L/W-PG29	

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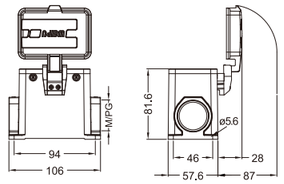
32A Metal Hoods/Housings

IP65

Lock selection, see pageP24-02

	thread	Product Code	Part Number	Drawings (mm)
Bulkhead Mounted Housing 	----	170 132 370 0000	HA32A-ST-4B	
	with plastic cover			
	----	170 132 380 0000	HA32A-ST-4B-CV	
	with metal cover			
	----	170 132 390 0000	HA32A-ST-4B-MCV	
Surface Mounted Housings	M25	170 132 430 0250	HA32A-SF-4B-M25	
	M32	170 132 430 0320	HA32A-SF-4B-M32	
	2M32	170 132 430 2320	HA32A-SF-4B-2M32	
	PG21	170 132 430 0210	HA32A-SF-4B-PG21	
	2PG21	170 132 430 2210	HA32A-SF-4B-2PG21	
	PG29	170 132 430 0290	HA32A-SF-4B-PG29	
	2PG29	170 132 430 2290	HA32A-SF-4B-2PG29	
	with plastic cover			
	M25	170 132 440 0250	HA32A-SF-4B-CV-M25	
	M32	170 132 440 0320	HA32A-SF-4B-CV-M32	
	2M32	170 132 440 2320	HA32A-SF-4B-CV-2M32	
	PG21	170 132 440 0210	HA32A-SF-4B-CV-PG21	
	2PG21	170 132 440 2210	HA32A-SF-4B-CV-2PG21	
	PG29	170 132 440 0290	HA32A-SF-4B-CV-PG29	
	2PG29	170 132 440 2290	HA32A-SF-4B-CV-2PG29	
	with metal cover			
	M25	170 132 450 0250	HA32A-SF-4B-MCV-M25	
	M32	170 132 450 0320	HA32A-SF-4B-MCV-M32	
	2M32	170 132 450 2320	HA32A-SF-4B-MCV-2M32	
	PG21	170 132 450 0210	HA32A-SF-4B-MCV-PG21	
	2PG21	170 132 450 2210	HA32A-SF-4B-MCV-2PG21	
	PG29	170 132 450 0290	HA32A-SF-4B-MCV-PG29	
	2PG29	170 132 450 2290	HA32A-SF-4B-MCV-2PG29	



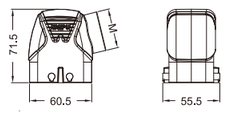
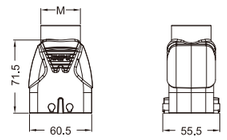
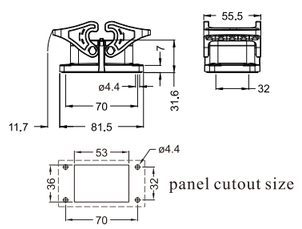
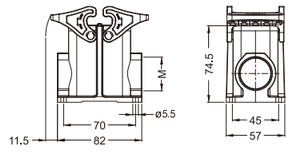
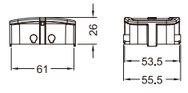
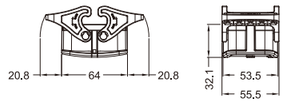


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18

6B Plastic Hoods/Housings

IP65

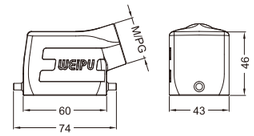
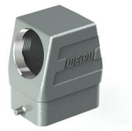
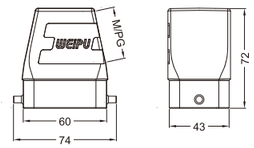
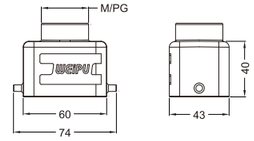
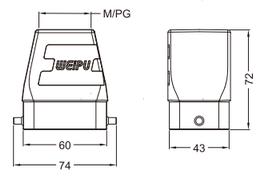
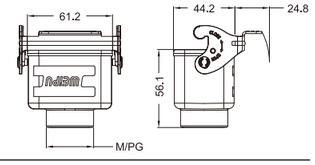
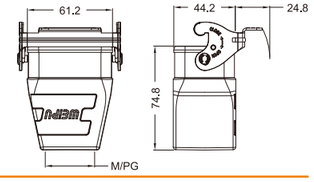
	thread	Product Code	Part Number	Drawings (mm)
Side Entry Hoods & High Structure 	M25	171 006 200 0250	HB6B-PSH-4B-M25	
	M32	171 006 200 0320	HB6B-PSH-4B-M32	
Top Entry Hoods & High Structure 	M25	171 006 230 0250	HB6B-PTH-4B-M25	
	M32	171 006 230 0320	HB6B-PTH-4B-M32	
Bulkhead Mounted Housing 	----	171 006 258 0000	HB6B-ST-2L/C	
Surface Mounted Housings & High Structure 	M25	171 006 278 0250	HB6B-SFH-2L/C-M25	
	2M25	171 006 278 2250	HB6B-SFH-2L/C-2M25	
	M32	171 006 278 0320	HB6B-SFH-2L/C-M32	
	2M32	171 006 278 2320	HB6B-SFH-2L/C-2M32	
removable cover 	----	171 006 520 0000	HB6B-CV-4B	
removable cover 	----	171 006 570 0000	HB6B-CV-2L/C	

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6B Metal Hoods/Housings

IP65

Lock selection, see pageP24-02

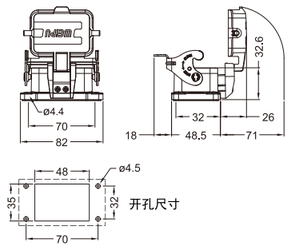
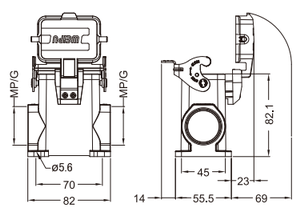
	thread	Product Code	Part Number	Drawings (mm)
Side Entry Hoods 	M20	170 006 010 0200	HA6B-PS-2B-M20	
	M25	170 006 010 0250	HA6B-PS-2B-M25	
	PG13.5	170 006 010 0130	HA6B-PS-2B-PG13.5	
	PG16	170 006 010 0160	HA6B-PS-2B-PG16	
Side Entry Hoods & High Structure 	----	170 006 720 0000	HA6B-PNH-2B(无出线孔)	
	M25	170 006 030 0250	HA6B-PSH-2B-M25	
	M32	170 006 030 0320	HA6B-PSH-2B-M32	
	PG21	170 006 030 0210	HA6B-PSH-2B-PG21	
	PG29	170 006 030 0290	HA6B-PSH-2B-PG29	
Top Entry Hoods 	M20	170 006 040 0200	HA6B-PT-2B-M20	
	M25	170 006 040 0250	HA6B-PT-2B-M25	
	PG13.5	170 006 040 0130	HA6B-PT-2B-PG13.5	
	PG16	170 006 040 0160	HA6B-PT-2B-PG16	
Top Entry Hoods & High Structure 	----	170 006 720 0000	HA6B-PNH-2B(无出线孔)	
	M25	170 006 060 0250	HA6B-PTH-2B-M25	
	M32	170 006 060 0320	HA6B-PTH-2B-M32	
	PG21	170 006 060 0210	HA6B-PTH-2B-PG21	
	PG29	170 006 060 0290	HA6B-PTH-2B-PG29	
Cable-to-Cable Housings 	M20	170 006 073 0200	HA6B-MC-1L/W-M20	
	PG13.5	170 006 073 0130	HA6B-MC-1L/W-PG13.5	
	PG16	170 006 073 0160	HA6B-MC-1L/W-PG16	
Cable-to-Cable Housings & High Structure 	M20	170 006 093 0250	HA6B-MCH-1L/W-M25	
	M25	170 006 093 0320	HA6B-MCH-1L/W-M32	
	PG21	170 006 093 0210	HA6B-MCH-1L/W-PG21	
	PG29	170 006 093 0290	HA6B-MCH-1L/W-PG29	

RETURN>

6B Metal Hoods/Housings

IP65

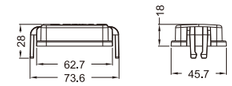
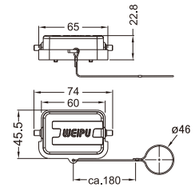
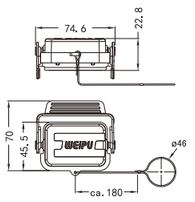
Lock selection, see pageP24-02

	thread	Product Code	Part Number	Drawings (mm)
Bulkhead Mounted Housing 	----	170 006 103 0000	HA6B-ST-1L/W	
	----	with plastic cover 170 006 113 0000	HA6B-ST-1L/W-CV	
	----	with metal cover 170 006 123 0000	HA6B-ST-1L/W-MCV	
Surface Mounted Housings 	M20	170 006 133 0200	HA6B-SF-1L/W-M20	
	2M20	170 006 133 2200	HA6B-SF-1L/W-2M20	
	M25	170 006 133 0250	HA6B-SF-1L/W-M25	
	2M25	170 006 133 2250	HA6B-SF-1L/W-2M25	
	PG16	170 006 133 0160	HA6B-SF-1L/W-PG16	
	2PG16	170 006 133 2160	HA6B-SF-1L/W-2PG16	
		with plastic cover		
	M20	170 006 143 0200	HA6B-SF-1L/W-CV-M20	
	2M20	170 006 143 2200	HA6B-SF-1L/W-CV-2M20	
	M25	170 006 143 0250	HA6B-SF-1L/W-CV-M25	
	2M25	170 006 143 2250	HA6B-SF-1L/W-CV-2M25	
	PG16	170 006 143 0160	HA6B-SF-1L/W-CV-PG16	
	2PG16	170 006 143 2160	HA6B-SF-1L/W-CV-2PG16	
		with metal cover		
	M20	170 006 153 0200	HA6B-SF-1L/W-MCV-M20	
	2M20	170 006 153 2200	HA6B-SF-1L/W-MCV-2M20	
	M25	170 006 153 0250	HA6B-SF-1L/W-MCV-M25	
	2M25	170 006 153 2250	HA6B-SF-1L/W-MCV-2M25	
	PG16	170 006 153 0160	HA6B-SF-1L/W-MCV-PG16	
	2PG16	170 006 153 2160	HA6B-SF-1L/W-MCV-2PG16	
Surface Mounted Housings & High Structure 	M25	170 006 163 0250	HA6B-SFH-1L/W-M25	
	2M25	170 006 163 2250	HA6B-SFH-1L/W-2M25	
	M32	170 006 163 0320	HA6B-SFH-1L/W-M32	
	2M32	170 006 163 2320	HA6B-SFH-1L/W-2M32	
	PG21	170 006 163 0210	HA6B-SFH-1L/W-PG21	
	2PG21	170 006 163 2210	HA6B-SFH-1L/W-2PG21	
	PG29	170 006 163 0290	HA6B-SFH-1L/W-PG29	
	2PG29	170 006 163 2290	HA6B-SFH-1L/W-2PG29	
		with plastic cover		
	M25	170 006 173 0250	HA6B-SFH-1L/W-CV-M25	
	2M25	170 006 173 2250	HA6B-SFH-1L/W-CV-2M25	
	M32	170 006 173 0320	HA6B-SFH-1L/W-CV-M32	
	2M32	170 006 173 2320	HA6B-SFH-1L/W-CV-2M32	
	PG21	170 006 173 0210	HA6B-SFH-1L/W-CV-PG21	
	2PG21	170 006 173 2210	HA6B-SFH-1L/W-CV-2PG21	
	PG29	170 006 173 0290	HA6B-SFH-1L/W-CV-PG29	
	2PG29	170 006 173 2290	HA6B-SFH-1L/W-CV-2PG29	
		with metal cover		
	M25	170 006 183 0250	HA6B-SFH-1L/W-MCV-M25	
	2M25	170 006 183 2250	HA6B-SFH-1L/W-MCV-2M25	
	M32	170 006 183 0320	HA6B-SFH-1L/W-MCV-M32	
	2M32	170 006 183 2320	HA6B-SFH-1L/W-MCV-2M32	
	PG21	170 006 183 0210	HA6B-SFH-1L/W-MCV-PG21	
	2PG21	170 006 183 2210	HA6B-SFH-1L/W-MCV-2PG21	
	PG29	170 006 183 0290	HA6B-SFH-1L/W-MCV-PG29	
	2PG29	170 006 183 2290	HA6B-SFH-1L/W-MCV-2PG29	

6B Metal Hoods/Housings

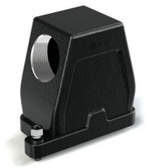
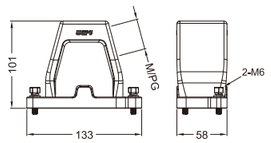
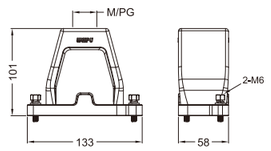
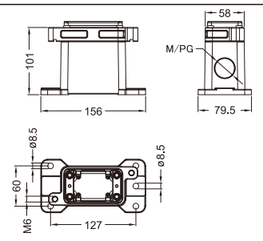
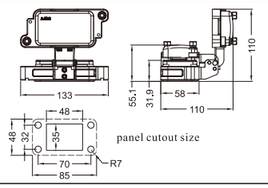
IP65

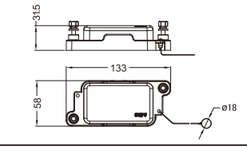
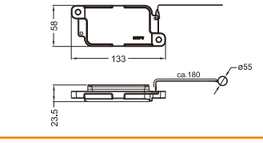
Lock selection, see pageP24-02

	Termination	Description	Product Code	Part Number	Drawings (mm)
plastic cover 	----	plastic cove (use with 2 lugs hoods)	170 006 490 0000	HA6B-CV-2C	
removable metal cover 		metal cover (use with single lock lever housings)	170 006 530 3000	HA6B-MCV-2B/1	
		metal cover (use with single lock lever bulkhead/surface mounted housings)	170 006 530 6000	HA6B-MCV-2B/2	
removable metal cover 		metal cover (use with 2 lugs hoods)	170 006 553 3000	HA6B-MCV-1L/W.1S	

IP68/IP69K Metal Hoods/Housings

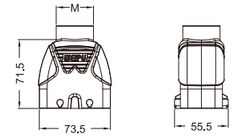
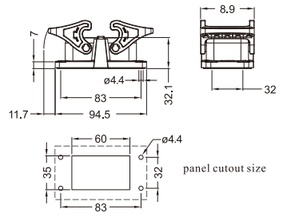
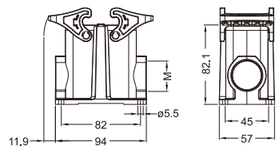
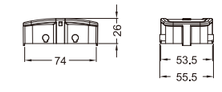
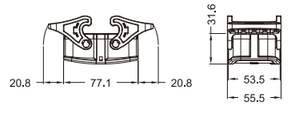
IP68/IP69K

	thread	Product Code	Part Number	Drawings (mm)
Side Entry Hoods & High Structure 		bolt connection		
	M20	172 006 580 0200	HP6B/H-PSH-2S-M20	
	M25	172 006 580 0250	HP6B/H-PSH-2S-M25	
	M32	172 006 580 0320	HP6B/H-PSH-2S-M32	
	PG16	172 006 580 0160	HP6B/H-PSH-2S-PG16	
	PG21	172 006 580 0210	HP6B/H-PSH-2S-PG21	
	PG29	172 006 580 0290	HP6B/H-PSH-2S-PG29	
		roll pin connection		
	M20	172 006 590 0200	HP6B/H-PSH-2T-M20	
	M25	172 006 590 0250	HP6B/H-PSH-2T-M25	
	M32	172 006 590 0320	HP6B/H-PSH-2T-M32	
	PG16	172 006 590 0160	HP6B/H-PSH-2T-PG16	
	PG21	172 006 590 0210	HP6B/H-PSH-2T-PG21	
	PG29	172 006 590 0290	HP6B/H-PSH-2T-PG29	
Top Entry Hoods & High Structure 		bolt connection		
	M20	172 006 600 0200	HP6B/H-PTH-2S-M20	
	M25	172 006 600 0250	HP6B/H-PTH-2S-M25	
	M32	172 006 600 0320	HP6B/H-PTH-2S-M32	
	PG16	172 006 600 0160	HP6B/H-PTH-2S-PG16	
	PG21	172 006 600 0210	HP6B/H-PTH-2S-PG21	
	PG29	172 006 600 0290	HP6B/H-PTH-2S-PG29	
		roll pin connection		
	M20	172 006 610 0200	HP6B/H-PTH-2T-M20	
	M25	172 006 610 0250	HP6B/H-PTH-2T-M25	
	M32	172 006 610 0320	HP6B/H-PTH-2T-M32	
	PG16	172 006 610 0160	HP6B/H-PTH-2T-PG16	
	PG21	172 006 610 0210	HP6B/H-PTH-2T-PG21	
	PG29	172 006 610 0290	HP6B/H-PTH-2T-PG29	
Surface Mounted Housings & High Structure 		bolt connection		
	M20	172 006 620 0200	HP6B/H-SFH-2H-M20	
	M25	172 006 620 0250	HP6B/H-SFH-2H-M25	
	M32	172 006 620 0320	HP6B/H-SFH-2H-M32	
	PG16	172 006 620 0160	HP6B/H-SFH-2H-PG16	
	PG21	172 006 620 0210	HP6B/H-SFH-2H-PG21	
	PG29	172 006 620 0290	HP6B/H-SFH-2H-PG29	
		roll pin connection		
	M20	172 006 630 0200	HP6B/H-SFH-2T-M20	
	M25	172 006 630 0250	HP6B/H-SFH-2T-M25	
	M32	172 006 630 0320	HP6B/H-SFH-2T-M32	
	PG16	172 006 630 0160	HP6B/H-SFH-2T-PG16	
	PG21	172 006 630 0210	HP6B/H-SFH-2T-PG21	
	PG29	172 006 630 0290	HP6B/H-SFH-2T-PG29	
Bulkhead Mounted Housing 	----	bolt connection 172 006 640 0000	HP6B/H-ST-2H	
	----	roll pin connection 172 006 650 0000	HP6B/H-ST-2T	
	with metal cover			
	----	bolt connection 172 006 660 0000	HP6B/H-ST-2H-MCV	
	----	roll pin connection 172 006 670 0000	HP6B/H-ST-2T-MCV	

	connection type	Product Code	Part Number	
removable metal cover 		for housings bolt connection 172 006 680 0000	HP6B/H-MCV-2H	
		for hoods roll pin connection 172 006 690 0000	HP6B/H-MCV-2T	
removable metal cover 		for housings bolt connection 172 006 700 0000	HP6B/H-MCV-2H/1	
		for hoods roll pin connection 172 006 710 0000	HP6B/H-MCV-2T/1	

10B Plastic Hoods/Housings

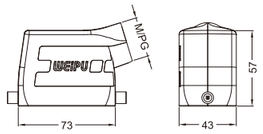
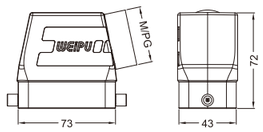
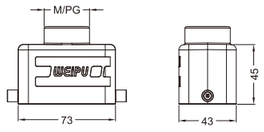
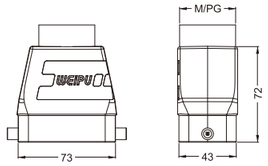
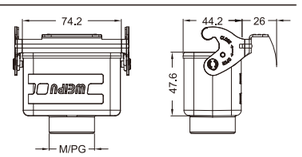
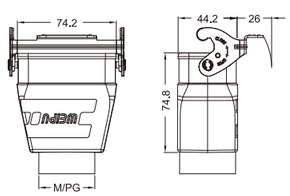
IP65

	thread	Product Code	Part Number	Drawings (mm)
Side Entry Hoods & High Structure 	M25	171 010 200 0250	HB10B-PSH-4B-M25	
	M32	171 010 200 0320	HB10B-PSH-4B-M32	
Top Entry Hoods & High Structure 	M25	171 010 230 0250	HB10B-PTH-4B-M25	
	M32	171 010 230 0320	HB10B-PTH-4B-M32	
Bulkhead Mounted Housing 	----	171 010 258 0000	HB10B-ST-2L/C	
Surface Mounted Housings & High Structure 	M25	171 010 278 0250	HB10B-SFH-2L/C-M25	
	2M25	171 010 278 2250	HB10B-SFH-2L/C-2M25	
	M32	171 010 278 0320	HB10B-SFH-2L/C-M32	
	2M32	171 010 278 2320	HB10B-SFH-2L/C-2M32	
removable cover 	----	171 010 520 0000	HB10B-CV-4B	
removable cover 	----	171 010 570 0000	HB10B-CV-2L/C	

10B Metal Hoods/Housings

IP65

Lock selection, see pageP24-02

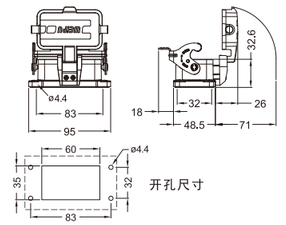
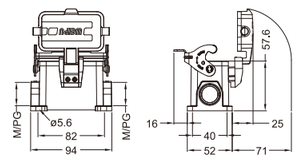
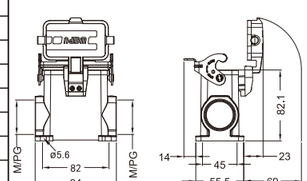
	thread	Product Code	Part Number	Drawings (mm)
Side Entry Hoods 	M20	170 010 010 0200	HA10B-PS-2B-M20	
	M25	170 010 010 0250	HA10B-PS-2B-M25	
	PG16	170 010 010 0160	HA10B-PS-2B-PG16	
Side Entry Hoods & High Structure 	----	170 010 720 0000	HA10B-PNH-2B(without cutout)	
	M25	170 010 030 0250	HA10B-PSH-2B-M25	
	M32	170 010 030 0320	HA10B-PSH-2B-M32	
	PG21	170 010 030 0210	HA10B-PSH-2B-PG21	
	PG29	170 010 030 0290	HA10B-PSH-2B-PG29	
	with extended thread			
	M25	170 010 020 0250	HA10B-PSHV-2B-M25	
	M32	170 010 020 0320	HA10B-PSHV-2B-M32	
	PG21	170 010 020 0210	HA10B-PSHV-2B-PG21	
	PG29	170 010 020 0290	HA10B-PSHV-2B-PG29	
Top Entry Hoods 	M20	170 010 040 0200	HA10B-PT-2B-M20	
	M25	170 010 040 0250	HA10B-PT-2B-M25	
	PG16	170 010 040 0160	HA10B-PT-2B-PG16	
Top Entry Hoods & High Structure 	----	170 010 720 0000	HA10B-PNH-2B(without cutout)	
	M25	170 010 060 0250	HA10B-PTH-2B-M25	
	M32	170 010 060 0320	HA10B-PTH-2B-M32	
	PG21	170 010 060 0210	HA10B-PTH-2B-PG21	
	PG29	170 010 060 0290	HA10B-PTH-2B-PG29	
	with extended thread			
	M25	170 010 050 0250	HA10B-PTHV-2B-M25	
	M32	170 010 050 0320	HA10B-PTHV-2B-M32	
	PG21	170 010 050 0210	HA10B-PTHV-2B-PG21	
	PG29	170 010 050 0290	HA10B-PTHV-2B-PG29	
Cable-to-Cable Housings 	M20	170 010 073 0200	HA10B-MC-1L/W-M20	
	M25	170 010 073 0250	HA10B-MC-1L/W-M25	
	PG16	170 010 073 0160	HA10B-MC-1L/W-PG16	
Cable-to-Cable Housings & High Structure 	M25	170 010 093 0250	HA10B-MCH-1L/W-M25	
	M32	170 010 093 0320	HA10B-MCH-1L/W-M32	
	PG21	170 010 093 0210	HA10B-MCH-1L/W-PG21	
	PG29	170 010 093 0290	HA10B-MCH-1L/W-PG29	
	with extended thread			
	M25	170 010 083 0250	HA10B-MCHV-1L/W-M25	
	M32	170 010 083 0320	HA10B-MCHV-1L/W-M32	
	PG21	170 010 083 0210	HA10B-MCHV-1L/W-PG21	
	PG29	170 010 083 0290	HA10B-MCHV-1L/W-PG29	

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10B Metal Hoods/Housings

IP65

Lock selection, see pageP24-02

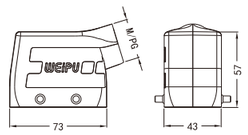
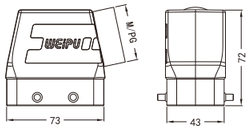
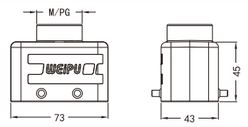
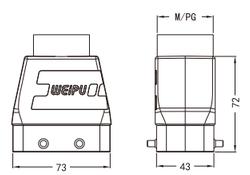
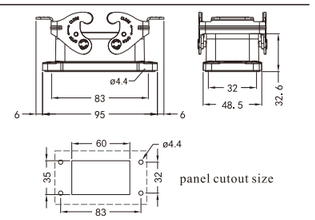
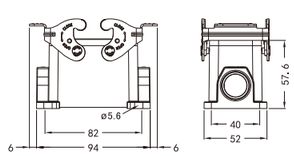
	thread	Product Code	Part Number	Drawings (mm)
Bulkhead Mounted Housing 	----	170 010 103 0000	HA10B-ST-1L/W	
	----	170 010 113 0000	HA10B-ST-1L/W-CV	
	----	170 010 123 0000	HA10B-ST-1L/W-MCV	
Surface Mounted Housings 	M20	170 010 133 0200	HA10B-SF-1L/W-M20	
	2M20	170 010 133 2200	HA10B-SF-1L/W-2M20	
	M25	170 010 133 0250	HA10B-SF-1L/W-M25	
	2M25	170 010 133 2250	HA10B-SF-1L/W-2M25	
	PG16	170 010 133 0160	HA10B-SF-1L/W-PG16	
	2PG26	170 010 133 2160	HA10B-SF-1L/W-2PG16	
	with plastic cover			
	M20	170 010 143 0200	HA10B-SF-1L/W-CV-M20	
	2M20	170 010 143 2200	HA10B-SF-1L/W-CV-2M20	
	M25	170 010 143 0250	HA10B-SF-1L/W-CV-M25	
	2M25	170 010 143 2250	HA10B-SF-1L/W-CV-2M25	
	PG16	170 010 143 0160	HA10B-SF-1L/W-CV-PG16	
	2PG26	170 010 143 2160	HA10B-SF-1L/W-CV-2PG16	
	with metal cover			
	M20	170 010 153 0200	HA10B-SF-1L/W-MCV-M20	
	2M20	170 010 153 2200	HA10B-SF-1L/W-MCV-2M20	
	M25	170 010 153 0250	HA10B-SF-1L/W-MCV-M25	
	2M25	170 010 153 2250	HA10B-SF-1L/W-MCV-2M25	
	PG16	170 010 153 0160	HA10B-SF-1L/W-MCV-PG16	
	2PG26	170 010 153 2160	HA10B-SF-1L/W-MCV-2PG16	
Surface Mounted Housings & High Structure 	M25	170 010 163 0250	HA10B-SFH-1L/W-M25	
	2M25	170 010 163 2250	HA10B-SFH-1L/W-2M25	
	M32	170 010 163 0320	HA10B-SFH-1L/W-M32	
	2M32	170 010 163 2320	HA10B-SFH-1L/W-2M32	
	PG21	170 010 163 0210	HA10B-SFH-1L/W-PG21	
	2PG21	170 010 163 2210	HA10B-SFH-1L/W-2PG21	
	PG29	170 010 163 0290	HA10B-SFH-1L/W-PG29	
	2PG29	170 010 163 2290	HA10B-SFH-1L/W-2PG29	
	with plastic cover			
	M25	170 010 173 0250	HA10B-SFH-1L/W-CV-M25	
	2M25	170 010 173 2250	HA10B-SFH-1L/W-CV-2M25	
	M32	170 010 173 0320	HA10B-SFH-1L/W-CV-M32	
	2M32	170 010 173 2320	HA10B-SFH-1L/W-CV-2M32	
	PG21	170 010 173 0210	HA10B-SFH-1L/W-CV-PG21	
	2PG21	170 010 173 2210	HA10B-SFH-1L/W-CV-2PG21	
	PG29	170 010 173 0290	HA10B-SFH-1L/W-CV-PG29	
	2PG29	170 010 173 2290	HA10B-SFH-1L/W-CV-2PG29	
	with metal cover			
	M25	170 010 183 0250	HA10B-SFH-1L/W-MCV-M25	
	2M25	170 010 183 2250	HA10B-SFH-1L/W-MCV-2M25	
	M32	170 010 183 0320	HA10B-SFH-1L/W-MCV-M32	
	2M32	170 010 183 2320	HA10B-SFH-1L/W-MCV-2M32	
	PG21	170 010 183 0210	HA10B-SFH-1L/W-MCV-PG21	
	2PG21	170 010 183 2210	HA10B-SFH-1L/W-MCV-2PG21	
	PG29	170 010 183 0290	HA10B-SFH-1L/W-MCV-PG29	
	2PG29	170 010 183 2290	HA10B-SFH-1L/W-MCV-2PG29	

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10B Metal Hoods/Housings

IP65

Lock selection, see pageP24-02

	thread	Product Code	Part Number	Drawings (mm)
Side Entry Hoods	M20	170 010 190 0200	HA10B-PS-4B-M20	
	M25	170 010 190 0250	HA10B-PS-4B-M25	
	PG16	170 010 190 0160	HA10B-PS-4B-PG16	
Side Entry Hoods & High Structure	----	170 010 730 0000	HA10B-PNH-4B (without cutout)	
	M25	170 010 210 0250	HA10B-PSH-4B-M25	
	M32	170 010 210 0320	HA10B-PSH-4B-M32	
	PG21	170 010 210 0210	HA10B-PSH-4B-PG21	
	PG29	170 010 210 0290	HA10B-PSH-4B-PG29	
	with extended thread			
	M25	170 010 200 0250	HA10B-PSHV-4B-M25	
	M32	170 010 200 0320	HA10B-PSHV-4B-M32	
	PG21	170 010 200 0210	HA10B-PSHV-4B-PG21	
	PG29	170 010 200 0290	HA10B-PSHV-4B-PG29	
Top Entry Hoods	M20	170 010 220 0200	HA10B-PT-4B-M20	
	M25	170 010 220 0250	HA10B-PT-4B-M25	
	PG16	170 010 220 0160	HA10B-PT-4B-PG16	
Top Entry Hoods & High Structure 	----	170 010 730 0000	HA10B-PNH-4B (without cutout)	
	M25	170 010 240 0250	HA10B-PTH-4B-M25	
	M32	170 010 240 0320	HA10B-PTH-4B-M32	
	PG21	170 010 240 0210	HA10B-PTH-4B-PG21	
	PG29	170 010 240 0290	HA10B-PTH-4B-PG29	
	with extended thread			
	M25	170 010 230 0250	HA10B-PTHV-4B-M25	
	M32	170 010 230 0320	HA10B-PTHV-4B-M32	
	PG21	170 010 230 0210	HA10B-PTHV-4B-PG21	
	PG29	170 010 230 0290	HA10B-PTHV-4B-PG29	
Bulkhead Mounted Housing 	M20	170 010 253 0000	HA10B-ST-2L/W	 panel cutout size
Surface Mounted Housings 	M20	170 010 263 0200	HA10B-SF-2L/W-M20	
	2M20	170 010 263 2200	HA10B-SF-2L/W-2M20	
	M25	170 010 263 0250	HA10B-SF-2L/W-M25	
	2M25	170 010 263 2250	HA10B-SF-2L/W-2M25	
	PG16	170 010 263 0160	HA10B-SF-2L/W-PG16	
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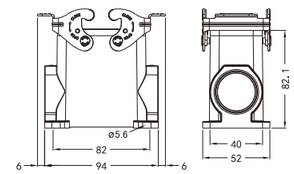
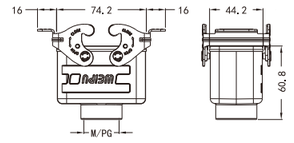
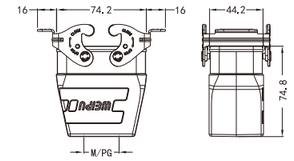
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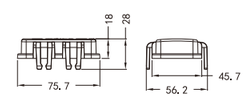
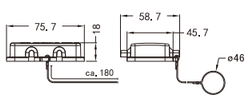
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10B Metal Hoods/Housings

IP65

Lock selection, see pageP24-02

	thread	Product Code	Part Number	Drawings (mm)
Surface Mounted Housings & High Structure 	M25	170 010 273 0250	HA10B-SFH-2L/W-M25	
	2M25	170 010 273 2250	HA10B-SFH-2L/W-2M25	
	M32	170 010 273 0320	HA10B-SFH-2L/W-M32	
	2M32	170 010 273 2320	HA10B-SFH-2L/W-2M32	
	PG21	170 010 273 0210	HA10B-SFH-2L/W-PG21	
	2PG21	170 010 273 2210	HA10B-SFH-2L/W-2PG21	
	PG29	170 010 273 0290	HA10B-SFH-2L/W-PG29	
	2PG29	170 010 273 2290	HA10B-SFH-2L/W-2PG29	
Cable-to-Cable Housings 	M20	170 010 283 0200	HA10B-MC-2L/W-M20	
	M25	170 010 283 0250	HA10B-MC-2L/W-M25	
	PG16	170 010 283 0160	HA10B-MC-2L/W-PG16	
Cable-to-Cable Housings & High Structure 	M25	170 010 303 0250	HA10B-MCH-2L/W-M25	
	M32	170 010 303 0320	HA10B-MCH-2L/W-M32	
	PG21	170 010 303 0210	HA10B-MCH-2L/W-PG21	
	PG29	170 010 303 0290	HA10B-MCH-2L/W-PG29	
	with extended thread			
	M25	170 010 293 0250	HA10B-MCHV-2L/W-M25	
	M32	170 010 293 0320	HA10B-MCHV-2L/W-M32	
	PG21	170 010 293 0210	HA10B-MCHV-2L/W-PG21	
	PG29	170 010 293 0290	HA10B-MCHV-2L/W-PG29	

	connection type	Product Code	Part Number	Drawings (mm)
plastic cover 	----	use with 4 lugs hoods 170 010 500 0000	HA10B-CV-4C	
removable plastic cover 		use with double lock lever housings 170 010 520 5000	HA10B-CV-4B/1	
		use with double lock lever bulkhead/surface mounted housings 170 010 520 6000	HA10B-CV-4B/2	

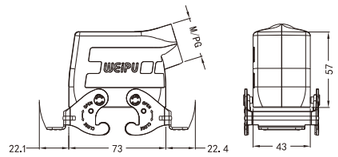
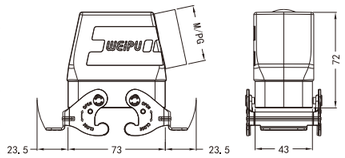
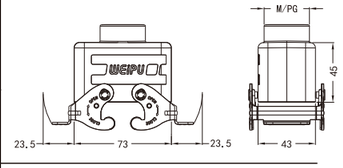
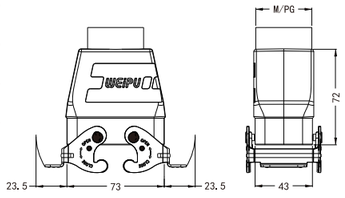
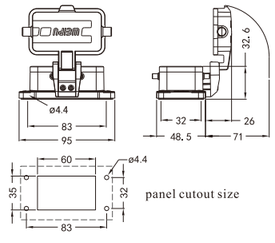
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10B Metal Hoods/Housings

IP65

Lock selection, see pageP24-02

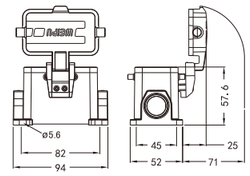
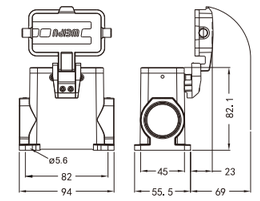
	thread	Product Code	Part Number	Drawings (mm)
Side Entry Hoods 	M20	170 010 313 0200	HA10B-PS-2L/W-M20	
	PG16	170 010 313 0160	HA10B-PS-2L/W-PG16	
Side Entry Hoods & High Structure 	M25	170 010 333 0250	HA10B-PSH-2L/W-M25	
	M32	170 010 333 0320	HA10B-PSH-2L/W-M32	
	PG21	170 010 333 0210	HA10B-PSH-2L/W-PG21	
	PG29	170 010 333 0290	HA10B-PSH-2L/W-PG29	
	with extended thread			
	M25	170 010 323 0250	HA10B-PSHV-2L/W-M25	
	M32	170 010 323 0320	HA10B-PSHV-2L/W-M32	
	PG21	170 010 323 0210	HA10B-PSHV-2L/W-PG21	
	PG29	170 010 323 0290	HA10B-PSHV-2L/W-PG29	
Top Entry Hoods 	M20	170 010 343 0200	HA10B-PT-2L/W-M20	
	PG16	170 010 343 0160	HA10B-PT-2L/W-PG16	
Top Entry Hoods & High Structure 	M25	170 010 363 0250	HA10B-PTH-2L/W-M25	
	M32	170 010 363 0320	HA10B-PTH-2L/W-M32	
	PG21	170 010 363 0210	HA10B-PTH-2L/W-PG21	
	PG29	170 010 363 0290	HA10B-PTH-2L/W-PG29	
	with extended thread			
	M25	170 010 353 0250	HA10B-PTHV-2L/W-M25	
	M32	170 010 353 0320	HA10B-PTHV-2L/W-M32	
	PG21	170 010 353 0210	HA10B-PTHV-2L/W-PG21	
	PG29	170 010 353 0290	HA10B-PTHV-2L/W-PG29	
Bulkhead Mounted Housing 	----	170 010 370 0000	HA10B-ST-4B	
	----	with plastic cover 170 010 380 0000	HA10B-ST-4B-CV	
	----	with metal cover 170 010 390 0000	HA10B-ST-4B-MCV	

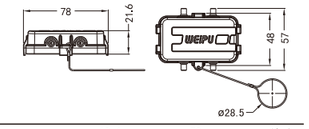
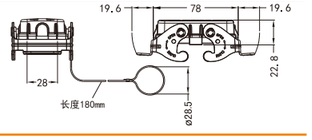
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10B Metal Hoods/Housings

IP65

Lock selection, see pageP24-02

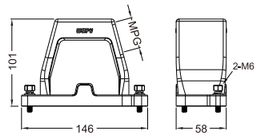
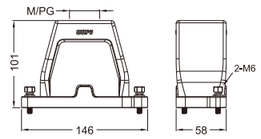
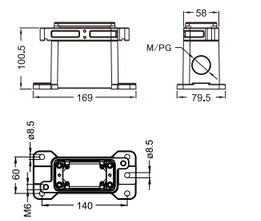
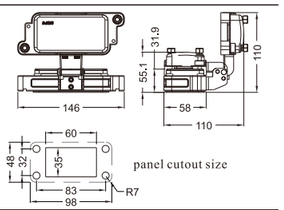
	thread	Product Code	Part Number	Drawings (mm)
Surface Mounted Housings 	M20	170 010 400 0200	HA10B-SF-4B-M20	
	2M20	170 010 400 2200	HA10B-SF-4B-2M20	
	M25	170 010 400 0250	HA10B-SF-4B-M25	
	2M25	170 010 400 2250	HA10B-SF-4B-2M25	
	PG16	170 010 400 0160	HA10B-SF-4B-PG16	
	2PG16	170 010 400 2160	HA10B-SF-4B-2PG16	
	with plastic cover			
	M20	170 010 410 0200	HA10B-SF-4B-CV-M20	
	2M20	170 010 410 2200	HA10B-SF-4B-CV-2M20	
	M25	170 010 410 0250	HA10B-SF-4B-CV-M25	
	2M25	170 010 410 2250	HA10B-SF-4B-CV-2M25	
	PG16	170 010 410 0160	HA10B-SF-4B-CV-PG16	
	2PG16	170 010 410 2160	HA10B-SF-4B-CV-2PG16	
	with metal cover			
	M20	170 010 420 0200	HA10B-SF-4B-MCV-M20	
	2M20	170 010 420 2200	HA10B-SF-4B-MCV-2M20	
	M25	170 010 420 0250	HA10B-SF-4B-MCV-M25	
	2M25	170 010 420 2250	HA10B-SF-4B-MCV-2M25	
	PG16	170 010 420 0160	HA10B-SF-4B-MCV-PG16	
	2PG16	170 010 420 2160	HA10B-SF-4B-MCV-2PG16	
Surface Mounted Housings & High Structure 	M25	170 010 430 0250	HA10B-SFH-4B-M25	
	2M25	170 010 430 2250	HA10B-SFH-4B-2M25	
	M32	170 010 430 0320	HA10B-SFH-4B-M32	
	2M32	170 010 430 2320	HA10B-SFH-4B-2M32	
	PG21	170 010 430 0210	HA10B-SFH-4B-PG21	
	2PG21	170 010 430 2210	HA10B-SFH-4B-2PG21	
	PG29	170 010 430 0290	HA10B-SFH-4B-PG29	
	2PG29	170 010 430 2290	HA10B-SFH-4B-2PG29	
	with plastic cover			
	M25	170 010 440 0250	HA10B-SFH-4B-CV-M25	
	2M25	170 010 440 2250	HA10B-SFH-4B-CV-2M25	
	M32	170 010 440 0320	HA10B-SFH-4B-CV-M32	
	2M32	170 010 440 2320	HA10B-SFH-4B-CV-2M32	
	PG21	170 010 440 0210	HA10B-SFH-4B-CV-PG21	
	2PG21	170 010 440 2210	HA10B-SFH-4B-CV-2PG21	
	PG29	170 010 440 0290	HA10B-SFH-4B-CV-PG29	
	2PG29	170 010 440 2290	HA10B-SFH-4B-CV-2PG29	
	with metal cover			
	M25	170 010 450 0250	HA10B-SFH-4B-MCV-M25	
	2M25	170 010 450 2250	HA10B-SFH-4B-MCV-2M25	
	M32	170 010 450 0320	HA10B-SFH-4B-MCV-M32	
	2M32	170 010 450 2320	HA10B-SFH-4B-MCV-2M32	
	PG21	170 010 450 0210	HA10B-SFH-4B-MCV-PG21	
	2PG21	170 010 450 2210	HA10B-SFH-4B-MCV-2PG21	
	PG29	170 010 450 0290	HA10B-SFH-4B-MCV-PG29	
	2PG29	170 010 450 2290	HA10B-SFH-4B-MCV-2PG29	

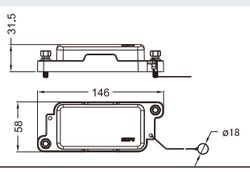
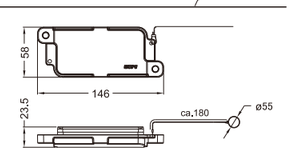
	thread	Product Code	Part Number	Drawings (mm)
removable metal cover 		use with double lock lever hoods 170 010 540 3000	HA10B-MCV-4B/1S	
		use with double lock lever bulkhead/surface mounted housings 170 010 540 6000	HA10B-MCV-4B/2	
removable metal cover 		use with 4 lugs hoods 170 010 563 3000	HA10B-MCV-2L/W.1S	
		use with 4 lugs bulkhead/ surface mounted housings 170 010 563 6000	HA10B-MCV-2L/W.2	

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10B IP68/IP69K Hoods/Housings

IP68/IP69K

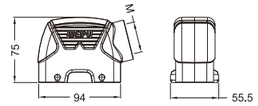
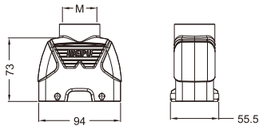
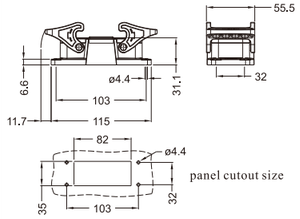
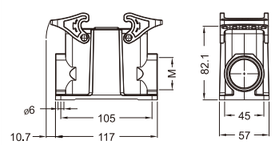
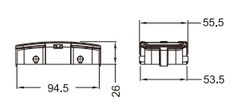
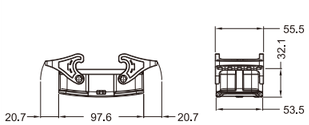
	thread	Product Code	Part Number	Drawings (mm)
Side Entry Hoods & High Structure 		bolt connection		
	M20	172 010 580 0200	HP10B/H-PSH-2S-M20	
	M25	172 010 580 0250	HP10B/H-PSH-2S-M25	
	M32	172 010 580 0320	HP10B/H-PSH-2S-M32	
	PG16	172 010 580 0160	HP10B/H-PSH-2S-PG16	
	PG21	172 010 580 0210	HP10B/H-PSH-2S-PG21	
		roll pin connection		
	M20	172 010 590 0200	HP10B/H-PSH-2T-M20	
	M25	172 010 590 0250	HP10B/H-PSH-2T-M25	
	M32	172 010 590 0320	HP10B/H-PSH-2T-M32	
	PG16	172 010 590 0160	HP10B/H-PSH-2T-PG16	
	PG21	172 010 590 0210	HP10B/H-PSH-2T-PG21	
Top Entry Hoods & High Structure 		bolt connection		
	M20	172 010 600 0200	HP10B/H-PTH-2S-M20	
	M25	172 010 600 0250	HP10B/H-PTH-2S-M25	
	M32	172 010 600 0320	HP10B/H-PTH-2S-M32	
	PG16	172 010 600 0160	HP10B/H-PTH-2S-PG16	
	PG21	172 010 600 0210	HP10B/H-PTH-2S-PG21	
	PG29	172 010 600 0290	HP10B/H-PTH-2S-PG29	
		roll pin connection		
	M20	172 010 610 0200	HP10B/H-PTH-2T-M20	
	M25	172 010 610 0250	HP10B/H-PTH-2T-M25	
	M32	172 010 610 0320	HP10B/H-PTH-2T-M32	
	PG16	172 010 610 0160	HP10B/H-PTH-2T-PG16	
	PG21	172 010 610 0210	HP10B/H-PTH-2T-PG21	
	PG29	172 010 610 0290	HP10B/H-PTH-2T-PG29	
Surface Mounted Housings & High Structure 		bolt connection		
	M20	172 010 620 0200	HP10B/H-SFH-2H-M20	
	M25	172 010 620 0250	HP10B/H-SFH-2H-M25	
	M32	172 010 620 0320	HP10B/H-SFH-2H-M32	
	PG16	172 010 620 0160	HP10B/H-SFH-2H-PG16	
	PG21	172 010 620 0210	HP10B/H-SFH-2H-PG21	
		roll pin connection		
	M20	172 010 630 0200	HP10B/H-SFH-2T-M20	
	M25	172 010 630 0250	HP10B/H-SFH-2T-M25	
	M32	172 010 630 0320	HP10B/H-SFH-2T-M32	
	PG16	172 010 630 0160	HP10B/H-SFH-2T-PG16	
	PG21	172 010 630 0210	HP10B/H-SFH-2T-PG21	
Bulkhead Mounted Housing 		bolt connection		
	----	172 010 640 0000	HP10B/H-ST-2H	
		roll pin connection		
	----	172 010 650 0000	HP10B/H-ST-2T	
		with metal cover		
		bolt connection		
	----	172 010 660 0000	HP10B/H-ST-2H-MCV	
		roll pin connection		
	----	172 010 670 0000	HP10B/H-ST-2T-MCV	

	connection type	Product Code	Part Number	Drawings (mm)
removable metal cover 		for housings bolt connection 172 010 680 0000	HP10B/H-ZMCV-2H	
		for hoods roll pin connection 172 010 690 0000	HP10B/H-ZMCV-2T	
removable metal cover 		for housings bolt connection 172 010 700 0000	HP10B/H-TMCV-2H	
		for hoods roll pin connection 172 010 710 0000	HP10B/H-TMCV-2T	

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16B Plastic Hoods/Housings

IP65

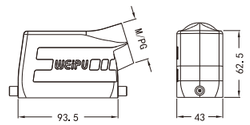
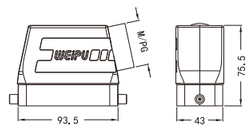
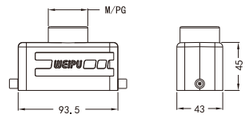
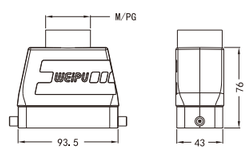
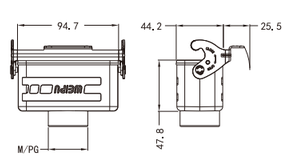
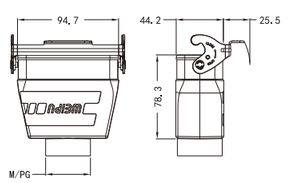
	thread	Product Code	Part Number	Drawings (mm)
Side Entry Hoods & High Structure 	M32	171 016 200 0320	HB16B-PSH-4B-M32	
	M40	171 016 200 0400	HB16B-PSH-4B-M40	
Top Entry Hoods & High Structure 	M32	171 016 210 0320	HB16B-PTH-4B-M32	
	M40	171 016 210 0400	HB16B-PTH-4B-M40	
Bulkhead Mounted Housing 	----	171 016 258 0000	HB16B-ST-2L/C	
Surface Mounted Housings & High Structure 	M32	171 016 278 0320	HB16B-SFH-2L/C-M32	
	2M32	171 016 278 2320	HB16B-SFH-2L/C-2M32	
	M40	171 016 278 0400	HB16B-SFH-2L/C-M40	
	2M40	171 016 278 2400	HB16B-SFH-2L/C-2M40	
removable cover 	----	171 016 520 0000	HB16B-CV-4B/2	
removable cover 	----	171 016 578 0000	HB16B-CV-2L/C	

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16B Metal Hoods/Housings

IP65

Lock selection, see pageP24-02

	thread	Product Code	Part Number	Drawings (mm)
Side Entry Hoods 	M25	170 016 010 0250	HA16B-PS-2B-M25	
	M32	170 016 010 0320	HA16B-PS-2B-M32	
	PG21	170 016 010 0210	HA16B-PS-2B-PG21	
Side Entry Hoods & High Structure 	----	170 016 720 0000	HA16B-PNH-2B (without wire outlet)	
	M40	170 016 030 0400	HA16B-PSH-2B-M40	
	with extended thread			
	M32	170 016 020 0320	HA16B-PSHV-2B-M32	
	PG21	170 016 020 0210	HA16B-PSHV-2B-PG21	
	PG29	170 016 020 0290	HA16B-PSHV-2B-PG29	
Top Entry Hoods 	M25	170 016 040 0250	HA16B-PT-2B-M25	
	M32	170 016 040 0320	HA16B-PT-2B-M32	
	PG21	170 016 040 0210	HA16B-PT-2B-PG21	
Top Entry Hoods & High Structure 	----	170 016 720 0000	HA16B-PNH-2B (without wire outlet)	
	M40	170 016 060 0400	HA16B-PTH-2B-M40	
	with extended thread			
	M32	170 016 050 0320	HA16B-PTHV-2B-M32	
	PG21	170 016 050 0210	HA16B-PTHV-2B-PG21	
	PG29	170 016 050 0290	HA16B-PTHV-2B-PG29	
Cable-to-Cable Housings 	M25	170 016 073 0250	HA16B-MC-1L/W-M25	
	M32	170 016 073 0320	HA16B-MC-1L/W-M32	
	PG21	170 016 073 0210	HA16B-MC-1L/W-PG21	
Cable-to-Cable Housings & High Structure 	M40	170 016 093 0400	HA16B-MCH-1L/W-M40	
	with extended thread			
	M32	170 016 083 0320	HA16B-MCHV-1L/W-M32	
	PG21	170 016 083 0210	HA16B-MCHV-1L/W-PG21	
	PG29	170 016 083 0290	HA16B-MCHV-1L/W-PG29	

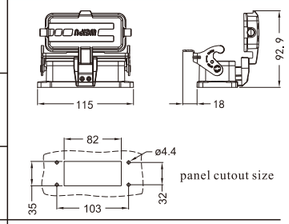
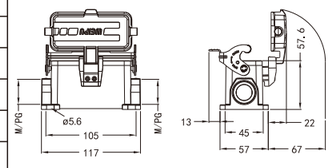
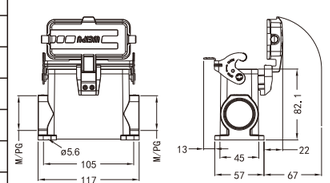
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16B Metal Hoods/Housings

IP65

Lock selection, see pageP24-02

	thread	Product Code	Part Number	Drawings (mm)
Bulkhead Mounted Housing 	----	170 016 103 0000	HA16B-ST-1L/W	
	----	170 016 113 0000	HA16B-ST-1L/W-CV	
	----	170 016 123 0000	HA16B-ST-1L/W-MCV	
Surface Mounted Housings 	M25	170 016 133 0250	HA16B-SF-1L/W-M25	
	2M25	170 016 133 2250	HA16B-SF-1L/W-2M25	
	PG21	170 016 133 0210	HA16B-SF-1L/W-PG21	
	2PG21	170 016 133 2210	HA16B-SF-1L/W-2PG21	
	with plastic cover			
	M25	170 016 143 0250	HA16B-SF-1L/W-CV-M25	
	2M25	170 016 143 2250	HA16B-SF-1L/W-CV-2M25	
	PG21	170 016 143 0210	HA16B-SF-1L/W-CV-PG21	
	2PG21	170 016 143 2210	HA16B-SF-1L/W-CV-2PG21	
	with metal cover			
	M25	170 016 153 0250	HA16B-SF-1L/W-MCV-M25	
	2M25	170 016 153 2250	HA16B-SF-1L/W-MCV-2M25	
	PG21	170 016 153 0210	HA16B-SF-1L/W-MCV-PG21	
	2PG21	170 016 153 2210	HA16B-SF-1L/W-MCV-2PG21	
Surface Mounted Housings & High Structure 	M32	170 016 163 0320	HA16B-SFH-1L/W-M32	
	2M32	170 016 163 2320	HA16B-SFH-1L/W-2M32	
	PG21	170 016 163 0210	HA16B-SFH-1L/W-PG21	
	2PG21	170 016 163 2210	HA16B-SFH-1L/W-2PG21	
	PG29	170 016 163 0290	HA16B-SFH-1L/W-PG29	
	2PG29	170 016 163 2290	HA16B-SFH-1L/W-2PG29	
	with plastic cover			
	M32	170 016 173 0320	HA16B-SFH-1L/W-CV-M32	
	2M32	170 016 173 2320	HA16B-SFH-1L/W-CV-2M32	
	PG21	170 016 173 0210	HA16B-SFH-1L/W-CV-PG21	
	2PG21	170 016 173 2210	HA16B-SFH-1L/W-CV-2PG21	
	PG29	170 016 173 0290	HA16B-SFH-1L/W-CV-PG29	
	2PG29	170 016 173 2290	HA16B-SFH-1L/W-CV-2PG29	
	with metal cover			
	M32	170 016 183 0320	HA16B-SFH-1L/W-MCV-M32	
	2M32	170 016 183 2320	HA16B-SFH-1L/W-MCV-2M32	
	PG21	170 016 183 0210	HA16B-SFH-1L/W-MCV-PG21	
	2PG21	170 016 183 2210	HA16B-SFH-1L/W-MCV-2PG21	
	PG29	170 016 183 0290	HA16B-SFH-1L/W-MCV-PG29	
	2PG29	170 016 183 2290	HA16B-SFH-1L/W-MCV-2PG29	

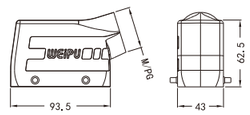
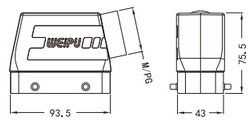
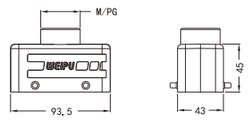
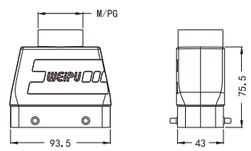
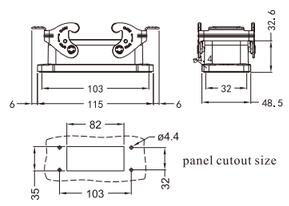
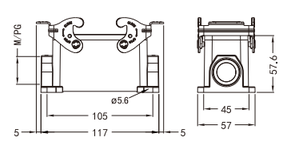
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16B Metal Hoods/Housings

IP65

Lock selection, see pageP24-02

	thread	Product Code	Part Number	Drawings (mm)
Side Entry Hoods 	M25	170 016 190 0250	HA16B-PS-4B-M25	
	M32	170 016 190 0320	HA16B-PS-4B-M32	
	PG21	170 016 190 0210	HA16B-PS-4B-PG21	
Side Entry Hoods & High Structure 	----	170 016 720 0000	HA16B-PNH-4B (without wire outlet)	
	M40	170 016 210 0400	HA16B-PSH-4B-M40	
	with extended thread			
	M32	170 016 200 0320	HA16B-PSHV-4B-M32	
	PG21	170 016 200 0210	HA16B-PSHV-4B-PG21	
	PG29	170 016 200 0290	HA16B-PSHV-4B-PG29	
Top Entry Hoods 	M25	170 016 220 0250	HA16B-PT-4B-M25	
	M32	170 016 220 0320	HA16B-PT-4B-M32	
	PG21	170 016 220 0210	HA16B-PT-4B-PG21	
Top Entry Hoods & High Structure 	----	170 016 720 0000	HA16B-PNH-4B (without wire outlet)	
	M40	170 016 240 0400	HA16B-PTH-4B-M40	
	with extended thread			
	M32	170 016 230 0320	HA16B-PTHV-4B-M32	
	PG21	170 016 230 0210	HA16B-PTHV-4B-PG21	
	PG29	170 016 230 0290	HA16B-PTHV-4B-PG29	
Bulkhead Mounted Housing 	----	170 016 253 0000	HA16B-ST-2L/W	
Surface Mounted Housings 	M25	170 016 263 0250	HA16B-SF-2L/W-M25	
	2M25	170 016 263 2250	HA16B-SF-2L/W-2M25	
	PG21	170 016 263 0210	HA16B-SF-2L/W-PG21	
	2PG21	170 016 263 2210	HA16B-SF-2L/W-2PG21	

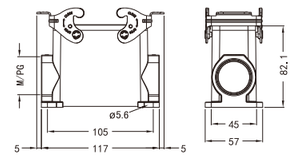
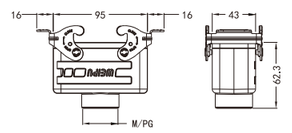
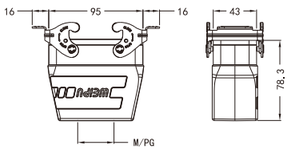
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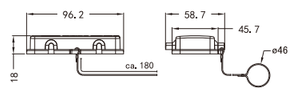
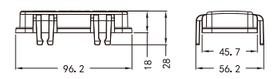
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16B Metal Hoods/Housings

IP65

Lock selection, see pageP24-02

	thread	Product Code	Part Number	Drawings (mm)
Surface Mounted Housings & High Structure 	M25	170 016 273 0250	HA16B-SFH-2L/W-M25	
	M32	170 016 273 0320	HA16B-SFH-2L/W-M32	
	2M32	170 016 273 2320	HA16B-SFH-2L/W-2M32	
	M40	170 016 273 0400	HA16B-SFH-2L/W-M40	
	2M40	170 016 273 2400	HA16B-SFH-2L/W-2M40	
	PG21	170 016 273 0210	HA16B-SFH-2L/W-PG21	
	2PG21	170 016 273 2210	HA16B-SFH-2L/W-2PG21	
	PG29	170 016 273 0290	HA16B-SFH-2L/W-PG29	
	2PG29	170 016 273 2290	HA16B-SFH-2L/W-2PG29	
Cable-to-Cable Housings 	M25	170 016 283 0250	HA16B-MC-2L/W-M25	
	M32	170 016 283 0320	HA16B-MC-2L/W-M32	
	PG21	170 016 283 0210	HA16B-MC-2L/W-PG21	
Cable-to-Cable Housings & High Structure 	M40	170 016 303 0400	HA16B-MCH-2L/W-M40	
	with extended thread			
	M25	170 016 293 0250	HA16B-MCHV-2L/W-M25	
	M32	170 016 293 0320	HA16B-MCHV-2L/W-M32	
	PG21	170 016 293 0210	HA16B-MCHV-2L/W-PG21	
	PG29	170 016 293 0290	HA16B-MCHV-2L/W-PG29	

	thread	Product Code	Part Number	Drawings (mm)
plastic cover 	----	use with 4 lugs hoods 170 016 500 0000	HA16B-CV-4C	
removable plastic cover 		use with double lock lever housings 170 016 500 5000	HA16B-CV-4B/1	
		use with double lock lever bulkhead/surface mounted housings 170 016 500 6000	HA16B-CV-4B/2	

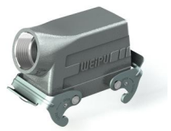
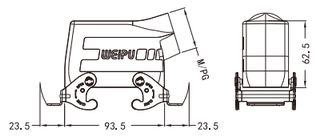
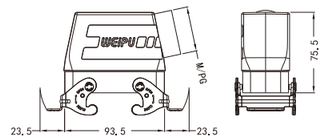
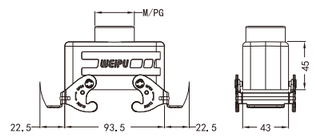
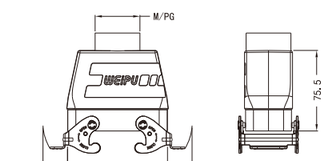
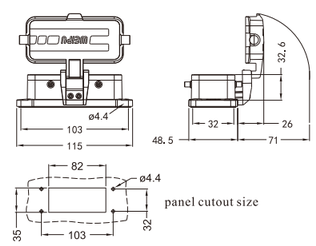
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16B Metal Hoods/Housings

IP65

Lock selection, see pageP24-02

	thread	Product Code	Part Number	Drawings (mm)
Side Entry Hoods 	M25	170 016 313 0250	HA16B-PS-2L/W-M25	
	M32	170 016 313 0320	HA16B-PS-2L/W-M32	
	PG21	170 016 313 0210	HA16B-PS-2L/W-PG21	
Side Entry Hoods & High Structure 	M40	170 016 333 0400	HA16B-PSH-2L/W-M40	
	with extended thread			
	M32	170 016 323 0320	HA16B-PSHV-2L/W-M32	
	PG21	170 016 323 0210	HA16B-PSHV-2L/W-PG21	
	PG29	170 016 323 0290	HA16B-PSHV-2L/W-PG29	
Top Entry Hoods 	M25	170 016 343 0250	HA16B-PT-2L/W-M25	
	M32	170 016 343 0320	HA16B-PT-2L/W-M32	
	PG21	170 016 343 0210	HA16B-PT-2L/W-PG21	
Top Entry Hoods & High Structure 	M40	170 016 363 0400	HA16B-PTH-2L/W-M40	
	with extended thread			
	M32	170 016 353 0320	HA16B-PTHV-2L/W-M32	
	PG21	170 016 353 0210	HA16B-PTHV-2L/W-PG21	
	PG29	170 016 353 0290	HA16B-PTHV-2L/W-PG29	
Bulkhead Mounted Housing 	----	170 016 370 0000	HA16B-ST-4B	
	----	with plastic cover 170 016 380 0000	HA16B-ST-4B-CV	
	----	with metal cover 170 016 390 0000	HA16B-ST-4B-MCV	

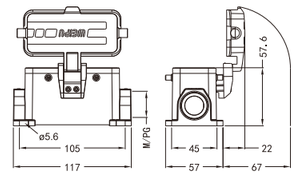
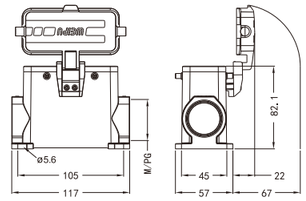
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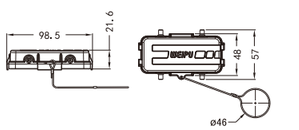
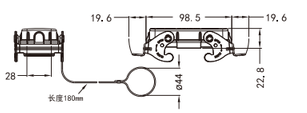
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16B Metal Hoods/Housings

IP65

Lock selection, see pageP24-02

	thread	Product Code	Part Number	Drawings (mm)
Surface Mounted Housings 	M25	170 016 400 0250	HA16B-SF-4B-M25	
	2M25	170 016 400 2250	HA16B-SF-4B-2M25	
	PG21	170 016 400 0210	HA16B-SF-4B-PG21	
	2PG21	170 016 400 2210	HA16B-SF-4B-2PG21	
	with plastic cover			
	M25	170 016 410 0250	HA16B-SF-4B-CV-M25	
	2M25	170 016 410 2250	HA16B-SF-4B-CV-2M25	
	PG21	170 016 410 0210	HA16B-SF-4B-CV-PG21	
	2PG21	170 016 410 2210	HA16B-SF-4B-CV-2PG21	
	with metal cover			
	M25	170 016 420 0250	HA16B-SF-4B-MCV-M25	
	2M25	170 016 420 2250	HA16B-SF-4B-MCV-2M25	
	PG21	170 016 420 0210	HA16B-SF-4B-MCV-PG21	
	2PG21	170 016 420 2210	HA16B-SF-4B-MCV-2PG21	
Surface Mounted Housings & High Structure 	M32	170 016 430 0320	HA16B-SFH-4B-M32	
	2M32	170 016 430 2320	HA16B-SFH-4B-2M32	
	PG21	170 016 430 0210	HA16B-SFH-4B-PG21	
	2PG21	170 016 430 2210	HA16B-SFH-4B-2PG21	
	PG29	170 016 430 0290	HA16B-SFH-4B-PG29	
	2PG29	170 016 430 2290	HA16B-SFH-4B-2PG29	
	with plastic cover			
	M32	170 016 440 0320	HA16B-SFH-4B-CV-M32	
	2M32	170 016 440 2320	HA16B-SFH-4B-CV-2M32	
	PG21	170 016 440 0210	HA16B-SFH-4B-CV-PG21	
	2PG21	170 016 440 2210	HA16B-SFH-4B-CV-2PG21	
	PG29	170 016 440 0290	HA16B-SFH-4B-CV-PG29	
	2PG29	170 016 440 2290	HA16B-SFH-4B-CV-2PG29	
	with metal cover			
	M32	170 016 450 0320	HA16B-SFH-4B-MCV-M32	
	2M32	170 016 450 2320	HA16B-SFH-4B-MCV-2M32	
	PG21	170 016 450 0210	HA16B-SFH-4B-MCV-PG21	
	2PG21	170 016 450 2210	HA16B-SFH-4B-MCV-2PG21	
	PG29	170 016 450 0290	HA16B-SFH-4B-MCV-PG29	
	2PG29	170 016 450 2290	HA16B-SFH-4B-MCV-2PG29	

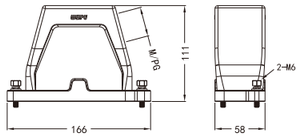
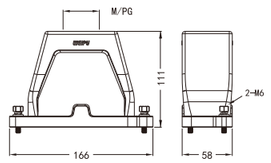
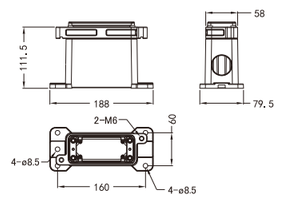
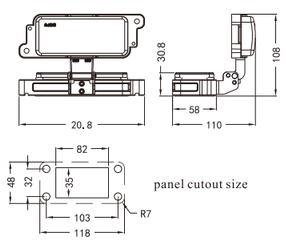
	connection type	Product Code	Part Number	Drawings (mm)
removable metal cover 		use with double lock lever hoods 170 016 540 3000	HA16B-MCV-4B/1S	
		use with double lock lever bulkhead/surface mounted housings 170 016 540 6000	HA16B-MCV-4B/2	
removable metal cover 		use with 4 lugs hoods 170 016 563 3000	HA16B-MCV-2L/W.1S	
		use with 4 lugs bulkhead/ surface mounted housings 170 016 563 6000	HA16B-MCV-2L/W.2	

21

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16 B IP68/IP69K Hoods/Housings

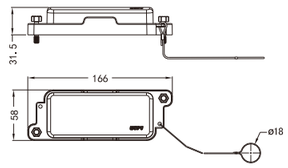
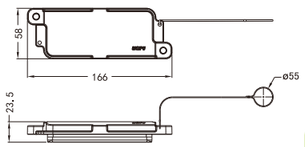
IP68/IP69K

	thread	Product Code	Part Number	Drawings (mm)
Side Entry Hoods & High Structure	bolt connection			
	M25	172 016 580 0250	HP16B/H-PSH-2S-M25	
	M32	172 016 580 0320	HP16B/H-PSH-2S-M32	
	M40	172 016 580 0400	HP16B/H-PSH-2S-M40	
	M50	172 016 580 0500	HP16B/H-PSH-2S-M50	
	PG21	172 016 580 0210	HP16B/H-PSH-2S-PG21	
	PG29	172 016 580 0290	HP16B/H-PSH-2S-PG29	
	PG36	172 016 580 0360	HP16B/H-PSH-2S-PG36	
	roll pin connection			
	M25	172 016 590 0250	HP16B/H-PSH-2T-M25	
	M32	172 016 590 0320	HP16B/H-PSH-2T-M32	
	M40	172 016 590 0400	HP16B/H-PSH-2T-M40	
	M50	172 016 590 0500	HP16B/H-PSH-2T-M50	
	PG21	172 016 590 0210	HP16B/H-PSH-2T-PG21	
	PG29	172 016 590 0290	HP16B/H-PSH-2T-PG29	
	PG36	172 016 590 0360	HP16B/H-PSH-2T-PG36	
Top Entry Hoods & High Structure	bolt connection			
	M25	172 016 600 0250	HP16B/H-PTH-2S-M25	
	2M25	172 016 600 2250	HP16B/H-PTH-2S-2M25	
	M32	172 016 600 0320	HP16B/H-PTH-2S-M32	
	M40	172 016 600 0400	HP16B/H-PTH-2S-M40	
	M50	172 016 600 0500	HP16B/H-PTH-2S-M50	
	PG21	172 016 600 0210	HP16B/H-PTH-2S-PG21	
	2PG21	172 016 600 2210	HP16B/H-PTH-2S-2PG21	
	PG29	172 016 600 0290	HP16B/H-PTH-2S-PG29	
	PG36	172 016 600 0360	HP16B/H-PTH-2S-PG36	
	roll pin connection			
	M25	172 016 610 0250	HP16B/H-PTH-2T-M25	
	2M25	172 016 610 2250	HP16B/H-PTH-2T-2M25	
	M32	172 016 610 0320	HP16B/H-PTH-2T-M32	
	M40	172 016 610 0400	HP16B/H-PTH-2T-M40	
	M50	172 016 610 0500	HP16B/H-PTH-2T-M50	
	PG21	172 016 610 0210	HP16B/H-PTH-2T-PG21	
	2PG21	172 016 610 2210	HP16B/H-PTH-2T-2PG21	
	PG29	172 016 610 0290	HP16B/H-PTH-2T-PG29	
	PG36	172 016 610 0360	HP16B/H-PTH-2T-PG36	
Surface Mounted Housings & High Structure	bolt connection			
	M25	172 016 620 0250	HP16B/H-SFH-2H-M25	
	M32	172 016 620 0320	HP16B/H-SFH-2H-M32	
	M40	172 016 620 0400	HP16B/H-SFH-2H-M40	
	2M40	172 016 620 2400	HP16B/H-SFH-2H-2M40	
	PG21	172 016 620 0210	HP16B/H-SFH-2H-PG21	
	PG29	172 016 620 0290	HP16B/H-SFH-2H-PG29	
	PG36	172 016 620 0360	HP16B/H-SFH-2H-PG36	
	roll pin connection			
	M25	172 016 630 0250	HP16B/H-SFH-2T-M25	
	M32	172 016 630 0320	HP16B/H-SFH-2T-M32	
	M40	172 016 630 0400	HP16B/H-SFH-2T-M40	
	2M40	172 016 630 2400	HP16B/H-SFH-2T-2M40	
	PG21	172 016 630 0210	HP16B/H-SFH-2T-PG21	
	PG29	172 016 630 0290	HP16B/H-SFH-2T-PG29	
	PG36	172 016 630 0360	HP16B/H-SFH-2T-PG36	
Bulkhead Mounted Housing	----	bolt connection 172 016 640 0000	HP16B/H-ST-2H	
	----	roll pin connection 172 016 650 0000	HP16B/H-ST-2T	
	----	bolt connection with metal cover 172 016 660 0000	HP16B/H-ST-2H-MCV	
	----	bolt connection 172 016 670 0000	HP16B/H-ST-2T-MCV	

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16B IP68/IP69K Hoods/Housings

IP68/IP69K

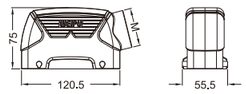
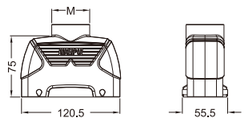
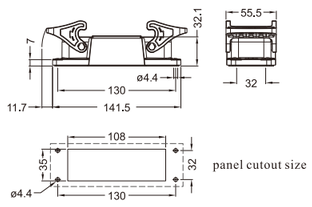
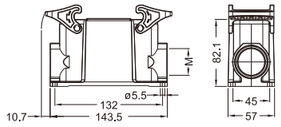
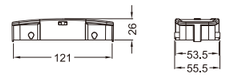
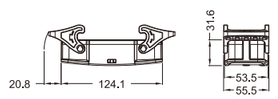
	connection type	Product Code	Part Number	Drawings (mm)
removable metal cover				
		for housings bolt connection 172 016 680 0000	HP16B/H-MCV-2S	
		for housings roll pin connection 172 016 690 0000	HP16B/H-MCV-2T	
removable metal cover				
		for hoods bolt connection 172 016 700 0000	HP16B/H-MCV-2H/1	
		for hoods roll pin connection 172 016 710 0000	HP16B/H-MCV-2T/1	

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21

24B Plastic Hoods/Housings

IP65

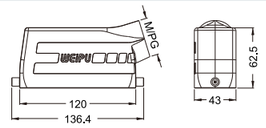
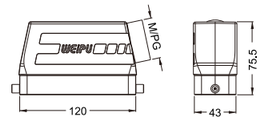
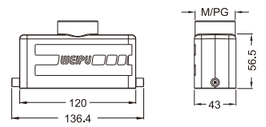
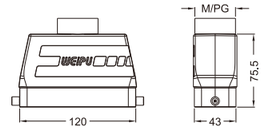
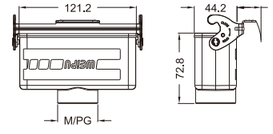
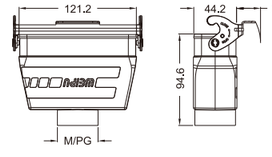
	thread	Product Code	Part Number	Drawings (mm)
Side Entry Hoods & High Structure 	M32	171 024 200 0320	HB24B-PSH-4B-M32	
	M40	171 024 200 0400	HB24B-PSH-4B-M40	
Top Entry Hoods & High Structure 	M32	171 024 210 0320	HB24B-PTH-4B-M32	
	M40	171 024 210 0400	HB24B-PTH-4B-M40	
Bulkhead Mounted Housing 	----	171 024 258 0000	HB24B-ST-2L/C	
Surface Mounted Housings & High Structure 	M32	171 024 278 0320	HB24B-SFH-2L/C-M32	
	2M32	171 024 278 2320	HB24B-SFH-2L/C-2M32	
	M40	171 024 278 0400	HB24B-SFH-2L/C-M40	
	2M40	171 024 278 2400	HB24B-SFH-2L/C-2M40	
removable cover 	----	171 024 520 0000	HB24B-CV-4B/2	
removable cover 	----	171 024 578 0000	HB24B-CV-2L/C	

RETURN>

24B Metal Hoods/Housings

IP65

Lock selection, see pageP24-02

	thread	Product Code	Part Number	Drawings (mm)
Side Entry Hoods 	M25	170 024 010 0250	HA24B-PS-2B-M25	
	M32	170 024 010 0320	HA24B-PS-2B-M32	
	PG21	170 024 010 0210	HA24B-PS-2B-PG21	
Side Entry Hoods & High Structure 	----	170 024 720 0000	HA24B-PNH-2B	
	M40	170 024 030 0400	HA24B-PSH-2B-M40	
	with extended thread			
	M32	170 024 020 0320	HA24B-PSHV-2B-M32	
	PG21	170 024 020 0210	HA24B-PSHV-2B-PG21	
	PG29	170 024 020 0290	HA24B-PSHV-2B-PG29	
Top Entry Hoods 	M25	170 024 040 0250	HA24B-PT-2B-M25	
	M32	170 024 040 0320	HA24B-PT-2B-M32	
	PG21	170 024 040 0210	HA24B-PT-2B-PG21	
	PG29	170 024 040 0290	HA24B-PT-2B-PG29	
Top Entry Hoods & High Structure 	----	170 024 720 0000	HA24B-PNH-2B	
	M40	170 024 060 0400	HA24B-PTH-2B-M40	
	with extended thread			
	M32	170 024 050 0320	HA24B-PTHV-2B-M32	
	PG21	170 024 050 0210	HA24B-PTHV-2B-PG21	
	PG29	170 024 050 0290	HA24B-PTHV-2B-PG29	
Cable-to-Cable Housings 	M25	170 024 073 0250	HA24B-MC-1L/W-M25	
	M32	170 024 073 0320	HA24B-MC-1L/W-M32	
	PG21	170 024 073 0210	HA24B-MC-1L/W-PG21	
	PG29	170 024 073 0290	HA24B-MC-1L/W-PG29	
Cable-to-Cable Housings & High Structure 	M40	170 024 093 0400	HA24B-MCH-1L/W-M40	
	with extended thread			
	M32	170 024 083 0320	HA24B-MCHV-1L/W-M32	
	PG21	170 024 083 0210	HA24B-MCHV-1L/W-PG21	
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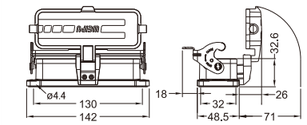
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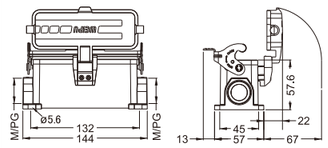
24B Metal Hoods/Housings

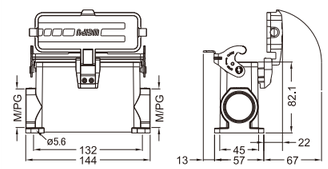
IP65

Lock selection, see pageP24-02

	thread	Product Code	Part Number	Drawings (mm)
Bulkhead Mounted Housing	----	170 024 103 0000	HA24B-ST-1L/W	
	with plastic cover			
	----	170 024 113 0000	HA24B-ST-1L/W-CV	
	with metal cover			
	----	170 024 123 0000	HA24B-ST-1L/W-MCV	
Surface Mounted Housings	M25	170 024 133 0250	HA24B-SF-1L/W-M25	
	2M25	170 024 133 2250	HA24B-SF-1L/W-2M25	
	PG21	170 024 133 0210	HA24B-SF-1L/W-PG21	
	2PG21	170 024 133 2210	HA24B-SF-1L/W-2PG21	
	with plastic cover			
	M25	170 024 143 0250	HA24B-SF-1L/W-CV-M25	
	2M25	170 024 143 2250	HA24B-SF-1L/W-CV-2M25	
	PG21	170 024 143 0210	HA24B-SF-1L/W-CV-PG21	
	2PG21	170 024 143 2210	HA24B-SF-1L/W-CV-2PG21	
	with metal cover			
	M25	170 024 153 0250	HA24B-SF-1L/W-MCV-M25	
	2M25	170 024 153 2250	HA24B-SF-1L/W-MCV-2M25	
	PG21	170 024 153 0210	HA24B-SF-1L/W-MCV-PG21	
	2PG21	170 024 153 2210	HA24B-SF-1L/W-MCV-2PG21	
Surface Mounted Housings & High Structure	M32	170 024 163 0320	HA24B-SFH-1L/W-M32	
	2M32	170 024 163 2320	HA24B-SFH-1L/W-2M32	
	PG21	170 024 163 0210	HA24B-SFH-1L/W-PG21	
	2PG21	170 024 163 2210	HA24B-SFH-1L/W-2PG21	
	PG29	170 024 163 0290	HA24B-SFH-1L/W-PG29	
	2PG29	170 024 163 2290	HA24B-SFH-1L/W-2PG29	
	with plastic cover			
	M32	170 024 173 0320	HA24B-SFH-1L/W-CV-M32	
	2M32	170 024 173 2320	HA24B-SFH-1L/W-CV-2M32	
	PG21	170 024 173 0210	HA24B-SFH-1L/W-CV-PG21	
	2PG21	170 024 173 2210	HA24B-SFH-1L/W-CV-2PG21	
	PG29	170 024 173 0290	HA24B-SFH-1L/W-CV-PG29	
	2PG29	170 024 173 2290	HA24B-SFH-1L/W-CV-2PG29	
	with metal cover			
	M32	170 024 183 0320	HA24B-SFH-1L/W-MCV-M32	
	2M32	170 024 183 2320	HA24B-SFH-1L/W-MCV-2M32	
	PG21	170 024 183 0210	HA24B-SFH-1L/W-MCV-PG21	
	2PG21	170 024 183 2210	HA24B-SFH-1L/W-MCV-2PG21	
	PG29	170 024 183 0290	HA24B-SFH-1L/W-MCV-PG29	
	2PG29	170 024 183 2290	HA24B-SFH-1L/W-MCV-2PG29	







22

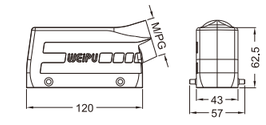
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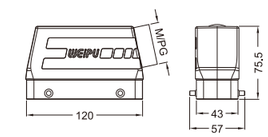
24B Metal Hoods/Housings

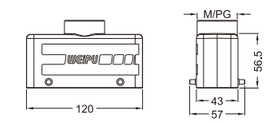
IP65

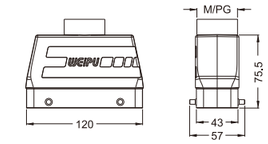
Lock selection, see pageP24-02

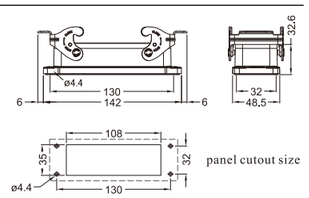
	thread	Product Code	Part Number	Drawings (mm)
Side Entry Hoods	M25	170 024 190 0250	HA24B-PS-4B-M25	
	M32	170 024 190 0320	HA24B-PS-4B-M32	
	PG21	170 024 190 0210	HA24B-PS-4B-PG21	
Side Entry Hoods & High Structure	----	170 024 720 0000	HA24B-PNH-4B	
	M32	170 024 200 0320	HA24B-PSHV-4B-M32	
	M40	170 024 210 0400	HA24B-PSH-4B-M40	
	PG21	170 024 200 0210	HA24B-PSHV-4B-PG21	
	PG29	170 024 200 0290	HA24B-PSHV-4B-PG29	
Top Entry Hoods	M25	170 024 220 0250	HA24B-PT-4B-M25	
	M32	170 024 220 0320	HA24B-PT-4B-M32	
	PG21	170 024 220 0210	HA24B-PT-4B-PG21	
	PG29	170 024 220 0290	HA24B-PT-4B-PG29	
Top Entry Hoods & High Structure	----	170 024 720 0000	HA24B-PNH-4B(无出线孔)	
	M40	170 024 240 0400	HA24B-PTH-4B-M40	
	2M32	170 024 240 2320	HA24B-PTH-4B-2M32	
	M32	170 024 230 0320	HA24B-PTHV-4B-M32	
	PG21	170 024 230 0210	HA24B-PTHV-4B-PG21	
	PG29	170 024 230 0290	HA24B-PTHV-4B-PG29	
Bulkhead Mounted Housing	----	170 024253 0000	HA24B-ST-2L/W	
				
Surface Mounted Housings	M25	170 024 263 0250	HA24B-SF-2L/W-M25	
	2M25	170 024 263 2250	HA24B-SF-2L/W-2M25	
	PG21	170 024 263 0210	HA24B-SF-2L/W-PG21	
	2PG21	170 024 263 2210	HA24B-SF-2L/W-2PG21	

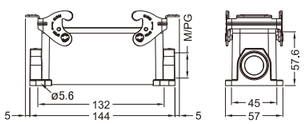












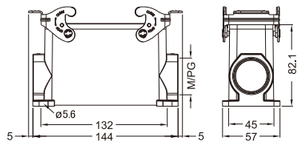
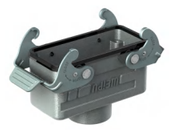
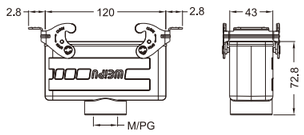
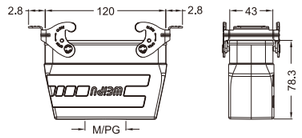
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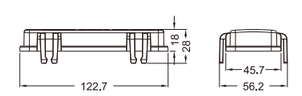
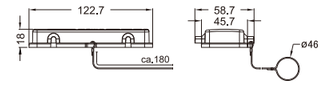
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24B Metal Hoods/Housings

IP65

Lock selection, see pageP24-02

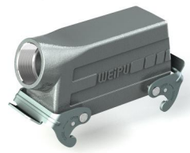
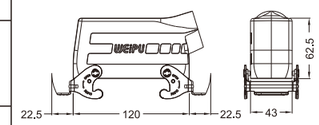
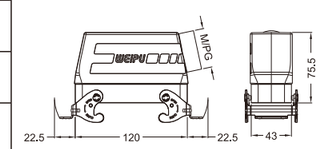
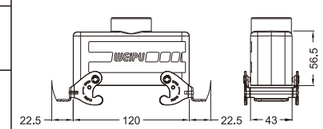
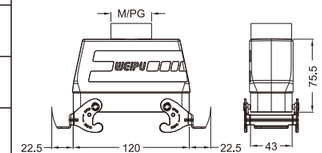
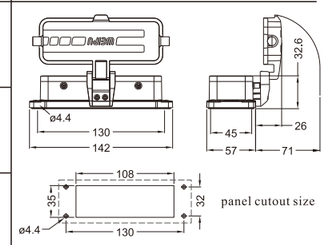
	thread	Product Code	Part Number	Drawings (mm)
Surface Mounted Housings & High Structure 	M32	170 024 273 0320	HA24B-SFH-2L/W-M32	
	2M32	170 024 273 2320	HA24B-SFH-2L/W-2M32	
	M40	170 024 273 0400	HA24B-SFH-2L/W-M40	
	PG21	170 024 273 0210	HA24B-SFH-2L/W-PG21	
	2PG21	170 024 273 2210	HA24B-SFH-2L/W-2PG21	
	PG29	170 024 273 0290	HA24B-SFH-2L/W-PG29	
	2PG29	170 024 273 2290	HA24B-SFH-2L/W-2PG29	
Cable-to-Cable Housings 	M25	170 024 283 0250	HA24B-MC-2L/W-M25	
	M32	170 024 283 0320	HA24B-MC-2L/W-M32	
	PG21	170 024 283 0210	HA24B-MC-2L/W-PG21	
	PG29	170 024 283 0290	HA24B-MC-2L/W-PG29	
Cable-to-Cable Housings & High Structure 	M40	170 024 303 0400	HA24B-MCH-2L/W-M40	
	with extended thread			
	M32	170 024 293 0320	HA24B-MCHV-2L/W-M32	
	PG21	170 024 293 0210	HA24B-MCHV-2L/W-PG21	
	PG29	170 024 293 0290	HA24B-MCHV-2L/W-PG29	

	thread	Product Code	Part Number	Drawings (mm)
plastic cover 	----	use with 4 lugs hoods 170 024 500 0000	HA24B-CV-4C	
removable plastic cover 		use with double lock lever housings 170 024 500 5000	HA24B-CV-4B/1	
		use with double lock lever bulkhead/surface mounted housings 170 024 500 6000	HA24B-CV-4B/2	

24B Metal Hoods/Housings

IP65

Lock selection, see pageP24-02

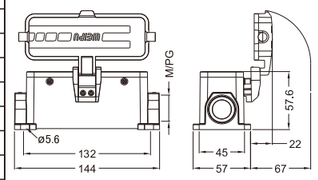
	thread	Product Code	Part Number	Drawings (mm)
Side Entry Hoods 	M25	170 024 313 0250	HA24B-PS-2L/W-M25	
	M32	170 024 313 0320	HA24B-PS-2L/W-M32	
	PG21	170 024 313 0210	HA24B-PS-2L/W-PG21	
Side Entry Hoods & High Structure 	M40	170 024 333 0400	HA24B-PSH-2L/W-M40	
	with extended thread			
	M32	170 024 323 0320	HA24B-PSHV-2L/W-M32	
	PG21	170 024 323 0210	HA24B-PSHV-2L/W-PG21	
	PG29	170 024 323 0290	HA24B-PSHV-2L/W-PG29	
Top Entry Hoods 	M25	170 024 343 0250	HA24B-PT-2L/W-M25	
	M32	170 024 343 0320	HA24B-PT-2L/W-M32	
	PG21	170 024 343 0210	HA24B-PT-2L/W-PG21	
	PG29	170 024 343 0290	HA24B-PT-2L/W-PG29	
Top Entry Hoods & High Structure 	M40	170 024 363 0400	HA24B-PTH-2L/W-M40	
	with extended thread			
	M32	170 024 353 0320	HA24B-PTHV-2L/W-M32	
	PG21	170 024 353 0210	HA24B-PTHV-2L/W-PG21	
	PG29	170 024 353 0290	HA24B-PTHV-2L/W-PG29	
Bulkhead Mounted Housing 	----	170 024 370 0000	HA24B-ST-4B	
	----	with plastic cover 170 024 380 0000	HA24B-ST-4B-CV	
	----	with metal cover 170 024 390 0000	HA24B-ST-4B-MCV	

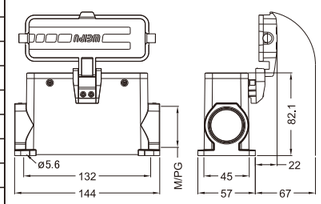
24B Metal Hoods/Housings

IP65

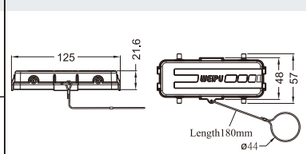
Lock selection, see pageP24-02

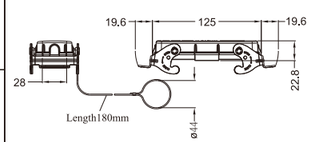
	thread	Product Code	Part Number	Drawings (mm)
Surface Mounted Housings	M25	170 024 400 0250	HA24B-SF-4B-M25	
	2M25	170 024 400 2250	HA24B-SF-4B-2M25	
	PG21	170 024 400 0210	HA24B-SF-4B-PG21	
	2PG21	170 024 400 2210	HA24B-SF-4B-2PG21	
	with plastic cover			
	M25	170 024 410 0250	HA24B-SF-4B-CV-M25	
	2M25	170 024 410 2250	HA24B-SF-4B-CV-2M25	
	PG21	170 024 410 0210	HA24B-SF-4B-CV-PG21	
	2PG21	170 024 410 2210	HA24B-SF-4B-CV-2PG21	
	with metal cover			
	M25	170 024 420 0250	HA24B-SF-4B-MCV-M25	
	2M25	170 024 420 2250	HA24B-SF-4B-MCV-2M25	
	PG21	170 024 420 0210	HA24B-SF-4B-MCV-PG21	
	2PG21	170 024 420 2210	HA24B-SF-4B-MCV-2PG21	
Surface Mounted Housings & High Structure	M32	170 024 430 0320	HA24B-SFH-4B-M32	
	2M32	170 024 430 2320	HA24B-SFH-4B-2M32	
	PG21	170 024 430 0210	HA24B-SFH-4B-PG21	
	2PG21	170 024 430 2210	HA24B-SFH-4B-2PG21	
	PG29	170 024 430 0290	HA24B-SFH-4B-PG29	
	2PG29	170 024 430 2290	HA24B-SFH-4B-2PG29	
	with plastic cover			
	M32	170 024 440 0320	HA24B-SFH-4B-CV-M32	
	2M32	170 024 440 2320	HA24B-SFH-4B-CV-2M32	
	PG21	170 024 440 0210	HA24B-SFH-4B-CV-PG21	
	2PG21	170 024 440 2210	HA24B-SFH-4B-CV-2PG21	
	PG29	170 024 440 0290	HA24B-SFH-4B-CV-PG29	
	2PG29	170 024 440 2290	HA24B-SFH-4B-CV-2PG29	
	with metal cover			
	M32	170 024 450 0320	HA24B-SFH-4B-MCV-M32	
	2M32	170 024 450 2320	HA24B-SFH-4B-MCV-2M32	
	PG21	170 024 450 0210	HA24B-SFH-4B-MCV-PG21	
	2PG21	170 024 450 2210	HA24B-SFH-4B-MCV-2PG21	
	PG29	170 024 450 0290	HA24B-SFH-4B-MCV-PG29	
	2PG29	170 024 450 2290	HA24B-SFH-4B-MCV-2PG29	





	connection type	Product Code	Part Number	Drawings (mm)
removable metal cover		use with double lock lever hoods 170 024 540 3000	HA24B-MCV-4B/1S	
		use with double lock lever bulkhead/surface mounted housings 170 024 540 6000	HA24B-MCV-4B/2	
removable metal cover		use with 4 lugs hoods 170 024 563 3000	HA24B-MCV-2L/W.1S	
		use with 4 lugs bulkhead/ surface mounted housings 170 024 563 6000	HA24B-MCV-2L/W.2	

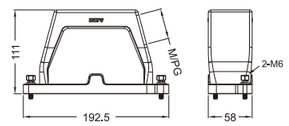


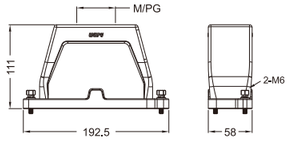


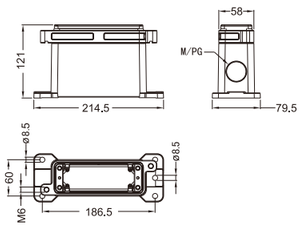
24B IP68/IP69K Hoods/Housings

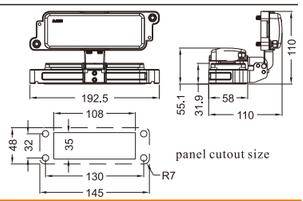
IP68/IP69K

	thread	Product Code	Part Number	Drawings (mm)
Side Entry Hoods & High Structure	bolt connection			
	M25	172 024 580 0250	HP24B/H-PSH-2S-M25	
	M32	172 024 580 0320	HP24B/H-PSH-2S-M32	
	M40	172 024 580 0400	HP24B/H-PSH-2S-M40	
	M50	172 024 580 0500	HP24B/H-PSH-2S-M50	
	PG21	172 024 580 0210	HP24B/H-PSH-2S-PG21	
	PG29	172 024 580 0290	HP24B/H-PSH-2S-PG29	
	PG36	172 024 580 0360	HP24B/H-PSH-2S-PG36	
	roll pin connection			
	M25	172 024 590 0250	HP24B/H-PSH-2T-M25	
	M32	172 024 590 0320	HP24B/H-PSH-2T-M32	
	M40	172 024 590 0400	HP24B/H-PSH-2T-M40	
	M50	172 024 590 0500	HP24B/H-PSH-2T-M50	
	PG21	172 024 590 0210	HP24B/H-PSH-2T-PG21	
	PG29	172 024 590 0290	HP24B/H-PSH-2T-PG29	
	PG36	172 024 590 0360	HP24B/H-PSH-2T-PG36	
Top Entry Hoods & High Structure	bolt connection			
	M25	172 024 600 0250	HP24B/H-PTH-2S-M25	
	M32	172 024 600 0320	HP24B/H-PTH-2S-M32	
	M40	172 024 600 0400	HP24B/H-PTH-2S-M40	
	M50	172 024 600 0500	HP24B/H-PTH-2S-M50	
	PG21	172 024 600 0210	HP24B/H-PTH-2S-PG21	
	2PG21	172 024 600 2210	HP24B/H-PTH-2S-2PG21	
	PG29	172 024 600 0290	HP24B/H-PTH-2S-PG29	
	PG36	172 024 600 0360	HP24B/H-PTH-2S-PG36	
	roll pin connection			
	M25	172 024 610 0250	HP24B/H-PTH-2T-M25	
	M32	172 024 610 0320	HP24B/H-PTH-2T-M32	
	M40	172 024 610 0400	HP24B/H-PTH-2T-M40	
	M50	172 024 610 0500	HP24B/H-PTH-2T-M50	
	PG21	172 024 610 0210	HP24B/H-PTH-2T-PG21	
	2PG21	172 024 610 2210	HP24B/H-PTH-2T-2PG21	
	PG29	172 024 610 0290	HP24B/H-PTH-2T-PG29	
	PG36	172 024 610 0360	HP24B/H-PTH-2T-PG36	
Surface Mounted Housings & High Structure	bolt connection			
	M25	172 024 620 0250	HP24B/H-SFH-2H-M25	
	M32	172 024 620 0320	HP24B/H-SFH-2H-M32	
	M40	172 024 620 0400	HP24B/H-SFH-2H-M40	
	2M40	172 024 620 2400	HP24B/H-SFH-2H-2M40	
	PG21	172 024 620 0210	HP24B/H-SFH-2H-PG21	
	PG29	172 024 620 0290	HP24B/H-SFH-2H-PG29	
	PG36	172 024 620 0360	HP24B/H-SFH-2H-PG36	
	roll pin connection			
	M25	172 024 630 0250	HP24B/H-SFH-2T-M25	
	M32	172 024 630 0320	HP24B/H-SFH-2T-M32	
	M40	172 024 630 0400	HP24B/H-SFH-2T-M40	
	2M40	172 024 630 2400	HP24B/H-SFH-2T-2M40	
	PG21	172 024 630 0210	HP24B/H-SFH-2T-PG21	
	PG29	172 024 630 0290	HP24B/H-SFH-2T-PG29	
	PG36	172 024 630 0360	HP24B/H-SFH-2T-PG36	
Bulkhead Mounted Housing	bolt connection			
	----	172 024 640 0000	HP24B/H-ST-2H	
	roll pin connection			
	----	172 024 650 0000	HP24B/H-ST-2T	
	with metal cover			
	bolt connection			
	----	172 024 660 0000	HP24B/H-ST-2H-MCV	
	roll pin connection			
	----	172 024 670 0000	HP24B/H-ST-2T-MCV	



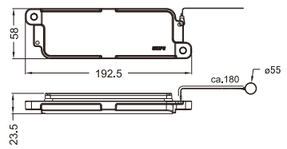
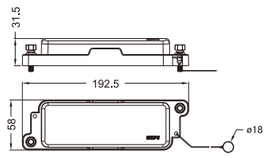






24B Metal Hoods/Housings

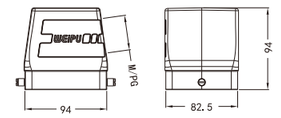
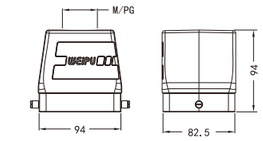
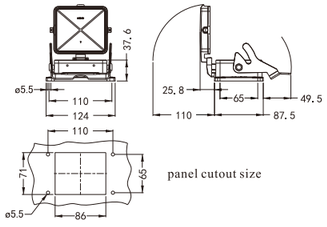
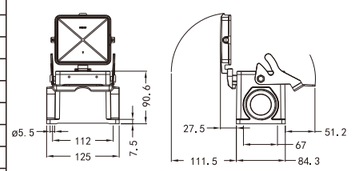
IP65

	connection type	Product Code	Part Number	Drawings (mm)
removable metal cover for housings				
		bolt connection 172 024 680 0000	HP24B/H-MCV-2S	
		roll pin connection 172 024 690 0000	HP24B/H-MCV-2T	
removable metal cover for hoods				
		bolt connection 172 024 700 0000	HP24B/H-MCV-2H/1	
		roll pin connection 172 024 710 0000	HP24B/H-MCV-2T/1	

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32B Metal Hoods/Housings

IP65

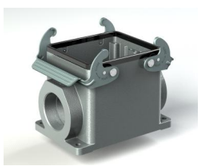
	thread	Product Code	Part Number	Drawings (mm)
Side Entry Hoods	M32	170 032 010 0320	HA32B-PS-2B-M32	
	M40	170 032 010 0400	HA32B-PS-2B-M40	
	M50	170 032 010 0500	HA32B-PS-2B-M50	
	PG29	170 032 010 0290	HA32B-PS-2B-PG29	
	PG36	170 032 010 0360	HA32B-PS-2B-PG36	
	PG42	170 032 010 0420	HA32B-PS-2B-PG42	
Top Entry Hoods	M32	170 032 040 0320	HA32B-PT-2B-M32	
	M40	170 032 040 0400	HA32B-PT-2B-M40	
	M50	170 032 040 0500	HA32B-PT-2B-M50	
	PG29	170 032 040 0290	HA32B-PT-2B-PG29	
	PG36	170 032 040 0360	HA32B-PT-2B-PG36	
	PG42	170 032 040 0420	HA32B-PT-2B-PG42	
Bulkhead Mounted Housing	----	170 032 107 0000	HA32B-ST-1L/S	
	----	with plastic cover 170 032 117 0000	HA32B-ST-1L/S-CV	
	----	with metal cover 170 032 127 0000	HA32B-ST-1L/S-MCV	
Surface Mounted Housings & High Structure	M32	170 032 137 0320	HA32B-SF-1L/S-M32	
	2M32	170 032 137 2320	HA32B-SF-1L/S-2M32	
	M40	170 032 137 0400	HA32B-SF-1L/S-M40	
	2M40	170 032 137 2400	HA32B-SF-1L/S-2M40	
	PG29	170 032 137 0290	HA32B-SF-1L/S-PG29	
	2PG29	170 032 137 2290	HA32B-SF-1L/S-2PG29	
	PG36	170 032 137 0360	HA32B-SF-1L/S-PG36	
	2PG36	170 032 137 2360	HA32B-SF-1L/S-2PG36	
	with plastic cover			
	M32	170 032 147 0320	HA32B-SF-1L/S-CV-M32	
	2M32	170 032 147 2320	HA32B-SF-1L/S-CV-2M32	
	M40	170 032 147 0400	HA32B-SF-1L/S-CV-M40	
	2M40	170 032 147 2400	HA32B-SF-1L/S-CV-2M40	
	PG29	170 032 147 0290	HA32B-SF-1L/S-CV-PG29	
	2PG29	170 032 147 2290	HA32B-SF-1L/S-CV-2PG29	
	PG36	170 032 147 0360	HA32B-SF-1L/S-CV-PG36	
	2PG36	170 032 147 2360	HA32B-SF-1L/S-CV-2PG36	
	with metal cover			
	M32	170 032 157 0320	HA32B-SF-1L/S-MCV-M32	
	2M32	170 032 157 2320	HA32B-SF-1L/S-MCV-2M32	
	M40	170 032 157 0400	HA32B-SF-1L/S-MCV-M40	
	2M40	170 032 157 2400	HA32B-SF-1L/S-MCV-2M40	
	PG29	170 032 157 0290	HA32B-SF-1L/S-MCV-PG29	
	2PG29	170 032 157 2290	HA32B-SF-1L/S-MCV-2PG29	
	PG36	170 032 157 0360	HA32B-SF-1L/S-MCV-PG36	
	2PG36	170 032 157 2360	HA32B-SF-1L/S-MCV-2PG36	

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32B Metal Hoods/Housings

IP65

Lock selection, see pageP24-02

	thread	Product Code	Part Number	Drawings (mm)
Side Entry Hoods	M32	170 032 190 0320	HA32B-PS-4B-M32	
	M40	170 032 190 0400	HA32B-PS-4B-M40	
	M50	170 032 190 0500	HA32B-PS-4B-M50	
	PG29	170 032 190 0290	HA32B-PS-4B-PG29	
	PG36	170 032 190 0360	HA32B-PS-4B-PG36	
	PG42	170 032 190 0420	HA32B-PS-4B-PG42	
Top Entry Hoods	M32	170 032 220 0320	HA32B-PT-4B-M32	
	M40	170 032 220 0400	HA32B-PT-4B-M40	
	M50	170 032 220 0500	HA32B-PT-4B-M50	
	PG29	170 032 220 0290	HA32B-PT-4B-PG29	
	PG36	170 032 220 0360	HA32B-PT-4B-PG36	
	PG42	170 032 220 0420	HA32B-PT-4B-PG42	
Bulkhead Mounted Housing	----	170 032 253 0000	HA32B-ST-2L/W	
				
Surface Mounted Housings	M32	170 032 263 0320	HA32B-SF-2L/W-M32	
	2M32	170 032 263 2320	HA32B-SF-2L/W-2M32	
	M40	170 032 263 0400	HA32B-SF-2L/W-M40	
	2M40	170 032 263 2400	HA32B-SF-2L/W-2M40	
	PG29	170 032 263 0290	HA32B-SF-2L/W-PG29	
	2PG29	170 032 263 2290	HA32B-SF-2L/W-2PG29	
	PG36	170 032 263 0360	HA32B-SF-2L/W-PG36	
	2PG36	170 032 263 2360	HA32B-SF-2L/W-2PG36	
	2PG42	170 032 263 2420	HA32B-SF-2L/W-2PG42	
Cable-to-Cable Housings	M32	170 032 283 0320	HA32B-MC-2L/W-M32	
	M40	170 032 283 0400	HA32B-MC-2L/W-M40	
	M50	170 032 283 0500	HA32B-MC-2L/W-M50	
	PG29	170 032 283 0290	HA32B-MC-2L/W-PG29	
	PG36	170 032 283 0360	HA32B-MC-2L/W-PG36	
	PG42	170 032 283 0420	HA32B-MC-2L/W-PG42	

23

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32B Metal Hoods/Housings

IP65

Lock selection, see pageP24-02

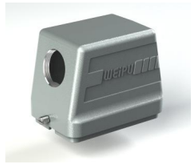
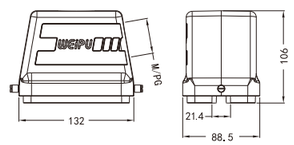
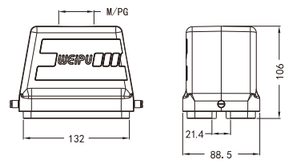
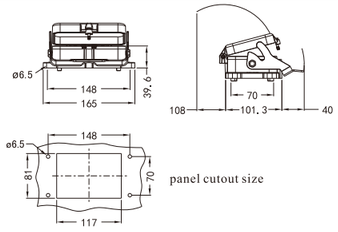
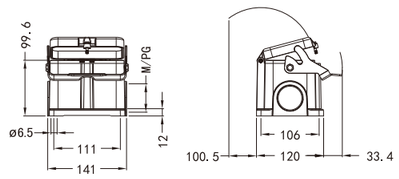
	thread	Product Code	Part Number	Drawings (mm)
removable metal cover		use with double lock lever bulkhead/surface mounted housings 170 032 540 6000	HA32B-MCV-4B/2	
				
removable metal cover		use with 4 lugs hoods 170 032 563 3000	HA32B-MCV-2L/W.1S	
				

23

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48B Metal Hoods/Housings

IP65

	thread	Product Code	Part Number	Drawings (mm)
Side Entry Hoods 	M32	170 048 010 0320	HA48B-PS-2B-M32	
	M40	170 048 010 0400	HA48B-PS-2B-M40	
	M50	170 048 010 0500	HA48B-PS-2B-M50	
	PG29	170 048 010 0290	HA48B-PS-2B-PG29	
	PG36	170 048 010 0360	HA48B-PS-2B-PG36	
	PG42	170 048 010 0420	HA48B-PS-2B-PG42	
Top Entry Hoods 	M32	170 048 040 0320	HA48B-PT-2B-M32	
	M40	170 048 040 0400	HA48B-PT-2B-M40	
	M50	170 048 040 0500	HA48B-PT-2B-M50	
	PG29	170 048 040 0290	HA48B-PT-2B-PG29	
	PG36	170 048 040 0360	HA48B-PT-2B-PG36	
	PG42	170 048 040 0420	HA48B-PT-2B-PG42	
Bulkhead Mounted Housing 	----	170 048 107 0000	HA48B-ST-1L/S	
	----	with plastic cover 170 048 117 0000	HA48B-ST-1L/S-CV	
	----	with metal cover 170 048 127 0000	HA48B-ST-1L/S-MCV	
Surface Mounted Housings & High Structure	M32	170 048 137 0320	HA48B-SF-1L/S-M32	
	2M32	170 048 137 2320	HA48B-SF-1L/S-2M32	
	M40	170 048 137 0400	HA48B-SF-1L/S-M40	
	2M40	170 048 137 2400	HA48B-SF-1L/S-2M40	
	PG29	170 048 137 0290	HA48B-SF-1L/S-PG29	
	2PG29	170 048 137 2290	HA48B-SF-1L/S-2PG29	
	PG36	170 048 137 0360	HA48B-SF-1L/S-PG36	
	2PG36	170 048 137 2360	HA48B-SF-1L/S-2PG36	
	with plastic cover			
	M32	170 048 147 0320	HA48B-SF-1L/S-CV-M32	
	2M32	170 048 147 2320	HA48B-SF-1L/S-CV-2M32	
	M40	170 048 147 0400	HA48B-SF-1L/S-CV-M40	
	2M40	170 048 147 2400	HA48B-SF-1L/S-CV-2M40	
	PG29	170 048 147 0290	HA48B-SF-1L/S-CV-PG29	
	2PG29	170 048 147 2290	HA48B-SF-1L/S-CV-2PG29	
	PG36	170 048 147 0360	HA48B-SF-1L/S-CV-PG36	
	2PG36	170 048 147 2360	HA48B-SF-1L/S-CV-2PG36	
	with metal cover			
	M32	170 048 157 0320	HA48B-SF-1L/S-MCV-M32	
	2M32	170 048 157 2320	HA48B-SF-1L/S-MCV-2M32	
	M40	170 048 157 0400	HA48B-SF-1L/S-MCV-M40	
	2M40	170 048 157 2400	HA48B-SF-1L/S-MCV-2M40	
	PG29	170 048 157 0290	HA48B-SF-1L/S-MCV-PG29	
	2PG29	170 048 157 2290	HA48B-SF-1L/S-MCV-2PG29	
	PG36	170 048 157 0360	HA48B-SF-1L/S-MCV-PG36	
	2PG36	170 048 157 2360	HA48B-SF-1L/S-MCV-2PG36	

Optional locks

	Mark	Material	Description	Part Number	Product Code
	L/GC	Stainless steel+TPR	High-strength lock, with soft rubber protection, suitable for harsh environments	HA16B-SFH-2L/GC-M25	170 016 271 0250
	L/G	Stainless steel	High-strength lock, suitable for harsh environments	HA16B-SFH-2L/G-M25	170 016 272 0250
	L/W	Iron zinc-nickel alloy + metal spring	Common lock, suitable for general industrial environment	HA16B-SFH-2L/W-M25	170 016 273 0250
	L/P	Plastic+Stainless Steel	Detachable lock, suitable for general industrial environment	HA16B-SFH-2L/P-M25	170 016 275 0250
	L/E	Plastic+Stainless Steel	Detachable lock, suitable for general industrial environment	HA16B-SFH-2L/E-M25	170 016 276 0250

Tools

Removal tool

	Part Number	Product Code
5A Removal tool		
	RT-5A	193 004 001 2000
HD Series 10A Removal tool		
	RT-HD/10A	193 004 002 2000
HEE Series 16A Removal tool		
	RT-HEE/16A	193 004 003 2000

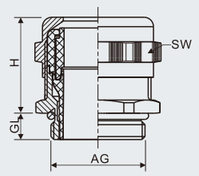
Crimp tool

	Crimping wire range	Part Number	Product Code
	0.14-4mm² AWG 25-11	CTW-0.14/4	104 980 014
	0.37-4mm²	CT-0.37/4	193 003 003 0000

HSM Cable Gland — Cable Gland-Metric Thread

Shell : nickel-plated brass
Clamping ring : PA
O-ring : NBR
IP rating : IP68 (with O-ring)
Environment Temperature : -40℃-100℃
Temperature range : Static: - 40°C to 100°C, or instantaneous heat resistance up to 120°C.
Dynamic: - 20°C to 80°C, or instantaneous heat resistance up to 100°C.
Flammability Rating : UL94-V2





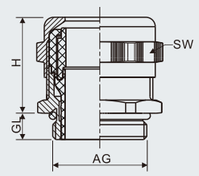
Part Number	Thread Type	⌀Cable OD mm	AG mm	GL mm	H mm	SW mm	Product Code	
HSM.M12.A	M12×1.5	3-6.5	12	6.5	19	14	9 00 010 0120 0	50
HSM.M12.B	M12×1.5	2-5	12	6.5	19	14	9 00 010 0121 0	50
HSM.M16.A	M16×1.5	4-8	16	6	21	17/19	9 00 010 0160 0	50
HSM.M16.B	M16×1.5	2-6	16	6	21	17/19	9 00 010 0161 0	50
HSM.M16.C	M16×1.5	5-10	16	6	22	20	9 00 010 0162 0	50
HSM.M18	M18×1.5	5-10	18	6	22	20	9 00 010 0180 0	50
HSM.M20.A	M20×1.5	6-12	20	6	23	22	9 00 010 0200 0	50
HSM.M20.B	M20×1.5	5-9	20	6	23	22	9 00 010 0201 0	50
HSM.M22	M22×1.5	10-14	22	6	24	24	9 00 010 0220 0	50
HSM.M24.A	M24×1.5	7-12	24	6	24	27	9 00 010 0240 0	50
HSM.M24.B	M24×1.5	10-14	24	6	24	27	9 00 010 0241 0	50
HSM.M25.A	M25×1.5	13-18	25	7	26	30	9 00 010 0250 0	20
HSM.M25.B	M25×1.5	9-16	25	7	26	30	9 00 010 0251 0	20
HSM.M27.A	M27×2.0	13-18	27	8	25	30	9 00 010 0270 0	20
HSM.M27.B	M27×2.0	9-16	27	8	26	30	9 00 010 0271 0	20
HSM.M30.A	M30×2.0	9-16	30	8	26	32	9 00 010 0300 0	20
HSM.M30.B	M30×2.0	13-18	30	8	26	32	9 00 010 0301 0	20
HSM.M32.A	M32×1.5	18-25	32	8	31	40	9 00 010 0320 0	20
HSM.M32.B	M32×1.5	13-20	32	8	31	40	9 00 010 0321 0	20
HSM.M32.C	M32×1.5	15-21	32	8	33	36	9 00 010 0322 0	20
HSM.M33	M33×2.0	18-25	33	8	34	40	9 00 010 0330 0	20
HSM.M36.A	M36×2.0	13-20	36	8	34	40	9 00 010 0360 0	20
HSM.M36.B	M36×2.0	18-25	36	8	34	40	9 00 010 0361 0	20
HSM.M40.A	M40×1.5	22-32	40	8	37	50	9 00 010 0400 0	10
HSM.M40.B	M40×1.5	20-26	40	8	37	50	9 00 010 0401 0	10
HSM.M40.C	M40×1.5	19-27	40	8	33	46	9 00 010 0402 0	10
HSM.M42	M42×2.0	22-32	42	8	40	50	9 00 010 0420 0	10
HSM.M48	M48×2.0	22-32	48	8	40	50	9 00 010 0480 0	10
HSM.M50.A	M50×1.5	32-38	50	9	37	57	9 00 010 0500 0	10
HSM.M50.B	M50×1.5	25-31	50	9	37	57	9 00 010 0501 0	10
HSM.M56	M56×2.0	32-38	56	9	42	60	9 00 010 0560 0	5
HSM.M60	M60×2.0	37-44	60	10	43	65	9 00 010 0600 0	5
HSM.M63.A	M63×1.5	37-44	63	10	38	64/68	9 00 010 0630 0	5
HSM.M63.B	M63×1.5	29-35	63	10	38	64/68	9 00 010 0631 0	5
HSM.M64	M64×2.0	37-44	64	10	43	67	9 00 010 0640 0	5

Part Number	Thread Type	⌀Cable OD mm	AG mm	GL mm	H mm	SW mm	Product Code	
HSM.PG7.A	PG7	3-6.5	12.5	5	19	14	9 00 010 1070 0	50
HSM.PG7.B	PG7	2-5	12.5	5	19	14	9 00 010 1071 0	50
HSM.PG9.A	PG9	4-8	15.2	6	21	17	9 00 010 1090 0	50
HSM.PG9.B	PG9	2-6	15.2	6	21	17	9 00 010 1091 0	50
HSM.PG11.A	PG11	5-10	18.6	6	22	20	9 00 010 1110 0	50
HSM.PG11.B	PG11	3-7	18.6	6	22	20	9 00 010 1111 0	50
HSM.PG13.5.A	PG13.5	6-12	20.4	6.5	24	22	9 00 010 1130 0	50
HSM.PG13.5.B	PG13.5	5-9	20.4	6.5	24	22	9 00 010 1131 0	50
HSM.PG16.A	PG16	10-14	22.5	6.5	23	24	9 00 010 1160 0	50
HSM.PG16.B	PG16	7-12	22.5	6.5	23	24	9 00 010 1161 0	50
HSM.PG21.A	PG21	13-18	28.3	7	24	30	9 00 010 1210 0	20
HSM.PG21.B	PG21	9-16	28.3	7	24	30	9 00 010 1211 0	20
HSM.PG29.A	PG29	18-25	37	8	29	40	9 00 010 1290 0	20
HSM.PG29.B	PG29	13-20	37	8	29	40	9 00 010 1291 0	20
HSM.PG36.A	PG36	22-32	47	8	35	50	9 00 010 1360 0	10
HSM.PG36.B	PG36	20-26	47	8	35	50	9 00 010 1361 0	10
HSM.PG42.A	PG42	32-38	54	9	37	57	9 00 010 1420 0	10
HSM.PG42.B	PG42	25-31	54	9	37	57	9 00 010 1421 0	10
HSM.PG48.A	PG48	37-44	59.3	10	38	64	9 00 010 1480 0	5
HSM.PG48.B	PG48	29-35	59.3	10	38	64	9 00 010 1481 0	5

HSM Cable Gland — Extended Metal Cable Gland-Metric Thread

Shell : nickel-plated brass
Clamping ring : PA
O-ring : NBR
IP rating : Ip68 (with O-ring)
Environment Temperature : -40℃-100℃
Temperature range : Static: -40°C to 100°C, or instantaneous heat resistance up to 120°C.
Dynamic: -20°C to 80°C, or instantaneous heat resistance up to 100°C.
Flammability Rating : UL94-V2





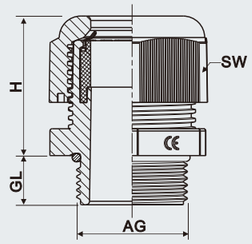
Part Number	Thread Type	⌀Cable OD mm	AG mm	GL mm	H mm	SW mm	Product Code	
HSM.L.M12.A	M12×1.5	3-6.5	12	10	19	14	9 00 011 0120 0	50
HSM.L.M12.B	M12×1.5	2-5	12	10	19	14	9 00 011 0121 0	50
HSM.L.M16.A	M16×1.5	4-8	16	10	21	17/19	9 00 011 0160 0	50
HSM.L.M16.B	M16×1.5	2-6	16	10	21	17/19	9 00 011 0161 0	50
HSM.L.M16.C	M16×1.5	5-10	16	10	22	20	9 00 011 0162 0	50
HSM.L.M18	M18×1.5	5-10	18	10	22	20	9 00 011 0180 0	50
HSM.L.M20.A	M20×1.5	6-12	20	10	23	22	9 00 011 0200 0	50
HSM.L.M20.B	M20×1.5	5-9	20	10	23	22	9 00 011 0201 0	50
HSM.L.M22	M22×1.5	10-14	22	10	24	24	9 00 011 0220 0	50
HSM.L.M24.A	M24×1.5	7-12	24	10	24	27	9 00 011 0240 0	50
HSM.L.M24.B	M24×1.5	10-14	24	10	24	27	9 00 011 0241 0	50
HSM.L.M25.A	M25×1.5	13-18	25	12	26	30	9 00 011 0250 0	20
HSM.L.M25.B	M25×1.5	9-16	25	12	26	30	9 00 011 0251 0	20
HSM.L.M27.A	M27×2.0	13-18	27	12	25	30	9 00 011 0270 0	20
HSM.L.M27.B	M27×2.0	9-16	27	12	26	30	9 00 011 0271 0	20
HSM.L.M30.A	M30×2.0	9-16	30	12	26	32	9 00 011 0300 0	20
HSM.L.M30.B	M30×2.0	13-18	30	12	26	32	9 00 011 0301 0	20
HSM.L.M32.A	M32×1.5	18-25	32	12	31	40	9 00 011 0320 0	20
HSM.L.M32.B	M32×1.5	13-20	32	12	31	40	9 00 011 0321 0	20
HSM.L.M32.C	M32×1.5	15-21	32	12	37	36	9 00 011 0322 0	20
HSM.L.M33	M33×2.0	18-25	33	12	34	40	9 00 011 0330 0	20
HSM.L.M36.A	M36×2.0	13-20	36	12	34	40	9 00 011 0360 0	20
HSM.L.M36.B	M36×2.0	18-25	36	12	34	40	9 00 011 0361 0	20
HSM.L.M40.A	M40×1.5	22-32	40	15	37	50	9 00 011 0400 0	10
HSM.L.M40.B	M40×1.5	20-26	40	15	37	50	9 00 011 0401 0	10
HSM.L.M40.C	M40×1.5	19-27	40	15	37	46	9 00 011 0402 0	10
HSM.L.M42	M42×2.0	22-32	42	15	40	50	9 00 011 0420 0	10
HSM.L.M48	M48×2.0	22-32	48	15	40	50	9 00 011 0480 0	10
HSM.L.M50.A	M50×1.5	32-38	50	15	37	57	9 00 011 0500 0	10
HSM.L.M50.B	M50×1.5	25-31	50	15	37	57	9 00 011 0501 0	10
HSM.L.M56	M56×2.0	32-38	56	15	42	60	9 00 011 0560 0	10
HSM.L.M60	M60×2.0	37-44	60	15	43	65	9 00 011 0600 0	10
HSM.L.M63.A	M63×1.5	37-44	63	15	38	64/68	9 00 011 0630 0	5
HSM.L.M63.B	M63×1.5	29-35	63	15	38	64/68	9 00 011 0631 0	5
HSM.L.M64	M64×2.0	37-44	64	15	43	67	9 00 011 0640 0	5

Part Number	Thread Type	⌀Cable OD mm	AG mm	GL mm	H mm	SW mm	Product Code	
HSM.L.PG7.A	PG7	3-6.5	12.5	10	19	14	9 00 011 1070 0	50
HSM.L.PG7.B	PG7	2-5	12.5	10	19	14	9 00 011 1071 0	50
HSM.L.PG9.A	PG9	4-8	15.2	10	21	17	9 00 011 1090 0	50
HSM.L.PG9.B	PG9	2-6	15.2	10	21	17	9 00 011 1091 0	50
HSM.L.PG11.A	PG11	5-10	18.6	10	22	20	9 00 011 1110 0	50
HSM.L.PG11.B	PG11	3-7	18.6	10	22	20	9 00 011 1111 0	50
HSM.L.PG13.5.A	PG13.5	6-12	20.4	10	24	22	9 00 011 1130 0	50
HSM.L.PG13.5.B	PG13.5	5-9	20.4	10	24	22	9 00 011 1131 0	50
HSM.L.PG16.A	PG16	10-14	22.5	10	23	24	9 00 011 1160 0	50
HSM.L.PG16.B	PG16	7-12	22.5	10	23	24	9 00 011 1161 0	50
HSM.L.PG21.A	PG21	13-18	28.3	12	24	30	9 00 011 1210 0	20
HSM.L.PG21.B	PG21	9-16	28.3	12	24	30	9 00 011 1211 0	20
HSM.L.PG29.A	PG29	18-25	37	12	29	40	9 00 011 1290 0	20
HSM.L.PG29.B	PG29	13-20	37	12	29	40	9 00 011 1291 0	20
HSM.L.PG36.A	PG36	22-32	47	15	35	50	9 00 011 1360 0	10
HSM.L.PG36.B	PG36	20-26	47	15	35	50	9 00 011 1361 0	10
HSM.L.PG42.A	PG42	32-38	54	15	37	57	9 00 011 1420 0	10
HSM.L.PG42.B	PG42	25-31	54	15	37	57	9 00 011 1421 0	10
HSM.L.PG48.A	PG48	37-44	59.3	15	38	64	9 00 011 1480 0	5
HSM.L.PG48.B	PG48	29-35	59.3	15	38	64	9 00 011 1481 0	5

HSK Cable Gland—PG Nylon Cable Gland

Material : PA
O-ring : NBR
IP rating : Ip68 (with O-ring)
Temperature range : Static: -40°C to 100°C, or instantaneous heat resistance up to120°C.
Dynamic: -20°C to 80°C, or instantaneous heat resistance up to 100°C.
Color : black (RAL9005) , gray (RAL7037)
Flammability Rating : UL94-V2



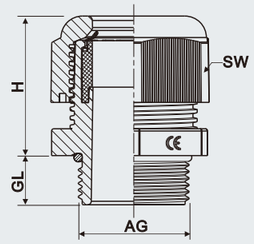


Part Number	Thread Type	⌀ Cable OD mm	AG mm	GL mm	H mm	SW mm	Product Code (white)	Product Code (black)	
HSK.PG7.A(B/G)	PG7	2-5	12.5	8	20	15	9 00 001 1070 1	9 00 001 1070 2	50
HSK.PG7.B(B/G)	PG7	3-6.5	12.5	8	20	15	9 00 001 1071 1	9 00 001 1071 2	50
HSK.PG9.A(B/G)	PG9	2-6	15.2	8	22	19	9 00 001 1090 1	9 00 001 1090 2	50
HSK.PG9.B(B/G)	PG9	4-8	15.2	8	22	19	9 00 001 1091 1	9 00 001 1091 2	50
HSK.PG11(B/G)	PG11	3-7	18.6	8	25	22	9 00 001 1110 1	9 00 001 1110 2	50
HSK.PG13.5.A(B/G)	PG13.5	5-10	20.4	9	26.5	24	9 00 001 1130 1	9 00 001 1130 2	50
HSK.PG13.5.B(B/G)	PG13.5	6-12	20.4	9	26.5	24	9 00 001 1131 1	9 00 001 1131 2	50
HSK.PG16.A(B/G)	PG16	7-12	22.5	10	28	27	9 00 001 1160 1	9 00 001 1160 2	50
HSK.PG16.B(B/G)	PG16	10-14	22.5	10	28	27	9 00 001 1161 1	9 00 001 1161 2	50
HSK.PG21.A(B/G)	PG21	9-16	28.3	11	31.5	33	9 00 001 1210 1	9 00 001 1210 2	20
HSK.PG21.B(B/G)	PG21	13-18	28.3	11	31.5	33	9 00 001 1211 1	9 00 001 1211 2	20
HSK.PG29.A(B/G)	PG29	13-20	37	11	39	42	9 00 001 1290 1	9 00 001 1290 2	20
HSK.PG29.B(B/G)	PG29	18-25	37	11	39	42	9 00 001 1291 1	9 00 001 1291 2	20
HSK.PG36.A(B/G)	PG36	20-26	47	13	48.5	53	9 00 001 1360 1	9 00 001 1360 2	10
HSK.PG36.B(B/G)	PG36	22-32	47	13	48.5	53	9 00 001 1361 1	9 00 001 1361 2	10
HSK.PG42.A(B/G)	PG42	25-31	54	13	47.3	60	9 00 001 1420 1	9 00 001 1420 2	5
HSK.PG42.B(B/G)	PG42	32-38	54	13	47.3	60	9 00 001 1421 1	9 00 001 1421 2	5
HSK.PG48.A(B/G)	PG48	29-35	59.3	14	47	68	9 00 001 1480 1	9 00 001 1480 2	5
HSK.PG48.B(B/G)	PG48	37-44	59.3	14	47	68	9 00 001 1481 1	9 00 001 1481 2	5

HSK Cable Gland—Nylon Cable Gland-Metric Thread

Material : PA
O-ring : NBR
IP rating : Ip68 (with O-ring)
Temperature range : Static: -40°C to 100°C, or instantaneous heat resistance up to120°C.
Dynamic: -20°C to 80°C, or instantaneous heat resistance up to 100°C.
Color : black (RAL9005) , gray (RAL7037)
Flammability Rating : UL94-V2



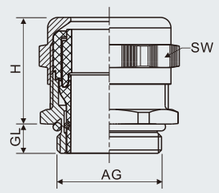


Part Number	Thread Type	⌀ Cable OD mm	AG mm	GL mm	H mm	SW mm	Product Code (white)	Product Code (black)	
HSK.M12.A(B/G)	M12X1.5	2-5	12	8	20	15	9 00 001 0120 1	9 00 001 0120 2	50
HSK.M12.B(B/G)	M12X1.5	3-6.5	12	8	20	15	9 00 001 0121 1	9 00 001 0121 2	50
HSK.M16.A(B/G)	M16X1.5	2-6	16	8	22	19	9 00 001 0160 1	9 00 001 0160 2	50
HSK.M16.B(B/G)	M16X1.5	4-8	16	8	22	19	9 00 001 0161 1	9 00 001 0161 2	50
HSK.M20.A(B/G)	M20X1.5	5-10	20	9	26.5	24	9 00 001 0200 1	9 00 001 0200 2	50
HSK.M20.B(B/G)	M20X1.5	6-12	20	9	26.5	24	9 00 001 0201 1	9 00 001 0201 2	50
HSK.M22.A(B/G)	M22X1.5	6-12	22	10	28	27	9 00 001 0220 1	9 00 001 0220 2	50
HSK.M22.B(B/G)	M22X1.5	10-14	22	10	28	27	9 00 001 0221 1	9 00 001 0221 2	50
HSK.M25.A(B/G)	M25X1.5	9-16	25	11	31.5	33	9 00 001 0250 1	9 00 001 0250 2	20
HSK.M25.B(B/G)	M25X1.5	13-18	25	11	31.5	33	9 00 001 0251 1	9 00 001 0251 2	20
HSK.M32.A(B/G)	M32X1.5	13-20	32	11	39	42	9 00 001 0320 1	9 00 001 0320 2	20
HSK.M32.B(B/G)	M32X1.5	18-25	32	11	39	42	9 00 001 0321 1	9 00 001 0321 2	20
HSK.M40.A(B/G)	M40X1.5	20-26	40	13	48.5	53	9 00 001 0400 1	9 00 001 0400 2	10
HSK.M40.B(B/G)	M40X1.5	22-32	40	13	48.5	53	9 00 001 0401 1	9 00 001 0401 2	10
HSK.M50.A(B/G)	M50X1.5	25-31	50	13	47.3	60	9 00 001 0500 1	9 00 001 0500 2	5
HSK.M50.B(B/G)	M50X1.5	32-38	50	13	47.3	60	9 00 001 0501 1	9 00 001 0501 2	5
HSK.M63.A(B/G)	M63X1.5	29-35	63	14	47	68	9 00 001 0630 1	9 00 001 0630 2	5
HSK.M63.B(B/G)	M63X1.5	37-44	63	14	47	68	9 00 001 0631 1	9 00 001 0631 2	5

HSM Cable Gland — EMC Cable Gland-Metric Thread

Shell : nickel-plated brass
Clamping ring : PA
O-ring : NBR
IP rating : Ip68 (with O-ring)
Environment Temperature : −40℃−100℃
Temperature range : Static: -40°C to 100°C, or instantaneous heat resistance up to 120°C.
Dynamic: -20°C to 80°C, or instantaneous heat resistance up to 100°C.
Flammability Rating : UL94-V2





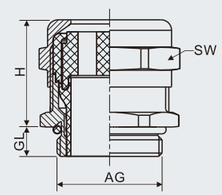
Part Number	Thread Type	Cable OD mm	AG mm	GL mm	H mm	SW mm	Product Code	
HSM.EMC.M12.A	M12×1.5	3–6.5	12.0	6.5	19	14	9 00 022 0120 0	50
HSM.EMC.M12.B	M12×1.5	2–5	12.0	6.5	19	14	9 00 022 0121 0	50
HSM.EMC.M16.A	M16×1.5	5–10	16.0	6	22	20	9 00 022 0160 0	50
HSM.EMC.M16.B	M16×1.5	3–7	16.0	6	22	20	9 00 022 0161 0	50
HSM.EMC.M20.A	M20×1.5	10–14	20.0	6	24	24	9 00 022 0200 0	50
HSM.EMC.M20.B	M20×1.5	7–12	20.0	6	24	24	9 00 022 0201 0	50
HSM.EMC.M25.A	M25×1.5	13–18	25.0	7	26	30	9 00 022 0250 0	20
HSM.EMC.M25.B	M25×1.5	9–16	25.0	7	26	30	9 00 022 0251 0	20
HSM.EMC.M32.A	M32×1.5	18–25	32.0	8	31	40	9 00 022 0320 0	20
HSM.EMC.M32.B	M32×1.5	13–20	32.0	8	31	40	9 00 022 0321 0	20
HSM.EMC.M32.C	M32×1.5	15–21	32.0	8	33	36	9 00 022 0322 0	20
HSM.EMC.M40.A	M40×1.5	22–32	40.0	8	37	50	9 00 022 0400 0	10
HSM.EMC.M40.B	M40×1.5	20–26	40.0	8	37	50	9 00 022 0401 0	10
HSM.EMC.M40.C	M40×1.5	19–27	40.0	8	33	46	9 00 022 0402 0	10
HSM.EMC.M50.A	M50×1.5	32–38	50.0	9	37	57	9 00 022 0500 0	10
HSM.EMC.M50.B	M50×1.5	25–31	50.0	9	37	57	9 00 022 0501 0	10
HSM.EMC.M63.A	M63×1.5	37–44	63.0	10	38	64/68	9 00 022 0630 0	5
HSM.EMC.M63.B	M63×1.5	29–35	63.0	10	38	64/68	9 00 022 0631 0	5

Part Number	Thread Type	Cable OD mm	AG mm	GL mm	H mm	SW mm	Product Code	
HSM.EMC.PG7.A	PG7	3–6.5	12.5	5	19	14	9 00 022 1070 0	50
HSM.EMC.PG7.B	PG7	2–5	12.5	5	19	14	9 00 022 1071 0	50
HSM.EMC.PG9.A	PG9	4–8	15.2	6	21	17	9 00 022 1090 0	50
HSM.EMC.PG9.B	PG9	2–6	15.2	6	21	17	9 00 022 1091 0	50
HSM.EMC.PG11.A	PG11	5–10	18.6	6	22	20	9 00 022 1110 0	50
HSM.EMC.PG11.B	PG11	3–7	18.6	6	22	20	9 00 022 1111 0	50
HSM.EMC.PG13.5.A	PG13.5	6–12	20.4	6.5	24	22	9 00 022 1130 0	50
HSM.EMC.PG13.5.B	PG13.5	5–9	20.4	6.5	24	22	9 00 022 1131 0	50
HSM.EMC.PG16.A	PG16	10–14	22.5	6.5	23	24	9 00 022 1160 0	50
HSM.EMC.PG16.B	PG16	7–12	22.5	6.5	23	24	9 00 022 1161 0	50
HSM.EMC.PG21.A	PG21	13–18	28.3	7	24	30	9 00 022 1210 0	20
HSM.EMC.PG21.B	PG21	9–16	28.3	7	24	30	9 00 022 1211 0	20
HSM.EMC.PG29.A	PG29	18–25	37	8	29	40	9 00 022 1290 0	20
HSM.EMC.PG29.B	PG29	13–20	37	8	29	40	9 00 022 1291 0	20
HSM.EMC.PG36.A	PG36	22–32	47	8	35	50	9 00 022 1360 0	10
HSM.EMC.PG36.B	PG36	20–26	47	8	35	50	9 00 022 1361 0	10
HSM.EMC.PG42.A	PG42	32–38	54	9	37	57	9 00 022 1420 0	10
HSM.EMC.PG42.B	PG42	25–31	54	9	37	57	9 00 022 1421 0	10
HSM.EMC.PG48.A	PG48	37–44	59.3	10	38	64	9 00 022 1480 0	5
HSM.EMC.PG48.B	PG48	29–35	59.3	10	38	64	9 00 022 1481 0	5

HSM Cable Gland — Multicore Metal Cable Gland-Metric Thread

Shell : nickel-plated brass
Clamping ring : PA
O-ring : NBR
IP rating : IP68 (with O-ring)
Environment Temperature : −40℃−100℃
Temperature range : Static: -40°C to 100°C, or instantaneous heat resistance up to 120°C.
Dynamic: -20°C to 80°C, or instantaneous heat resistance up to 100°C.
Flammability Rating : UL94-V2





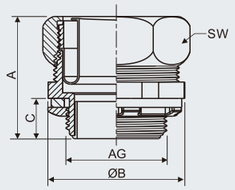
Part Number	Thread Type	No. of contact × contact diameter	AG mm	GL mm	H mm	SW mm	Product Code	
HSM.MU.M16.A	M16×1.5	4×1.4	16.0	6	21	17/19	9 00 012 0160 0	50
HSM.MU.M20.A	M20×1.5	6×3	20.0	6	23	22	9 00 012 0200 0	50
HSM.MU.M20.B	M20×1.5	2×5	20.0	6	23	22	9 00 012 0201 0	50
HSM.MU.M20.C	M20×1.5	3×4	20.0	6	23	22	9 00 012 0202 0	50
HSM.MU.M25.A	M25×1.5	4×6	25.0	7	26	30	9 00 012 0250 0	20
HSM.MU.M25.B	M25×1.5	3×7	25.0	7	26	30	9 00 012 0251 0	20
HSM.MU.M32.A	M32×1.5	10×6	32.0	8	31	40	9 00 012 0320 0	20
HSM.MU.M32.B	M32×1.5	4×9	32.0	8	31	40	9 00 012 0321 0	20
HSM.MU.M32.C	M32×1.5	6×6.5	32.0	8	31	40	9 00 012 0322 0	20
HSM.MU.M40.A	M40×1.5	9×7	40.0	8	37	50	9 00 012 0400 0	10
HSM.MU.M40.B	M40×1.5	2×15	40.0	8	37	50	9 00 012 0401 0	10
HSM.MU.M40.C	M40×1.5	3×10	40.0	8	37	50	9 00 012 0402 0	10
HSM.MU.M50.A	M50×1.5	4×12	50.0	9	37	57	9 00 012 0500 0	10
HSM.MU.M50.B	M50×1.5	3×15	50.0	9	37	57	9 00 012 0501 0	10
HSM.MU.M63.A	M63×1.5	6×12	63.0	10	38	64/68	9 00 012 0630 0	5
HSM.MU.M63.B	M63×1.5	3×18	63.0	10	38	64/68	9 00 012 0631 0	5

Part Number	Thread Type	No. of contact × contact diameter	AG mm	GL mm	H mm	SW mm	Product Code	
HSM.MU.PG9.A	PG9	4×1.4	15.2	6	21	17	9 00 012 1090 0	50
HSM.MU.PG11.A	PG11	2×4	18.6	6	22	20	9 00 012 1110 0	50
HSM.MU.PG11.B	PG11	3×3	18.6	6	22	20	9 00 012 1111 0	50
HSM.MU.PG13.5.A	PG13.5	3×4	20.4	6.5	24	22	9 00 012 1130 0	50
HSM.MU.PG13.5.B	PG13.5	2×5	20.4	6.5	24	22	9 00 012 1131 0	50
HSM.MU.PG13.5.C	PG13.5	6×3	20.4	6.5	24	22	9 00 012 1132 0	50
HSM.MU.PG16.A	PG16	4×4	22.5	6.5	23	24	9 00 012 1160 0	50
HSM.MU.PG16.B	PG16	6×4	22.5	6.5	23	24	9 00 012 1161 0	50
HSM.MU.PG16.C	PG16	2×6	22.5	6.5	23	24	9 00 012 1162 0	50
HSM.MU.PG16.D	PG16	7×3	22.5	6.5	23	24	9 00 012 1163 0	50
HSM.MU.PG21.A	PG21	4×6	28.3	7	24	30	9 00 012 1210 0	20
HSM.MU.PG21.B	PG21	3×7	28.3	7	24	30	9 00 012 1211 0	20
HSM.MU.PG29.A	PG29	6×6.5	37	8	29	40	9 00 012 1290 0	20
HSM.MU.PG29.B	PG29	4×9	37	8	29	40	9 00 012 1291 0	20
HSM.MU.PG29.C	PG29	10×6	37	8	29	40	9 00 012 1292 0	20
HSM.MU.PG36.A	PG36	9×7	47	8	35	50	9 00 012 1360 0	10
HSM.MU.PG36.B	PG36	2×15	47	8	35	50	9 00 012 1361 0	10
HSM.MU.PG36.C	PG36	3×10	47	8	35	50	9 00 012 1362 0	10
HSM.MU.PG42.A	PG42	4×13	54	9	37	57	9 00 012 1420 0	10
HSM.MU.PG42.B	PG42	3×15	54	9	37	57	9 00 012 1421 0	10
HSM.MU.PG48.A	PG48	6×12	59.3	10	38	64	9 00 012 1480 0	5
HSM.MU.PG48.B	PG48	3×18	59.3	10	38	64	9 00 012 1481 0	5

DPJ Hose Fittings and Accessories
— Metal Hose Connector-Metric Thread

Material: Galvanized zinc alloy
locking nut : Chrome-plated zinc alloy
expansion ring : TPE
washer: Modified rubber
Hose jacket : galvanized iron
Temperature range : −40° C−105° C
Features : One end is connected to a metal hose, and the other end is connected to a box or equipment by a thread. It's compact, waterproof and corrosion resistant.



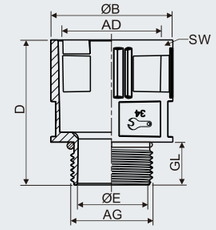


Part Number	AG	Hose diameter		C mm	ØB mm	A mm	Product Code
		Metric	Inch				
DPJ.8.M16	M16x1.5	Ø8	1/4"	8	25	26	9 00 091 0160 0
DPJ.10.M16	M16x1.5	Ø10	5/6"	8	25.6	30	9 00 091 0161 0
DPJ.12.M20	M20x1.5	Ø12	3/8"	10	28.5	32	9 00 091 0162 0
DPJ.15.M20	M20x1.5	Ø15	1/2"	10	33	34.5	9 00 091 0200 0
DPJ.15.M24	M24x1.5	Ø15	1/2"	10	33	34.5	9 00 091 0240 0
DPJ.20.M27	M27x2.0	Ø20	3/4"	12	39	39.5	9 00 091 0270 0
DPJ.20.M30	M30x2.0	Ø20	3/4"	12	39	39.5	9 00 091 0300 0
DPJ.25.M33	M33x2.0	Ø25	1"	12	42.5	42.5	9 00 091 0330 0
DPJ.25.M36	M36x2.0	Ø25	1"	12	42.5	42.5	9 00 091 0360 0
DPJ.32.M40	M40x1.5	Ø32	1−1/4"	14	57.5	46.5	9 00 091 0400 0
DPJ.32.M42	M42x2.0	Ø32	1−1/4"	14	57.5	46.5	9 00 091 0420 0
DPJ.32.M48	M48x2.0	Ø32	1−1/4"	14	57.5	46.5	9 00 091 0480 0
DPJ.38.M48	M48x2.0	Ø38	1−1/2"	14	62	51	9 00 091 0481 0
DPJ.38.M60	M60x2.0	Ø38	1−1/2"	14	62	51	9 00 091 0600 0
DPJ.51.M60	M60x2.0	Ø51	2"	15	77.5	57	9 00 091 0601 0
DPJ.51.M72	M72x2.0	Ø51	2"	15	77.5	57	9 00 091 0720 0
DPJ.64.M76	M76x2.0	Ø64	2−1/2"	20	95	66	9 00 091 0760 0
DPJ.75.M88	M88x2.0	Ø75	3"	22	108.5	68	9 00 091 0880 0

WQG Quick Hose Adapter-Metric Thread

Material: PA
O-ring : NBR
IP rating : Ip67 (with suitable O-ring)
Temperature range : Static: -40°C to 100°C, or instantaneous heat resistance up to 120°C
Color : black (RAL9005) , gray (RAL7037)
Flammability Rating : UL94-V2





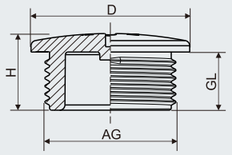
Part Number	Thread Type	Hose diameter	AG mm	GL mm	ØE mm	ØB mm	D mm	SW mm	Product Code (gray)	Product Code (black)	
WQG.M12(B/G)	M12X1.5	AD10.0	12	11	7	17	35	15	9 00 070 0120 1	9 00 070 0120 2	50
WQG.M16(B/G)	M16X1.5	AD13.0	16	11	10	20	37	18	9 00 070 0160 1	9 00 070 0160 2	50
WQG.M18(B/G)	M18X1.5	AD15.8	18	12	13.5	23	39.5	21	9 00 070 0180 1	9 00 070 0180 2	50
WQG.M20.A(B/G)	M20X1.5	AD18.5	20	12	14.7	26	40	24	9 00 070 0200 1	9 00 070 0200 2	50
WQG.M20.B(B/G)	M20X1.5	AD21.2	20	13	15.5	29.5	45	27	9 00 070 0201 1	9 00 070 0201 2	50
WQG.M25.A(B/G)	M25X1.5	AD21.2	25	13	17	29.5	45	27	9 00 070 0250 1	9 00 070 0250 2	20
WQG.M25.B(B/G)	M25X1.5	AD28.5	25	13	20.5	37	47	34	9 00 070 0251 1	9 00 070 0251 2	20
WQG.M32(B/G)	M32X1.5	AD28.5	32	13	23.5	37	47	34	9 00 070 0320 1	9 00 070 0320 2	20
WQG.M40.A(B/G)	M40X1.5	AD34.5	40	15	29	44	51	42	9 00 070 0400 1	9 00 070 0400 2	20
WQG.M40.B(B/G)	M40X1.5	AD42.5	40	15	33	52	54	58	9 00 070 0401 1	9 00 070 0401 2	10
WQG.M50(B/G)	M50X1.5	AD54.5	50	16	43	64	55	63	9 00 070 0500 1	9 00 070 0500 2	5
WQG.M63(B/G)	M63X1.5	AD54.5	63	16	52	64	55	63	9 00 070 0630 1	9 00 070 0630 2	5

Part Number	Thread Type	Hose diameter	AG mm	GL mm	ØE mm	ØB mm	D mm	SW mm	Product Code (gray)	Product Code (black)	
WQG.PG7(B/G)	PG7	AD10.0	12.5	11	7	17	35	15	9 00 070 1070 1	9 00 070 1070 2	50
WQG.PG9(B/G)	PG9	AD13.0	15.2	11	10	20	37	18	9 00 070 1090 1	9 00 070 1090 2	50
WQG.PG11(B/G)	PG11	AD15.8	18.6	12	13.5	23	39.5	21	9 00 070 1110 1	9 00 070 1110 2	50
WQG.PG13.5(B/G)	PG13.5	AD18.5	20.4	12	14.7	26	40	24	9 00 070 1130 1	9 00 070 1130 2	50
WQG.PG16(B/G)	PG16	AD21.2	22.5	13	17	29.5	45	27	9 00 070 1160 1	9 00 070 1160 2	50
WQG.PG21(B/G)	PG21	AD28.5	28.3	13	23.5	37	47	34	9 00 070 1210 1	9 00 070 1210 2	20
WQG.PG29(B/G)	PG29	AD34.5	37	15	29	44	51	42	9 00 070 1290 1	9 00 070 1290 2	20
WQG.PG36(B/G)	PG36	AD42.5	47	15	36.5	52	54	58	9 00 070 1360 1	9 00 070 1360 2	10
WQG.PG48(B/G)	PG48	AD54.5	59.3	16	52	64	55	63	9 00 070 1480 1	9 00 070 1480 2	5

DPK Plastic accessories — PG Nylon Blind Plug

Material : PA
IP rating : IP56, IP68 (with suitable O-ring)
Temperature range : -40℃-100℃
Color : black (RAL9005), gray (RAL7035)
Flammability Rating : UL94-V2



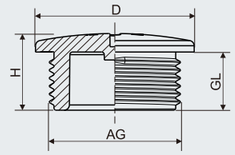


Part Number	Thread Type	AG mm	GL mm	D mm	H mm	Product Code (gray)	Product Code (black)	
DPK.PG7 (B/G)	PG7	12.5	8	16	11	9 00 006 1070 1	9 00 006 1070 2	100
DPK.PG9 (B/G)	PG9	15.2	8	19	11	9 00 006 1090 1	9 00 006 1090 2	100
DPK.PG11 (B/G)	PG11	18.6	8	23	11	9 00 006 1110 1	9 00 006 1110 2	100
DPK.PG13.5 (B/G)	PG13.5	20.4	9	25	12	9 00 006 1130 1	9 00 006 1130 2	100
DPK.PG16 (B/G)	PG16	22.5	10	27	13	9 00 006 1160 1	9 00 006 1160 2	100
DPK.PG21 (B/G)	PG21	28.3	11	33	14.5	9 00 006 1210 1	9 00 006 1210 2	50
DPK.PG29 (B/G)	PG29	37	11	44	14.5	9 00 006 1290 1	9 00 006 1290 2	50
DPK.PG36 (B/G)	PG36	47	13	55	16.5	9 00 006 1360 1	9 00 006 1360 2	30
DPK.PG42 (B/G)	PG42	54	15	62	18.5	9 00 006 1420 1	9 00 006 1420 2	30
DPK.PG48 (B/G)	PG48	59.3	15	69	21	9 00 006 1480 1	9 00 006 1480 2	10

DPK Plastic accessories — Blind Plug-Metric Thread

Material : PA
IP rating : IP56, IP68 (with suitable O-ring)
Temperature range : -40℃-100℃
Color : black (RAL9005), gray (RAL7035)
Flammability Rating : UL94-V2



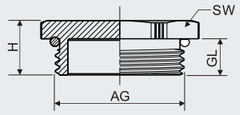


Part Number	Thread Type	AG mm	GL mm	D mm	H mm	Product Code (gray)	Product Code (black)	
DPK.M12 (B/G)	M12X1.5	12	8	15	11	9 00 006 0120 1	9 00 006 0120 2	100
DPK.M16 (B/G)	M16X1.5	16	8	20	11	9 00 006 0160 1	9 00 006 0160 2	100
DPK.M18 (B/G)	M18X1.5	18	8	23	11	9 00 006 0180 1	9 00 006 0180 2	100
DPK.M20 (B/G)	M20X1.5	20	9	25	12	9 00 006 0200 1	9 00 006 0200 2	100
DPK.M25 (B/G)	M25X1.5	25	11	30	14.5	9 00 006 0250 1	9 00 006 0250 2	50
DPK.M32 (B/G)	M32X1.5	32	11	38	14.5	9 00 006 0320 1	9 00 006 0320 2	50
DPK.M40 (B/G)	M40X1.5	40	13	46	16.5	9 00 006 0400 1	9 00 006 0400 2	30
DPK.M50 (B/G)	M50X1.5	50	15	56	18.5	9 00 006 0500 1	9 00 006 0500 2	30
DPK.M63 (B/G)	M63X1.5	63	15	69	21	9 00 006 0630 1	9 00 006 0630 2	10

DPMH Metal accessories —PG Hexagonal metal blind plug

Material: nickel-plated brass
IP rating : IP68 (with suitable O-ring)
Certificate : RoHS Compliant





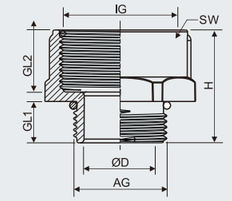
Part Number	Thread Type	Thread Type AG	GL mm	H mm	SW mm	Product Code	
DPMH.PG7	PG7	12.5	6	9	14	9 00 030 1070 0	30
DPMH.PG9	PG9	15.2	7	10	18	9 00 030 1090 0	30
DPMH.PG11	PG11	18.6	7	10.5	20	9 00 030 1110 0	30
DPMH.PG13.5	PG13.5	20.4	7	10.5	22	9 00 030 1130 0	30
DPMH.PG16	PG16	22.5	7	10.5	26	9 00 030 1160 0	20
DPMH.PG21	PG21	28.3	7	11	32	9 00 030 1210 0	20
DPMH.PG29	PG29	37	8	12	40	9 00 030 1290 0	10
DPMH.PG36	PG36	47	9	14	50	9 00 030 1360 0	10
DPMH.PG42	PG42	54	9	14	57	9 00 030 1420 0	5
DPMH.PG48	PG48	59.3	10	16	64	9 00 030 1480 0	5

Part Number	Thread Type	Thread Type AG	GL mm	H mm	SW mm	Product Code	
DPMH.M12	M12X1.5	12	6	9	14	9 00 030 0120 0	30
DPMH.M16	M16X1.5	16	7	10	18	9 00 030 0160 0	30
DPMH.M18	M18X1.5	18	7	10.5	20	9 00 030 0180 0	30
DPMH.M20	M20X1.5	20	7	10.5	22	9 00 030 0200 0	20
DPMH.M22	M22X1.5	22	7	10.5	24	9 00 030 0220 0	20
DPMH.M24	M24X1.5	24	7	10.5	27	9 00 030 0240 0	20
DPMH.M25	M25X1.5	25	7	10.5	28	9 00 030 0250 0	20
DPMH.M32	M32X1.5	32	8	12	36	9 00 030 0320 0	10
DPMH.M36	M36X2.0	36	8	12	40	9 00 030 0360 0	10
DPMH.M40	M40X1.5	40	9	14	45	9 00 030 0400 0	10
DPMH.M48	M48X2.0	48	9	14	52	9 00 030 0480 0	10
DPMH.M50	M50X1.5	50	9	14	55	9 00 030 0500 0	5
DPMH.M63	M63X1.5	63	10	16	70	9 00 030 0630 0	5

EWM Metal accessories — PG metal expansion ring

Material: nickel-plated brass
IP rating : IP68 (with suitable O-ring)
Certificate : RoHS Compliant





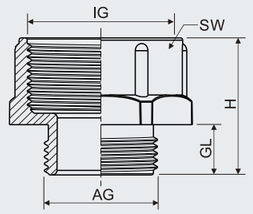
Part Number	Thread Type AG	Thread Type IG	GL1 mm	GL2 mm	ØD mm	H mm	SW mm	Product Code	
EWM.PG7	PG7	PG9	6	8	9	16	18	9 00 034 1070 0	30
EWM.PG9.A	PG9	PG11	7	9	11.5	18	22	9 00 034 1090 0	30
EWM.PG9.B	PG9	PG13.5	7	9	11.5	18	24	9 00 034 1091 0	30
EWM.PG11.A	PG11	PG13.5	7	9	15	18	24	9 00 034 1110 0	30
EWM.PG11.B	PG11	PG16	7	11	15	20	26	9 00 034 1111 0	20
EWM.PG11.C	PG11	PG21	7	12.5	15	22	32	9 00 034 1112 0	20
EWM.PG13.5.A	PG13.5	PG16	7	11	17	20	26	9 00 034 1130 0	20
EWM.PG13.5.B	PG13.5	PG21	7	13	17	22	32	9 00 034 1131 0	20
EWM.PG16.A	PG16	PG21	7	12.5	19	22	32	9 00 034 1160 0	10
EWM.PG16.B	PG16	PG29	7	13	19	22	40	9 00 034 1161 0	10
EWM.PG21	PG21	PG29	7	13	23	22	40	9 00 034 1210 0	10
EWM.PG29	PG29	PG36	8	16.5	32.5	27.5	50	9 00 034 1290 0	5
EWM.PG36	PG36	PG42	9	18	42.5	31	57	9 00 034 1360 0	5
EWM.PG42	PG42	PG48	10	19	48	33	64	9 00 034 1420 0	5

Part Number	Thread Type AG	Thread Type IG	GL1 mm	GL2 mm	ØD mm	H mm	SW mm	Product Code	
EWM.M12	M12X1.5	M16X1.5	6	8	8	16	19	9 00 034 0120 0	30
EWM.M16.A	M16X1.5	M18X1.5	7	8.5	12	17.5	22	9 00 034 0160 0	30
EWM.M16.B	M16X1.5	M20X1.5	7	9.5	12	18.5	23	9 00 034 0161 0	30
EWM.M18	M18X1.5	M20X1.5	7	9.5	14	18.5	23	9 00 034 0180 0	30
EWM.M20.A	M20X1.5	M24X1.5	7	11.5	15.5	18.5	27	9 00 034 0200 0	20
EWM.M20.B	M20X1.5	M25X1.5	7	9	16	18.5	28	9 00 034 0201 0	20
EWM.M25.A	M25X1.5	M30X2.0	7	10.5	21	20	34	9 00 034 0250 0	20
EWM.M25.B	M25X1.5	M32X1.5	7	10.5	21	20	36	9 00 034 0251 0	20
EWM.M30	M30X2.0	M36X2.0	8	12.5	25	23	40	9 00 034 0300 0	10
EWM.M32	M32X1.5	M40X1.5	8	12.5	27	23.5	45	9 00 034 0320 0	10
EWM.M36	M36X2.0	M48X2.0	8	16	31	27	52	9 00 034 0360 0	5
EWM.M40	M40X1.5	M50X1.5	9	16	35	28	54	9 00 034 0400 0	5
EWM.M50	M50X1.5	M63X1.5	10	17	44	30.5	68	9 00 034 0500 0	5

EWK Plastic accessories — PG Nylon Expansion Ring

Material : PA
IP rating : IP56, IP68 (with suitable O-ring)
Temperature range : −40℃–100℃
Color : black (RAL9005), gray (RAL7035)
Flammability Rating : UL94-V2



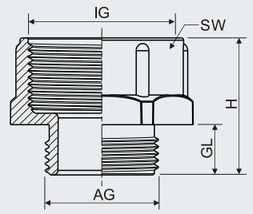


Part Number	Thread Type AG	Thread Type IG	GL mm	H mm	SW mm	Product Code (gray)	Product Code (black)	
EWK.PG7(B/G)	PG7	PG9	8	20	19	9 00 008 1070 1	9 00 008 1070 2	100
EWK.PG9(B/G)	PG9	PG11	8	23	23	9 00 008 1090 1	9 00 008 1090 2	100
EWK.PG11(B/G)	PG11	PG13.5	8	23	24	9 00 008 1110 1	9 00 008 1110 2	100
EWK.PG13.5(B/G)	PG13.5	PG16	9	26	27	9 00 008 1130 1	9 00 008 1130 2	100
EWK.PG16(B/G)	PG16	PG21	10	29	32	9 00 008 1160 1	9 00 008 1160 2	50
EWK.PG21(B/G)	PG21	PG29	11	32	42	9 00 008 1210 1	9 00 008 1210 2	50
EWK.PG29(B/G)	PG29	PG36	11	35	53	9 00 008 1290 1	9 00 008 1290 2	30
EWK.PG36(B/G)	PG36	PG42	13	41	60	9 00 008 1360 1	9 00 008 1360 2	30
EWK.PG42(B/G)	PG42	PG48	15	46	65	9 00 008 1420 1	9 00 008 1420 2	10

EWK Plastic accessories — Nylon Expansion Ring-Metric Thread

Material : PA
IP rating : IP56, IP68 (with suitable O-ring)
Temperature range : −40℃–100℃
Color : black (RAL9005), gray (RAL7035)
Flammability Rating : UL94-V2



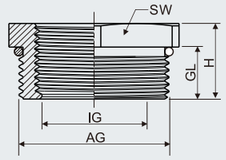


Part Number	Thread Type AG	Thread Type IG	GL mm	H mm	SW mm	Product Code (gray)	Product Code (black)	
EWK.M12(B/G)	M12X1.5	M16X1.5	8	22	20	9 00 008 0120 1	9 00 008 0120 2	100
EWK.M16(B/G)	M16X1.5	M20X1.5	8	23	24	9 00 008 0160 1	9 00 008 0160 2	100
EWK.M20(B/G)	M20X1.5	M25X1.5	9	27	30	9 00 008 0200 1	9 00 008 0200 2	50
EWK.M25(B/G)	M25X1.5	M32X1.5	11	30	36	9 00 008 0250 1	9 00 008 0250 2	50
EWK.M32(B/G)	M32X1.5	M40X1.5	11	34	45	9 00 008 0320 1	9 00 008 0320 2	30
EWK.M40(B/G)	M40X1.5	M50X1.5	13	37	54	9 00 008 0400 1	9 00 008 0400 2	30
EWK.M50(B/G)	M50X1.5	M63X1.5	14	41	68	9 00 008 0500 1	9 00 008 0500 2	10

REM Metal accessories — PG Metal Reducing Ring

Material: nickel-plated brass
IP rating : IP68 (with suitable O-ring)
Certificate : RoHS Compliant



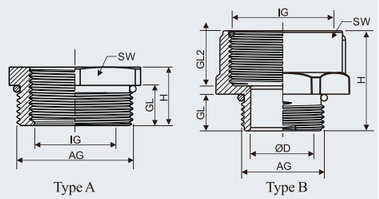


Part Number	Thread Type AG	Thread Type IG	GL mm	H mm	SW mm	Product Code	
REM.PG9	PG9	PG7	7	10	18	9 00 032 1090 0	30
REM.PG11	PG11	PG9	7	10.5	21	9 00 032 1110 0	30
REM.PG13.5	PG13.5	PG11	7	10.5	23	9 00 032 1130 0	30
REM.PG16	PG16	PG13.5	7	10.5	26	9 00 032 1160 0	20
REM.PG21	PG21	PG16	7	11	30	9 00 032 1210 0	20
REM.PG29	PG29	PG21	8	13	40	9 00 032 1290 0	10
REM.PG36	PG36	PG29	9	14	50	9 00 032 1360 0	10
REM.PG42	PG42	PG36	10	15	55	9 00 032 1420 0	5
REM.PG48	PG48	PG42	10	16	64	9 00 032 1480 0	5

REM Metal accessories — Metal Reducing Ring-Metric Thread

Material: nickel-plated brass
IP rating : IP rating: IP68 (with suitable O-ring)
Certificate : RoHS Compliant





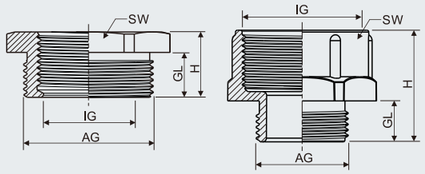
Part Number	Thread Type AG	Thread Type IG	GL mm	GL2 mm	H mm	SW mm	Type	Product Code	
REM.M16	M16X1.5	M12X1.5	7	/	9.5	18	A	9 00 032 0160 0	30
REM.M18	M18X1.5	M16X1.5	7	12	20.5	20	B	9 00 032 0180 0	30
REM.M20.A	M20X1.5	M16X1.5	7	/	10	24	A	9 00 032 0200 0	30
REM.M20.B	M20X1.5	M18X1.5	7	12	21	24	B	9 00 032 0201 0	30
REM.M24	M24X1.5	M20X1.5	7	/	10.5	26	A	9 00 032 0240 0	20
REM.M25	M25X1.5	M20X1.5	7	/	10.5	29	A	9 00 032 0250 0	20
REM.M27	M27X2.0	M25X1.5	8	14	24	30	B	9 00 032 0270 0	15
REM.M30	M30X2.0	M27X2.0	8	14	24	32	B	9 00 032 0300 0	15
REM.M32	M32X1.5	M25X1.5	8	/	12	36	A	9 00 032 0320 0	20
REM.M36	M36X2.0	M32X1.5	8	/	12	40	A	9 00 032 0360 0	10
REM.M40	M40X1.5	M32X1.5	9	/	13	45	A	9 00 032 0400 0	10
REM.M50	M50X1.5	M40X1.5	9	/	14	55	A	9 00 032 0500 0	5
REM.M63	M63X1.5	M50X1.5	10	/	16	68	A	9 00 032 0630 0	5

:

REK Plastic accessories — PG Nylon Reducing Ring

Material: PA
IP rating : IP56，IP68 (with suitable O-ring)
Temperature range : –40℃–100℃
Color: black(RAL9005),gray(RAL7035)
Flammability Rating : UL94-V2



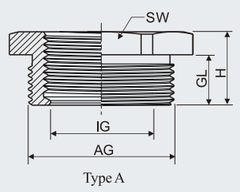


Part Number	Thread Type AG	Thread Type IG	GL mm	H mm	SW mm	Type	Product Code (gray)	Product Code (black)	
REK.PG9(B/G)	PG9	PG7	8	12	18	B	9 00 007 1090 1	9 00 007 1090 2	100
REK.PG11(B/G)	PG11	PG9	8	12	22	B	9 00 007 1110 1	9 00 007 1110 2	100
REK.PG13.5(B/G)	PG13.5	PG11	9	14	24	B	9 00 007 1130 1	9 00 007 1130 2	100
REK.PG16(B/G)	PG16	PG13.5	9	14	23	B	9 00 007 1160 1	9 00 007 1160 2	100
REK.PG21(B/G)	PG21	PG16	10	16	27	A	9 00 007 1210 1	9 00 007 1210 2	50
REK.PG29(B/G)	PG29	PG21	11	16	33	A	9 00 007 1290 1	9 00 007 1290 2	50
REK.PG36(B/G)	PG36	PG29	11	17	40	A	9 00 007 1360 1	9 00 007 1360 2	30

REK Plastic accessories — Nylon Reducing Ring-Metric Thread

Material: PA
IP rating : IP56，IP68 (with suitable O-ring)
Temperature range : –40℃–100℃
Color: black(RAL9005),gray(RAL7035)
Flammability Rating : UL94-V2



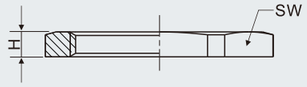


Part Number	Thread Type AG	Thread Type IG	GL mm	H mm	SW mm	Type	Product Code (gray)	Product Code (black)	
REK.M16(B/G)	M16X1.5	M12X1.5	8	12	18	A	9 00 007 0160 1	9 00 007 0160 2	100
REK.M20(B/G)	M20X1.5	M16X1.5	9	13	24	A	9 00 007 0200 1	9 00 007 0200 2	100
REK.M25(B/G)	M25X1.5	M20X1.5	11	16	29	A	9 00 007 0250 1	9 00 007 0250 2	50
REK.M32(B/G)	M32X1.5	M25X1.5	11	16	36	A	9 00 007 0320 1	9 00 007 0320 2	50
REK.M40(B/G)	M40X1.5	M32X1.5	13	19	45	A	9 00 007 0400 1	9 00 007 0400 2	30
REK.M50(B/G)	M50X1.5	M40X1.5	14	22	55	A	9 00 007 0500 1	9 00 007 0500 2	30
REK.M63(B/G)	M63X1.5	M50X1.5	15	24	68	A	9 00 007 0630 1	9 00 007 0630 2	10

GM Metal accessories— PG Metal Nuts

Material： nickel-plated brass
RoHS Compliant





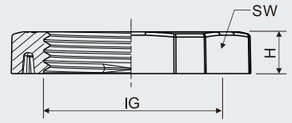
Part Number	Thread Type	H mm	SW mm	Product Code	
GM.PG7	PG7	2.8	15	9 00 036 1070 0	50
GM.PG9	PG9	2.8	18	9 00 036 1090 0	50
GM.PG11	PG11	3	21	9 00 036 1110 0	50
GM.PG13.5	PG13.5	3	23	9 00 036 1130 0	50
GM.PG16	PG16	3	26	9 00 036 1160 0	50
GM.PG21	PG21	3.5	32	9 00 036 1210 0	20
GM.PG29	PG29	4	41	9 00 036 1290 0	20
GM.PG36	PG36	5	51	9 00 036 1360 0	10
GM.PG42	PG42	5	60	9 00 036 1420 0	10
GM.PG48	PG48	5.5	64	9 00 036 1480 0	5

Part Number	Thread Type	H mm	SW mm	Product Code	
GM.M12	M12×1.5	2.8	15	9 00 036 0120 0	50
GM.M16	M16×1.5	2.8	19	9 00 036 0160 0	50
GM.M18	M18×1.5	3.0	21	9 00 036 0180 0	50
GM.M20	M20×1.5	3.0	23	9 00 036 0200 0	50
GM.M22	M22×1.5	3.0	26	9 00 036 0220 0	50
GM.M24	M24×1.5	3.5	28	9 00 036 0240 0	50
GM.M25	M25×1.5	3.5	29	9 00 036 0250 0	20
GM.M27	M27×1.5	4.0	32	9 00 036 0270 0	20
GM.M30	M30×1.5	4.0	34	9 00 036 0300 0	20
GM.M32	M32×1.5	4.0	36	9 00 036 0320 0	20
GM.M33	M33×1.5	4.0	36	9 00 036 0330 0	20
GM.M36	M36×1.5	4.0	40	9 00 036 0360 0	20
GM.M40	M40×1.5	4.5	45	9 00 036 0400 0	10
GM.M42	M42×1.5	5.0	46	9 00 036 0420 0	10
GM.M48	M48×1.5	5.0	55	9 00 036 0480 0	10
GM.M50	M50×1.5	5.5	55	9 00 036 0500 0	10
GM.M56	M56×1.5	5.0	60	9 00 036 0560 0	10
GM.M60	M60×1.5	5.0	65	9 00 036 0600 0	10
GM.M63	M63×1.5	6.0	70	9 00 036 0630 0	5
GM.M64	M64×1.5	6.0	70	9 00 036 0640 0	5

GMKPlastic accessories — PG Nylon Nuts

Material： PA
Temperature range：−40°C−100°C
Color： black（RAL9005）, gray（RAL7035）
Flammability Rating：UL94-V2



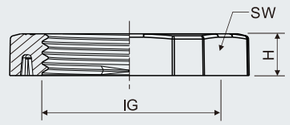


Part Number	Thread Type IG	H mm	SW mm	Product Code (gray)	Product Code (black)	
GMK.PG7(B/G)	PG7	5	19	9 00 009 1070 1	9 00 009 1070 2	200
GMK.PG9(B/G)	PG9	5	22	9 00 009 1090 1	9 00 009 1090 2	200
GMK.PG11(B/G)	PG11	5	24	9 00 009 1110 1	9 00 009 1110 2	200
GMK.PG13.5(B/G)	PG13.5	6	27	9 00 009 1130 1	9 00 009 1130 2	200
GMK.PG16(B/G)	PG16	6	30	9 00 009 1160 1	9 00 009 1160 2	200
GMK.PG21(B/G)	PG21	7	36	9 00 009 1210 1	9 00 009 1210 2	100
GMK.PG29(B/G)	PG29	7	45	9 00 009 1290 1	9 00 009 1290 2	100
GMK.PG36(B/G)	PG36	8	60	9 00 009 1360 1	9 00 009 1360 2	60
GMK.PG42(B/G)	PG42	8	65	9 00 009 1420 1	9 00 009 1420 2	60
GMK.PG48(B/G)	PG48	8	70	9 00 009 1480 1	9 00 009 1480 2	20

GMK Plastic accessories — Metric Nylon Nuts

Material : PA
Temperature range : -40°C-100°C
Color : black (RAL9005) , gray (RAL7035)
Flammability Rating : UL94-V2





Part Number	Thread Type IG	H mm	SW mm	Product Code (gray)	Product Code (black)	
GMK.M12(B/G)	M12X1.5	5	19	9 00 009 0120 1	9 00 009 0120 2	200
GMK.M16(B/G)	M16X1.5	5	22	9 00 009 0160 1	9 00 009 0160 2	200
GMK.M18(B/G)	M18X1.5	5	24	9 00 009 0180 1	9 00 009 0180 2	200
GMK.M20(B/G)	M20X1.5	6	27	9 00 009 0200 1	9 00 009 0200 2	200
GMK.M22(B/G)	M22X1.5	6	30	9 00 009 0220 1	9 00 009 0220 2	200
GMK.M25(B/G)	M25X1.5	6	32	9 00 009 0250 1	9 00 009 0250 2	200
GMK.M32(B/G)	M32X1.5	7	41	9 00 009 0320 1	9 00 009 0320 2	100
GMK.M40(B/G)	M40X1.5	8	50	9 00 009 0400 1	9 00 009 0400 2	100
GMK.M50(B/G)	M50X1.5	8	60	9 00 009 0500 1	9 00 009 0500 2	60
GMK.M63(B/G)	M63X1.5	8	75	9 00 009 0630 1	9 00 009 0630 2	60