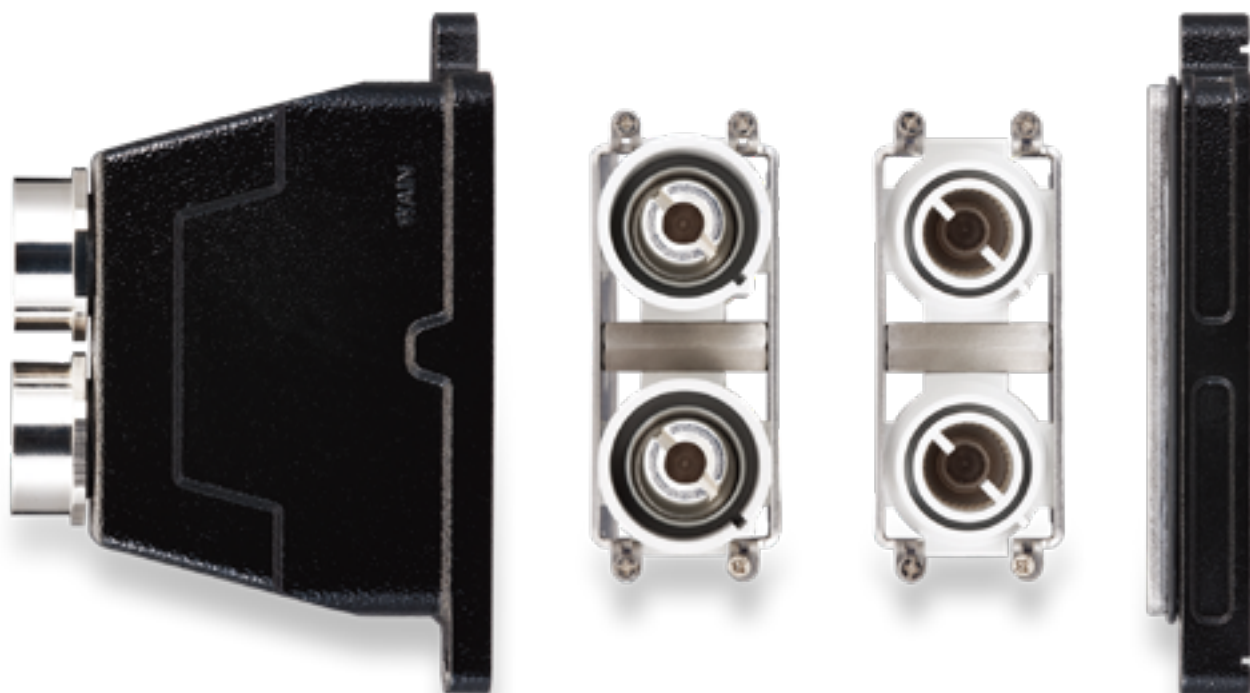


HK-003, HC SERIES

Modular Heavy-current connector



HC

HK-003/0, HK-003/2 Heavy-current inserts



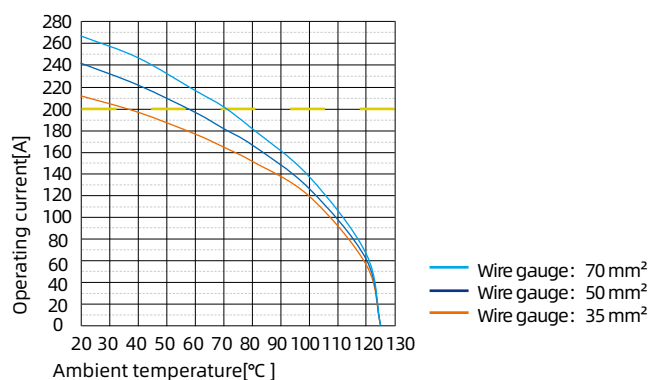
Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	CE
Inserts	
Number of contacts	3/0+PE,3/2+PE
Electrical data acc. to EN 61 984	
Power area	
-Rated current	200A
-Rated voltage conductor	1150/2000V
-Rated impulse voltage	8kV
-Pollution degree	3
Pollution degree 2 also	200A 2000V 12kV 2
Signal area	
-Rated current	16A
-Rated voltage	400V
-Rated impulse voltage	6kV
-Pollution degree	3
Pollution degree 2 also	16A 500V 6kV 2
Insulation resistance	$\geq 10^{10}\Omega$
Material	polycarbonate
Limiting temperatures	-40°C ...+125°C
Flammability acc. to UL 94	V0
Mechanical working life(mating cycles)	≥ 500
Contacts	
Material	copper alloy
Surface	silver
Contact resistance	$\leq 0.2m\Omega$
For stranded wire acc. to IEC 60 228 Class 5	
Axial screw termination	
Power contacts	
- Wire gauge	35-70mm ²
- AWG	2-00
- Hexagonal driver	SW5
- Stripping length	22mm
	mm ² 35 50 70
- Tightening torque	N.m 8 9 10
PE contact	
- Wire gauge	16-35mm ²
- AWG	5-2
- Hexagonal driver	SW4
- Stripping length	14mm
- Tightening torque	6Nm
Signal contact (only HK 3/2)	
- Wire gauge	2.5mm ²
- AWG	14
- Stripping length	7mm
- Tightening torque	0.5Nm

Current carrying capacity

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals

Control and test procedures according to DIN EN 60512-5



24B Pressure tight hoods/housings with 1 modules

HK-003/0, HK-003/2 Heavy-current inserts

1150/2000V 200A 3/0  , 3/2+ 

CE

Inserts

备注: 标准包装量 5pcs Hoods/Housings: size Pressure tight hoods/housings, please find the details on page 12-04~12-05.

Axial screw terminal ¹⁾



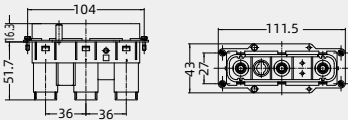
Insert	Designation	Order No.
Male	HK-003/0-M	128 003 011 0001
Female	HK-003/0-F	128 003 021 0001

Axial screw terminal ¹⁾

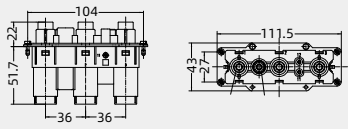


Insert	Designation	Order No.
Male	HK-003/2-M	128 005 011 0001
Female	HK-003/2-F	128 005 021 0001

Distance for contact max. 21 mm



M



F

Pressure tight hoods/housings

Degree of protection: IP68/IP69K

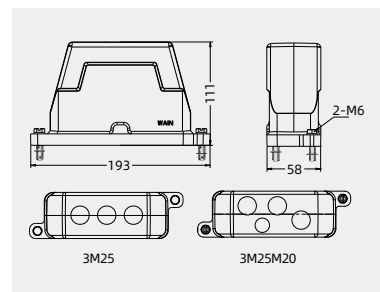
Remark: SPQ is 1pc

H version

Hoods, top entry, high construction



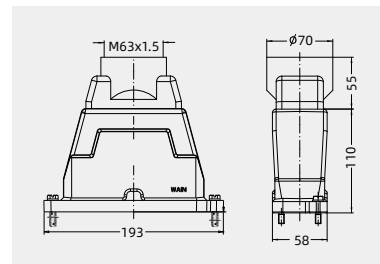
Thread	Designation	Order No.
	Screw locking	
3M25	HP24B/H-TEH-2S-3M25	113 624 420 5036
3M25,M20	HP24B/H-TEH-2S-3M25M20	113 624 420 5040
	Toggle locking	
3M25	HP24B/H-TEH-2T-3M25	113 624 440 5036
3M25,M20	HP24B/H-TEH-2T-3M25M20	113 624 440 5040



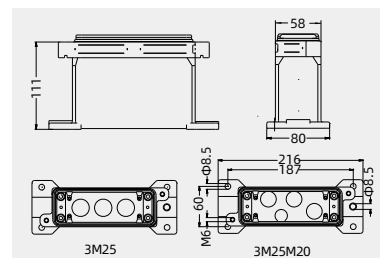
Hoods, top entry, high construction



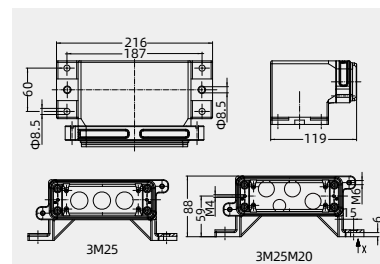
Thread	Designation	Order No.
	Screw locking	
M63	HP24B/H-TEH-2S-M63	113 624 420 5007
	Toggle locking	
M63	HP24B/H-TEH-2T-M63	113 624 440 5007

Surface mounted housings
high construction

Thread	Designation	Order No.
	Screw locking	
3M25	HP24B/H-SFH-2H-3M25	113 624 220 5036
3M25,M20	HP24B/H-SFH-2H-3M25M20	113 624 220 5040
	Toggle locking	
3M25	HP24B/H-SFH-2T-3M25	113 624 240 5036
3M25,M20	HP24B/H-SFH-2T-3M25M20	113 624 240 5040

Surface mounted housings
high construction

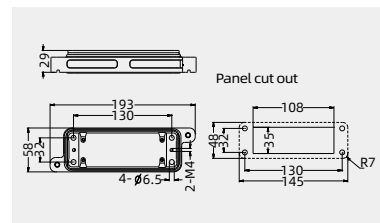
Thread	Designation	Order No.
	Screw locking	
3M25	HP24B/H-BK-SE-2H-3M25	113 624 920 1036
3M25,M20	HP24B/H-BK-SE-2H-3M25M20	113 624 920 1040
M50	HP24B/H-BK-SE-2H-M50	113 624 920 1006
	Toggle locking	
3M25	HP24B/H-BK-SE-2T-3M25	113 624 940 1036
3M25,M20	HP24B/H-BK-SE-2T-3M25M20	113 624 940 1040
M50	HP24B/H-BK-SE-2T-M50	113 624 940 1006



Surface mounted housings



Thread	Designation	Order No.
	Screw locking	
---	HP24B/H-BK-2H	113 624 320 1001
	Toggle locking	
---	HP24B/H-BK-2T	113 624 340 1001



Pressure tight hoods/housings

Degree of protection: IP68/IP69K

The following hoods/housings comply with the standards for rail transport industry in China.

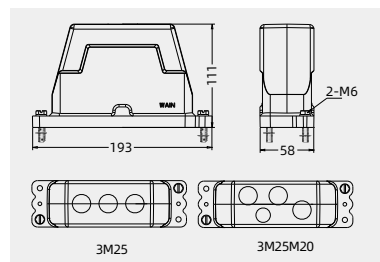
Remark: SPQ is 1pc

H version

Hoods, top entry, high construction



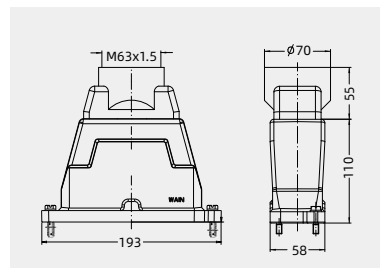
Thread	Designation	Order No.
	Screw locking	
3M25	HP24B/H-TEH-4S-3M25	113 624 430 5036
3M25,M20	HP24B/H-TEH-4S-3M25M20 3SP	113 624 430 5040



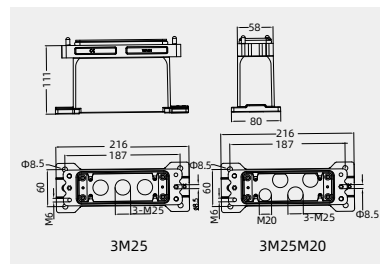
Hoods, top entry, high construction



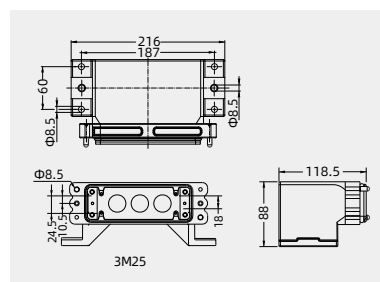
Thread	Designation	Order No.
	Screw locking	
M63	HP24B/H-TEH-4S-M63	113 624 430 5007

Surface mounted housings
high construction

Thread	Designation	Order No.
	Screw locking	
3M25	HP24B/H-SFH/BK-4H-3M25	113 624 230 5036
3M25,M20	HP24B/H-SFH-4H-3M25M20	113 624 230 5040

Surface mounted housings
high construction

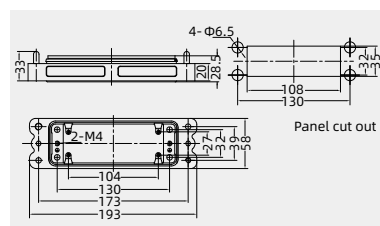
Thread	Designation	Order No.
	Screw locking	
3M25	HP24B/H-BK-SE-4H-3M25	113 624 930 1036
3M25,M20	HP24B/H-BK-SE-4H-3M25M20	113 624 930 1040
M50	HP24B/H-BK-SE-4H-M50	113 624 930 1006



Surface mounted housings



Thread	Designation	Order No.
	Screw locking	
---	HP24B/H-BK-4H	113 624 330 1001



HC-250 Heavy-current inserts

Crimp terminal



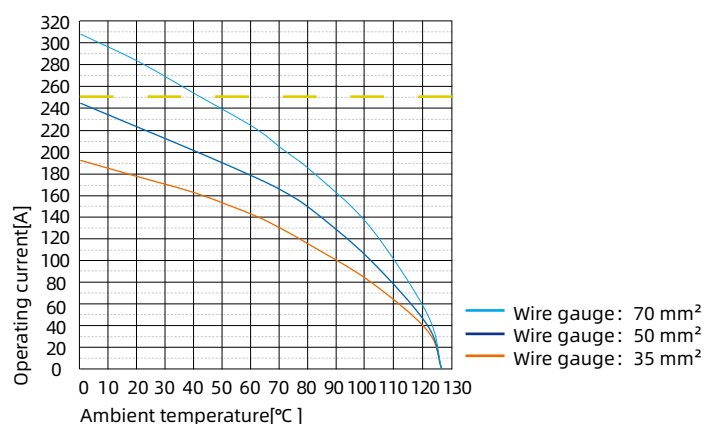
Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	
Inserts	
Number of contacts	1,2,3,4,3+PE
Electrical data acc. to DIN EN 61 984	
Rated current	250A
-Rated voltage	2000V
-Rated impulse voltage	12kV
-Pollution degree	3
Insulation resistance	$\geq 10^{10}\Omega$
Material	polycarbonate
Limiting temperatures	-40°C ... +125°C
Flammability acc. to UL 94	V0
Mechanical working life(mating cycles)	≥ 500
Contacts	
Material	Copper alloy
Surface	hard-silver plated
Contact resistance	$\leq 0.3 \text{ m}\Omega$
Crimp terminal	
- mm ²	35 - 70 mm ²
Max. insulation diameter	18 mm
Crimp dies	acc. to DIN 46 325
Pressing force requirement	130 kN
Frame	
Material	stainless steel
Tightening torque of the M3 fixing screws	0.5Nm

Current carrying capacity

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals

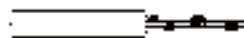
Control and test procedures according to DIN EN 60512-5



Assembly Details



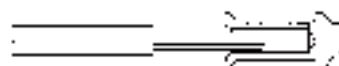
Cut the cable head square and strip the insulation



The copper strands must be cleaned from dirt and oxide film



Copper strands must not be twisted



Check if the cable strand is inserted completely into the crimp ferrule of the contact

HC-250 Heavy-current inserts

2000V 250A



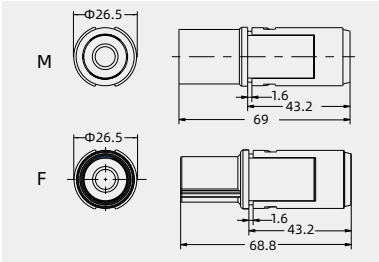
Inserts

Remark: SPQ is 1pc Hoods/Housings: size Pressure tight hoods/housings, please find the details on page 12-08~12-09.

Crimp terminal
Order crimp contacts separately



Insert	Designation	Order No.
Male	HC250-MC	131 001 010 0001
Female	HC250-FC	131 001 020 0001



Crimp contacts

Crimp contacts 250A

Silver plated

Remark: SPQ is 1pc

NO.	Male	Order No.	Female	Order No.
①	CHSM250-35	101 028 110 1701	CHSF250-35G	101 028 120 1703
②	CHSM250-50	101 028 110 1801	CHSF250-50G	101 028 120 1803
③	CHSM250-70	101 028 110 1901	CHSF250-70G	101 028 120 1903



For stranded wire acc. to IEC 60 228-5
Crimp zone acc. to DIN 46 235

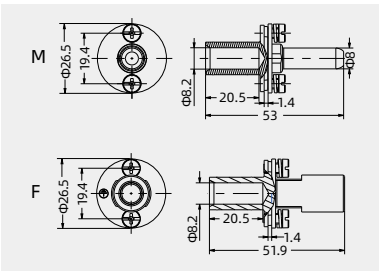
NO.	Wire gauge	Φ	Stripping length
①	35 mm ²	8.45 mm	22 mm
②	50 mm ²	10.25 mm	22 mm
③	70 mm ²	11.75 mm	22 mm

PE crimp contacts 250A

Silver plated



Male	Order No.	Female	Order No.
CHSM250PE-35	101 028 110 1704	CHSF250PE-35	101 028 120 1704



Tools

Manual hydraulic clamp



Wire gauge	Designation	Order No.
10-240mm ²	TL05	198 001 001 0005

Notes: The tools for crimp terminal may influence the product quality and stability. Please select the tools recognized by our company.

Pressure tight hoods/housings

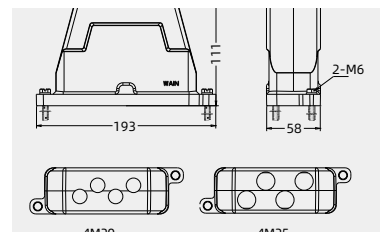
Degree of protection: IP68/IP69K Remark: SPQ is 1pc

H version

Hoods, top entry, high construction



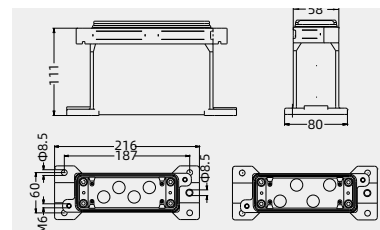
Thread	Designation	Order No.
	Screw locking	
4M20	HP24B/H-TEH-2S-4M20	113 624 420 5038
4M25	HP24B/H-TEH-2S-4M25	113 624 420 5039
	Toggle locking	
4M20	HP24B/H-TEH-2T-4M20	113 624 440 5038
4M25	HP24B/H-TEH-2T-4M25	113 624 440 5039



Surface mounted housings high construction



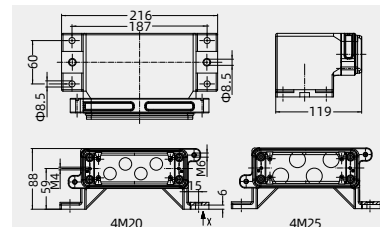
Thread	Designation	Order No.
	Screw locking	
4M20	HP24B/H-SFH-2H-4M20	113 624 220 5038
4M25	HP24B/H-SFH-2H-4M25	113 624 220 5039
	Toggle locking	
4M20	HP24B/H-SFH-2T-4M20	113 624 240 5038
4M25	HP24B/H-SFH-2T-4M25	113 624 240 5039



Surface mounted housings



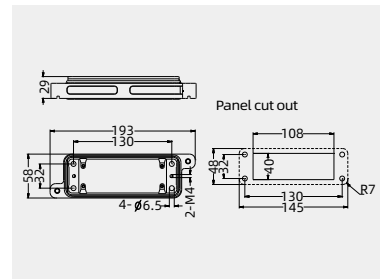
Thread	Designation	Order No.
	Screw locking	
4M20	HP24B/H-BK-SE-2H-4M20	113 624 920 1038
4M25	HP24B/H-BK-SE-2H-4M25	113 624 920 1039
	Toggle locking	
4M20	HP24B/H-BK-SE-2T-4M20	113 624 940 1038
4M25	HP24B/H-BK-SE-2T-4M25	113 624 940 1039



Bulkhead mounted housings



Thread	Designation	Order No.
	Screw locking	
---	HP24B/H-BK-2H	113 624 320 1001
	Toggle locking	
---	HP24B/H-BK-2T	113 624 340 1001



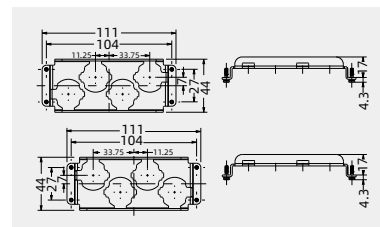
Frame

for 4 pins



Describe	Designation	Order No.
---	HF24B-004A-M	131 024 000 1011
---	HF24B-004A-F	131 024 000 1012

Remark: SPQ is 5pcs



Pressure tight hoods/housings

Degree of protection: IP68/IP69K

The following hoods/housings comply with the standards for rail transport industry in China.

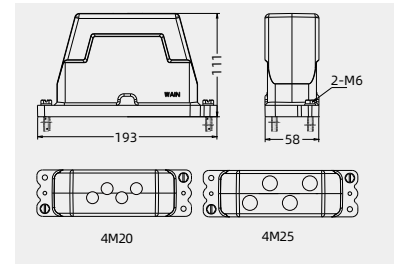
Remark: SPQ is 1pc

H version

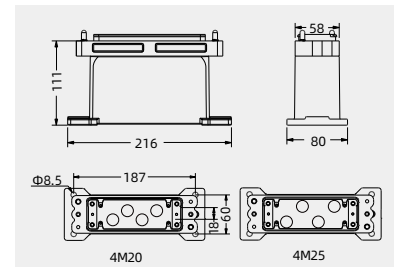
Hoods, top entry, high construction



Thread	Designation	Order No.
	Screw locking	
4M20	HP24B/H-TEH-4S-4M20	113 624 430 5038
4M25	HP24B/H-TEH-4S-4M25	113 624 430 5039

Surface mounted housings
high construction

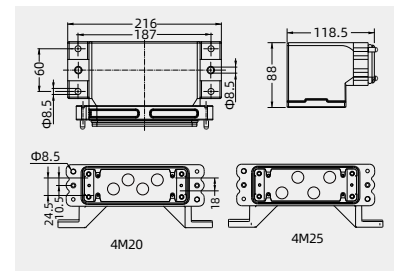
Thread	Designation	Order No.
	Screw locking	
4M20	HP24B/H-SFH-4H-4M20	113 624 230 5038
4M25	HP24B/H-SFH-4H-4M25	113 624 230 5039



Surface mounted housings



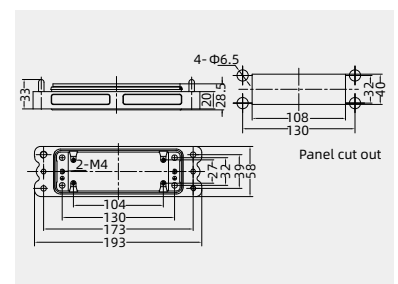
Thread	Designation	Order No.
	Screw locking	
4M20	HP24B/H-BK-SE-4H-4M20	113 624 930 1038
4M25	HP24B/H-BK-SE-4H-4M25	113 624 930 1039



Bulkhead mounted housings



Thread	Designation	Order No.
	Screw locking	
---	HP24B/H-BK-4H	113 624 330 1001



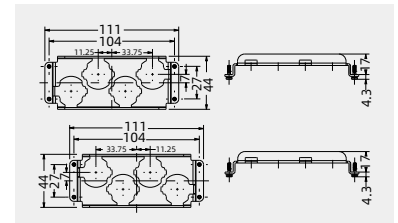
Frame

for 4 pins



Describe	Designation	Order No.
---	HF24B-004A-M	131 024 000 1011
---	HF24B-004A-F	131 024 000 1012

Remark: SPQ is 5pcs



Pressure tight hoods/housings

Degree of protection: IP68/IP69K

The following hoods/housings comply with the standards for rail transport industry in China.

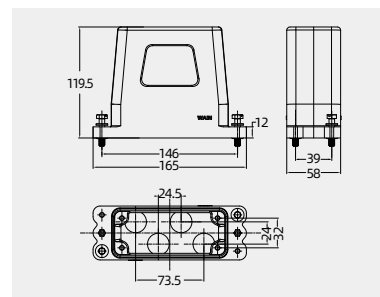
Only suitable for cable with 18mm diameter

Remark: SPQ is 1pc
H version

Hoods, top entry, high construction



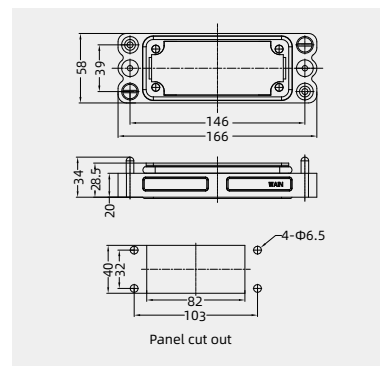
Thread	Designation	Order No.
	Screw locking	
4M25	HP16B/HE-TEHH-4S-4M25	113 016 430 5003



Bulkhead mounted housings



Thread	Designation	Order No.
	Screw locking	
---	HP16B/HE-BK-4H	113 016 330 1002



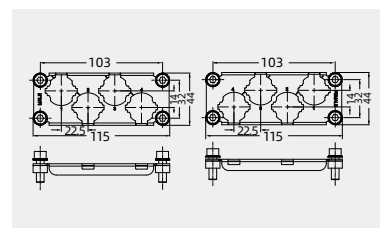
Frame

for 4 pins



Describe	Designation	Order No.
---	HF16B-004A/E-M	131 016 000 1006
---	HF16B-004A/E-F	131 016 000 1007

Remark: SPQ is 5pcs



HC-350 Heavy-current inserts

Crimp terminal



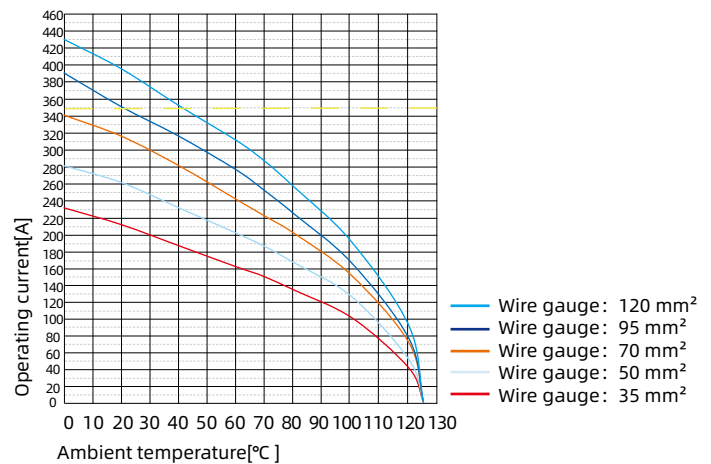
Technical characteristics

Specifications	DIN EN 60 664	DIN EN 61 984
Approvals		
Inserts		
Number of contacts	1,2,3,4	
Electrical data acc. to EN 61 984		
without adapter		
-Rated current	350A	
-Rated voltage	2000V	
-Rated impulse voltage	12kV	
-Pollution degree	3	
with adapter		
-Rated voltage	4000V	
-Rated impulse voltage	18kV	
-Pollution degree	3	
Insulation resistance	≥ 10 ¹⁰ Ω	
Material	polyamide	
Limiting temperatures	-40°C ...+125°C	
Flammability acc. to UL 94	V0	
Mechanical working life(mating cycles)	≥ 500	
Contacts		
Material	copper alloy	
Surface	hard-silver plated	
Contact resistance	≤ 0.3mΩ	
Crimp terminal		
- mm ²	35 - 120 mm ²	
Max. insulation diameter	22 mm	
Crimp dies	acc. to DIN 46 235	
Pressing force	130kN	
Frame		
Material	stainless steel	
Tightening torque of the M3 fixing screws	0.5 Nm	
Tightening torque of the M4 fixing screws	1.5 Nm	
Tightening torque of the M6 fixing screws	4Nm	

Current carrying capacity

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals

Control and test procedures according to DIN EN 60512-5



24B Pressure tight hoods/housings with 3 modules

Assembly Details



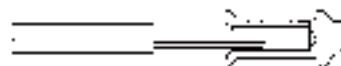
Cut the cable head square and strip the insulation



The copper strands must be cleaned from dirt and oxide film



Copper strands must not be twisted



Check if the cable strand is inserted completely into the crimp ferrule of the contact

HC-350 Heavy-current inserts

2000/4000V 350A



Inserts

Remark: SPQ is 1pc

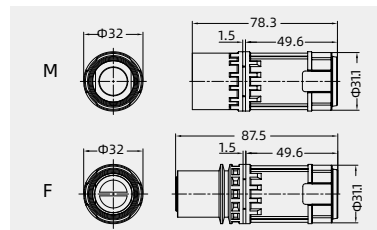
Hoods/Housings: size Pressure tight hoods/housings, please find the details on page 12-12~12-19.

Crimp terminal

Order crimp contacts separately



Insert	Designation	Order No.
Male	HC350-MC	131 001 010 0101
Female	HC350-FC	131 001 020 0101



Crimp contacts

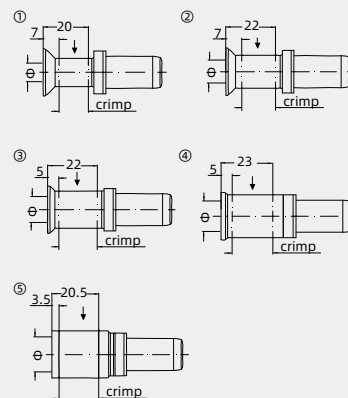
Remark: SPQ is 1pc

Crimp contacts 350A

Silver plated



NO.	Male	Order No.	Female	Order No.
①	CHSM350-35	101 029 110 1701	CHSF350-35G	101 029 120 1703
②	CHSM350-50	101 029 110 1801	CHSF350-50G	101 029 120 1803
③	CHSM350-70	101 029 110 1901	CHSF350-70G	101 029 120 1903
④	CHSM350-95	101 029 110 2001	CHSF350-95G	101 029 120 2003
⑤	CHSM350-120	101 029 110 2101	CHSF350-120G	101 029 120 2103

For stranded wire acc. to IEC 60 228-5
Crimp zone acc. to DIN 46 235

NO.	Wire gauge	Φ	Stripping length
①	35 mm²	8.2 mm	26 mm
②	50 mm²	10.0 mm	28 mm
③	70 mm²	11.5 mm	28 mm
④	95 mm²	13.5 mm	30 mm
⑤	120 mm²	15.5 mm	24 mm

Tools

Manual hydraulic clamp



Wire gauge	Designation	Order No.
10-240mm²	TL05	198 001 001 0005

Hexagonal adapter[optional]

metal version
with O-Ring

Describe	Designation	Order No.
for 350 Hoods/Housings	WNSC-M25M25/APT	102 103 018 1001
	WNSC-M32M32/APT	102 103 019 1001

	WNSC-M25M25/APT	WNSC-M32M32/APT
Thread(LG)	M25x1.5	M32x1.5
Thread(AG)	M25x1.5	M32x1.5
length of thread(L1)	13.5	16.5
length of thread(L2)	5.5	5.5
Wrench Size(SW)	30	40

Notes: The tools for crimp terminal may influence the product quality and stability. Please select the tools recognized by our company.

Pressure tight hoods/housings

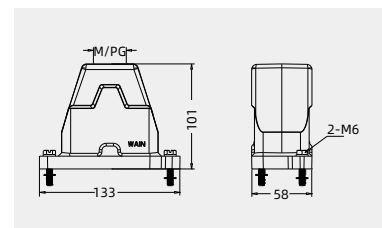
Degree of protection: IP68/IP69K Remark: SPQ is 1pc

H version

Hoods, top entry, high construction



Thread	Designation	Order No.
	Screw locking	
M25	HP6B/H-TEH-2S-M25	113 606 420 5003
M32	HP6B/H-TEH-2S-M32	113 606 420 5004
	Toggle locking	
M25	HP6B/H-TEH-2T-M25	113 606 440 5003
M32	HP6B/H-TEH-2T-M32	113 606 440 5004



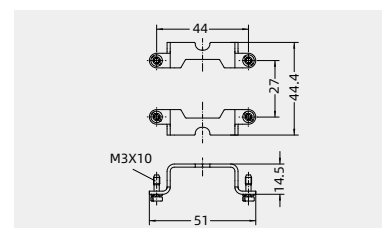
Frame, size 6B hoods/housings

for 1 pins



Describe for 1 pin	Designation	Order No.
	HF6B-001C	131 006 000 1001

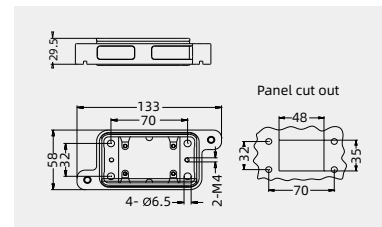
Remark: SPQ is 1pc



Bulkhead mounted housings



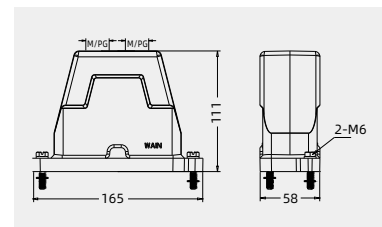
Thread	Designation	Order No.
	Screw locking	
---	HP6B/H-BK-2H	113 606 320 1001
	Toggle locking	
---	HP6B/H-BK-2T	113 606 340 1001



Hoods, top entry, high construction



Thread	Designation	Order No.
	Screw locking	
2M25	HP16B/H-TEH-2S-2M25	113 616 420 5023
	Toggle locking	
2M25	HP16B/H-TEH-2T-2M25	113 616 440 5023



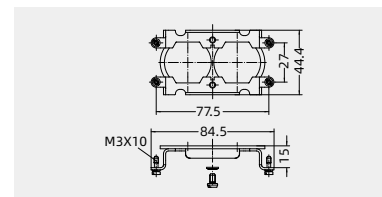
Frame, size 16B hoods/housings

for 2 pins



Describe for 2 pins	Designation	Order No.
	HF16B-002C	131 016 000 1001

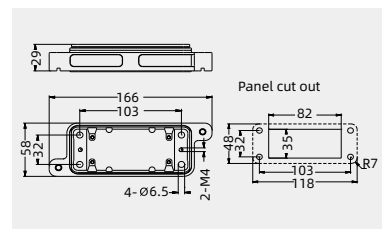
Remark: SPQ is 1pc



Bulkhead mounted housings



Thread	Designation	Order No.
	Screw locking	
---	HP16B/H-BK-2H	113 616 320 1001
	Toggle locking	
---	HP16B/H-BK-2T	113 616 340 1001



Pressure tight hoods/housings

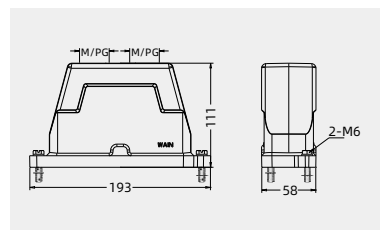
Degree of protection: IP68/IP69K Remark: SPQ is 1pc

H version

Hoods, top entry, high construction



Thread	Designation	Order No.
	Screw locking	
2M25	HP24B/H-TEH-2S-2M25	113 624 420 5023
2M32	HP24B/H-TEH-2S-2M32	113 624 420 5024
	Toggle locking	
2M25	HP24B/H-TEH-2T-2M25	113 624 440 5023
2M32	HP24B/H-TEH-2T-2M32	113 624 440 5024

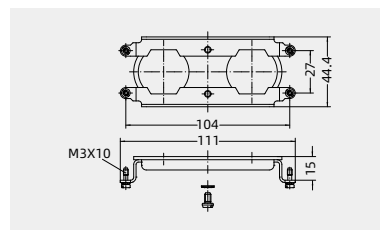


Frame, size 24B hoods/housings

for 2 pins



Describe for 2 pins	Designation	Order No.
	HF24B-002C	131 024 000 1001

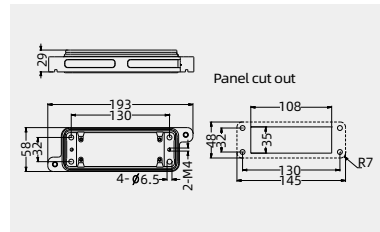


Remark: SPQ is 1pc

Bulkhead mounted housings



Thread	Designation	Order No.
	Screw locking	
---	HP24B/H-BK-2H	113 624 320 1001
	Toggle locking	
---	HP24B/H-BK-2T	113 624 340 1001



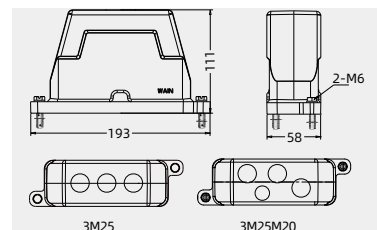
Degree of protection: IP68/IP69K Remark: SPQ is 1pc

H version

Hoods, top entry, high construction



Thread	Designation	Order No.
	Screw locking	
3M25	HP24B/H-TEH-2S-3M25	113 624 420 5036
	Toggle locking	
3M25	HP24B/H-TEH-2T-3M25	113 624 440 5036

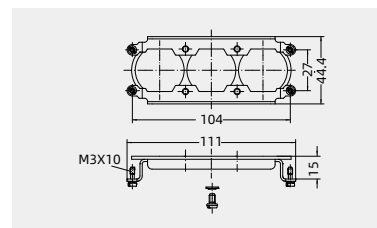


Frame, size 24B hoods/housings

for 3 pins



Describe	Designation	Order No.
for 3 pins	HF24B-003C	131 024 000 1003
Remark: SPO is 5pcs		

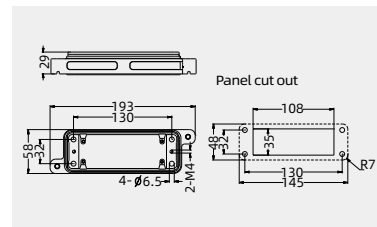


Remark: SPQ is 5pcs

Bulkhead mounted housings



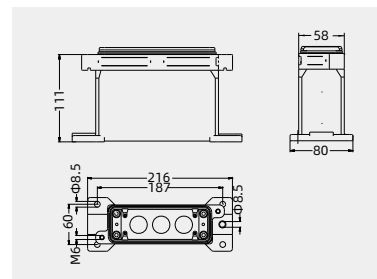
Thread	Designation	Order No.
	Screw locking	
---	HP24B/H-BK-2H	113 624 320 1001
	Toggle locking	
---	HP24B/H-BK-2T	113 624 340 1001



Surface mounted housings high construction



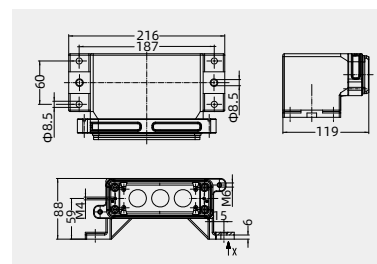
Thread	Designation	Order No.
	Screw locking	
3M25	HP24B/H-SFH-2H-3M25	113 624 220 5036
	Toggle locking	
3M25	HP24B/H-SFH-2T-3M25	113 624 240 5036



Surface mounted housings high construction



Thread	Designation	Order No.
	Screw locking	
3M25	HP24B/H-BK-SE-2H-3M25	113 624 920 1036
	Toggle locking	
3M25	HP24B/H-BK-SE-2T-3M25	113 624 940 1036



Pressure tight hoods/housings

Degree of protection: IP68/IP69K

The following hoods/housings comply with the standards for rail transport industry in China.

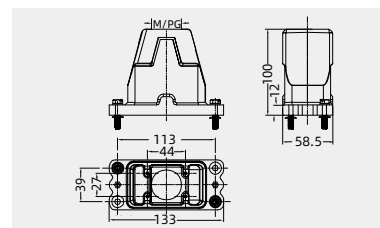
Remark: SPQ is 1pc

H version

Hoods, top entry, high construction



Thread	Designation	Order No.
	Screw locking	
M25	HP6B/H-TEH-4S-M25	113 606 430 5003
M32	HP6B/H-TEH-4S-M32	113 606 430 5004



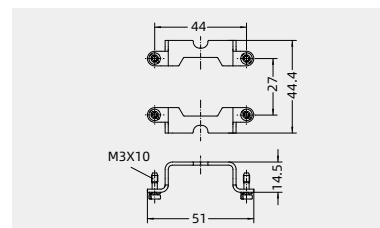
Frame, size 6B hoods/housings

for 1 pins



Describe for 1 pin	Designation	Order No.
	HF6B-001C	131 006 000 1001

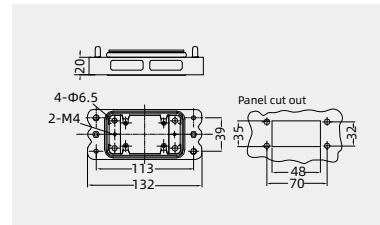
Remark: SPQ is 1pc



Bulkhead mounted housings



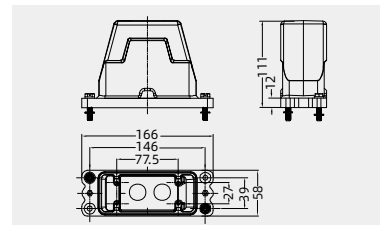
Thread	Designation	Order No.
	Screw locking	
---	HP6B/H-BK-4H	113 606 330 1001



Hoods, top entry, high construction



Thread	Designation	Order No.
	Screw locking	
2M25	HP16B/H-TEH-4S-2M25	113 616 430 5023



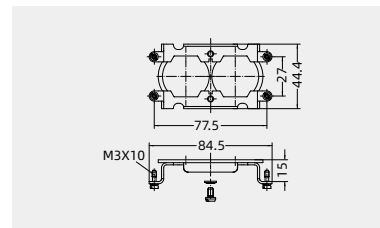
Frame, size 16B hoods/housings

for 2 pins



Describe for 2 pins	Designation	Order No.
	HF16B-002C	131 016 000 1001

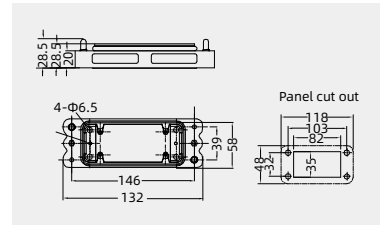
Remark: SPQ is 1pc



Bulkhead mounted housings



Thread	Designation	Order No.
	Screw locking	
---	HP16B/H-BK-4H	113 616 330 1001



Pressure tight hoods/housings - enlarged

Degree of protection: IP68/IP69K

The following hoods/housings comply with the standards for rail transport industry in China.

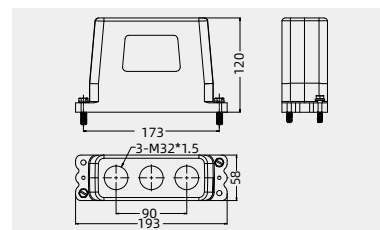
Only suitable for cable with 25mm diameter

H version

Hoods, top entry, high construction

Remark: SPQ is 1pc

Thread	Designation	Order No.
	Screw locking	
3M32	HP24B/HE-TEHH-4S-3M32	113 624 430 5137

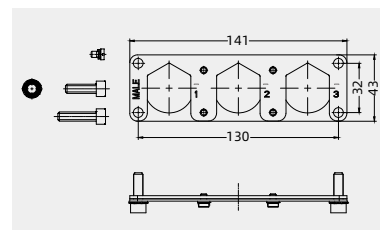


Male, Frame, size 24B hoods/housings

Remark: SPQ is 5pcs

for 3 pins

Describe for 3 pins	Designation	Order No.
	HF24B-003C/E-M	131 024 000 1005

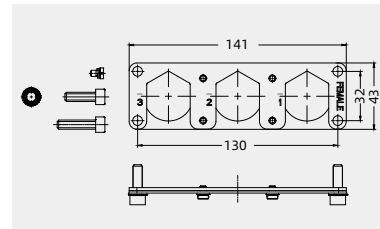


Female, Frame, size 24B hoods/housings

Remark: SPQ is 5pcs

for 3 pins

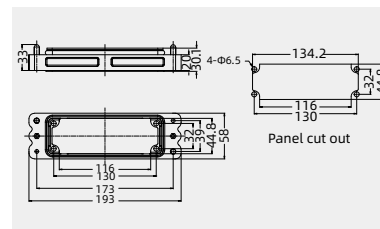
Describe for 3 pins	Designation	Order No.
	HF24B-003C/E-F	131 024 000 1006



Bulkhead mounted housings

Remark: SPQ is 1pc

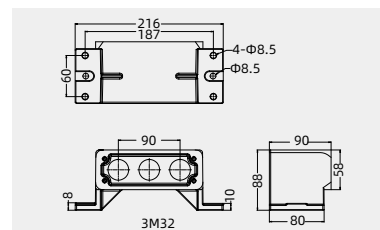
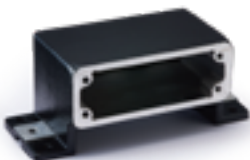
Thread	Designation	Order No.
	Screw locking	
---	HP24B/HE-BK-4H	113 624 330 1101



Surface mounted housings

Remark: SPQ is 1pc

Thread	Designation	Order No.
	Screw locking	
3M32	HP24B/HE-BK-SE-3M32	113 624 900 1137



Pressure tight hoods/housings

Degree of protection: IP68/IP69K

The following hoods/housings comply with the standards for rail transport industry in China.

Only suitable for cable with 18mm diameter

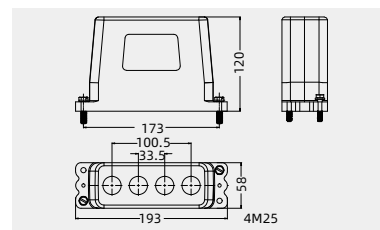
H version

Hoods, top entry, high construction

Remark: SPQ is 1pc



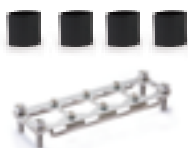
Thread	Designation	Order No.
4M25	HP24B/HE-TEHH-4S-4M25	113 624 430 5139



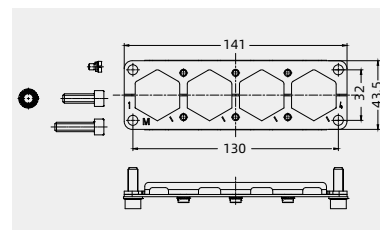
Male,Frame, size 24B hoods/housings

Remark: SPQ is 5pcs

for 4 pins



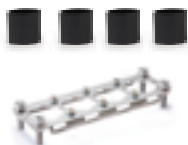
Describe for 4 pins	Designation	Order No.
	HF24B-004C/E-M	131 024 000 1009



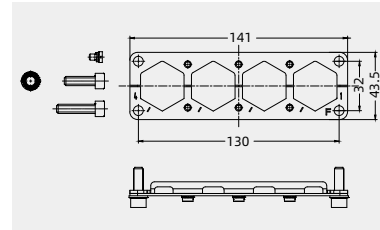
Female,Frame, size 24B hoods/housings

Remark: SPQ is 5pcs

for 4 pins



Describe for 4 pins	Designation	Order No.
	HF24B-004C/E-F	131 024 000 1010

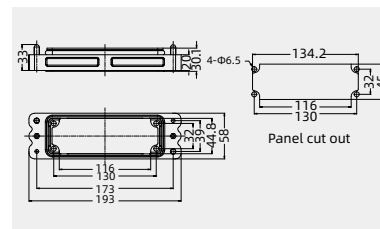


Bulkhead mounted housings

Remark: SPQ is 1pc

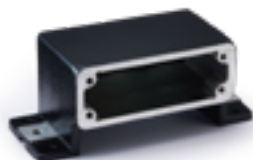


Thread	Designation	Order No.
---	HP24B/HE-BK-4H	113 624 330 1101

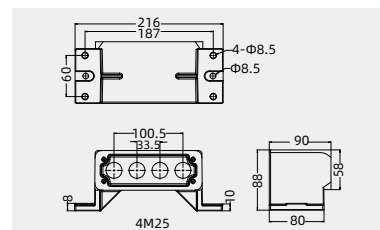


Surface mounted housings

Remark: SPQ is 1pc



Thread	Designation	Order No.
---	HP24B/HE-BK-SE-4M25	113 624 900 1139



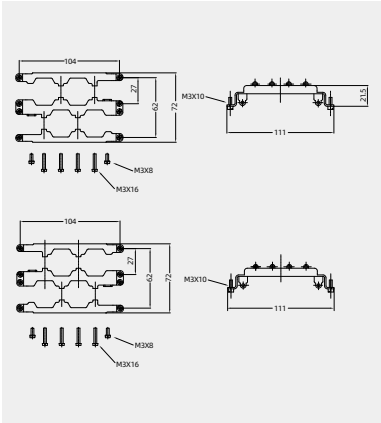
Pressure tight hoods/housings
- enlarged

Hoods/Housings: size 48B, please find the details on page15-160 ~15-161 .

Frame

Remark: SPQ is 5pcs

Insert	Designation	Order No.
Male	HF48B-004C/2HQ005-M	131 048 000 1002
Female	HF48B-004C/2HQ005-F	131 048 000 1003



Crimp contacts 350A

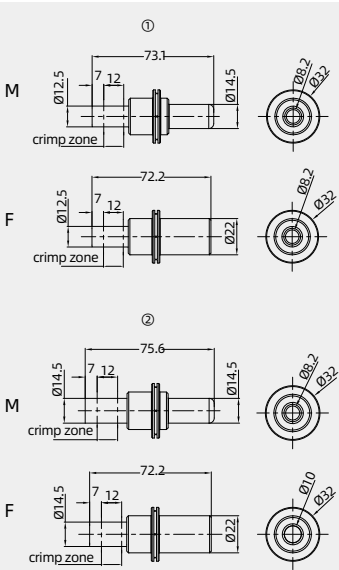
350A Crimp contacts

silver plated



Remark: SPQ is 1pc

NO.	Male	Order No.	Female	Order No.
①	CHSM350PE-35	101 029 101 1701	CHSF350PE-35G	101 029 120 1701
②	CHSM350PE-50	101 029 101 1801	CHSF350PE-50G	101 029 120 1801



Tools

Manual hydraulic clamp



Remark: SPQ is 1pc

Wire gauge	Designation	Order No.
10-240mm ²	TL05	198 001 001 0005

No.	Wire gauge	Stripping length
①	35 mm ²	26 mm
②	50 mm ²	26 mm

Notes: The tools for crimp terminal may influence the product quality and stability. Please select the tools recognized by our company.

HC-650 Heavy-current inserts

Axial screw terminal



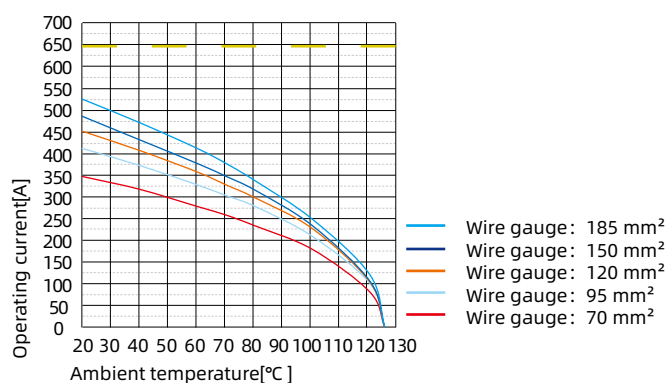
Technical characteristics

Specifications	DIN EN 60 664	DIN EN 61 984
Approvals		
Inserts		
Number of contacts	1,2,3	
Electrical data acc. to EN 61 984		
without adapter		
-Rated current	650A	
-Rated voltage	2000V	
-Rated impulse voltage	12kV	
-Pollution degree	3	
with adapter		
-Rated voltage	4000V	
-Rated impulse voltage	18kV	
-Pollution degree	3	
Insulation resistance	$\geq 10^{10}\Omega$	
Material	polyamide	
Limiting temperatures	-40°C ...+125°C	
Flammability acc. to UL 94	V0	
Mechanical working life(mating cycles)	≥ 500	
Contacts		
Material	copper alloy	
Surface	silver	
Contact resistance	$\leq 0.2m\Omega$	
For stranded wire acc. to IEC 60 228 Class 5		
Axial screw termination		
- Wire gauge	35-70 / 70-120 / 150-185mm ²	
- MCM	138 - 236 / 300 - 350	
- Stripping length	23-25	
- Max. cable diameter	26.5mm	
	mm ² 35 50 70 95 120 150 185	
- Tightening torque	Nm 8 10 12 14 16 17 18	
Screw terminal		
- Thread	M12	
- Tightening torque	8-18Nm	
Frame		
Material	stainless steel	
Tightening torque of the M3 fixing screws	0.5Nm	

Current carrying capacity

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals

Control and test procedures according to DIN EN 60512-5



24B Pressure tight hoods/housings with 2 modules

HC-650 Heavy-current inserts

4000V 650A

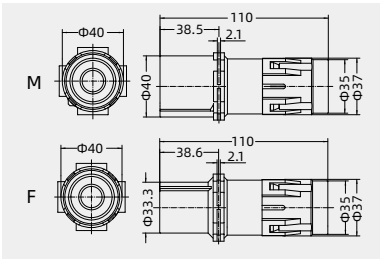
Inserts

Remark: SPQ is 1pc Hoods/Housings: size Pressure tight hoods/housings, please find the details on page 12-24~12-26.

Axial screw terminal¹⁾



Insert	Wire gauge	Designation	Order No.
Male	35-70mm ²	HC650.70-M(35-70mm ²)	131 001 011 0203
	70-120mm ²	HC650.120-M (70-120mm ²)	131 001 011 0201
	150-185mm ²	HC650.185-M (150-185mm ²)	131 001 011 0202
Female	35-70mm ²	HC650.70-F(35-70mm ²)	131 001 021 0203
	70-120mm ²	HC650.120-F (70-120mm ²)	131 001 021 0201
	150-185mm ²	HC650.185-F (150-185mm ²)	131 001 021 0202



Assembly details

Step 1: Strip cable to 23+2 mm

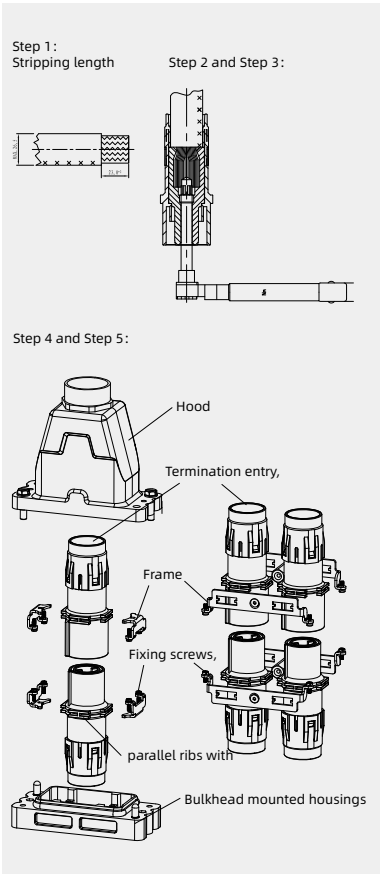
Step 2: Push conductor through the cable gland and the housing. Push the stripped end of the conductor into the termination entry of the module until the insulation touches the contact.

Step 3: To tighten the axial screw, a hexagonal wrench size 8 is needed. Insert the hexagonal wrench on the mating side of the contact. At the same time, push the conductor over the axial screw. The locking screw has to be tightened with the recommended tightening torque that is determined by the conductor's cross section.

Step 4: Once the modules are terminated, they are mounted into the housing by using two metal frames (tightening torque of the fixing screws = 0.5 Nm). The modules have 4 pegs formed by 2 parallel ribs (each peg shapes like a "H"). Each rib takes 1 pole frame, where the lateral link has to go into the relief of the frame. The 2 pole frames have 2 cutouts on the wall which get fitted to the "H"-shaped pegs (see figure). The heads of the screws have to face the mating direction of the module. Coding can be established by rotating the contact by 90 degrees. Therefore it is important that the corresponding modules are assembled in the correct position otherwise mating is not possible.

Step 5: After assembling the modules in the housing, the tightening torque of the locking screw can be checked and corrected if necessary.

Step 6: After final assembly of the contacts, the user should ensure that the cable is adequately strain relieved to protect the contact from radial stress.



1) See P00-30-00-31 for the structural characteristics and description of Axial screw terminal.

HC-650 Heavy-current inserts

Crimp terminal



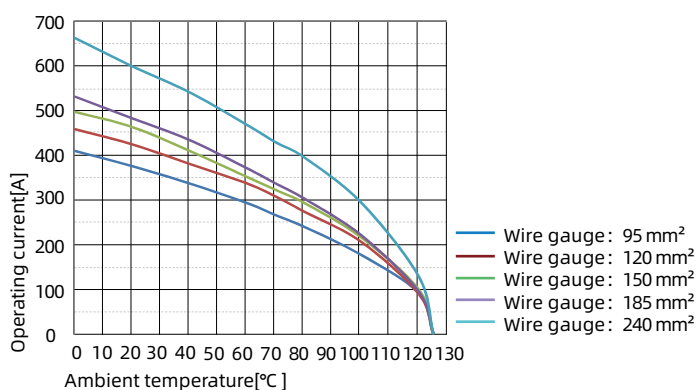
Technical characteristics

Specifications	DIN EN 60 664	DIN EN 61 984
Approvals		
Inserts		
Number of contacts	1,2,3	
Electrical data acc. to EN 61 984		
without adapter		
-Rated current	650A	
-Rated voltage	2000V	
-Rated impulse voltage	12kV	
-Pollution degree	3	
with adapter		
-Rated voltage	4000V	
-Rated impulse voltage	18kV	
-Pollution degree	3	
Insulation resistance	$\geq 10^{10}\Omega$	
Material	polyamide	
Limiting temperatures	$-40^{\circ}\text{C} \dots +125^{\circ}\text{C}$	
Flammability acc. to UL 94	V0	
Mechanical working life(mating cycles)	≥ 500	
Contacts		
Material	copper alloy	
Surface	hard-silver plated	
Contact resistance	$\leq 0.3\text{m}\Omega$	
Crimp terminal		
- mm ²	240mm ²	
Max. insulation diameter	32mm	
Pressing force requirement	130kN	
Frame		
Material	stainless steel	
Tightening torque of the M3 fixing screws	0.5 Nm	
Tightening torque of the M4 fixing screws	1.5 Nm	
Tightening torque of the M6 fixing screws	4 Nm	

Current carrying capacity

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals

Control and test procedures according to DIN EN 60512-5

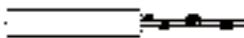


24B Pressure tight hoods/housings with 2 modules

Assembly Details



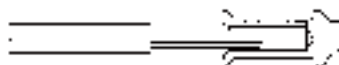
Cut the cable head square and strip the insulation



The copper strands must be cleaned from dirt and oxide film



Copper strands must not be twisted



Check if the cable strand is inserted completely into the crimp ferrule of the contact

HC-650 Heavy-current inserts

4000V 650A

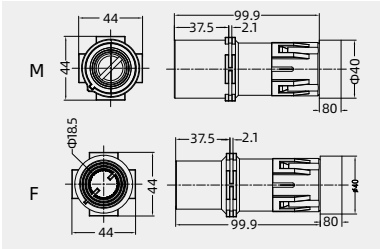
Inserts

Remark: SPQ is 1pc Hoods/Housings: size Pressure tight hoods/housings, please find the details on page 12-24~12-26.

Crimp terminal
Order crimp contacts separately



Insert	Designation	Order No.
Male	HC650-MC	131 001 010 0201
Female	HC650-FC	131 001 020 0201



Crimp contacts 650A (with crown spring), for HC650 inserts.

Contact resistance $\leq 0.3\text{m}\Omega$

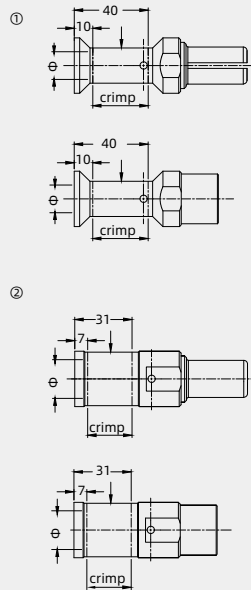
silver plated



Remark: SPQ is 1pc

NO.	Male	Order No.	Female	Order No.
①	CHSM650-95	101 030 110 2002	CHSF650-95G	101 030 120 2002
①	CHSM650-120	101 030 110 2101	CHSF650-120G	101 030 120 2101
①	CHSM650-150	101 030 110 2202	CHSF650-150G	101 030 120 2202
②	CHSM650-185	101 030 110 2301	CHSF650-185G	101 030 120 2303
②	CHSM650-240	101 030 110 2401	CHSF650-240G	101 030 120 2403

For stranded wire acc. to IEC 60 228-5
Crimp zone acc. to DIN 46 235



NO.	Wire gauge	Φ	Stripping length
①	95 mm ²	13.5 mm	42 mm
	120 mm ²	15.5 mm	42 mm
	150 mm ²	17 mm	42 mm
②	185 mm ²	19.4 mm	46 mm
	240 mm ²	22.5 mm	46 mm

Tools

Manual hydraulic clamp



Remark: SPQ is 1pc		
Wire gauge	Designation	Order No.
10-240mm ²	TL05	198 001 001 0005

Notes: The tools for crimp terminal may influence the product quality and stability. Please select the tools recognized by our company.

Pressure tight hoods/housings

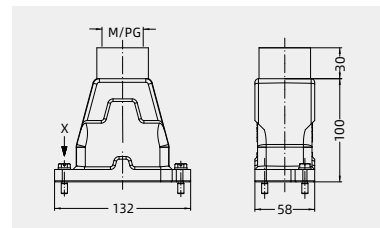
Degree of protection: IP68/IP69K Remark: SPQ is 1pc

H version

Hoods, top entry, high construction



Thread	Designation	Order No.
M40	Screw locking	113 606 420 5105
	Toggle locking	
M40	HP6B/H-TEH-2S-M40B	
M40	Screw locking	113 606 440 5105
	Toggle locking	
	HP6B/H-TEH-2T-M40B	



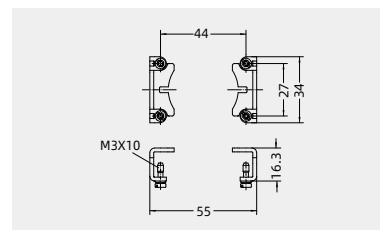
Frame, size 6B hoods/housings

for 1 pins



Describe for 1 pin	Designation	Order No.
	HF6B-001R	131 006 000 1002

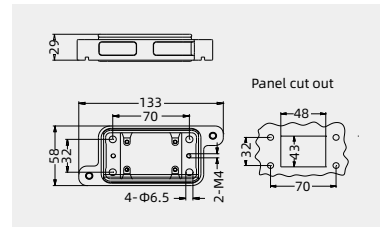
Remark: SPQ is 5pcs



Bulkhead mounted housings



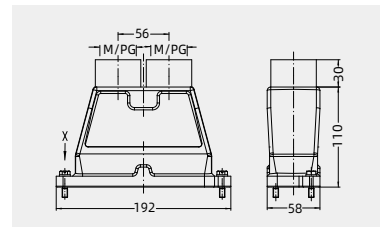
Thread	Designation	Order No.
---	Screw locking	113 606 320 1002
	Toggle locking	
---	HP6B/H-BKH-2H	
---	Screw locking	113 606 340 1002
	Toggle locking	
	HP6B/H-BKH-2T	



Hoods, top entry, high construction



Thread	Designation	Order No.
2M40	Screw locking	113 624 420 5125
	Toggle locking	
2M40	HP24B/H-TEH-2S-2M40B	
2M40	Screw locking	113 624 440 5125
	Toggle locking	
	HP24B/H-TEH-2T-2M40B	



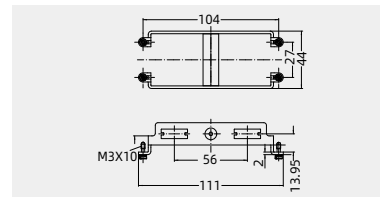
Frame, size 24B hoods/housings

for 2 pins



Describe for 2 pins	Designation	Order No.
	HF24B-002R	131 024 000 1002

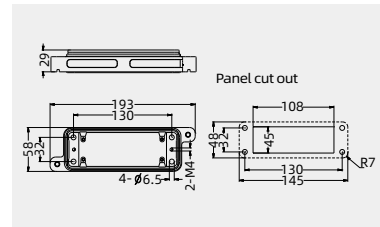
Remark: SPQ is 5pcs



Bulkhead mounted housings



Thread	Designation	Order No.
---	Screw locking	113 624 320 1001
	Toggle locking	
---	HP24B/H-BK-2H	
---	Screw locking	113 624 340 1001
	Toggle locking	
	HP24B/H-BK-2T	



Pressure tight hoods/housings

Degree of protection: IP68/IP69K

The following hoods/housings comply with the standards for rail transport industry in China.

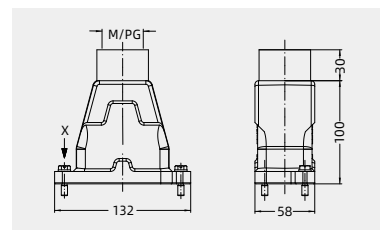
H version

Hoods, top entry, high construction



Remark: SPQ is 1pc

Thread	Designation	Order No.
	Screw locking	
M40	HP6B/H-TEH-4S-M40B	113 606 430 5105



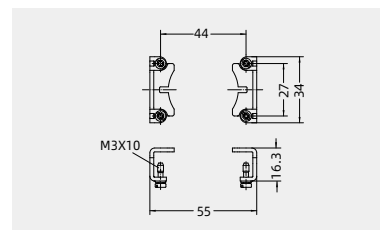
Frame, size 6B hoods/housings

for 1 pins



Remark: SPQ is 5pcs

Describe	Designation	Order No.
for 1 pin	HF6B-001R	131 006 000 1002

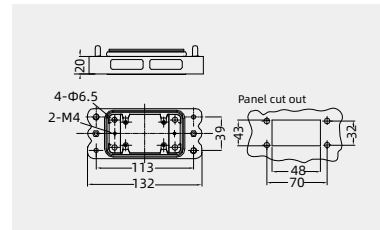


Bulkhead mounted housings



Remark: SPQ is 1pc

Thread	Designation	Order No.
	Screw locking	
---	HP6B/H-BK-4H	113 606 330 1001

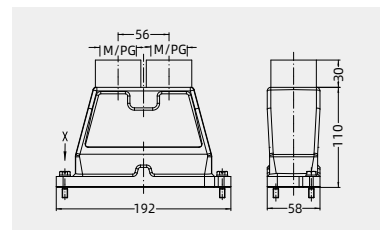


Hoods, top entry, high construction



Remark: SPQ is 1pc

Thread	Designation	Order No.
	Screw locking	
2M40	HP24B/H-TEH-4S-2M40B	113 624 430 5125



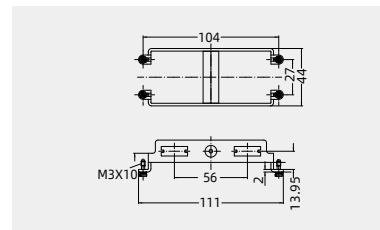
Frame, size 24B hoods/housings

for 2 pins



Remark: SPQ is 5pcs

Describe	Designation	Order No.
for 2 pins	HF24B-002R	131 024 000 1002

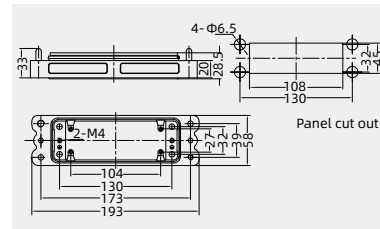


Bulkhead mounted housings



Remark: SPQ is 1pc

Thread	Designation	Order No.
	Screw locking	
---	HP24B/H-BK-4H	113 624 330 1001



Pressure tight hoods/housings - enlarged

Degree of protection: IP68/IP69K

The following hoods/housings comply with the standards for rail transport industry in China.

Only suitable for cable with 25mm diameter

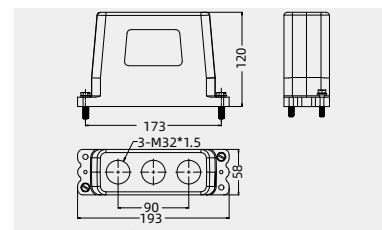
H version

Hoods, top entry, high construction

Remark: SPQ is 1pc



Thread	Designation	Order No.
	Screw locking	
3M32	HP24B/HE-TEHH-4S-3M32	113 624 430 5137



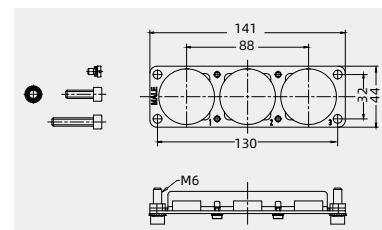
Male,Frame, size 24B hoods/housings

Remark: SPQ is 5pcs

for 3 pins



Describe for 3 pins	Designation	Order No.
	HF24B-003R/E-M	131 024 000 1007



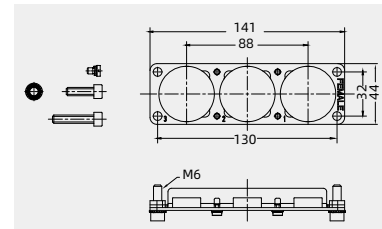
Female,Frame, size 24B hoods/housings

Remark: SPQ is 5pcs

for 3 pins



Describe for 3 pins	Designation	Order No.
	HF24B-003R/E-F	131 024 000 1008

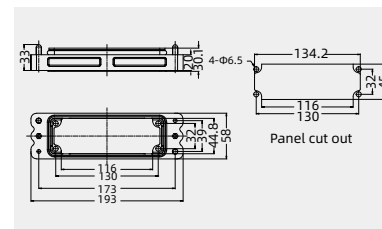


Bulkhead mounted housings

Remark: SPQ is 1pc

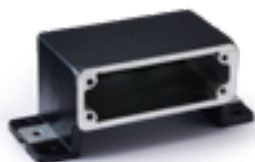


Thread	Designation	Order No.
	Screw locking	
---	HP24B/HE-BK-4H	113 624 330 1101

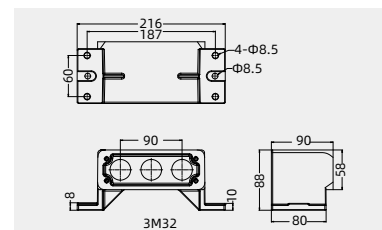


Surface mounted housings

Remark: SPQ is 1pc



Thread	Designation	Order No.
	Screw locking	
3M32	HP24B/HE-BK-SE-3M32	113 624 900 1137



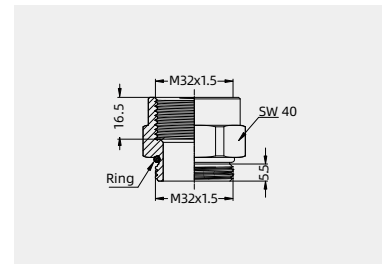
Hexagonal adapter[optional]

metal version
with O-Ring



Remark: SPQ is 1pc

Describe for 650 Hoods/Housings:	Designation	Order No.
HP24B/HE-TEHH-4S-3M32,	WNSC-M32M32/APT	102 103 019 1001
HP24B/HE-BK-SE-3M32		



Pressure tight hoods/housings

Degree of protection: IP68/IP69K

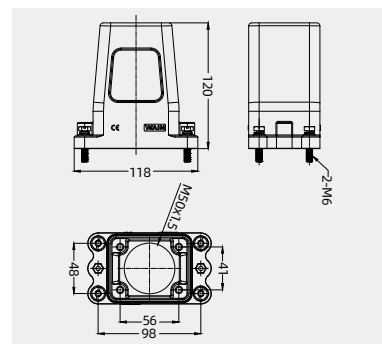
The following hoods/housings comply with the standards for rail transport industry in China.

H version

Hoods, top entry, high construction

Remark: SPQ is 1pc

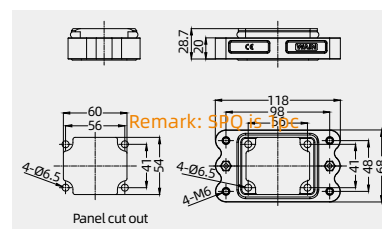
Thread	Designation	Order No.
M50	Screw locking HP1T/H-TEH-4S-M50	114 000 435 0001



Bulkhead mounted housings

Remark: SPQ is 1pc

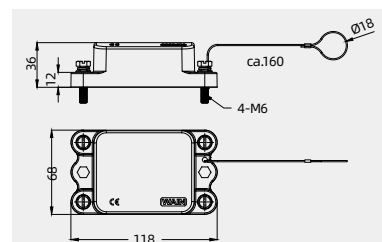
Thread	Designation	Order No.
---	Screw locking HP1T/H-BK-4H	114 000 335 0001



Protective cover (housings)

Remark: SPQ is 1pc

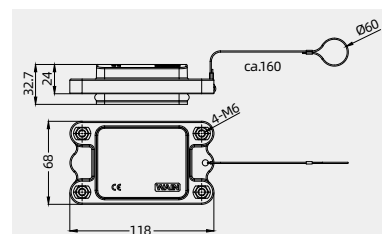
Thread	Designation	Order No.
---	Screw locking HP1T/H-MCV-4S	114 000 135 9011



Protective cover (Hoods)

Remark: SPQ is 1pc

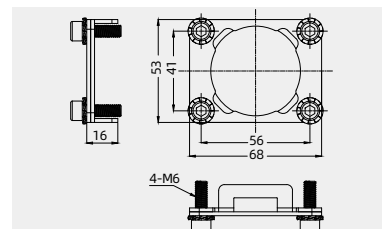
Thread	Designation	Order No.
---	Screw locking HP1T/H-MCV-4H	114 000 135 9001



Frame

Remark: SPQ is 5pcs

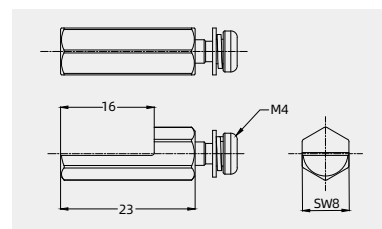
Describe for 1 pins	Designation	Order No.
	HF1T-001	131 001 099 0001



Coding element

Remark: SPQ is 1pc

Describe coding, pokayoke	Designation	Order No.
	CODE-HP	198 002 005 0038



HC-1000 Heavy-current inserts

4000V 1000A

Inserts

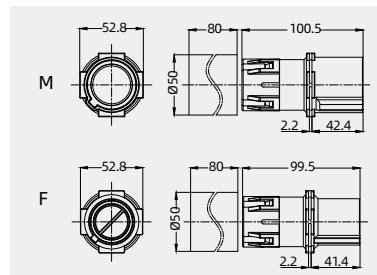
Remark: SPQ is 1pc

Crimp terminal

Order crimp contacts separately



Insert	Designation	Order No.
Male	HC1000-MC	131 001 010 0506
Female	HC1000-FC	131 001 020 0506



Crimp contacts 1000A

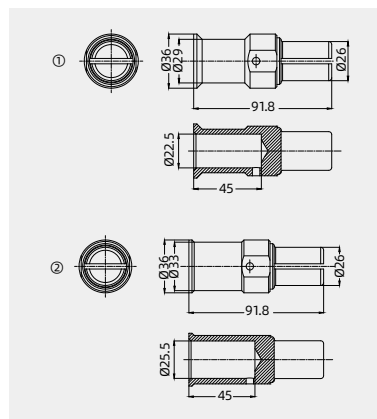
Crimp contacts 1000A

silver plated

Remark: SPQ is 1pc



NO.	Male	Order No.	Female	Order No.
①	CHSM1000-240	101 042 110 2401	CHSF1000-240G	101 042 120 2401
②	CHSM1000-300	101 042 110 3551	CHSF1000-300G	101 042 120 3551



Tools

Manual hydraulic clamp



Remark: SPQ is 1pc

Wire gauge	Designation	Order No.
10-300mm ²	TL05-EA	198 001 001 0020