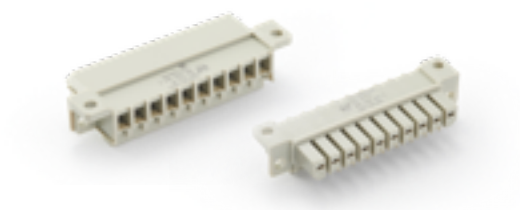


HCC SERIES

Single row connector

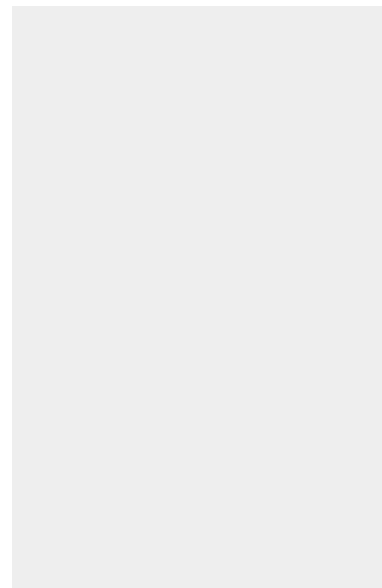


HCC single row inserts



Technical characteristics

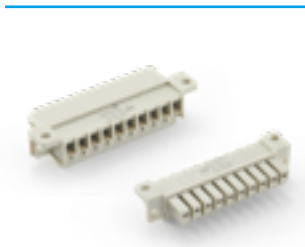
Specifications	
Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	ERC
Inserts	
Rated current	30A
Rated voltage	500V
Rated impulse voltage	6kV
Pollution degree	3
Limiting temperatures	-40°C ...+125°C
Flammability	V0
Mechanical working life(mating cycles)	≥ 500
Contacts	
Number of contacts	10
Terminal	screw terminal
Wire gauge	0.32~4mm ²
Material	copper alloy
Surface	silver plated



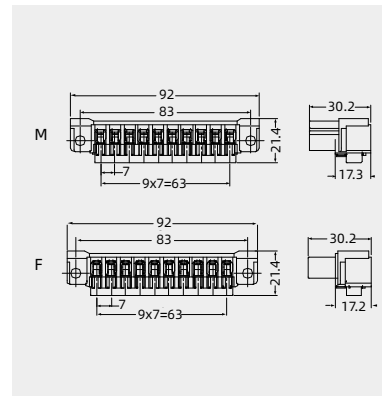
HCC

Inserts

Remark: SPQ is 5pcs



Inserts	Designation	Order No.
Male	HCC-010-M	133 010 011 0001
Female	HCC-010-F	133 010 021 0001



HV SERIES

Single row connector



HV single row inserts

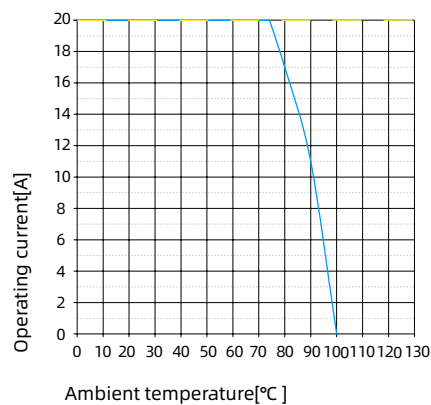


Technical characteristics

Specifications/Approvals	
Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	ERC
Inserts	
Number of contacts	8 +PE
Rated current	20A
Rated voltage	400V
Rated impulse voltage	6kV
Pollution degree	3
Insulation resistance	$\geq 10^{10}\Omega$
Flammability (UL94)	V0
Mechanical working life(mating cycles)	≥ 500
Material	PA
Limiting temperature	-40°C ...+100°C
Contacts	
Material	copper alloy
Surface	tin plating
Contact resistance	$\leq 1\text{m}\Omega$
Terminal	
-Screw terminal	
-Wire gauge	0.2—4.0mm ²
-Tightening torque	0.5~0.6Nm
-Stripping length	7.0mm
Hoods/Housings	
Material	Zinc-alloy
Surface	nickel plating
Locking element	Screw locking
Sealing element	NBR
Limiting temperatures	-40°C ~+125°C
Degree of protection	IP67

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



HV single row inserts

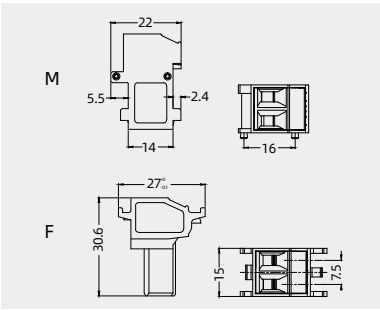
400V 20A 8+

Inserts

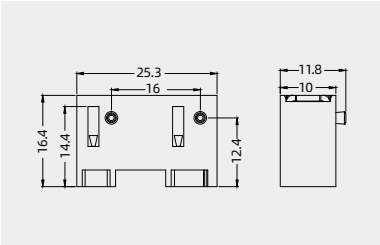
Remark: SPQ is 1pc



Inserts	Designation	Order No.
Male	HV-S02-M	232 002 011 0002
Female	HV-S02-F	232 002 021 0002



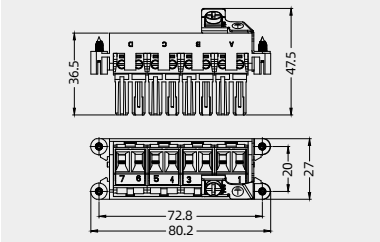
Description	Designation	Order No.
Panel ground	HV-A-PEA	132 000 000 0001



External member 1
with female inserts and frame



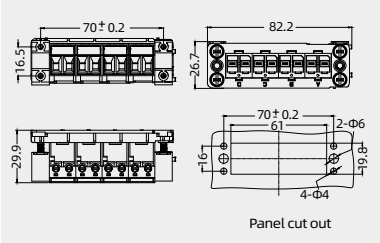
Description	Designation	Order No.
hoods/housings frame external member	HV-HF3/4M-PEA-S2222	132 008 021 0001



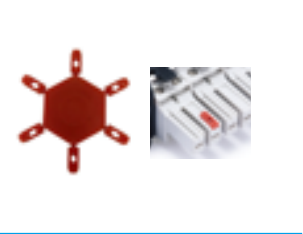
External member 2
with male inserts and frame



Description	Designation	Order No.
Panel frame external member	HV-AF3/4M-PEA-S2222	132 008 011 0001



Plug piece



Description	Designation	Order No.
Preventing interpolation	CODE-V	198 002 005 0012

HV single row inserts

400V 20A 8+ 

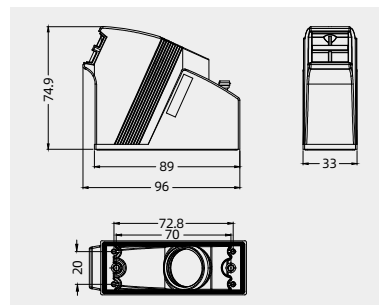
Inserts

Remark: SPQ is 1pc

Hoods/Housings, nickel plating



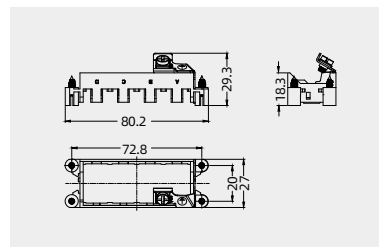
screw	Designation	Order No.
M25	EMC.HV-PM-H3/C-M25	132 604 420 1003



Frame



Description	Designation	Order No.
with 4 module hoods/housings frame	HV-HF3/4M-PEA	132 004 000 0002



The State Grid Anti-Open Connector

32 pin DTU anti-open circuit connector



32 pin

The State Grid Anti-Open Connector



Technical characteristics

Specifications/Approvals	
Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	
Inserts	
Number of contacts	24+8(anti-open circuit)+1(grounding)
Rated current	10A
Rated voltage	250V
Rated impulse voltage	4kV
Pollution degree	3
Insulation resistance	$\geq 10^{10}\Omega$
Flammability (UL94)	V0
Mechanical working life(mating cycles)	≥ 500
Material	PC
Limiting temperature	-40°C ...+125°C
Contacts	
Material	copper alloy
Surface	silver plated
Contact resistance	$\leq 5m\Omega$
Terminal	crimp terminal / Screw terminal
-crimp terminal	0.14-2.5mm ² (26-14AWG)
-Screw terminal	0.75-2.5mm ² (18-14AWG)
-solde terminal	Φ1.6/Φ2.4(grounding) Welding pin
Hoods/Housings	
Material	PC
Sealing element	NBR
Flammability acc. to UL 94	V0
Limiting temperatures	-40°C ...+125°C
Degree of protection	IP65

32 pin

32 pin DTU anti-open circuit connector

250V 10A 24+8 (anti-open circuit) +1

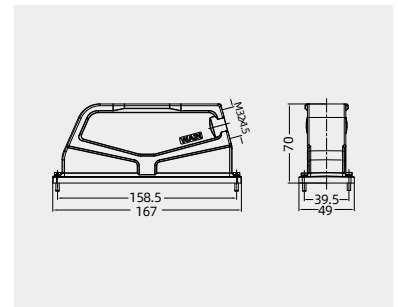
Inserts

Hoods/Housings

Remark: SPQ is 1pc



screw	Designation	Order No.
M32	HDC.P-DTU-SE-4S-M32	119 000 520 1001

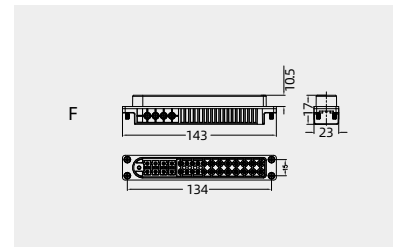


Inserts

Remark: SPQ is 5pcs



Inserts	Designation	Order No.
Female	HDC-DTU-008/10/14-FC	125 032 020 0001



32 pin

Crimp contacts

Crimp contacts 10A

Contact resistance $\leq 3m\Omega$
silver plated

gold plated



Remark: SPQ is 100pcs

Female (silver plated)	Order No.	Female (gold plated)	Order No.
CDSF-0.25	101 017 120 0101	CDGF-0.25	101 017 220 0101
CDSF-0.37	101 017 120 0301	CDGF-0.37	101 017 220 0301
CDSF-0.50	101 017 120 0401	CDGF-0.50	101 017 220 0401
CDSF-0.75	101 017 120 0601	CDGF-0.75	101 017 220 0601
CDSF-1.0	101 017 120 0801	CDGF-1.0	101 017 220 0801
CDSF-1.5	101 017 120 0901	CDGF-1.5	101 017 220 0901
CDSF-2.5	101 017 120 1001	CDGF-2.5	101 017 220 1001

More crimp contacts 10A
see P13-02,P13-03.

Tools

Crimping tool



Contact removal tool

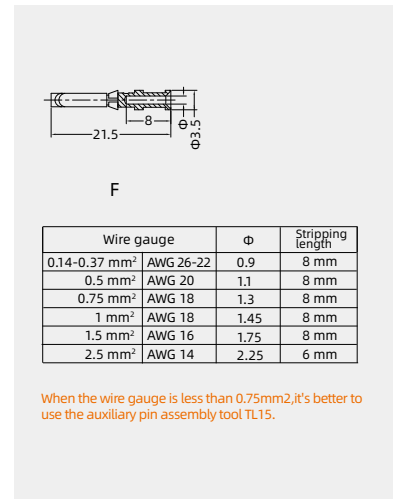


Remark: SPQ is 100pcs

Wire gauge	Designation	Order No.
0.14-4mm ²	TL02G	198 001 001 0011

Application	Designation	Order No.
for crimp contacts 10A	TL00	198 001 000 0001

More tools detail please find the page32-03~32-06.



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

32 pin DTU anti-open circuit connector

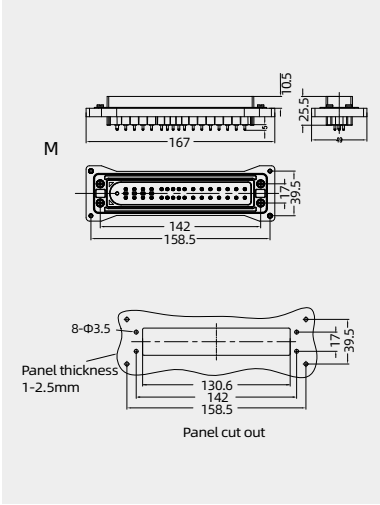
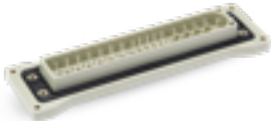
250V 10A 24+8 (anti-open circuit) +1

Inserts

Remark: SPQ is 5pcs

Inserts

Inserts	Designation	Order No.
Male	HDC-DTU-008/10/14-MC-4H	125 032 010 0001



The State Grid Anti-Open Connector

56 pin TTU anti-open circuit connector



56 pin



Technical characteristics

Specifications/Approvals	
Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	
Inserts	
Number of contacts	8+8 (anti-open circuit) +40
Rated current	10A
Rated voltage	250V
Rated impulse voltage	4kV
Pollution degree	3
Insulation resistance	≥ 10 ¹⁰ Ω
Flammability acc. to UL 94	V0
Mechanical working life(mating cycles)	≥ 500
Material	PC
Limiting temperatures	-40°C ...+125°C
Contacts	
Material	copper alloy
Surface	silver plated/gold plated
Contact resistance	≤ 3mΩ
Anti open circuit contact:	
-Terminal	Screw terminal
-Wire gauge	0.75-2.5mm ² (18-14AWG)
voltage wire contact:	
-Terminal	Crimp terminal
-Wire gauge	0.14-2.5mm ² (26-14AWG)
signal contact:	
-Terminal	Crimp terminal
-Wire gauge	0.09-0.52mm ² (28-20AWG)
Hoods/Housings	
Material	PC
Sealing element	NBR
Flammability acc. to UL 94	V0
Limiting temperatures	-40°C ...+125°C
Degree of protection	IP65

56 pin

56 pin TTU anti-open circuit connector

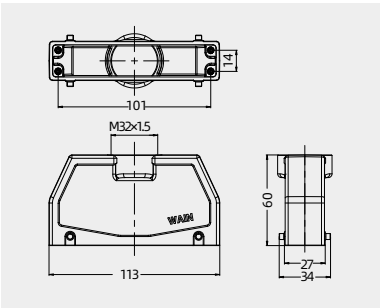
250V 10A 8+8 (anti-open circuit) +40

Inserts

Remark: SPQ is 1pc

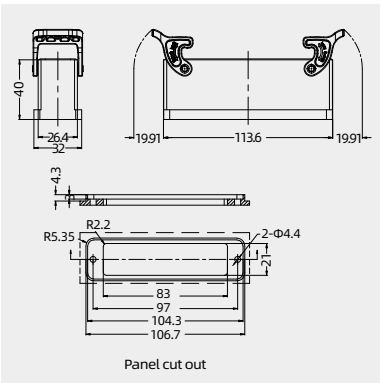
Hoods, side entry

	screw	Designation	Order No.
	M32	HDC.P-TEH-4B-M32	119 000 430 5001



Housings, bulkhead mounting

	Inserts	Designation	Order No.
	Female	HDC.P-BKH-2L	119 000 349 5001



56 pin TTU anti-open circuit connector

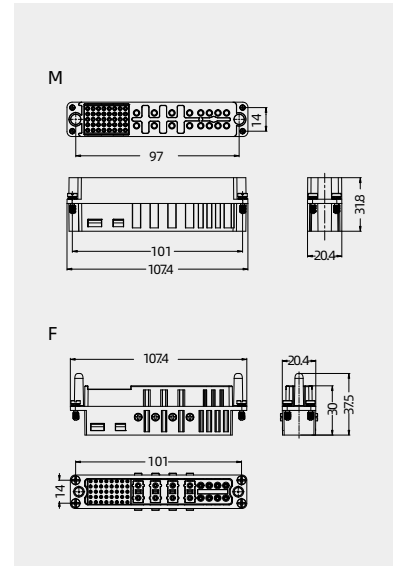
250V 10A 8+8 (anti-open circuit) +40

Inserts

Remark: SPQ is 1pc

Screw terminal/Crimp terminal
Order crimp contacts separately

Inserts	Designation	Order No.
Male	HDC-008/8/40-MC	125 056 010 0001
Female	HDC-008/8/40-FC	125 056 020 0001



Crimp contacts

Crimp contacts 5A

Contact resistance $\leq 3\text{m}\Omega$
silver plated

gold plated



Remark: SPQ is 100pcs

Male	Order No.	Female	Order No.
CSSM-0.25	101 014 110 0101	CSSF-0.25	101 014 120 0101
CSSM-0.33	101 014 110 0201	CSSF-0.33	101 014 120 0201
CSSM-0.52	101 014 110 0501	CSSF-0.52	101 014 120 0501
CSGM-0.25	101 014 210 0101	CSGF-0.25	101 014 220 0101
CSGM-0.33	101 014 210 0201	CSGF-0.33	101 014 220 0201
CSGM-0.52	101 014 210 0501	CSGF-0.52	101 014 220 0501

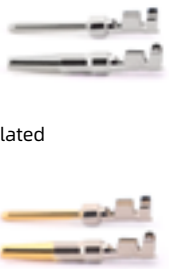
a	b	c	d	e	f
8.10	4.0	14.8	0.64	1.66	14.4
8.10	4.0	14.8	0.90	1.66	14.4
8.10	4.0	14.8	1.12	1.66	14.4

Wire gauge	Stripping length
0.09-0.25 mm ² AWG 28-24	5 mm
0.13-0.33 mm ² AWG 26-22	5 mm
0.33-0.52 mm ² AWG 22-20	5 mm

Stamped contacts 5A

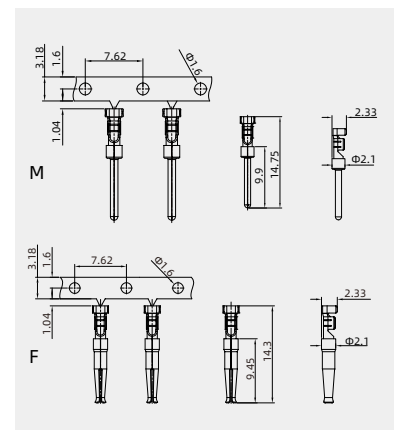
Contact resistance $\leq 10\text{m}\Omega$
silver plated

gold plated



Remark: SPQ is 3000pcs

Male	Order No.	Female	Order No.
CSSM-0.82P	101 014 110 0750	CSSF-0.82P	101 014 120 0750
CSGM-0.82P	101 014 210 0750	CSGF-0.82P	101 014 220 0750



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

56 pin

56 pin TTU anti-open circuit connector

250V 10A 8+8 (anti-open circuit) +40

Crimp contacts

Crimp contacts 10A
Contact resistance ≤ 3mΩ
silver plated



More crimp contacts 10A
see P13-02, P13-03.

Remark: SPQ is 100pcs

Male	Order No.	Female	Order No.
CDSM-0.25	101 017 110 0101	CDSF-0.25	101 017 120 0101
CDSM-0.37	101 017 110 0301	CDSF-0.37	101 017 120 0301
CDSM-0.50	101 017 110 0401	CDSF-0.50	101 017 120 0401
CDSM-0.75	101 017 110 0601	CDSF-0.75	101 017 120 0601
CDSM-1.0	101 017 110 0801	CDSF-1.0	101 017 120 0801
CDSM-1.5	101 017 110 0901	CDSF-1.5	101 017 120 0901
CDSM-2.5	101 017 110 1001	CDSF-2.5	101 017 120 1001
CDGM-0.25	101 017 210 0101	CDGF-0.25	101 017 220 0101
CDGM-0.37	101 017 210 0301	CDGF-0.37	101 017 220 0301
CDGM-0.50	101 017 210 0401	CDGF-0.50	101 017 220 0401
CDGM-0.75	101 017 210 0601	CDGF-0.75	101 017 220 0601
CDGM-1.0	101 017 210 0801	CDGF-1.0	101 017 220 0801
CDGM-1.5	101 017 210 0901	CDGF-1.5	101 017 220 0901
CDGM-2.5	101 017 210 1001	CDGF-2.5	101 017 220 1001



Identification	Φ	Stripping length	
0.09-0.25 mm ²	AWG 28-24	0.65	5 mm
0.14-0.37 mm ²	AWG 26-22	0.9	8 mm
0.5 mm ²	AWG 20	1.1	8 mm
0.75 mm ²	AWG 18	1.3	8 mm
1 mm ²	AWG 18	1.45	8 mm
1.5 mm ²	AWG 16	1.75	8 mm
2.5 mm ²	AWG 14	2.25	6 mm

When the wire gauge is less than 0.75mm², it's better to use the auxiliary pin assembly tool TL15.

Tools

Remark: SPQ is 1pc

Crimping tool	Wire gauge	Designation	Order No.
	0.09-0.82mm ²	TL03	198 001 001 0002
Contact removal tool	Application	Designation	Order No.
	for 5A crimp contact	TL08	198 001 000 0006

Tools

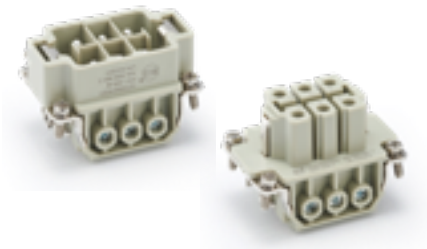
Remark: SPQ is 1pc

Crimping tool	Wire gauge	Designation	Order No.
	0.14-4mm ²	TL02G	198 001 001 0011
Contact removal tool	Application	Designation	Order No.
	for 10A crimp contact	TL00	198 001 000 0001

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

More tools detail please find the page 32-03~32-06.

6 pins Anti-Open Connector



Technical characteristics

Specifications/Approvals	
Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	
Inserts	
Number of contacts	6+PE
Three Groups of Preventive Opening	1-2, 3-4, 5-6
Rated current	40A
Rated voltage	500V
Rated impulse voltage	6kV
Pollution degree	3
Insulation resistance	$\geq 10^{10}\Omega$
Material	PC
Colour	RAL 7032(light grey)
Temperature range	-40°C ...+125°C
Flammability acc. to UL 94	V0
Mechanical working life(mating cycles) ≥ 500	
Contacts	
Terminal	screw terminal
Material	copper alloy
Surface	silver plated/gold plated
Contact resistance	$\leq 5m\Omega$
Wire	
-gauge	1.5-6mm ²
-AWG	(16-10)
Tightening torque	0.8N.m
Stripping length	10mm

The State Grid Anti-Open Connector

500V 40A 6+PE

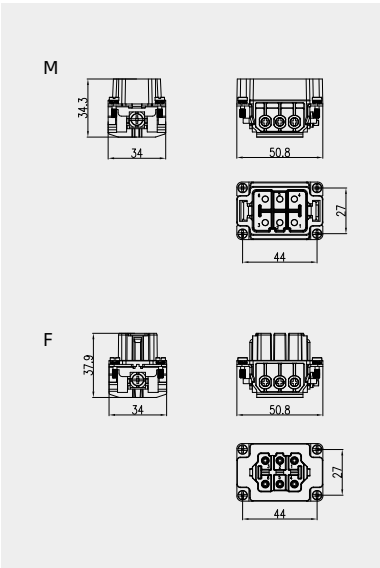
Inserts

Remark: SPQ is 5pcs

Hoods/Housings: size WV6B/HV6B

Screw terminal

Inserts	Designation	Order No.
Male	HSC-006-M	127 006 011 0511
Female	HSC-006-F	127 006 021 0512



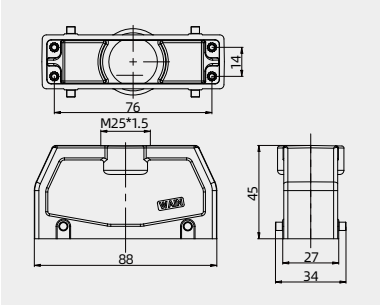


Remark: SPQ is 1pc

Hoods, top entry



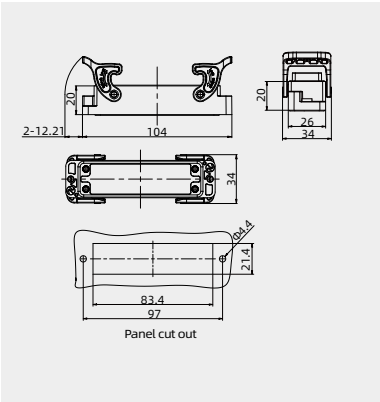
Thread	Designation	Order No.
M25	HDC.P-TE-4B-M25	119 000 430 1001



Housings, bulkhead mounting



Description	Designation	Order No.
-	HDC.P-BK-2L	119 000 340 1001



16 pin TTU anti-open circuit connector

250V 10A 8+8 (The open circuit) 

Inserts

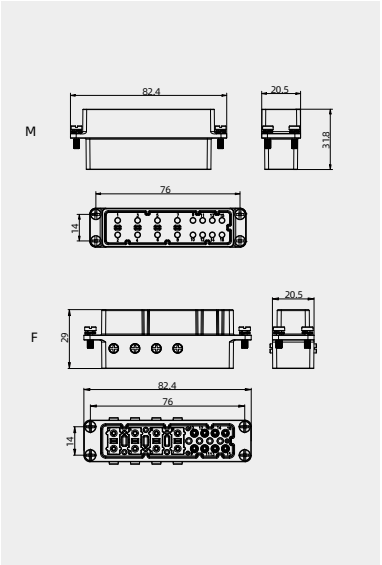
Remark: SPQ is 5pcs

Crimp terminal

Order crimp contacts separately



Inserts	Designation	Order No.
Male	HDC-008/8-MC	125 016 010 0001
Female	HDC-008/8-FC	125 016 020 0001



HCC

Crimp contacts

Crimp contacts 10A

Contact resistance $\leq 3m\Omega$
silver plated



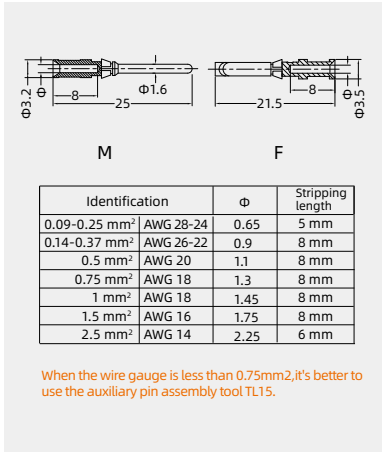
gold plated



More crimp contacts 10A
see P13-02,P13-03.

Remark: SPQ is 100pcs

Male	Order No.	Female	Order No.
CDSM-0.25	101 017 110 0101	CDSF-0.25	101 017 120 0101
CDSM-0.37	101 017 110 0301	CDSF-0.37	101 017 120 0301
CDSM-0.50	101 017 110 0401	CDSF-0.50	101 017 120 0401
CDSM-0.75	101 017 110 0601	CDSF-0.75	101 017 120 0601
CDSM-1.0	101 017 110 0801	CDSF-1.0	101 017 120 0801
CDSM-1.5	101 017 110 0901	CDSF-1.5	101 017 120 0901
CDSM-2.5	101 017 110 1001	CDSF-2.5	101 017 120 1001
CDGM-0.25	101 017 210 0101	CDGF-0.25	101 017 220 0101
CDGM-0.37	101 017 210 0301	CDGF-0.37	101 017 220 0301
CDGM-0.50	101 017 210 0401	CDGF-0.50	101 017 220 0401
CDGM-0.75	101 017 210 0601	CDGF-0.75	101 017 220 0601
CDGM-1.0	101 017 210 0801	CDGF-1.0	101 017 220 0801
CDGM-1.5	101 017 210 0901	CDGF-1.5	101 017 220 0901
CDGM-2.5	101 017 210 1001	CDGF-2.5	101 017 220 1001



When the wire gauge is less than 0.75mm², it's better to use the auxiliary pin assembly tool TL15.

Tools

Crimping tool



Contact removal tool



Remark: SPQ is 1pc

Wire gauge	Designation	Order No.
0.14-4mm ²	TL02G	198 001 001 0011
Application	Designation	Order No.
for crimp contacts 10A	TL00	198 001 000 0001

More tools detail please find the page 32-03~32-06.

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



D-Sub-044 SERIES

D-Sub-044



D-Sub-044 SERIES



Technical characteristics

Specifications/Approvals	
Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	
Inserts	
Number of contacts	44
Rated current	3A
Rated voltage	40V
Rated impulse voltage	0.5kV
Pollution degree	3
Insulation resistance	$\geq 10^{10}\Omega$
Flammability (UL94)	V0
Mechanical working life(mating cycles)	≥ 500
Material	PBT+copper alloy
Limiting temperature	-40°C ...+105°C
Contacts	
Material	copper alloy
Surface	Nickel plated floating gold
Contact resistance	$\leq 3m\Omega$
Rated current	3A
Wire gauge	0.09-0.25mm ² (28-24 AWG)
Mechanical working life(mating cycles)	≥ 500
Hoods/Housings	
Material	Zinc die-cast
Surface	nickel plating
Locking element	
Locking element	1 lever
Material	Stainless steel
Sealing element	NBR
Flammability acc. to UL 94	V0
Limiting temperatures	-40°C ~+125°C
Degree of protection	IP65

D-Sub-044

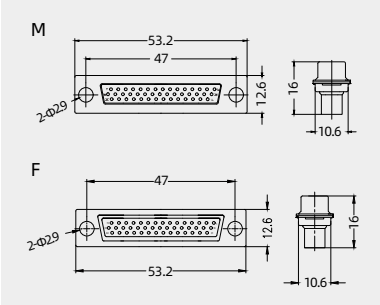
Inserts

Inserts



Remark: SPQ is 1pc

Inserts	Designation	Order No.
Male	DB-A044MC	998 002 099 0007
Female	DB-A044FC	998 002 099 0008

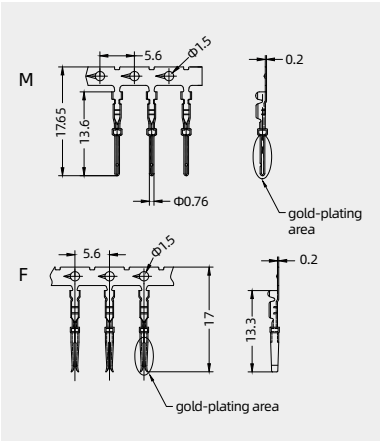


Contacts



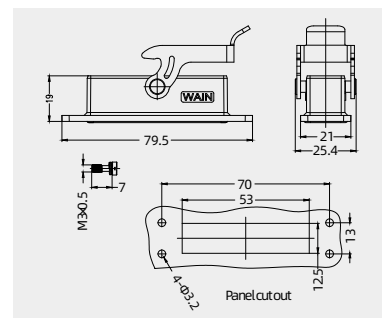
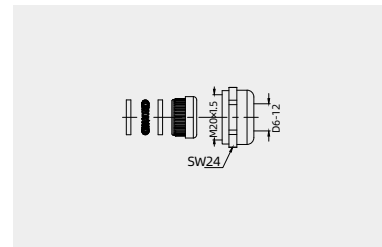
Remark: SPQ is 1500pcs

Description	Designation	Order No.
Male	CSNM/DB-0.25P	998 002 099 0009
Female	CSNF/DB-0.25P	998 002 099 0010



Note: pin roll material 15000pcs / roll

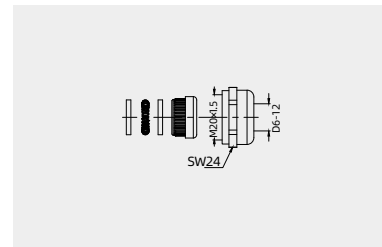
Remark: SPQ is 1pc

[illegible][illegible]

Remark: SPQ is 10pcs

[illegible]

Description	Designation	Order No.
---	EMC.WNAMC-M20(D6-12)	102 118 015 1001



Charging socket



Charging
socket

Charging socket



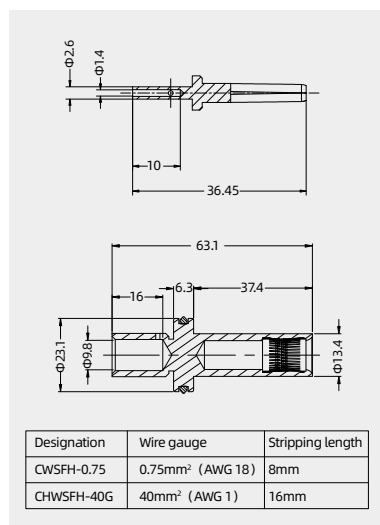
Technical characteristics

Specifications/Approvals	
Specifications	DIN EN 60 664 DIN EN 61 984 CHAdemo/IEC 62196-3
Approvals	
Inserts	
Number of contacts	8/2
Rated current	
-Power area	150A
-Signal area	2A
Rated voltage	
-Power area	500V
-Signal area	12V
Rated impulse voltage	
-Power area	6kV
-Signal area	2kV
Pollution degree	3
Insulation resistance	$\geq 10^{10}\Omega$
Flammability (UL94)	V0
Mechanical working life(mating cycles)	≥ 10000
Material	polyamide
Limiting temperature	-40°C ...+60°C
Contacts	
Material	copper alloy
Surface	silver plated
Crimp terminal	
-Power area	$\leq 1m\Omega$
-Signal area	$\leq 3m\Omega$
Wire gauge	
-Power area	40mm ² (1 AWG)
-Signal area	0.75mm ² (18 AWG)

Remark: SPQ is 1pc



1)Products with wire harness (1 meter length).



Inserts	Designation	Order No.
	CWSFH-0.75	101 012 120 0401
	CHWSFH-40G	101 036 120 3501

Designation	Wire gauge	Stripping length
CWSFH-0.75	0.75mm ² (AWG 18)	8mm
CHWSFH-40G	40mm ² (AWG 1)	16mm

TL-DZ Contact retention test tool

TL-DZ Contact retention test tool

Remark: SPQ is 1pc

Contact retention test tool

Includes 1 handle +3 standard contact tester



Description	Designation	Order No.
Detect whether the turning contacts be assembled in place.	TL-DZ	198 001 003 0022

16A female contact tester (optional)



Description	Designation	Order No.
Detect whether the turning contacts be assembled in place.	TL-DZ-FT/16A	298 001 003 0015

Instruction Manual for Contact Retention Test Tool (TL-DZ)

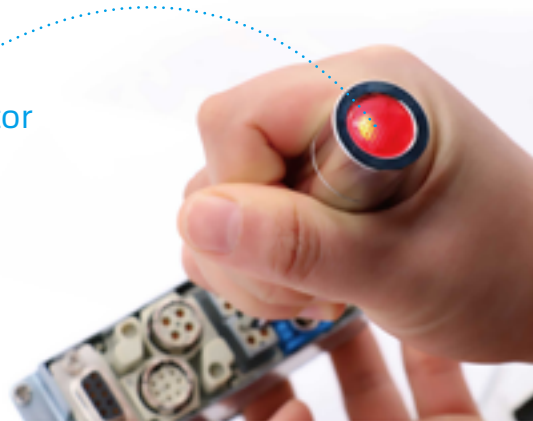
TL-DZ is a tool used to detect the contact retention force. It solves the problem that the detection result is not intuitive by using the function of LED indicator. Compact structure, easy operation, chrome plated surface, beautiful appearance, service life $\geq 100,000$ times, a variety of contact tester can be freely replaced, compatible with a variety of contact detection, and the detection force value can be customized by customers.

Function: Check whether the contacts be assembled in place.

Principle: The ejection force is controlled by the spring compression inside the handle, force range is 20-30N. If the indicator light is on and contacts do not exit, it indicates that the contacts have been assembled in place. If the contacts exit, it indicates that it has not been assembled in place.

Components: handle (1pc) +standard contact tester (3pcs) +optional contact tester (1pc) (tighten the contact tester on the handle during using)

The indicator



Usage and Precautions:

1. According to the testing requirements, select the corresponding contact tester.
2. Hold the test tool by hand (Avoid obscuring the top red lampshade), align contact tester with the head of the contact, and push it forward to see that the indicator light is on (when the indicator light is on, do not force the contact tester again), and ensure that the test tool is perpendicular to the contacts;
3. Please check whether the contacts is bent or deformed after the contact tester detection. If the contact tester is not in the vertical state, the contact may be bent or deformed;
4. As the contact tester for 5A female contacts is thin, it is easy to break during operation. If it breaks, be sure to remove the broken tip from the pin hole; If the test tool is not used, please remove the tips and keep it well to avoid breakage;
5. The test tool shall regularly detect if the spring compression force in 20-30N, if the LED light works normally, if the battery power is insufficient, etc. (Note: if any above point is not satisfied, it shall be submitted for inspection);
6. The battery can be replaced independently when the battery power is insufficient. When replacing, unscrew the back cover of handle, pay attention to the installation direction of the positive and negative poles of the battery. (battery P/N: CR 1220; voltage 3V);
7. Do not use other unverified test tools to avoid damage to the contacts and connectors due to improper operations.

Metallic outlet boxes

Technical characteristics

Note: Hole opening can be customized according to requirements.

Specifications

Specifications	DIN EN 60 664
Specifications	DIN EN 61 984

Approvals

Metallic outlet boxes

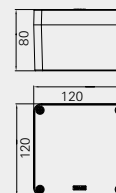
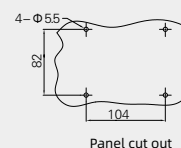
Material	aluminium die-cast
Surface	powder-coated
Colour	RAL 7037 (grey)
Temperature range	-40°C ...+125°C
Degree of protection	IP65
Hoods/Housings sealing	NBR

Remark: SPQ is 1pc

Metallic outlet boxes



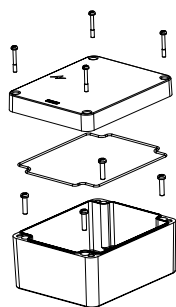
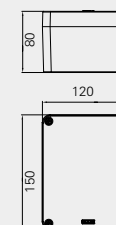
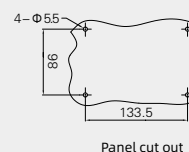
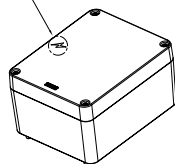
Description	Designation	Order No.
	MTB-120x120x80	139 500 000 9001



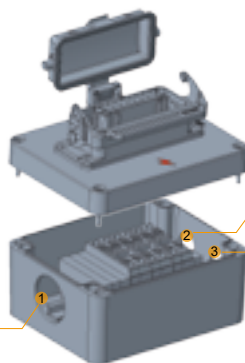
Metallic outlet boxes



Description	Designation	Order No.
	MTB-150x120x80	139 500 000 9002

Lightning sign
Red (RAL3003)

Hole opening①



Hole opening②

Hole opening③

Designation
MTB-120x120x80
MTB-150x120x80

Note: Hole opening can be customized according to requirements.