

## 2-3POS low voltage Right angle connector with shield

### Describe

- 2POS,3POS
- Metal Shell
- Push-pull fast locking structure
- High Protection Degree: IP68
- 6 Anti-mistake key position
- Cable Section: 2.5mm<sup>2</sup>--4mm<sup>2</sup>
- Integrated Shield Interlocking Function
- For battery heating, compressor, PTC、
- OBC、PDU equipment



### Application

- Current Rating: 16A=2.5mm<sup>2</sup>  
25A=4mm<sup>2</sup>
- Voltage Rating: 1000V DC
- Shield: Option
- HVIL: Option
- Temperature Range: -40°C--+140°C

### Name of material

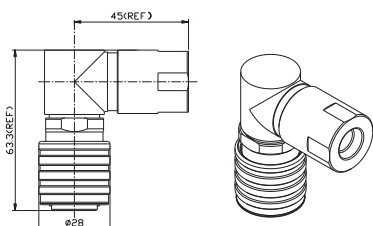
No	Product name	Product Model	Key Position	Cable Section	Cable sheath diameter
1	2Pos rightangleconnectorPlug	RQB-B-4SP5-NR-A	N	2×1.5mm <sup>2</sup> Shielding Outcover	Φ8.5±0.3
2	2Pos rightangleconnectorPlug	RQB-B-4SP5-AH-A	A		
3	2Pos rightangleconnectorPlug	RQB-B-4SP5-NR-B	N	2×2.5mm <sup>2</sup> Shielding Outcover	Φ11±0.4
4	2Pos rightangleconnectorPlug	RQB-B-4SP5-AH-B	A		
5	2Pos rightangleconnectorPlug	RQB-B-4SP5-NR-C	N	2×4mm <sup>2</sup> Shielding Outcover	Φ11.5±0.4
6	2Pos rightangleconnectorPlug	RQB-B-4SP5-AH-C	A		
7	2Pos connector socket	RQB-B-4PR1-AH-D	A		

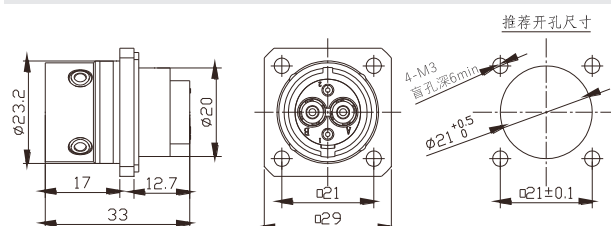
1	3Pos rightangleconnectorPlug	RQB-B-2SP5-NR-A	N	3×1.5mm <sup>2</sup> Shielding Outcover	Φ10.2±0.3
2	3Pos rightangleconnectorPlug	RQB-B-2SP5-AH-A	A		
3	3Pos rightangleconnectorPlug	RQB-B-2SP5-NR-B	N	3×2.5mm <sup>2</sup> Shielding Outcover	Φ11.5±0.3
4	3Pos rightangleconnectorPlug	RQB-B-2SP5-AH-B	A		
5	3Pos rightangleconnectorPlug	RQB-B-2SP5-NR-C	N	3×4mm <sup>2</sup> Shielding Outcover	Φ13.3±0.4
6	3Pos rightangleconnectorPlug	RQB-B-2SP5-AH-C	A		

### SIZE

#### PLUG



#### SOCKET



# RQH 2POS Metal shell connector with shield

## Describe

- 2POS
- Metal shell
- Push-pull fast locking structure
- Anti-mis-touch design IPXXB
- High Protection Degree:
- 4Anti-mistake key positions
- Cable Section: 2.5mm<sup>2</sup>--6mm<sup>2</sup>
- Integrated Mask Interlocking Function
- For battery heating, compressor, PTC、OBC、PDU equipment



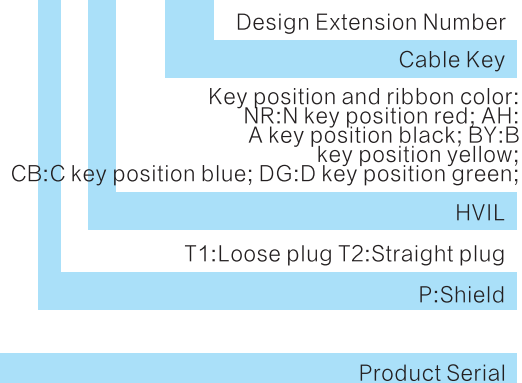
## Application

- Current Rating 16A=2.5mm<sup>2</sup>  
25A=4mm<sup>2</sup>  
40A=6mm<sup>2</sup>
- Voltage Rating: 1000V DC
- Shield: Option
- HVIL: Option
- Temperature range: -40°C--+140°C

## Naming Rules

### PLUG

RQH-C-1PT1H-AH-2.5-A



### Socket

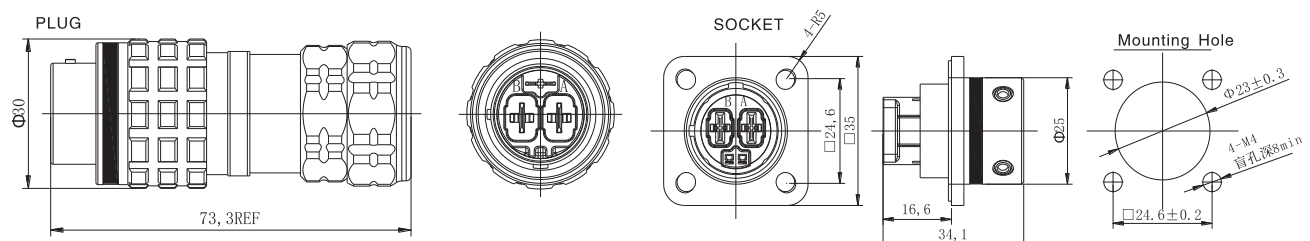
RQH-C-1Z1H-AH-2.5-A



Note 1: the model generated according to the naming rules does not contain terminals, which need to be ordered separately.

Note 2: if RQH-C-1PT2H-NR-6-A means shielded, interlocking, suitable for integral plug, N key position red, 6 square wire 2 core connector;

## SIZE



## RQH High Voltage Metal shell connector with Shield

## Describe

- 3POS
- Metal shell
- Push-pull fast locking structure
- Anti-mis-touch design IPXXB
- High Protection Degree: IP6K9K、IP68
- 4 Anti-mistake key position
- Cable Section: 2.5mm<sup>2</sup>—6mm<sup>2</sup>
- Integrated Mask Interlocking Function
- For battery heating, compressor, PTC、OBC、PDU equipment



## Application

- Current Rating: 16A=2.5mm<sup>2</sup>  
25A=4mm<sup>2</sup>  
40A=6mm<sup>2</sup>
- Voltage Rating: 1000V DC
- Shield: Option
- HVIL: Option
- Temperature Range: -40°C--+140°C

## Naming rules

## Plug

RQH-D-1 P T1 H-AH-2.5-A

Design Extension Number	Cable
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
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87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

Key position and ribbon color: NR: N key positionred;  
AH: A key position black; BY: B key positionyellow;  
CB: C key position blue; DG: D key position green;

HVIL

T1: loose plug, T2: Straight plug

P:Shield

Product Serial

## Socket

RQH-D-1 Z1 H-AH-2.5-A

Design Extension Number

Cable

Key position and ribbon color:NR: N key position red;  
AH: A key position black; BY: Bkey position yellow;CB:  
C key position blue; DG: D keyposition green;

HVIL

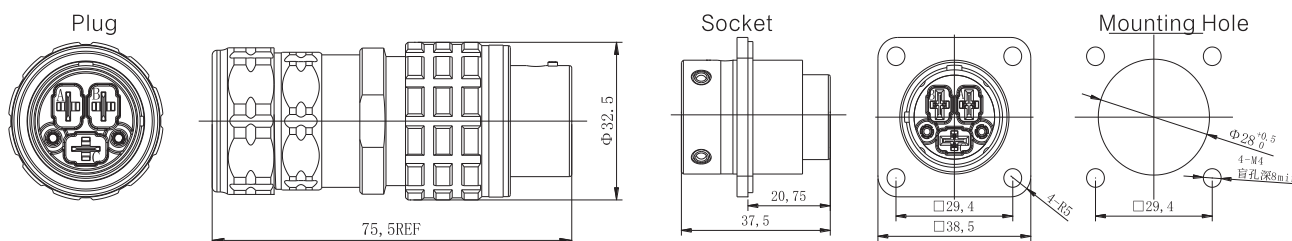
Z1: Socket

Product Serial

Note 1: the model generated according to the naming rules does not contain terminals, which need to be ordered separately.

Note 2: if ROH-D-1Z1H-NR-4-A indicates interlocking N key position red .4 square wire 2 core socket.

## SIZE



## 3+2 POS Push-pull Metal Shell Circular Connector (RQB)



### Features/Application

- Multi-POS Push-pull RQB series connectors applying in EV or industry field, providing stable power or signal transmission. Plug and Jack are designed with rapid push-pull lock system, it can reach self-locking, connectors require small installation space, especially applying for installation limited space.
- Excellent sealing performance, IP67 in mated condition.
- Assembly manufacturing service as required.

### Product Model

Plug/Pin

No.	Model And Description	Key Position	Key Color	Cable Range
1	RQB-C-4PP1-NR-E	N	red	3*6mm <sup>2</sup> shielded cable Outer dia: φ15.5±0.3
2	RQB-C-4PP1-AH-E	A	black	
3	RQB-C-4PP1-BY-E	B	yellow	
4	RQB-C-4PP1-CB-E	C	blue	
5	RQB-C-4PP1-DG-E	D	green	
1	RQB-C-4PP1-NR-F	N	red	3*4mm <sup>2</sup> shielded cable Outer dia: φ14±0.3
2	RQB-C-4PP1-AH-F	A	black	
3	RQB-C-4PP1-BY-F	B	yellow	
4	RQB-C-4PP1-CB-F	C	blue	
5	RQB-C-4PP1-DG-F	D	green	
1	RQB-C-4PP1-NR-G	N	red	3*2.5mm <sup>2</sup> shielded cable Outer dia: φ12±0.25
2	RQB-C-4PP1-AH-G	A	black	
3	RQB-C-4PP1-BY-G	B	yellow	
4	RQB-C-4PP1-CB-G	C	blue	
5	RQB-C-4PP1-DG-G	D	green	
1	RQB-C-4PP2-NR-E	N	red	6mm <sup>2</sup> Non-shielded cable
2	RQB-C-4PP2-AH-E	A	black	
3	RQB-C-4PP2-BY-E	B	yellow	
4	RQB-C-4PP2-CB-E	C	blue	
5	RQB-C-4PP2-DG-E	D	green	

No.	Model And Description	Key Position	Key Color	Cable Range
1	RQB-C-4PP2-NR-F	N	red	2.5~4mm <sup>2</sup> Non-shielded cable
2	RQB-C-4PP2-AH-F	A	black	
3	RQB-C-4PP2-BY-F	B	yellow	
4	RQB-C-4PP2-CB-F	C	blue	
5	RQB-C-4PP2-DG-F	D	green	

#### Jack

No.	Model And Description	Key Position	Key Color	Cable Range
1	RQB-C-4SR1-NR-E	N	red	6mm <sup>2</sup> cable
2	RQB-C-4SR1-AH-E	A	black	
3	RQB-C-4SR1-BY-E	B	yellow	
4	RQB-C-4SR1-CB-E	C	blue	
5	RQB-C-4SR1-DG-E	D	green	
1	RQB-C-4SR1-NR-F	N	red	2.5~4mm <sup>2</sup> cable
2	RQB-C-4SR1-AH-F	A	black	
3	RQB-C-4SR1-BY-F	B	yellow	
4	RQB-C-4SR1-CB-F	C	blue	
5	RQB-C-4SR1-DG-F	D	green	

### Technical Specification

#### Electrical Property

Current rating

Contact Diameter	Cable Range	Current Rating	Remarks
1mm	0.3~0.75mm <sup>2</sup>	7A	HVIL Terminal
3mm	2.5mm <sup>2</sup>	16A	Main Terminal
	4mm <sup>2</sup>	25A	
	6mm <sup>2</sup>	40A	

Voltage rating:750V DC

Withstand voltage: 3000V AC 1min

Insulation resistance:3000MΩ(1000V DC 15s)

HVIL:Contain(HVIL short in plug)

#### Environmental Property

Working temperature: -30°C~+125°C

Relative humidity: 95%(40°C)

Sealing: IP67 in mated condition

Flame retardant grade: UL94 V-0

#### Mechanical Property

Mating cycle: >750 times

Vibration: 10~80Hz, amplitude 0.75

81~500Hz, 20g

500~2000Hz, 18g

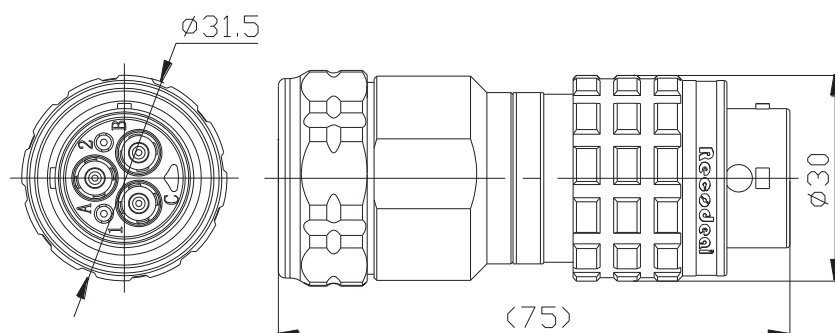
#### Material

Shell: aluminum alloy/zinc alloy

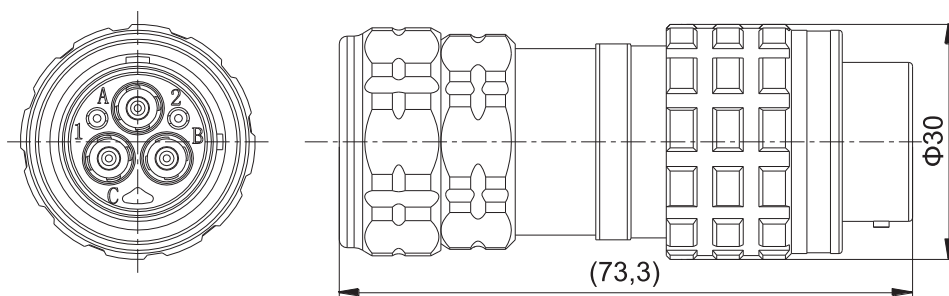
Contact: Copper alloy gold plated(power)&silver plated(HVIL)

Seal: rubber or elastomer

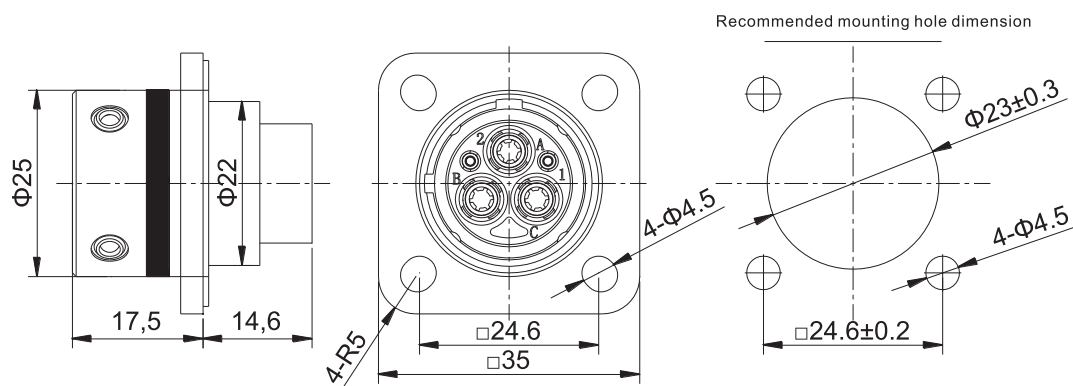
## Size

Plug(For 3\*6mm<sup>2</sup> shielded cable)


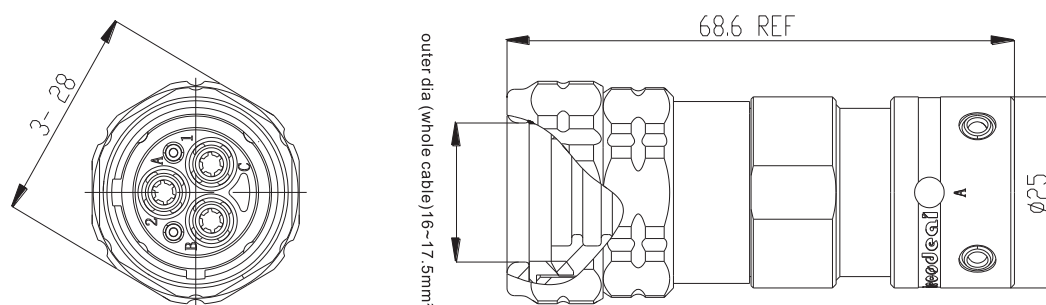
Plug



Jack Flange Type(R1)



Jack Floating Type(R3)



## 2+2 POS Push-pull Metal Shell Circular Connector (RQB)



### Features/Application

- Multi-POS Push-pull RQB series connectors applying in EV or industry field, providing stable power or signal transmission.
- Plug and Jack are designed with rapid push-pull lock system, it can reach self-locking, connectors require small installation space, especially applying for installation limited space.
- Excellent sealing performance, IP67 in mated condition.
- Assembly manufacturing service as required.

### Product Model

#### 1 . Plug/Pin

No.	Description	Model	Key Position	Key Color	Cable Range
1	2+2 POS Plug	RQB-C-5PP1-NR-A	N	red	2*6mm <sup>2</sup> shielded cable Outer dia: φ 12.5±0.25
2	2+2 POS Plug	RQB-C-5PP1-AH-A	A	black	
3	2+2 POS Plug	RQB-C-5PP1-BY-A	B	yellow	
4	2+2 POS Plug	RQB-C-5PP1-CB-A	C	blue	
5	2+2 POS Plug	RQB-C-5PP1-DG-A	D	green	
1	2+2 POS Plug	RQB-C-5PP1-NR-B	N	red	2*2.5、2*4mm <sup>2</sup> shielded cable Outer dia: φ11.5~φ12±0.25
2	2+2 POS Plug	RQB-C-5PP1-AH-B	A	black	
3	2+2 POS Plug	RQB-C-5PP1-BY-B	B	yellow	
4	2+2 POS Plug	RQB-C-5PP1-CB-B	C	blue	
5	2+2 POS Plug	RQB-C-5PP1-DG-B	D	green	
1	2+2 POS Plug	RQB-C-5PP1-NR-C	N	red	2*10mm <sup>2</sup> shielded cable Outer dia: φ17±0.3
2	2+2 POS Plug	RQB-C-5PP1-AH-C	A	black	
3	2+2 POS Plug	RQB-C-5PP1-BY-C	B	yellow	
4	2+2 POS Plug	RQB-C-5PP1-CB-C	C	blue	
5	2+2 POS Plug	RQB-C-5PP1-DG-C	D	green	
1	2+2 POS Plug	RQB-C-5PP2-NR-A	N	red	6mm <sup>2</sup> Non-shielded cable
2	2+2 POS Plug	RQB-C-5PP2-AH-A	A	black	
3	2+2 POS Plug	RQB-C-5PP2-BY-A	B	yellow	
4	2+2 POS Plug	RQB-C-5PP2-CB-A	C	blue	
5	2+2 POS Plug	RQB-C-5PP2-DG-A	D	green	



No.	Description	Model	Key Position	Key Color	Cable Range
1	2+2 POS Plug	RQB-C-5PP2-NR-B	N	red	2.5~4mm <sup>2</sup> Non-shielded cable
2	2+2 POS Plug	RQB-C-5PP2-AH-B	A	black	
3	2+2 POS Plug	RQB-C-5PP2-BY-B	B	yellow	
4	2+2 POS Plug	RQB-C-5PP2-CB-B	C	blue	
5	2+2 POS Plug	RQB-C-5PP2-DG-B	D	green	
1	2+2 POS Plug	RQB-C-5PP2-NR-C	N	red	10mm <sup>2</sup> Non-shielded cable
2	2+2 POS Plug	RQB-C-5PP2-AH-C	A	black	
3	2+2 POS Plug	RQB-C-5PP2-BY-C	B	yellow	
4	2+2 POS Plug	RQB-C-5PP2-CB-C	C	blue	
5	2+2 POS Plug	RQB-C-5PP2-DG-C	D	green	

## 2 . Jack

No.	Description	Model	Key Position	Key Color	Cable Range
1	2+2 POS Jack	RQB-C-5SR1-NR-A	N	red	6mm <sup>2</sup> cable
2	2+2 POS Jack	RQB-C-5SR1-AH-A	A	black	
3	2+2 POS Jack	RQB-C-5SR1-BY-A	B	yellow	
4	2+2 POS Jack	RQB-C-5SR1-CB-A	C	blue	
5	2+2 POS Jack	RQB-C-5SR1-DG-A	D	green	
1	2+2 POS Jack	RQB-C-5SR1-NR-B	N	red	2.5~4mm <sup>2</sup> cable
2	2+2 POS Jack	RQB-C-5SR1-AH-B	A	black	
3	2+2 POS Jack	RQB-C-5SR1-BY-B	B	yellow	
4	2+2 POS Jack	RQB-C-5SR1-CB-B	C	blue	
5	2+2 POS Jack	RQB-C-5SR1-DG-B	D	green	
1	2+2 POS Jack	RQB-C-5SR1-NR-C	N	red	10mm <sup>2</sup> cable
2	2+2 POS Jack	RQB-C-5SR1-AH-C	A	black	
3	2+2 POS Jack	RQB-C-5SR1-BY-C	B	yellow	
4	2+2 POS Jack	RQB-C-5SR1-CB-C	C	blue	
5	2+2 POS Jack	RQB-C-5SR1-DG-C	D	green	

## Technical Specification

## Electrical Property

Current rating:

Contact Diameter	Cable Range	Current Rating	Remarks
1.6mm	0.3~0.75mm <sup>2</sup>	7A	HVIL Terminal
3.5mm	2.5mm <sup>2</sup>	16A	Main Terminal
	4mm <sup>2</sup>	25A	
	6mm <sup>2</sup>	40A	
	10mm <sup>2</sup>	60A	

Voltage rating:750V DC

Withstand voltage: 3000V AC 1min

Insulation resistance:3000MΩ(1000V DC 15s)

HVIL:Contain(HVIL short in plug)

## Environmental Property

Working temperature: -30℃~+125℃

Relative humidity: 95%(40℃)

Sealing: IP67 in mated condition

Flame retardant grade: UL94 V-0

## Mechanical Property

Mating cycle: &gt;500 times

Vibration: 10~80Hz, amplitude 0.75

81~500Hz, 20g

500~2000Hz, 18g

## Material

Shell: aluminum alloy/zinc alloy

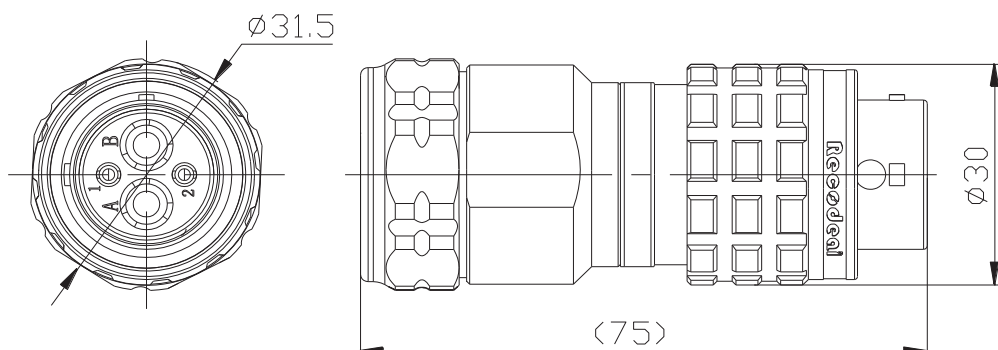
Contact: Copper alloy gold plated(power)&amp;silver plated(HVIL)

Seal: rubber or elastomer

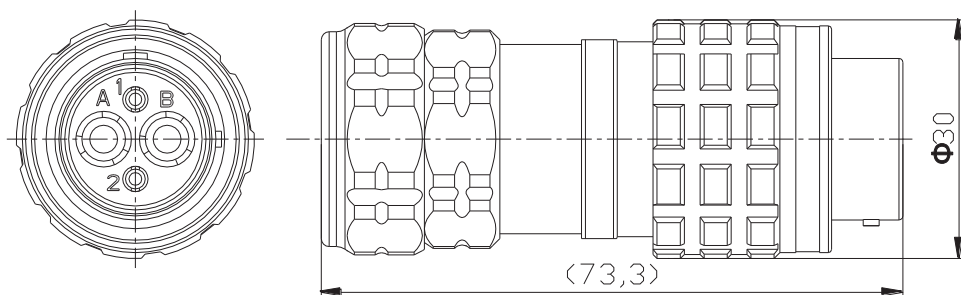


## Size

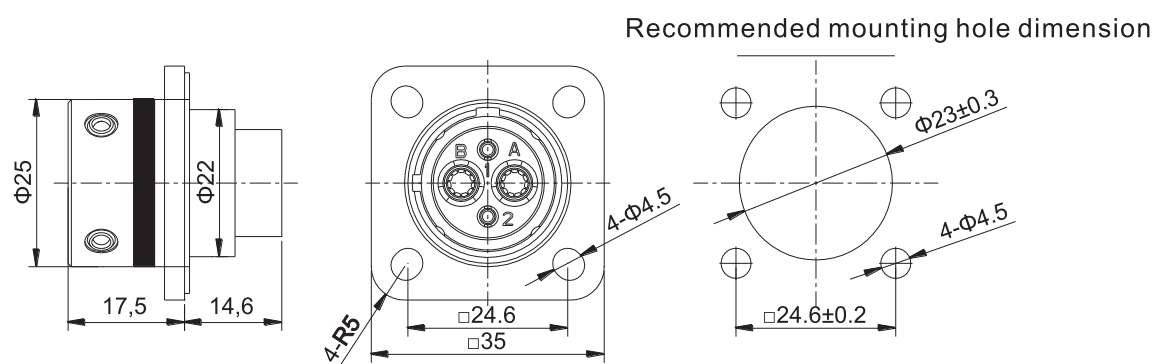
Plug(For 2\*10mm<sup>2</sup> shielded cable)



Plug(other)



Jack

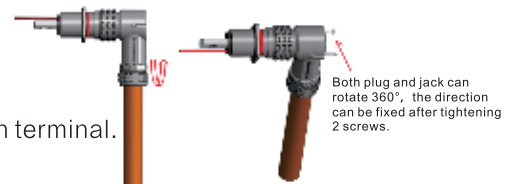


# 1POS High Current Push-pull Metal Shell Connector (RQF-D)



## Features/Application

- RQF series connectors provide stable high voltage, high current transmission among EV/HEV systems.
- Plug and Jack are designed with rapid push-pull lock system, it can reach self-locking, connectors require small installation space, especially applying for installation limited space.
- Current rating 180A~250A, with 2 type of cable ways: straight and side, meet different request from clients.
- Six anti-misplug key for option, different color distinguish different key, to avoid visually and installation mistakes, also it has the main key mark on the surface, provide convenience to customers.
- Both plug and jack have electric shock protection function.
- Excellent sealing performance, IP68 in mated condition.
- 360 degrees shielding function, which is optional.
- This series of connectors with HVIL, can indicate the on or off of the main terminal.
- Assembly manufacturing service as required.
- The right angel plug can rotate 360° and appear in any direction, the direction can be fixed after determining the direction as required.



## Technical Specification

### Electrical Property

Current rating: 180~270A  
 Cable range: 35mm<sup>2</sup>, 50mm<sup>2</sup>, 70mm<sup>2</sup>  
 Contact:  $\Phi 10$ mm  
 Voltage rating: 1000V DC  
 Contact resistance: 5m $\Omega$   
 Withstand voltage: 1500V(AC)  
 Insulation resistance: 5000M $\Omega$   
 Shielding: optional  
 HVIL: optional

### Environmental Property

Working temperature: -40 °C~ +125°C  
 Relative humidity: 95% (40°C)  
 Sealing: IP68 in mated condition  
 Flame retardant grade: UL94 V-0  
 Salt spray: 48h(5% NaCl)

### Mechanical Property

Mechanical Property  
 Mating cycle: >500times  
 Vibration: 10~80Hz, Amplitude 0.75  
 81~500Hz, 20g  
 500~2000Hz, 18g

### Material

Shell: aluminum alloy/zinc alloy nickel plated  
 Insulator: thermoplastic flame-retardant  
 Contact: copper alloy gold plated  
 Seal: silicone rubber

## Ordering Information

### Plug

RQF -D P PW H -NR -50 - A

Extensive character

Cable range:35, 50, 70

NR:Key N red ;BY:Key B yellow;  
DG:Key D green;AH:Key A black;  
CB:Key C Blue;EO:Key E Orange

H:HVIL(Non-HVIL unmarked)

P: Straight; PW: Right angle

P: Shielding (non-shielding unmarked)

Shell: D

High Current Push-pull Metal Shell Connector (RQF)

### Jack

RQF -D R D1 H0.3 -NR - A

Extensive character

NR:Key N red ;BY:Key B yellow;  
DG:Key D green;AH:Key A black;  
CB:Key C Blue;EO:Key E Orange

H0.3:HVIL,0.3m reserved  
(Non-HVIL unmarked)

Wiring Method:  
D1: Terminal (through-hole);  
D2: Terminal (thread-hole)

Jack

Shell: D

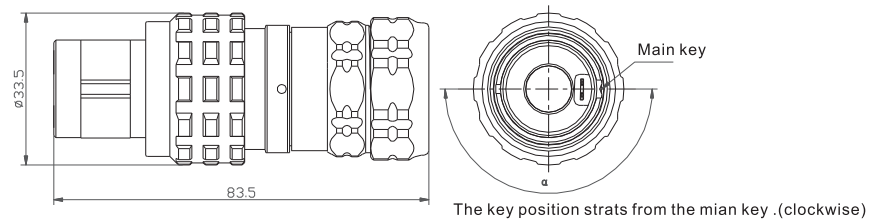
High Current Push-pull Metal Shell Connector (RQF)

## Size

Note: The following outlined dimensions are available as standard dimensions at Recodeal.  
The connectors can be customized.

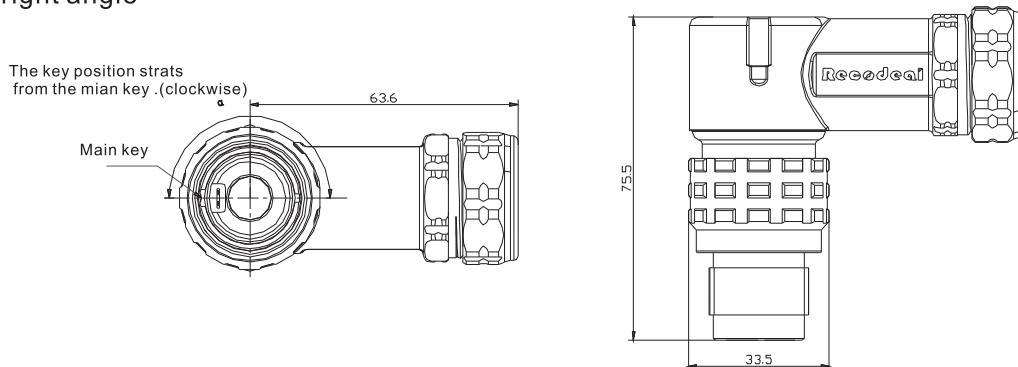
### Plug

#### Plug straight



Contact	Cable Range	Current Rating	The Position Of α (Build Position Corner)					
Φ10mm	35mm²	180A	N	A	B	C	D	E
	50mm²	200A						
	70mm²	250A	180°	90°	160°	190°	270°	330°

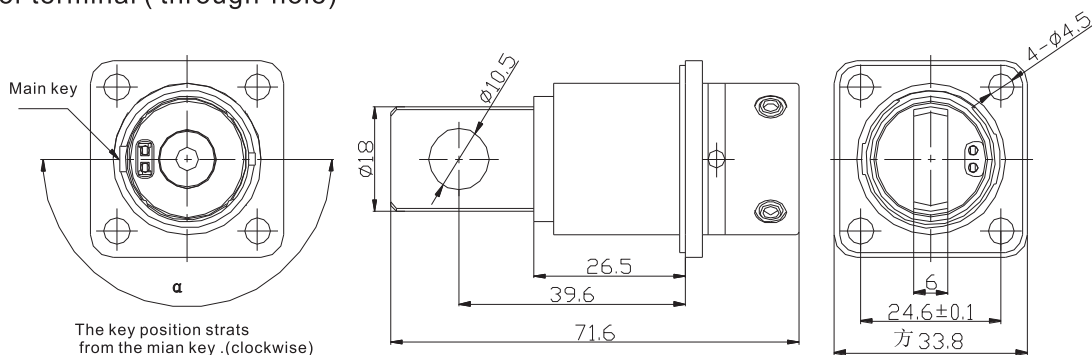
#### Plug right angle



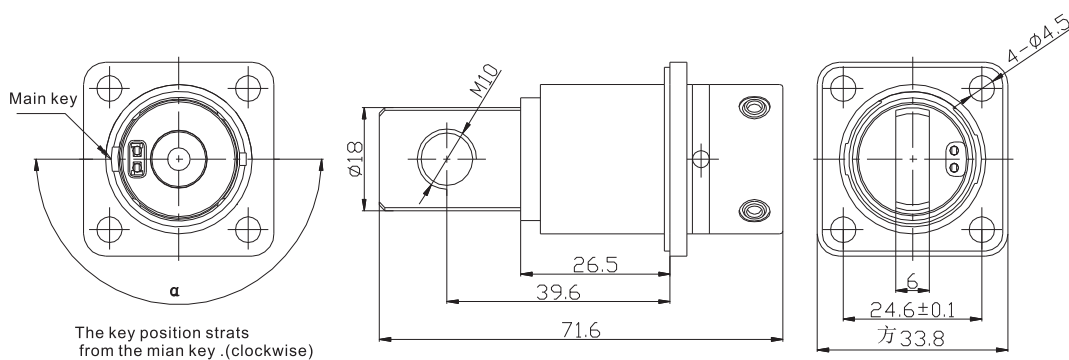
Contact	Cable Range	Current Rating	The Position Of α (Build Position Corner)					
Φ 10mm	35mm²	180A	N	A	B	C	D	E
	50mm²	200A						
	70mm²	250A	180°	90°	160°	190°	270°	330°

## Jack

Jack:for terminal ( through-hole)



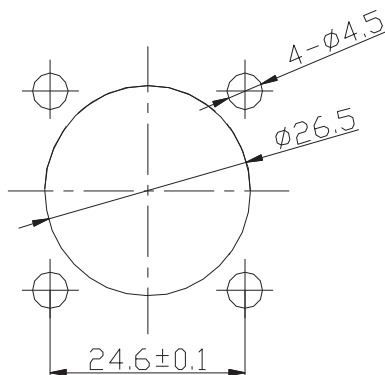
Jack:for terminal (thread-hole)



Contact	Cable Range	Current Rating	The Position Of α (Build Position Corner)					
Φ10mm	35mm <sup>2</sup>	180A	N	A	B	C	D	E
	50mm <sup>2</sup>	200A						
	70mm <sup>2</sup>	250A	180°	90°	160°	190°	270°	330°

- 1.Thickness of mounting plate: $t \leq 1.0\text{mm}$  , recommended mounting screw:M4 × (9+t),the tightening torque:(2.5~3.5N · M);
- 2.The recommended tightening torque of M10:14N · M(Jackcopper,Mounting plate:thermoplastic);
- 3.The recommended tightening torque of Φ10:22N · M(Jack:copper,Mounting plate:thermoplastic).

## Recommended Mounting Hole Dimension



# 1POS High Current Push-pull Metal Shell Connector (RQD)



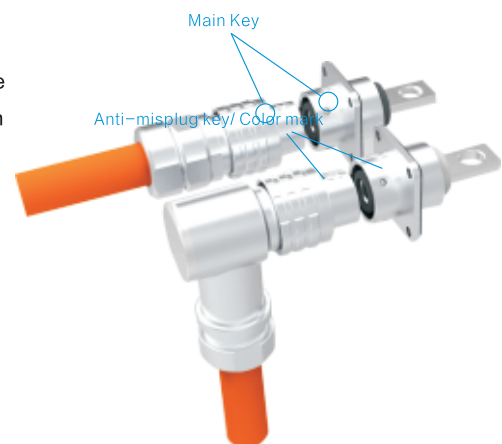
## Features/Application

- RQD series connectors provide stable high voltage, high current transmission among EV/HEV systems.
- Plug and Jack are designed with rapid push-pull lock system, it can reach self-locking, connectors require small installation space, especially applying for installation limited space.
- Current rating 30A~350A, with 5 different shell colors, (A,B,C,D,E) with 2 type of cable ways :straight and side, meet different request from clients.
- Five anti-misplug key for option, different color distinguish different key, to avoid visually and installation mistakes, also it has the main key mark on the surface, provide convenience to customers.
- Both plug and jack have electric shock protection function.
- Excellent sealing performance, IP67 in mated condition.
- 360 degree shielding function, which is optional.
- Assembly manufacturing service as required.
- Normally, RQD series is 1 POS design, can be customized if multiple POS are required.
- Can be customized according to client's requirement.

## Instructions

The connectors provide visual anti-misplug ability from the outer shell color. It avoids mistakes especially when the same series connectors are used on same equipment. The main key is significantly marked on the shell for users to plug in quickly.

The connectors prevent the users from installation mistakes by its anti-misplug keys. When the users hold the end of plug and push it into jack, the locking sleeve will move back slightly with the steel balls works inside. When the plug and jack are pushed to the right place, the locking sleeve will automatically move forward to compress the steel balls with the spring mechanism and be locked with audible positive "click". The self-locking design would avoid "unlock" situation. Easy to separate or de-mating by pulling the locking sleeve at opposite direction.



## Technical Specification

## Electrical Property

Current rating:

Shell	Contact	Cable Range	Current rating
A	Φ3.6mm	6mm <sup>2</sup>	40A
		10mm <sup>2</sup>	60A
B	Φ6mm	16mm <sup>2</sup>	80A
		25mm <sup>2</sup>	130A
C	Φ8mm	35mm <sup>2</sup>	180A
		50mm <sup>2</sup>	220A
D	Φ10mm	50mm <sup>2</sup>	240A
		70mm <sup>2</sup>	270A
E	Φ12mm	95mm <sup>2</sup>	300A
		120mm <sup>2</sup>	350A

Voltage rating: 700V DC

Withstand voltage: 3000V AC

Resistance: 5000MΩ

Shielding: optional

## Mechanical Property

Mating cycle: ≥500times

Vibration: 10~80Hz, amplitude 0.75

81~500Hz, 20g

500~2000Hz, 18g

## Environmental Property

Environmental Property

Working temperature: -40 °C~ +125°C

Relative humidity: 95% (40°C)

Salt spray: 48h (Up to 1000h as required)

Sealing: IP68 under mated condition

Flame retardant grade: UL94 V-0

## Material

Material

Shell: aluminum alloy/zinc alloy

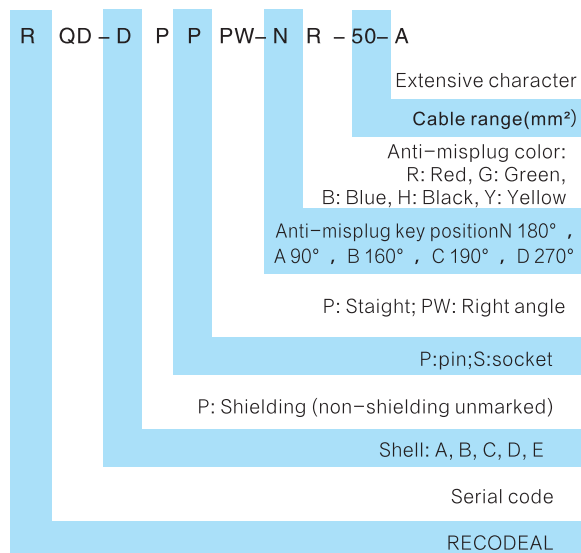
Insulator: thermoplastic flame-retardant

Contact: copper alloy silver plated

Seal: rubber or elastomer

## Ordering Information

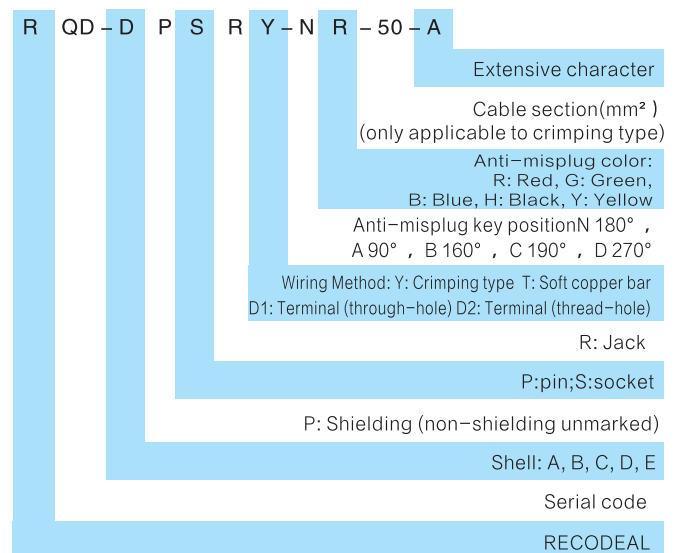
## Plug



Note: Plug assemble with pins

eg: RQD-CPPPW-AH-35-A means: RQD series plug, Shell C connect 35 mm<sup>2</sup> shield cable, right angle plug, A position black.

## Jack



Note: Plug assemble with socket

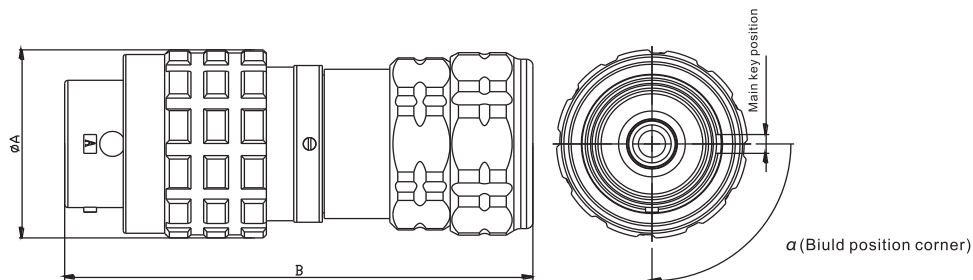
eg: RQD-CPPPW-AH-35-A means: RQD series plug, Shell C A position black, plug trail is open end.

## Size

Note: The following outlined dimensions are available as standard dimensions at Recodeal.

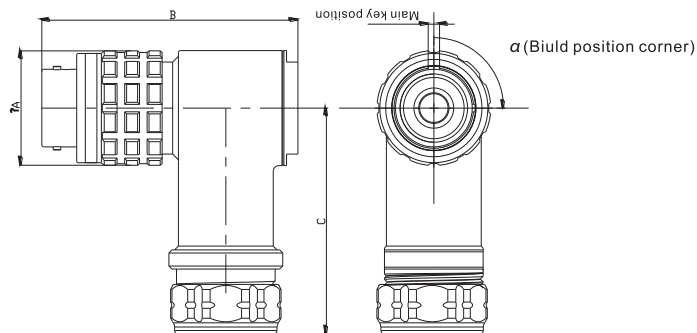
### Plug

Plug straight



Shell	Contact	Cable Range	Current Rating	A	B	B(shielding)
A	Φ3.6mm	6mm <sup>2</sup>	40A	24	60	60
		10mm <sup>2</sup>	60A			
B	Φ6mm	16mm <sup>2</sup>	80A	28	62	62
		25mm <sup>2</sup>	120A			
C	Φ8mm	35mm <sup>2</sup>	180A	30	73.5	73.5
		50mm <sup>2</sup>	200A			
D	Φ10mm	50mm <sup>2</sup>	200A	32.5	75.5	75.5
		70mm <sup>2</sup>	250A			
E	Φ12mm	95mm <sup>2</sup>	300A	35	71	76
		120mm <sup>2</sup>	350A			

Plug right angle

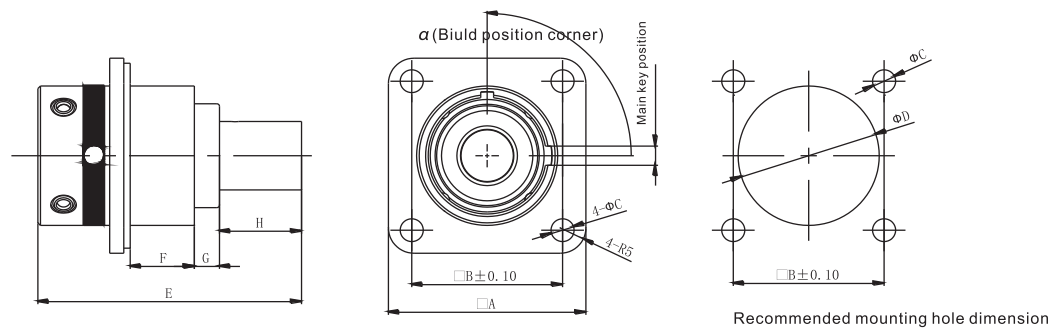


Shell	Contact	Cable Range	Current Rating	A	B	C	C(shielding)
A	Φ3.6mm	6mm <sup>2</sup>	40A	24	56	54	54
		10mm <sup>2</sup>	60A				
B	Φ6mm	16mm <sup>2</sup>	80A	28	61	( 56 )	( 56 )
		25mm <sup>2</sup>	120A				
C	Φ8mm	35mm <sup>2</sup>	180A	30	67.5	59	61.5
		50mm <sup>2</sup>	200A				
D	Φ10mm	50mm <sup>2</sup>	200A	32.5	74	61.5	64.5
		70mm <sup>2</sup>	250A				
E	Φ12mm	95mm <sup>2</sup>	300A	35	77	63	66
		120mm <sup>2</sup>	350A				



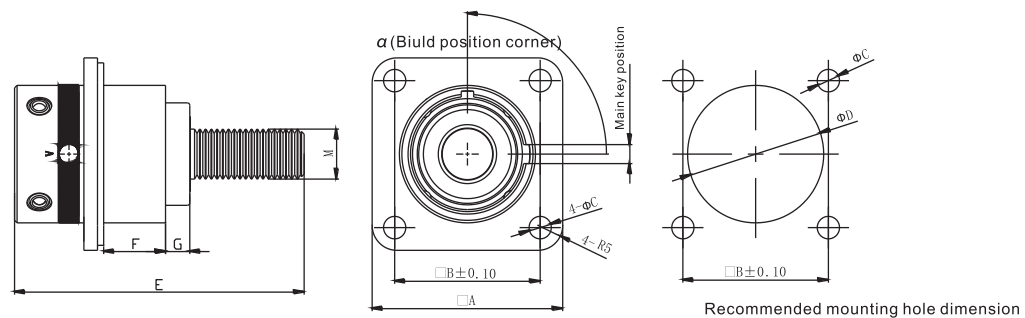
## Jack

Jack: crimping type



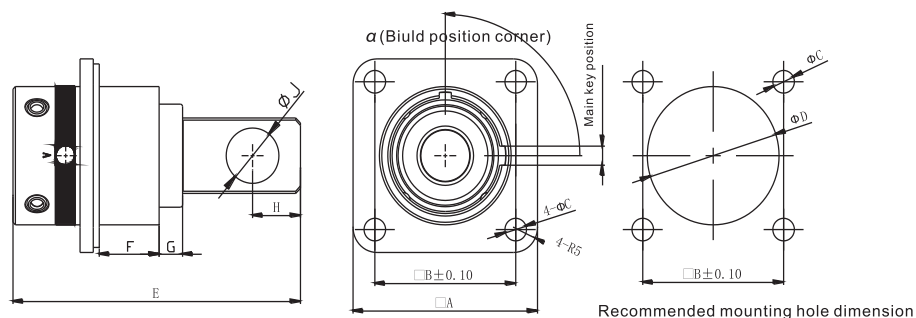
Shell	Contact	Cable Range	Current Rating	A	B	C	D	E	F	G	H
A	Φ3.6mm	6mm <sup>2</sup>	40A	24	18	3.2	19	35	4.5	2	15
		10mm <sup>2</sup>	60A								
B	Φ6mm	16mm <sup>2</sup>	80A	31	22-23	4.2	20	38.6	5	2	12.5
		25mm <sup>2</sup>	120A								
C	Φ8mm	35mm <sup>2</sup>	180A	35	24	4.5	23	43.6	6.9	4	15.4
		50mm <sup>2</sup>	200A								
D	Φ10mm	50mm <sup>2</sup>	220A	38.5	29.4	4.5	28.5	51.4	13	5	16
		70mm <sup>2</sup>	250A								
E	Φ12mm	95mm <sup>2</sup>	300A	41	34	4.5	34	56	12.5	5	18.5
		120mm <sup>2</sup>	350A								

Jack: for copper bar



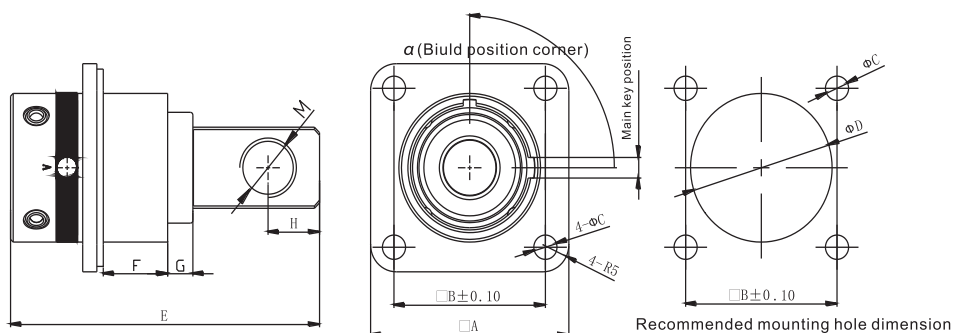
Shell	Contact	Cable Range	Current Rating	A	B	C	D	E	F	G	M
A	Φ3.6mm	6mm <sup>2</sup>	40A	24	18	3.2	19	35	4.5	2	M5
		10mm <sup>2</sup>	60A								
B	Φ6mm	16mm <sup>2</sup>	80A	31	22-23	4.2	20	40	5	2	M6
		25mm <sup>2</sup>	120A								
C	Φ8mm	35mm <sup>2</sup>	180A	35	24	4.5	23	43.1	6.9	4	M8
		50mm <sup>2</sup>	200A								
D	Φ10mm	50mm <sup>2</sup>	200A	38.5	29.4	4.5	28.5	58.5	13	5	M10
		70mm <sup>2</sup>	250A								
E	Φ12mm	95mm <sup>2</sup>	300A	41	34	4.5	34	56	12.5	5	M12
		120mm <sup>2</sup>	350A								

Jack:for terminal(through-hole)



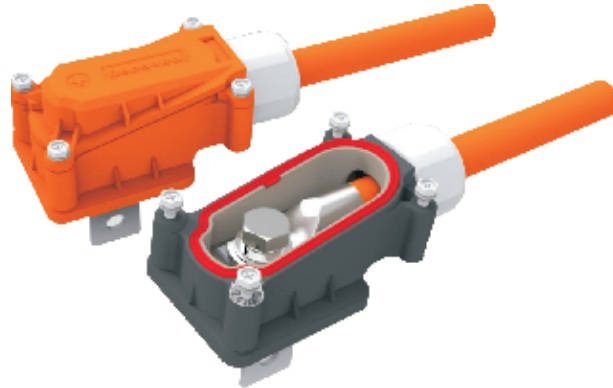
Shell	Contact	Cable Range	Current Rating	A	B	C	D	E	F	G	H	J
A	Φ3.6mm	6mm <sup>2</sup>	40A	24	18	3.2	19	35	4.5	2	6	4.5
		10mm <sup>2</sup>	60A									
B	Φ6mm	16mm <sup>2</sup>	80A	31	22-23	4.2	20	40	5	2	5.5	6.5
		25mm <sup>2</sup>	120A									
C	Φ8mm	35mm <sup>2</sup>	180A	35	24	4.5	23	47.6	6.9	4	7	8.5
		50mm <sup>2</sup>	200A									
D	Φ10mm	50mm <sup>2</sup>	200A	38.5	29.4	4.5	28.5	60	13	5	10	10.5
		70mm <sup>2</sup>	250A									
E	Φ12mm	95mm <sup>2</sup>	300A	41	34	4.5	34	56	12.5	5	12	12.5
		120mm <sup>2</sup>	350A									

Jack:for terminal(thread-hole)



Shell	Contact	Cable Range	Current Rating	A	B	C	D	E	F	G	H	M
A	Φ3.6mm	6mm <sup>2</sup>	40A	24	18	3.2	19	35	4.5	2	6	M4
		10mm <sup>2</sup>	60A									
B	Φ6mm	16mm <sup>2</sup>	80A	31	22-23	4.2	20	40	5	2	5.5	M6
		25mm <sup>2</sup>	120A									
C	Φ8mm	35mm <sup>2</sup>	180A	35	24	4.5	23	47.6	6.9	4	7	M8
		50mm <sup>2</sup>	200A									
D	Φ10mm	50mm <sup>2</sup>	200A	38.5	29.4	4.5	28.5	60	13	5	10	M10
		70mm <sup>2</sup>	250A									
E	Φ12mm	95mm <sup>2</sup>	300A	41	34	4.5	34	56	12.5	5	12	M12
		120mm <sup>2</sup>	350A									

# Low-cost High Voltage Metal Shell Connector (REQ4)



## Features/Application

- This series connectors utilized for EV industry, offering stable high voltage, high current transmission among equipments.
- Positive and negative connectors are differentiated by color, Positive shell is orange, negative is black.
- Sealing grade can reach IP68 under mated condition.
- The cable can be easily assembled with connectors after cable was crimped.
- REQ4 connector doesn't use direct mating between male and female, instead it uses copper bars to connect both male and female contacts, which provides lower cost comparing to majority of HV connectors, and more reliable connection.
- The product has shielding properties.
- HVIL (High Voltage Interlock) is optional.

## Technical Specification

### Electrical Property

Voltage rating: 1000V DC  
 Contact resistance:  $\leq 3\text{m}\Omega$   
 Withstand voltage:  $\geq 3000\text{V AC 1Min}$   
 Insulation resistance:  $\geq 3000\text{M}\Omega$  ( $\leq 40^\circ\text{C}$ ,  $\leq 50\% \text{ RH}$ )  
 $\geq 300\text{M}\Omega$  ( $> 95\% \text{ RH}$ )

### Mechanical Property

Mating cycle: 20 times

### Environmental Property

Working temperature:  $-40^\circ\text{C} \sim +125^\circ\text{C}$   
 Relative humidity:  $\leq 95\%$  ( $40^\circ\text{C}$ )  
 Sealing: IP67 (Depth of water: 1m, 48h, water tight)  
 Single jack: waterproof (IP67) or aleak

### Material

Meeting the RoHS  
 Shell: aluminum alloy  
 Contact: copper alloy  
 Seal: rubber

## Ordering Information

### Non-HVIL

REQ4-50P-OR-A

Extensive character

OR: orange; BK: black

P: Shield; Non-shield unmarked

Cable range: 35/50/70

Serial

RECODEAL

### HVIL

REQ4-50PH0.3-OR-A

Extensive character

OR: orange; BK: black

H: HVIL; Non-HVIL unmarked

P: Shield; Non-shield unmarked

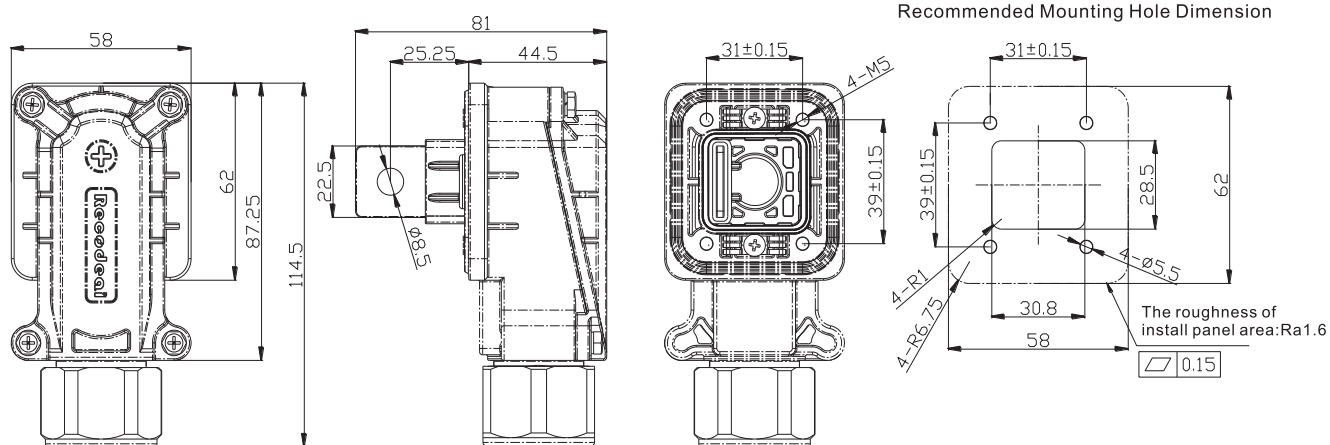
Cable range: 35/50/70

Serial

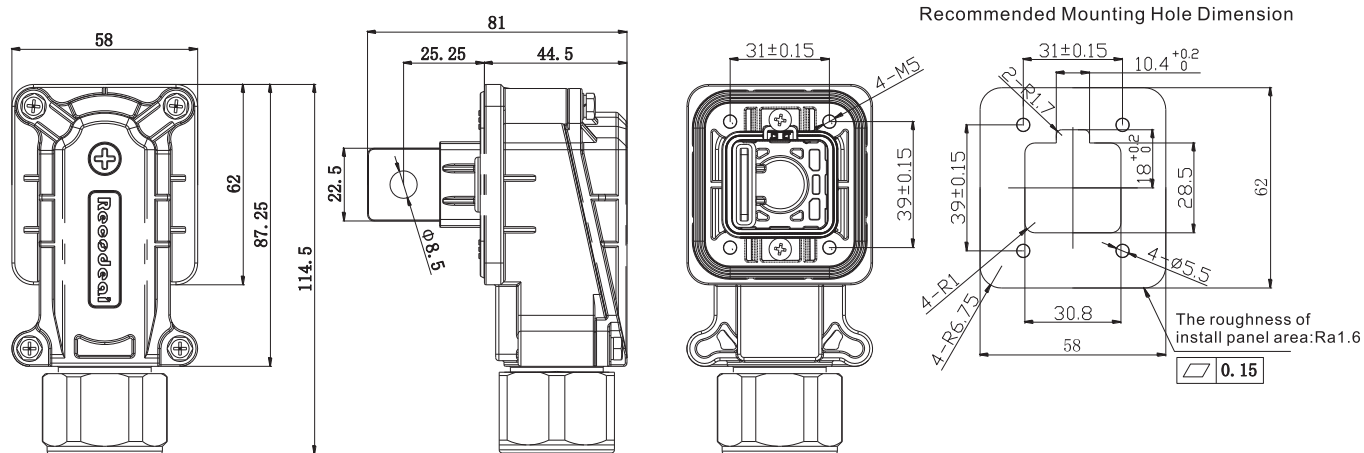
RECODEAL

## Size

### Non-HVIL



### HVIL



#### Note:

- 1.The product divides positive and negative type.
- 2.The mounting hole of the jack:M5,thickness of mounting plate: $t \leq 0.8\text{mm}$ , panel flatness:0.2,oughness of install panel area: $\leq \text{Ra}1.6$ .
- 3.The recommended tightening torque of M10:16N · M ~ 18N · M;The recommended tightening torque of M8:12N · M ~ 14N · M;The recommended tightening torque of M5:3.5N · M ~ 4.5N · M;The recommended tightening torque of M4:2N · M ~ 2.5N · M.
- 4.The code of terminal、 shield inner tube、 shield tube,all of the above need to ordered separately.

Name	35 <sup>2</sup>	50 <sup>2</sup>	70 <sup>2</sup>
Terminal(XX-10)	7.731.479	7.731.180051.06	7.731.180052.06
Shield inner tube	7.070.180139.01	7.070.180133.01	7.070.180134.01
Shield tube	7.070.180140.01	7.070.180135.01	7.070.193001.01

5.The length of the lead-out is 150mm

HVIL terminal:terminal8240-0447/SWS plastic shell:6098-7898/SWS

Recommended terminal:terminal8230-5271/SWS plastic shell:6098-7892/SWS

## Multi 2POS High Current Metal shell connector with shield(REG2)

## Describe

- 2POS
- Metal shell
- Locking handle and
- Secondary locking structure
- False-proof design ( IPXXB )
- Sealing: IP6K9K、IP68
- Supporting cable: 25mm<sup>2</sup>--95mm<sup>2</sup>



## Application

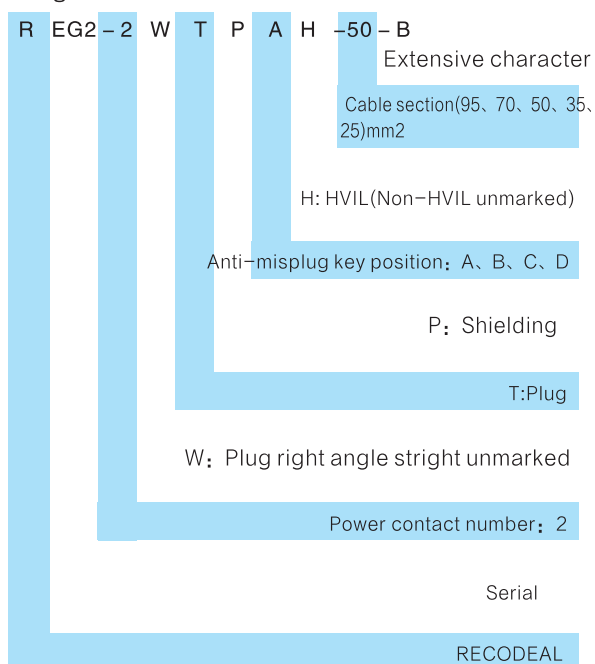
## ■ Current Rating

Contact	Cable range	current rating	Cable type	Diameter of the insulation layer in the cable	External diameter of cable	Remark
Φ 10mm	25mm <sup>2</sup>	120A	Shield or Non-Shield is optional	Φ8.2mm~Φ8.8mm	Φ 11.6mm~Φ 12.2mm	/
	35mm <sup>2</sup>	180A	Shield or Non-Shield is optional	Φ9.8mm~Φ 10.5mm	Φ 13.8mm~Φ 14.4mm	/
	50mm <sup>2</sup>	220A	Shield or Non-Shield is optional	Φ 11.5mm~Φ 12.2mm	Φ 15.2mm~Φ 15.8mm	/
	70mm <sup>2</sup>	250A	Shield or Non-Shield is optional	Φ 14mm~Φ 15.5mm	Φ 19.2mm~Φ 20mm	/
	95mm <sup>2</sup>	280A	Shield or Non-Shield is optional	Φ 16.2mm~Φ 18mm	Φ 21.5mm~Φ 22.5mm	/
0.6X1.2	(0.35/0.5)mm <sup>2</sup>	3A	Non-shield	/	Φ 1.4mm~Φ 2.0mm	HIVL

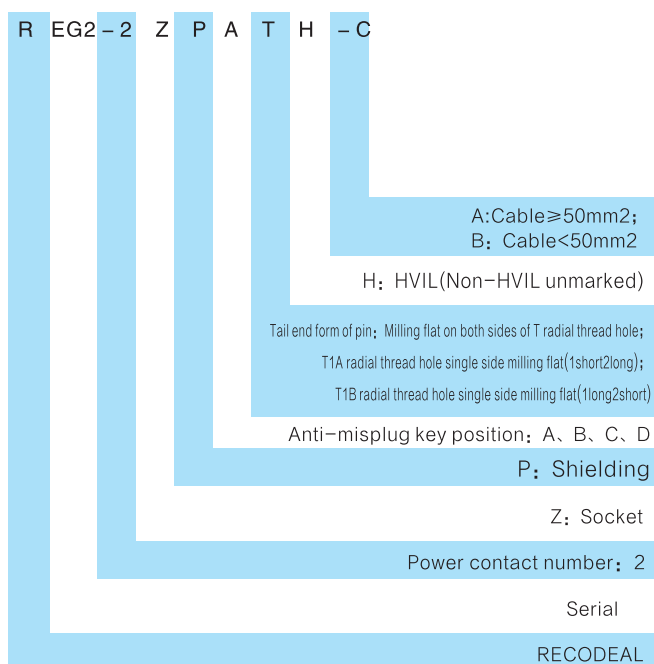
- Current Rating: 1000V DC;
  - Shielding: optional
  - HIVL: YES(HIVL is normal)
  - Non HIVL is optional
- Working Temperture: -40℃--+140℃

## Ordering information

## Plug

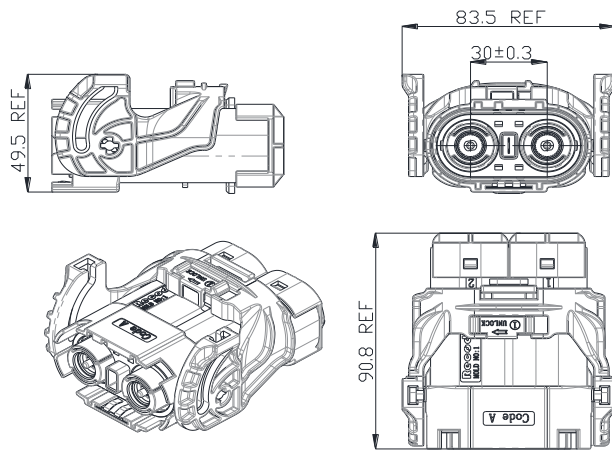


## Socket

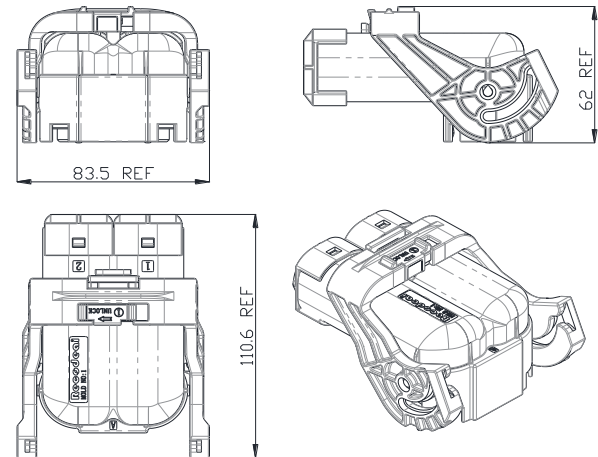
Fitting Cable ≥ 50mm<sup>2</sup> Socket

size

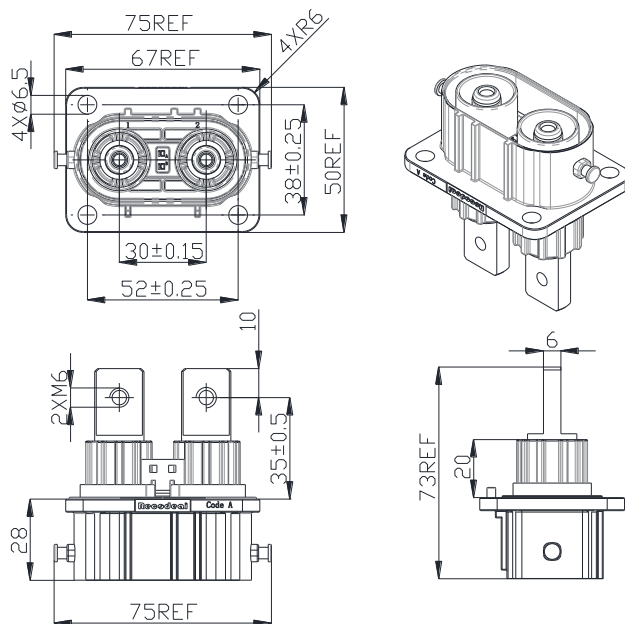
2POS Straight socket



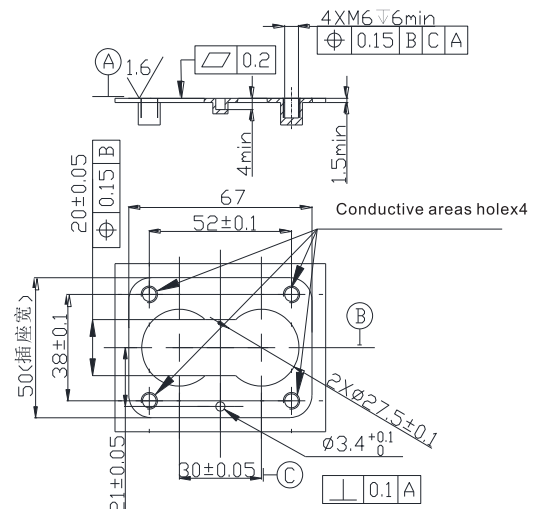
2POS Right angle Plug



2POS Straight socket



Mounting hole dimension(A key position)



## Describe

- 2POS
- Metal shell
- High Protection Degree: IP6K9K、IP68
- Cable Section: 25mm<sup>2</sup>--70mm<sup>2</sup>
- After the cable is loaded, the cable will not move up and down, nor will it rotate, so the fixing effect is good
- Mainly used for battery, MCU、, PDU and other equipment



## Naming rules

- Current Rating: 120A=25mm  
200A=35mm  
250A=50mm  
300A=70mm
- Voltage Rating: 1000V DC
- Shield: Option
- Temperature: -40°C--+140°C

Extension serial number

P: Shield

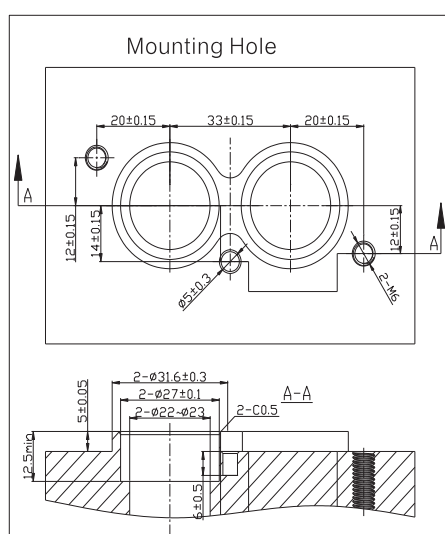
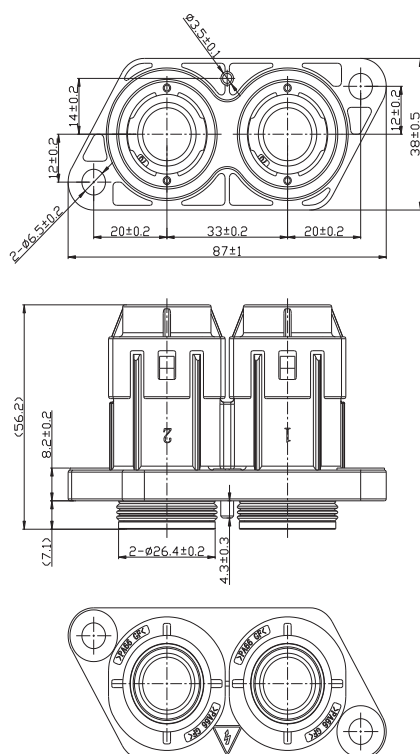
Cable: 25、35、50、70

POS: 2

IPT II:Product Serial

RIPT II -2-50P-A" means: Recodeal manufacture, IPT II series, two-core, suitable for 50 mm<sup>2</sup> shielded cable, with shielding, expansion model is A.

## SIZE





## RET Metal /Plastic Shell connector with Shield

### Describe

- 3POS
- Metal/Plastic shell
- High protection Degree: IP6K9K、IP68
- Mainly used for battery, MCU、, PDU and other equipment

### Application

- Current Rating: 200A—250A
- Voltage Rating: 1000V DC
- Shield: Type code 1 with shield,others without
- Temperature Range: -40°C--+140



### Naming Rules

RET-13PM-Y-A

Design expansion No

Pin non-pressurized unmarked

M: sealed, unsealed not marked

P:Shield

Number of power contacts

Product Serial Code: 1,2,3.....

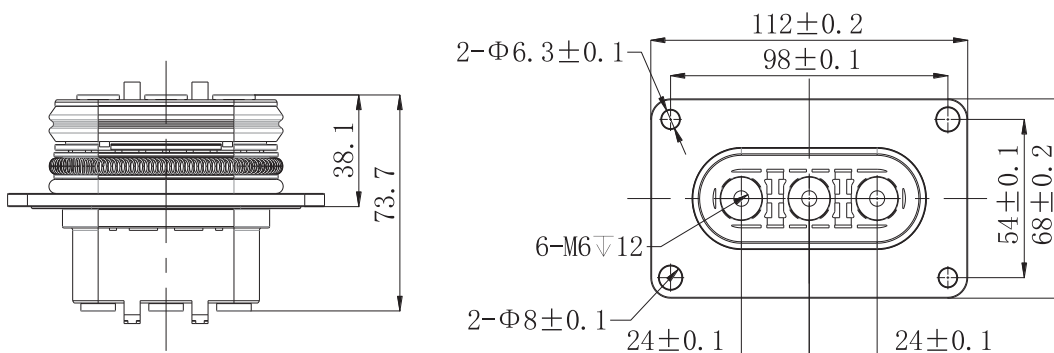
RECODEAL

### Product Serial Code

Product Serial Code	P/N	Current Rating	Shield	Protection Degree
1	RET-13PM-A	210	Y	IP68

### SIZE

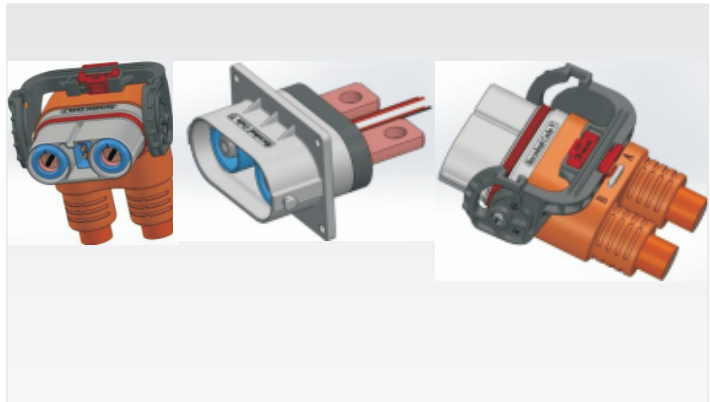
#### Product Serial Code-Shape Size Chart



# High voltage super current connector with shield REX

## Describe

- 2POS
- Metal shell
- Hand locking structure
- Anti-mis-touch design ( IPXXB )
- High protection Degree: IP6K9K、IP68
- 2 Anti-mistake key positions
- Cable Section: 70mm<sup>2</sup>--120mm<sup>2</sup>
- Integrated Mask Interlocking Function
- The socket integrates the function of temperature probe
- For battery pack, MCU、PDU equipment



## Application

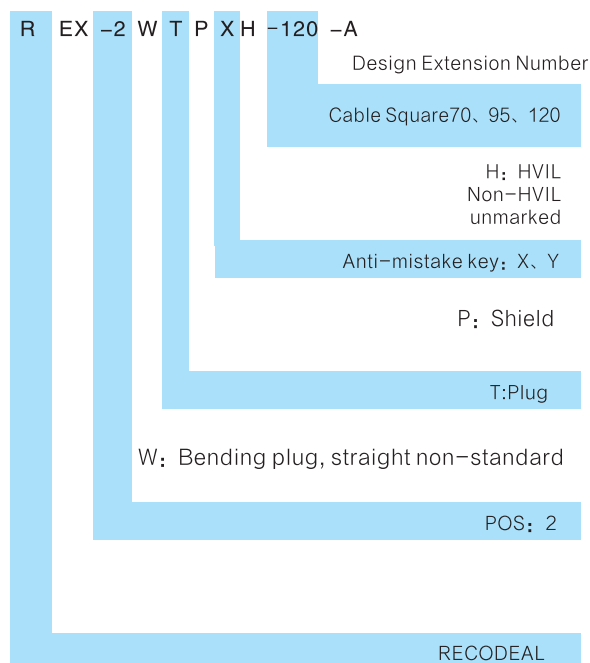
- Current Rating

Contact Specifications	Cable Square	Current Rating	Cable Type	Outer diameter of Shield Cable	Outer diameter of Non-Shield Cable
φ 12	70mm <sup>2</sup>	2*250A	Shield and Non-Shield	φ 19.5±0.5	φ 15.5±0.3
φ 12	95mm <sup>2</sup>	2*300A	Shield and Non-Shield	φ 22.5±0.5	φ 18.7±0.5
φ 12	120mm <sup>2</sup>	2*400A	Shield and Non-Shield	φ 24.9±0.5	φ 20.5±0.5

- Voltage Rating: 1000V DC
- Shield: Option
- HVIL: Non
- Temperature: -40°C--+140°C

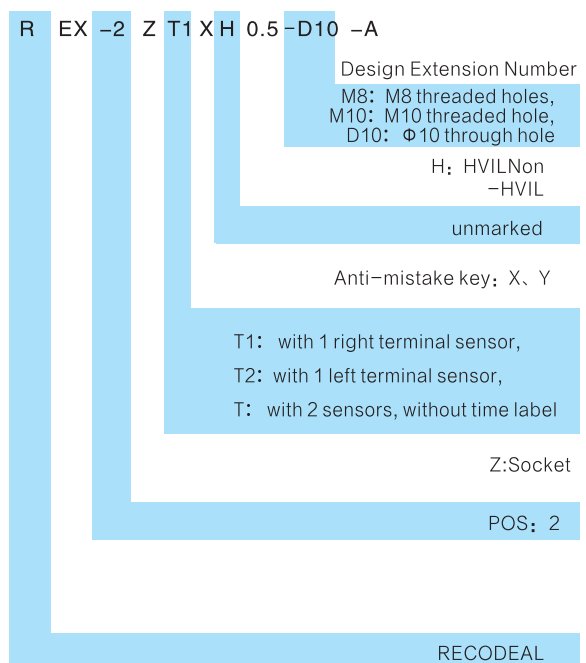
## Naming Rules

### PLUG



Note: the plug model is an unconnected empty plug model. If you need to buy it in the form of wiring assembly, you need to contact our technical contact to confirm the details of the assembly to give the material number of the outgoing bundle assembly.

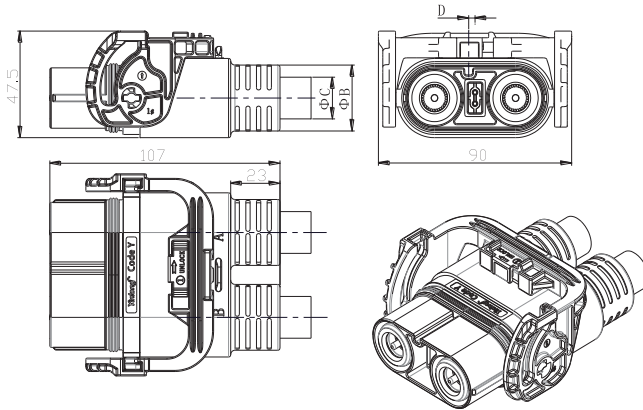
### Socket



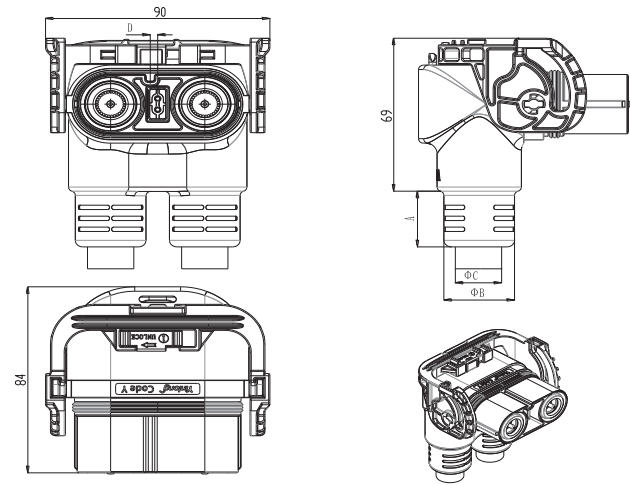
Note: For example: REX-2ZT1XH0.3-D10-A means two core with a sensor T1, X key position insulation cap color orange, with high voltage interlocking and pin bronze hole for Φ10( through hole) connector socket;

## SIZE

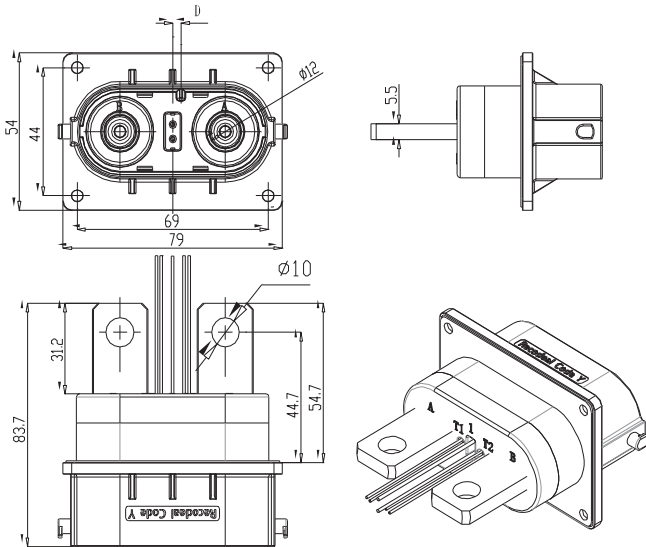
### 2POSstraight plug



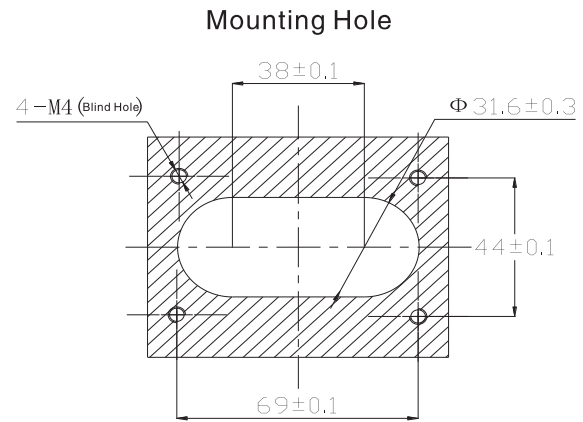
### 2pos curved plug



### 2POS Socket



### Install hole size



## High Current Push-pull Metal Connector RQAll

### Describe

- 1POS
- Metal Shell
- Hand locking structure
- Anti-mis-touch design ( IPXXB )
- High Protection Degree: IP6K9K、IP68
- 2 Anti-Mistake Key Positions
- Cable Section : 95mm<sup>2</sup>--135mm<sup>2</sup>
- Integrated Mask Interlocking Function
- A socket that integrates the function of a temperature probe and is mainly used for battery pack and MCU、PDU equipment



### Application

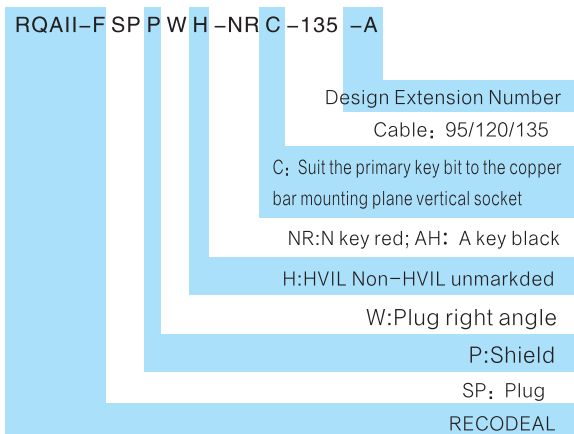
- Current Rating

Contact Specifications	Cable	Current Rating	Cable Type
φ 15	95mm <sup>2</sup>	300	Shield and Non-Shield
φ 15	120mm <sup>2</sup>	350	Shield and Non-Shield
φ 15	135mm <sup>2</sup>	400	Shield and Non-Shield

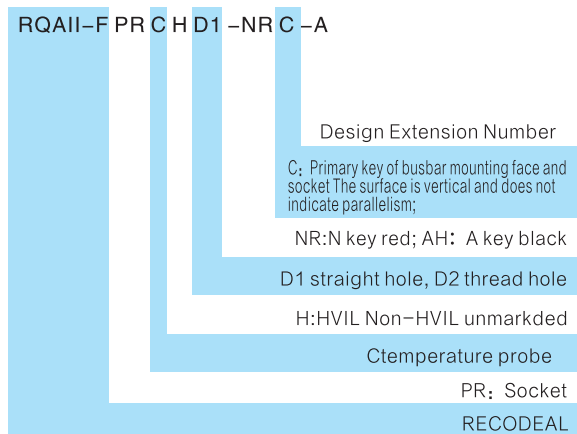
- Voltage Rating: 1000V DC
- Shield: Option
- HVIL: Non
- Temperature Range: -40°C-- +140°C

### Naming Rules

#### Plug



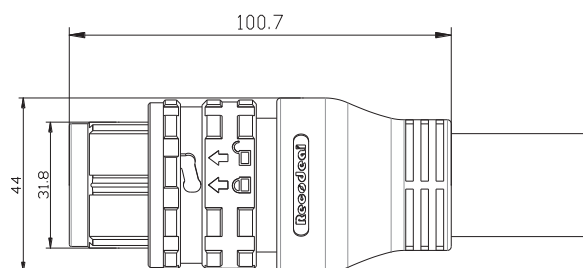
#### Socket



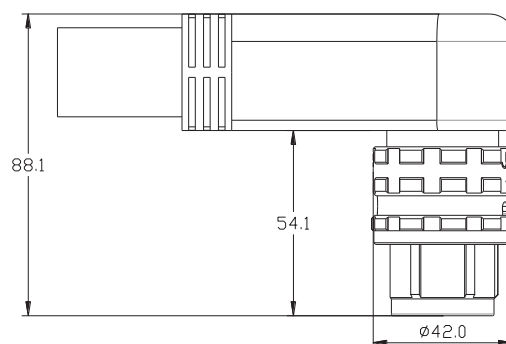
Note: the plug must be connected by Recodeal and does not support the customer's own Cable

## SIZE

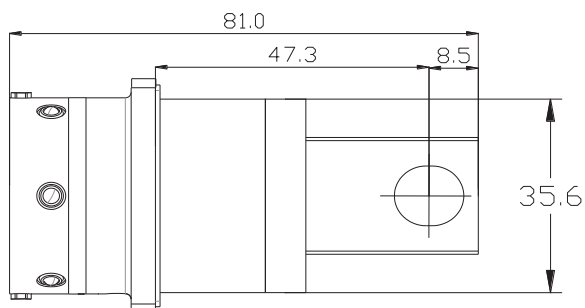
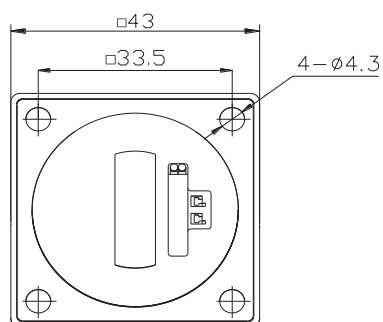
### Straight Plug



### Right angle plug



### Socket



### Installation of hole size

