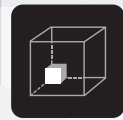


## PS3C/PS3CS Series

# High Current Single Pos. Cable Connector



High-Current



Space Saving



Finger Protect



## Overview

High current single position cable connector  
Space-saving design with right angle plugs  
flexible cable wiring  
Prevents incorrect insertion with its unique shape.  
Meets IP2X finger protection standards.  
Standard tools allow for straightforward cable assembly.

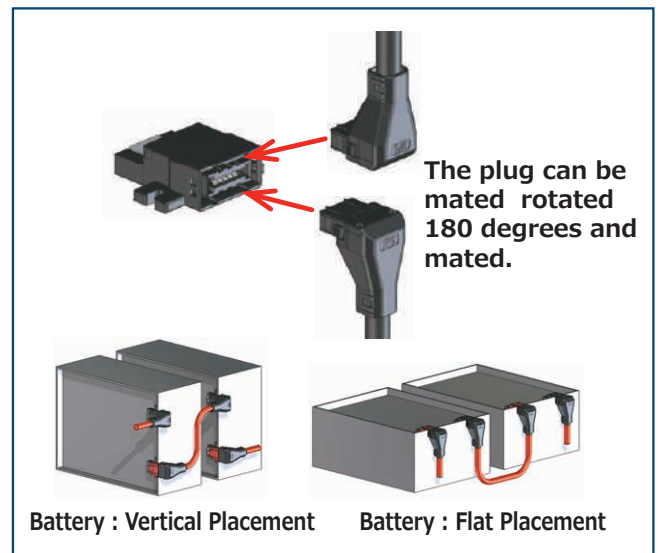
## Features

### 1. High current flow

Supports up to 150A rated current.  
(Derating curve, ambient temp 25°C : 210A)

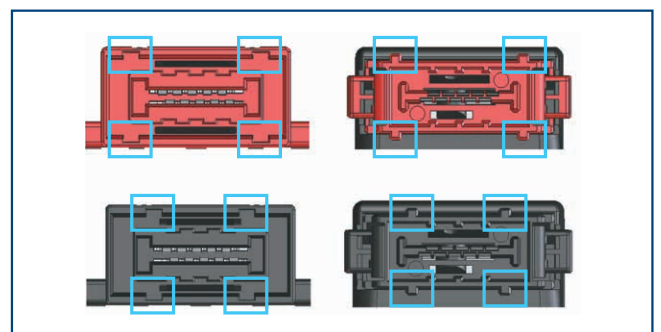
### 2. Space-saving and flexible wiring

The 180-degree rotatable plug allows for versatile cable routing, and the right-angle plug design contributes to a compact housing.



### 3. Mis-insertion prevention

Guide keys and color coding prevent incorrect connections between positive and negative terminals.



### 4. Finger protection.

Both plug and receptacle are designed to prevent finger contact (IP2X level)

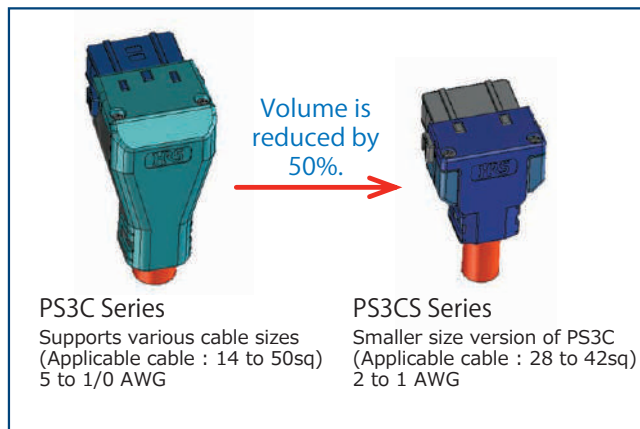
## 5. UL, C-UL and TÜV-certified

PS3C Series meets safety standards (UL, C-UL, TÜV standards). The PS3C Series will also receive certification.

## 6. Two variations are available.

The PS3C Series offers flexibility in cable sizes, whereas the PS3CS Series is for a specific range (28 to 42sq) and offers a smaller form factor.

(Note: PS3C and PS3CS Series are not compatible with each other.)



## 7. Standard tool assembly.

Cable assembly can be performed with standard tools like torque wrenches (JIS B 4652) and crimps (JIS C 9711).

## Applications

Power supply devices such as batteries and UPS etc.

## Product Specifications

### ● PS3C Series

Rated Current (Note 1) (Note 2)	Power	Derating curve at ambient temperature of 25°C	Operating Temperature Range	-40 to +105°C
	150A	210A	Storage Temperature Range	-40 to +60°C
Rated Voltage (Note 1) (Note 3)	1,500V AC/DC			

Applicable Cable	14 to 50sq (WL1,WL2) (Note 1) 5 to 1/0 AWG
------------------	---

Note 1 : UL, C-UL and TÜV certifications have been obtained while changing conditions such as rated current and voltage multiple times.

For details, see the "Conditions on Safety Standards (UL, C-UL, TÜV)".

Note 2 : The value of the current is from the readings of derating curve at ambient temperature of 25°C .

Note 3 : Creepage distance requirements vary based on the insulation of the base and the voltage applied between the copper conductors.

Voltage	Contamination Level 2	Contamination Level 3
600V (Note 4)	6.3mm	10mm
1,500V (Note 5)	15mm	25mm

Note 4 : This dimension is specified from IEC (EN) 61984 and is subject to overvoltage category IV.

Note 5 : Since IEC (EN) 61984 specifies 1,000V, 1,500V is assumed in our company.

Please change the size according to the operating environment and the applicable standard.

### ● PS3CS Series

Rated Current (Note 1)	38sq	Operating Temperature Range	-40 to +105°C
	125A	Storage Temperature Range	-40 to +60°C
Rated Voltage (Note 1) (Note 2)	1,500V AC/DC		

Applicable Cable	28 to 42sq (WL1,WL2)(Note 1) 2 to 1 AWG
------------------	--

Note 1 : UL, C-UL and TÜV certifications have been obtained while changing conditions such as rated current and voltage multiple times.

For details, see the "Conditions on Safety Standards (UL, C-UL, TÜV)".

Note 2 : Creepage distance requirements vary based on the insulation of the base and the voltage applied between the copper conductors.

Voltage	Contamination Level 2	Contamination Level 3
600V (Note 3)	6.3mm	10mm
1,500V (Note 4)	15mm	25mm

Note 3 : This dimension is specified from IEC (EN) 61984 and is subject to overvoltage category IV.

Note 4 : Since IEC (EN) 61984 specifies 1,000V, 1,500V is assumed in our company.

Please change the size according to the operating environment and the applicable standard.

## Materials / Finish

### <PS3C Series>

#### ● Receptacle

Parts	Materials	Color/Finish
Insulator	PBT	Black or Red
Power Female Contact	Copper Alloy	Silver Plating
Contact Retention Plate C	PBT	Black

#### ● Plug

Parts	Materials	Color/Finish
Insulator	PBT	Black or Red
Power Male Contact	Copper Alloy	Silver Plating
Contact Retention Plate A	PBT	Black

#### ● Plug Cover

Parts	Materials	Color/Finish
Cover A	PBT	Black or Red
Cover B	PBT	Black or Red
Tapping Screw	Steel	Nickel

#### ● Tapping Screw

Parts	Materials	Color/Finish
Tapping Screw	Steel	Nickel

Note : It is meant for use in repair operation when the same tapping screw attached to the plug cover is lost.

## &lt;PS3CS Series&gt;

## ● Receptacle

Parts	Materials	Color/Finish
Insulator	PBT	Black or Red
Power Female Contact	Copper Alloy	Silver Plating
Contact Retention Plate C	PBT	Black
Metal Color	Steel	-

## ● Plug

Parts	Materials	Color/Finish
Insulator	PBT	Black or Red
Power Male Contact	Copper Alloy	Silver Plating
Contact Retention Plate A	PBT	Black

## ● Plug Cover

Parts	Materials	Color/Finish
Cover A	PBT	Black or Red
Cover B	PBT	Black or Red
P-tight Screw	Steel	Nickel

## ● P-tight Screw

Parts	Materials	Color/Finish
Tapping Screw	Steel	Nickel

Note : It is meant for use in repair operation when the same P-tight screw attached to the plug cover is lost.

## Product Number Structure

Refer to the chart below when determining the product specifications from the product number.  
Please select from the product numbers listed in this catalog when placing orders.

### ■ Connector Unit

**PS3C S - A - 1 U S**

① ② ③ ④ ⑤ ⑥

### ■ Plug Cover

**PS3C - 1 U P - CV L**

① ④ ⑤ ⑥ ⑦ ⑧

### ■ Screw

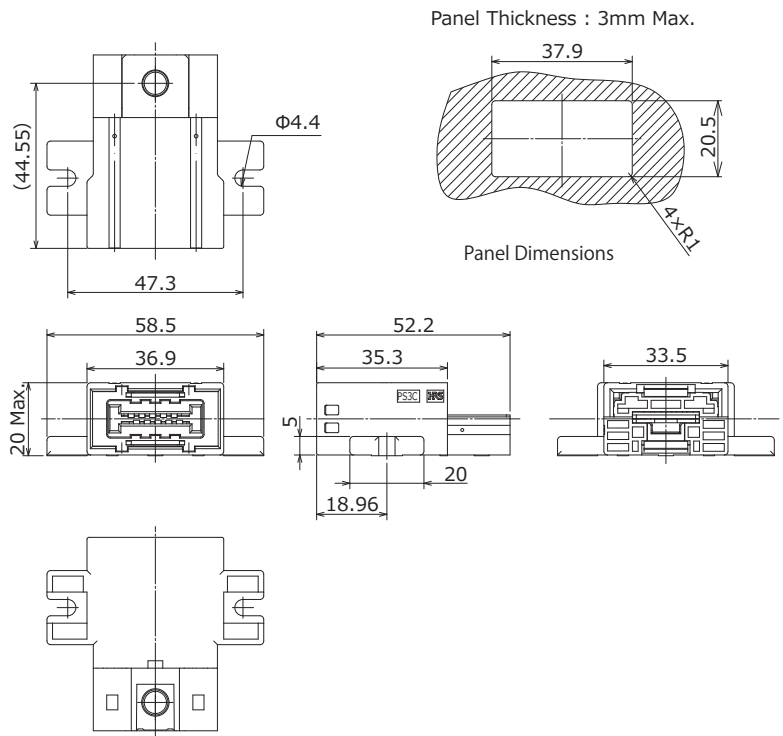
**PS3C - 1 U P - TS**

① ④ ⑤ ⑥ ⑨

① Series Name	PS3C	⑥ Power Contact Type	P : Male contact S : Female contact
② Type	S : Small size type	⑦ Case	CV : Cover
③ Shape of Mating Key	A : A key B : B key	⑧ Cover	L : Right angle type
④ No. of Power Contacts		⑨ Screw Shape Type	TS : Tapping screw PS : P-tight screw
⑤ Current Capacity of Power Contact	U : 150A		

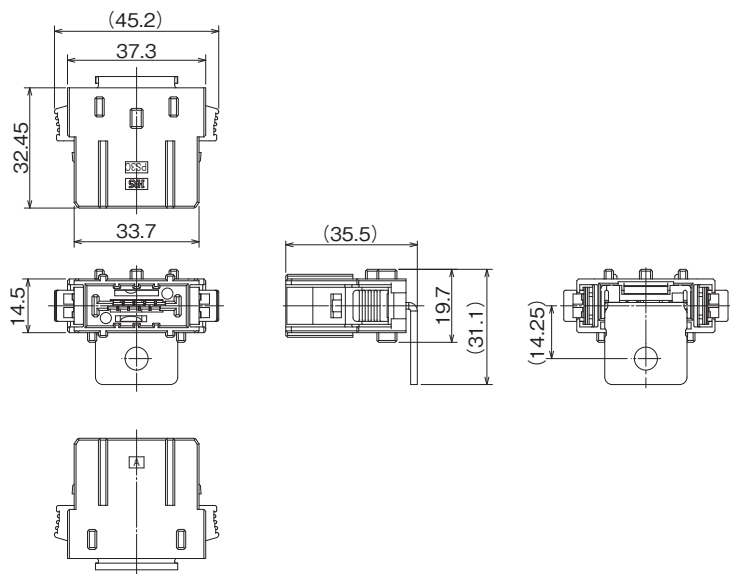
## PS3C Series

### ● Receptacle



Part No.	HRS No.	Insulator Color	Purchase Unit
PS3C-A-1US	CL0236-1062-0-00	Black	20pcs per tray
PS3C-B-1US	CL0236-1063-2-00	Red	

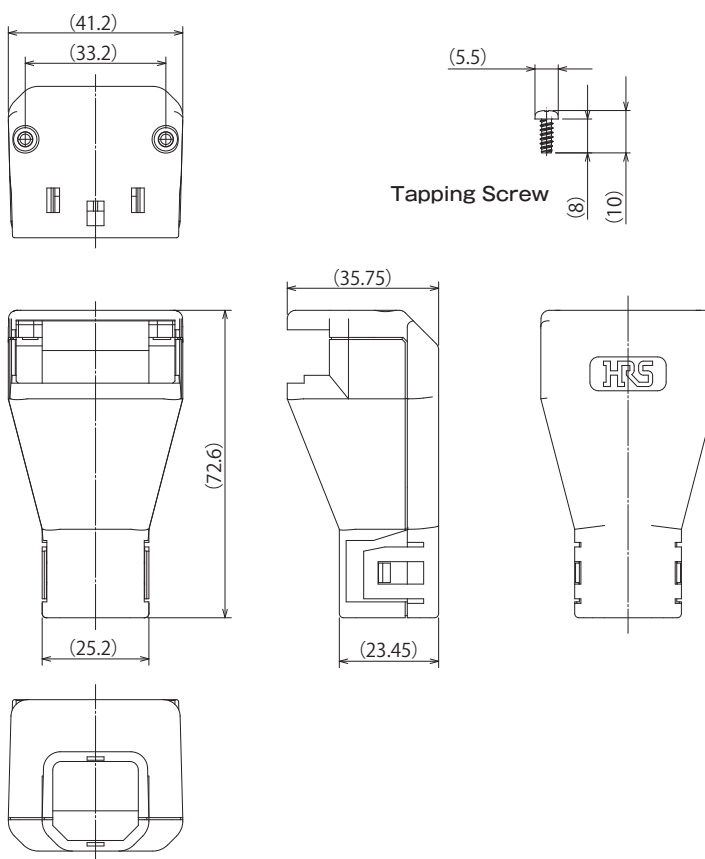
### ● Plug



Part No.	HRS No.	Insulator Color	Purchase Unit
PS3C-A-1UP	CL0236-1064-5-00	Black	30pcs per tray
PS3C-B-1UP	CL0236-1065-8-00	Red	



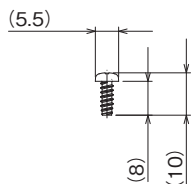
### ● Plug Cover



Part No.	HRS No.	Insulator Color	Purchase Unit
PS3C-1UP-CVL	CL0236-1066-0-00	Black	15pcs per tray
PS3C-1UP-CVL(01)	CL0236-1066-0-01	Red	

### ● Tapping Screw

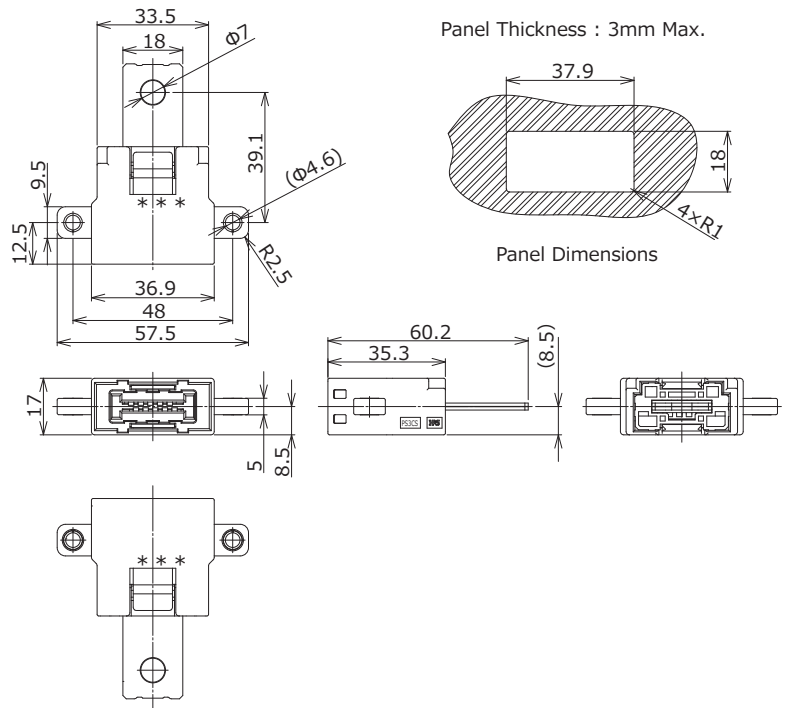
It is meant for use in repair operation when the same tapping screw attached to the plug cover is lost.



Part No.	HRS No.	Purchase Unit
PS3C-1UP-TS	CL0236-1068-6-00	60pcs per bag

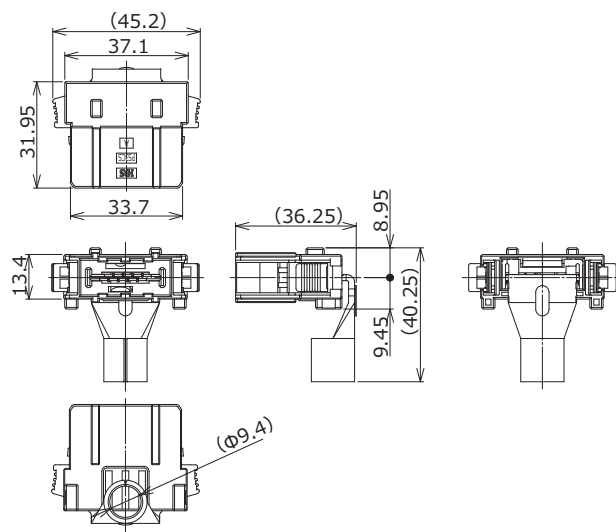
## PS3CS Series

### ● Receptacle



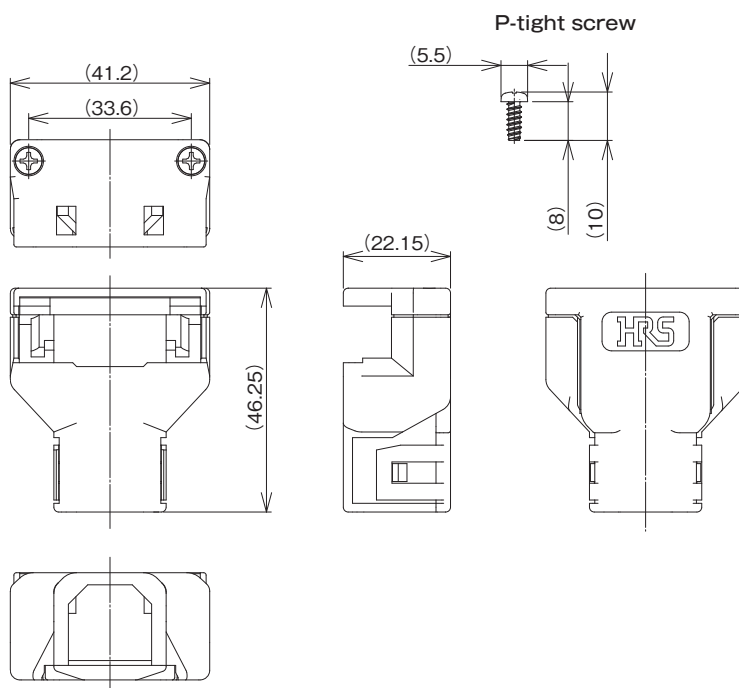
Part No.	HRS No.	Insulator Color	Purchase Unit
PS3CS-A-1US(10)	CL0236-1074-0-10	Black	15pcs per tray
PS3CS-B-1US(10)	CL0236-1075-0-10	Red	

### ● Plug



Part No.	HRS No.	Insulator Color	Purchase Unit
PS3CS-A-1UP	CL0236-1076-0-00	Black	39pcs per tray
PS3CS-B-1UP	CL0236-1077-0-00	Red	

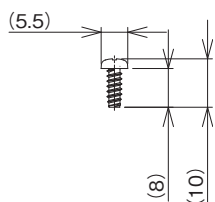
### ● Plug Cover



Part No.	HRS No.	Insulator Color	Purchase Unit
PS3CS-1UP-CVL	CL0236-1078-0-00	Black	24pcs per tray
PS3CS-1UP-CVL(01)	CL0236-1078-0-01	Red	

### ● P-Tight Screw

It is meant for use in repair operation when the same P-tight screw attached to the plug cover is lost.



Part No.	HRS No.	Purchase Unit
PS3CS-1UP-PS	CL0236-1081-0-00	48pcs per bag

## Precautions

- M4 screw is used to assemble the receptacle with the housing.
- The recommended amount of torque used to tighten the screws should be 1.2 to 2.1 N·m.
- The recommended fastening torque of the screw attached the power female contact on the receptacle side is 2.5 to 5.2 N·m.  
Please use standard tools including torque wrench etc. (JIS B 4652) for screw-fastening.  
In addition, please use standard tools (JIS C 9711) for crimping the power male contact on the PS3CS plug side.
- Power contacts are silver plated and may react with the sulfide in the atmosphere. This might cause the color to change to a dark brown.
- The power contacts do not support hot plugging, and cannot be used to shut off the power.
- As PS3C series and PS3CS series do not mate with each other, please use them only with the products of the same series.

## Safety Standards Certifications (UL, C-UL, TÜV) (PS3C only)

The PS3C, PS3CS series has received safety certifications from the UL, C-UL, and TÜV under the conditions provided in Table 1 and Table 2.

Please refer to Tables 1 and 2, as there are various conditions for safety standard depending on the application content of rated voltage and rated current.

(Conditions for PS3CS series are now being adjusted.)

● Table 1. Conditions for UL and C-UL

	Condition ①	Condition ②
Rated Voltage (AC/DC)	600V	
Rated Current	100A	150A
Cable	14 to 22sq (Note 1), 5 to 3 AWG	38 to 50sq (Note 1), 1 to 1/0 AWG
Creepage Distance (Note 2)	3.2mm Min.	
Clearance (Note 2)	3.2mm Min.	

● Table 2. Conditions for TÜV

	Condition I	Condition II	Condition III
Rated Voltage (AC/DC)	800V	600V	1.000V
Rated Current	100A (cable 14 to 22sq) ( Note 1), 5 to 3 AWG 125A (cable 38sq) (Note 1), 1 AWG 150A (cable 50sq) (Note 1), 1/0 AWG		
Overvoltage Category	II	III	
Contamination Level	3		
Creepage Distance (Note 2)	12.6mm Min.	12.6mm Min.	16mm Min.
Clearance (Note 2)	6mm Min.	6mm Min.	8mm Min.
Insulation System	Basic insulation (Panel should be grounded)		

Note 1 : Use the screw and crimp contact combination recommended below. The use of other screws and crimp contacts can affect clearance and creepage distance.

If you choose to use a different screw/contact combination, be sure to check the measurements for clearance and creepage.

Make sure that these conditions will meet the UL, C-UL and TÜV.

• Recommended screw : JIS B 1188 spring lock washer + cross recessed head screw with captive flat washer M6 × 12

• Recommended crimp contacts

Cable 14sq : JIS C 2805 R14-6

Cable 22sq : JIS C 2805 R22-6

Cable 38sq : NICHIFU R38-6S

Cable 50sq : NICHIFU R60-6S

Note 2 : Subjects of clearance and creepage distance are as follows.

- Between the power contacts of plus and minus electrodes.
- Between the crimp contacts of plus and minus electrodes.
- Between power contact and panel
- Between screw (attached to power contact) and panel

## While Taking into Consideration

Specifications mentioned in this catalog are reference values.

When considering to order or use this product, please review the Drawing and Product Specifications sheets.

Use an appropriate cable when using the connector in combination with cables.

If considering usage of a non-specified cable, please contact your sales representative.

If assembly process is done by jigs & tools which are not identified by Hirose, the warranty of the product may be affected.

If considering usage for below mentioned applications, please contact your sales representative.

In cases where the application will demand a high level of reliability, such as automotive, medical instruments, public infrastructure, aerospace/defense etc. Hirose must review before assurance of reliability can be given.



Dec.1.2024 Copyright 2024 HIROSE ELECTRIC CO., LTD. All Rights Reserved.



※ The contents of this catalog are current as of date of 6/2024. Contents are subject to change without notice for the purpose of improvements.  
※ The HRS logo and "HIROSE" are trademarks of HIROSE ELECTRIC CO., LTD.