

High Current Connector

PS2 Series



■ Features

1. Power/Signal Hybrid Connector

The Hybrid design saves space by combining power

and signal contacts together in one unit with dedicated power contacts to handle 100, 200 or 300 Amps.

2. Floating Structure

The structure allows up to ± 2.5 mm of float in the X and Y directions, which makes mating easier even when the mating position is not clearly visible.

3. Sequential Contact System

This series utilizes sequential contacts, the power contacts mate before the signal contacts. This prevents incomplete mating and also prevents hot swapping.

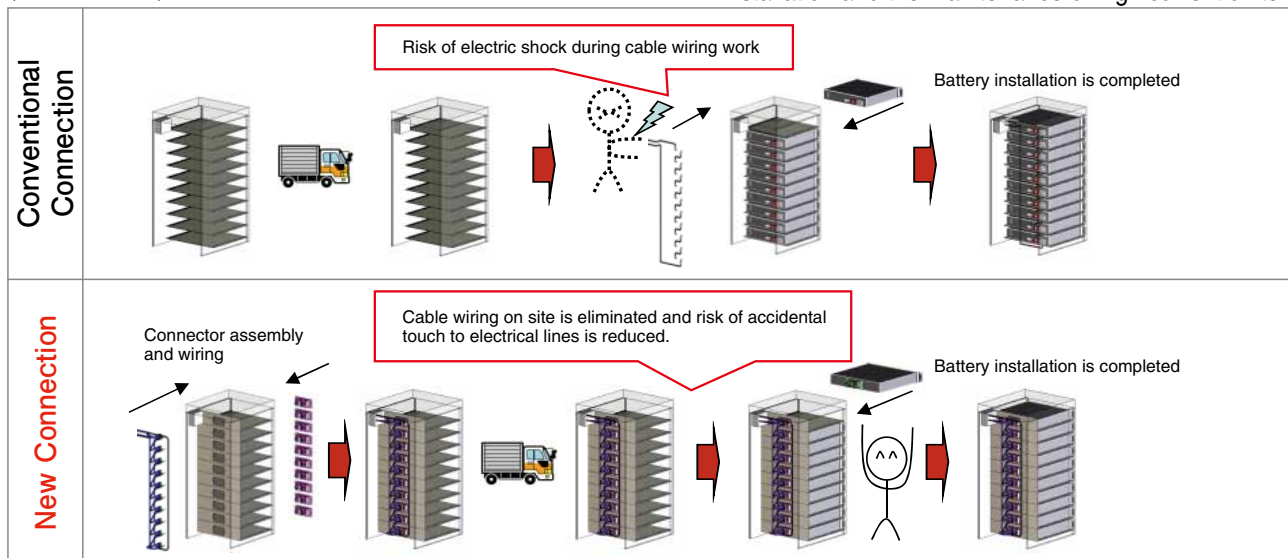
4. Finger Protection Structure

For added safety, the plug side (battery side) is designed to prevent shock hazard and provides for more user safety and security.

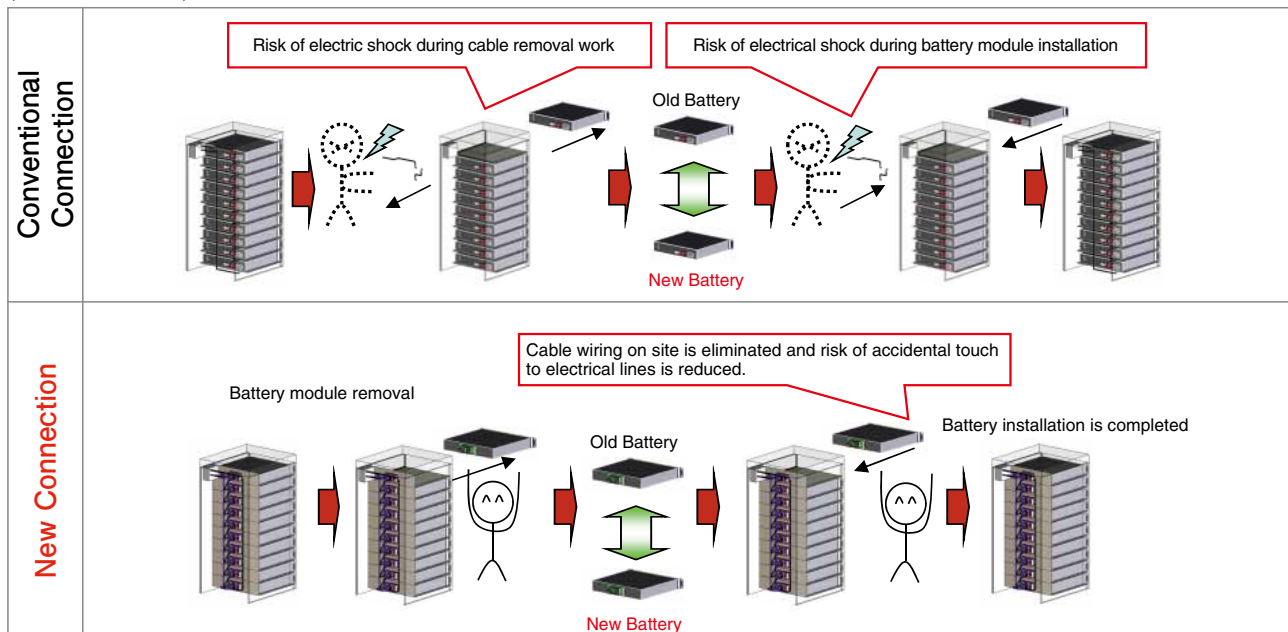
5. Plug-in Design

Its unique plug-in design provides enhanced safety features, reduced production costs related to its installation and the maintenance of high current units.

(Installation)



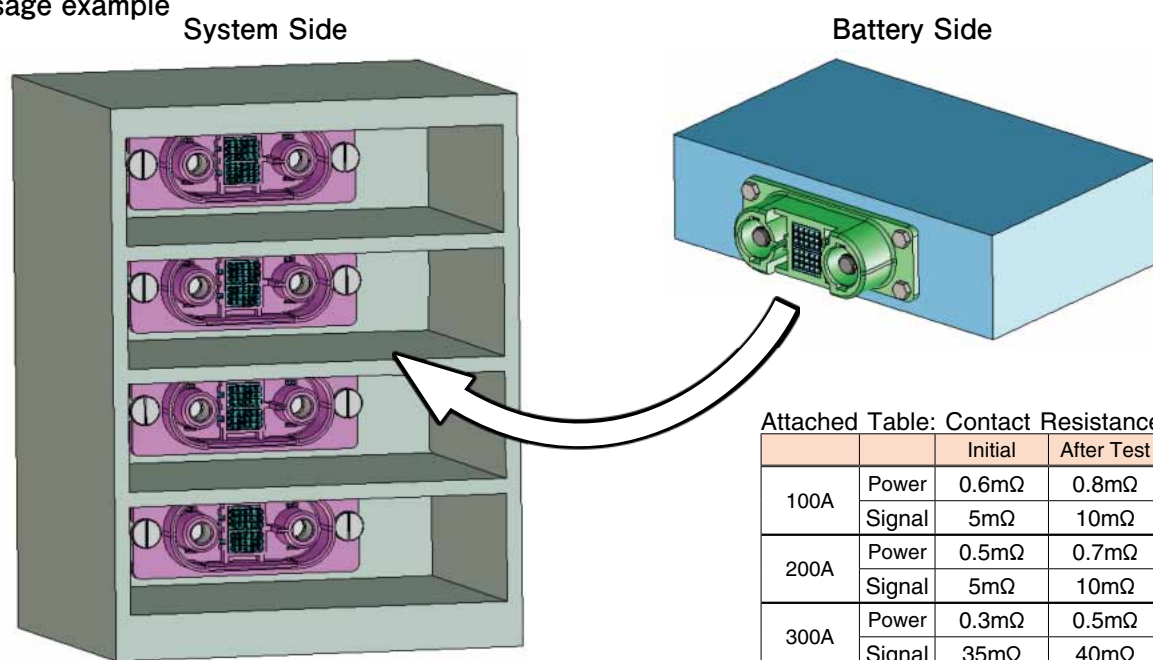
(Maintenance)



■Applications

●Storage Battery, UPS

Usage example



Attached Table: Contact Resistance

		Initial	After Test
100A	Power	0.6mΩ	0.8mΩ
	Signal	5mΩ	10mΩ
200A	Power	0.5mΩ	0.7mΩ
	Signal	5mΩ	10mΩ
300A	Power	0.3mΩ	0.5mΩ
	Signal	35mΩ	40mΩ

■Product Specifications

Ratings	—	Power Part	Signal Part	Operating Temp. Range
	Current	300 A	5A	–40~105℃
		200 A		Storage Temp. Range
		100 A		–55~60℃
	Voltage	1,000 V	100V	

Item	Specifications	Conditions
1. Contact resistance	Attached table	Measured at DC 1 A Measured at DC 100 mA
2. Insulation resistance	5,000 MΩ or more	Measured at DC 250 V
3. Withstand voltage	No flashover or breakdown	Power: Apply AC 2,000 V for one minute Signal: Apply AC 1,000 V for one minute
4. Durability	Attached table	50 mating cycles
5. Shock resistance	No electrical discontinuity of 10 μs or more	Acceleration 490 m/s ² , duration 11 ms, half-sine wave, 3 times each for each of the 3 axes.
6. Vibration resistance	No electrical discontinuity of 10 μs or more	10 cycles in each of 3 axial directions at frequency 10-55 Hz, half amplitude 0.75 mm
7. Temperature cycles	Attached table Minimum of 1,000 MΩ	Temperature: –40 → 105℃ Time: 30 → 30 min
8. Salt water spray	No significant corrosion	5% salt water spray concentration while keeping samples at 35℃ for 48 hours.

■Materials

●Receptacle

Parts	Materials	Color/Treatment	Remarks
Insulation case	Synthetic resin	Black	UL94V-0
Power contact	Brass/Copper alloy	Silver plating	—
Contact spring	Copper alloy	Silver plating	—
Rotation stopper	Synthetic resin	Black	UL94V-0
Crimp case	Synthetic resin	Black	UL94V-0
Signal contact	Copper alloy	Gold plating	—
Floating screw	Stainless steel/Steel	—/Trivalent chrome	—

●Plug

Parts	Materials	Color/Treatment	Remarks
Insulation case	Synthetic resin	Black	UL94V-0
Power contact	Brass/Copper alloy	Silver plating	—
Rotation stopper	Synthetic resin	Black	UL94V-0
Cap	Synthetic resin	Black	UL94V-0
Crimp case	Synthetic resin	Black	UL94V-0
Signal contact	Copper alloy	Gold plating	—

Product Number Structure

Refer to the charts below for determining specific part number characteristics.

Please select connectors listed in this catalog when placing orders and be sure to check the latest delivery specifications at the time of ordering the product.

Connector

PS2 – 2 W P / 6C / 6C

1 2 3 4 5 6

Crimp Case

PS2 – 6 PC

1 7 8

Crimp Contact

PS2 – 1618 P C F A

1 9 4 10 11 12

1	Series name
2	No. of power contacts
3	R: 100A V: 200A W: 300A
4	P: Male S: Female
5	Signal contact block 1
6	Signal contact block 2
7	No. of signal contacts
8	PC: Male crimp case SC: Female crimp case
9	Applicable wires of signal contact 16-18 AWG
10	Crimp contact
11	F: Reel contacts None: Loose piece contacts
12	Gold plating

List of Combinations

300 A type

Male: PS2-2WP/6C/6C + PS2-6PC + PS2-1618PCFA

Female: PS2-2WS/6C/6C + PS2-6SC + PS2-1618SCFA

200 A type

Male: PS2-2VP/42C + $\begin{cases} \text{PS2-18PC} \\ \text{PS2-42PC} \end{cases}$ + $\begin{cases} \text{PQ50SA-1822PCFA} \\ \text{PQ50SA-2428PCFA} \\ \text{PQ50SA-1822PCFA} \\ \text{PQ50SA-2428PCFA} \end{cases}$

Female: PS2-2VS/42C + $\begin{cases} \text{PS2-18SC} \\ \text{PS2-42SC} \end{cases}$ + $\begin{cases} \text{PQ50S-1822SCFA} \\ \text{PQ50S-2428SCFA} \\ \text{PQ50S-1822SCFA} \\ \text{PQ50S-2428SCFA} \end{cases}$

100 A type

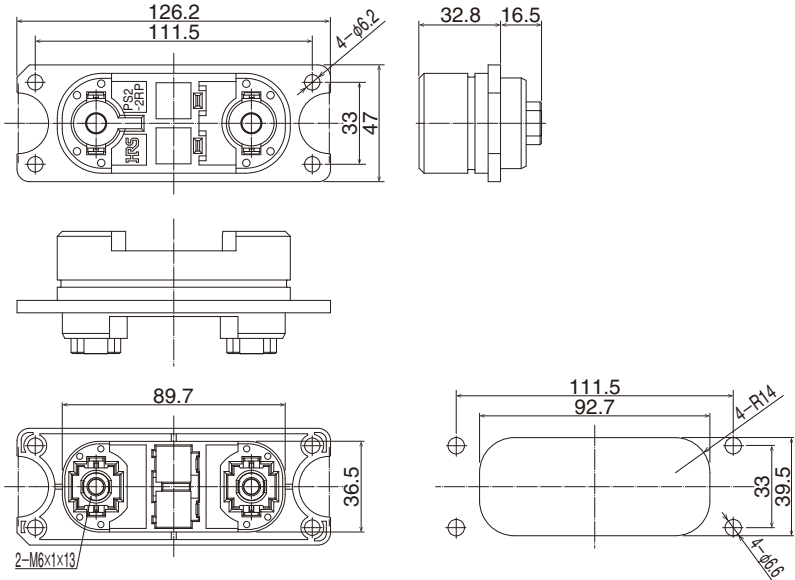
Male: PS2-2RP/9C/9C + PS2-9PC + $\begin{cases} \text{PQ50SA-1822PCFA} \\ \text{PQ50SA-2428PCFA} \end{cases}$

Female: PS2-2RS/9C/9C + PS2-9SC + $\begin{cases} \text{PQ50S-1822SCFA} \\ \text{PQ50S-2428SCFA} \end{cases}$

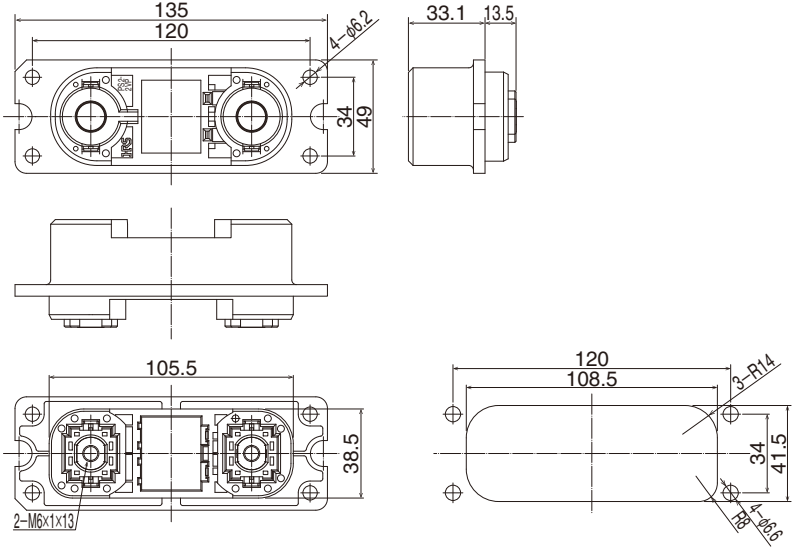
■Plug

Current	Part Number	HRS No.	Sales Unit	RoHS
100A	PS2-2RP/9C/9C	CL236-1036-0-00	Each	○
200A	PS2-2VP/42C	CL236-1060-4-00		○
300A	PS2-2WP/6C/6C	CL236-1032-9-00		○

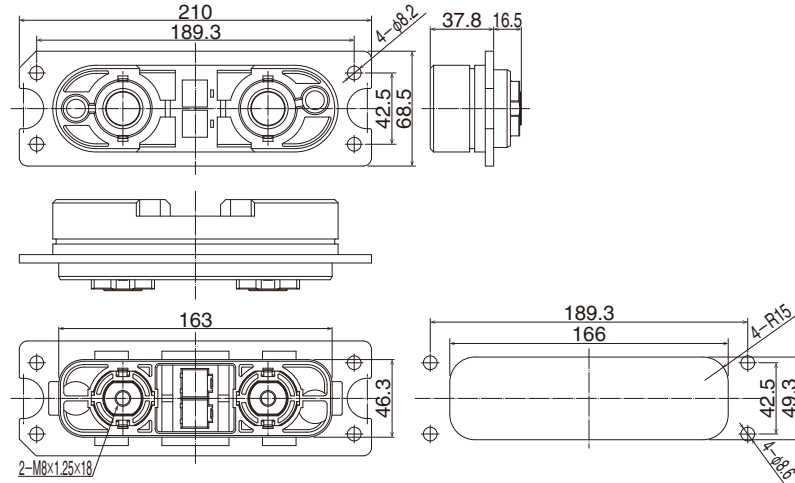
◇100A



◇200A



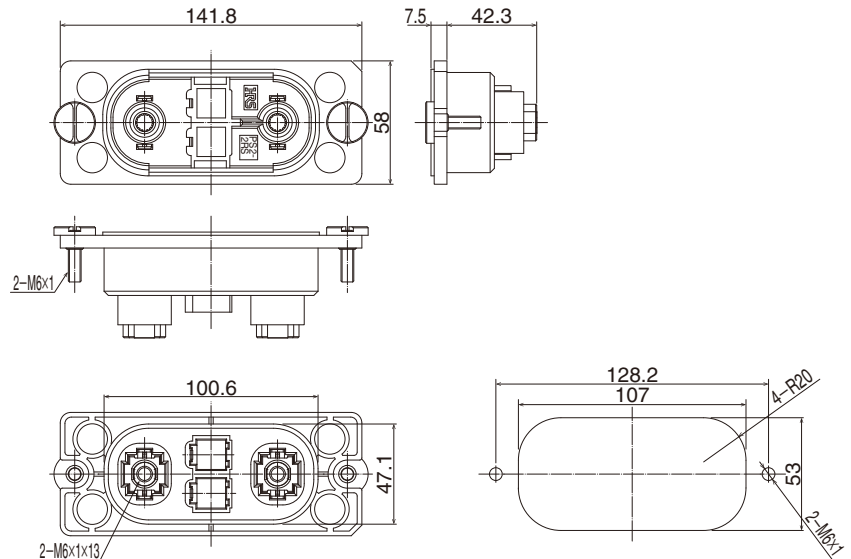
◇300A



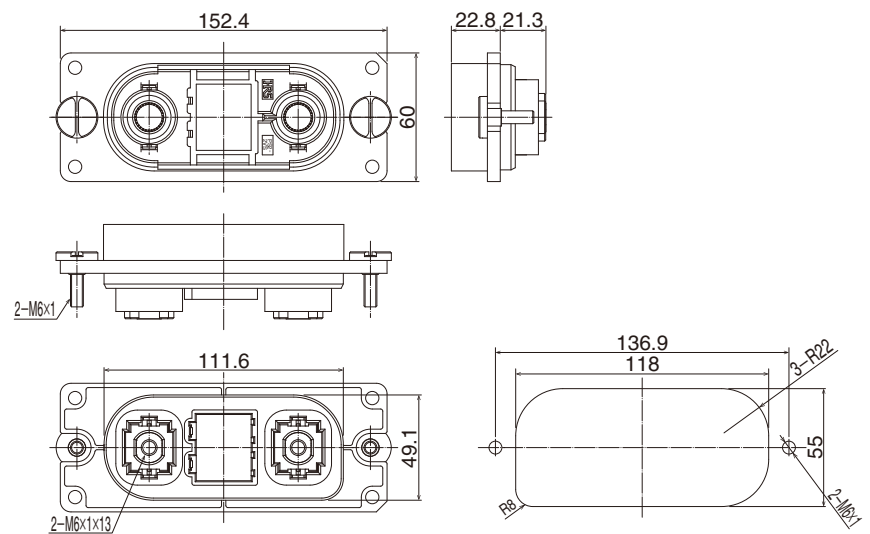
Receptacle

Current	Part Number	HRS No.	Sales Unit	RoHS
100A	PS2-2RS/9C/9C	CL236-1037-2-00	Each	☐
200A	PS2-2VS/42C	CL236-1046-3-00		☐
300A	PS2-2WS/6C/6C	CL236-1033-1-00		☐

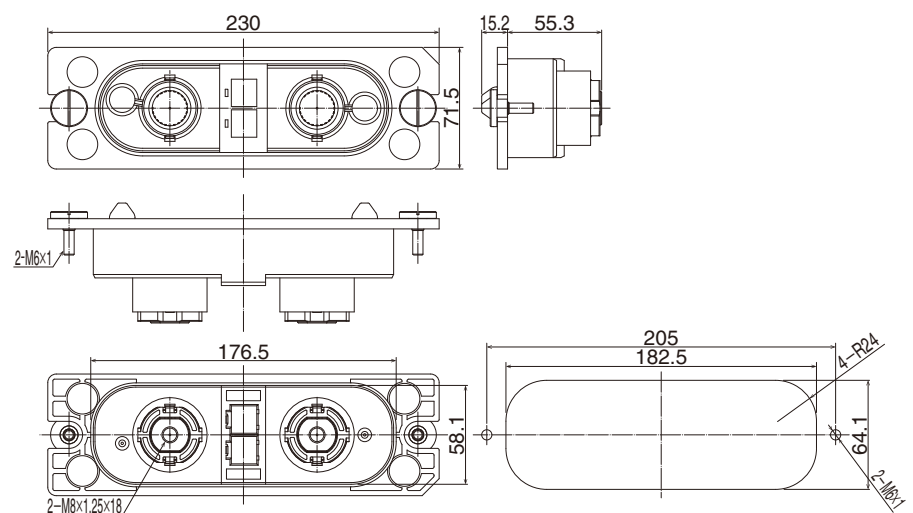
◇100A



◇200A



◇300A



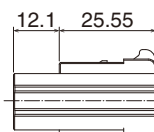
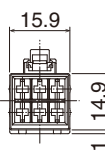
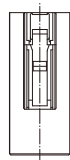
■ Crimp Contact Housing

Part Number	HRS No.	Sales Unit	RoHS
PS2-6PC	CL236-1034-4-00	100 pieces per bag	○
PS2-6SC	CL236-1035-7-00		○
PS2-9PC	CL236-1038-5-00		○
PS2-9SC	CL236-1039-8-00		○

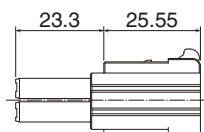
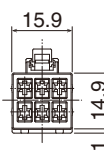
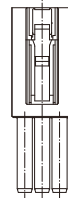
Part Number	HRS No.	Sales Unit	RoHS
PS2-18PC	CL236-1049-1-00	50 pieces per bag	○
PS2-18SC	CL236-1050-0-00		○
PS2-42PC	CL236-1047-6-00		○
PS2-42SC	CL236-1048-9-00		○



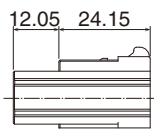
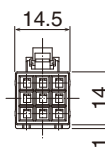
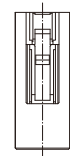
●PS2-6PC



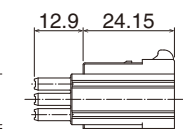
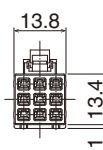
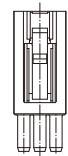
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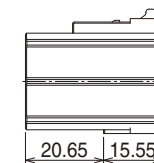
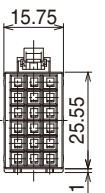
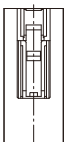
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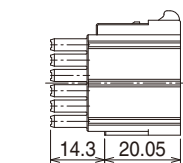
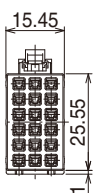
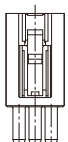
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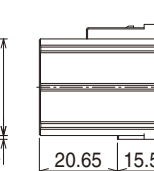
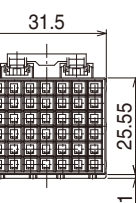
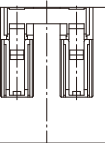
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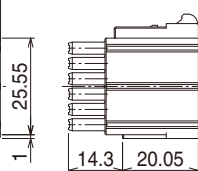
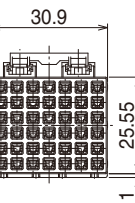
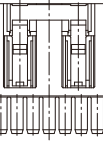
●PS2-18SC



●PS2-42PC



●PS2-42SC

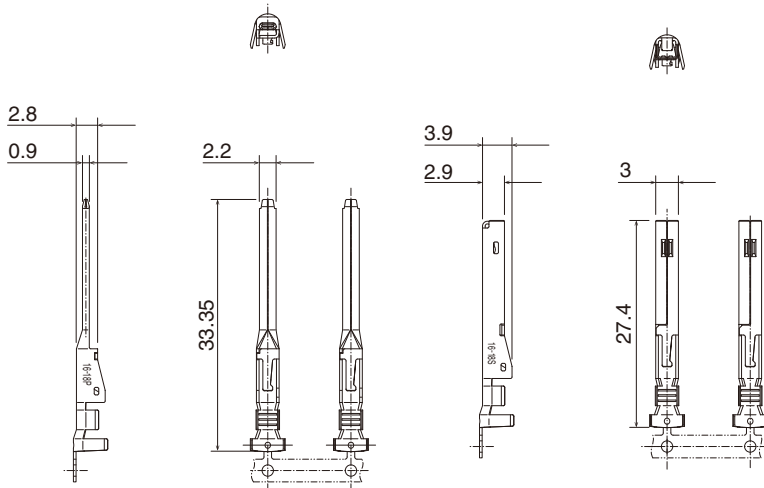


■Crimp Contact

Part number	HRS No.	Sales Unit	RoHS
PS2-1618PCFA	CL236-1028-1-00	3500 per reel	○
PS2-1618PCA	CL236-1051-3-00	100 pieces per bag	○
PS2-1618SCFA	CL236-1029-4-00	3500 per reel	○
PS2-1618SCA	CL236-1052-6-00	100 pieces per bag	○
PQ50SA-1822PCFA	CL236-2029-0-00	6000 per reel	○
PQ50SA-1822PCA	CL236-2048-4-00	100 pieces per bag	○
PQ50SA-2428PCFA	CL236-2030-9-00	6000 per reel	○
PQ50SA-2428PCA	CL236-2049-7-00	100 pieces per bag	○
PQ50S-1822SCFA	CL236-2026-1-00	6000 per reel	○
PQ50S-1822SCA	CL236-2050-6-00	100 pieces per bag	○
PQ50S-2428SCFA	CL236-2028-7-00	6000 per reel	○
PQ50S-2428SCA	CL236-2051-9-00	100 pieces per bag	○

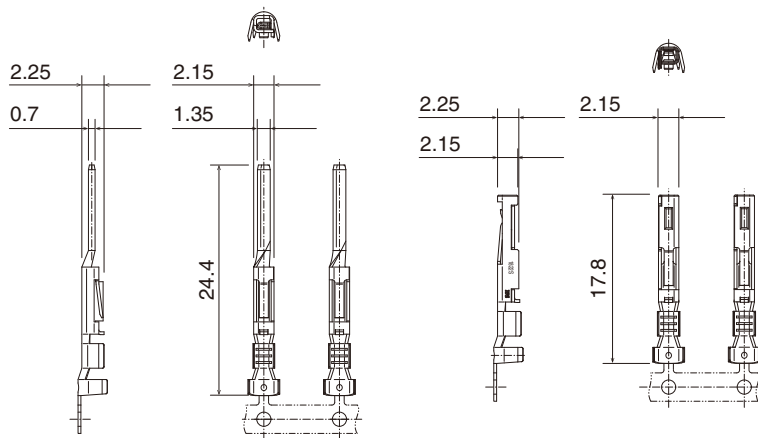
●PS2-1618PCFA

●PS2-1618SCFA



●PQ50SA-1822PCFA 2428

●PQ50S-1822SCFA 2428



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