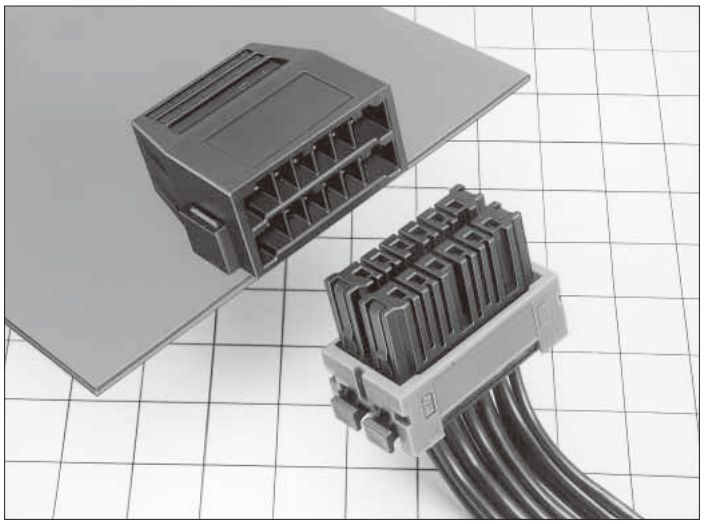
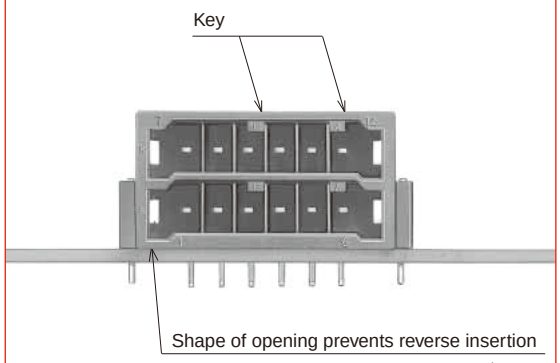
Power Supply Connectors For Industrial Equipment

PX Series



Structure prevents mis-insertion



■Features

1. Power supply connector for high-current

Withstands voltage of 2200V AC max. and 10A/contact (60A/6 pos.) of rating current.

2. Housing design prevents incorrect insertion

Opening section is designed to prevent reverse insertion and mating direction is easily checked. Additionally, the opening section is keyed to prevent misalignment of plugs in parallel applications.

3. Reduced Size

When compared to conventional products, Hirose's plug is smaller in size by 65% and the receptacle is smaller by 55%.

4. Reliable contact structure

①Three point contact

②Gold plated contact point (standard) with high-level environmental resistance

③Contact spring guard structure

④Structure prevents retainer deformation

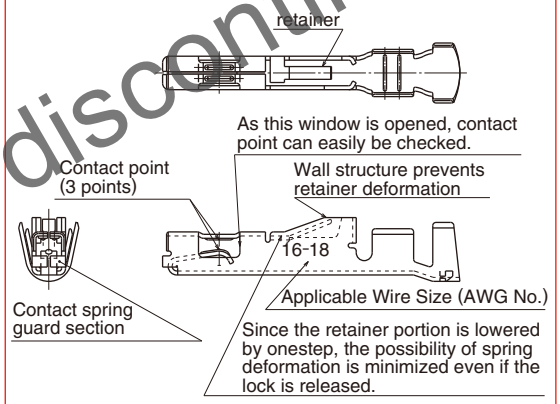
5. Easy Cable Assembly

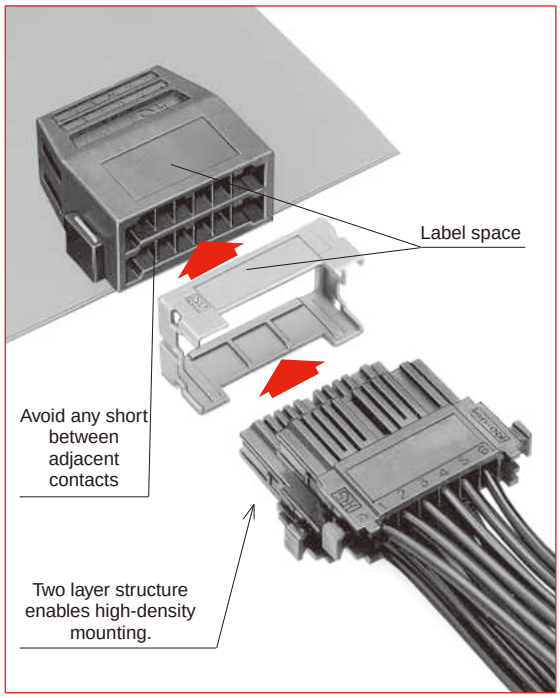
①Use of dedicated crimping tools will make harness work easier.One tool crimps both AWG#16 and AWG#18 wire.

②Positive lock can be felt on contact insertion.

③Release of contact lock can easily be performed with dedicated jig, which facilitates the wiring modification after assembly.

Reliable contact structure





Scheduled to be discontinued

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■Product Specifications

Ratings	Operating temperature range	-55℃～+105℃
	Voltage rating	600V AC
	Current rating	10A

Description	Specifications	Requirements
1.Contact resistance	10mΩ max.	100mA
2.Insulation resistance	1000MΩ min.	500V DC
3.Withstanding voltage	No flashover or insulation breakdown.	2200V AC / 1 minute.
4.Durability	①Contact resistance : 20mΩ max. ②No damage, cracks or looseness of parts	1000 cycles
5.Vibration	①No electrical discontinuity of 10μs or more. ②Contact resistance : 20mΩ max. ③No damage, cracks or looseness of parts	Frequency:10 to 55Hz,single amplitude of 0.75mm, 2 hours,3axis
6.Shock		Acceleration: 490m/s² Duration: 11ms Test at sine half-wave, 3 axes, bi-directional three times, respectively.
7.Temperature cycle	①Contact resistance : 20mΩ max. ②Insulation resistance : 1000MΩ min. ③No damage, cracks or looseness of parts	Temperature : -55→+5～+35→+85→+5～+35℃ Time : 30→10～ 15→ 30→10～15Minutes 5 cycles
8.Humidity	①Contact resistance : 20mΩ max. ②Insulation resistance : 1000MΩ min. ③No damage, cracks or looseness of parts	96 hours at 40±2℃ and humidity of 90～95%
9.Salt spray	①No corrosions	5% salt water for 48 hours

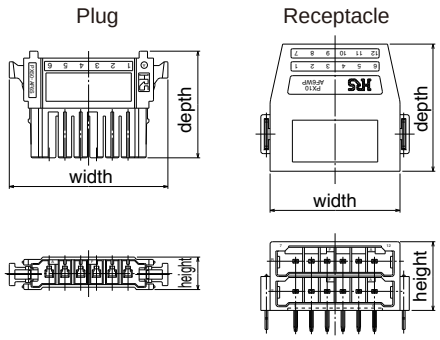
■Materials

Parts	Material	Finish
Contacts	Copper alloy	Gold plating
Insulator	PBT (UL94V-0)	
Metal fixture	Copper alloy	Tin reflow plating

◆Comparison In Size With Conventional Equivalent

(mm)

		PX	A company-made
Plug	Width	34.2	44.94
	Height	7.0	7.15
	Depth	23.0	22.80
Receptacle	Width	28.0	39.40
	Height	14.8	18.47
	Depth	27.4	27.18



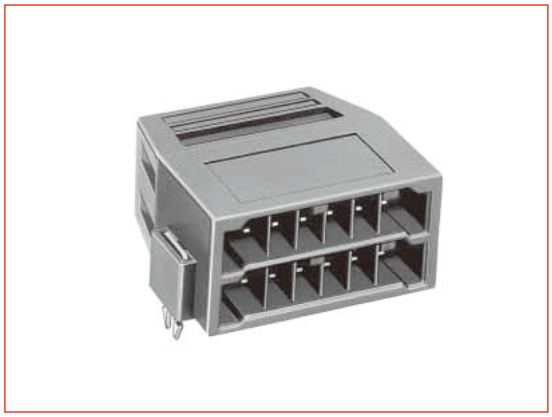
For volume ratio, plug is downsized to : nearly 65%; and
receptacle : nearly 55%.

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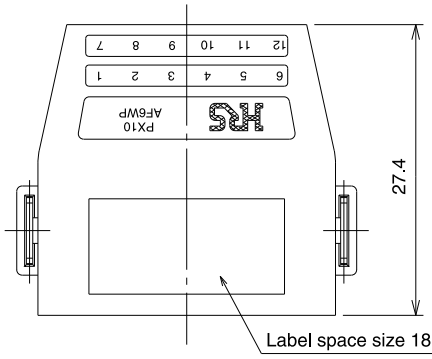
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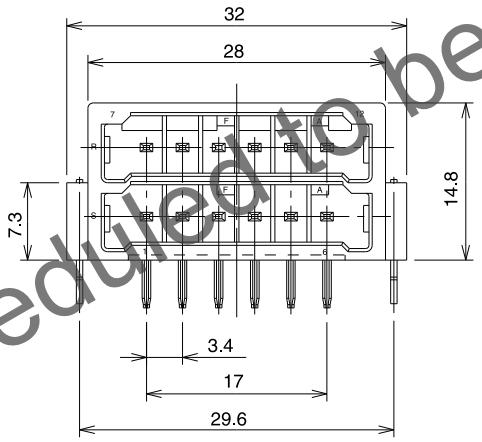
■Receptacles

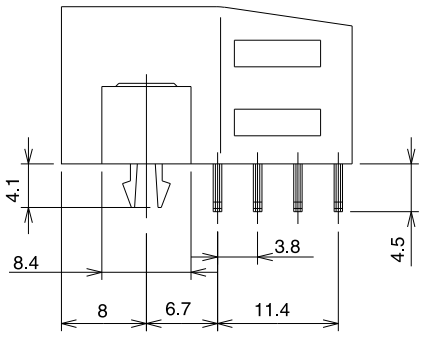
●6 pos.×2 row Type



Part No.	CL No.	RoHS
PX10-AF6WP(50)	236-0001-0-50	YES

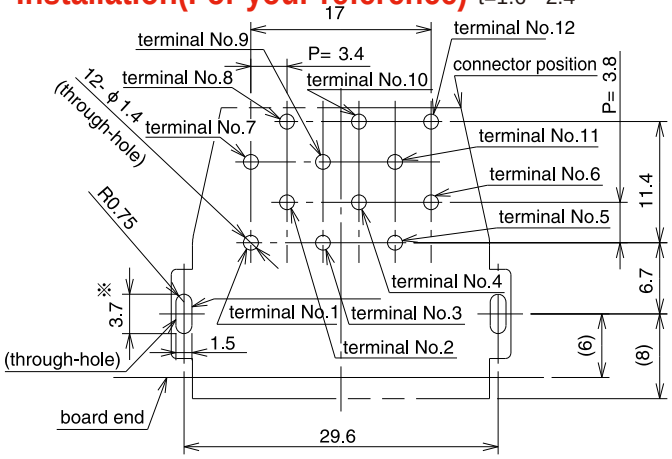




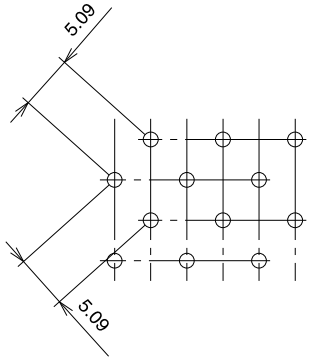


Scheduled to be discontinued

◆Dimensions For Circuit Board Installation(For your reference) t=1.6~2.4



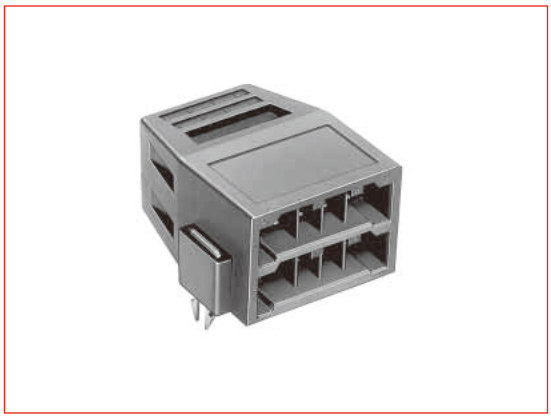
◆PCB mounting pattern



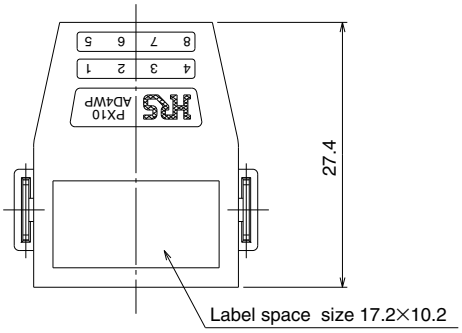
※Where t=1.6 (Setting value depends on thickness of boards.)

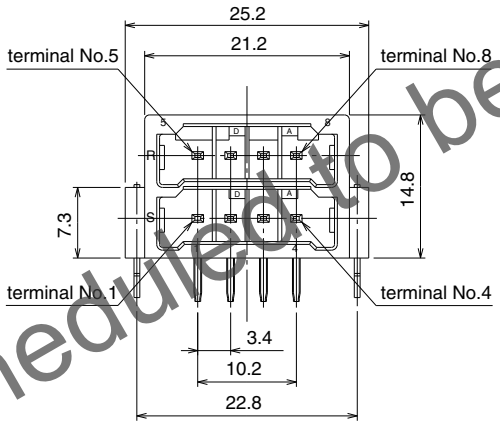
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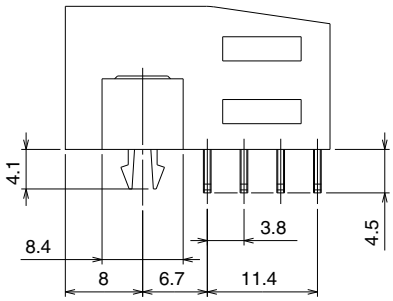
●4 pos.×2 row Type



Part No.	CL No.	RoHS
PX10-AD4WP(50)	236-0005-0-50	YES

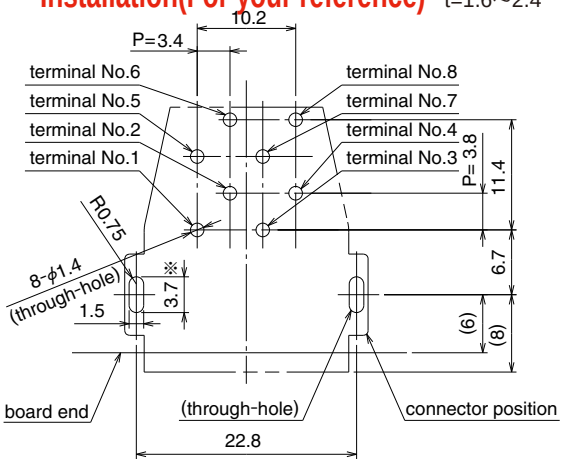




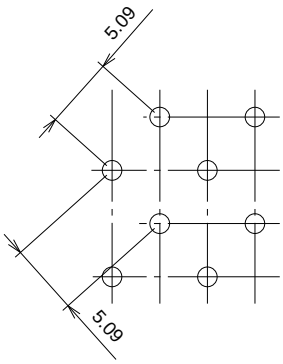


Scheduled to be discontinued

◆Dimensions For Circuit Board Installation(For your reference) t=1.6~2.4



◆PCB mounting pattern



∗ Where t=1.6 (Setting value depends on thickness of boards.)

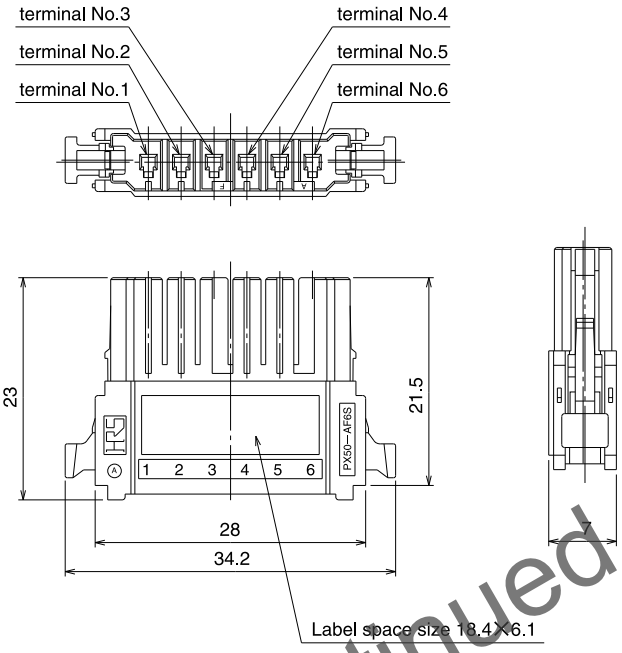
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■Plug

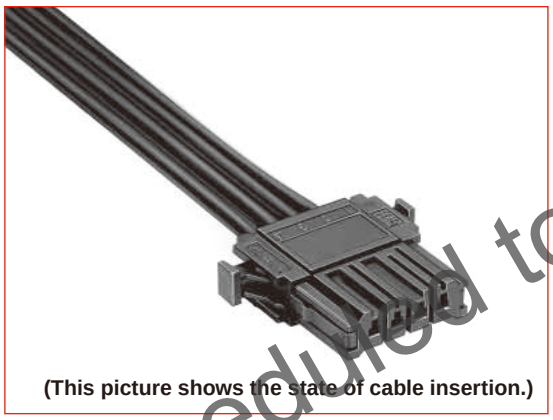
●6-Position Type



Part No.	CL No.	RoHS
PX50-AF6S	236-0002-2	YES

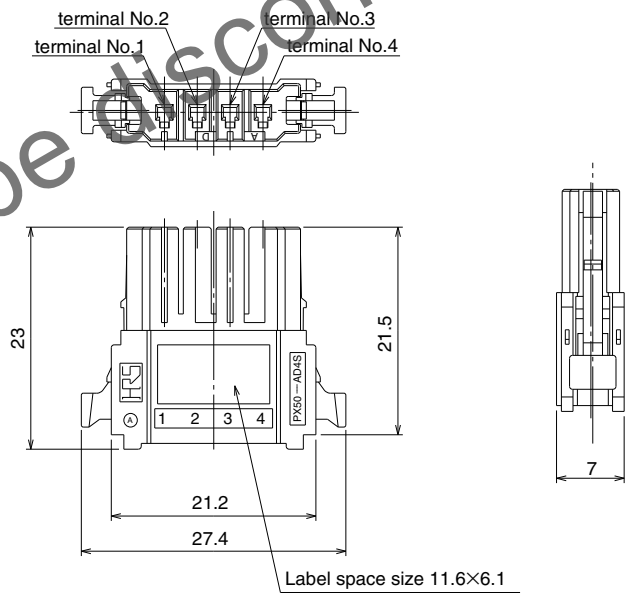


●4-Position Type



(This picture shows the state of cable insertion.)

Part No.	CL No.	RoHS
PX50-AD4S	236-0006-3	YES



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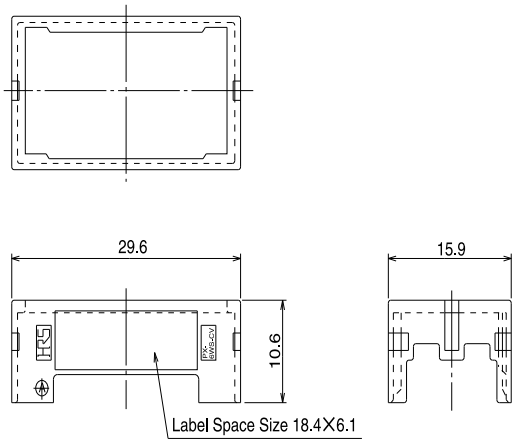
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■Simple-Type Plug Holder Cover

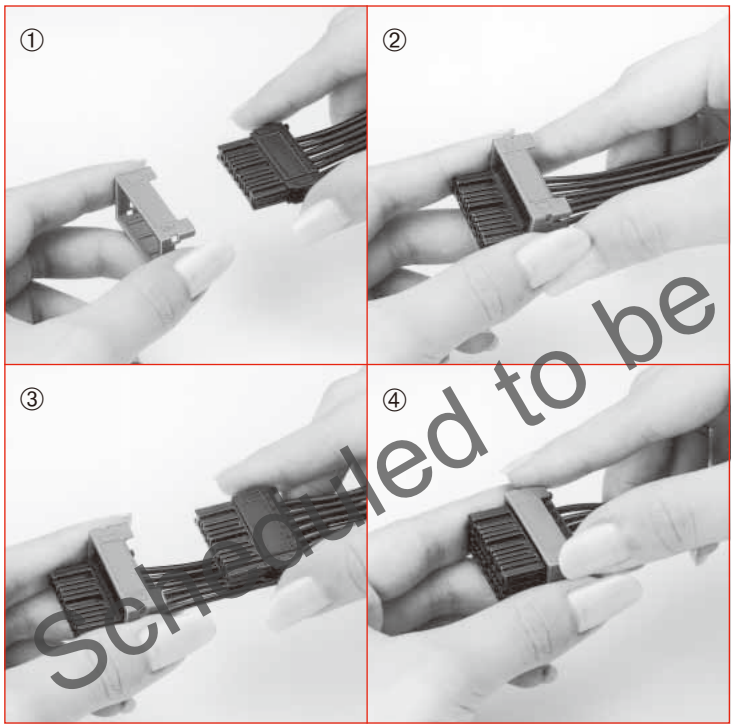
●For 6-Position Type



Part No.	CL No.	RoHS
PX-6WS-CV	236-0004-8	YES

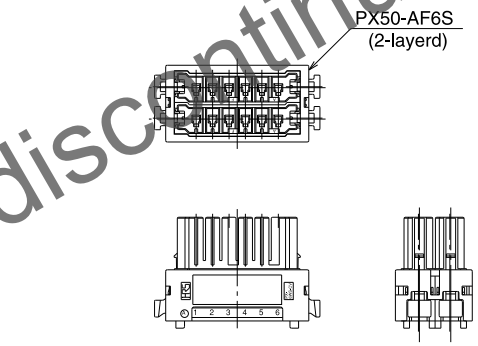


◆Installation status



◆Installation method

●6-Position Type



Scheduled to be discontinued

<Caution>The holder cover is not a rugged support fixture but only meant for alignment of the plugs. When external force is imposed by pulling of cables, etc. before mating, please bundle all cables together around the connector with union bands, etc.

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■Crimp contact

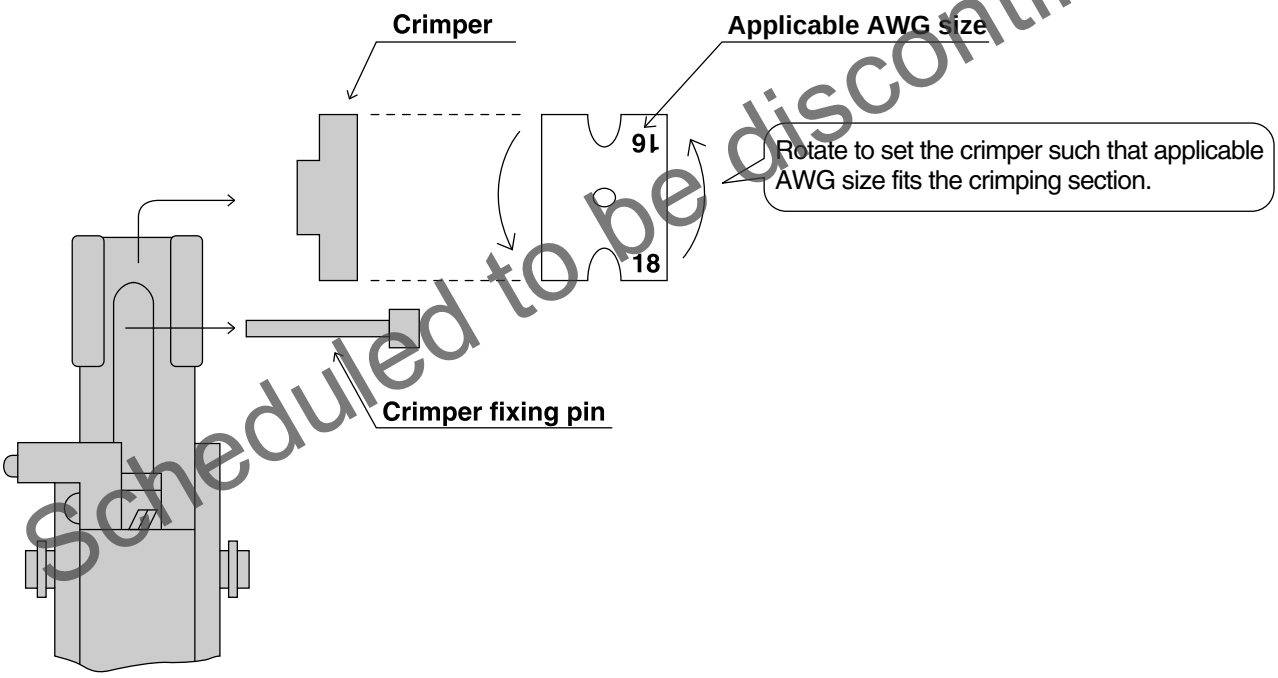
Applicable wire size	Packaging	Part No.	CL No.	Quantity	RoHS
16, 18	Reel	PX50-SC-231	236-0003-5	5,000	YES
	Bag	PX50-SC-131	236-0008-9	200	

Please order by integral multiple of the packing volume.

■Tools

Type	Description	Part No.	CL No.	Applicable contacts
Automatic	Press unit	CM-105	901-0005-4	PX50-SC-231
	Applicator	AP105-PX50-3	901-2573-8	
Manual	Hand tool (*)	HT104/PX50-3	250-0229-4	PX50-SC-131
Contact extraction tool		PX50-SC-TC	250-0233-1	PX50-SC-*31

*For our manual crimping tools, we employ the rotate-replace procedure to use the crimper depending on wire size.



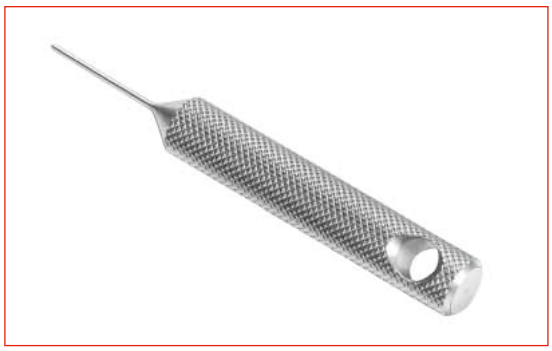
[Manual crimping tool : crimped section]

Note : Since manual crimping tool cannot provide fine adjustment of crimp height, please use the proper crimp height of auto crimper in crimping of the wires other than specified ones

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■Crimp Terminal Remoral Jig

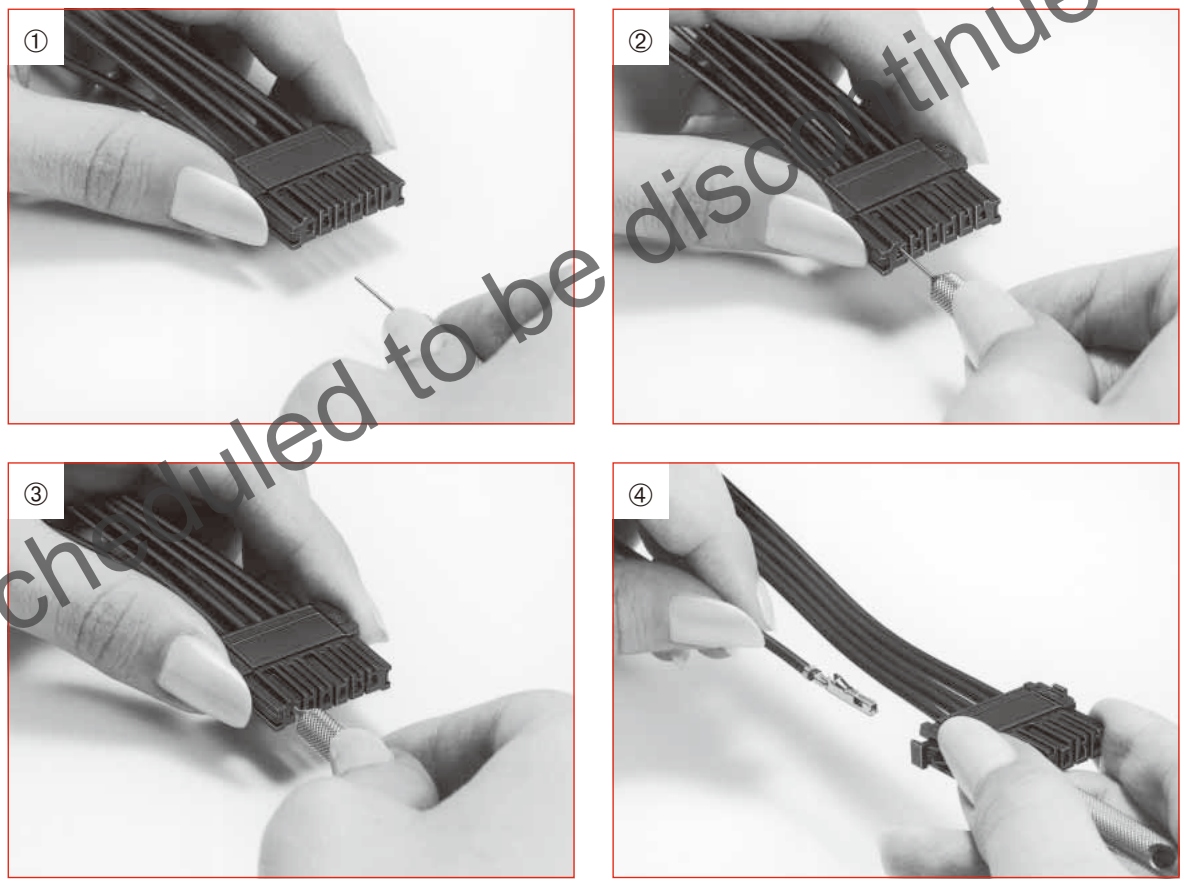


Part No.	CL No.	RoHS
PX-50-SC-TC	250-0233-1	YES

<WARNING>

When the crimp terminal remoral jig is inserted and pushed from the mating face of a connector as shown below, retainer lock of the terminal will be released. Then please extract the cable. If the retainer is too lowered after extracting terminal, put it in a former position and reinsert. Position and direction of the jig top to be inserted are as shown in the Figures below.
Be careful that any mistake will lead to the damage of terminal.

●How To Extract Crimp Terminal



∗ Insert the jig top into the peak of convex section on terminal hole.

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