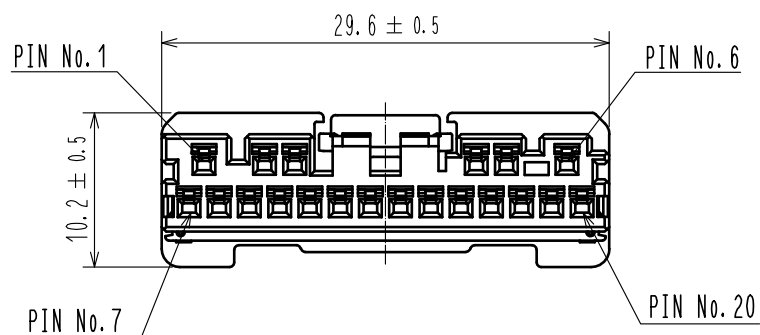
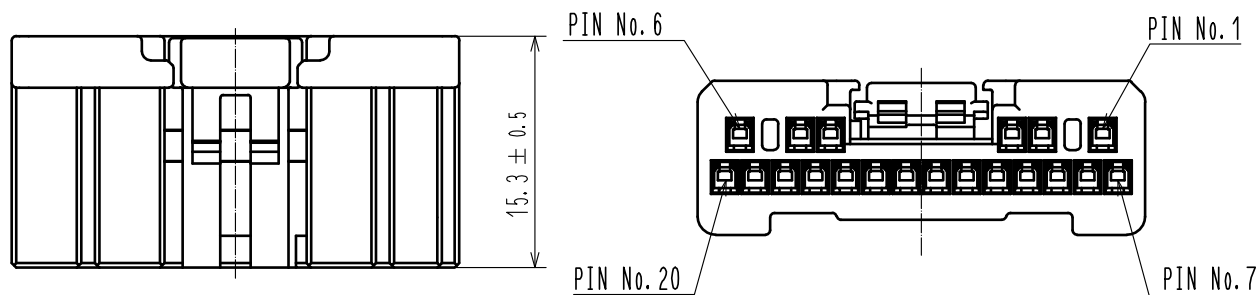


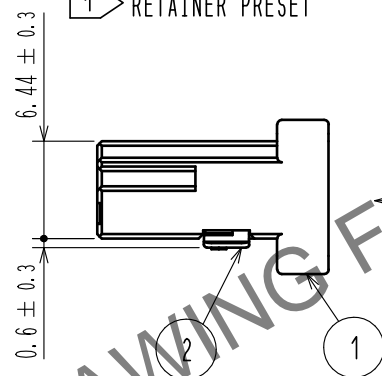
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ELV, RoHS COMPLIANT

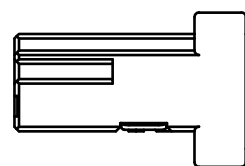
VIEW A



1 RETAINER PRESET



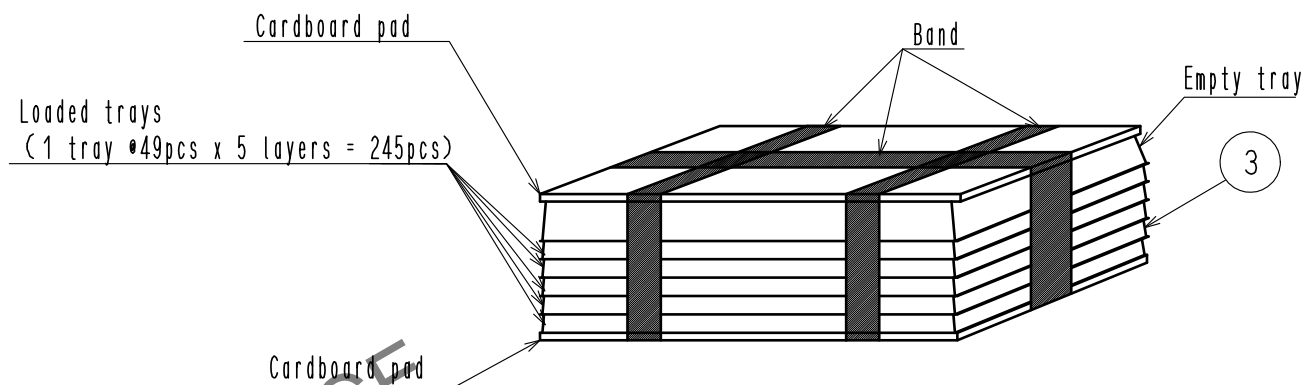
2 RETAINER FIXED



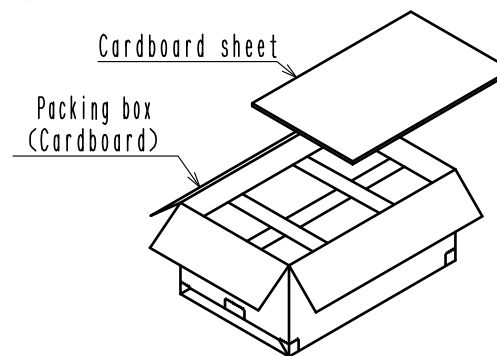
NOTE. 1 RETAINER IS TEMPORARILY ASSEMBLED INTO HOUSING.  
2 RETAINER TO BE COMPLETELY ASSEMBLED INTO POSITION AFTER CONTACT IS INSERTED.

## Packaging Specification

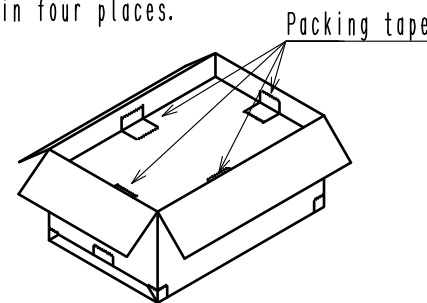
(1) After placing parts in trays, stack in six layers. (Top layer will be empty.)



(2) Place bound trays in box, then place cardboard sheet on top.

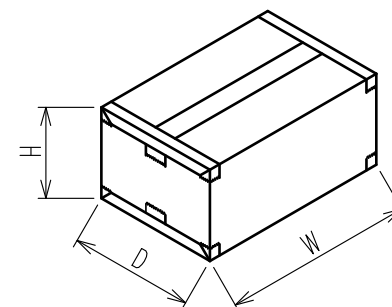


(3) Using packing tape, affix sheet of cardboard to box in four places.



(4) Place lid on box and seal with packing tape.

W=(365)mm  
D=(267)mm  
H=(126)mm



2	PA	NATURAL					
1	PA	GRAY	3	POLYSTYRENE			
NO.	MATERIAL	FINISH . REMARKS	NO.	MATERIAL	FINISH . REMARKS		
UNITS mm		SCALE 2 : 1	COUNT 4	DESCRIPTION OF REVISIONS DIS-T-00006879	DESIGNED YH. MAMADA	CHECKED HH. TSUKUMO	DATE 20201019
HIROSE ELECTRIC CO., LTD.		APPROVED : HK. UMEHARA	20190323	DRAWING NO.	EDC-383549-00-00		
		CHECKED : HK. UMEHARA	20190323	PART NO.	ZE05-20DS-HU/R(CA)		
		DESIGNED : YH. MAMADA	20190323	CODE NO.	CL752-2210-0-00		
		DRAWN : DS. HIROWATARI	20190323				

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## ASSEMBLY PROCESS

①Strip the cable

Note: Please refer to the Crimp Quality Standard (p.4)  
for details on strip length.

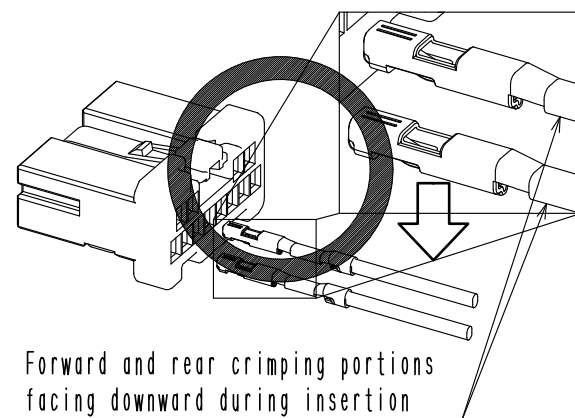
②Crimp wire in terminal

NOTE 1: Please use the Hirose crimp tool.

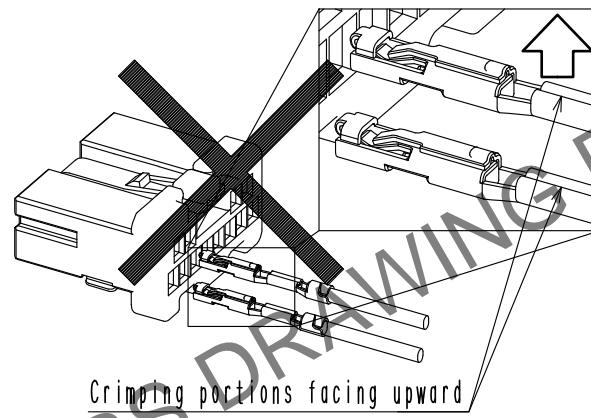
NOTE 2: Please refer to the Crimp Quality Standard  
to confirm terminal compatibility and check crimp condition.

③Insert contact and push until a click is heard.

※Please take care to ensure that the terminal is inserted in the correct orientation.



Forward and rear crimping portions  
facing downward during insertion



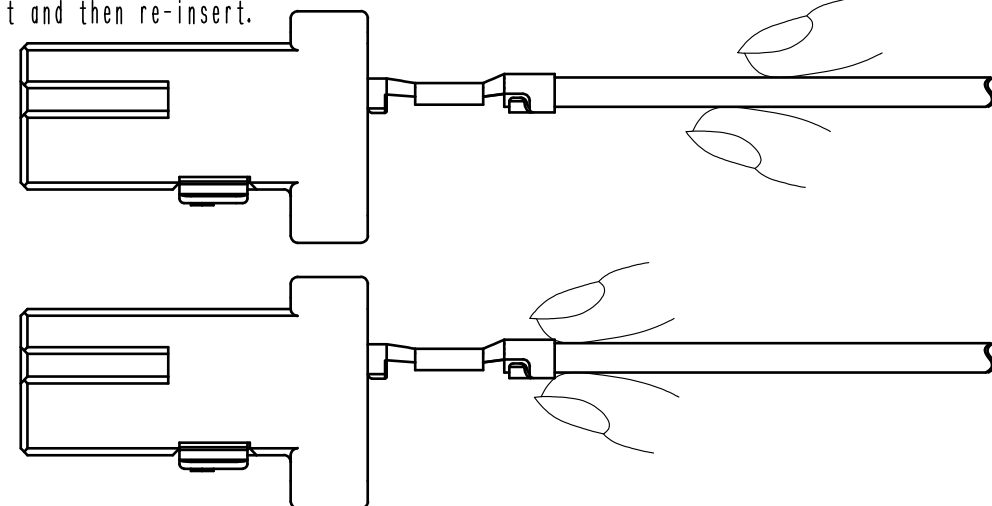
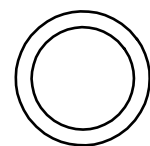
Crimping portions facing upward

NOTE 1: Holding the cable, please insert straight into the housing.

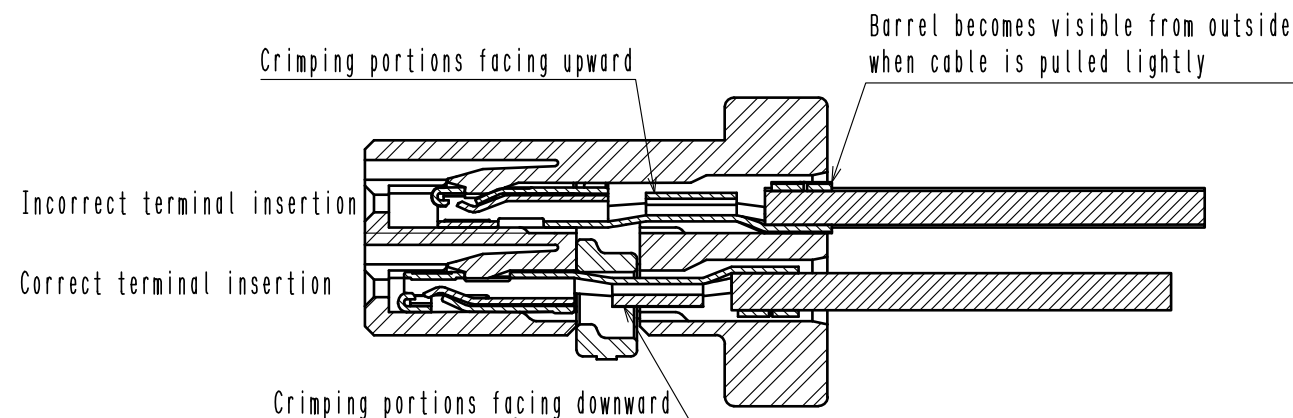
Do not use more than 10N of force during this process.

※Even in the incorrect orientation, holding the cable at the crimped terminal  
and applying a force in excess of 10N can result in insertion.

NOTE 2: If the crimped terminal does not enter the housing smoothly the first time,  
remove it and then re-insert.



④After insertion, confirm that the terminal has been inserted correctly  
by pulling lightly on the cable.



Incorrect terminal insertion

Correct terminal insertion

Crimping portions facing upward

Barrel becomes visible from outside  
when cable is pulled lightly

Crimping portions facing downward

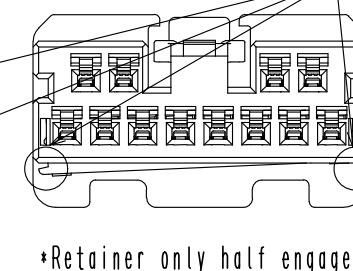
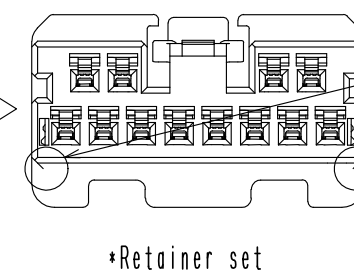
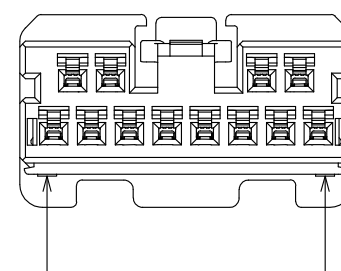
⑤Press preset retainer until a click is heard.

Please press the retainer at one side, and then the other side to fully push it in.

Preset condition  
(Configuration at time of delivery)

Set position

After setting the retainer, please inspect the housing head-on  
to confirm that the retainer is not protruding in any way.

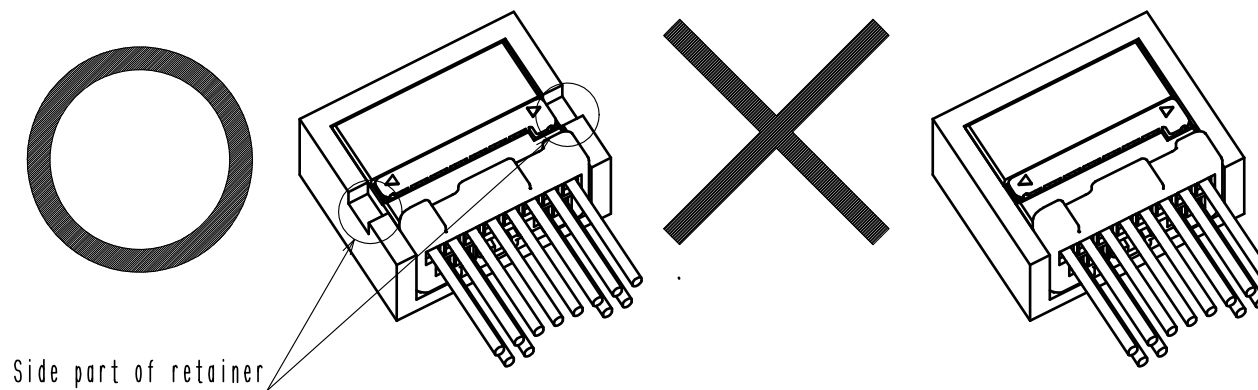


Press the retainer at one side,  
and then the other side to fully push it in.

\*Retainer set  
OK

\*Retainer only half engaged  
Not OK

⚠ In the event that a jig will be used for setting of the retainer,  
please ensure that there is clearance on either side of the retainer.  
Using a jig that does not allow such clearance may result in damage to the female housing of the time of retainer insertion.



Side part of retainer

⚠ NOTE 3: Do not bend or twist the cable. Doing so may cause damage or deformation of the female housing and/or terminal.

HR5

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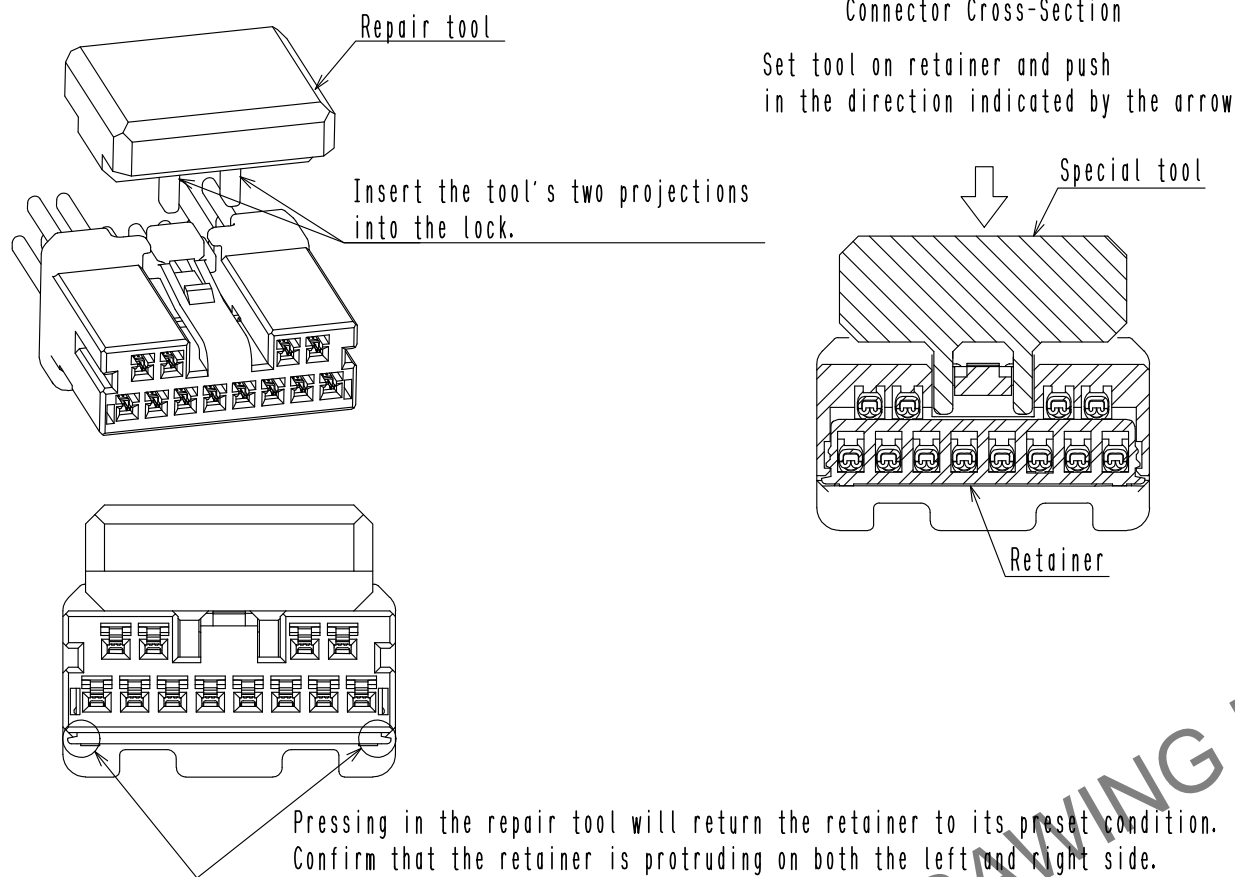
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## REPAIR PROCESS

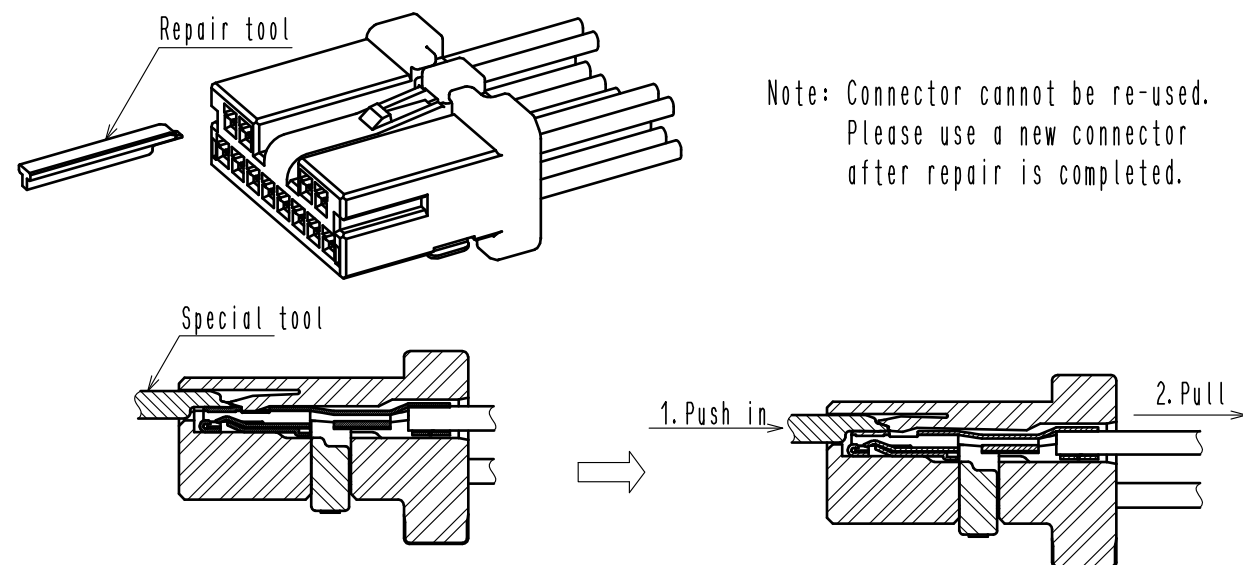
- ①Using the special repair tool, disengage the retainer lock and return the retainer to the preset condition.

Note: Please refer to the table on the right for details on the special tool.



- ②Insert the tool into the terminal cavity and push until contact with the terminal is made. Maintain this position and remove the terminal.

Note: Please refer to the table on the right for details on the special tool.



### ③Repair tool summary

Retainer Repair Tools - Part Number Summary

Applicable Part	Repair Tool Name	Repair Tool Part Number
ZE05-2S-HU/R(##)	ZE05-2DC-HU/R/RE-MD	902-5144-0
ZE05-4S-HU/R(##)		
ZE05-5S-HU/R(##)		
ZE05-8DS-HU/R(##)	ZE05-12DC-HU/R/RE-MD	902-5143-0
ZE05-12DS-HU/R(##)		
ZE05-16DS-HU/R(##)		
ZE05-20DS-HU/R(##)	ZE05-20-24DC-HU/R/RE-MD	902-5160-0
ZE05-24DS-HU/R(##)		

(##) =specification number

Crimped Terminal Repair Tool - Part Number Summary

Applicable Part	Repair Tool Name	Repair Tool Part Number
ZE05-2022SC(F)(##)	ZE05/RE-MD	902-5145-0

(##) =specification number

**HRS**

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PART NO.	ZE05-20DS-HU/R(A)
CODE NO.	CL752-2210-0-00

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## Other / Notes

- 1) Do not touch the terminal contact points or the interior of the barrel.
- 2) In the event that the terminal must be handled, please wear gloves in order to prevent corrosion.
- 3) Placing items on top of a terminal or dropping a terminal may result in shape deformities or contamination. Please handle terminals with care.
- 4) In the event of terminals becoming tangled, please do not forcibly pull or bend them apart, but disentangle them carefully.
- 5) Use caution when handling terminals so as to avoid deformation.
- 6) Make sure that the terminals of crimped cables do not become entangled.  
When bundling or stacking cables, please prevent the terminals from being subjected to any external force.
- 7) Use caution to ensure that the part is not subjected to any large impacts.
- 8) Avoid storing in dusty areas.
- 9) Do not place wire harnesses on the floor.
- 10) Refrain from any handling that may result in terminal damage or deformation.
- 11) If the retainer is out of the housing, do not use either the housing or the retainer.
- 12) Do not use if the housing is dropped.

## CRIMP QUALITY STANDARD

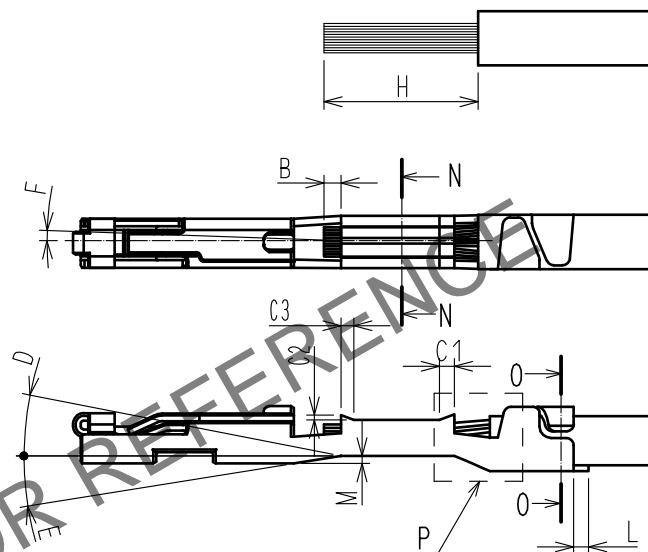
### 1. Scope

This technical specification prescribes crimp condition of ZE05-2022SCF (CL752-2001-0)

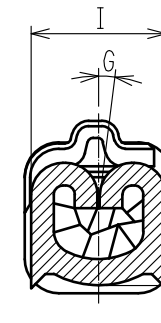
### 2. Applicable wire

- Applicable wire size : 0.3~0.5SQ
- Applicable insulation size :  $\phi 1.4 \sim \phi 1.7$   $\triangle$

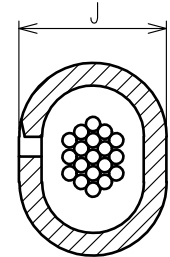
### 3. Quality standard



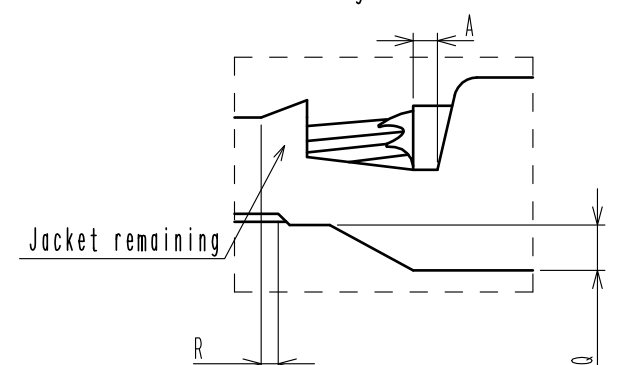
N-N(WIRE BARREL  
CROSS-SECTION IMAGE)



O-O(INSULATION BARREL  
CROSS-SECTION IMAGE)



P enlarged view



CHECK POINT		MEASURE (mm)
JACKET LOCATION	A	0.3~0.8
LOCATION OF TIP OF THE CORE	B	0.1~0.6
BELL-MOUTH	C1	0.1~0.4
	C2	0.1 max
	C3	0.15 max
BEND-UP	D	2° max
BEND-DOWN	E	5° max
TWIST	F	±2° max
ROLLING	G	±5° max
STRIP LENGTH	H	4.0~4.6
WIDTH	WIRE BARREL	I
	INSULATION BARREL	J
HEIGHT OF METAL CUT-OUT TEETH	K	0.12 max
CUT-OFF TAB	L	0.1 max
DIFFERENCE IN LEVEL ON TRANSITION PART APPLY ONLY BEND-UP	M	0.2 max
DIFFERENCE IN LEVEL BETWEEN WIRE BARREL AND INSULATION BARREL	Q	0.25~0.4
DISTANCE BETWEEN WIRE-CRIMPER AND WIRE-ANVIL	R	0.15~0.31

Note1. Refer to a Crimping Data for the crimp height.

Note2. There is a possibility that a terminal is involved in jacket and crowded by the crimping, but it does no affect on the product function.

Note3. Please confirm that the crimped terminal can be inserted into a housing.

**HRS**

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