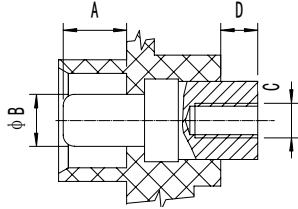


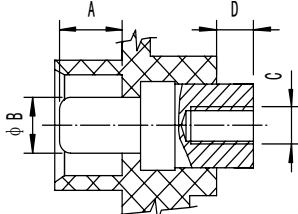
## Pin for Selection (Annex A)

(There are two plating: gold and silver. P/N listed in the table is the silver plated pin. If the gold plated pin is needed, Ag in part number should be changed to Au)

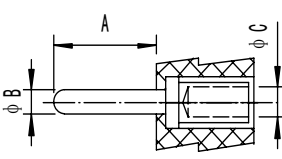
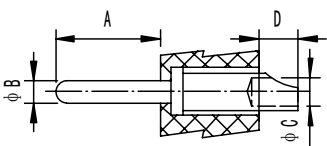
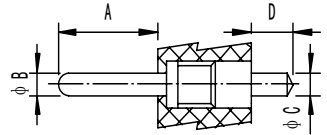
### 0# pin

P/N	Figure	Termination	Dimension (mm)				Plating
			A	B	C	D	
Z0Ag		Thread	12.2	9.1	M6	7	Ag

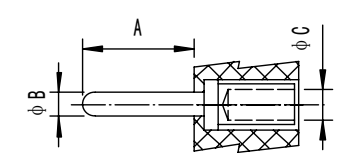
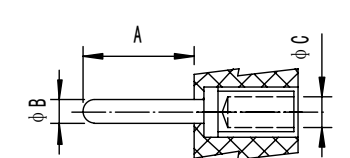
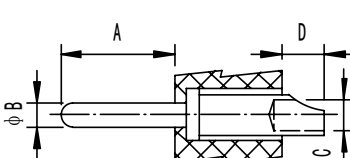
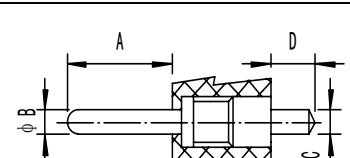
### 4# pin

P/N	Figure	Termination	Dimension (mm)				Plating
			A	B	C	D	
Z4Ag		Thread	12.2	6.4	M5	7	Ag

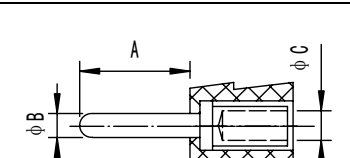
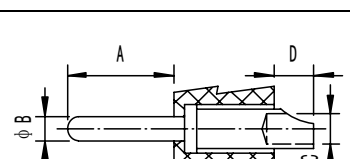
### 8# pin

P/N	Figure	Termination	Dimension (mm)				Plating
			A	B	C	D	
Z8YAgL		Crimp	12.2	3.60	4.6	—	Ag
Z8YAgS			10.9				Ag
Z8HAgL		Solder	12.2	3.60	4.9	7	Ag
Z8HAgS			10.9				Ag
Z8BAgL		PCB	12.2	3.60	3.6	7	Ag
Z8BAgS			10.9				Ag

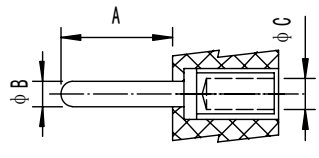
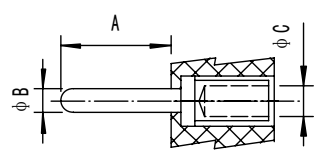
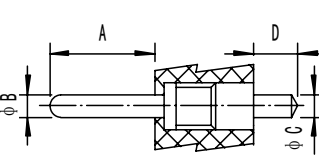
**12 # pin**

P/N	Figure	Termination	Dimension (mm)				Plating
			A	B	C	D	
Z12YAgL-φ2.5		Crimp	11.7	2.38	2.5	—	Ag
Z12YAgM-φ2.5			11.0				Ag
Z12YAgS-φ2.5			10.0				Ag
Z12YAgL-φ3.2		Crimp	11.7	2.38	3.2	—	Ag
Z12YAgM-φ3.2			11.0				Ag
Z12YAgS-φ3.2			10.0				Ag
Z12HAgL		Solder	11.7	2.38	2.8	4.3	Ag
Z12HAgM			11.0				Ag
Z12HAgS			10.0				Ag
Z12BAgL		PCB	11.7	2.38	2.38	5.3	Ag
Z12BAgM			11.0				Ag
Z12BAgS			10.0				Ag

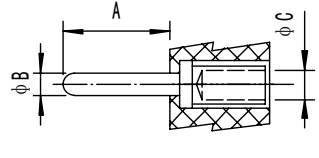
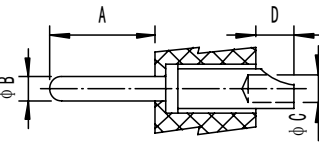
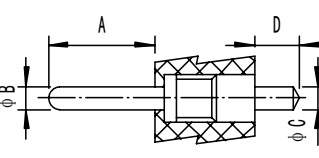
**16 # pin (used for 16# cavity of FNA21T, FN25T and FN29T)**

P/N	Figure	Termination	Dimension (mm)				Plating
			A	B	C	D	
Z16YAgL-01		Crimp	12.2	1.57	3.2	—	Ag
Z16YAgM-01			8.4				Ag
Z16YAgS-01			7.4				Ag
Z16HAgL-01		Solder	12.2	1.57	2.1	4.4	Ag
Z16HAgM-01			8.4				Ag
Z16HAgS-01			7.4				Ag
Z16BAgL-01		PCB	12.2	1.57	1.6	4.3	Ag
Z16BAgM-01			8.4				Ag
Z16BAgS-01			7.4				Ag

**16 # pin(used for 16# cavity of FN52)**

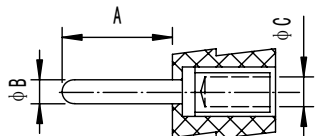
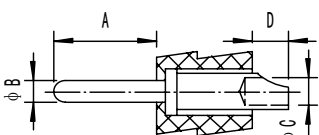
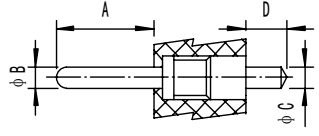
P/N	Figure	Termination	Dimension (mm)				Plating
			A	B	C	D	
Z16YAgL-02		Crimp	12.2	1.57	1.8	—	Ag
Z16YAgM-02			8.4				Ag
Z16YAgS-02			7.4				Ag
Z16HAgL-02		Solder	12.2	1.57	2.1	4.3	Ag
Z16HAgM-02			8.4				Ag
Z16HAgS-02			7.4				Ag
Z16BAgL-02		PCB	12.2	1.57	1.55	4.3	Ag
Z16BAgM-02			8.4				Ag
Z16BAgS-02			7.4				Ag

**20 # pin**

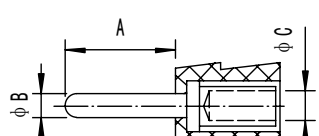
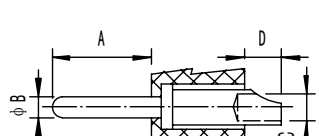
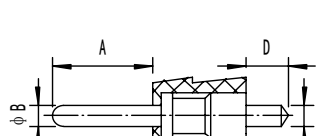
P/N	Figure	Termination	Dimension (mm)				Plating
			A	B	C	D	
Z20YAgL		Crimp	12.0	1.01	1.3	—	Ag
Z20YAgM			8.1				Ag
Z20YAgS			6.9				Ag
Z20HAgL		Solder	12.0	1.01	1.3	4.3	Ag
Z20HAgM			8.1				Ag
Z20HAgS			6.9				Ag
Z20BAgL		PCB	12.0	1.01	1	4.1	Ag
Z20BAgM			8.1				Ag
Z20BAgS			6.9				Ag

Pin used for FN<sup>29</sup><sub>37</sub>T-20、FN<sup>29</sup><sub>37</sub> T-21 and FN37T-10、FN37T-11 (Annex B)  
 (There are two plating: gold and silver. P/N listed in the table is the silver plated pin. If the gold plated pin is needed, Ag in part number should be changed to Au)

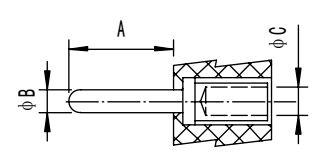
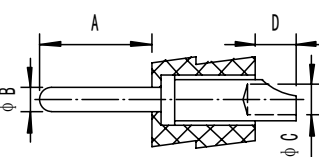
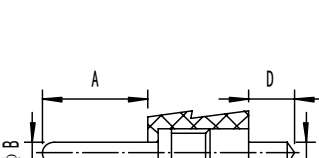
### 8 # pin

P/N	Figure	Termination	Dimension (mm)				Plating
			A	B	C	D	
8ZYAgL		Crimp	12.2	3.6	4.6	—	Ag
8ZYAgS			10.9				Ag
8ZHAgL		Solder	12.2	3.6	4.9	7.0	Ag
8ZHAgS			10.9				Ag
8ZBAgL		PCB	12.2	3.6	3.6	7.5	Ag
8ZBAgS			10.9				Ag

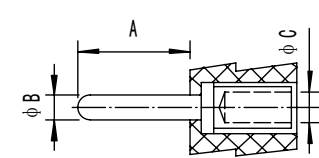
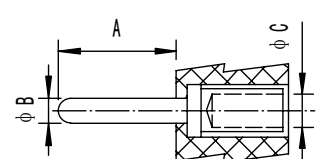
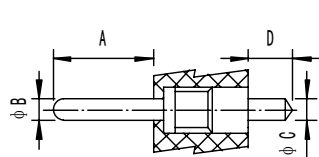
### 12 # pin

P/N	Figure	Termination	Dimension (mm)				Plating
			A	B	C	D	
12ZYAgL		Crimp	11.7	2.4	2.6	—	Ag
12ZYAgM			11.0				Ag
12ZYAgS			10.0				Ag
12ZHAgL		Solder	11.7	2.4	2.6	4.3	Ag
12ZHAgM			11.0				Ag
12ZHAgS			10.0				Ag
12ZBAgL		PCB	11.7	2.4	2.4	6.0	Ag
12ZBAgM			11.0				Ag
12ZBAgS			10.0				Ag

**16 # pin**

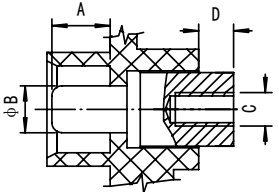
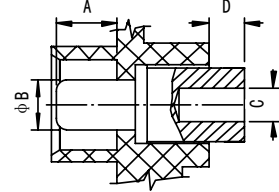
P/N	Figure	Termination	Dimension (mm)				Plating
			A	B	C	D	
16ZYAgL		Crimp	12.2	1.6	1.7	—	Ag
16ZYAgM			8.4				Ag
16ZYAgS			7.4				Ag
16ZHAgL		Solder	12.2	1.6	2.1	4.3	Ag
16ZHAgM			8.4				Ag
16ZHAgS			7.4				Ag
16ZBAgL		PCB	12.2	1.6	1.6	4.7	Ag
16ZBAgM			8.4				Ag
16ZBAgS			7.4				Ag

**20 # pin**

P/N	Figure	Termination	Dimension (mm)				Plating
			A	B	C	D	
20ZYAgL		Crimp	12.0	1.0	1.3	—	Ag
20ZYAgM			8.1				Ag
20ZYAgS			6.9				Ag
20ZHAgL		Solder	12.0	1.0	1.3	4.9	Ag
20ZHAgM			8.1				Ag
20ZHAgS			6.9				Ag
20ZBAgL		PCB	12.0	1.0	1.0	4.7	Ag
20ZBAgM			8.1				Ag
20ZBAgS			6.9				Ag

### 0# pin used for DL2T and DL4T (Annex C)

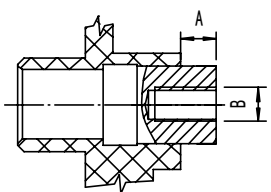
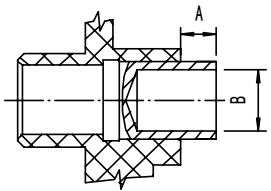
#### 0# pin

P/N	Figure	Termination	Dimension (mm)				Plating
			A	B	C	D	
0ZLAgL		Thread	12.56	9.1	M6	6.4	Ag
0ZLAgS			10.96		M6	6.4	
0ZYAgL		Crimp	12.56	9.1	11.5	6.4	Ag
0ZYAgS			10.96		11.5	6.4	
0ZYAgL-01			12.56		9.2	6.4	
0ZYAgS-01			10.96		9.2	6.4	
0ZYAgL-02			12.56		7	6.4	
0ZYAgS-02			10.96		7	6.4	

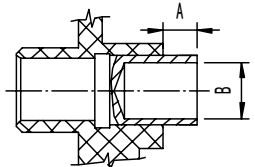
### Socket for selection (Annex D)

(There are two plating: gold and silver. P/N listed in the table is the silver plated socket. If the gold plated socket is needed, Ag in part number should be changed to Au)

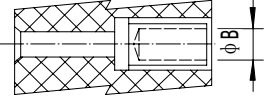
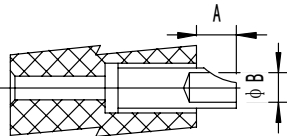
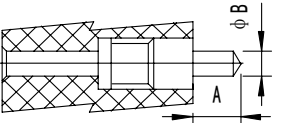
#### 0# socket

P/N	Figure	Termination	Dimension (mm)		Plating
			A	B	
K0Ag		Thread	6.4	M6	Ag
K0YAg		Crimp	6.4	φ11.5	Ag

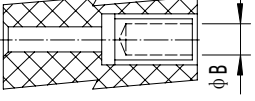
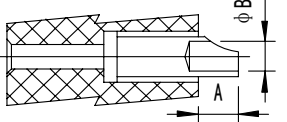
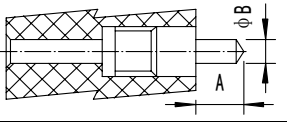
#### 4# socket

P/N	Figure	Termination	Dimension (mm)		Plating
			A	B	
K4YAg		Crimp	6.4	φ7.4	Ag

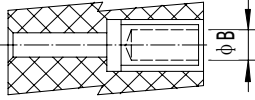
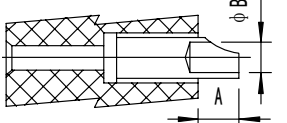
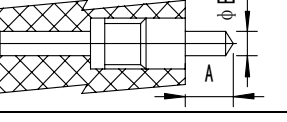
**8 # socket**

P/N	Figure	Termination	Dimension (mm)		Plating
			A	B	
K8YAg		Crimp	—	4.6	Ag
K8HAg		Solder	10.5	4.9	Ag
K8BAg		PCB	7	3.6	Ag

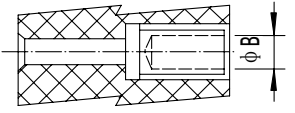
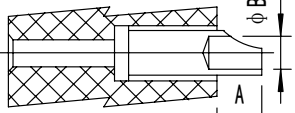
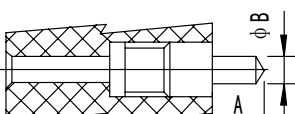
**12 # socket**

P/N	Figure	Termination	Dimension (mm)		Plating
			A	B	
K12YAg-φ2.5		Crimp	—	2.5	Ag
K12YAg-φ3.2		Crimp	—	3.2	Ag
K12HAg		Solder	4.6	2.8	Ag
K12BAg		PCB	5.3	2.38	Ag

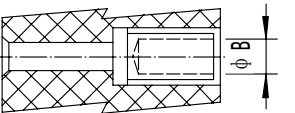
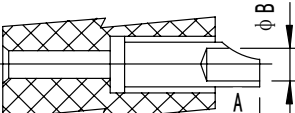
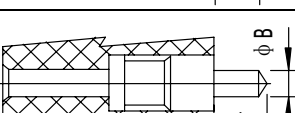
**16 # socket (used for 16# cavity of FNA21Z, FN25Z and FN29Z)**

P/N	Figure	Termination	Dimension (mm)		Plating
			A	B	
K16YAg-01		Crimp	—	3.2	Ag
K16HAg-01		Solder	4.1	2.2	Ag
K16BAg-01		PCB	4.1	1.55	Ag

**16# socket( used for 16# cavity of FN52Z)**

P/N	Figure	Termination	Dimension (mm)		Plating
			A	B	
K16YAg-02		Crimp	—	1.8	Ag
K16HAg-02		Solder	4.6	2.2	Ag
K16BAg-02		PCB	4.1	1.55	Ag

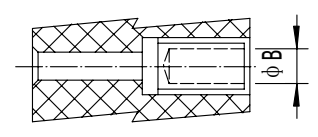
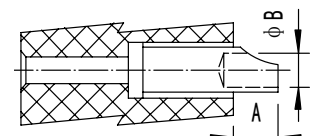
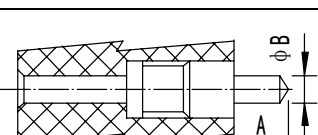
**20# socket**

P/N	Figure	Termination	Dimension (mm)		Plating
			A	B	
K20YAg		Crimp	—	1.3	Ag
K20HAg		Solder	4.6	1.3	Ag
K20BAg		PCB	4.1	1.01	Ag

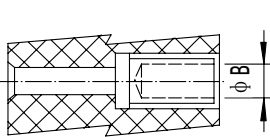
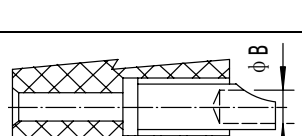
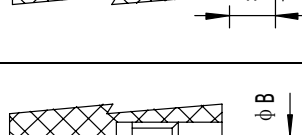


Socket used for FN<sup>29</sup><sub>37Z-20</sub>、FN<sup>29</sup><sub>37Z-21</sub> and FN<sub>37Z-10</sub>、FN<sub>37Z-11</sub> (Annex E)  
 (There are two plating: gold and silver. P/N listed in the table is the silver plated socket. If the gold plated socket is needed, Ag in part number should be changed to Au)

### 8 # socket

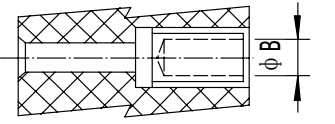
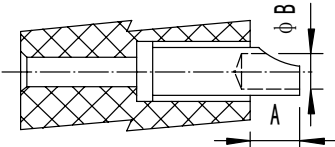
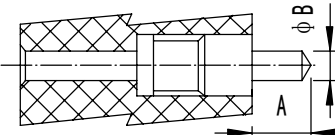
P/N	Socket structure	Figure	Termination	Dimension (mm)		Plating
				A	B	
8KYAg	Wire spring socket		Crimp	—	4.6	Ag
8KYAg-G	Crown band socket					
8KHAg	Wire spring socket		Solder	10.5	4.9	Ag
8KHAg-G	Crown band socket					
8KBAg	Wire spring socket		PCB	7	3.6	Ag
8KBAg-G	Crown band socket					

### 12 # socket

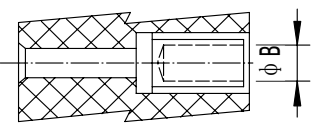
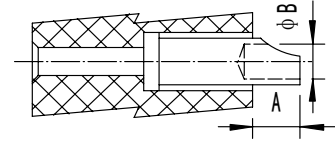
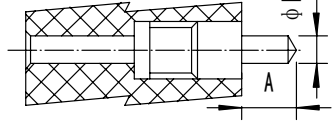
P/N	Socket structure	Figure	Termination	Dimension (mm)		Plating
				A	B	
12KYAg	Wire spring socket		Crimp	—	2.6	Ag
12KYAg-G	Crown band socket					
12KYRAg*						
12KHAg	Wire spring socket		Solder	4.6	2.6	Ag
12KHAg-G	Crown band socket					
12KHRAg*						
12KBAg	Wire spring socket		PCB	6.4	2.4	Ag
12KBAg-G	Crown band socket					
12KBRAg*						

12KYRAg、12KHRAg and 12KBRAg are applicable to hot swap .

**16 # socket**

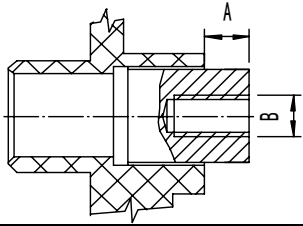
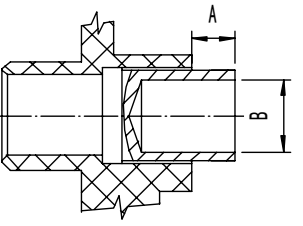
P/N	socket structure	Figure	Termination	Dimension (mm)		Plating
				A	B	
16KYAg	Wire spring socket		Crimp	—	1.7	Ag
16KHAg	Wire spring socket		Solder	4.1	2.1	Ag
16KBAg	Wire spring socket		PCB	4.5	1.6	Ag

**20 # socket**

P/N	Socket structure	Figure	Termination	Dimension (mm)		Plating
				A	B	
20KYAg	Wire spring socket		Crimp	—	1.3	Ag
20KHAg	Wire spring socket		Solder	4.6	1.3	Ag
20KBAg	Wire spring socket		PCB	4.4	1.0	Ag

## 0 # socket for FN2Z and FN4Z (Annex F) 0#

socket

P/N	Figure	Termination	Dimension (mm)		Plating
			A	B	
0KLAg		Thread	6.4	M6	Ag
0KYAg		Crimp	6.4	11.5	Ag
0KYAg-01				9.5	
0KYAg-02				7	

## Tool

The retaining finger is installed in every cavity of the plug shell and receptacle shell (except 0# non-removal contact) in order to locate the contact. The crimped and soldered contacts can be removal after they are installed in the shell and PCB contacts can not be removal after they are installed in the shell

### Crimping tool

The special crimping tool should be used for the crimped socket. The following tool is supplied.

Contact size	12#、16#-01、16#-02、20#	8#
Crimping tool P/N	XCXY adjustable crimping tool	YDXY-00

### Contact installation

Insert the crimped contacts into the cavity. The contacts are in place when the click is audible, which means the retaining finger locks the shoulder of the contact. Pull the wire gently with hand. Do not pull the contact out.

### Removal tool

Remove the crimped and soldered contacts with the special tool. The following tool is supplied.

Contact size	8#	12#、16#-01	16#-02	20#
Removal tool P/N	DLQ-8	XCQ-13	XCQ-11	XCQ-10

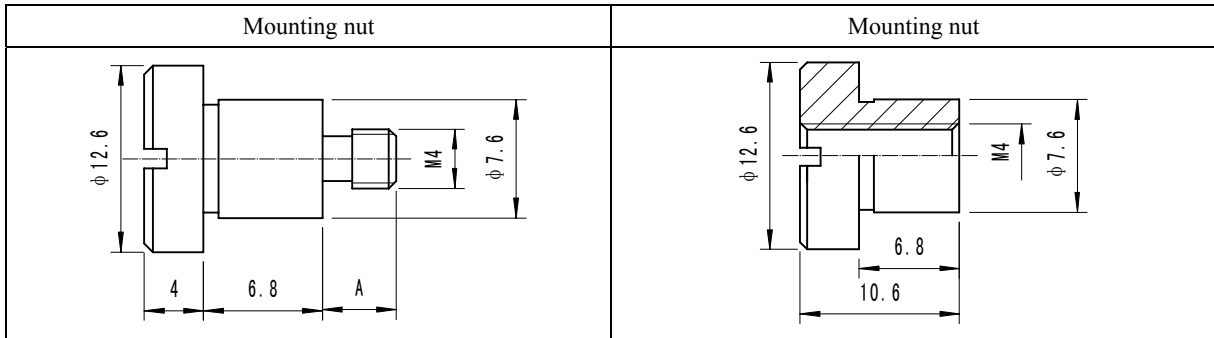
### Contact removal

The removal tool is rear-removal and is inserted into the rear of contact along the wire (open the retaining finger). Pull the wire and remove the contact.

## Mounting feature

Connector can be fixed mounting or floating mounting with bolt and nut in order to mate the displacement. There are long and short bolts for selection.

	Mounting bolt L	Mounting bolt S
A	8	5



## Mating requirements for plug and receptacle

The electrical connector features mis-mating proof. The plug and receptacle is straight mating. The plug is aligned with the receptacle during mating. After the plug and receptacle is chosen by the customer, the contacts should be chosen separately

[ Contact selection ]

The termination of contact is crimped, soldered and PCB soldered. The length of 20#, 16# and 12# pin is long, middle and short and the length of 8# pin is long and short. The same size of pin only has different length of the pin head, the others are the same.

Note: Different lengths of pin are designed for meeting the customer's requirements. When the plug mates with the receptacle, the pin and socket in some cavities are firstly contacted. And those in other cavities are lastly contacted. Therefore, when the customers select the pin, they do not worry that the short pin can not be contacted and the long pin is against the bottom of the cavity

Pay attention to contact P/N during selecting the contact. The contact P/N has two kinds: the letter is first (for example Z20YAuS) and the figure is first (for example 20ZYAuS). Even if the two kinds of contacts are the same kind, they can not be mated. When the customs choose the following P/N (FN2Z/T, FN4Z/T, FN5Z-20/T-20, FN24Z/T, FN29Z-20/T-20, FN29Z-21/T-21, FN35Z/T, FN37Z-10/T-10, FN37Z-11/T-11, FN37Z-20/T-20, FN37Z-21/T-21), the contact with *the figure is first* should be selected. T the contact with *the letter is first* should be selected for the other P/N.

## Mounting description

The product can not be installed or can be installed on PCB. Floating mounting can be supported. The customer can floatingly mount the plug or receptacle according to the requirements. If both the plug and the receptacle should be installed, it is recommended that one end be floating mounted and the other end is fixed. The mounting bolts should be ordered separately. See the below table for details:

Bolt/Nut	Ordering Code	Size
Floating mounted bolts	21E8-900-022-A1	M4
Fixed mounting bolts	21E8-900-264-H10	M4

Floating mounted nut	21E8-941-040-A1	M4
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The durability is 1000 cycles, there should be clean and no dirty and oil on plug and receptacle. Handle with care

### Maintenance description

1. Plug and receptacle should be maintained at a temperature of  $-5\sim 35^{\circ}\text{C}$ , the relative humidity is not more than 80%. Product should be stored in the warehouse without acid, alkaline and corrosive gas. The storage period is 5 years;
- 2 Wipe the plug, the receptacle and the inner cavity with the clean cloth. Coupling can be accomplished after there are no condensation and dirty;