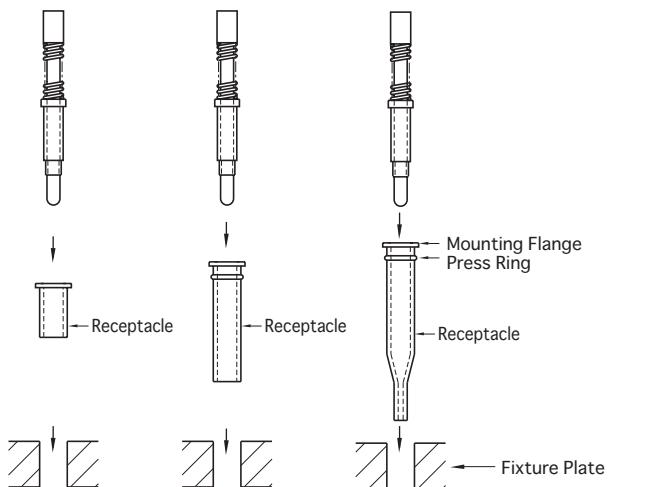


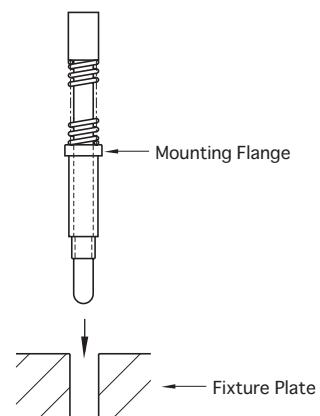
How to Use

[MOUNTING]

A) Mounting with receptacle



B) Mounting directly into the plate



There are two ways to mount probes into a fixture plate.

A) Mounting with receptacles (Recommended)

1. Drill holes in the fixture plate

- Use our catalog for reference only. The actual hole diameter can slightly vary due to material of the fixture plate, drill speed, pressure etc. Make sure the appropriate diameter when you mount probes.
- Drilling of fixtures is much easier as holes for receptacles need not be as exact as for probes.
- The distance between mounting holes should be sufficient. A short distance between probes can cause electric discharge under high voltage.
- The distance between mounting holes should be sufficient so that mounted probes would not hit each other.
- Too small size of holes in a fixture plate results in excessive holding force so that probes will not work smoothly.
- Too big size of holes in a fixture plate results in lack of holding force so that receptacles can be loosen or fallen.

2. Receptacles are press-fit into the fixture plate

- Receptacles can facilitate to change probes. Use only adaptable receptacles to probe types.

3. Probes are press-fit into the receptacles

B) Mounting directly into the fixture plate

1. Drill holes in the fixture plate

- Use our catalog for reference only. The actual hole diameter can slightly vary due to material of the fixture plate, drill speed, pressure etc. Make sure the appropriate diameter when you mount probes.
- Too small size of holes in a fixture plate results in excessive holding force so that probes will not work smoothly.
- Too big size of holes in a fixture plate results in lack of holding force so that probes can be loosen or fallen.

2. Probes are press-fit into the plate

- Probes should be mounted at a sufficient distance. A short distance between probes can cause electric discharge under high voltage.
- Probes should be mounted at a sufficient distance in order not to hit other probes.

- CAUTION -

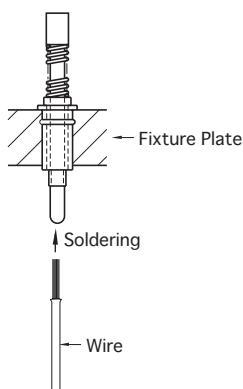
- The probe can be worn and broken while it working.
- Thin or sharp tip can cause injury to you. Be careful when you use them.
- Thin tips of probes can be damaged or broken easily.

If you need to mount probes in other ways, please consult with us

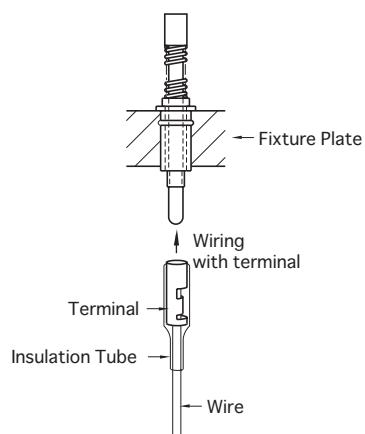
How to Use (Cont.)

[WIRING]

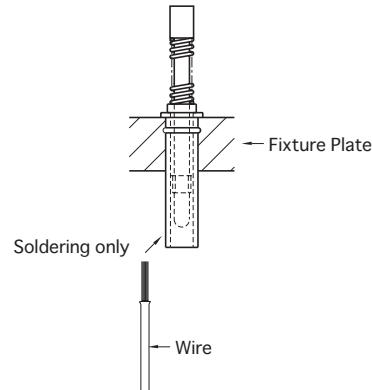
A) Soldering wire to probe



B) Wiring with terminal



C) Soldering wire to receptacle



There are three methods to wire. Select the most suitable method for your measuring.

A) Soldering wire directly to probes

- Use wire of flexible material to make probes move smoothly.
- The tension of a wire should be loose (Do not make it tight). Probes cannot move smoothly and fail to contact to the target owing to tight wires.

B) Wiring with terminals

- Use wire of flexible material to make probes move smoothly.
- The tension of a wire should be loose (Do not make it tight). Probes cannot move smoothly and fail to contact to the target owing to tight wires.
- Use only adaptable terminals to the probe types. Using terminals can facilitate to change probes.

C) Soldering wire to receptacles

- Not recommended for precise measurement. Where precise measurement is required we recommend method A) or B).
- Not recommended for high current.
- Use only adaptable receptacles to the probe types. Using receptacles can facilitate to change probes.

- CAUTION -

- The probe can be worn and broken while it working.
- Thin or sharp tip can cause injury to you. Be careful when you use them.
- Thin tips of probes can be damaged or broken easily.

If you need to wire in other ways, please consult with us

Safety Instructions 1

Read the Safety Instructions carefully before using probes. Failure to read and to comply with our instructions can result in serious injury and accidents. Note that we do not take any responsibility for any incidents which are caused by failure to obey our instructions.

To reduce the risk of damage to the device under test or to prevent a probe mounted area from melting or fusing, do not use current beyond the safety range (refer to our catalog for the safety current).

— SAFETY CURRENT —

Safety current in our catalog is only adapted when current flows through a probe alone. Please note that consideration of contact resistance or wire size is not included in the safety range of current.

Safety current can be varied if any of the following cases are adapted to your measurement;

In Case Contact Resistance Is High

- Heat can be generated even within the safety range of current if contact resistance is high.
- Heat can be generated even within the safety range of current where contact resistance is raised. Contact resistance is raised when the probe tips are worn due to the increasing number of hits.

In Case Wires Are Connected To Receptacles

- The safety current cannot be adapted where the resistance between components in the probe is raised by the increasing number of contacts.

In Case Unsuitable Wire Size Is Used

- The safety current cannot be adapted where unsuitable size of wires are connected to the probes.

Safety Instructions 2

Read the Safety Instructions carefully before using probes. Failure to read and to comply with our instructions can result in serious injury and accidents. Note that we do not take any responsibility for any incidents which are caused by failure to obey our instructions.

Probes should be carefully selected. The most suitable probe can be different depending on target conditions. (e.g. base material, plating material, shape, the amount of electric current, the process of oxidization, etc.)

- To reduce the risk of damage to the device under test or to prevent a probe mounted area from melting or fusing, do not use current beyond the safety range (refer to our catalog for the safety current).
- Heat can be generated even within the safety range of current if contact resistance is high.
- Heat at the contact point can be varied by the degree of contact resistance. Where high current is used, check the contact resistance. (High resistance can raise temperature at the contact point.)
- Contact resistance can be raised where current is kept flowing. At the contact point can also be raised. Where current flow over one hour, check the contact resistance.
- Make sure that probes contact not only physically but also electrically. Contaminants can attach to probe tips. If current flows through contaminants (=no electrical contact), they can gradually be oxidized. As a result, oxidized contaminants can be turned to insulation, and then, they can cause sparking at contact point and lead to breaking the device under test.
- Select probes carefully, and consider that surface condition of the target is changeable when it is heated up. Selecting probes without considering it can lead to measurement failure.
- Be careful about the ambient temperature. Probes are not suitable at 0°C or below.
- Clean tips of probes regularly to reduce contamination. Contaminants can make the probes wear out quickly and cause failure of measuring.
- Do not use where corrosive liquid is applied.
- Exposed to oil mist, some probes will not be usable.
- Avoid a humid place and use desiccant to store probes to reduce the risk of rust and oxidization.
- Do not use probes which are kept stored more than one year.

If you need to use high current or voltage, please consult with us

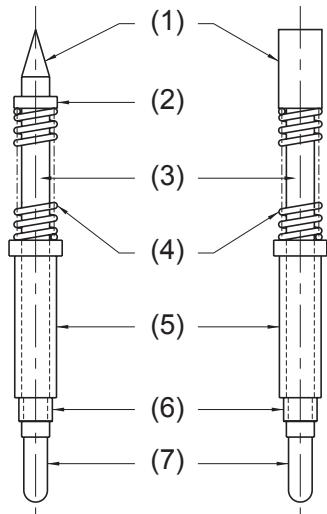
- CAUTION -

- If contact resistance is raised, fire or serious accidents can occur.
- Be careful when high current used, fire or serious accidents can occur resulting from wrong use.
- Be careful when high voltage used, failure to use probes properly can cause sparking and breaking the device under test.
- The probe can be worn and broken while it working.
- Be careful when you check probes closely while they working. Wear protective glasses. Probes can be displaced or fly by their spring action and can cause injury to you.
- Thin or sharp tip can cause injury to you. Be careful when you use them.
- Thin tips of probes can be damaged or broken easily.

Probes are not guaranteed where they are used to measure except electric products or components.

Basic Terminology and Structure

Electrical resistance of the probe is extremely small and stable due to solid body structure.

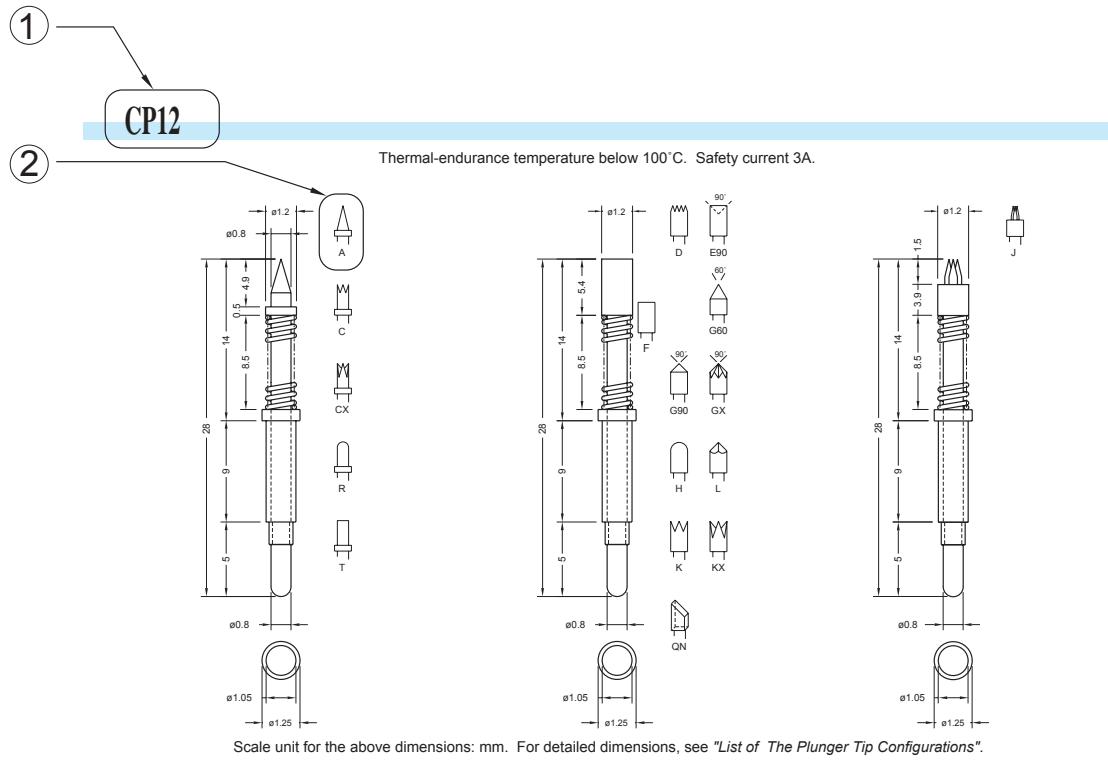


<Spring Contact Probe>

- (1) Tip Configuration (Head)
- (2) Upper Stopper
- (3) Plunger (Shaft)
- (4) Spring
- (5) Bushing
- (6) Lower Stopper
- (7) Wire Connection End

How to see marks of items

Item	Example of mark of item	Meaning of each mark
Probe	CP12 - A SPS ① ② ③	① Type of Probe (Series)
		② Type of Tip Configuration
		③ Pressure Symbol of Spring
Receptacle	AS15 <9> ④ ⑤	④ Type of Receptacle
		⑤ Length of Receptacle

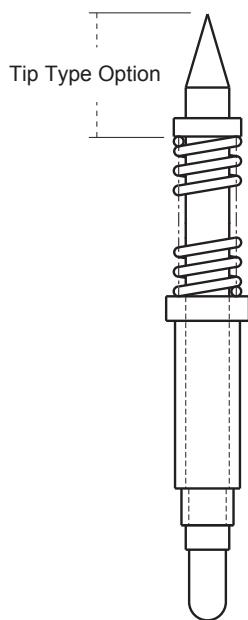


Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Contact (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
CP12	SPS	4	23	35	95	125
	SPS1	4	23.5	50	110	145
	SPL	4.5	2.9	15	23.5	28
	SPH	4	40	70	175	230
Application	Applicable Receptacle (size)	Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (reference only)	Minimum Distance of Mounting	
Probe Only			TA15S (soldering) TA15P	1.05	1.5	
Probe + Receptacle	R=9, V=1.6, X=1.37 (AS15<9>)	Terminal TA10S TA15P Soldering directly to probe	TA15S (soldering) TA15P (pressing)	1.05 6 10	1.39 - 1.42	1.8
	R=23, V=1.6, X=1.37 (AS15<23>)	Soldering to receptacle				

Please refer to "Product Line up, Auxiliary Parts" for the details of terminals, wires with terminals and flexible wires.

CPS

	Tip Type (Configuration)	Base Material	Plating
CPS10	All type in this series	Carbon Tool Steel	Nickel-Aurun
CPS12	All type in this series	Carbon Tool Steel	Nickel-Aurun
CPS15	All type in this series	Carbon Tool Steel	Nickel-Aurun
CPS20	All type in this series	Carbon Tool Steel	Nickel-Aurun
CPS25	All type in this series	Carbon Tool Steel	Nickel-Aurun
CPS30	All type in this series	Carbon Tool Steel	Nickel-Aurun
CPS35	All type in this series	Carbon Tool Steel	Nickel-Aurun



Tip type (Configuration) is option.
If you do not know which tip type is the most appropriate for your measuring, please contact us.

(Tip example above is A type)

NOTE: A range of tip type options differs depending on probe types.
See "Illustrated Specifications" of this series for option.

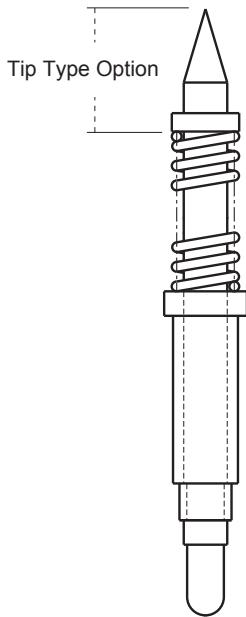
CP

	Tip Type (Configuration)	Base Material	Plating
CP6	All type in this series	Carbon Tool Steel	Nickel-Aurun
CP8	Q type	Carbon Tool Steel	Nickel-Rhodium
	All other type in this series	Carbon Tool Steel	Nickel-Aurun
CP10	J type	Carbon Tool Steel	Nickel
	Q type	Carbon Tool Steel	Nickel-Rhodium
CP12	All other type in this series	Carbon Tool Steel	Nickel-Aurun
	J type	Carbon Tool Steel	Nickel
	Q type	Carbon Tool Steel	Nickel-Rhodium
CP15, 15B	All other type in this series	Carbon Tool Steel	Nickel-Aurun
	J type	Carbon Tool Steel	Nickel
CP20, 20B	Q type	Carbon Tool Steel	Nickel-Rhodium
	All other type in this series	Carbon Tool Steel	Nickel-Aurun
CP25, 25B	J type	Carbon Tool Steel	Nickel
	All other type in this series	Carbon Tool Steel	Nickel-Aurun
CP30, 30P, 30B	J type	Carbon Tool Steel	Nickel
	Q type	Carbon Tool Steel	Nickel-Rhodium
CP35, 35SB	All other type in this series	Carbon Tool Steel	Nickel-Aurun
	J type	Carbon Tool Steel	Nickel
CP35S, 35P	All other type in this series	Carbon Tool Steel	Nickel-Aurun
	J type	Carbon Tool Steel	Nickel
CPR35	All other type in this series	Carbon Tool Steel	Nickel-Aurun
	Q type	Carbon Tool Steel	Nickel-Rhodium
CPR35S	V type	Carbon Tool Steel	Nickel-Aurun
	Q type	Carbon Tool Steel	Nickel-Rhodium
CP40, 40SB, 40A	V type	Carbon Tool Steel	Nickel-Aurun
	J type	Carbon Tool Steel	Nickel
CP40S, 40P	All other type in this series	Carbon Tool Steel	Nickel-Aurun
	J type	Carbon Tool Steel	Nickel
CPR40, 40S	All other type in this series	Carbon Tool Steel	Nickel-Aurun
	Q type	Carbon Tool Steel	Nickel-Rhodium
CP50	V type	Carbon Tool Steel	Nickel-Aurun
	M type	Brass	Nickel-Aurun
CPR50	All other type in this series	Carbon Tool Steel	Nickel-Aurun
	V type	Carbon Tool Steel	Nickel-Aurun
CP65	M type	Brass	Nickel-Aurun
	All other type in this series	Carbon Tool Steel	Nickel-Aurun
CP90	M type	Brass	Nickel-Aurun
	All other type in this series	Carbon Tool Steel	Nickel-Aurun

NOTE: A range of tip type options differs depending on probe types.
See "Illustrated Specifications" of this series for option.

NCP

	Tip Type (Configuration)	Base Material	Plating
NCP10	All type in this series	Carbon Tool Steel	Nickel-Aurun
NCP11, 11S	All type in this series	Carbon Tool Steel	Nickel-Aurun
NCP12, 12S	All type in this series	Carbon Tool Steel	Nickel-Aurun
NCP15	J type	Carbon Tool Steel	Nickel
	All other type in this series	Carbon Tool Steel	Nickel-Aurun
NCP18	J type	Carbon Tool Steel	Nickel
	All other type in this series	Carbon Tool Steel	Nickel-Aurun
NCP20, 20S	J type	Carbon Tool Steel	Nickel
	All other type in this series	Carbon Tool Steel	Nickel-Aurun
NCP25, 25S	J type	Carbon Tool Steel	Nickel
	All other type in this series	Carbon Tool Steel	Nickel-Aurun
NCP250	J type	Carbon Tool Steel	Nickel
	All other type in this series	Carbon Tool Steel	Nickel-Aurun
NCP250B	J type	Carbon Tool Steel	Nickel
	All other type in this series	Carbon Tool Steel	Nickel-Aurun
NCP300	J type	Carbon Tool Steel	Nickel
	All other type in this series	Carbon Tool Steel	Nickel-Aurun
NCP300B, 300BA	J type	Carbon Tool Steel	Nickel
	All other type in this series	Carbon Tool Steel	Nickel-Aurun



Tip type (Configuration) is option.
If you do not know which tip type is
the most appropriate for your measuring,
please contact us.
(Tip example above is A type)

NOTE: A range of tip type options differs depending on probe types.
See "Illustrated Specifications" of this series for option.

NCPLB / LP

	Tip Type (Configuration)	Base Material	Plating
NCP10LP	All type in this series	Carbon Tool Steel	Nickel-Aurun
NCP11LP	All type in this series	Carbon Tool Steel	Nickel-Aurun
NCP12LP	All type in this series	Carbon Tool Steel	Nickel-Aurun
NCP15LP	J type	Carbon Tool Steel	Nickel
	All other type in this series	Carbon Tool Steel	Nickel-Aurun
NCP18LP	J type	Carbon Tool Steel	Nickel
	All other type in this series	Carbon Tool Steel	Nickel-Aurun
NCP20LB	J type	Carbon Tool Steel	Nickel
	All other type in this series	Carbon Tool Steel	Nickel-Aurun
NCP20LP	J type	Carbon Tool Steel	Nickel
	All other type in this series	Carbon Tool Steel	Nickel-Aurun
NCP25LB	J type	Carbon Tool Steel	Nickel
	All other type in this series	Carbon Tool Steel	Nickel-Aurun
NCP25LP	J type	Carbon Tool Steel	Nickel
	All other type in this series	Carbon Tool Steel	Nickel-Aurun
NCP250LB	J type	Carbon Tool Steel	Nickel
	All other type in this series	Carbon Tool Steel	Nickel-Aurun
NCP250LP	J type	Carbon Tool Steel	Nickel
	All other type in this series	Carbon Tool Steel	Nickel-Aurun
NCP300LB	J type	Carbon Tool Steel	Nickel
	All other type in this series	Carbon Tool Steel	Nickel-Aurun
NCP300LBA	J type	Carbon Tool Steel	Nickel
	All other type in this series	Carbon Tool Steel	Nickel-Aurun
NCP300LP	J type	Carbon Tool Steel	Nickel
	All other type in this series	Carbon Tool Steel	Nickel-Aurun

NOTE: A range of tip type options differs depending on probe types.
See "Illustrated Specifications" of this series for option.

Mini-Probe CPS10 - CPS35

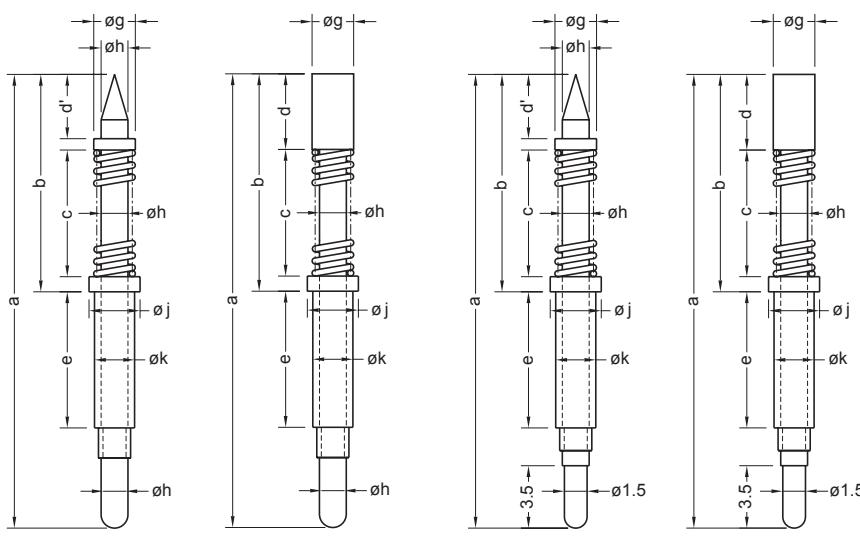


Fig 1

Fig 2

Fig 3

Fig 4

CPS10 - CPS30

CPS35

CPS10 - CPS35 (Spring contact probe)

Durability of bushing : more than 1 million strokes
(1mm stroke, 60 strokes / 60 seconds)

Thermal-endurance : below 100°C

Stated durability of the bushing is a result of our internal testing. It is not guaranteed and your actual results may vary.

Fig	Type	Configuration of Tip	(mm)										
			a	b	c	d	d'	e	g	h	j	k	
1	CPS10	A, R, T	18	9	6.4	—	2	5	1	0.6	1.05	0.85	
2		D, E90, F, GX, K, KX			5.4	3.5	—						
1	CPS12	A, CX, R, T	19	9	6.4	—	2	5	1.2	0.8	1.25	1.05	
2		D, E90, F, GX, KX				2.5	—						
2	CPS15	D, E90, F, GX, KX	19	9	6.4	2.5	—	5	1.5	1	1.5	1.25	
1	CPS20	A, CX, R, T	19	9	6.4	—	2	5	1.5	1	1.5	1.25	
2		D, E90, F, GX, KX				2.5	—						
1	CPS25	A, CX, R, T	19	9	6.35	—	2	5	2	1.3	2	1.65	
2		D, E90, F, GX, KX				2.5	—						
1	CPS30	A, CX, R	19	9	6	—	2	5	2	1.3	3	2.4	
2		D, E90, F, GX, KX				2.5	—						
3	CPS35	A, CX, R	19	9	6	—	2	5	3	2	3.5	2.9	
4		D, E90, F, GX, KX				2.5	—						

For the specifications of these probes and tip configurations,
see "Illustrated Specifications, CPS series" and "List of Tip Configurations".

Spring Contact Probe CP6 - CP20B

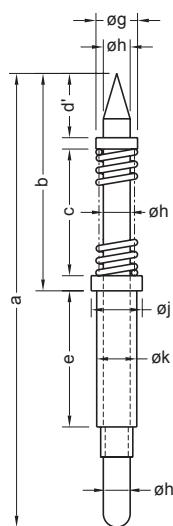


Fig 1

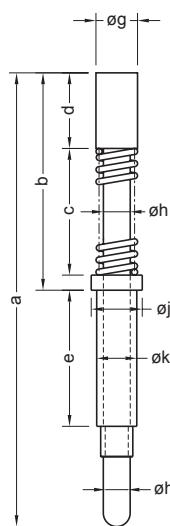


Fig 2

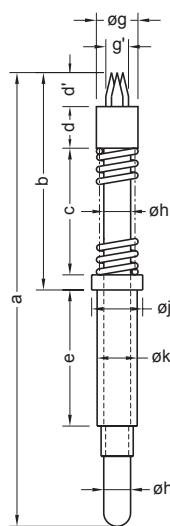


Fig 3

CP6 - CP20B (Spring contact probe)

Durability of bushing : more than 1 million strokes
(2mm stroke, 60 strokes / 60 seconds)

Thermal-endurance : 100°C or below

Stated durability of the bushing is a result of our internal testing. It is not guaranteed and your actual results may vary.

CP6 - CP20B

Fig	Type	Configuration of Tip	a	b	c	d	d'	e	g	g'	h	j	k	(mm)
1	CP6	A, R	28	14	8.5	—	4.9	9	0.6	—	0.3	0.65	0.5	
2		D, F, K				5.4	—							
1	CP8	A, R, T	28	14	8.5	—	4.9	9	0.8	—	0.4	0.8	0.6	
2		D, E90, F, G60, G90, GX, H, K, KX, L, QA, QF, QN				5.4	—							
1	CP10<1>	A, R, T	28	14	8.5	—	4.9	9	1	—	0.6	1.05	0.85	
2		D, E90, F, G60, G90, GX, H, K, KX, L, QA, QF, QN				5.4	—							
3		J				3.9	1.5							
2	CP10<0.8>	D, E90, F, G60, G90, GX, H, K, KX	28	14	8.5	5.4	—	9	0.8	—	0.6	1.05	0.85	
2	CP10<1.5>	D, E90, F, G90, GX, H, K, KX	28	14	8.5	5.4	—	9	1.5	—	0.6	1.05	0.85	
1	CP12	A, C, CX, R, T	28	14	8.5	—	4.9	9	1.2	—	0.8	1.25	1.05	
2		D, E90, F, G60, G90, GX, H, K, KX, L, QN				5.4	—							
3		J				3.9	1.5							
2	CP15	D, E90, F, G60, G90, GX, H, K, KX, L, V	28	14	8.5	5.4	—	9	1.5	—	1	1.5	1.25	
2	CP15B	D, E90, F, G60, G90, GX, H, K, KX, L, V	28	14	8.1	5.4	—	9	1.5	—	1	2.2	2	
1	CP20	A, C, CX, R, T	28	14	8.5	—	4.9	9	1.5	—	1	1.5	1.25	
2		D, E90, F, G60, G90, GX, H, K, KX, L, V, QN				5.4	—		1.8	—				
3		J				3.9	1.5		1.65	0.8				
1	CP20B	A, C, CX, R, T	28	14	8.1	—	4.9	9	1.5	—	1	2.2	2	
2		D, E90, F, G60, G90, GX, H, K, KX, L, V, QN				5.4	—		1.8	—				
3		J				3.9	1.5		1.65	0.8				

For the specifications of these probes and tip configurations,
see "Illustrated Specifications, CP series" and "List of Tip Configurations".

Spring Contact Probe CP25 - CP30S

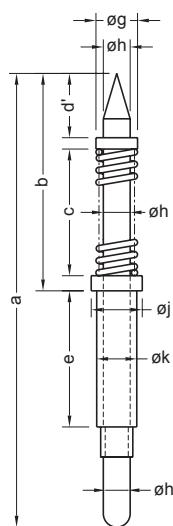


Fig 1

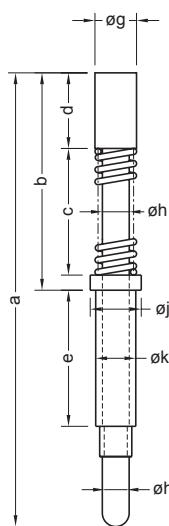


Fig 2

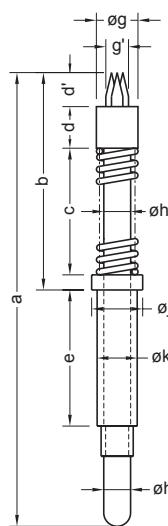


Fig 3

CP25 - CP30S (Spring contact probe)

Durability of bushing : more than 1 million strokes
(2mm stroke, 60 strokes / 60 seconds)

Thermal-endurance : 100°C or below

Stated durability of the bushing is a result of our internal testing. It is not guaranteed and your actual results may vary.

CP25 - CP30S

Fig	Type	Configuration of Tip	a	b	c	d	d'	e	g	g'	h	j	k	(mm)
1	CP25	A, B, CX, R, T	28	14	8.85	-	4	9	2	-	1.3	2	1.65	
2		D, E90, F, G60, G90, GX, H, K, KX, L, U, V					5							
3		J					5		3.4					
3		J7					3.5		2.1					
2	CP25B	D, E90, F, G60, G90, GX, H, K, KX, L, U, V	28	14	8	5	-	9	2	-	1.3	3	2.4	
1	CP30	A, B, CX, R, T	28	14	8	-	4	9	2	-	1.3	3	2.4	
2		D,DF,E90,F,G60,G90,GX,H,K,KX,L,U,V,QN					5							
3		J					5		3.4					
3		J7					3.5		2.1					
2	CP30SB	D, DF, E90, F, GX, H, K, KX, U, V	28	14	8	5	-	9	3	-	1.3	3	2.4	
2	CP30P	D,DF,E90,F,G60,G90,GX,H,K,KX,L,U,V,QN	28	14	8.85	5	-	9	2.5	-	1.3	2	1.65	
2	CP30S	D, DF, E90, F, GX, H, K, KX, U, V	28	14	8.85	5	-	9	3	-	1.3	2	1.65	

For the specifications of these probes and tip configurations,
see "*Illustrated Specifications, CP series*" and "*List of Tip Configurations*".

Spring Contact Probe CP35 - CP35S

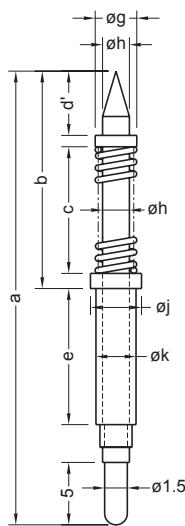


Fig 1

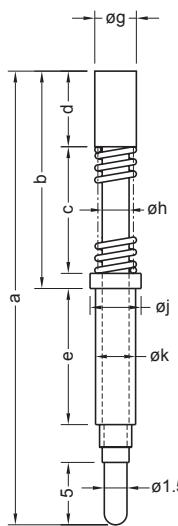


Fig 2

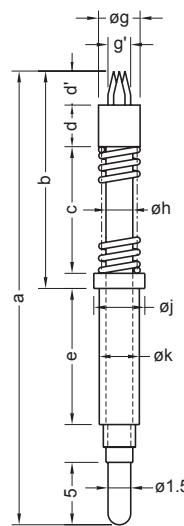


Fig 3

CP35 - CP35S (Spring contact probe)

Durability of bushing :

CP more than 1 million strokes
CPR more than 500,000 strokes
(2mm stroke, 60 strokes / 60 seconds)

Thermal-endurance : 100°C or below

Stated durability of the bushing is a result of our internal testing. It is not guaranteed and your actual results may vary.

CP35 - CP35S

Fig	Type	Configuration of Tip	a	b	c	d	d'	e	g	g'	h	j	k	(mm)							
1	CP35	A, B*, B<0.9>, C, CX, R, T	30	14	8	-	4	9	3	-	(1.3)*	2	3.5	2.9							
2		D,DF,E90,E120,F,G60,G90,GX,H,K,KX,L,U,V					5														
3		J	33.4	17.4	5	3.4															
		J7																			
		J19																			
		J37																			
2	CPR35	VC, QN	30	14	8	5	-	9	3	-	2	3.5	2.9								
2	CP35SB	D, DF, E90, E120, F, G120, GX, H, K, KX	30	14	8	5	-	9	3.5	-	2	3.5	2.9								
2	CPR35S	VC, QN	30	14	8	5	-	9	3.5	-	2	3.5	2.9								
2	CP35P	D,DF,E90,E120,F,G60,G90,GX,H,K,KX,L,U,V	30	14	8.8	5	-	9	3	-	2	3	2.4								
1	CP35S	A, B*, B<0.9>, C, CX, R, T	30	14	8.8	-	4	9	3	-	(1.3)*	2	3	2.4							
2		D, DF, E90, E120, F, G120, GX, H, K, KX					5														
3		J	33.4	17.4	5	3.4															
		J7																			
		J19																			
		J37																			

For the specifications of these probes and tip configurations,
see "Illustrated Specifications, CP series" and "List of Tip Configurations".

Spring Contact Probe CP40 - CP40S

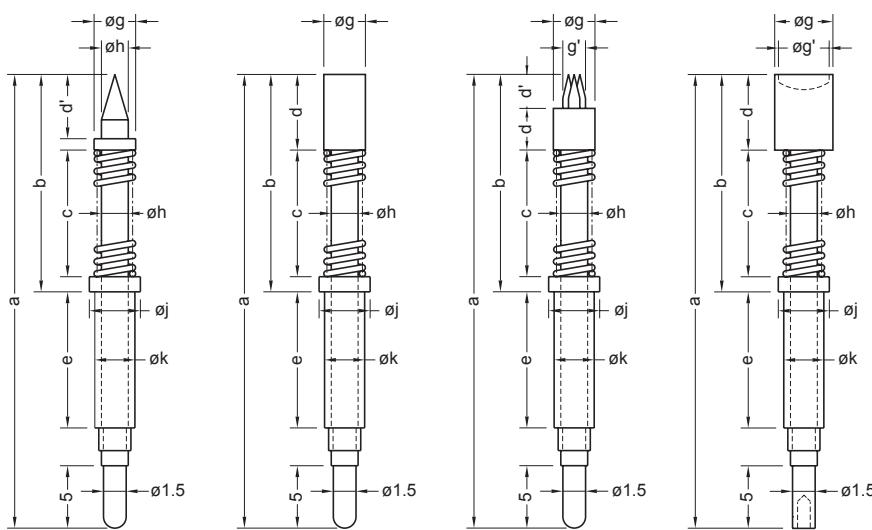


Fig 1

Fig 2

Fig 3

Fig 4

CP40 - CP40S (Spring contact probe)

Durability of bushing :

CP more than 1 million strokes
CPR more than 500,000 strokes
(2mm stroke, 60 strokes / 60 seconds)

Thermal-endurance : 100°C or below

Stated durability of the bushing is a result of our internal testing. It is not guaranteed and your actual results may vary.

CP40 - CP40S

CP40

Fig	Type	Configuration of Tip	a	b	c	d	d'	e	g	g'	h	j	k	(mm)						
1	CP40	A, B*, B<0.9>, C, CX, R, T	45.5	23.5	15	—	6	15	3	—	2 (1.3)*	4	3.2							
2		DL,DFL,E90,E120,F,G30,G60,G90,GX,H,K,KX,U				7	—		3.5	—										
3		D, DF	42.5	20.5	—	4	—		3	1.8										
4		J	45.5	23.5	13.6	5	3.4		3.5	2.1										
5		J7							4.5	3.5										
6		J19	43.5	15	7	—		6	4.7											
7		J37						5.3	4.8											
8	CPR40	M3P	43.5	15	7	—		7	6.1											
9		M3B																		
10	CP40A	VC, QN	45.5	23.5	15	7	—	15	3.5	—	2	4	3.2							
11		A, B*, B<0.9>, C, CX, R, T	45.5	23.5	15	—	6	15	3	—	2 (1.3)*	3.5	2.9							
12		DL,DFL,E90,E120,F,G30,G60,G90,GX,H,K,KX,U	45.5	23.5					3.5	—										
13		D, DF	42.5	20.5	23.5	4	—		3	1.8										
14		J	45.5	23.5					3.5	2.1										
15		J7							4.5	3.5										
16	CP40SB	J19	45.5	23.5	13.6	5	3.4		6	4.7										
17		J37																		
18	CPR40S	DL, DFL, E90, E120, F, G120, GX, H	45.5	23.5	15	7	—	15	4.5	—	2	4	3.2							
19		VC, QN	45.5	23.5	15	7	—	15	4.5	—	2	4	3.2							
20	CP40P	DL,DFL,E90,E120,F,G30,G60,G90,GX,H,K,KX,U	45.5	23.5	16.3	7	—	15	3.5	—	2	3	2.4							
21		D, DF	42.5	20.5					4	—										
22	CP40S	A, B*, B<0.9>, C, CX, R, T	45.5	23.5	16.3	—	6	15	3	—	2 (1.3)*	3	2.4							
23		DL, DFL, E90, E120, F, G120, GX, H							4.5	—										
24		J	45.5	23.5	14.9	5	3.4		3	1.8										
25		J7							3.5	2.1										
26		J19							4.5	3.5										
27		J37							6	4.7										

For the specifications of these probes and tip configurations,
see "Illustrated Specifications, CP series" and "List of Tip Configurations".

Spring Contact Probe CP50 - CP90

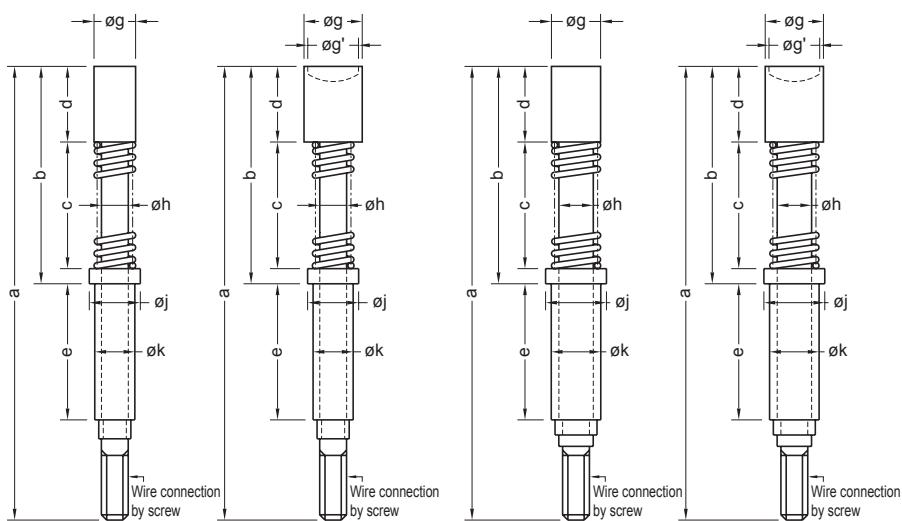


Fig 1

Fig 2

Fig 3

Fig 4

CP50 / CPR50

CP65 / CP90

CP50 - CP90 (Spring contact probe)

Durability of bushing :

CP more than 1 million strokes
CPR more than 500,000 strokes
(2mm stroke, 60 strokes / 60 seconds)

Thermal-endurance : 100°C or below

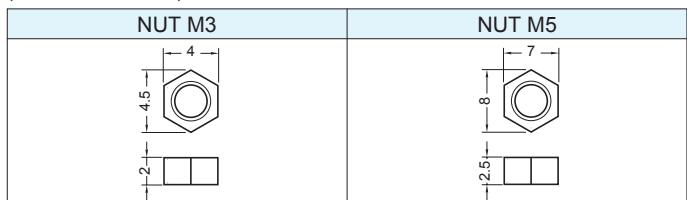
Stated durability of the bushing is a result of our internal testing. It is not guaranteed and your actual results may vary.

(Table of connection method)

Type	Connection Method
CP50, CPR50	Fixing by M3 NUT
CP65, CPU65	
CP90, CPU90	Fixing by M5 NUT

(NUT is included as accessory)

(Dimension of NUT)



(mm)

Fig	Type	Configuration of Tip	a	b	c	d	e	g	g'	h	j	k			
1	CP50	D <5>, D6 <5>, F <5>, G90, H	48.5	23.5	15	7	15	5	-	3	5	4.2			
		D4 <8>, D6 <8>, F <8>						8							
		D6 <10>						10							
2		M3PM						5.3	4.8						
		M3BM						7	6.1						
1	CPR50	VC <5>	48.5	23.5	15	7	15	7.4	6.8	4.5	6.5	5.7			
3	CP65	D2 <6>, F <6>, G90, H	48.5	23.5	15	7	15	8.8	8.2						
		D4 <8>, F <8>						10	-						
		D6 <10>						7	6.1						
4		M3BM						7.4	6.8						
		M4PM						8.8	8.2						
	CP90	M4BM	48.5	23.5	15	7	15	10	9	6	9	8			
3		M5PM						11.5	10.5						
		M5BM						8	-						
		M6PM						10	9						
4		M6BM						11.5	10.5						
								12.5	11						
								13	12.3						

For the specifications of these probes and tip configurations,
see "Illustrated Specifications, CP series" and "List of Tip Configurations".

Spring Contact Probe NCP10 - NCP250B

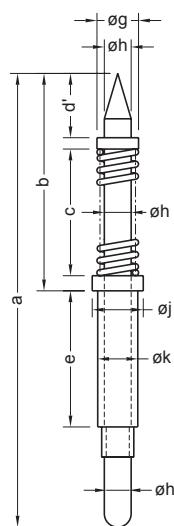


Fig 1

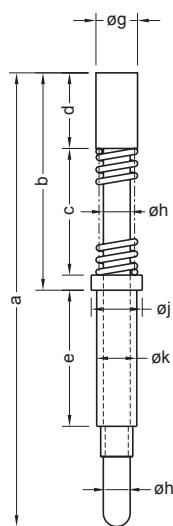


Fig 2

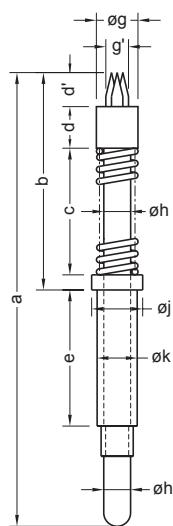


Fig 3

NCP10 - NCP250B (Spring contact probe)

Durability of bushing : more than 1 million strokes
(2mm stroke, 60 strokes / 60 seconds)

Thermal-endurance : 100°C or below

Stated durability of the bushing is a result of our internal testing. It is not guaranteed and your actual results may vary.

NCP10 - NCP250B

Fig	Type	Configuration of Tip	a	b	c	d	d'	e	(mm)				
									g	g'	h	j	k
1	NCP10	A, R, T	32	18	12.5	—	4.9	9	1	—	0.6	1.05	0.85
2		D, E90, F, G90, GX, H, K, KX, L				5.4	—		1.2	—			
1	NCP15<1.5>	A, C, CX, R, T	32	18	12.5	—	4.9	9	1.2	—	0.8	1.25	1.05
2		D, E90, F, G90, GX, H, K, KX					5.4		1.5	—			
3		J					3.9	1.5	1.2	0.6			
2	NCP15<1.2>	D, E90, F, G90, GX, H, K, KX	32	18	12.5	5.4	—	9	1.2	—	0.8	1.25	1.05
1	NCP18	A, C, CX, R	32	18	12.5	—	4.9	9	1.5	—	1	1.5	1.25
2		D, E90, F, G90, GX, H, K, KX					5.4		1.8	—			
3		J					3.9	1.5	1.65	0.8			
1	NCP11	A, R	37	23	17.5	—	4.9	9	1	—	0.6	1.05	0.85
2		D, E90, F, G90, GX, H, K, KX, L					5.4		1	—			
1	NCP11S	A, R	37	23	12.4	—	10	9	1	—	0.6	1.05	0.85
1	NCP12	A, CX, R, T	37	23	17.5	—	4.9	9	1.2	—	0.8	1.25	1.05
2		D, E90, F, G90, GX, H, K, KX					5.4		1.65	0.8			
1	NCP12S	A, C, R	37	23	12.4	—	10	9	1.2	—	0.8	1.25	1.05
1	NCP20	A, C, CX, R, T	37	23	17.5	—	4.9	9	1.5	—	1	1.5	1.25
2		D, E90, F, G90, GX, H, K, KX, L					5.4		1.65	0.8			
3		J					3.9	1.5	2.5	1.4			
1	NCP20S	A, C, CX, R, T	37	23	12.4	—	10	9	1.5	—	1	1.5	1.25
1	NCP25	A, CX, R	37	23	17.45	—	4.4	9	2	—	1.3	2	1.65
2		D, E90, F, G90, GX, H, K, KX,					5.4		2.5	1.4			
3		J					14.45	5	3.4	2.5			
1	NCP25S	A, CX, R	37	23	11.85	—	10	9	2	—	1.3	2	1.65
1	NCP250	A, B, CX, R	48.5	28.5	20	—	7.35	15	2	—	1.3	2.3	1.65
2		D, E90, F, G90, GX, H, K, KX					8.35		2.3	—			
3		J					4.95	3.4	2.5	1.4			
1	NCP250B	A, B, CX, R	48.5	28.5	19.15	—	7.35	15	2	—	1.3	2.8	2.4
2		D, E90, F, G90, GX, H, K, KX					8.35		2.3	—			
3		J					4.95	3.4	2.5	1.4			

For the specifications of these probes and tip configurations,
see "Illustrated Specifications, NCP series" and "List of Tip Configurations".

Spring Contact Probe NCP300 - NCP300BA

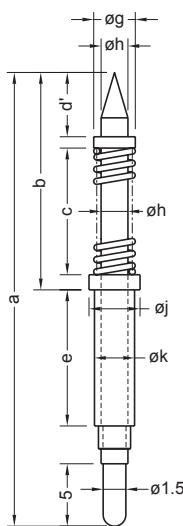


Fig 1

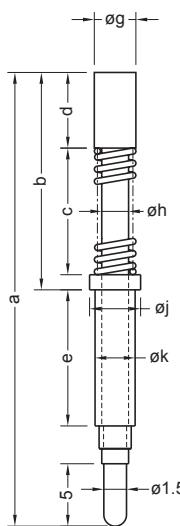


Fig 2

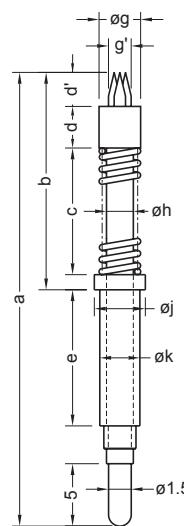


Fig 3

NCP300 - NCP300BA (Spring contact probe)

Durability of bushing : more than 1 million strokes
(2mm stroke, 60 strokes / 60 seconds)

Thermal-endurance : 100°C or below

Stated durability of the bushing is a result of our internal testing. It is not guaranteed and your actual results may vary.

NCP300 - NCP300BA

Fig	Type	Configuration of Tip	a	b	c	d	d'	e	g	g'	h	j	k	(mm)
1	NCP300	A, B*, CX, R	50.5	28.5	20	4.95	3.4	15	3	— 1.8 2.1	— 2 (1.3)*	3 3 2.1	2.4 3 2.4	
2		D, E90, F, G90, GX, H, K, KX												
3		J												
3		J7												
1	NCP300B	A, B*, CX, R	50.5	28.5	18.65	4.95	3.4	15	3	— 1.8 2.1	— 2 (1.3)*	4	3.2	
2		D, E90, F, G90, GX, H, K, KX												
3		J												
3		J7												
1	NCP300BA	A, B*, CX, R	50.5	28.5	18.65	4.95	3.4	15	3	— 1.8 2.1	— 2 (1.3)*	3.5	2.9	
2		D, E90, F, G90, GX, H, K, KX												
3		J												
3		J7												

For the specifications of these probes and tip configurations,
see "Illustrated Specifications, NCP series" and "List of Tip Configurations".

Probe with Long-Shaft Bushing NCP10LP - NCP20LB

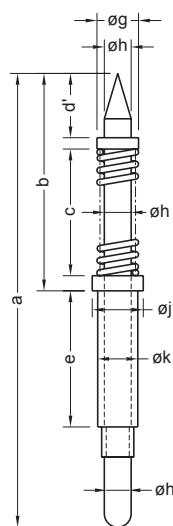


Fig 1

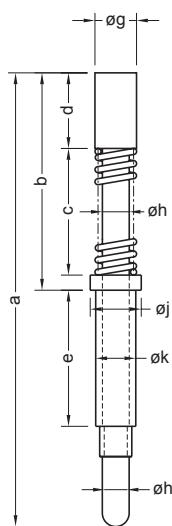


Fig 2

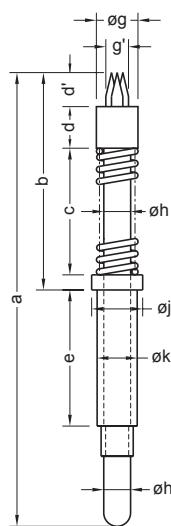


Fig 3

NCP10LP - NCP20LB (Spring contact probe)

Durability of bushing : more than 1 million strokes
(2mm stroke, 60 strokes / 60 seconds)

Thermal-endurance : 100°C or below

Stated durability of the bushing is a result of our internal testing. It is not guaranteed and your actual results may vary.

NCP10LP - NCP20LB

* Type Having the Same Dimension of 'b' (mm)

Fig	Type	*	Configuration of Tip	a	b	c	d	d'	e	g	g'	h	j	k
1	NCP10LP13	CP10	A, R, T	32	14	8.5	—	4.9	13	1	—	0.6	1.05	0.85
2			D, E90, F, G90, GX, H, K, KX, L					5.4		1.2	—			
1	NCP15<1.5>LP13	CP12	A, C, CX, R, T	32	14	8.5	—	4.9	13	1.2	—	0.8	1.25	1.05
2			D, E90, F, G90, GX, H, K, KX					5.4		1.5	—			
3			J					3.9		1.5	—			
2	NCP15<1.2>LP13	CP12	D, E90, F, G90, GX, H, K, KX	32	14	8.5	5.4	—	13	1.2	—	0.8	1.25	1.05
1	NCP18LP13	CP15 CP20	A, C, CX, R	32	14	8.5	—	4.9	13	1.5	—	1	1.5	1.25
2			D, E90, F, G90, GX, H, K, KX					5.4		1.8	—			
3			J					3.9		1.5	—			
1	NCP11LP14	NCP10	A, R	37	18	12.5	—	4.9	14	1	—	0.6	1.05	0.85
2	NCP11LP18	CP10	D, E90, F, G90, GX, H, K, KX, L	37	14	8.5	—	4.9	18	1	—	0.6	1.05	0.85
1			A, R					5.4		1.2	—			
2	NCP12LP14	NCP15	D, E90, F, G90, GX, H, K, KX	37	18	12.5	—	4.9	14	1.2	—	0.8	1.25	1.05
1			A, CX, R, T					5.4		1.5	—			
2	NCP12LP18	CP12	D, E90, F, G90, GX, H, K, KX, L	37	14	8.5	—	4.9	18	1.2	—	0.8	1.25	1.05
1	NCP20LP14	NCP18	A, C, CX, R, T	37	18	12.5	—	4.9	14	1.5	—	1	1.5	1.25
2			D, E90, F, G90, GX, H, K, KX, L					5.4		1.65	0.8			
3			J					3.9		1.5	—			
1	NCP20LP18	CP15 CP20	A, C, CX, R, T	37	14	8.5	—	4.9	18	1.5	—	1	1.5	1.25
2			D, E90, F, G90, GX, H, K, KX, L					5.4		1.65	0.8			
3			J					3.9		1.5	—			
1	NCP20LB14.5	NCP18	A, C, CX, R, T	37	18	12.1	—	4.9	14	1.5	—	1	2.2	2
2			D, E90, F, G90, GX, H, K, KX, L					5.4		1.65	0.8			
3			J					3.9		1.5	—			
1	NCP20LB18.5	CP20B	A, C, CX, R, T	37	14	8.1	—	4.9	18	1.5	—	1	2.2	2
2			D, E90, F, G90, GX, H, K, KX, L					5.4		1.65	0.8			
3			J					3.9		1.5	—			

For the specifications of these probes and tip configurations,
see "Illustrated Specifications, NCPLP/LB series" and "List of Tip Configurations".

Probe with Long-Shaft Bushing NCP25LB - NCP250LP

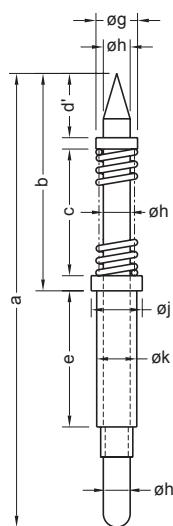


Fig 1

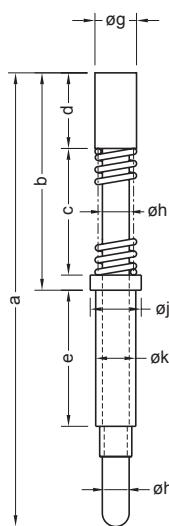


Fig 2

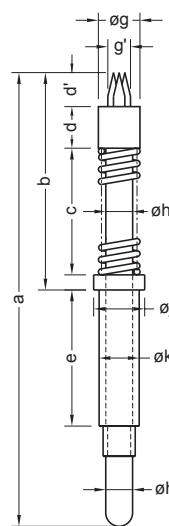


Fig 3

NCP25LB - NCP250LP (Spring contact probe)

Durability of bushing : more than 1 million strokes
(2mm stroke, 60 strokes / 60 seconds)

Thermal-endurance : 100°C or below

Stated durability of the bushing is a result of our internal testing. It is not guaranteed and your actual results may vary.

NCP25LB - NCP250LP

* Type Having the Same Dimension of 'b' (mm)

Fig	Type	*	Configuration of Tip	a	b	c	d	d'	e	g	g'	h	j	k
1	NCP25LB15	-	A, CX, R	37	18	11.6	—	4.4	14	2	—	1.3	2.8	2.4
2			D, E90, F, G90, GX, H, K, KX				5.4	—						
3			J				8.6	5	3.4		2.5	1.4		
1	NCP25LP14	-	A, CX, R	37	18	12.45	—	4.4	14	2	—	1.3	2	1.65
2			D, E90, F, G90, GX, H, K, KX				5.4	—						
3			J				9.45	5	3.4		2.5	1.4		
1	NCP25LP18	CP25	A, CX, R	37	14	8.45	—	4.4	18	2	—	1.3	2	1.65
2			D, E90, F, G90, GX, H, K, KX				5.4	—						
1	NCP250LB21	-	A, B, CX, R	48.5	23.5	14.15	—	7.35	20	2	—	1.3	2.8	2.4
2			D, E90, F, G90, GX, H, K, KX				8.35	—						
3			J				4.95	3.4			2.5	1.4		
1	NCP250LP20	-	A, B, CX, R	48.5	23.5	15	—	7.35	20	2	—	1.3	2	1.65
2			D, E90, F, G90, GX, H, K, KX				8.35	—						
3			J				4.95	3.4			2.5	1.4		

For the specifications of these probes and tip configurations,
see "Illustrated Specifications, NCPLP/LB series" and "List of Tip Configurations".

Probe with Long-Shaft Bushing NCP300LB - NCP300LP

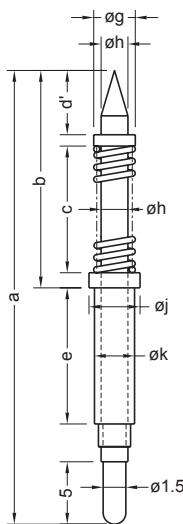


Fig 1

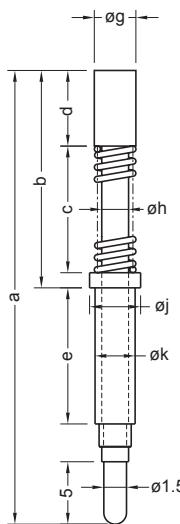


Fig 2

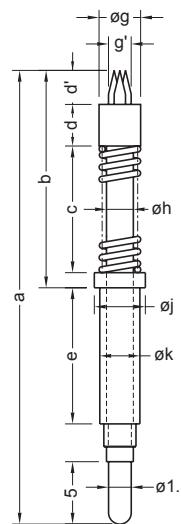


Fig 3

NCP300LB - NCP300LP (Spring contact probe)

Durability of bushing : more than 1 million strokes
(2mm stroke, 60 strokes / 60 seconds)

Thermal-endurance : 100°C or below

Stated durability of the bushing is a result of our internal testing. It is not guaranteed and your actual results may vary.

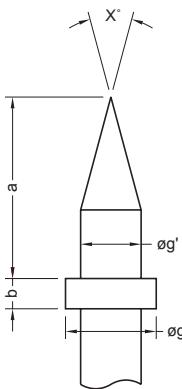
NCP300LB - NCP300LP

* Type Having the Same Dimension of 'b' (mm)

Fig	Type	*	Configuration of Tip	a	b	c	d	d'	e	g	g'	h	j	k
1	NCP300LB21	CP40	A, B, CX, R	50.5	23.5	14.15	4.95	-	20	3	1.8	2	4	3.2
2			D, E90, F, G90, GX, H, K, KX					7.35						
3			J					8.35						
4			J7					3.4						
1	NCP300LBA21	CP40	A, B, CX, R	50.5	23.5	14.15	4.95	-	20	3	1.8	2	3.5	2.9
2			D, E90, F, G90, GX, H, K, KX					7.35						
3			J					8.35						
4			J7					3.4						
1	NCP300LP20	CP40S	A, B, CX, R	50.5	23.5	15	4.95	-	20	3	1.8	2	3	2.4
2			D, E90, F, G90, GX, H, K, KX					7.35						
3			J					8.35						
4			J7					3.4						

For the specifications of these probes and tip configurations,
see "Illustrated Specifications, NCPLP/LB series" and "List of Tip Configurations".

A type



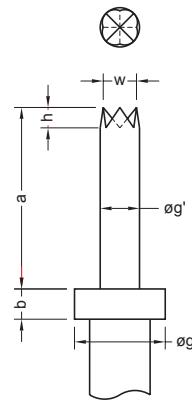
Tip Configuration Symbol A

(mm)

Type	X'(angle)	a	b	øg	øg'
<CPS>					
CPS10	25°	2.0	0.5	1.0	0.6
CPS12				1.2	0.8
CPS20				1.5	1.0
CPS25				2.0	—
CPS30				3.0	—
CPS35					
<CP>					
CP6	30°	4.9	0.5	0.6	0.3
CP8				0.8	0.4
CP10<1>				1.0	0.6
CP12				1.2	0.8
CP20, CP20B		4.0	1.0	1.5	1.0
CP25				2.0	1.3
CP30				3.0	2.0
CP35,CP35S	30°				
CP40, CP40A, CP40S	25°	6.0			
<NCP> <NCPLP, LB>					
NCP10 NCP11	25°	4.9	0.5	1.0	0.6
NCP11S				1.2	0.8
NCP12				1.5	1.0
NCP12S				2.0	1.3
NCP15<1.5>		4.9	1.0	3.0	2.0
NCP18 NCP20					
NCP20S					
NCP25					
NCP25S					
NCP250 NCP250B		7.35			
NCP300, NCP300B NCP300BA					

B and C type

B type

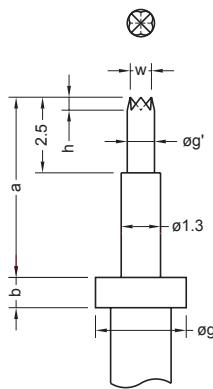


Tip Configuration Symbol B

Type	a	b	øg	øg'	w	h	(mm)
<CP>							
CP25							
CP30	4.0			2.0			
CP35, CP35S		1.0			1.3	1.1	0.7
CP40, CP40A, CP40S	6.0			3.0			
<NCP> <NCPLP, LB>							
NCP250	NCP250LP20			2.0			
NCP250B	NCP250LB21	7.35	1.0		1.3	1.1	0.7
NCP300, NCP300B	NCP300LP20, NCP300LB21			3.0			
NCP300BA	NCP300LBA21						

List of Tip Configurations

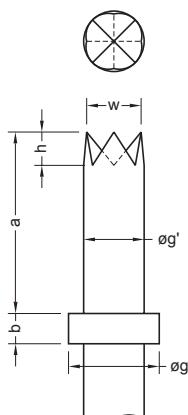
Tip Configuration Symbol B <0.9>



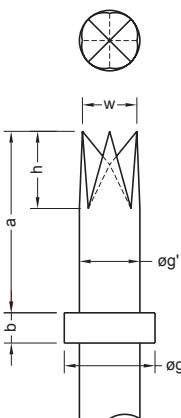
Tip Configuration Symbol C

Type	a	b	øg	øg'	w	h	(mm)
<CP>							
CP12							
CP20, CP20B	4.9	0.5	1.2	0.8	0.7	0.4	
CP35, CP35S	4.0		1.5	1.0	0.8	0.5	
CP40, CP40A, CP40S	6.0		3.0	2.0	1.8	1.1	
<NCP> <NCPLP, LB>							
NCP12S	-	10.0					
NCP15<1.5>	NCP15<1.5>LP13		1.2	0.8	0.7	0.4	
NCP18 NCP20	NCP18LP13 NCP20LP, NCP20LB	4.9					
NCP20S	-	10.0	1.5	1.0	0.8	0.5	

C type



CX type



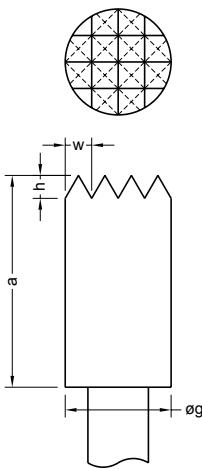
Tip Configuration Symbol CX

(mm)

Type	a	b	øg	øg'	w	h	
<CPS>							
CPS12	2.0	0.5	1.2	0.8	0.6	1.0	
CPS20			1.5	1.0	0.8	1.2	
CPS25			2.0	1.3	1.1	1.6	
CPS30			3.0	2.0	1.8	1.6	
CPS35							
<CP>							
CP12	4.9	0.5	1.2	0.8	0.6	1.0	
CP20, CP20B			1.5	1.0	0.8	1.2	
CP25	4.0	1.0	2.0	1.3	1.1	1.6	
CP30							
CP35A, CP35S			3.0	2.0	1.8	2.4	
CP40, CP40A, CP40S	6.0						
<NCP> <NCPLP, LB>							
NCP12	NCP12LP	4.9	0.5	1.2	0.8	0.6	1.0
NCP15<1.5>	NCP15<1.5>LP13			1.5	1.0	0.8	1.2
NCP18 NCP20	NCP18LP13 NCP20LP, NCP20LB						
NCP20S	–	10.0	1.0				
NCP25	NCP25LP NCP25LB15	4.4					
NCP25S	–	10.0		2.0	1.3	1.1	1.6
NCP250 NCP250B	NCP250LP20 NCP250LB21	7.35					
NCP300, NCP300B NCP300BA	NCP300LP20, NCP300LB21 NCP300LBA21			3.0	2.0	1.8	2.4

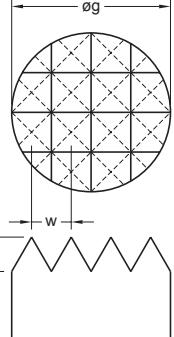
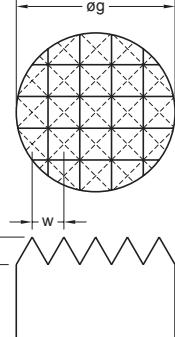
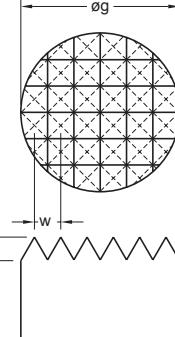
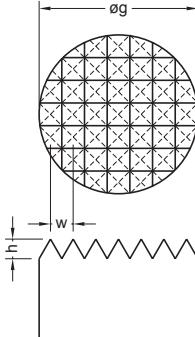
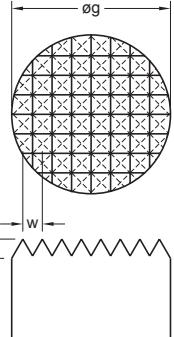
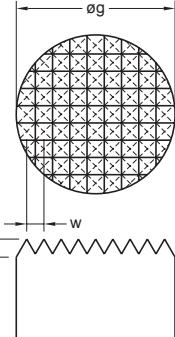
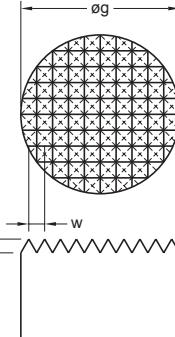
D type

Tip Configuration Symbol D



Type	a	øg	w	h	(mm)	
<CPS>						
CPS10	3.5	1.0	0.25	0.22		
CPS12		1.2	0.3	0.26		
CPS15		1.5	0.37	0.32		
CPS20		1.8	0.45	0.39		
CPS25		2.0	0.5	0.43		
CPS30		2.5	0.62	0.54		
CPS35		3.0	0.75	0.65		
<CP>						
CP6	5.4	0.6	0.15	0.13		
CP8		0.8	0.2	0.17		
CP10<0.8>		1.0	0.25	0.22		
CP10<1>		1.2	0.3	0.26		
CP12		1.5	0.37	0.32		
CP10<1.5> CP15, CP15B		1.8	0.45	0.39		
CP20, CP20B		2.0	0.5	0.43		
CP25, CP25B	5.0	2.5	0.62	0.54		
CP30, CP30P		3.0	0.75	0.65		
CP30S, CP30SB		3.5	0.87	0.76		
CP35, CP35P		4.0	5.0	1.25	1.08	
CP35S, CP35SB		5.0	5.0	1.25	1.08	
CP40, CP40A, CP40P		5.4	5.0	1.25	1.08	
CP50		5.4	5.0	1.25	1.08	
<NCP>						
<NCPLP, LB>						
NCP10	5.4	NCP10LP13	1.2	0.3	0.26	
NCP11		NCP11LP	1.0	0.25	0.22	
NCP12 NCP15<1.2>		NCP12LP NCP15<1.2>LP13	1.2	0.3	0.26	
NCP15<1.5> NCP20		NCP15<1.5>LP13 NCP20LP, NCP20LB	1.5	0.37	0.32	
NCP18		NCP18LP13	1.8	0.45	0.39	
NCP25		NCP25LP NCP25LB15	2.0	0.5	0.43	
NCP250 NCP250B		NCP250LP20 NCP250LB21	2.3	0.57	0.5	
NCP300, NCP300B NCP300BA	8.35	NCP300LP20, NCP300LB21 NCP300LBA21	3.0	0.75	0.65	

Variation of D type

<p>Various types are available, each of which has the different number of contact points and diameters of tips, from D / DL type with 12 points to D6 / DL6 with 80 points.</p> <p>Please select from the list.</p>	<p>D : 12point (DL)</p> 	<p>D1 : 21point (DL1)</p> 	<p>D2 : 32point (DL2)</p> 
<p>D3 : 37point (DL3)</p> 	<p>D4 : 52point (DL4)</p> 	<p>D5 : 69point (DL5)</p> 	<p>D6 : 80point (DL6)</p> 

List for D - D6

Tip Configuration Symbol D (DL) - D6 (DL6)

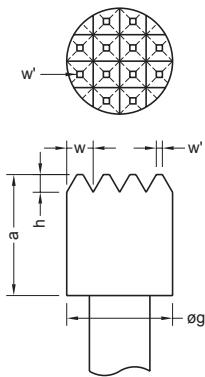
Type	Tip configuration øg (Dia of Tips)	D (DL)		D1 (DL1)		D2 (DL2)		D3 (DL3)		D4 (DL4)		D5 (DL5)		D6 (DL6)	
		w	h	w	h	w	h	w	h	w	h	w	h	w	h
CP6	0.6	0.15	0.13												
CP8, CP10<0.8>	0.8	0.2	0.17												
CP10<1>	1.0	0.25	0.22	0.2	0.17										
CPS10, NCP11 NCP11LP14, NCP11LP18	1.0	0.25	0.22												
CP12	1.2	0.3	0.26	0.24	0.21	0.2	0.17								
CPS12, NCP10, NCP12, NCP15<1.2> NCP10LP13, NCP12LP, NCP15<1.2>LP13	1.2	0.3	0.26												
CP15, CP15B	1.5	0.37	0.32	0.3	0.26			0.21	0.18						
CPS15, NCP15<1.5>, NCP20 NCP15<1.5>LP13, NCP20LP, NCP20LB	1.5	0.37	0.32												
CP10<1.5>	1.5	0.37	0.32					0.21	0.18						
CPS20, NCP18 NCP18LP	1.8	0.45	0.39												
CP20, CP20B	1.8	0.45	0.39	0.36	0.31	0.3	0.26	0.25	0.22			0.2	0.17		
	2.0	0.5	0.43												
	3.0	0.75	0.65												
CP25, CP25B	2.0	0.5	0.43	0.4	0.35	0.33	0.29			0.25	0.22			0.2	0.17
CPS25, NCP25 NCP25LP, NCP25LB	2.0	0.5	0.43												
NCP250, NCP250B NCP250LP20, NCP250LB21	2.3	0.57	0.5												
CPS30	2.5	0.62	0.54												
CP30, CP30P	2.5	0.62	0.54		0.41	0.36	0.35	0.3	0.31	0.27				0.25	0.22
	3.5	0.87	0.76												
CP30S, CP30SB	3.0	0.75	0.65		0.5	0.43	0.42	0.36	0.37	0.32			0.3	0.26	
CPS35, NCP300, NCP300BA, NCP300B NCP300LP20, NCP300LBA21, NCP300LB21	3.0	0.75	0.65												
CP35, CP35P	3.0	0.75	0.65	0.6	0.52	0.5	0.43	0.42	0.36					0.3	0.26
CP35S, CP35SB	3.5	0.87	0.76	0.7	0.61	0.58	0.5	0.5	0.43					0.35	0.3
CP40, CP40A, CP40P	3.5	0.87	0.76												
	(3.5)	(0.87)	(0.76)	(0.7)	(0.61)	(0.58)	(0.5)	(0.5)	(0.43)					(0.35)	(0.3)
CP40S, CP40SB	(4.5)	(1.12)	(0.97)					(0.64)	(0.55)	(0.56)	(0.49)	(0.5)	(0.43)	(0.45)	(0.39)
CP50	5.0	1.25	1.08											0.5	0.43
	8.0									1.0	0.87			0.8	0.69
	10.0													1.0	0.87
CP65	6.0				1.0	0.87									
	8.0									1.0	0.87			1.0	0.87
CP90	8.0									1.0	0.87				
	10.0													1.0	0.87

Figures in brackets correspond to DL - DL6 for CP40, CP40A, CP40P, CP40S and CP40SB.

All the configuration listed in the above are ready to supply from stock. Regarding other configurations, we shall produce them as special requirement.

DF, DFL, DF1 and DFL1 type

DF, DFL type

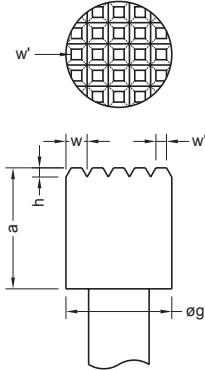


Tip Configuration Symbol DF, DFL

Type	Configuration	a	øg	w	w'	h	(mm)
<CP>							
CP30, CP30P	DF			2.5	0.62		0.37
CP30S, CP30SB	DF			3.0	0.75		0.48
CP35, CP35P	DF					0.2□	
CP35S, CP35SB	DF			3.5	0.87		0.58
CP40, CP40A, CP40P	DF	4.0					
	DFL						
CP40S, CP40SB	DFL	7.0		4.5	1.12		0.8

List of Tip Configurations

DF1, DFL1 type

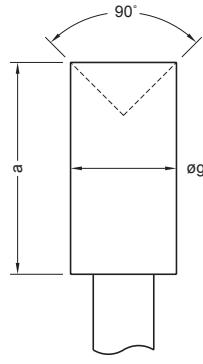


Tip Configuration Symbol DF1, DFL1

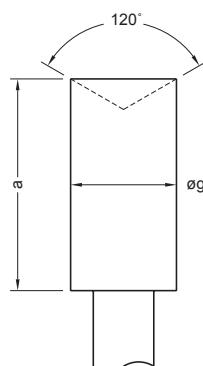
Type	Configuration	a	øg	w	w'	h	(mm)
<CP>							
CP30, CP30P	DF1			2.5	0.5	0.25□	0.22
CP30S, CP30SB	DF1			3.0	0.6	0.3 □	0.26
CP35, CP35P	DF1					0.25□	
CP35S, CP35SB	DF1			3.5	0.7	0.35□	0.3
CP40, CP40A, CP40P	DF1	4.0					
	DFL1						
CP40S, CP40SB	DFL1	7.0		4.5	0.9	0.45□	0.39

E type

Tip Configuration Symbol E90, E120



E90

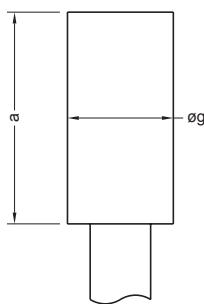


E120

Type	Configuration	angle	a	øg	(mm)	
<CPS>						
CPS10	E90	90°	2.5	3.5	1.0	
CPS12	E90	90°		3.5	1.2	
CPS15	E90	90°		3.5	1.5	
CPS20	E90	90°		3.5	1.8	
CPS25	E90	90°		3.5	2.0	
CPS30	E90	90°		3.5	2.5	
CPS35	E90	90°		3.5	3.0	
<CP>						
CP8	E90	90°	5.4	5.4	0.8	
CP10 <0.8>	E90	90°		5.4	1.0	
CP10 <1>	E90	90°		5.4	1.2	
CP12	E90	90°		5.4	1.5	
CP10 <1.5> CP15, CP15B	E90	90°		5.4	1.8	
CP20, CP20B	E90	90°		5.4	2.0	
CP25, CP25B	E90	90°		5.4	2.5	
CP30, CP30P	E90	90°	5.0	5.0	3.0	
CP30S, CP30SB	E90	90°		5.0	3.5	
CP35, CP35P	E90	90°		5.0	4.5	
CP35S, CP35SB	E90	90°		5.0	5.4	
CP40, CP40A, CP40P	E90	90°		5.0	6.2	
CP40SB, CP40S	E90	90°		5.0	7.0	
	E120	120°		5.0	8.35	
<NCP>						
<NCPLP, LB>						
NCP10	NCP10LP13	E90	90°	5.4	1.2	
NCP11	NCP11LP	E90	90°		1.0	
NCP12 NCP15 <1.2>	NCP12LP NCP15 <1.2> LP13	E90	90°		1.2	
NCP15 <1.5> NCP20	NCP15 <1.5> LP13 NCP20LP, NCP20LB	E90	90°		1.5	
NCP18	NCP18LP13	E90	90°		1.8	
NCP25	NCP25LP NCP25LB15	E90	90°		2.0	
NCP250 NCP250B	NCP250LP20 NCP250LB21	E90	90°		2.3	
NCP300, NCP300B NCP300BA	NCP300LP20, NCP300LB21 NCP300LBA21	E90	90°	8.35	3.0	

F type

Tip Configuration Symbol F



Type	a	øg	(mm)
<CPS>			
CPS10	2.5	3.5	1.0
CPS12			1.2
CPS15			1.5
CPS20			1.8
CPS25			2.0
CPS30			2.5
CPS35			3.0
<CP>			
CP6	5.4		0.6
CP8			0.8
CP10<0.8>			
CP10<1>			1.0
CP12			1.2
CP10<1.5> CP15, CP15B			1.5
CP20, CP20B			1.8
CP25, CP25B	5.0		2.0
CP30, CP30P			2.5
CP30S, CP30SB			
CP35, CP35P			3.0
CP35S, CP35SB			
CP40, CP40A, CP40P			3.5
CP40SB, CP40S			
CP50	7.0		4.5
CP65			5.0
CP90			8.0
			6.0
			8.0
			8.0
			10.0
<NCP> <NCPLP, LB>			
NCP10	5.4	NCP10LP13	1.2
NCP11		NCP11LP	1.0
NCP12 NCP15<1.2>		NCP12LP NCP15<1.2>LP13	1.2
NCP15<1.5> NCP20		NCP15<1.5>LP13 NCP20LP, NCP20LB	1.5
NCP18		NCP18LP13	1.8
NCP25		NCP25LP NCP25LB15	2.0
NCP250 NCP250B		NCP250LP20 NCP250LB21	2.3
NCP300, NCP300B NCP300BA	8.35	NCP300LP20, NCP300LB21 NCP300LBA21	3.0

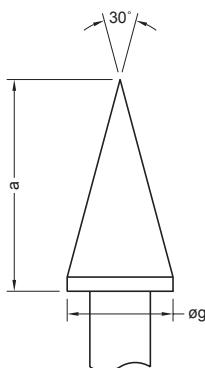
G type

G30 type

Tip Configuration Symbol G30

(mm)

Type	angle	a	øg
<CP> CP40, CP40A, CP40P	30°	7.0	3.5

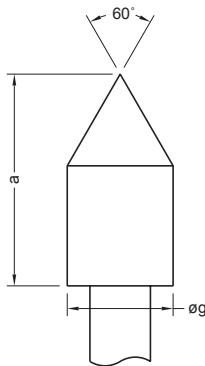


G60 type

Tip Configuration Symbol G60

(mm)

Type	angle	a	øg
<CP>	60°	5.4	0.8
CP8 CP10<0.8>			1.0
CP10<1>			1.2
CP12			1.5
CP15, CP15B			1.8
CP20, CP20B			2.0
CP25, CP25B			2.5
CP30, CP30P			3.0
CP35, CP35P			3.5
CP40, CP40A, CP40P		7.0	

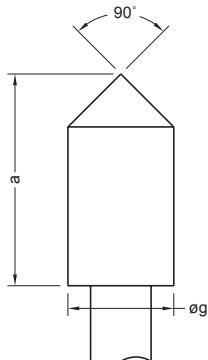


Please refer to the next page for G90 and G120 type

G type

G90 type

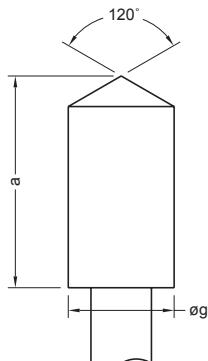
Tip Configuration Symbol G90



Type	angle	a	øg	(mm)
<CP>				
CP8 CP10<0.8>	90°	5.4		0.8
CP10<1>				1.0
CP12				1.2
CP10<1.5> CP15, CP15B				1.5
CP20, CP20B				1.8
CP25, CP25B				2.0
CP30, CP30P				2.5
CP35, CP35P				3.0
CP40, CP40A, CP40P				3.5
CP50	7.0			5.0
CP65				6.0
<NCP> <NCPLP, LB>				
NCP10	90°	5.4		1.2
NCP11				1.0
NCP12 NCP15<1.2>				1.2
NCP15<1.5> NCP20				1.5
NCP18				1.8
NCP25				2.0
NCP250 NCP250B				2.3
NCP300, NCP300B NCP300BA				3.0

G120 type

Tip Configuration Symbol G120



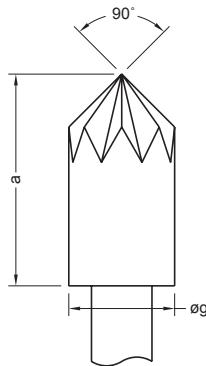
Type	angle	a	øg	(mm)
<CP>				
CP35S, CP35SB	120°	5.0		3.5
CP40SB, CP40S				4.5

Please refer to the previous page for G30 and G60 type

GX type

List of Tip Configurations

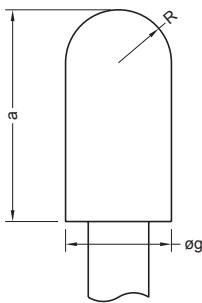
Tip Configuration Symbol GX



Type	a	øg	(mm)
<CPS>			
CPS10	3.5	1.0	
CPS12		1.2	
CPS15		1.5	
CPS20		1.8	
CPS25		2.0	
CPS30		2.5	
CPS35		3.0	
<CP>			
CP8	5.4	0.8	
CP10 <0.8>		1.0	
CP10 <1>		1.2	
CP12		1.5	
CP10 <1.5> CP15, CP15B		1.8	
CP20, CP20B		2.0	
CP25, CP25B		2.5	
CP30, CP30P	5.0	3.0	
CP30S, CP30SB		3.5	
CP35, CP35P		4.5	
CP35S, CP35SB			
CP40, CP40A, CP40P			
CP40SB, CP40S			
<NCPLP, LB>			
NCP10	5.4	1.2	
NCP11		1.0	
NCP12 NCP15 <1.2>		1.2	
NCP15 <1.5> NCP20		1.5	
NCP18		1.8	
NCP25		2.0	
NCP250 NCP250B		2.3	
NCP300, NCP300B NCP300BA	8.35	3.0	
NCP300LP20, NCP300LB21 NCP300LBA21			

H type

Tip Configuration Symbol H



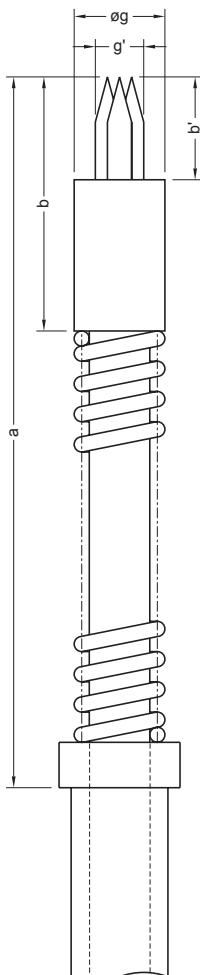
Type	R	a	øg	(mm)
<CP>				
CP8 CP10 <0.8>	0.4	5.4	0.8	
CP10 <1>	0.5		1.0	
CP12	0.6		1.2	
CP10 <1.5> CP15, CP15B	0.75		1.5	
CP20, CP20B	0.9		1.8	
CP25, CP25B	1.0		2.0	
CP30, CP30P	1.25		2.5	
CP30S, CP30SB	1.5		3.0	
CP35, CP35P				
CP35S, CP35SB	1.75		3.5	
CP40, CP40A, CP40P		7.0		
CP40SB, CP40S	2.25		4.5	
CP50	2.5		5.0	
CP65	3.0		6.0	
<NCP> <NCPLP, LB>				
NCP10	NCP10LP13	5.4	0.6	1.2
NCP11	NCP11LP		0.5	1.0
NCP12 NCP15 <1.2>	NCP12LP NCP15 <1.2> LP13		0.6	1.2
NCP15 <1.5> NCP20	NCP15 <1.5> LP13 NCP20LP, NCP20LB		0.75	1.5
NCP18	NCP18LP13		0.9	1.8
NCP25	NCP25LP NCP25LB15		1.0	2.0
NCP250 NCP250B	NCP250LP20 NCP250LB21		1.15	2.3
NCP300, NCP300B NCP300BA	NCP300LP20, NCP300LB21 NCP300LBA21	8.35	1.5	3.0

J type

Tip Configuration Symbol	J (3 needles)				J7 (7 needles)	J19 (19 needles)	J37 (37 needles)
Dimensional Drawing for g'							
Drawing No.	1	2	3	4	5	6	7

Tip Configuration Symbol J, J7, J19, J37

* = Drawing No. (mm)

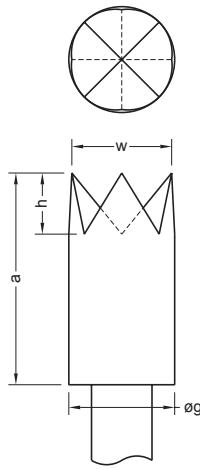


Type	Configuration	a	b	b'	øg	g'	*
<CP>							
CP10 <1>	J	14	5.4	1.5	1.0	0.6	1
CP12	J	14	5.4	1.5	1.2	0.6	1
CP20, CP20B	J	14	5.4	1.5	1.65	0.8	2
CP25	J	17.4	8.4	3.4	2.5	1.4	3
	J7	17.4	8.4	3.4	3.5	2.1	5
CP30	J	17.4	8.4	3.4	2.5	1.4	3
	J7	17.4	8.4	3.4	3.5	2.1	5
CP35 CP35S	J	17.4	8.4	3.4	3.0	1.4	3
	J7	17.4	8.4	3.4	3.5	2.1	5
	J19	17.4	8.4	3.4	4.5	3.5	6
	J37	17.4	8.4	3.4	6.0	4.7	7
CP40 CP40A CP40S	J	23.5	8.4	3.4	3.0	1.8	4
	J7	23.5	8.4	3.4	3.5	2.1	5
	J19	23.5	8.4	3.4	4.5	3.5	6
	J37	23.5	8.4	3.4	6.0	4.7	7
<NCP>							
NCP15 <1.5>	J	18	5.4	1.5	1.2	0.6	1
NCP18	J	18	5.4	1.5	1.65	0.8	2
NCP20	J	23	5.4	1.5	1.65	0.8	2
NCP25	J	23	8.4	3.4	2.5	1.4	3
NCP250	J	28.5	8.35	3.4	2.5	1.4	3
NCP250B	J	28.5	8.35	3.4	2.5	1.4	3
NCP300, NCP300B NCP300BA	J	28.5	8.35	3.4	3.0	1.8	4
	J7	28.5	8.35	3.4	3.5	2.1	5
<NCPLP, LB>							
NCP15 <1.5> LP13	J	14	5.4	1.5	1.2	0.6	1
NCP18LP13, NCP20LB18.5, NCP20LP18	J	14	5.4	1.5	1.65	0.8	2
NCP20LB14.5, NCP20LP14	J	18	5.4	1.5	1.65	0.8	2
NP25LB15	J	18	8.4	3.4	2.5	1.4	3
NCP25LP14	J	18	8.4	3.4	2.5	1.4	3
NCP250LB21, NCP250LP20	J	23.5	8.35	3.4	2.5	1.4	3
NCP300LB21, NCP300LBA21 NCP300LP20	J	23.5	8.35	3.4	3.0	1.8	4
	J7	23.5	8.35	3.4	3.5	2.1	5

Distance g' is obtained from actual measurement.

K type

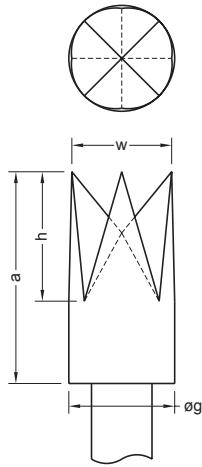
Tip Configuration Symbol K



Type	a	øg	w	h	(mm)
<CPS>					
CPS10	3.5	1.0	0.8	0.5	
<CP>					
CP6		0.6	0.5	0.3	
CP8		0.8	0.7	0.4	
CP10<0.8>					
CP10<1>		1.0	0.8	0.5	
CP12		1.2	1.0	0.6	
CP10<1.5> CP15, CP15B		1.5	1.3	0.8	
CP20, CP20B		1.8	1.6	1.0	
CP25, CP25B		2.0	1.8	1.1	
CP30, CP30P		2.5	2.3	1.4	
CP30S, CP30SB		3.0	2.8	1.7	
CP35, CP35P					
CP35S, CP35SB		3.5	3.3	2.0	
CP40, CP40A, CP40P	7.0				
<NCP> <NCPLP, LB>					
NCP10	NCP10LP13		1.2	1.0	0.6
NCP11	NCP11LP		1.0	0.8	0.5
NCP12 NCP15<1.2>	NCP12LP NCP15<1.2>LP13		1.2	1.0	0.6
NCP15<1.5> NCP20	NCP15<1.5>LP13 NCP20LP, NCP20LB		1.5	1.3	0.8
NCP18	NCP18LP13		1.8	1.6	1.0
NCP25	NCP25LP NCP25LB15		2.0	1.8	1.1
NCP250 NCP250B	NCP250LP20 NCP250LB21		2.3	2.1	1.3
NCP300, NCP300B NCP300BA	NCP300LP20, NCP300LB21 NCP300LBA21		3.0	2.8	1.7

KX type

Tip Configuration Symbol KX

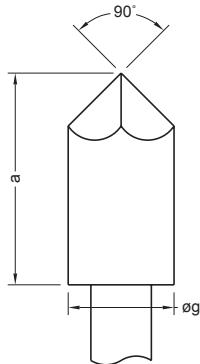


Type	a	øg	w	h	(mm)
<CPS>					
CPS10	3.5	1.0	0.8	1.2	
CPS12		1.2	1.0	1.5	
CPS15		1.5	1.3	1.9	
CPS20		1.8	1.6	2.2	
CPS25		2.0	1.8	2.2	
CPS30		2.5	2.3	2.2	
CPS35		3.0	2.8	2.2	
<CP>					
CP8	5.4	0.8	0.6	1.0	
CP10 <0.8>		1.0	0.8	1.2	
CP10 <1>		1.2	1.0	1.5	
CP12		1.5	1.3	1.9	
CP10 <1.5> CP15, CP15B		1.8	1.6	2.2	
CP20, CP20B	5.0	2.0	1.8	2.4	
CP25, CP25B		2.5	2.3	3.0	
CP30, CP30P		3.0	2.8	3.5	
CP30S, CP30SB		3.5	3.3	4.0	
CP35, CP35P					
CP35S, CP35SB	7.0				
CP40, CP40A, CP40A					
<NCP> <NCPLP, LB>					
NCP10	5.4	1.2	1.0	1.5	
NCP11		1.0	0.8	1.2	
NCP12 NCP15 <1.2>		1.2	1.0	1.5	
NCP15 <1.5> NCP20		1.5	1.3	1.9	
NCP18		1.8	1.6	2.2	
NCP25	8.35	2.0	1.8	2.4	
NCP250 NCP250B		2.3	2.1	2.8	
NCP300, NCP300B NCP300BA		3.0	2.8	3.5	

L type

List of Tip Configurations

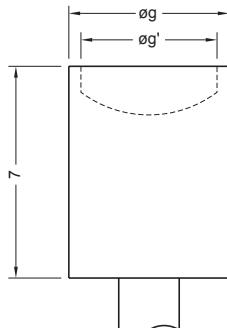
Tip Configuration Symbol L



Type	a	øg	(mm)		
<CP>					
CP8	5.4	0.8	0.8		
CP10<1>			1.0		
CP12			1.2		
CP15, CP15B			1.5		
CP20, CP20B			1.8		
CP25, CP25B			2.0		
CP30, CP30P			2.5		
CP35, CP35P	5.0	3.0	3.0		
<NCP> <NCPLP, LB>					
NCP10			1.2		
NCP11			1.0		
NCP20			1.5		

M type (only for screw head of terminal table)

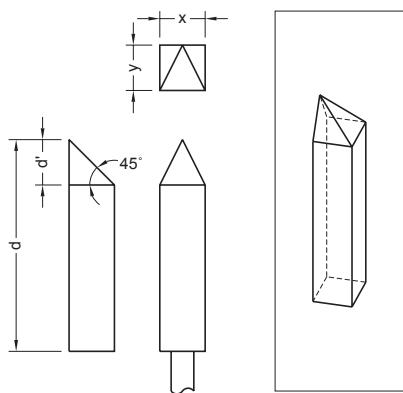
Tip Configuration Symbol M



Type	Configuration	øg	øg'	Safety Current (A)	Rush Current (A)	Intrinsic Resistance (mΩ)	Contact Resistance (mΩ)	(scale unit : mm)
<CP>								
CP40	M3P	5.3	4.8	7	20 or below	0.8	3.5 or below	
	M3B	7.0	6.1					
CP50	M3PM	5.3	4.8	15	20 or below	0.5	3.0 or below	
	M3BM	7.0	6.1					
	M4PM	7.4	6.8					
	M4BM	8.8	8.2					
	M3BM	7.0	6.1					
	M4PM	7.4	6.8					
CP65	M4BM	8.8	8.2	20	20 or below	0.2	3.0 or below	
	M5PM	10.0	9.0					
	M5BM	11.5	10.5					
	M4BM	8.8	8.2					
	M5PM	10.0	9.0					
CP90	M5BM	11.5	10.5	35	20 or below	0.1	2.0 or below	
	M6PM	12.5	11.0					
	M6BM	13.0	12.3					

QA, QF and QN type

QA type



Tip Configuration Symbol QA

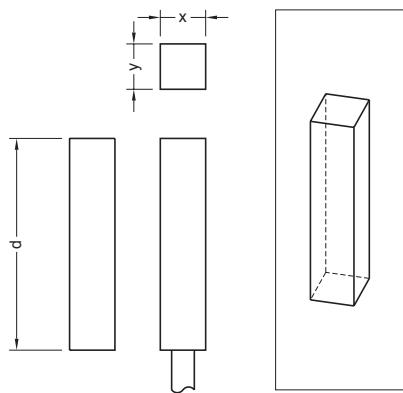
(mm)

Type	x	y	d	d'
<CP>				
CP8	0.8	0.8	5.4	0.8
CP10<1>	1.0	1.0		1.0

This type is not equipped with rotation prevention device.

List of Tip Configurations

QF type



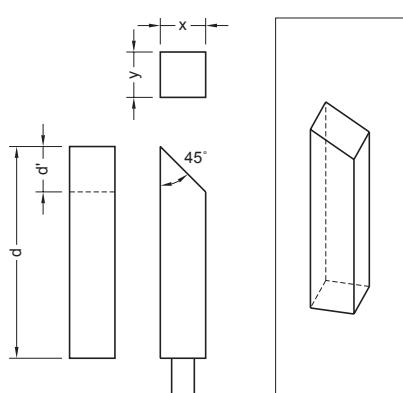
Tip Configuration Symbol QF

(mm)

Type	x	y	d	d'
<CP>				
CP8	0.8	0.8	5.4	-
CP10<1>	1.0	1.0		-

This type is not equipped with rotation prevention device.

QN type



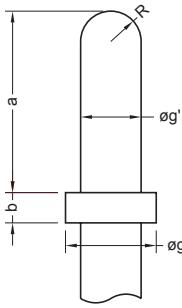
Tip Configuration Symbol QN

(mm)

Type	x	y	d	d'
<CP>				
CP8	0.8	0.8	5.4	0.8
CP10<1>	1.0	1.0		1.0
CP12	1.2	1.2		1.2
CP20, CP20B	1.8	2.0		1.8
CP30, CP30P	2.5	3.0	5.0	2.5
CPR35	3.0	3.5		3.0
CPR35S	3.5	3.5		3.5
CPR40	3.5	4.0	7.0	3.5
CPR40S	4.5	4.5		4.5

CP : without rotation prevention device CPR : with rotation prevention device

R type

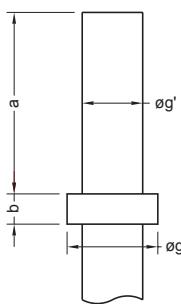


Tip Configuration Symbol R

(mm)

Type	R	a	b	øg	øg'		
<CPS>							
CPS10	0.3	2.0	0.5	1.0	0.6		
CPS12	0.4			1.2	0.8		
CPS20	0.5			1.5	1.0		
CPS25	0.65			2.0	1.3		
CPS30				3.0	2.0		
CPS35	1.0						
<CP>							
CP6	0.15	4.9	0.5	0.6	0.3		
CP8	0.2			0.8	0.4		
CP10<1>	0.3			1.0	0.6		
CP12	0.4			1.2	0.8		
CP20, CP20B	0.5	4.0	1.0	1.5	1.0		
CP25	0.65			2.0	1.3		
CP30							
CP35, CP35S	1.0			3.0	2.0		
CP40, CP40A, CP40S		6.0					
<NCP>		<NCPLP, LB>					
NCP10	NCP11	NCP10LP13 NCP11LP	0.3	4.9	1.0	0.6	
NCP11S				10.0			
NCP12	NCP12	NCP12LP	0.4	4.9			
NCP12S				10.0			
NCP15<1.5>	NCP15<1.5>	NCP15<1.5>LP13		4.9			
NCP18				10.0			
NCP20	NCP20	NCP18LP13 NCP20LP, NCP20LB	0.5	4.9			
NCP20S				10.0			
NCP25	NCP25	NCP25LP NCP25LB15	0.65	4.4	1.0	1.3	
NCP25S				10.0			
NCP250	NCP250	NCP250LP20 NCP250LB21		7.35			
NCP300, NCP300B				1.0	3.0	2.0	
NCP300BA		NCP300LP20, NCP300LB21 NCP300LBA21					

T type



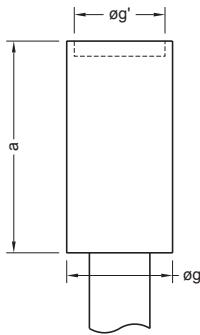
Tip Configuration Symbol T

(mm)

Type	a	b	øg	øg'
<CPS>				
CPS10	2.0	0.5	1.0	0.6
CPS12			1.2	0.8
CPS20			1.5	1.0
CPS25			2.0	1.3
<CP>				
CP8	4.9	0.5	0.8	0.4
CP10<1>			1.0	0.6
CP12			1.2	0.8
CP20, CP20B			1.5	1.0
CP25	4.0	1.0	2.0	1.3
CP30			3.0	2.0
CP35, CP35S				
CP40, CP40A, CP40S				
<NCP> <NCPLP, LB>				
NCP10	NCP10LP13	4.9	0.5	1.0
NCP12	NCP12LP			1.2
NCP15<1.5>	NCP15<1.5>LP13			0.8
NCP20	NCP20LP NCP20LB			1.5
NCP20S	—	10.0		1.0

U type

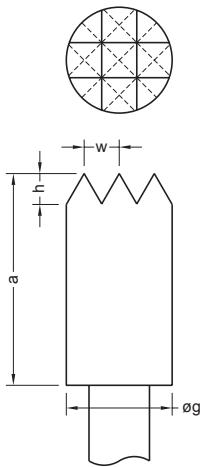
Tip Configuration Symbol U



Type	a	øg	øg'	(mm)
<CP>				
CP25, CP25B	5.0	2.0	1.5	
CP30, CP30P		2.5	2.0	
CP30S, CP30SB		3.0	2.5	
CP35, CP35P		7.0	3.5	3.0
CP40, CP40A, CP40P				

V type

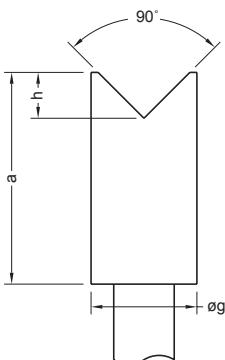
Tip Configuration Symbol V



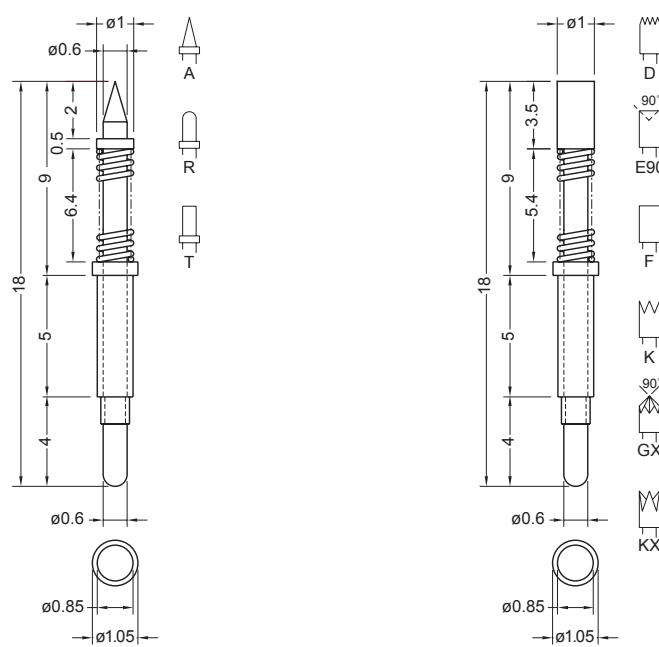
Type	a	øg	w	h	(mm)
<CP>					
CP15, CP15B	5.4	1.5	0.5	0.43	
CP20, CP20B		1.8	0.6	0.52	
CP25, CP25B	5.0	2.0	0.65	0.56	
CP30, CP30P		2.5	0.83	0.72	
CP30S, CP30SB		3.0	1.0	0.87	
CP35, CP35P					

VC type (rotation prevention device equipped for tab terminal)

Tip Configuration Symbol VC



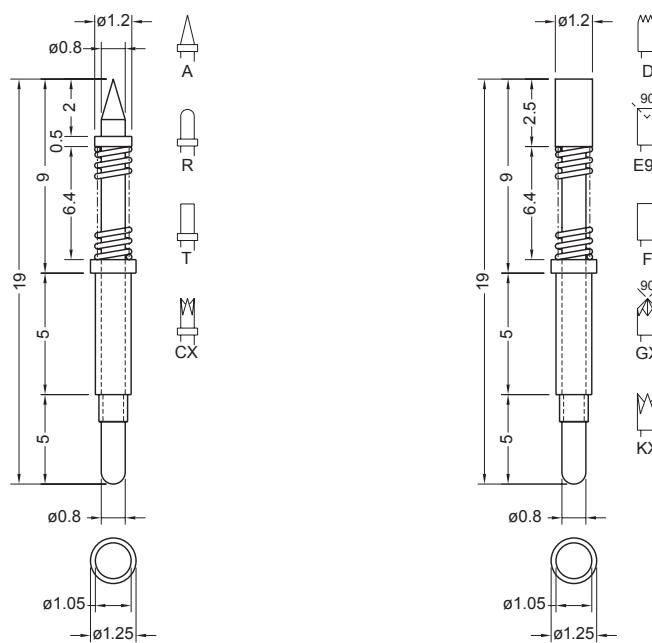
Type	Configuration	a	øg	øg'	(mm)
<CP>					
CPR35	VC	5.0	3.0	1.0	
CPR35S	VC		3.5	1.3	
CPR40	VC	7.0	4.5	1.5	
CPR40S	VC		5.0	2.0	
CPR50	VC<5>				



Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Configuration of Tip	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
A, R, T	SPS	2.5	13.5	30	52	62.5
	SPL	3.5	8	10	28	38
	SPH	2.5	14	50	71	85
	SPH1	3	30	80	140	170
Configuration of Tip	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
D, E, F, K GX, KX	SPS	2	13	30	57	66
	SPL	2.5	9.5	10	30	40
	SPH	2	19.3	50	69.3	98
	SPH1	3	30	50	110	140
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA10S TA10P Wire with terminal (TA10<S> FS10 L50<A>) Soldering directly to probe	TA10S (soldering)	0.85	1.25
Probe + Receptacle	 AS10 <5> (R=5, V=1.3, X=1.08)	 AS10 <9> (R=9, V=1.3, X=1.08)	 AS10 <23> (R=23, V=1.3, X=1.08)	Soldering to receptacle TA10P (pressing)	1.09 - 1.1	1.5

Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.

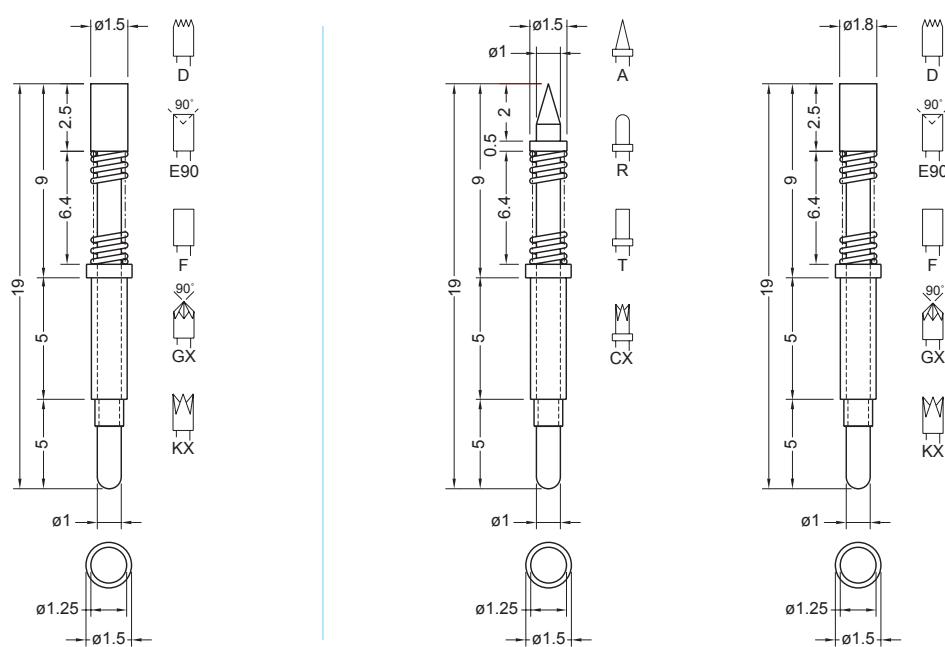


Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
CPS12	SPS	3	35	35	105	140
	SPL	3	20	20	60	80
	SPH	3	30	85	145	175
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA15S TA15P Wire with terminal (TA15<S> FS10 L50<A>) Soldering directly to probe	TA15S (soldering)	1.05	1.5
Probe + Receptacle	AS15 <5> (R=5, V=1.6, X=1.37) AS15 <9> (R=9, V=1.6, X=1.37) AS15 <23> (R=23, V=1.6, X=1.37)		Soldering to receptacle	TA15P (pressing)	1.39 - 1.42	1.8

Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.

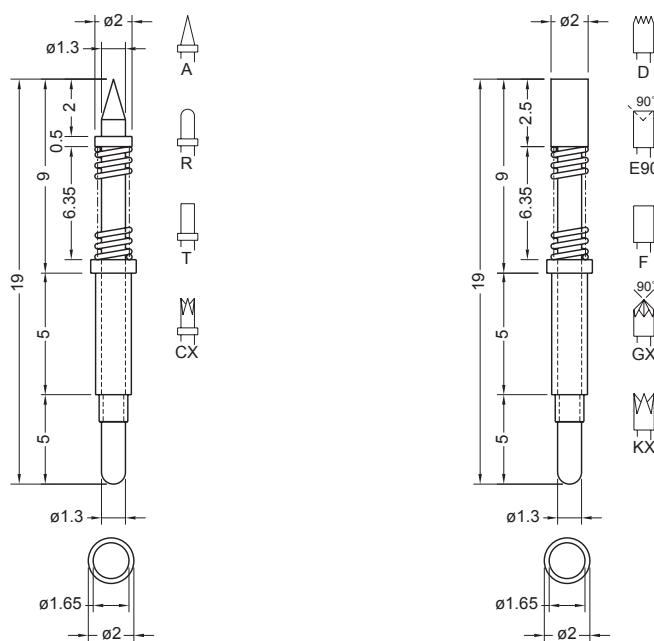
Thermal-endurance temperature below 100°C. Safety current 5A. (Note:Safety current can be varied. See our safety instructions.)



Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
CPS15 CPS20	SPS	3	35	50	120	155
	SPL	3	20	20	60	80
	SPH	3	55	60	170	225
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA20T TA20S TA20P Wire with terminal (TA20<S> FS10 L50<A> TA20<S> FS20 L50<A>) Soldering directly to probe	TA20T (pressing)	1.25	2.5
Probe + Receptacle	 AS20 <5> (R=5, V=2, X=1.6)		Soldering to receptacle	TA20S (soldering)	1.63 - 1.67	2.5
	 AS20 <9> (R=9, V=2, X=1.6)			TA20P (pressing)		
	 AS20 <23> (R=23, V=2, X=1.6)		Terminal TA20T TA20S TA20P Wire with terminal (TA20<S> FS10 L50<A> TA20<S> FS20 L50<A>)	 AS20T (R=26, V=2, X=1.6 Y=5, Z=1)		

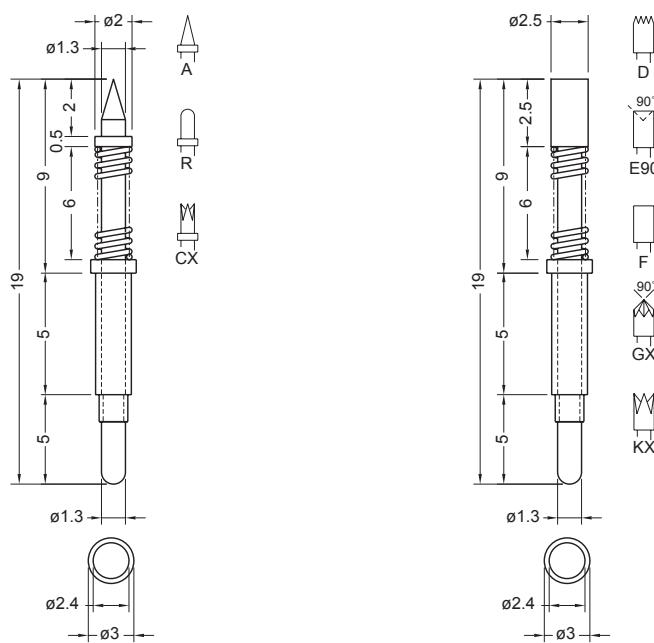
Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.



Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

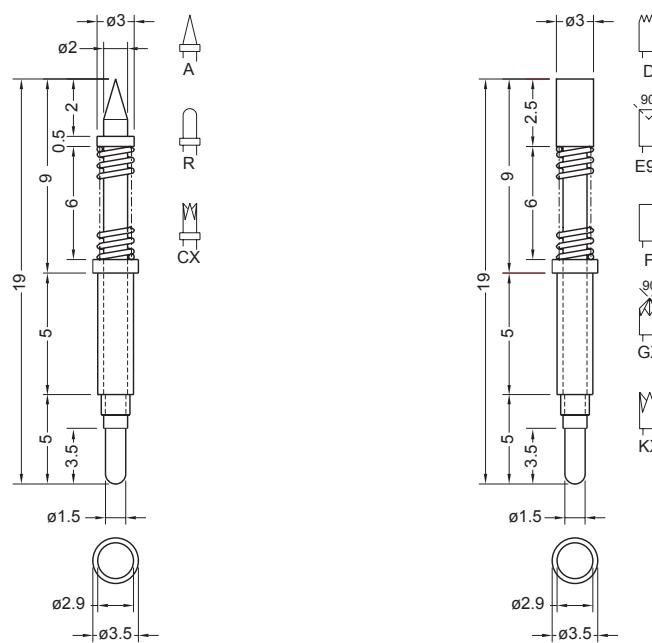
Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
CPS25	SPS	3	30	60	120	150
	SPL	3	20	20	60	80
	SPH	3	60	60	180	240
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA30T TA25S Wire with terminal (TA30<S> FS10 L50<A>) (TA30<S> FS20 L50<A>) Soldering directly to probe	TA30T (pressing) TA25S (soldering)	1.65	2.5
Probe + Receptacle	AS25 <5> (R=5, V=2.3, X=2)	AS25 <9> (R=9, V=2.3, X=2)	Soldering to receptacle		2.03 - 2.07	2.8
	AS25 <23> (R=23, V=2.3, X=2)	AS25T (R=26, V=2.3, X=2 Y=5, Z=1.3)	Terminal TA30T Wire with terminal (TA30<S> FS10 L50<A>) (TA30<S> FS20 L50<A>)			

Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.



Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

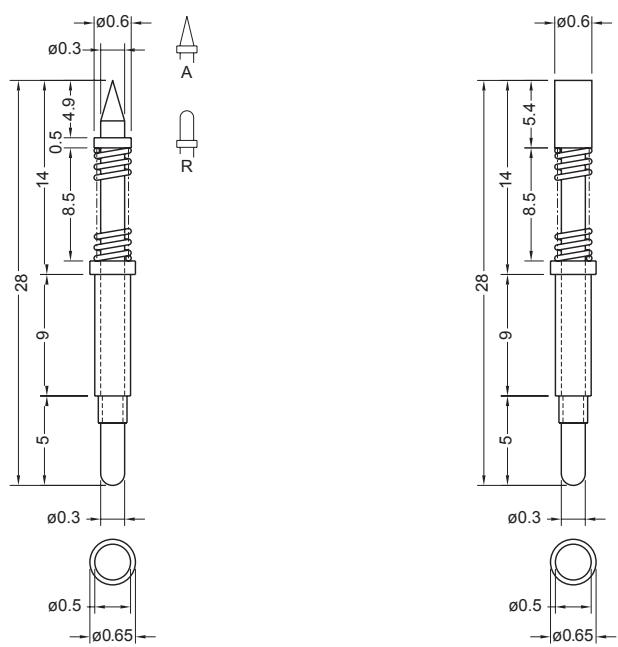
Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
CPS30	SPS	3	35	60	130	165
	SPL	3	20	20	60	80
	SPH	3	70	70	210	280
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA30T TA25S Wire with terminal (TA30<S> FS10 L50<A>) (TA30<S> FS20 L50<A>) Soldering directly to probe	TA30T (pressing)	2.39-2.4	3.5
Probe + Receptacle	AS30 <5> (R=5, V=3, X=2.7)	Soldering to receptacle	TA25S (soldering)	2.73 - 2.77	3.5	
	AS30 <9> (R=9, V=3, X=2.7)					
	AS30 <23> (R=23, V=3, X=2.7)	Terminal TA35T Wire with terminal (TA35<S> FS30 L50<A>)	TA35T (pressing)			
Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.						



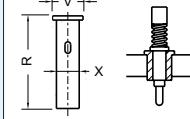
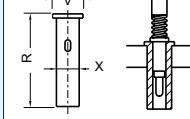
Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

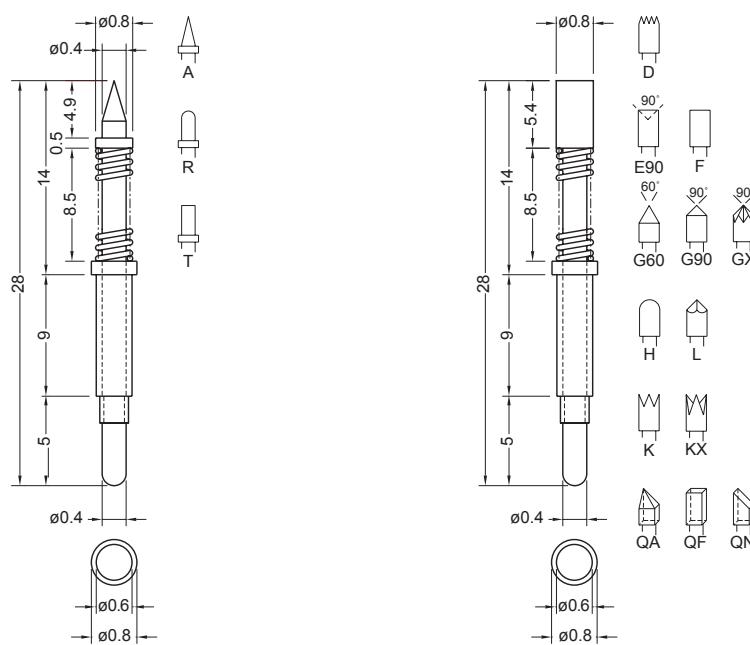
Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
CPS35	SPS	3	40	100	180	220
	SPL	3	20	55	95	115
	SPH	3	70	140	280	350
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA35T		2.89 - 2.9	4.0
Probe + Receptacle	AS35 <5> (R=5, V=3.5, X=3.2)	AS35 <9> (R=9, V=3.5, X=3.2)	Wire with terminal (TA35<S> FS30 L50<A>) Soldering directly to probe	TA35T (pressing)	3.23 - 3.27	4.0
	AS35 <20> (R=20, V=3.5, X=3.2)		Soldering to receptacle			
	AS35T (R=28, V=3.5, X=3.2) Y=5, Z=1.5		Terminal TA35T Wire with terminal (TA35<S> FS30 L50<A>)			

Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.



Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
CP6	SPS	3.4	25	25	81	110
	SPH	3	70	26	165	236
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Soldering directly to probe		0.5	0.8
Probe + Receptacle	 AS6 <9> (R=9, V=0.8, X=0.7)				0.7 - 0.71	1.0
	 AS6 <23> (R=23, V=0.8, X=0.7)		Soldering to receptacle			
Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles.						



Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
CP8	SPS	3	12	30	55	66
	SPH	3	12	50	75	86
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Soldering directly to probe		0.6	1.0
Probe + Receptacle	 AS8 <9> (R=9, V=1.1, X=0.85)				0.85 - 0.86	1.2
	 AS8 <23> (R=23, V=1.1, X=0.85)		Soldering to receptacle			

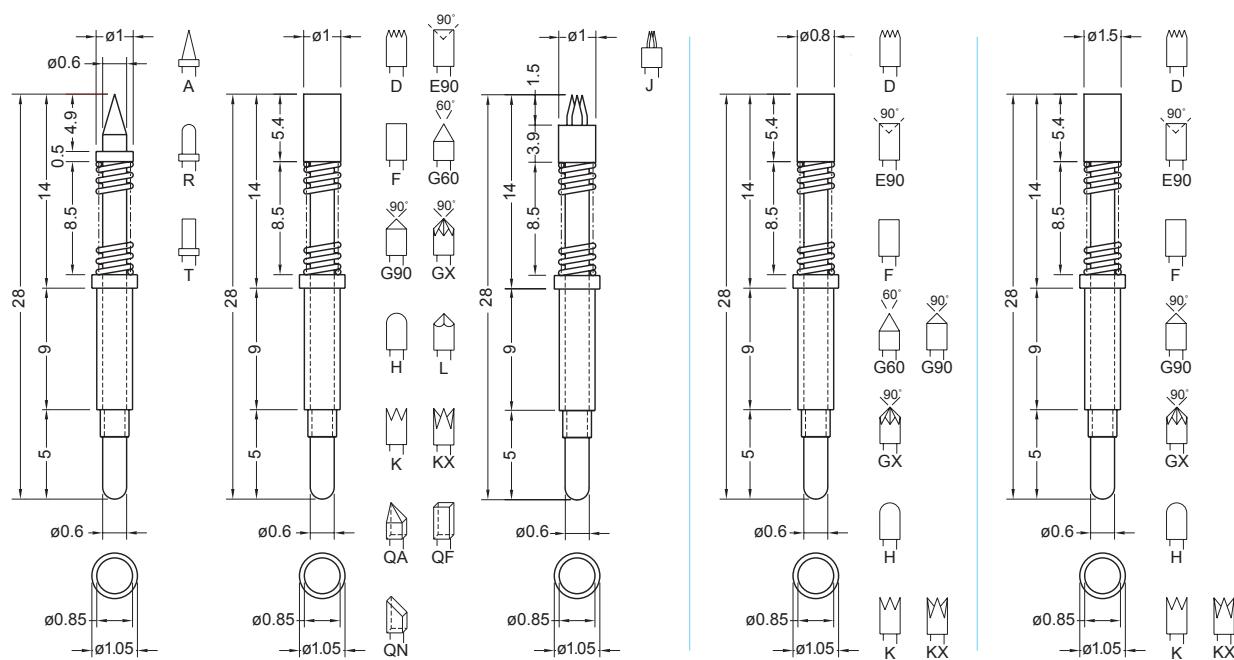
Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles.

CP10 <1>

Thermal-endurance temperature below 100°C. Safety current 2A. (Note:Safety current can be varied. See our safety instructions.)

CP10 <0.8>

CP10 <1.5>



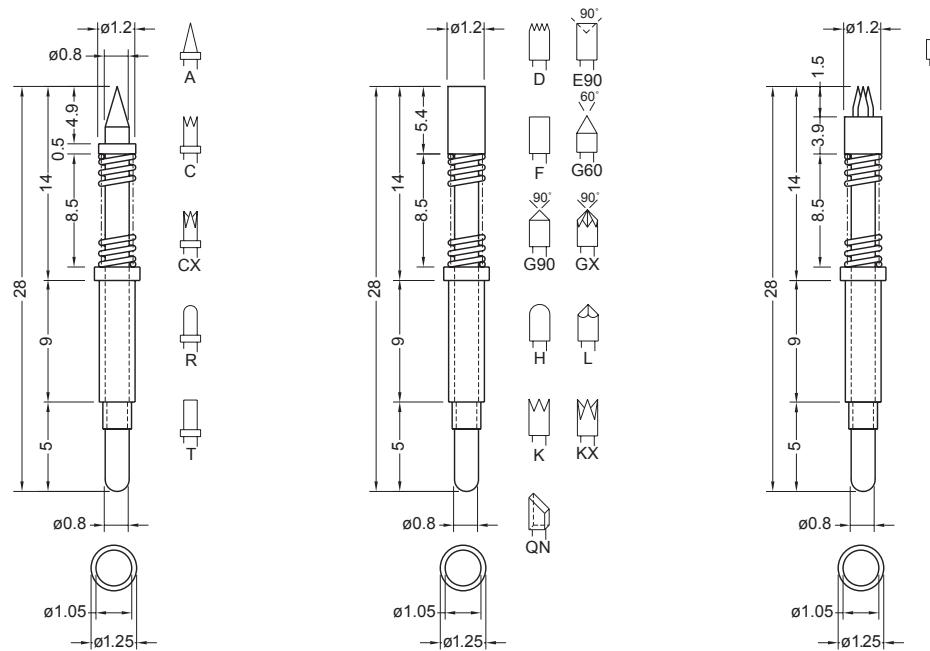
Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.
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Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
CP10 <0.8>	SPS	4.5	14	35	77	98
CP10 <1>	SPL	4	12	20	50	68
CP10 <1.5>	SPH	3.5	30	50	120	155
	SPH1	4	50	60	193	260

Application	Applicable Receptacle (size)	Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only	_____	Terminal TA10S TA10P	TA10S (soldering)	0.85	CP10<0.8> } → 1.25 CP10<1> } → 1.8 P10<1.5> → 1.8
Probe + Receptacle	AS10 <9> (R=9, V=1.3, X=1.08)	Wire with terminal (TA10<S> FS10 L50<A>) Soldering directly to probe	TA10P (pressing)	1.09 - 1.1	CP10<0.8> } → 1.5 CP10<1> } → 1.5 P10<1.5> → 1.8
	AS10 <23> (R=23, V=1.3, X=1.08)	Soldering to receptacle			

Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.

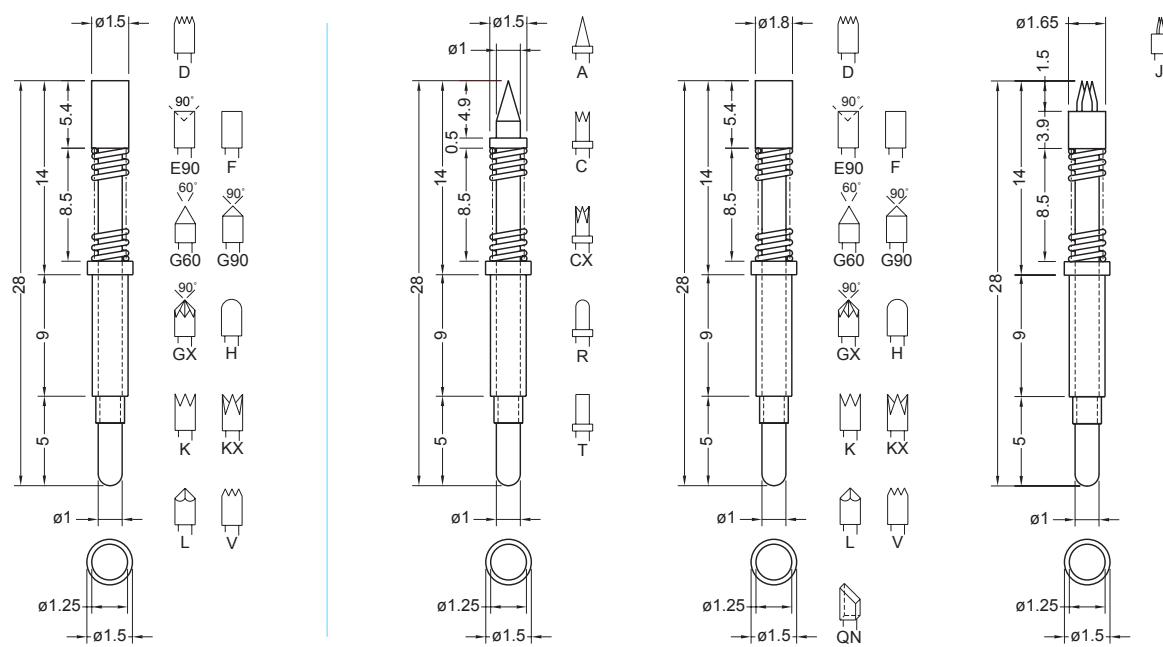


Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
CP12	SPS	4	23	35	95	125
	SPS1	4	23.5	50	110	145
	SPL	4.5	2.9	15	23.5	28
	SPH	4	40	70	175	230
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA15S TA15P Wire with terminal (TA15<S> FS10 L50<A>) Soldering directly to probe	TA15S (soldering)	1.05	1.5
Probe + Receptacle	 AS15 <9> (R=9, V=1.6, X=1.37)		Soldering to receptacle	TA15P (pressing)	1.39 - 1.42	1.8
	 AS15 <23> (R=23, V=1.6, X=1.37)			 		

Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.

Thermal-endurance temperature below 100°C. Safety current 5A. (Note:Safety current can be varied. See our safety instructions.)



Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
CP15 CP20	SPS	5	15	50	100	125
	SPL	4.5	3.5	32.5	43	48
	SPL1	5.5	4.8	10	27	36
	SPH	4.3	38	80	185	245
	SPH1	4.5	60	140	320	410
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA20T TA20S TA20P Wire with terminal (TA20<S> FS10 L50<A> (TA20<S> FS20 L50<A> Soldering directly to probe	TA20T (pressing)	1.25	CP15 → 2.0 CP20 → 2.5
Probe + Receptacle	AS20 <9> ASS20 <9> (R=9, V=2, X=1.6)			TA20S (soldering)	1.63 - 1.67	2.5
	AS20 <23> ASS20 <23> (R=23, V=2, X=1.6)			Soldering to receptacle		
	AS20T ASS20T (R=26, V=2, X=1.6 Y=5, Z=1)			Terminal TA20T TA20S TA20P Wire with terminal (TA20<S> FS10 L50<A> (TA20<S> FS20 L50<A>	TA20P (pressing)	

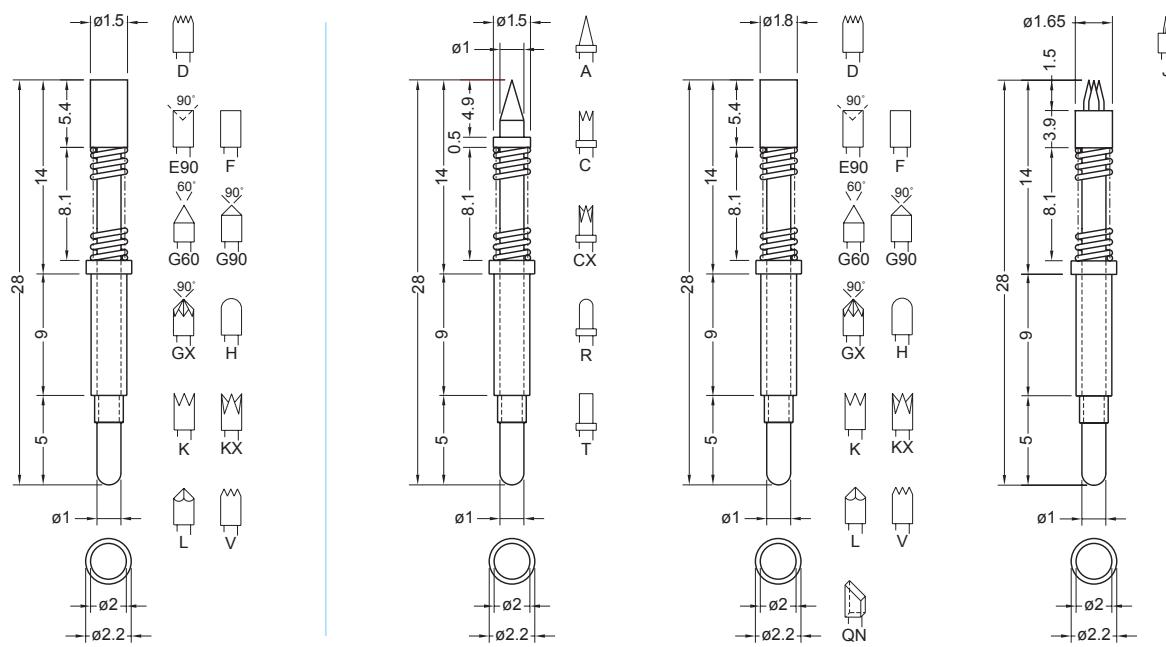
ASS20 is a high pressure type receptacle, having a stronger holding power than AS20.

Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.

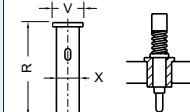
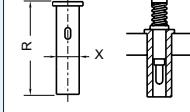
CP15B

CP20B

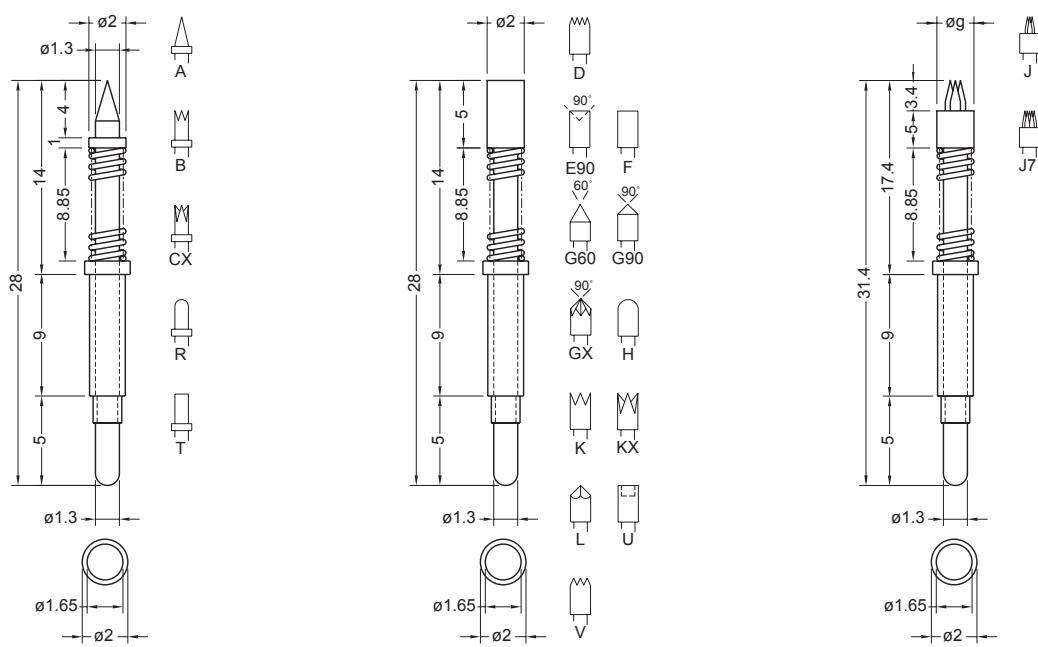
Thermal-endurance temperature below 100°C. Safety current 5A. (Note:Safety current can be varied. See our safety instructions.)



Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
CP15B CP20B	SPS	4.5	15	60	105	125
	SPL	4.1	3.5	34	43	48
	SPL1	5.1	4.8	12	28	36
	SPH	3.9	38	95	195	245
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA20T TA20S TA20P	TA20T (soldering)	1.99 - 2.0	2.5
Probe + Receptacle	 AS20B <9> ASS20B <9> (R=9, V=2.8, X=2.4)		Wire with terminal (TA20<S> FS10 L50<A>) (TA20<S> FS20 L50<A>) Soldering directly to probe	TA20S (soldering)	2.43 - 2.47	3.0
	 AS20B <23> ASS20B <23> (R=23, V=2.8, X=2.4)		Soldering to receptacle	TA20P (pressing)		

ASS20 is a high pressure type receptacle, having a stronger holding power than AS20.
 Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.



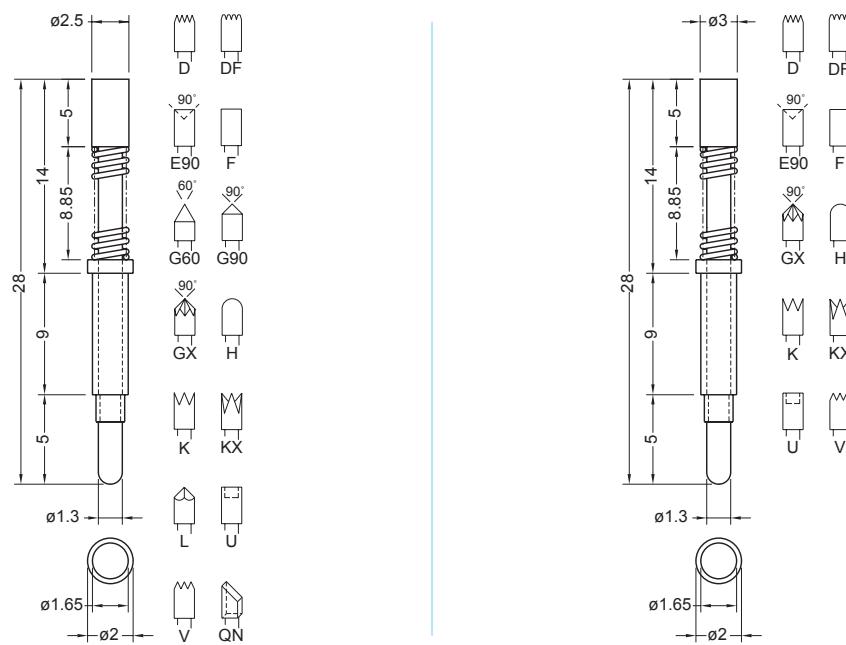
Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
CP25	SPS	4.8	23	60	130	170
	SPL	4.8	6.3	27	47	57
	SPH	4.8	46	80	225	300
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA30T TA25S Wire with terminal (TA30<S> FS10 L50<A>) (TA30<S> FS20 L50<A>) Soldering directly to probe		1.65	2.5
Probe + Receptacle			Soldering to receptacle		TA30T (pressing) 	2.03 - 2.07
			Terminal TA30T AS25T ASS25T (R=26, V=2.3, X=2) (Y=5, Z=1.3)		TA25S (soldering) 	

ASS25 is a high pressure type receptacle, having a stronger holding power than AS25.

Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.

Thermal-endurance temperature below 100°C. Safety current 5A. (Note:Safety current can be varied. See our safety instructions.)

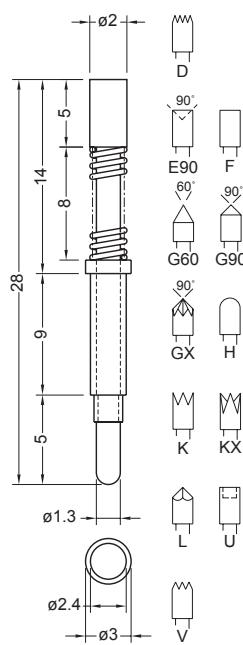


Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
CP30P CP30S	SPS	4.8	23	60	130	170
	SPL	4.8	6.3	27	47	57
	SPH	4.8	46	80	225	300
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA30T TA25S	TA30T (pressing) 	1.65	CP30P → 3.0 CP30S → 3.5
Probe + Receptacle			Wire with terminal (TA30<S> FS10 L50<A>) (TA30<S> FS20 L50<A>) Soldering directly to probe			
			Soldering to receptacle	TA25S (soldering) 	2.03 - 2.07	CP30P → 3.0 CP30S → 3.5
			Terminal TA30T Wire with terminal (TA30<S> FS10 L50<A>) (TA30<S> FS20 L50<A>)			
ASS25 is a high pressure type receptacle, having a stronger holding power than AS25. Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.						

CP25B

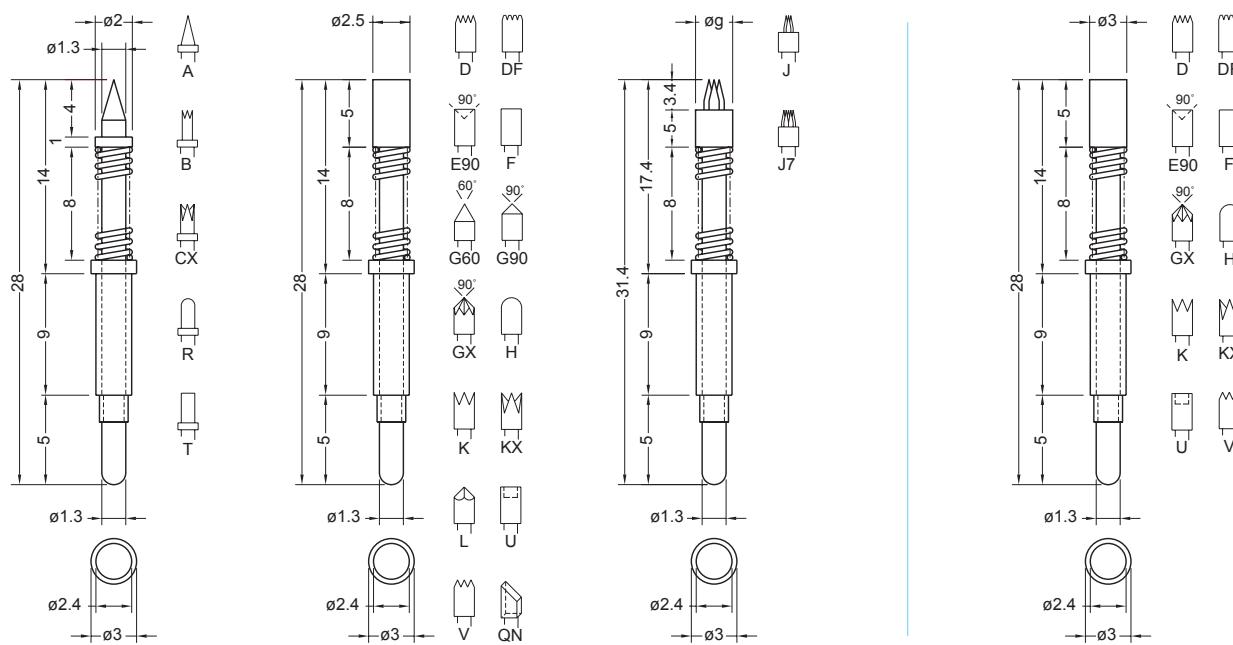
Thermal-endurance temperature below 100°C. Safety current 5A. (Note:Safety current can be varied. See our safety instructions.)



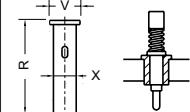
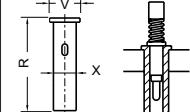
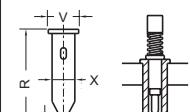
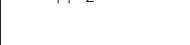
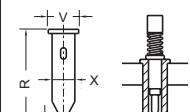
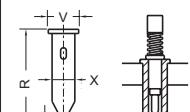
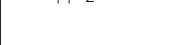
Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
CP25B	SPS	4	14	65	100	120
	SPS1	4	23	80	140	170
	SPL	4	6.3	32.5	48	57
	SPH	4	46	120	240	300
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA30T TA25S Wire with terminal (TA30<S> FS10 L50<A>) (TA30<S> FS20 L50<A>) Soldering directly to probe	TA30T (pressing)	2.39 - 2.4	3.5
Probe + Receptacle	AS30 <9> ASS30 <9> (R=9, V=3, X=2.7)			TA25S (soldering)	2.73 - 2.77	3.5
	AS30 <23> ASS30 <23> (R=23, V=3, X=2.7)			Soldering to receptacle		
	AS30T ASS30T (R=28, V=3, X=2.7 Y=5, Z=1.5)			TA35T (pressing) Wire with terminal (TA35<S> FS30 L50<A>)		
	AS30LT ASS30LT (R=30, V=3, X=2.7 Y=9.7, Z=2)			TA40T (pressing)		
ASS30 is a high pressure type receptacle, having a stronger holding power than AS30. Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.						

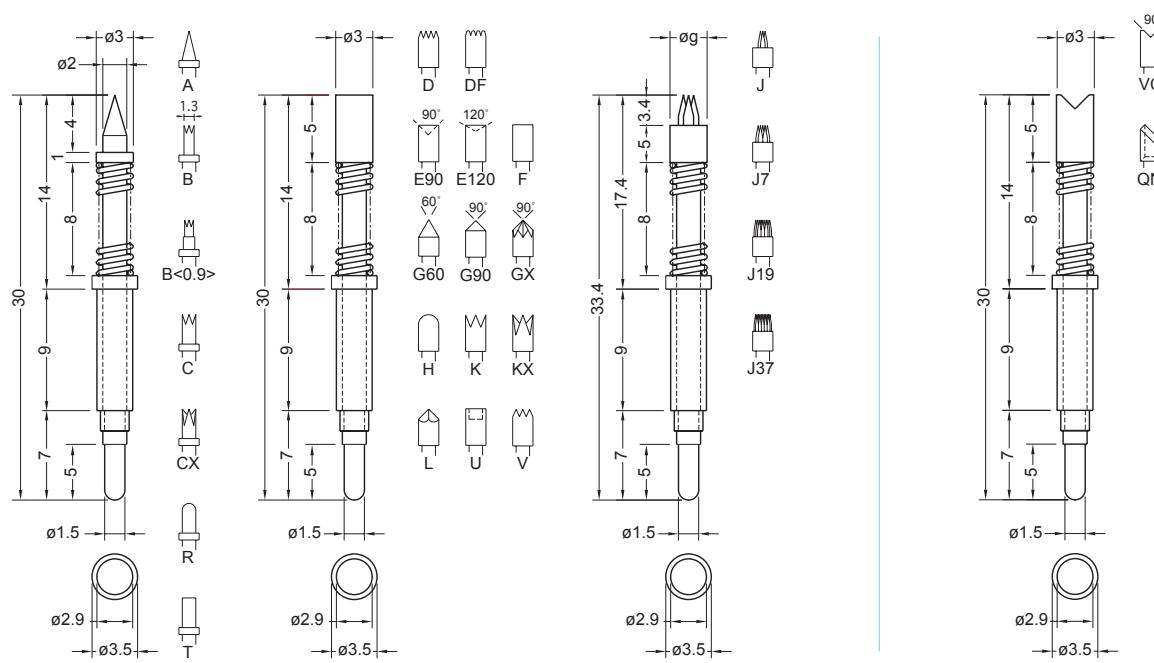
Thermal-endurance temperature below 100°C. Safety current 5A. (Note:Safety current can be varied. See our safety instructions.)



Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
CP30	SPS	4	14	65	100	120
	SPS1	4	23	80	140	170
	SPL	4	6.3	32.5	48	57
	SPH	4	46	120	240	300
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA30T TA25S Wire with terminal (TA30<S> FS10 L50<A> (TA30<S> FS20 L50<A> Soldering directly to probe	TA30T (pressing) TA25S (soldering)	2.39 - 2.4	3.5
Probe + Receptacle	    AS30 <9> ASS30 <9> (R=9, V=3, X=2.7)		Soldering to receptacle		2.73 - 2.77	3.5
	  AS30T ASS30T (R=28, V=3, X=2.7 Y=5, Z=1.5)		Terminal TA35T Wire with terminal (TA35<S> FS30 L50<A>)	TA35T (pressing)		
	  AS30LT ASS30LT (R=30, V=3, X=2.7 Y=9.7, Z=2)		Terminal TA40T	TA40T (pressing)		
	<p>ASS30 is a high pressure type receptacle, having a stronger holding power than AS30. Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.</p>					

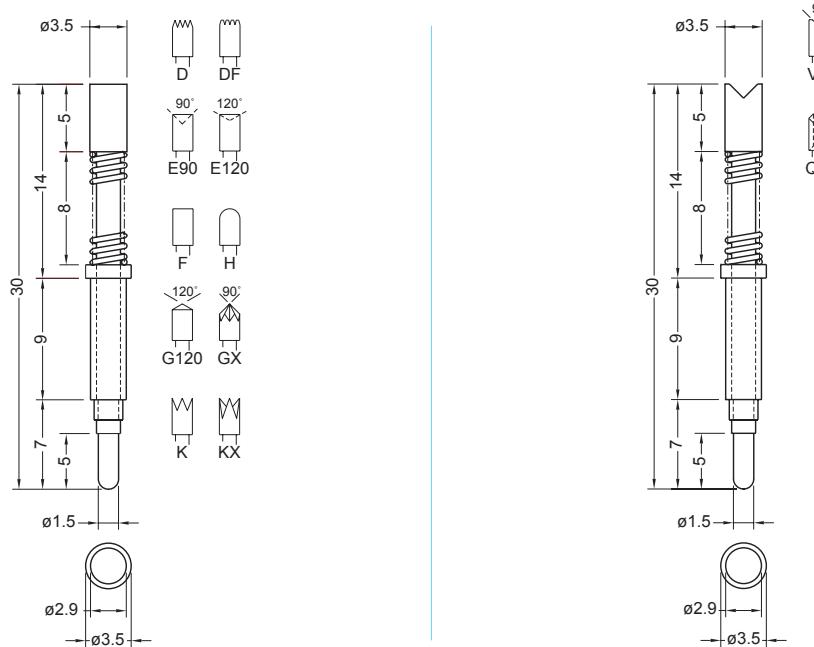
Thermal-endurance temperature below 100°C. Safety current 7A. (Note: Safety current can be varied. See our safety instructions.)



Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
CP35 CPR35	SPS	4.9	32	110	210	270
	SPL	5.4	11.5	32.5	75	95
	SPH	4.1	53	230	375	445
	SPH1	3.2	170	500	860	1,050
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA35T	TA35T (pressing)	2.89 - 2.9	4.0
Probe + Receptacle	 AS35 <9> ASS35 <9> (R=9, V=3.5, X=3.2)		Wire with terminal (TA35<S> FS30 L50<A>) Soldering directly to probe			3.23 - 3.27
	 AS35 <20> ASS35 <20> (R=20, V=3.5, X=3.2)		Soldering to receptacle			
	 AS35 <23> ASS35 <23> (R=23, V=3.5, X=3.2)		Terminal TA35T Wire with terminal (TA35<S> FS30 L50<A>)			4.0
	 AS35T ASS35T (R=28, V=3.5, X=3.2) Y=5, Z=1.5		Terminal TA40T			
ASS35 is a high pressure type receptacle, having a stronger holding power than AS35. Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.						

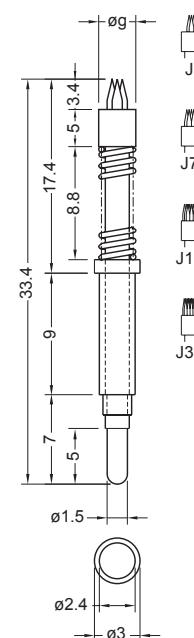
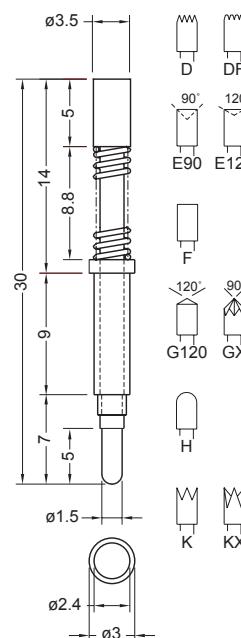
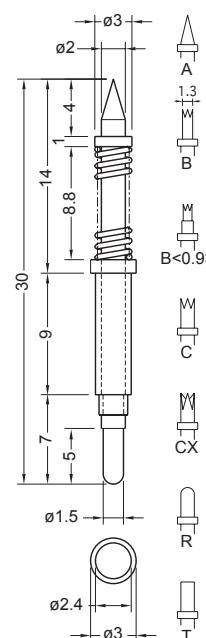
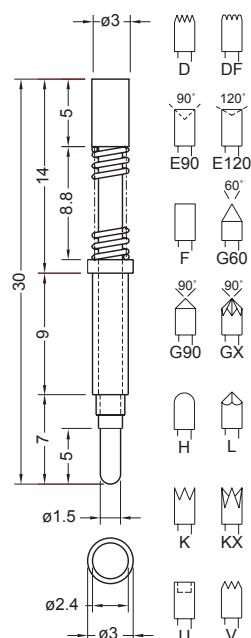
Thermal-endurance temperature below 100°C. Safety current 7A. (Note:Safety current can be varied. See our safety instructions.)



Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.								
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)			
CP35SB CPR35S	SPS	4.9	32	110	210	270			
	SPL	5.4	11.5	32.5	75	95			
	SPH	4.1	53	230	375	445			
	SPH1	3.2	170	500	860	1,050			
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting			
Probe Only			Terminal TA35T	TA35T (pressing)	2.89 - 2.9	4.0			
Probe + Receptacle	 AS35 <9> ASS35 <9> (R=9, V=3.5, X=3.2)		Wire with terminal (TA35<S> FS30 L50<A>) Soldering directly to probe		3.23 - 3.27	4.0			
	 AS35 <20> ASS35 <20> (R=20, V=3.5, X=3.2)		Soldering to receptacle						
	 AS35 <23> ASS35 <23> (R=23, V=3.5, X=3.2)								
	 AS35T ASS35T (R=28, V=3.5, X=3.2) Y=5, Z=1.5		Terminal TA35T Wire with terminal (TA35<S> FS30 L50<A>)						
		 AS35LT ASS35LT (R=30, V=3.5, X=3.2) Y=9.7, Z=2		Terminal TA40T	TA40T (pressing)				
ASS35 is a high pressure type receptacle, having a stronger holding power than AS35. Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.									

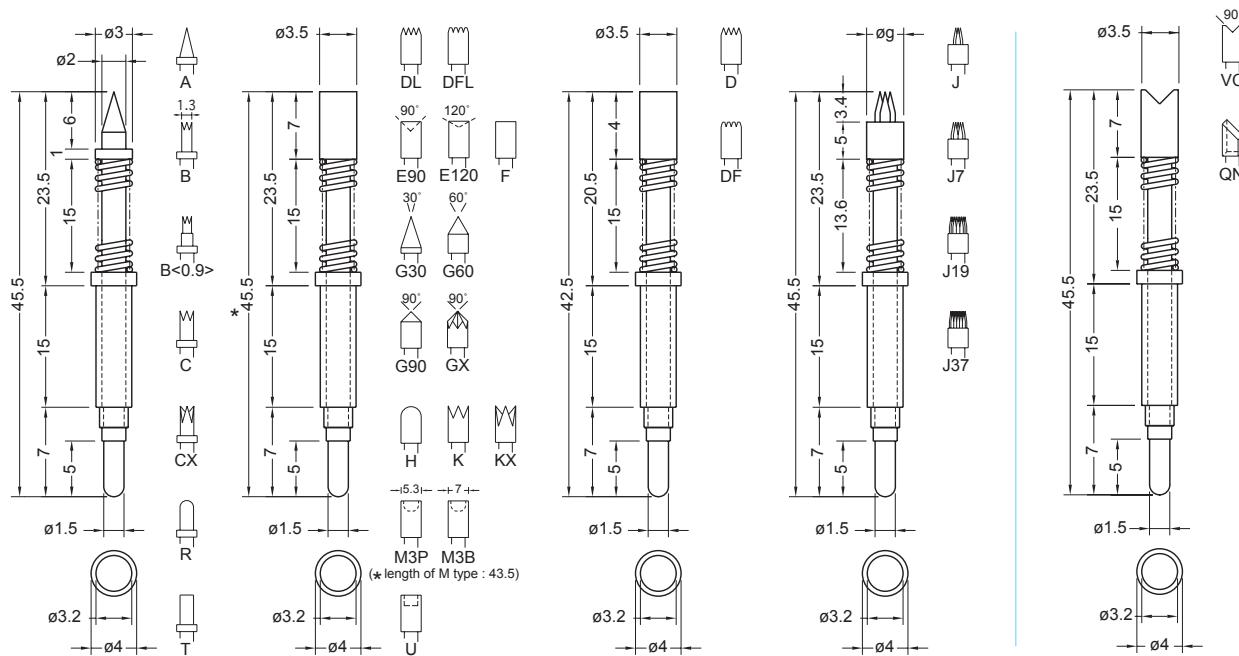
Thermal-endurance temperature below 100°C. Safety current 7A. (Note:Safety current can be varied. See our safety instructions.)



Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
CP35P	SPS	5.7	32	85	205	265
	SPL	5.8	9	50	85	100
	SPH	4.9	53	185	355	445
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA35T	TA35T (pressing) 	2.39 - 2.4 CP35P → 3.5 CP35S → 4.0	CP35P → 3.5 CP35S → 4.0
Probe + Receptacle			AS30 <9> ASS30 <9> (R=9, V=3, X=2.7)			
			AS30 <23> ASS30 <23> (R=23, V=3, X=2.7)			
			AS30T ASS30T (R=28, V=3, X=2.7 Y=5, Z=1.5)	Terminal TA35T Wire with terminal (TA35<S> FS30 L50<A>)		
				AS30LT ASS30LT (R=30, V=3, X=2.7 Y=9.7, Z=2)	Terminal TA40T	TA40T (pressing)
ASS30 is a high pressure type receptacle, having a stronger holding power than AS30. Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.						

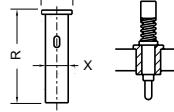
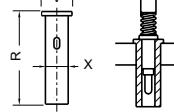
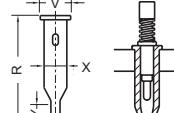
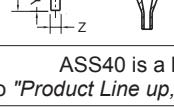
Thermal-endurance temperature below 100°C. Safety current 7A. (Note: Safety current can be varied. See our safety instructions.)



Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of parts	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
CP40 CPR40	SPS	7.8 (6.4)	26	150 (185)	285 (295)	355
	SPL	9.7 (8.3)	10.3	50 (65)	115 (122)	150
	SPL1	10.3 (8.9)	17.6	100 (125)	220 (230)	280
	SPH	6.6 (5.2)	40	320 (375)	500 (514)	585
	SPH1	6 (4.6)	121	250 (420)	735 (791)	980

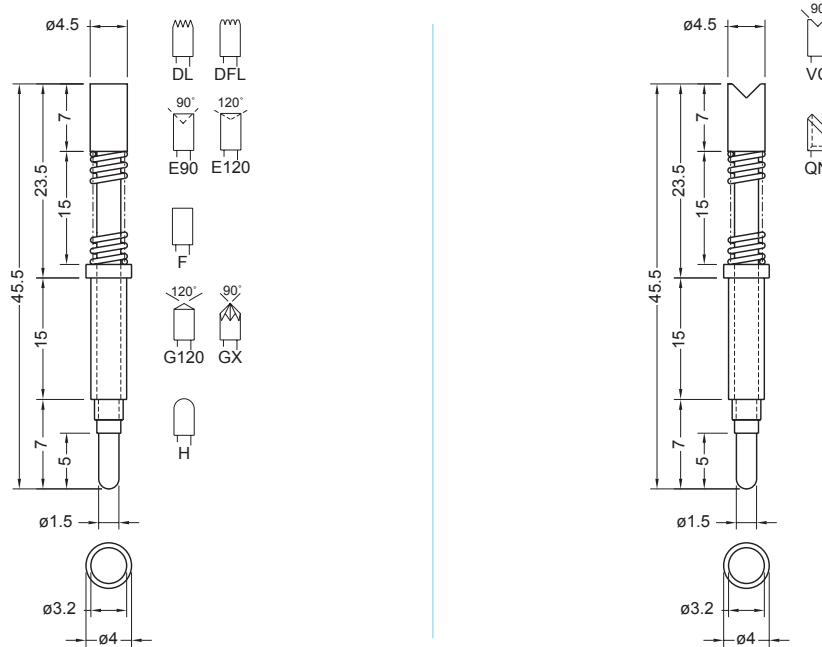
Note: Figures in () are only applied for the plunger tip configuration J-type.

Application	Applicable Receptacle (size)	Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only				3.19 - 3.2	4.5
Probe + Receptacle	 AS40 <15> ASS40 <15> (R=15, V=4, X=3.5)	Terminal TA35T Wire with terminal (TA35<S> FS30 L50<A>) Soldering directly to probe	TA35T (pressing)	3.53 - 3.57	4.5
	 AS40 <21>, ASS40 <21> (R=21, V=4, X=3.5)	Soldering to receptacle			
	 AS40 <30>, ASS40 <30> (R=30, V=4, X=3.5)				
	 AS40LT ASS40LT (R=35, V=4, X=3.5)	Terminal TA40T	TA40T (pressing)	2.5 13 21	4.5

ASS40 is a high pressure type receptacle, having a stronger holding power than AS40.

Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.

Thermal-endurance temperature below 100°C. Safety current 7A. (Note:Safety current can be varied. See our safety instructions.)



Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.										
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)					
CP40SB CPR40S	SPS	7.8	26	150	285	355					
	SPL	9.7	10.3	50	115	150					
	SPL1	10.3	17.6	100	220	280					
	SPH	6.6	40	320	500	585					
	SPH1	6	121	250	735	980					
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting					
Probe Only			Terminal TA35T Wire with terminal (TA35<S> FS30 L50<A>) Soldering directly to probe	TA35T (pressing) 	3.19 - 3.2	5.0					
Probe + Receptacle			Soldering to receptacle		3.53 - 3.57	5.0					
		AS40 <35>, ASS40 <35> (R=35, V=4, X=3.5)									

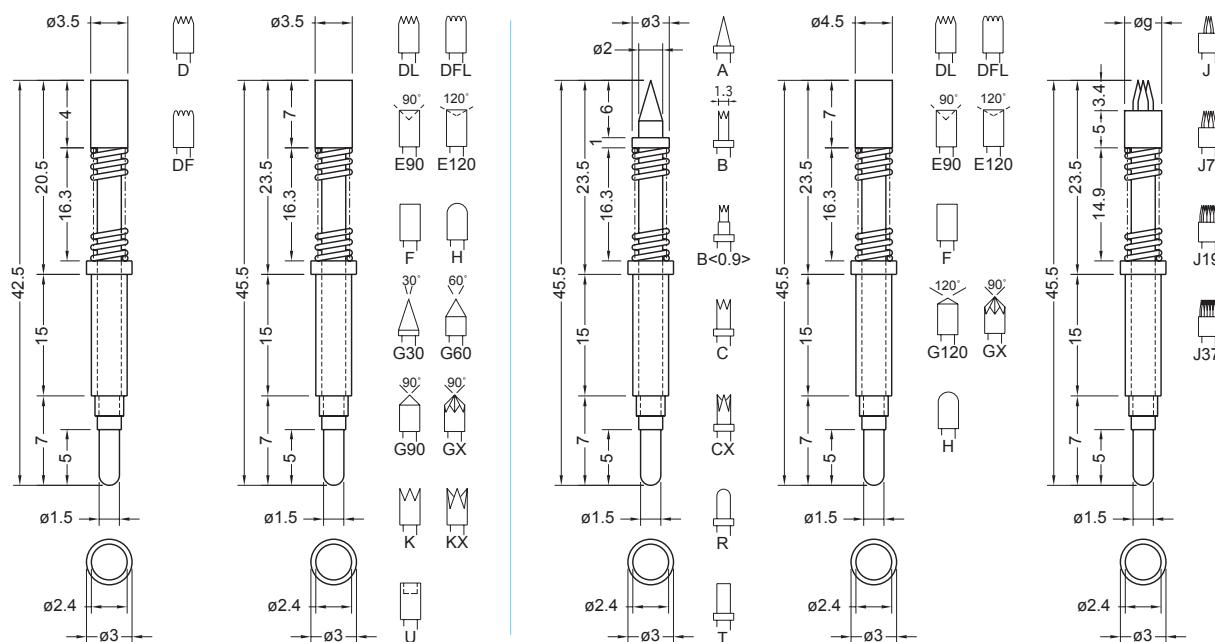
ASS40 is a high pressure type receptacle, having a stronger holding power than AS40.

Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.

CP40P

CP40S

Thermal-endurance temperature below 100°C. Safety current 7A. (Note: Safety current can be varied. See our safety instructions.)



Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

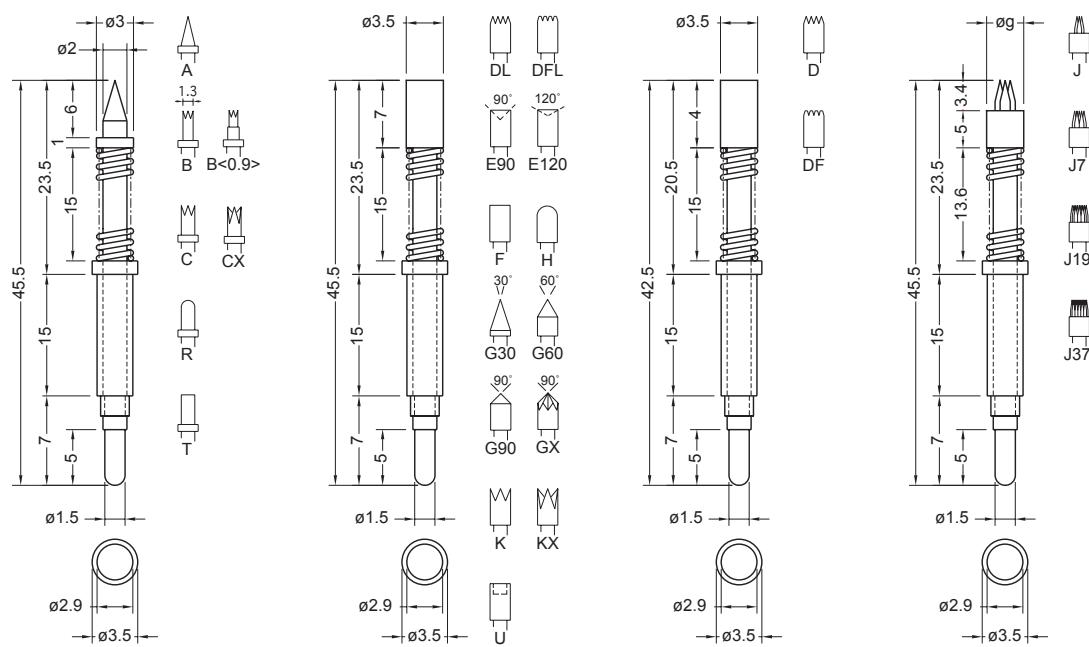
Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
CP40P CP40S	SPS	9.1 (7.7)	26	115 (150)	270 (280)	350
	SPL	11.6 (10.2)	17.6	75 (100)	200 (220)	280
	SPH	8 (6.6)	40	265 (320)	475 (495)	585

Note: Figures in () are only applied for the plunger tip configuration J-type.

Application	Applicable Receptacle (size)	Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only	—	Terminal TA35T Wire with terminal (TA35<S> FS30 L50<A>) Soldering directly to probe	TA35T (pressing)	2.39 - 2.4	CP40P → 4 CP40S → 5
Probe + Receptacle	AS30 <15> ASS30 <15> (R=15, V=3, X=2.7)				
	AS30 <35> ASS30 <35> (R=35, V=3, X=2.7)	Soldering to receptacle	2.73 - 2.77	CP40P → 4 CP40S → 5	

ASS30 is a high pressure type receptacle, having a stronger holding power than AS30.

Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.



Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
CP40A	SPS	7.8 (6.4)	26	150 (185)	285 (295)	355
	SPL	9.7 (8.3)	10.3	50 (65)	115 (122)	150
	SPL1	10.3 (8.9)	17.6	100 (125)	220 (230)	280
	SPH	6.6 (5.2)	40	320 (375)	500 (514)	585
	SPH1	6 (4.6)	121	250 (420)	735 (791)	980

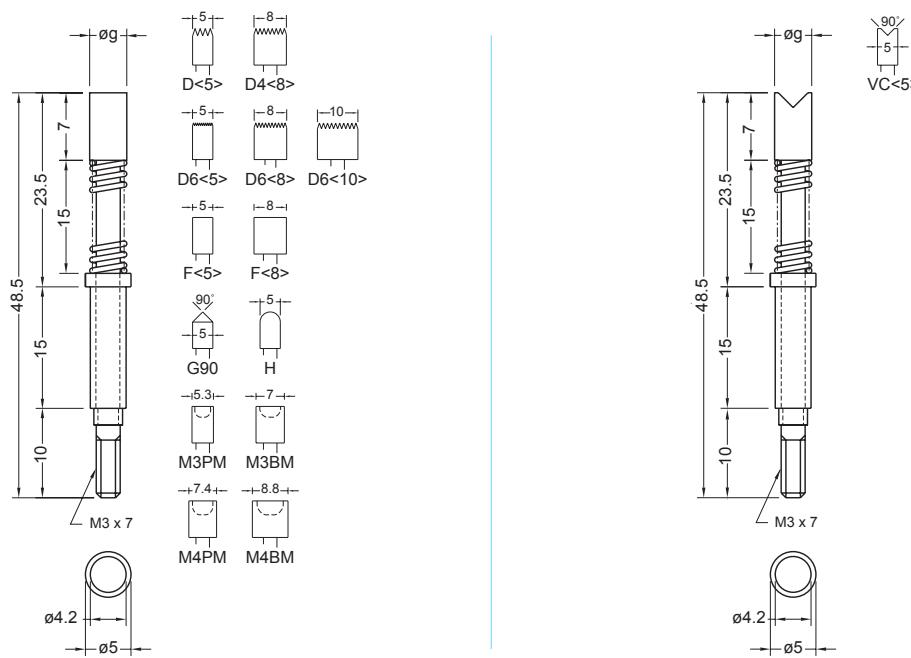
Note: Figures in () are only applied for the plunger tip configuration J-type.

Application	Applicable Receptacle (size)	Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only				2.89 - 2.9	4.0
Probe + Receptacle	AS35 <15> ASS35 <15> (R=15, V=3.5, X=3.2)	Terminal TA35T Wire with terminal (TA35<S> FS30 L50<A>) Soldering directly to probe	TA35T (pressing)	3.23 - 3.27	4.0
	AS35 <35> ASS35 <35> (R=35, V=3.5, X=3.2)	Soldering to receptacle			

ASS35 is a high pressure type receptacle, having a stronger holding power than AS35.

Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.

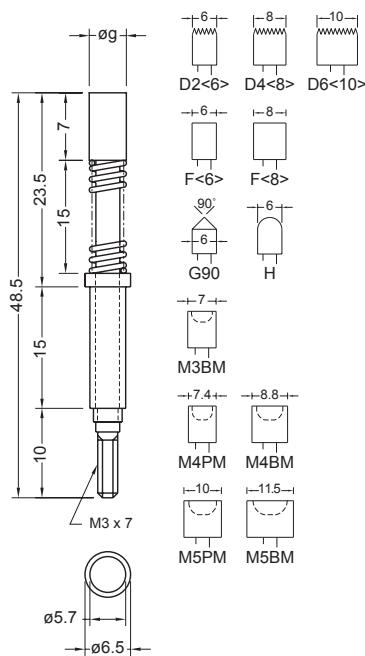
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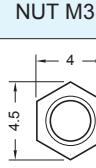
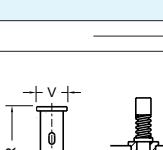
Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.							
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)		
CP50 CPR50	SPS	7.6	36	275	455	550		
	SPL	10	31	130	340	440		
	SPH	6	185	450	1,200	1,560		
	SPH1	6	200	800	1,600	2,000		
Application	Applicable Receptacle (size)		Wire Connection Method	Dimension of NUT M3	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting		
Probe Only			Wire connection end screwed Fixing by NUT M3		4.19 - 4.2	6.0		
Probe + Receptacle	 AS50 <15> ASS50 <15> (R=15, V=5.5, X=4.7)				4.75 - 4.82	6.5		
ASS50 is a high pressure type receptacle, having a stronger holding power than AS50. Please refer to "Product Line up, Auxiliary Parts" for the details.								

Note: Do not tighten a nut to the probe excessively. Excessive tightening can break the probe.



Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
CP65	SPS	9	49	330	625	770
	SPL	7.5	12	100	160	190
	SPH	6	295	1,200	2,400	2,970
Application	Applicable Receptacle (size)		Wire Connection Method	Dimension of NUT M3	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Wire connection end screwed Fixing by NUT M3		5.69 - 5.7	7.0
Probe + Receptacle	 	AS65 <15> ASS65 <15> (R=15, V=7, X=6.2)			6.25 - 6.32	8.0

Note: Do not tighten a nut to the probe excessively. Excessive tightening can break the probe.

Do not tighten a nut to the probe excessively. Excessive tightening can

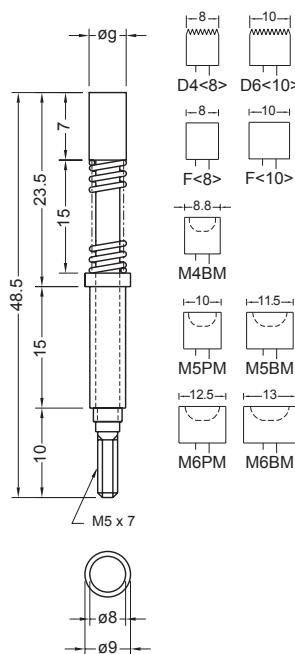
Note: Do not tighten a nut to the probe excessively. Excessive tightening can break the probe.

Note: Do not tighten a nut to the probe excessively. Excessive tightening can damage the probe.

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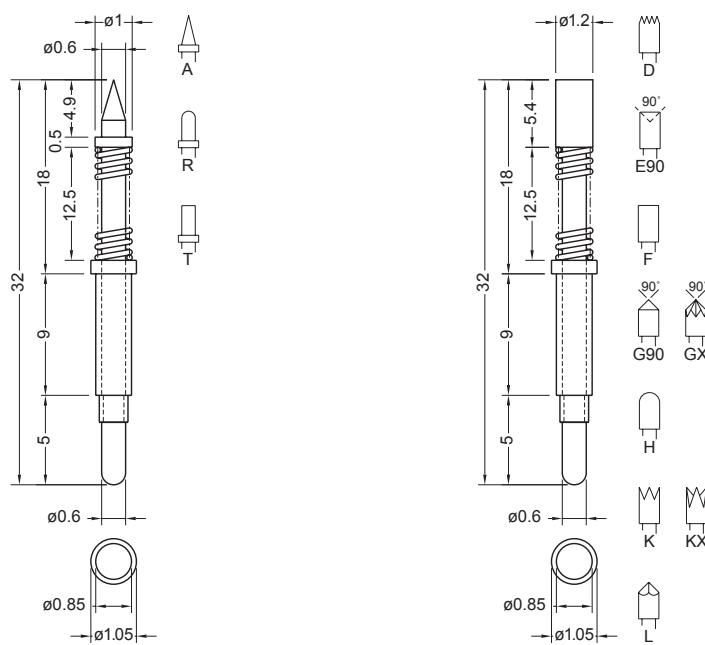
Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.							
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)		
CP90	SPS	9	36	300	520	625		
	SPH	6	250	1,000	2,000	2,500		
Application	Applicable Receptacle (size)		Wire Connection Method	Dimension of NUT M5	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting		
Probe Only			Wire connection end screwed Fixing by NUT M5		7.99 - 8.0	12.0		
Probe + Receptacle	 AS90 <15> ASS90 <15> (R=15, V=9, X=8.5)				8.55 - 8.65	12.0		
ASS90 is a high pressure type receptacle, having a stronger holding power than AS90. Please refer to "Product Line up, Auxiliary Parts" for the details.								

Note: Do not tighten a nut to the probe excessively. Excessive tightening can break the probe.

NCP10

Thermal-endurance temperature below 100°C. Safety current 2A. (Note:Safety current can be varied. See our safety instructions.)

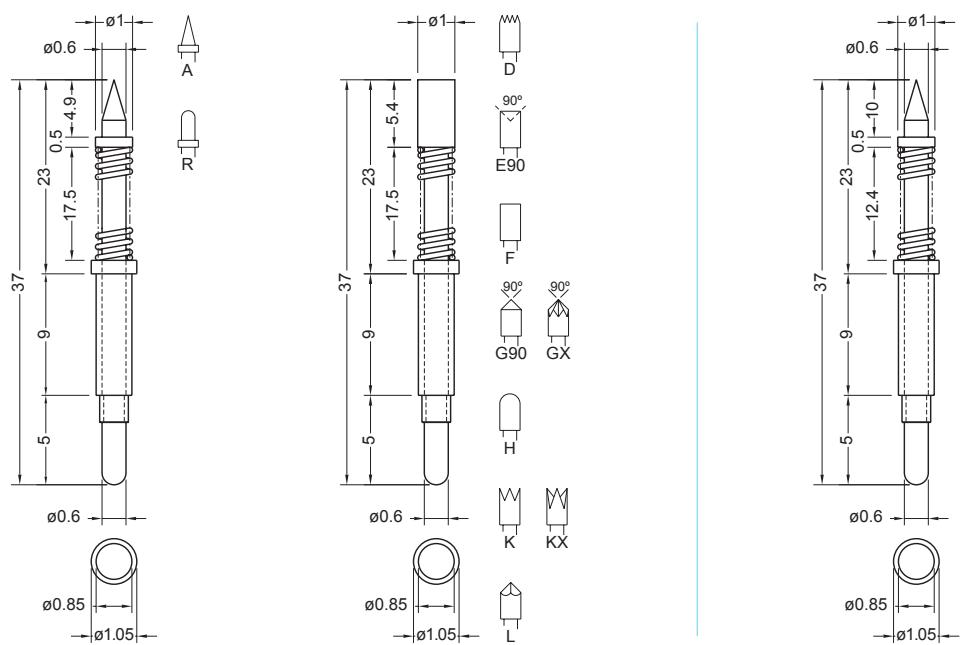


Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
NCP10	SPS	6	30	50	170	230
	SPL	6.4	7.3	15	45	62
	SPH	4.4	40	80	200	260
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA10S TA10P Wire with terminal (TA10<S> FS10 L50<A> Soldering directly to probe	TA10S (soldering)	0.85	1.25
Probe + Receptacle	 AS10 <9> (R=9, V=1.3, X=1.08)		Soldering to receptacle	TA10P (pressing)	1.09 - 1.1	1.5
	 AS10 <23> (R=23, V=1.3, X=1.08)			 		

Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.

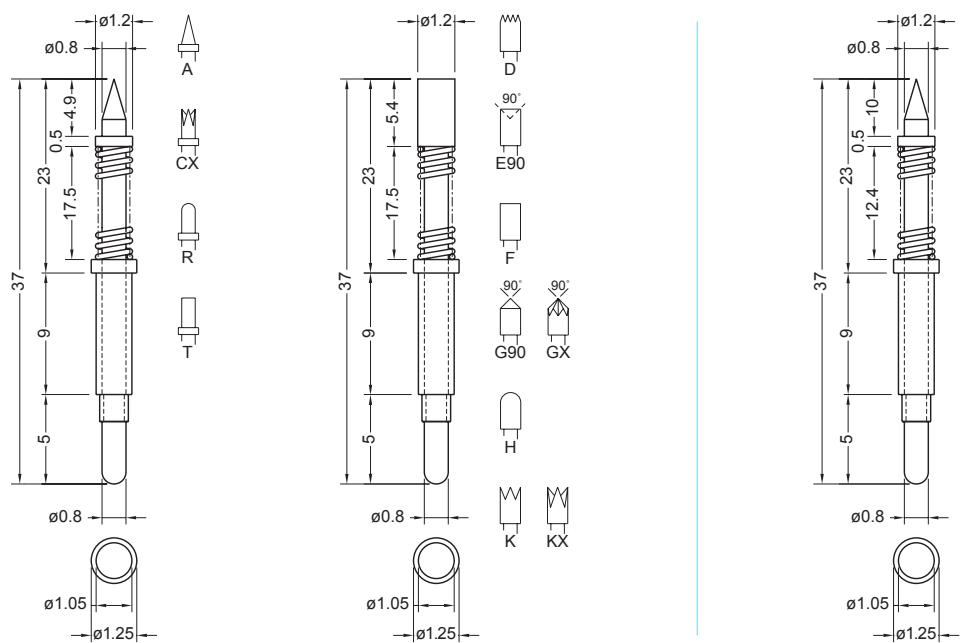
Thermal-endurance temperature below 100°C. Safety current 2A. (Note:Safety current can be varied. See our safety instructions.)



Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
NCP11	SPS	7.4	10.5	55	110	135
	SPL	8.5	5.9	20	53	70
	SPH	7.5	19.5	80	175	225
NCP11S	SPS	6	30	50	170	230
	SPL	6.4	7.3	15	45	62
	SPH	4.4	40	80	200	260
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA10S TA10P Wire with terminal (TA10<S> FS10 L50<A>) Soldering directly to probe	TA10S (soldering)	0.85	1.25
Probe + Receptacle	 		AS10 <9> (R=9, V=1.3, X=1.08)	AS10 <23> (R=23, V=1.3, X=1.08)	TA10P (pressing)	1.09 - 1.1 1.5
Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.						

Thermal-endurance temperature below 100°C. Safety current 3A. (Note:Safety current can be varied. See our safety instructions.)

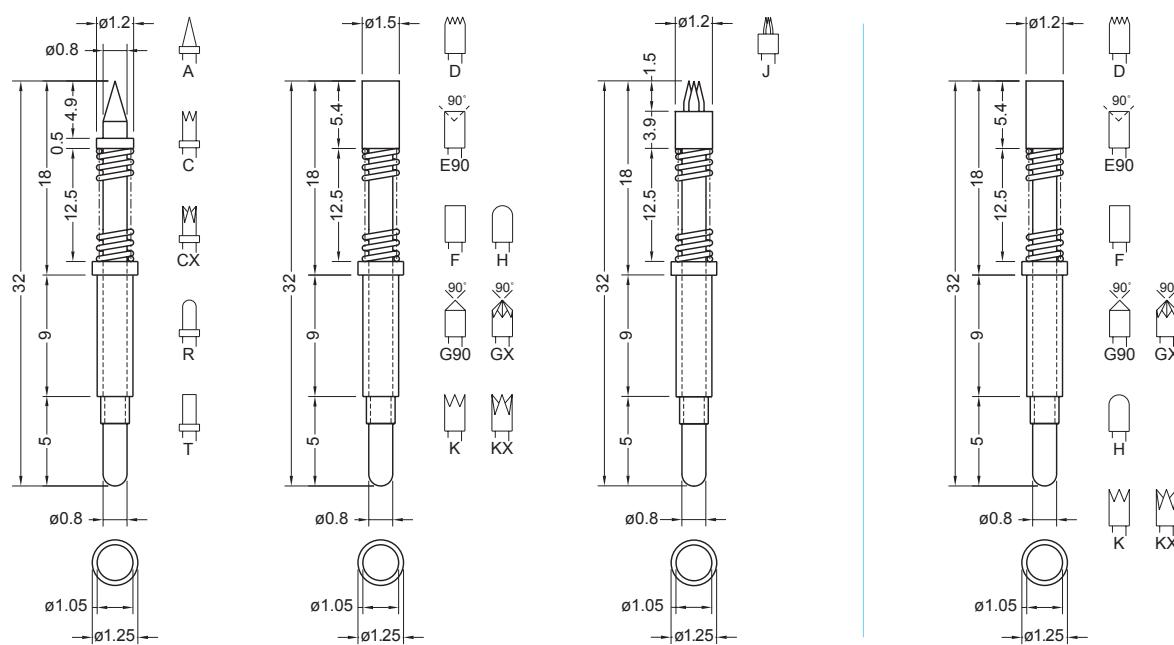


Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
NCP12	SPS	7.4	10	55	105	130
	SPL	9.4	6.7	20	62	83
	SPH	7.3	27	110	240	310
NCP12S	SPS	5.9	26.5	80	185	235
	SPL	5.9	15.5	40	100	130
	SPH	5	37	110	230	295
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA15S TA15P Wire with terminal (TA15<S> FS10 L50<A>) Soldering directly to probe	TA15S (soldering)	1.05	1.5
Probe + Receptacle	AS15 <9> (R=9, V=1.6, X=1.37)	AS15 <23> (R=23, V=1.6, X=1.37)	Soldering to receptacle	TA15P (pressing)	1.39 - 1.42	1.8
	AS15 <9> (R=9, V=1.6, X=1.37)					

Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.

Thermal-endurance temperature below 100°C. Safety current 3A. (Note:Safety current can be varied. See our safety instructions.)



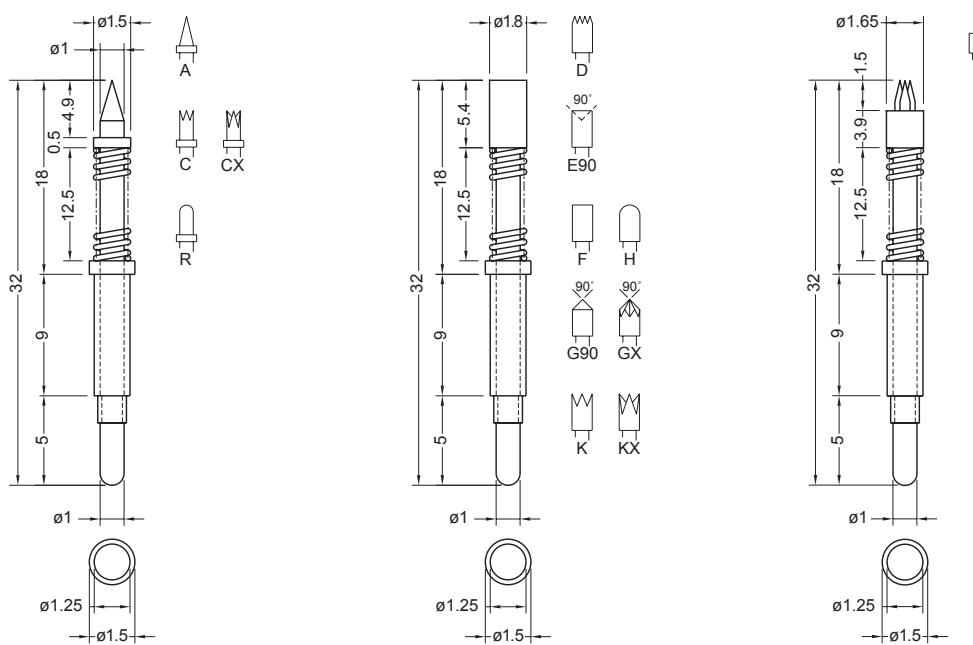
Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
NCP15 <1.2>	SPS	5.9	26.5	80	185	235
NCP15 <1.5>	SPL	5.9	15.5	40	100	130
	SPH	5	37	110	230	295
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA15S TA15P Wire with terminal (TA15<S> FS10 L50<A> Soldering directly to probe	TA15S (soldering)	1.05	1.5
Probe + Receptacle	AS15 <9> (R=9, V=1.6, X=1.37)		Soldering to receptacle	TA15P (pressing) 	1.39 - 1.42	1.8
	AS15 <23> (R=23, V=1.6, X=1.37)					

Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.

NCP18

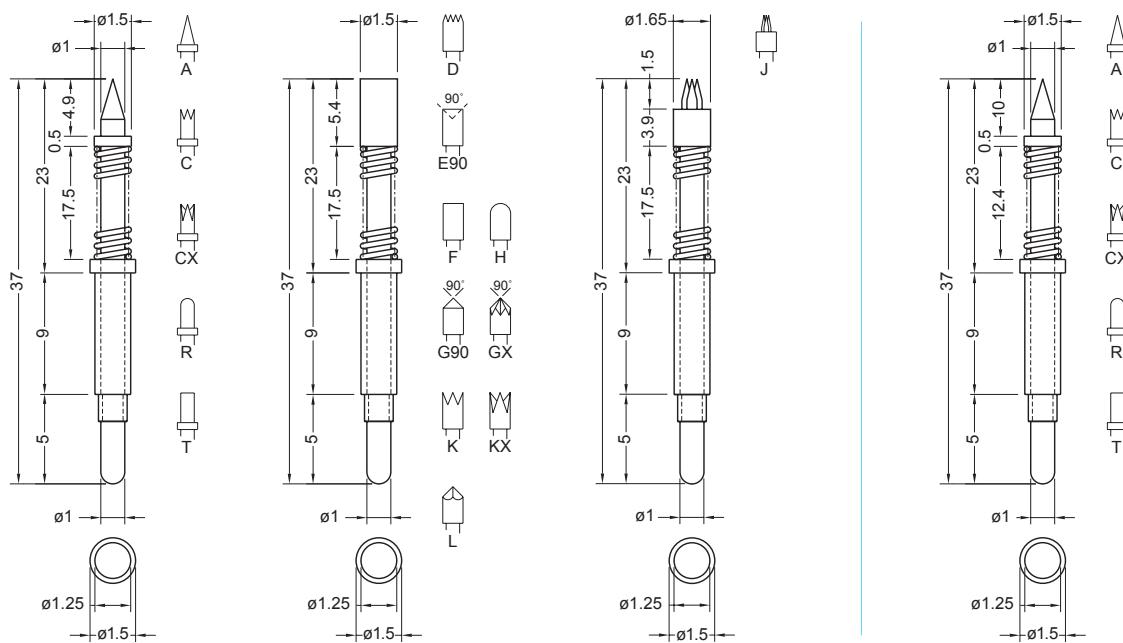
Thermal-endurance temperature below 100°C. Safety current 3A. (Note:Safety current can be varied. See our safety instructions.)



Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
NCP18	SPS	5.9	22	100	185	230
	SPL	7	8	20	55	75
	SPL1	6.1	14	60	115	145
	SPH	6	26	120	225	275
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA20T TA20S TA20P Wire with terminal (TA20<S> FS10 L50<A> TA20<S> FS20 L50<A>) Soldering directly to probe	TA20T (pressing) TA20S (soldering) TA20P (pressing)	1.25	2.0
Probe + Receptacle	 AS20 <9> ASS20 <9> (R=9, V=2, X=1.6)		Soldering to receptacle		1.63 - 1.67	2.5
ASS20 is a high pressure type receptacle, having a stronger holding power than AS20. Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.						

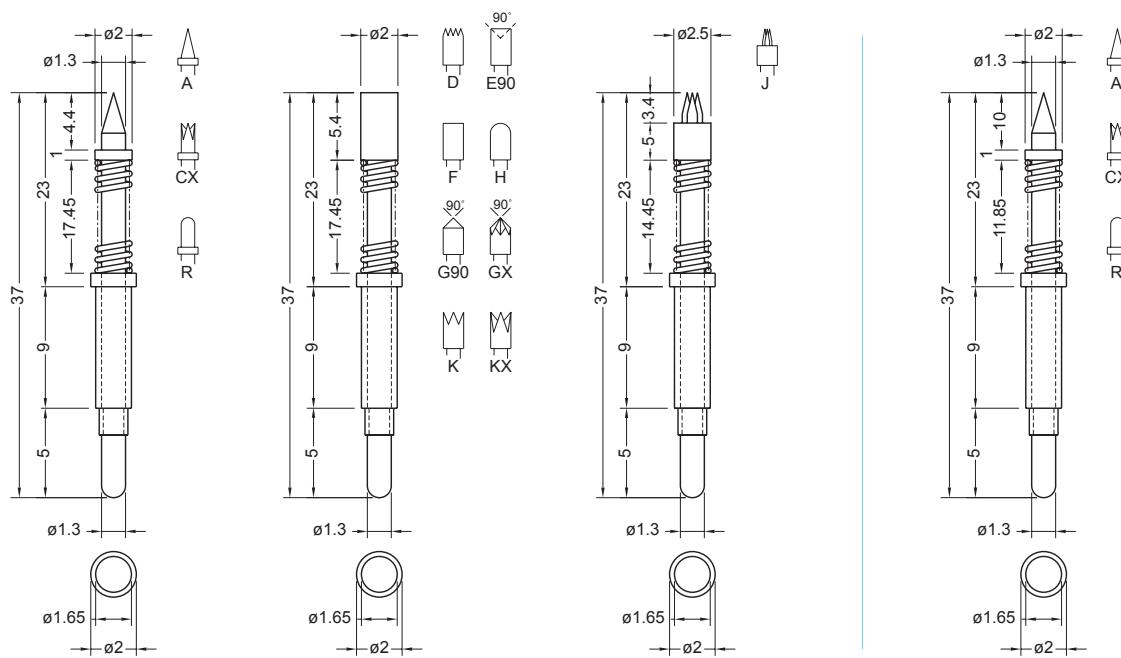
Thermal-endurance temperature below 100°C. Safety current 3A. (Note:Safety current can be varied. See our safety instructions.)



Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
NCP20	SPS	7.5	9	75	120	140
	SPL	7.5	10	55	105	130
	SPL1	7.5	10	20	70	95
	SPH	7.3	44	135	345	455
NCP20S	SPS	5.9	22	100	185	230
	SPL	7	8	20	55	75
	SPL1	6.1	14	60	115	145
	SPH	6	26	120	225	275
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA20T TA20S TA20P Wire with terminal (TA20<S> FS10 L50<A> TA20<S> FS20 L50<A>) Soldering directly to probe	TA20T (pressing) TA20S (soldering) TA20P (pressing)	1.25	2.0
Probe + Receptacle	 AS20 <9> AS20 <23> (R=9, V=2, X=1.6) (R=23, V=2, X=1.6)		Soldering to receptacle		1.63 - 1.67	2.5
ASS20 is a high pressure type receptacle, having a stronger holding power than AS20. Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.						

Thermal-endurance temperature below 100°C. Safety current 3A. (Note:Safety current can be varied. See our safety instructions.)



Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

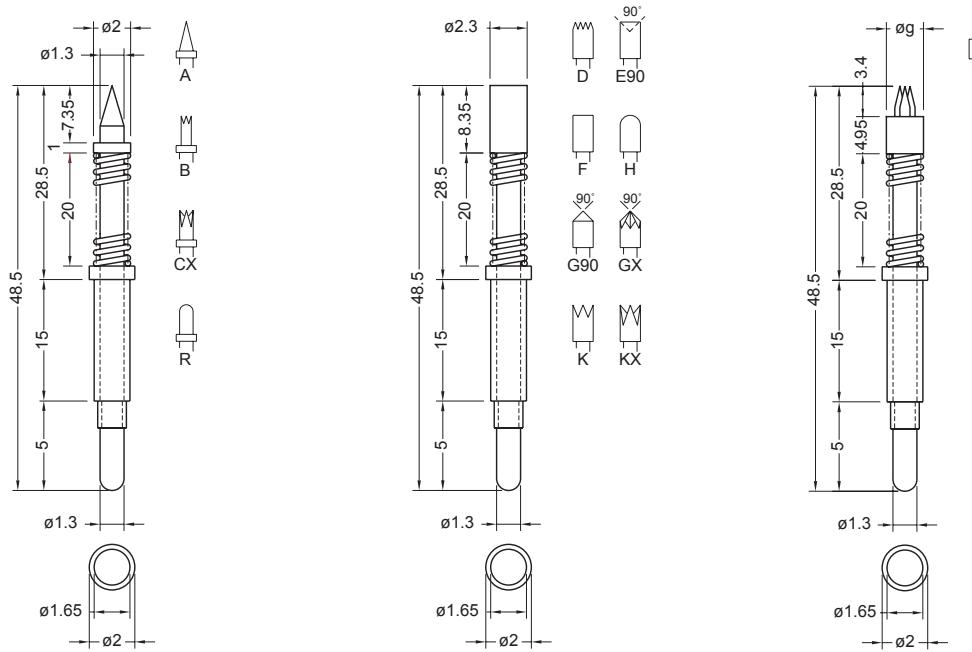
Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
NCP25	SPS	7.5 (4.5)	24	135 (207)	255 (279)	315
	SPL	9.5 (6.5)	10	55 (85)	120 (128)	150
	SPH	7.5 (4.5)	55	100 (265)	380 (430)	510
NCP25S	SPS	5.3	35	145	270	330
	SPL	7.8	15	40	120	155
	SPH					

Note: Figures in () are only applied for the plunger tip configuration J-type.

Application	Applicable Receptacle (size)	Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only					
Probe + Receptacle	 AS25 <9> ASS25 <9> (R=9, V=2.3, X=2)	Terminal TA25S TA30T Wire with terminal (TA30<S> FS10 L50<A> TA30<S> FS20 L50<A>) Soldering directly to probe	TA25S (soldering)	1.65	2.5
	 AS25 <23> ASS25 <23> (R=23, V=2.3, X=2)	Soldering to receptacle	TA30T (pressing)	2.03 - 2.07	2.8

ASS25 is a high pressure type receptacle, having a stronger holding power than AS25.

Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.



Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
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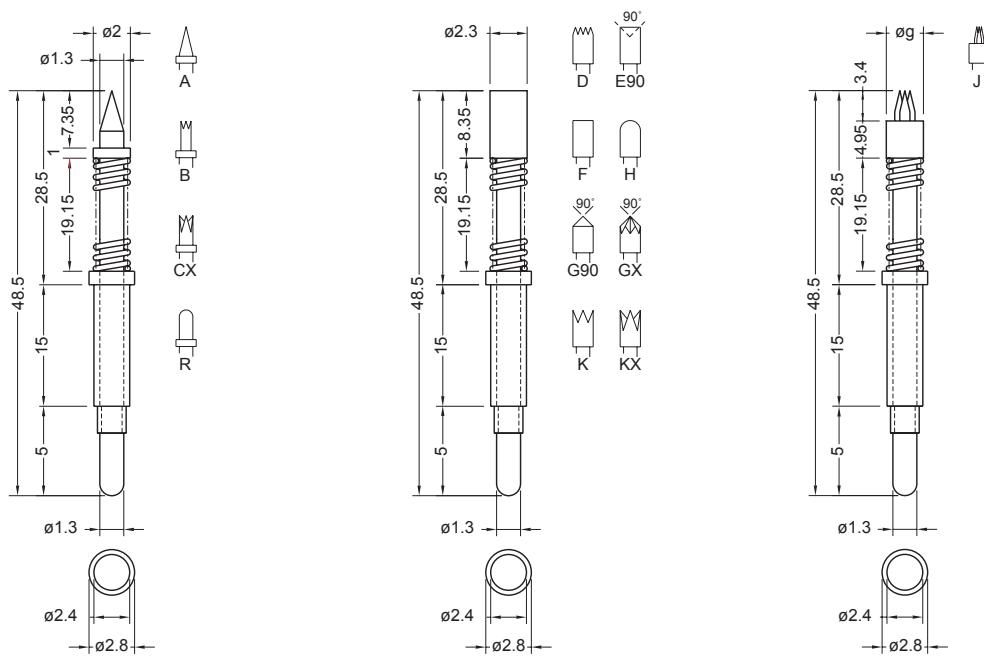
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
NCP250	SPS	10.5	23	140	300	380
	SPL	12	10	50	130	170
	SPH	7.5	55	200	475	612

Application	Applicable Receptacle (size)	Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only		Terminal TA25S TA30T Wire with terminal (TA30<S> FS10 L50<A>) (TA30<S> FS20 L50<A>) Soldering directly to probe	TA25S (soldering)	1.65	2.8
Probe + Receptacle	AS25 <15> ASS25 <15> (R=15, V=2.3, X=2)	Soldering to receptacle	TA30T (pressing)	2.03 - 2.07	2.8
	AS25 <35> ASS25 <35> (R=35, V=2.3, X=2)				

ASS25 is a high pressure type receptacle, having a stronger holding power than AS25.
Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.

NCP250B

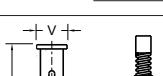
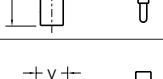
Thermal-endurance temperature below 100°C. Safety current 5A. (Note:Safety current can be varied. See our safety instructions.)



Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "*List of Tip Configurations*".

Material of tips See "Base Material and Plating of Probe Tips" for the detail.

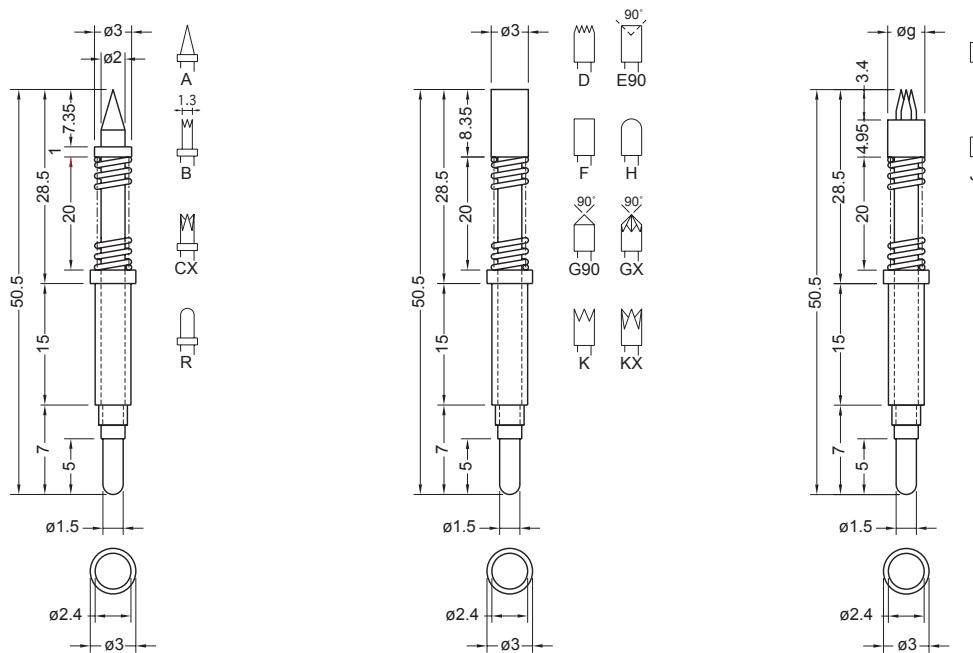
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
NCP250B	SPS	9.6	23	160	310	380
	SPL	11.1	10	60	134	170
	SPH	6.6	55	245	487	612

Application	Applicable Receptacle (size)	Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only		Terminal TA25S TA30T Wire with terminal (TA30<S> FS10 L50<A> TA30<S> FS20 L50<A>) Soldering directly to probe	TA25S (soldering)	2.39 - 2.4	3.5
Probe + Receptacle	 AS30 <15> ASS30 <15> (R=15, V=3, X=2.7)	Soldering to receptacle	 TA25S (soldering)	2.73 - 2.77	3.5
	 AS30 <35> ASS30 <35> (R=35, V=3, X=2.7)		 TA30T (pressing)		

ASS30 is a high pressure type receptacle, having a stronger holding power than AS30. Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.

NCP300

Thermal-endurance temperature below 100°C. Safety current 7A. (Note:Safety current can be varied. See our safety instructions.)



Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

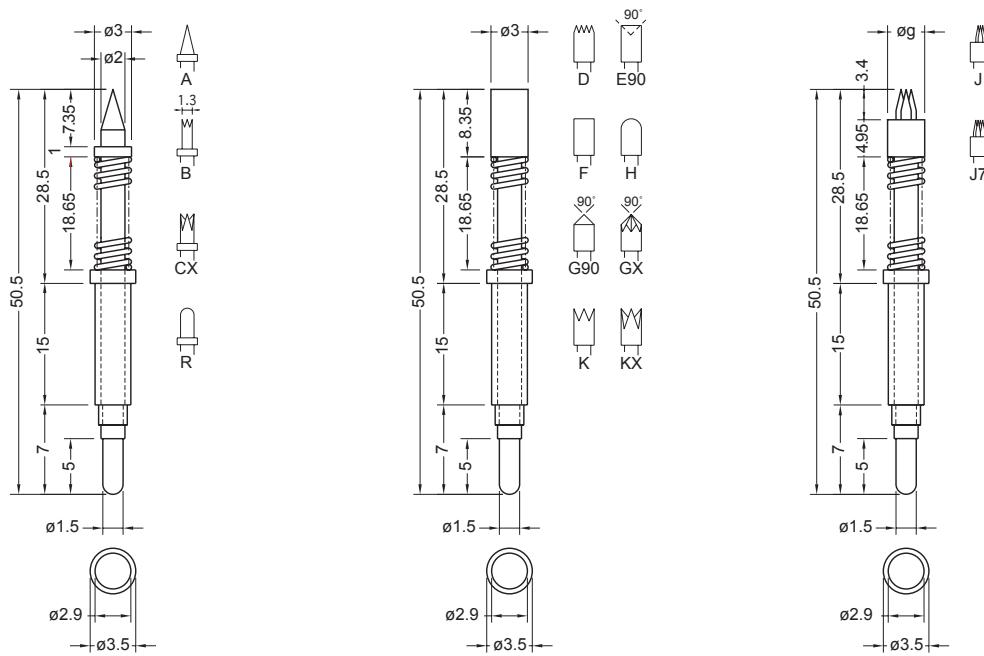
Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
NCP300	SPS	10	36	180	390	530
	SPL	10	8	100	150	180
	SPH	8	56	300	610	750
	SPH1	7	90	600	1,010	1,230
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA35T	TA35T (pressing)	2.39 - 2.4	3.5
Probe + Receptacle	 AS30 <15> ASS30 <15> (R=15, V=3, X=2.7)		Wire with terminal (TA35<S> FS30 L50<A>) Soldering directly to probe		2.73 - 2.77	3.5
	 AS30 <35> ASS30 <35> (R=35, V=3, X=2.7)		Soldering to receptacle			

ASS30 is a high pressure type receptacle, having a stronger holding power than AS30.

Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.

NCP300BA

Thermal-endurance temperature below 100°C. Safety current 7A. (Note:Safety current can be varied. See our safety instructions.)



Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
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Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
NCP300BA	SPS	8.2	36	230	430	530
	SPL	8.5	8	110	160	180
	SPH	6.5	56	380	625	750
	SPH1	5.5	90	735	1,050	1,230

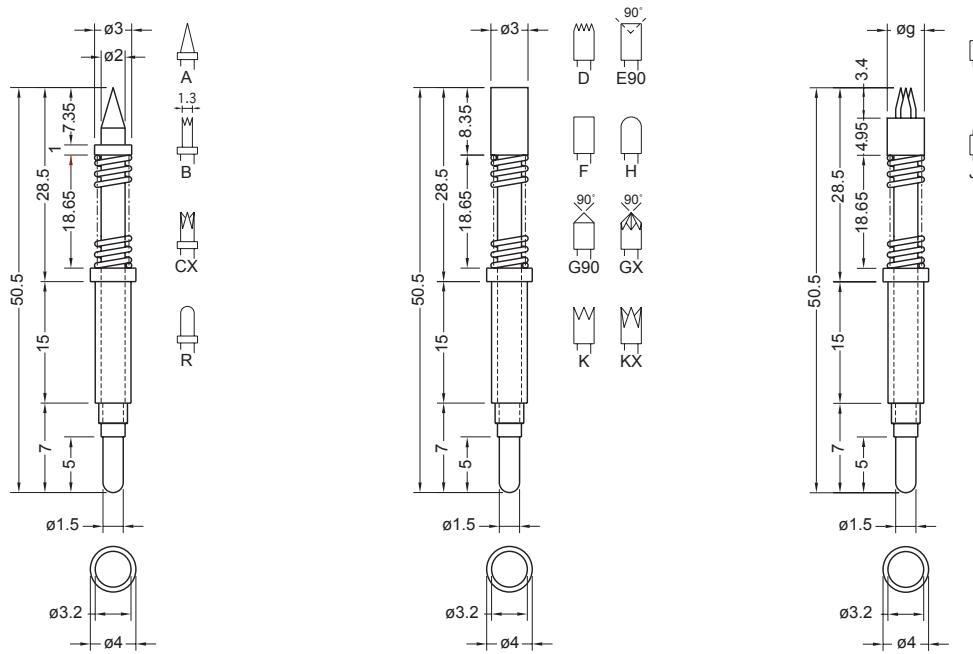
Application	Applicable Receptacle (size)	Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only				2.89 - 2.9	4.0
Probe + Receptacle	 AS35 <15> ASS35 <15> (R=15, V=3.5, X=3.2)	Terminal TA35T Wire with terminal (TA35<S> FS30 L50<A>) Soldering directly to probe	 TA35T (pressing)	3.23 - 3.27	4.0
	 AS35 <35> ASS35 <35> (R=35, V=3.5, X=3.2)	Soldering to receptacle			

ASS35 is a high pressure type receptacle, having a stronger holding power than AS35.

Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.

NCP300B

Thermal-endurance temperature below 100°C. Safety current 7A. (Note:Safety current can be varied. See our safety instructions.)



Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
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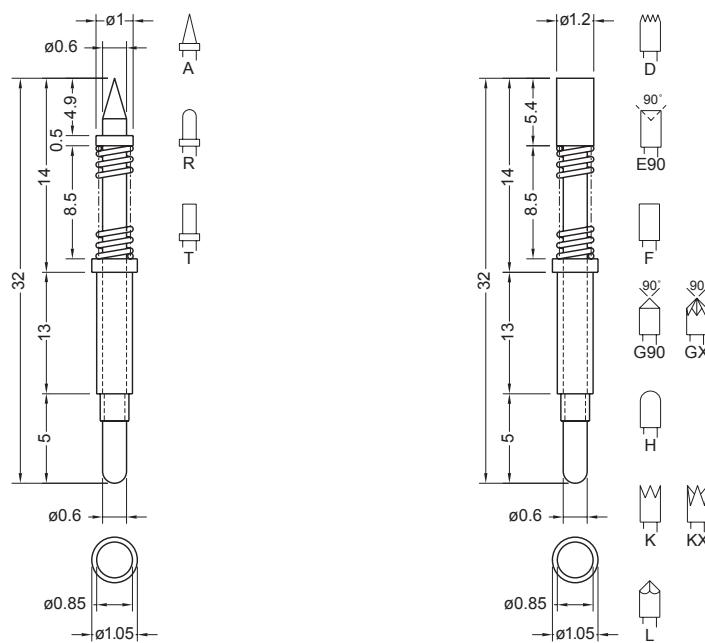
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
NCP300B	SPS	8.2	36	230	430	530
	SPL	8.5	8	110	160	180
	SPH	6.5	56	380	625	750
	SPH1	5.5	90	735	1,050	1,230

Application	Applicable Receptacle (size)	Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only				3.19 - 3.2	4.5
Probe + Receptacle	AS40 <15> ASS40 <15> (R=15, V=4, X=3.5)	Terminal TA35T Wire with terminal (TA35<S> FS30 L50<A>) Soldering directly to probe	TA35T (pressing)	3.53 - 3.57	4.5
	AS40 <35> ASS40 <35> (R=35, V=4, X=3.2)	Soldering to receptacle			

ASS40 is a high pressure type receptacle, having a stronger holding power than AS40.
Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.

NCP10LP13

Thermal-endurance temperature below 100°C. Safety current 2A. (Note:Safety current can be varied. See our safety instructions.)



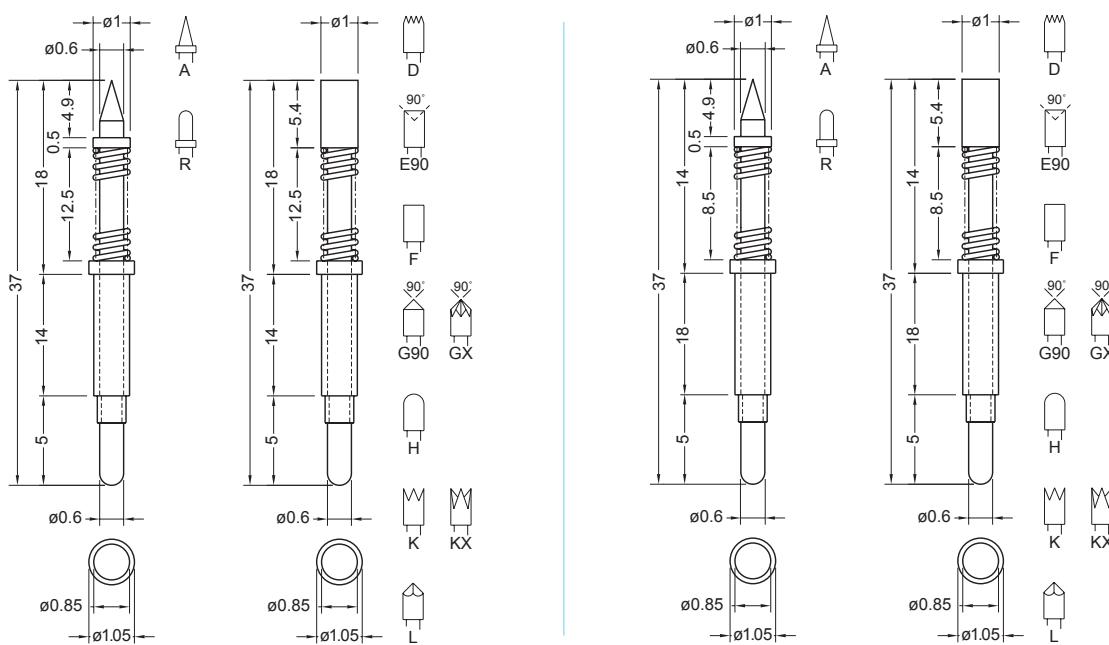
Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
NCP10LP13	SPS	4.5	14	35	77	98
	SPL	4	12	20	50	68
	SPH	3.5	30	50	120	155
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA10S TA10P Wire with terminal (TA10<S> FS10 L50<A>) Soldering directly to probe	TA10S (soldering)	0.85	1.25
Probe + Receptacle			AS10 <9> (R=9, V=1.3, X=1.08)	TA10P (pressing)	1.09 - 1.1	1.5
Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.						

NCP11LP14

Thermal-endurance temperature below 100°C. Safety current 2A. (Note:Safety current can be varied. See our safety instructions.)

NCP11LP18



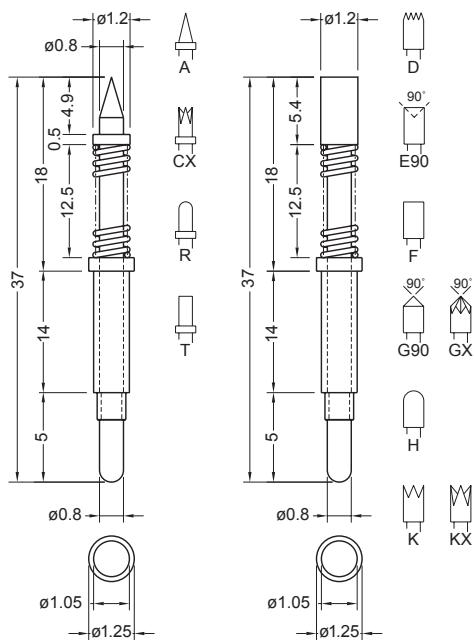
Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
NCP11LP14	SPS	6	30	50	170	230
	SPL	6.4	7.3	15	45	62
	SPH	4.4	40	80	200	260
NCP11LP18	SPS	4.5	14	35	77	98
	SPL	4	12	20	50	68
	SPH	3.5	30	50	120	155
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA10S TA10P Wire with terminal (TA10<S> FS10 L50<A>) Soldering directly to probe	TA10S (soldering)	0.85	1.25
Probe + Receptacle	 AS10 <9> (R=9, V=1.3, X=1.08)		Soldering to receptacle	 AS10 <23> (R=23, V=1.3, X=1.08)	1.09 - 1.1	1.5

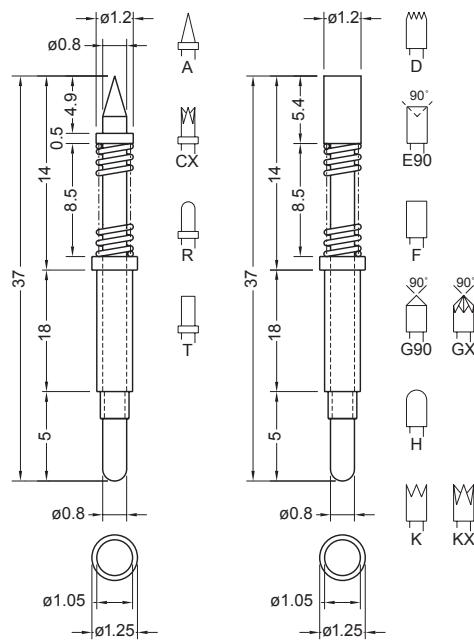
Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.

NCP12LP14

Thermal-endurance temperature below 100°C. Safety current 3A. (Note:Safety current can be varied. See our safety instructions.)



NCP12LP18

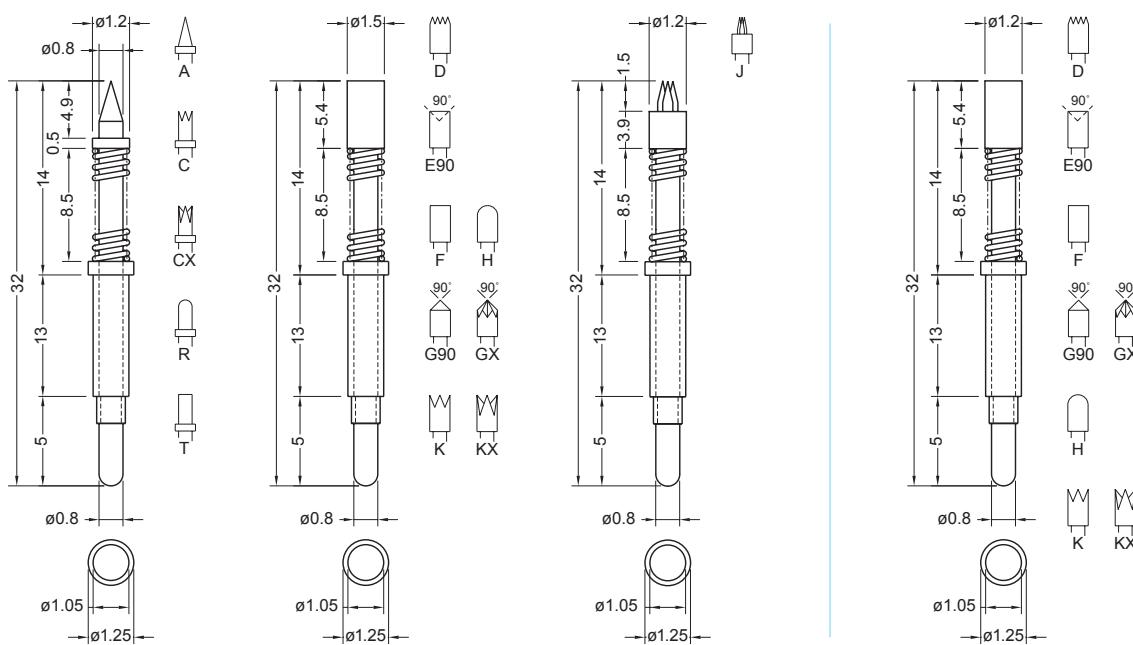


Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
NCP12LP14	SPS	5.9	26.5	80	185	235
	SPL	5.9	15.5	40	100	130
	SPH	5	37	110	230	295
NCP12LP18	SPS	4	23	35	95	125
	SPL	4.5	2.9	15	23.5	28
	SPH	4	40	70	175	230
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA15S TA15P Wire with terminal (TA15<S> FS10 L50<A>) Soldering directly to probe	TA15S (soldering)	1.05	1.5
Probe + Receptacle	 AS15 <9> (R=9, V=1.6, X=1.37)		Soldering to receptacle	TA15P (pressing)	1.39 - 1.42	1.8
	 AS15 <23> (R=23, V=1.6, X=1.37)					

Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.

Thermal-endurance temperature below 100°C. Safety current 3A. (Note:Safety current can be varied. See our safety instructions.)



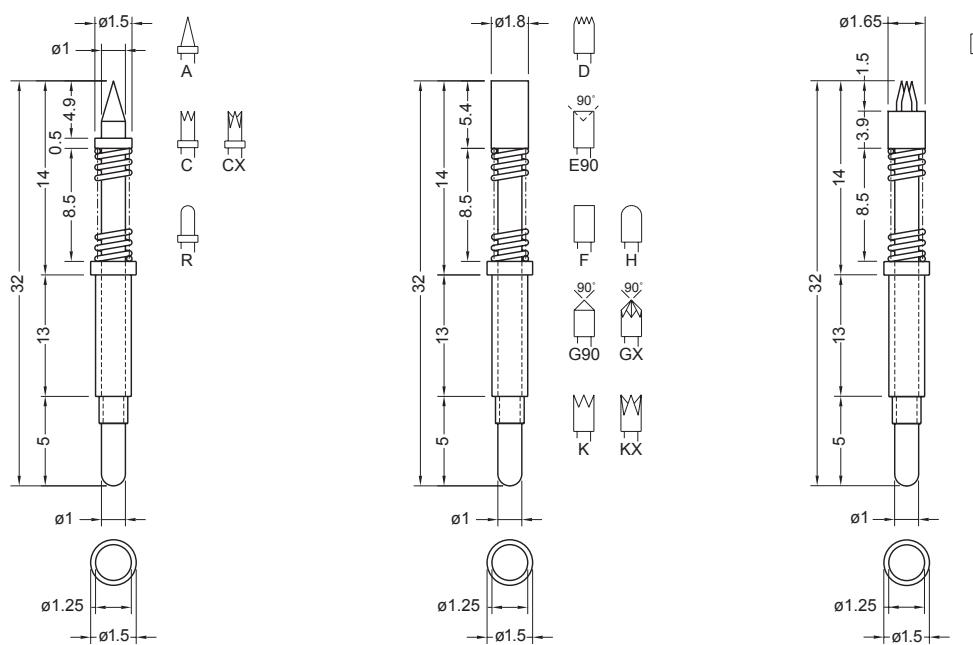
Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
NCP15<1.2>LP13	SPS	4	23	35	95	125
NCP15<1.5>LP13	SPL	4.5	2.9	15	23.5	28
	SPH	4	40	70	175	230
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA15S TA15P Wire with terminal (TA15<S> FS10 L50<A>) Soldering directly to probe	TA15S (soldering)	1.05	1.5
Probe + Receptacle	 		Soldering to receptacle	TA15P (pressing)	1.39 - 1.42	1.8

Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.

NCP18LP13

Thermal-endurance temperature below 100°C. Safety current 3A. (Note:Safety current can be varied. See our safety instructions.)



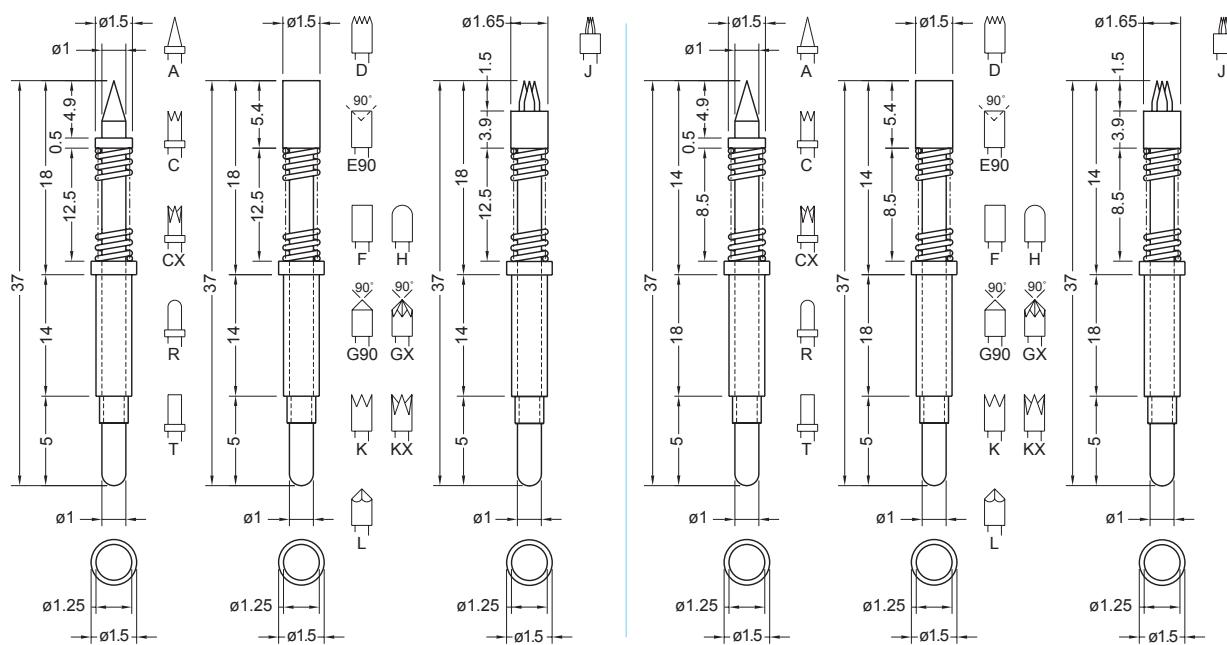
Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
NCP18LP13	SPS	5	15	50	100	125
	SPL	4.5	3.5	32.5	43	48
	SPL1	5.5	4.8	10	27	36
	SPH	4.3	38	80	185	245
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA20T TA20S TA20P Wire with terminal (TA20<S> FS10 L50<A>) (TA20<S> FS20 L50<A>) Soldering directly to probe	TA20T (pressing) TA20S (soldering) TA20P (pressing)	1.25	2.0
Probe + Receptacle	 AS20 <9> ASS20 <9> (R=9, V=2, X=1.6)	 AS20 <23> ASS20 <23> (R=23, V=2, X=1.6)	Soldering to receptacle		1.63 - 1.67	2.5
ASS20 is a high pressure type receptacle, having a stronger holding power than AS20. Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.						

NCP20LP14

NCP20LP18

Thermal-endurance temperature below 100°C. Safety current 3A. (Note:Safety current can be varied. See our safety instructions.)

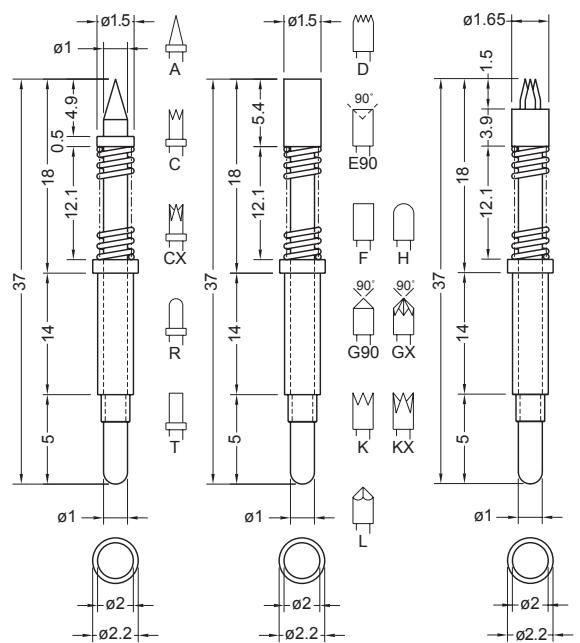


Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
NCP20LP14	SPS	5.9	22	100	185	230
	SPL	7	8	20	55	75
	SPL1	6.1	14	60	115	145
	SPH	6	26	120	225	275
NCP20LP18	SPS	5	15	50	100	125
	SPL	4.5	3.5	32.5	43	48
	SPL1	5.5	4.8	10	27	36
	SPH	4.3	38	80	185	245
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA20T TA20S TA20P Wire with terminal (TA20<S> FS10 L50<A> TA20<S> FS20 L50<A>) Soldering directly to probe	TA20T (pressing) TA20S (soldering) TA20P (pressing) 	1.25	2.0
Probe + Receptacle	 AS20 <9> ASS20 <9> (R=9, V=2, X=1.6)		Soldering to receptacle		1.63 - 1.67	2.5
ASS20 is a high pressure type receptacle, having a stronger holding power than AS20. Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.						

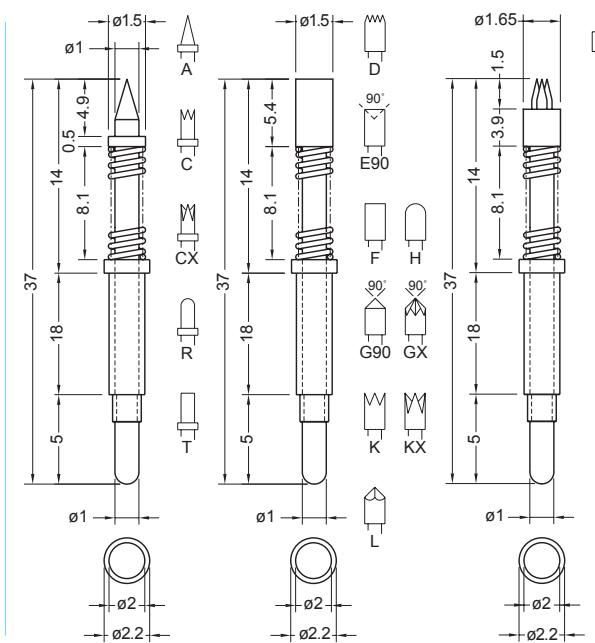
NCP20LB14.5

Thermal-endurance temperature below 100°C. Safety current 3A. (Note:Safety current can be varied. See our safety instructions.)



NCP20LB18.5

Thermal-endurance temperature below 100°C. Safety current 3A. (Note:Safety current can be varied. See our safety instructions.)

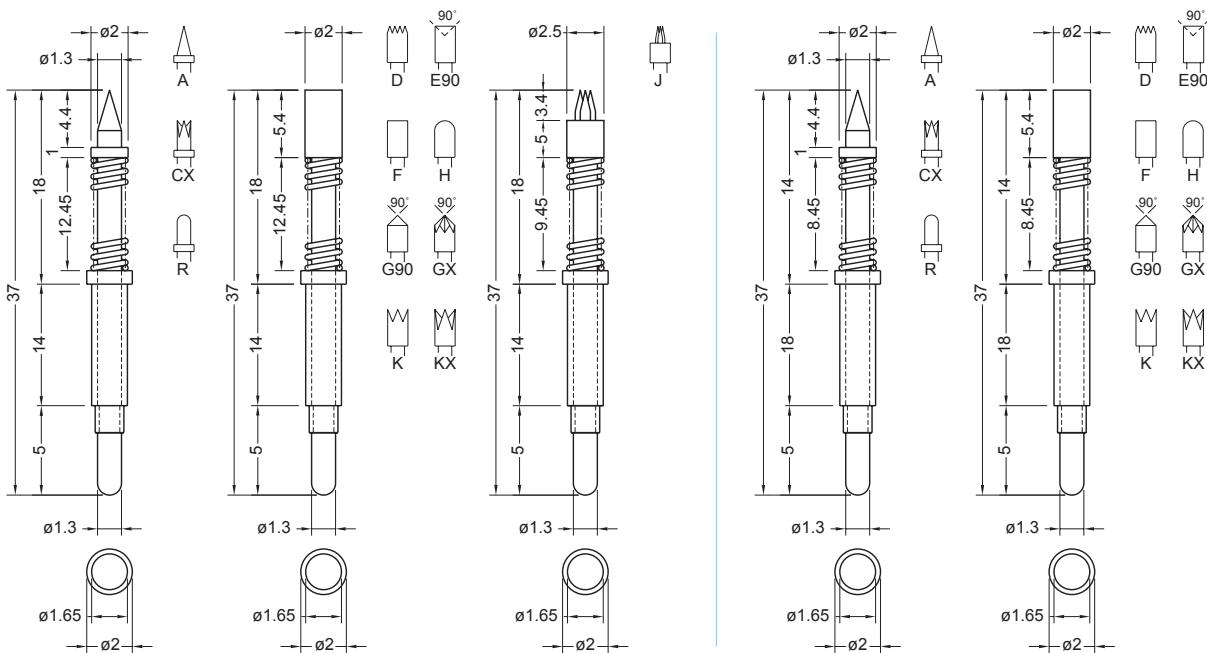


Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
NCP20LB14.5	SPS	5.5	22	110	190	230
	SPL	6.6	8	25	60	74
	SPL1	5.7	14.2	65	120	145
	SPH	5.6	26	130	230	275
NCP20LB18.5	SPS	4.5	15	60	105	125
	SPL	4.1	3.5	34	43	48
	SPL1	5.1	4.8	12	28	36
	SPH	3.9	38	95	195	245
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA20T TA20S TA20P Wire with terminal (TA20<S> FS10 L50<A> TA20<S> FS20 L50<A>) Soldering directly to probe	TA20T (pressing) TA20S (soldering)	1.99 - 2.0	2.5
Probe + Receptacle	 	AS20B <9> ASS20B <9> (R=9, V=2.8, X=2.4) AS20B <23> ASS20B <23> (R=23, V=2.8, X=2.4)	Soldering to receptacle	 TA20P (pressing)	2.43 - 2.47	3.2
ASS20B is a high pressure type receptacle, having a stronger holding power than AS20B. Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.						

NCP25LP14

Thermal-endurance temperature below 100°C. Safety current 3A. (Note:Safety current can be varied. See our safety instructions.)



Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
NCP25LP14	SPS	6 (3)	35	120 (225)	265 (295)	330
	SPL	8.5(5.5)	15	30 (75)	115 (130)	160
	SPH					
NCP25LP18	SPS	4	14	65	100	120
	SPS1	4	23	80	140	170
	SPL	4	6.3	32.5	48	57
	SPH	4	46	120	240	300

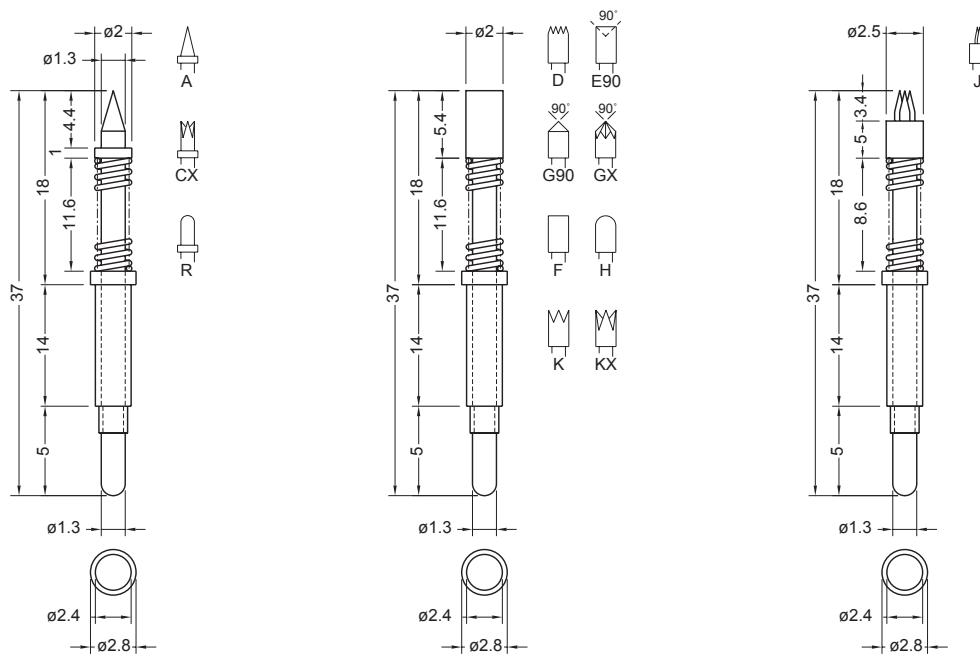
Note: Figures in () are only applied for the plunger tip configuration J-type.

Application	Applicable Receptacle (size)	Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only		Terminal TA30T TA25S	TA30T (pressing)	1.65	2.5
Probe + Receptacle	AS25 <9> ASS25 <9> (R=9, V=2.3, X=2)	Wire with terminal (TA30<S> FS10 L50<A> TA30<S> FS20 L50<A>) Soldering directly to probe	TA30T (pressing)		
	AS25 <23> ASS25 <23> (R=23, V=2.3, X=2)	Soldering to receptacle	TA25S (soldering)	2.03 - 2.07	2.8

ASS25 is a high pressure type receptacle, having a stronger holding power than AS25.
Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.

NCP25LB15

Thermal-endurance temperature below 100°C. Safety current 3A. (Note:Safety current can be varied. See our safety instructions.)



Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
NCP25LB15	SPS	5.3 (4.6)	46	145 (93)	270 (234)	330
	SPL	7.8 (4.8)	15	40 (85)	120 (133)	155

Note: Figures in () are only applied for the plunger tip configuration J-type.

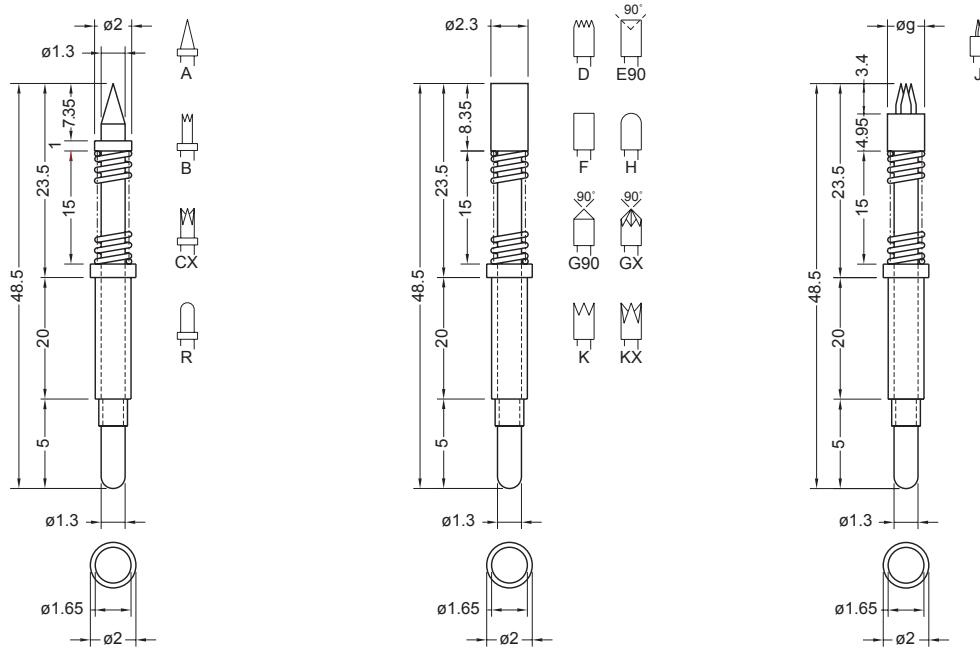
Application	Applicable Receptacle (size)	Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only		Terminal TA30T TA25S	TA30T (pressing)	2.39 - 2.4	3.5
Probe + Receptacle	AS30 <9> ASS30 <9> (R=9, V=3, X=2.7)	Wire with terminal (TA30<S> FS10 L50<A>) (TA30<S> FS20 L50<A>) Soldering directly to probe	TA30T (pressing)	2.73 - 2.77	3.5
	AS30 <23> ASS30 <23> (R=23, V=3, X=2.7)	Soldering to receptacle	TA25S (soldering)		

ASS30 is a high pressure type receptacle, having a stronger holding power than AS30.

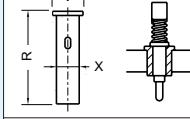
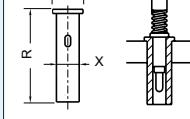
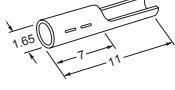
Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.

NCP250LP20

Thermal-endurance temperature below 100°C. Safety current 5A. (Note:Safety current can be varied. See our safety instructions.)

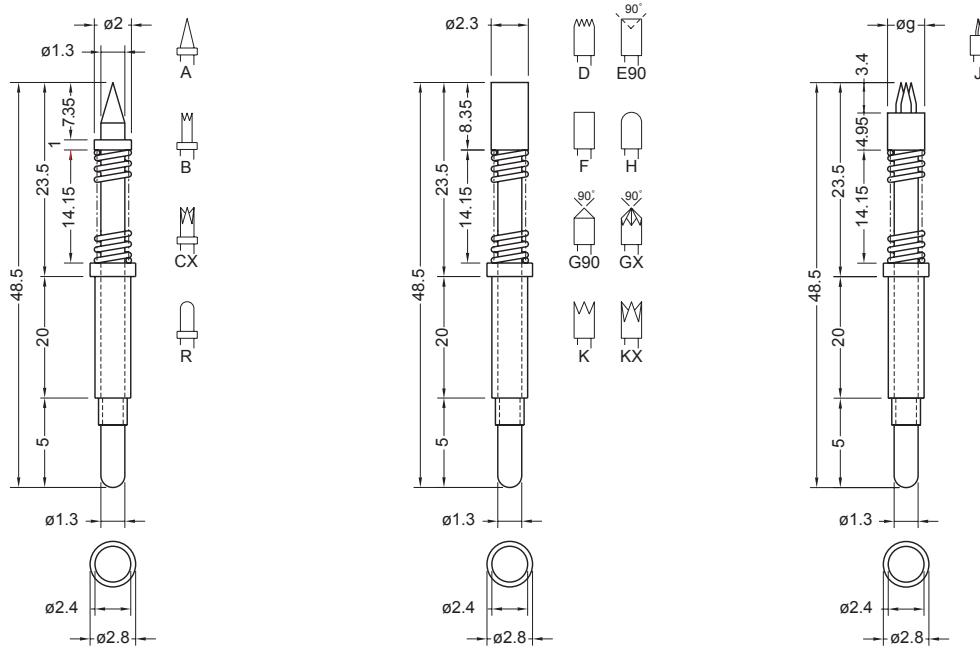


Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
NCP250LP20	SPS	5	24	195	275	315
Application	Applicable Receptacle (size)	Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting	
Probe Only		Terminal TA30T TA25S	TA30T (pressing)	1.65	2.5	
Probe + Receptacle	 AS25 <15> ASS25 <15> (R=15, V=2.3, X=2)	Wire with terminal (TA30<S> FS10 L50<A>) (TA30<S> FS20 L50<A>) Soldering directly to probe				
	 AS25 <35> ASS25 <35> (R=35, V=2.3, X=2)	Soldering to receptacle	TA25S (soldering) 	2.03 - 2.07	2.8	
ASS25 is a high pressure type receptacle, having a stronger holding power than AS25. Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.						

NCP250LB21

Thermal-endurance temperature below 100°C. Safety current 5A. (Note:Safety current can be varied. See our safety instructions.)



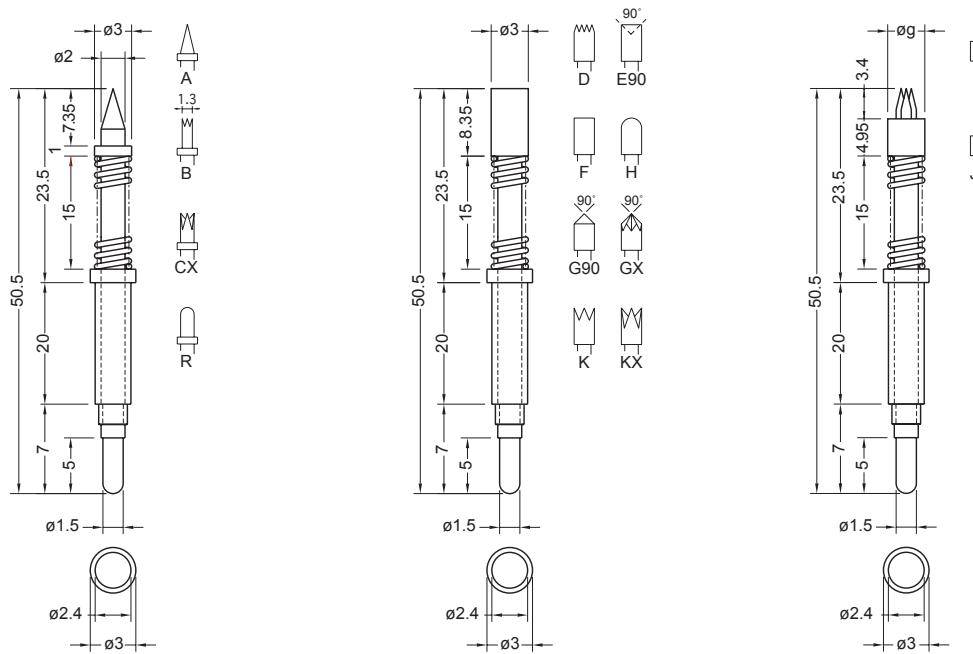
Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
NCP250LB21	SPS	4.1	24	215	280	315
Application	Applicable Receptacle (size)	Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting	
Probe Only		Terminal TA30T TA25S	TA30T (pressing)	2.39 - 2.4	3.5	
Probe + Receptacle	 AS30 <15> ASS30 <15> (R=15, V=3, X=2.7)	Wire with terminal (TA30<S> FS10 L50<A>) (TA30<S> FS20 L50<A>) Soldering directly to probe	 TA25S (soldering)	2.73 - 2.77	3.5	
	 AS30 <35> ASS30 <35> (R=35, V=3, X=2.7)	Soldering to receptacle				

ASS30 is a high pressure type receptacle, having a stronger holding power than AS30.
 Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.

NCP300LP20

Thermal-endurance temperature below 100°C. Safety current 7A. (Note:Safety current can be varied. See our safety instructions.)



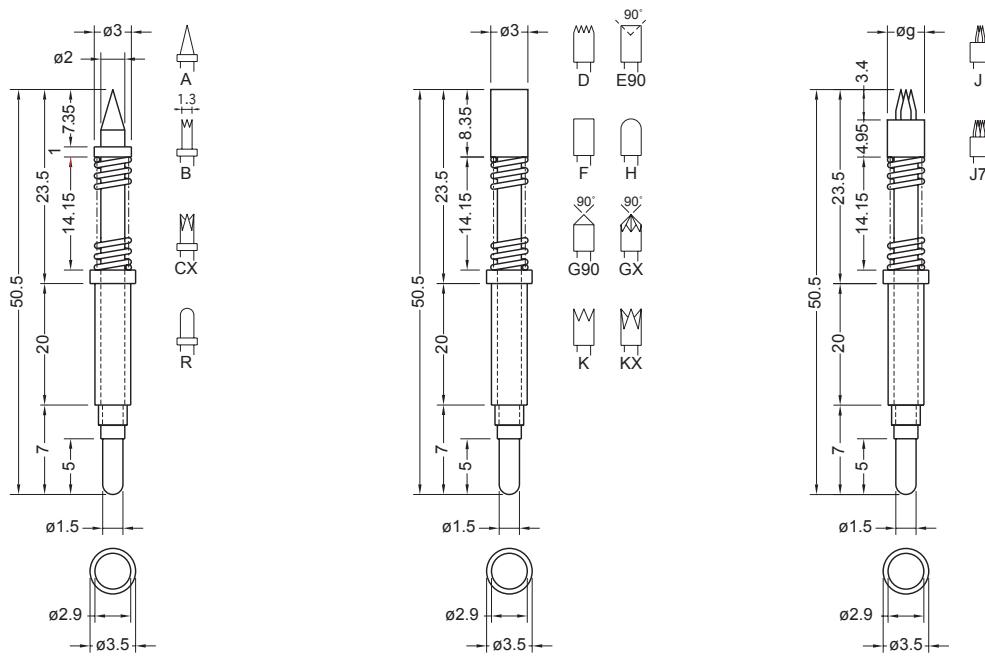
Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
NCP300LP20	SPS	7.8	26	150	285	355
	SPL	9.7	10.3	50	115	150
	SPL1	10.3	17.6	100	220	280
	SPH	6.6	40	320	500	585
	SPH1	6	121	250	735	980
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA35T	TA35T (pressing)	2.39 - 2.4	3.5
Probe + Receptacle	 AS30 <15> ASS30 <15> (R=15, V=3, X=2.7)		Wire with terminal (TA35<S> FS30 L50<A>) Soldering directly to probe		2.73 - 2.77	3.5
	 AS30 <35> ASS30 <35> (R=35, V=3, X=2.7)		Soldering to receptacle			

ASS30 is a high pressure type receptacle, having a stronger holding power than AS30.
Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.

NCP300LBA21

Thermal-endurance temperature below 100°C. Safety current 7A. (Note:Safety current can be varied. See our safety instructions.)



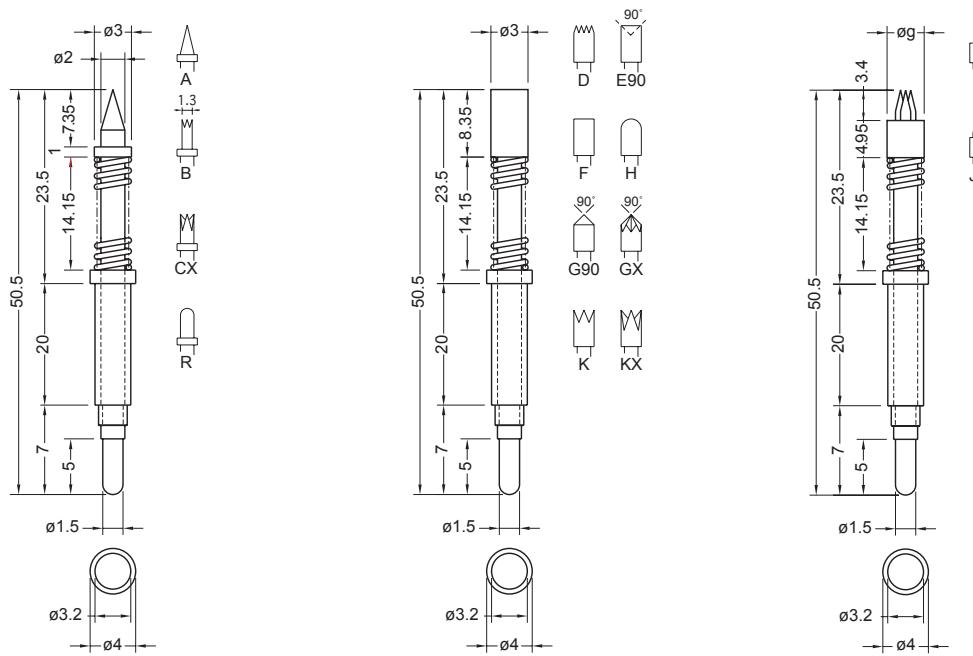
Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
NCP300LBA21	SPS	6.9	26	170	295	355
	SPL	8.8	10	60	120	150
	SPL1	9.4	17.6	115	225	280
	SPH	5.7	40	350	510	580
	SPH1	5.1	121	360	775	985
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA35T	TA35T (pressing)	2.89 - 2.9	4.0
Probe + Receptacle	 AS35 <15> ASS35 <15> (R=15, V=3.5, X=3.2)		Wire with terminal (TA35<S> FS30 L50<A>) Soldering directly to probe		3.23 - 3.27	4.0
	 AS35 <35> ASS35 <35> (R=35, V=3.5, X=3.2)		Soldering to receptacle			

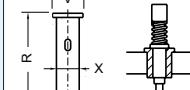
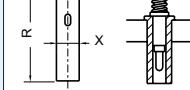
ASS35 is a high pressure type receptacle, having a stronger holding power than AS35.
Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.

NCP300LB21

Thermal-endurance temperature below 100°C. Safety current 7A. (Note:Safety current can be varied. See our safety instructions.)

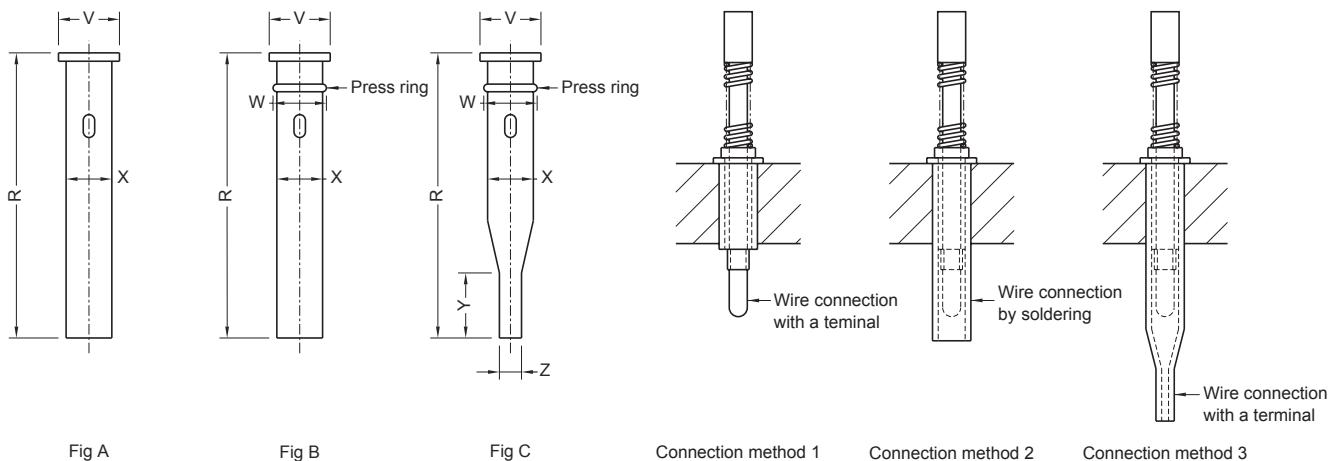


Scale unit for the above dimensions: mm. For detailed dimensions of the tips, see "List of Tip Configurations".

Material of tips	See "Base Material and Plating of Probe Tips" for the detail.					
Type of Probe	Spring Pressure Symbol	Sliding Distance (mm)	Spring Constant (g/mm)	Initial Contact Pressure (g)	2/3 Compression (g)	Total Compression (g)
NCP300LB21	SPS	6.9	26	170	295	355
	SPL	8.8	10	60	120	150
	SPL1	9.4	17.6	115	225	280
	SPH	5.7	40	350	510	580
	SPH1	5.1	121	360	775	980
Application	Applicable Receptacle (size)		Wire Connection Method	Adaptable Terminal	Diameter of Press-fit Hole (REFERENCE ONLY)	Minimum Distance of Mounting
Probe Only			Terminal TA35T	TA35T (pressing)	3.19 - 3.2	4.5
Probe + Receptacle	 AS40 <15> ASS40 <15> (R=15, V=4, X=3.5)		Wire with terminal (TA35<S> FS30 L50<A>) Soldering directly to probe		3.53 - 3.57	4.5
	 AS40 <35> ASS40 <35> (R=35, V=4, X=3.5)		Soldering to receptacle			
ASS40 is a high pressure type receptacle, having a stronger holding power than AS40. Please refer to "Product Line up, Auxiliary Parts" for the details of receptacles, terminals, wires with terminals and flexible wires.						

Receptacle AS6 - AS25

Receptacles facilitate to change probes. The receptacle is press-fit into the fixture plate and the probe can then be inserted into the receptacle. Drilling of fixtures is much easier as the hole for the receptacle need not be as exact as for a probe.



* Connection Method

Fig	Receptacle Type	Dimensions (mm)						Fixture Plate Dia of Hole Strong press-fit - Weak press-fit	Type of Adaptable Probe				* Adaptable Terminal
		R	V	X	Y	Z	W (Dia of Press Ring)		CPS	CP	NCP	NCPLP, LB	
A	AS6<5>	5	0.8	0.7	-	-	-	0.7 - 0.71	-	-	-	-	1 2
	AS6<9>	9								CP6			
	AS6<23>	23								-	-	-	-
A	AS8<5>	5	1.1	0.85	-	-	-	0.85 - 0.86	-	-	-	-	1 2
	AS8<9>	9								CP8			
	AS8<23>	23								-	-	-	-
A	AS10<5>	5	1.3	1.08	-	-	-	1.09 - 1.1	CPS10	-	-	-	1 2
	AS10<9>	9								CP10	NCP10 NCP11 NCP11S	NCP10LP NCP11LP	
	AS10<23>	23								-	-	-	TA10S TA10P
B	AS15<5>	5	1.6	1.37	-	-	1.42 - 1.45	1.39 - 1.42	CPS12	-	-	-	1 2
	AS15<9>	9								CP12	NCP12 NCP12S NCP15	NCP12LP NCP15LP	
	AS15<23>	23								-	-	-	TA15S TA15P
B	AS20<5>	5	2	1.6	-	-	1.68 - 1.78	1.63 - 1.67	CPS15 CPS20	-	-	-	1 2
	AS20<9>	9								CP15	NCP18 NCP20 NCP20S	NCP18LP NCP20LP	
	AS20<23>	23								CP20	-	-	TA20T TA20S TA20P
C	AS20T	26			5	1							3
B	AS20B<9>	9	2.8	2.4	-	-	2.48 - 2.57	2.43 - 2.47	-	CP15B CP20B	-	NCP20LB	1 2
	AS20B<23>	23								-			TA20T TA20S TA20P
	AS25<5>	5								-	-	-	
B	AS25<9>	9	2.3	2	-	-	2.1 - 2.2	2.03 - 2.07	CPS25	CP25 CP30P CP30S	NCP25 NCP25S NCP250	NCP25LP NCP250LP	1 2
	AS25<15>	15									TA30T TA25S		
	AS25<23>	23									-	-	
C	AS25T	26			5	1.3							3
	AS25T	26											TA30T

The diameter of the hole in the fixture plate will vary slightly due to a variety of materials, drill speed, pressure etc.
The most suitable diameter can be determined on site by trial drillings.

Receptacle AS30 - AS90

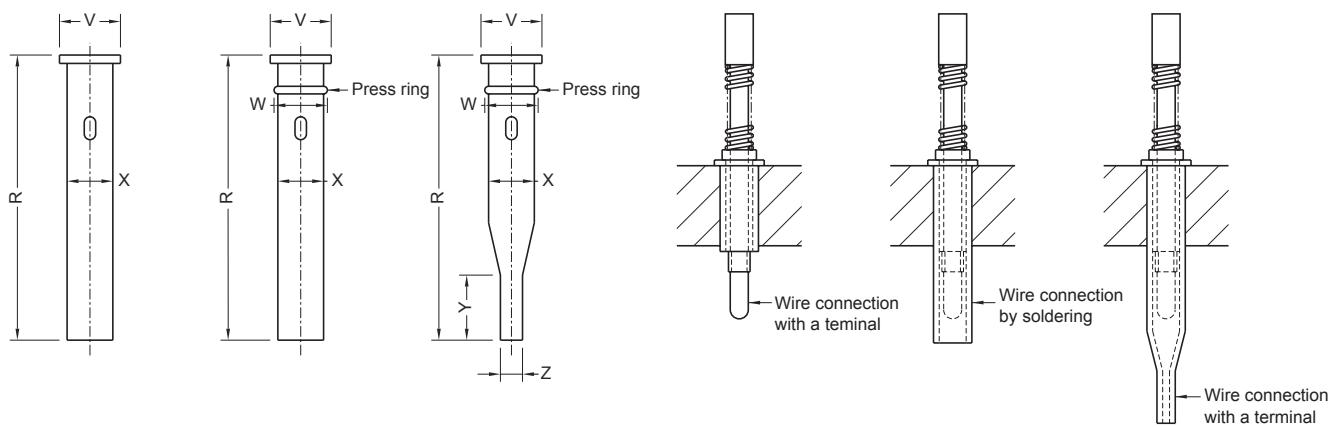


Fig A

Fig B

Fig C

Connection method 1

Connection method 2

Connection method 3

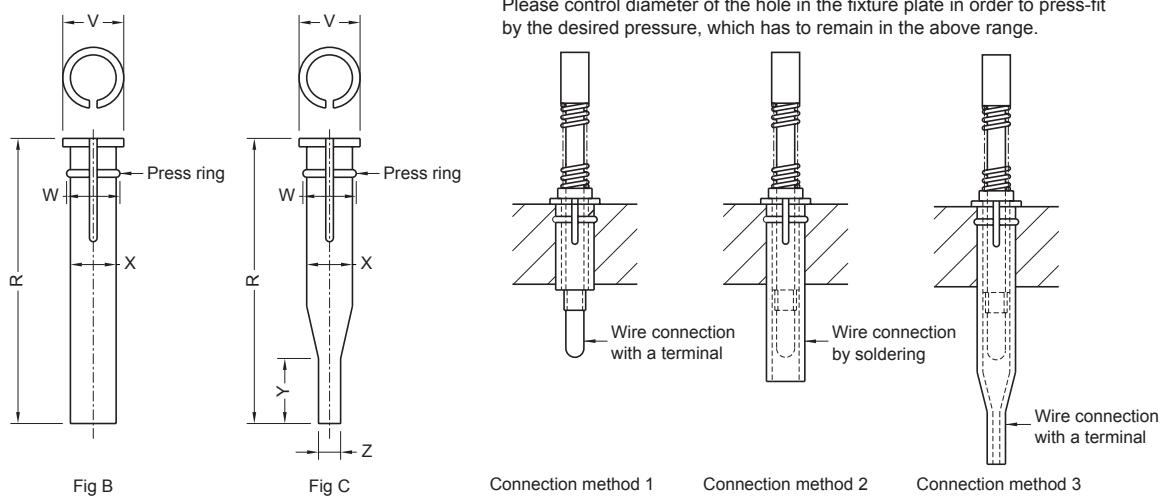
* Connection Method

Fig	Receptacle Type	Dimensions (mm)						Fixture Plate Dia of Hole	Type of Adaptable Probe				* Adaptable Terminal			
		R	V	X	Y	Z	W (Dia of Press Ring)		CPS	CP	NCP	NCPLP, LB				
B	AS30 <5>	5	3	2.7	-	-	2.8 - 2.9	2.73 - 2.77	CPS30	-	-	-	TA30T TA25S 1 TA35T for CP35P CP35S CP40P CP40S NCP300 (NCP300LP)			
	AS30 <9>	9								CP25B	NCP250B	NCP250LB	2 NCP250LB			
	AS30 <15>	15								CP30						
	AS30 <23>	23								CP30SB						
	AS30 <35>	35								CP35P						
	AS30T	28		5	1.5	9.7	2			CP35S	NCP300	NCP300LP				
	AS30LT	30		9.7	2					CP40P						
B	AS35 <5>	5	3.5	3.2	-	-	3.3 - 3.4	3.23 - 3.27	CPS35	-	CP35	NCP300BA	1 TA35T			
	AS35 <9>	9								CP35SB						
	AS35 <15>	15								CP40A						
	AS35 <20>	20								NCP300LBA	2 NCP300LBA	TA35T				
	AS35 <23>	23														
	AS35 <35>	35														
C	AS35T	28	3.5	5	1.5	9.7	2	3.6 - 3.7	3.53 - 3.57	-	CP40A not to be used	-	-	3 TA35T		
	AS35LT	30		9.7	2											
B	AS40 <15>	15	4	3.5	-	-	3.6 - 3.7	3.53 - 3.57	-	CP40	NCP300B	NCP300LB	1 TA35T			
	AS40 <21>	21														
	AS40 <30>	30								CP40SB			2 TA35T			
	AS40 <35>	35														
C	AS40LT	40			9.7	2								3 TA40T		
B	AS50 <15>	15	5.5	4.7	-	-	4.8 - 4.9	4.75 - 4.82	-	CP50	-	-	1 Wire connection end screwed			
B	AS65 <15>	15	7	6.2	-	-	6.3 - 6.4	6.25 - 6.32	-	CP65	-	-				
B	AS90 <15>	15	9	8.5	-	-	8.6 - 8.7	8.55 - 8.65	-	CP90	-	-				

The diameter of the hole in the fixture plate will vary slightly due to a variety of materials, drill speed, pressure etc.
The most suitable diameter can be determined on site by trial drillings.

Strong Pressure Type Receptacle ASS20 - ASS25

The ASS20 – 25 types are slotted for increased holding power on the bushing of the probe. Consider use when spring force causes probes to fall out of standard receptacles.



* Connection Method

Fig	Receptacle Type	Dimensions (mm)						Fixture Plate Dia of Hole	Type of Adaptable Probe			* Adaptable Terminal	
		R	V	X	Y	Z	W (Dia of Press Ring)		Strong press-fit - Weak press-fit	CP	NCP	NCPLP, LB	
B	ASS20<9>	9	2	1.6	-	-	1.68 - 1.78	1.63 - 1.67	CP15 CP20	NCP18 NCP20 NCP20S	NCP18LP NCP20LP	1 2	TA20T TA20S TA20P
	ASS20<23>	23								-	-	3	TA20T
C	ASS20T	26		5	1								
B	ASS20B<9>	9	2.8	2.4	-	-	2.48 - 2.57	2.43 - 2.47	CP15B CP20B	-	NCP20LB	1 2	TA20T TA20S TA20P
	ASS20B<23>	23											
B	ASS25<9>	9	2.3	2	-	-	2.1 - 2.2	2.03 - 2.07	CP25 CP30P CP30S	NCP25 NCP25S NCP250	NCP25LP NCP250LP	1 2	TA30T TA25S
	ASS25<15>	15											
	ASS25<23>	23											
	ASS25<35>	35											
C	ASS25T	26		5	1.3								

The diameter of the hole in the fixture plate will vary slightly due to a variety of materials, drill speed, pressure etc.
The most suitable diameter can be determined on site by trial drillings.

Strong Pressure Type Receptacle ASS30 - ASS90

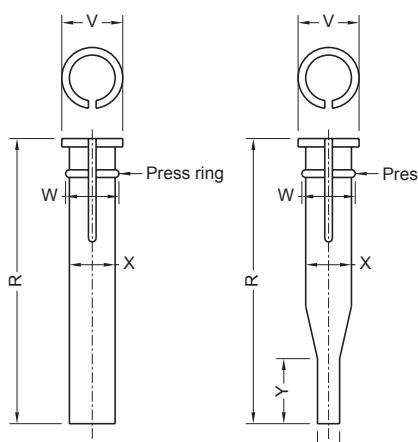
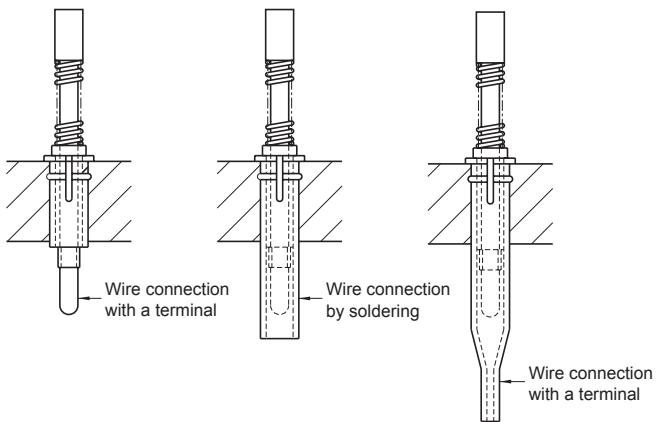


Fig B

Fig C

Press-fit between weak pressure 4 kg and strong pressure 8-10 kg.
Please control diameter of the hole in the fixture plate in order to press-fit by the desired pressure, which has to remain in the above range.



Connection method 1

Connection method 2

Connection method 3

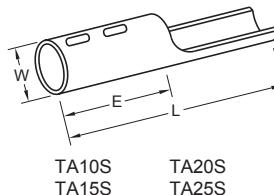
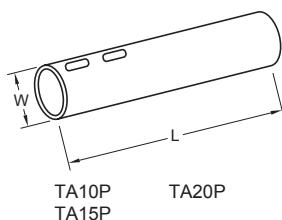
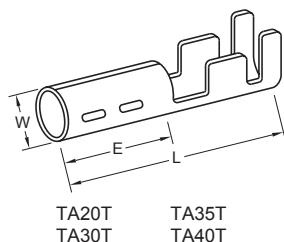
* Connection Method

Fig	Receptacle Type	Dimensions (mm)						Fixture Plate Dia of Hole Strong press-fit - Weak press-fit	Type of Adaptable Probe			* Adaptable Terminal
		R	V	X	Y	Z	W (Dia of Press Ring)		CP	NCP	NCPLP, LB	
B	ASS30<9>	9	3	2.7	-	-	2.8 - 2.9	2.73 - 2.77	CP25B	NCP250B	NCP25LB	TA30T
	ASS30<15>								CP30			
	ASS30<23>								CP30SB			TA25S
	ASS30<35>								CP35P			
	ASS30T	28	5	1.5	-	-	-	-	CP35S	NCP300	NCP250LB	TA35T for CP35P CP35S CP40P CP40S NCP300 NCP300LP
	ASS30LT	30							CP40P			
C	ASS35<9>	9	3.5	3.2	-	-	3.3 - 3.4	3.23 - 3.27	CP40S	NCP300	NCP300LP	TA40T
	ASS35<15>								CP40A			
	ASS35<20>								CP35			TA35T
	ASS35<23>								CP35SB			
	ASS35<35>	35	5	1.5	-	-	-	-	CP40A	NCP300BA	NCP300LBA	TA35T
	ASS35LT	30							not to be used			
B	ASS40<15>	15	4	3.5	-	-	3.6 - 3.7	3.53 - 3.57	CP40	NCP300B	NCP300LB	TA35T
	ASS40<21>								CP40SB			
	ASS40<30>								CP50			
	ASS40<35>								CP65			
	ASS40LT	40	9.7	2	-	-	-	-	-	-	-	TA40T
	ASS50<15>	15							CP90			
B	ASS65<15>	15	7	6.2	-	-	6.3 - 6.4	6.25 - 6.32	CP65	-	-	Wire connection end screwed
	ASS90<15>	15	9	8.5	-	-	8.6 - 8.7	8.55 - 8.65	CP90	-	-	

The diameter of the hole in the fixture plate will vary slightly due to a variety of materials, drill speed, pressure etc.
The most suitable diameter can be determined on site by trial drillings.

Terminal TA series

These are single pole relay terminals, designed to be easily installed and removed.
Probes can be easily changed and a dependable wire connection is assured.



Type	Adaptable Probe and Receptacle	Dia of Probe (mm)	Applicable Size of Wire AWG NO. cross sectional area (mm²)	W (mm)	L (mm)	E (mm)	Connection Method
TA10S	CPS10 CP10<0.8>, CP10<1>, CP10<1.5>	0.6	AWG28 - 32 (0.08 - 0.03)	0.85	10	6	Soldering
TA10P	NCP10, NCP11, NCP11S NCP10LP13, NCP11LP		AWG26 - 28 (0.13 - 0.08)	0.85	10	—	Pressing
TA15S	CPS12 CP12	0.8	AWG28 - 32 (0.08 - 0.03)	1.05	10	6	Soldering
TA15P	NCP12, NCP12S, NCP15<1.2>, NCP15<1.5> NCP12LP, NCP15<1.2>LP13, NCP15<1.5>LP13		AWG26 (0.13)	1.05	10	—	Pressing
TA20S	CPS15, CPS20	1.0	AWG24 - 32 (0.2 - 0.03)	1.25	11	7	Soldering
TA20P	CP15, CP15B, CP20, CP20B NCP18, NCP20, NCP20S NCP18LP13, NCP20LP, NCP20LB		AWG26 (0.13)	1.25	11	—	Pressing
TA20T	AS20T		AWG24 - 28 (0.2 - 0.08)	1.8	8	4	Pressing
TA25S	CPS25, CPS30 CP25, CP25B, CP30, CP30SB, CP30P, CP30S NCP25, NCP25S, NCP250, NCP250B	1.3	AWG24 - 32 (0.2 - 0.03)	1.65	11	7	Soldering
TA30T	NCP25LP, NCP25LB15, NCP250LP20, NCP250LB21 AS25T		AWG28 - 32 (0.08 - 0.03)	1.8	8	4	Pressing
TA35T	CPS35 CP35, CP35SB, CP35P, CP35S CP40, CP40A, CP40SB, CP40P, CP40S NCP300, NCP300B, NCP300BA NCP300LP20, NCP300LB21, NCP300LBA21 AS30T, AS35T	1.5	AWG22 - 26 (0.4 - 0.13)	2.0	10.5	4	Pressing
TA40T	AS30LT, AS35LT, AS40LT	2.0	AWG20 - 24 (0.5 - 0.2)	2.5	21	13	Pressing

Flexible Wire with Terminal (Type Description)

The wire is fixed to a terminal by pressing and covered by insulation tube. It has to be covered by a heat-resistant type insulation tube if operation temperature is 100°C or more. Besides standard type we also receive customised specifications.

How to Inquire			
TA20	<S>	FS10	L50 <A> - 2
Type of terminal	Type of insulation tube	Type of wire	Length of wire (any length) – (unit : cm)
		Condition of wire end	Color No.

Terminal

Flexible, Heat-proof, Cold-proof Wire (FS wire) Thermal- endurance 180°C / Cold-endurance - 60°C

This wire is insulated with silicone rubber which can withstand both higher and lower temperatures than PVC jacketed wire.
 FS Wire has temperature rating of -60°C to +180 °C.

Type of Flexible Wire (Heat-proof, Cold-proof)	AWG Size	Conductor			Thickness of Insulator (mm)	Dia of Sheathed Wire (mm)	Voltage Endurance ACV /min	Insulation Resistance (MΩ-Km)	Maximum Conductor Resistance (Ω-Km)	Length (mm/roll)
		Normal Cross Sectional Area (mm²)	Structure	Outside Dia (mm)						
FS10	27	0.1	50/0.05	0.5	0.4	1.3	1,000	100	186.5	100
FS20	24	0.2	40/0.08	0.6	0.4	1.4	1,000	100	95.1	100
FS30	22	0.3	3/20/0.08	0.9	0.4	1.7	1,000	100	63.1	100
FS50	20	0.5	3/33/0.08	1.1	0.4	1.9	1,000	100	38.3	100
FS75	18	0.75	3/50/0.08	1.3	0.4	2.1	1,000	100	25.3	100

Color Number	No.2 Red	No.3 Orange	No.4 Yellow	No.5 Green	No.6 Blue	No.8 Gray	No.9 White	No.0 Black	Applicable Terminal
FS10	○	○	○	○	○	○	○	○	TA20T, TA30T
FS20	○	○	○	○	○	○	○	○	TA20T, TA30T, TA35T
FS30	○	○	○	○	○	○	○	○	TA35T
FS50	○	—	—	—	—	—	○	○	TA35T, TA40T
FS75	○	—	—	—	—	—	○	○	

Standard Type (FS Wire with Terminal) Thermal-endurance (Wire: 180°C / Insulation Tube:100°C)

Flexible wire (FS wire) has superior bend resistance. When connected to a terminal and covered with an insulating sleeve, stress cuts of the wire are drastically reduced.

Our Standard Type	Terminal Used	Adaptable Probe and Receptacle		
TA10 <S> FS10 L50 <A>	TA10S	CP10<1>, CP10<0.8>, CP10<1.5>		NCP10, NCP11, NCP11S NCP10LP13, NCP11LP14, NCP11LP18
TA15 <S> FS10 L50 <A>	TA15S	CP12		NCP12, NCP12S, NCP15<1.2>, NCP15<1.5> NCP12LP14, NCP12LP18 NCP15<1.2>LP13, NCP15<1.5>LP13
TA20 <S> FS10 L50 <A> TA20 <S> FS20 L50 <A>	TA20T	CPS15, CPS20 CP15, CP15B, CP20, CP20B		NCP18, NCP20, NCP20S NCP18LP13, NCP20LP14, NCP20LP18 AS20T
TA30 <S> FS10 L50 <A> TA30 <S> FS20 L50 <A>	TA30T	CPS25, CPS30 CP25, CP25B, CP30, CP30SB, CP30P, CP30S		NCP25, NCP25S, NCP250, NCP250B NCP25LP14, NCP25LP18 NCP250LP20, NCP250LB21 AS25T
TA35 <S> FS30 L50 <A>	TA35T	CPS35 CP35, CP35B, CP35P, CP35S CP40, CP40A, CP40SB, CP40P, CP40S		NCP300, NCP300B, NCP300BA NCP300LP20, NCP300LP21 NCP300LBA21 AS30T, AS35T

Color Number : see above. Length of the wire : L50 = 50cm