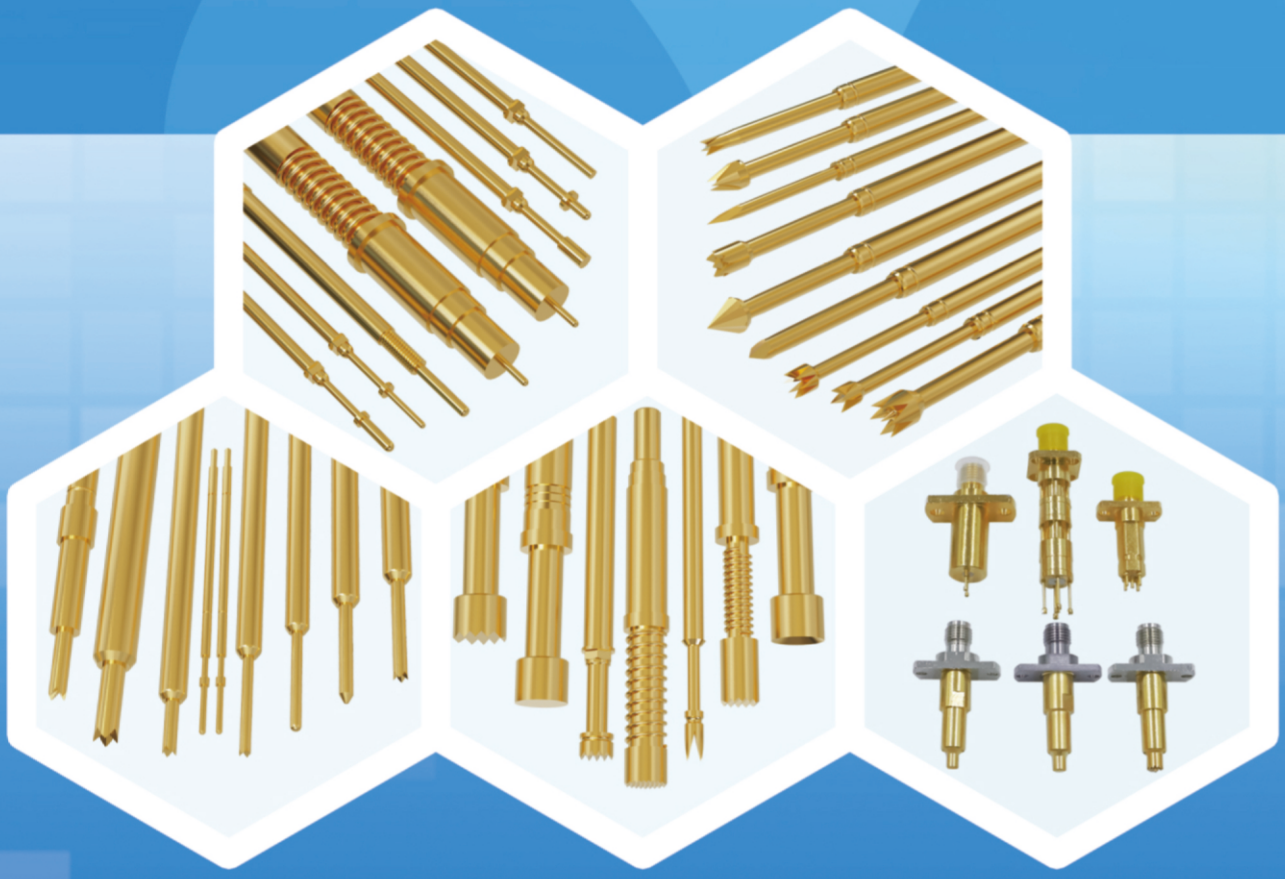
SHENZHEN OURUITE INDUSTRIAL CO.,LTD

PRECISION TEST PROBES

MAKE TEST MORE EFFECTIVE!



GROBAL TEST PROBESSALE AND SERVICE PROVIDER

深圳市欧瑞特电子有限公司

Shenzhen Ouruite Electronics Co., Ltd.

深圳市欧瑞特实业有限公司

Shenzhen Ouruite Industrial Co., Ltd.

company profile

Shenzhen Ouruite Industry Co.Ltd, was founded in 2003, is a self-development 、design、manufacturing、sales set in one-scale National high-tech enterprise. Our products mainly include probes, such as BGA probes, high current probes, PCB/ICT/FCT probes, wire harness switches, etc. And processing various of hardware, they mainly apply in high-tech products testing、electronics industry、semiconductor industry、automotive industry and other industries.

We have more than 150 employees, among of them more than 50 are professional backbone. At the same time, introducing various of advanced equipment at home and board, such as :Japanese high-precision CNC lathes more than 80, Japan and Switzerland automatic lathes more than 70, and kinds of testing equipment.

Company is people-oriented ,we pursuit stability、perfection、excellence on product design and provide solution as perfect as possible for customers. Continue R&D and invention is our eternal pursuit theme. In the future(3-5 years), strive to create a flag in Southeast of China.

The company philosophy is based on technology. Gain trust by service. We pursuit simple、practical、effective on design. Our quality policy is make fine businesses, to meet with customers' needs;Make reliable products with good quality;Honestly treating each other;Providing good service, making performance close to marketing-leading level, so that our products can remain invincible in the market competition.

We attach great important to communicate with customers, according to customer requirement will provide perfect solution. Mastering core technology, continuing developing and innovating as always is the theme of our company, leading the products' market.

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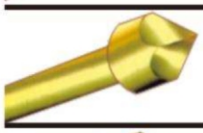
Plunger Introduction

Shape			Method of application
	A	cup shape	test- long lead point ,tertminal and wrappingpost
	B	spear shape	test- lead point and welding spot test- PC board pollutant or stab contamination layer
	D	round shape	test- goldfingers and welding pad ensure residue-free surface after touch
	E	spear shape	test- throughg-hole,welding pad and gold fingers
	F	crown shape	est- welding pad and gold fingers apply to thread test, free from dustand contaminant
	H	serrated shape	long lead point and termina,wrapping post,welding spot and welding pad
	K	chisel shape	test- through-hole,welding pad and gold fingers
	LM	star shape	test- through-hole,welding pad and gold fingersdust-free and contaminant
	M3	three spear shape	test- lead point and welding spot test- PC board pollutant or stab contamination layer steel tip, long usage life
	Q	crown shape	test- welding spot and welding pad dust-free and contaminant
only use in P100 new series	S	spear shape	test- through-hole,welding pad and gold fingers steel tip, long usage life
	T	chisel shape	test- through-hole,welding pad and gold fingers
only use in P100 new series	V	tulip shape	test- welding spot,long lead spot , tertminal and wrapping post The middle tooth of the surounding six teeth protrudes 0.2mm,free from dust and contaminant
only use in P100 new series	W	tulip shape	est- lead spot,ternimal and welding pad The middle tooth of the surounding six teeth protrudes 0.2mm,free from dust and contaminant

*PS:customized needs to accept 10% margin of errot

Make Test More Effective

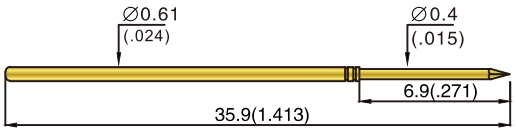
ORT040

ICT/FCT Test Probes

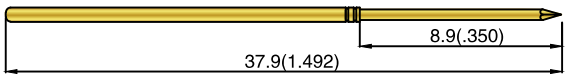
Installation Height:16mm(.629)
Grid:≥1.0(40Mil)

(Mounting and Functional Dimensions:

ORT–040



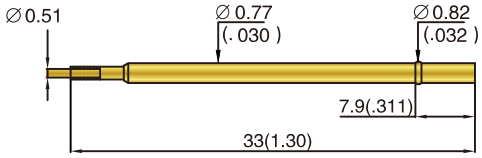
ORT–040...LP



Tip Style	Series Number	Tip Dim
	305	040
	201	040
	291	040
	238	040
	214	040
	297	040
	277	040
	307	040
	303	040
	222	032

Receptacle:

ORT KS 040 E08



ORT KS 040 E08 V–30

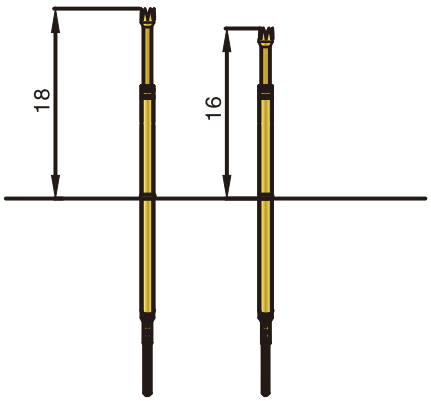
Materials(Plated):	
Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, gold-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, gold-plated

Mechanical/Electrical Data:	
Current Rating:	2amps
Contact Resistance:	70milliohms max
Full Stroke:	6.9mm
Rated Stroke:	4.3mm
Spring Force:	0.8N(chooseable)

Mounting Hole Size:	
CEM1 PMMA:	ϕ0.8mm(.031)
Epoxy Resin:	ϕ0.8mm(.031)

Operating Temperature:	
Standard:	-40°C:+80°C
Special Design"C":	-100°C-+200°C

Introduction to use:



Ordering Example:

ORT040 2 91 040 0.8N A

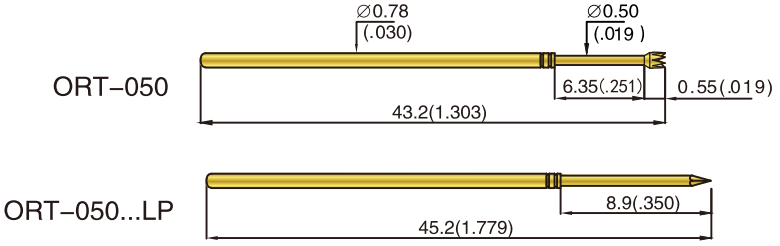
Series / Tip(Material) / Tip Style / Tip Diameter / Spring Force / Gold Plating

ORT050

ICT/FCT Test Probes

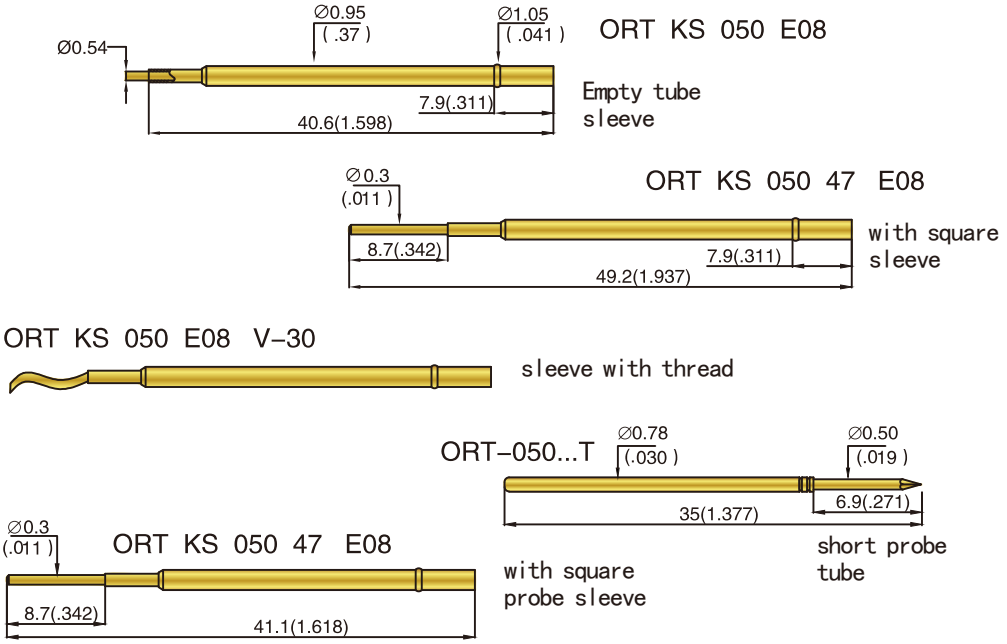
Installation Height:36mm(1.417)
Grid:≥1.27(50Mil)

Mounting and Functional Dimensions:



Tip Style	Series Number	Tip Dim
	305	064
	201	050
	291	064
	238	050
	214	050
	297	050
	277	064
	231	064
	307	050
	202	060
	303	050
	306	090
	222	040

Receptacle:



Materials(Plated):	
Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, gold-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, gold-plated

Mechanical/Electrical Data:	
Current Rating:	3amps
Contact Resistance:	50milliohms max
Full Stroke:	6.4mm
Rated Stroke:	4.3mm
Spring Force:	1.0N(chooseable)

Mounting Hole Size:	
CEM1 PMMA:	ϕ1.0mm(.039)
Epoxy Resin:	ϕ1.0mm(.039)

Operating Temperature:	
Standard:	-40°C:+80°C
Special Design"C":	-100°C-+200°C

Ordering Example:

Make Test More Effective

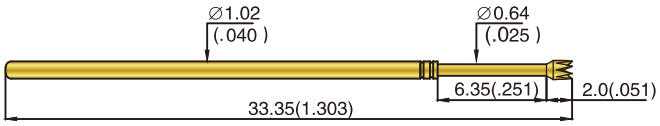
ORT075

ICT/FCT Test Probes

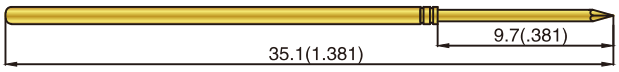
Installation Height:18mm(.70)
Grid:≥1.91(75Mil)

Mounting and Functional Dimension):

ORT–075

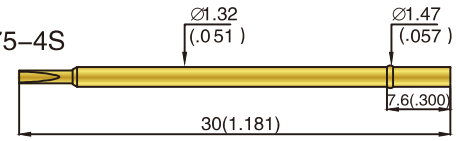


ORT–075...L

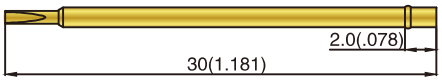


Receptacle:

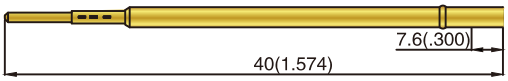
ORT–RL75–4S



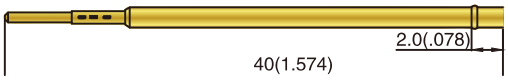
ORT–RL75–2S



ORT–RL75–4W



ORT–RL75–2W



Tip Style	Series Number	Tip Dim
	308	120/130
	307	120/130
	204	120/130
	214	120/130
	217	120/130
	224	120/130
	289	120/130
	306	120/130
	302	120/130
	303	120/130
	288	120/130
	225	120/130
	307	064
	214	064
	214	050
	306	064

Tip Style	Series Number	Tip Dim
	214	120/130
	233	120/130
	204	120/130
	313	090
	319	120/130
	297	064
	277	064
	006	225
	006	323
	209	064
	231	064
	298	064
	305	064
	201	064
	291	064

Materials(Plated):

Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, gold-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, gold-plated

Mechanical/Electrical Data:

Current Rating:	3amps
Contact Resistance:	50milliohms max
Full Stroke:	6.4mm
Rated Stroke:	4.3mm
Spring Force:	1.0/2.0/3.0N(chooseable)

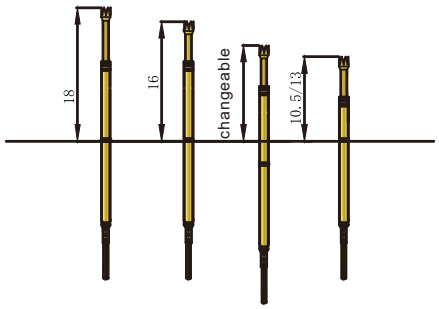
Mounting Hole Size:

CEM1 PMMA:	ϕ1.35mm(.053)
Epoxy Resin:	ϕ1.38mm(.054)

Operating Temperature:

Standard:	-40°C:+80°C
Special Design"C":	-100°C-+200°C

Introduction to use:



Ordering Example:

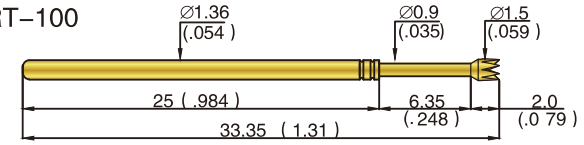
ORT100

ICT/FCT Test Probes

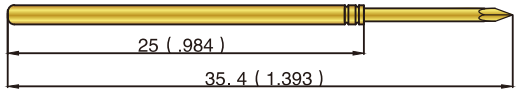
Installation Height:16mm(.63)
Grid:≥2.54(100Mil)

Mounting and Functional Dimensions:

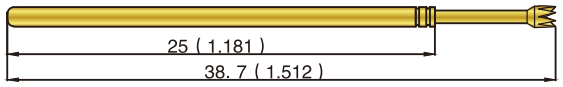
ORT–100



ORT-100...LP

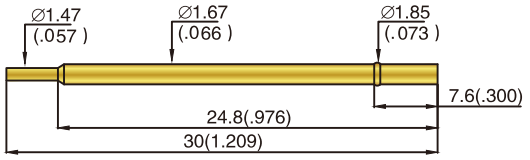


ORT–135

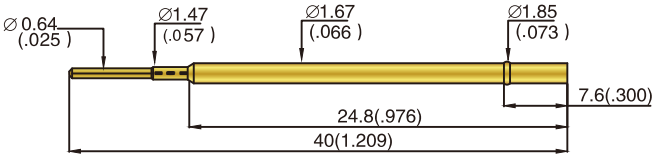


Receptacle:

ORT–R100–4S



ORT–R100–4W



Tip Style	Series Number	Tip Dim
	308	130/150
	307	130/150
	204	130/150
	214	130/150
	217	150/170
	224	150/170
	289	150/170
	306	150/170
	302	150/170
	303	150/170
	288	150
	225	130/150
	307	090
	214	090
	214	050
	306	090

Tip Style	Series Number	Tip Dim
	214	106
	233	106
	204	106
	313	090
	291	130
	319	180
	297	090
	277	090
	006	225
	006	323
	209	060
	231	090
	298	090
	305	090
	201	090
	291	090

Materials(Plated):

Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, gold-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, gold-plated

Mechanical/Electrical Data:

Current Rating:	3–5amps
Contact Resistance:	50milliohms max
Full Stroke:	6.35mm
Rated Stroke:	4.3mm
Spring Force:	1.0/2.0/3.0N(chooseable)

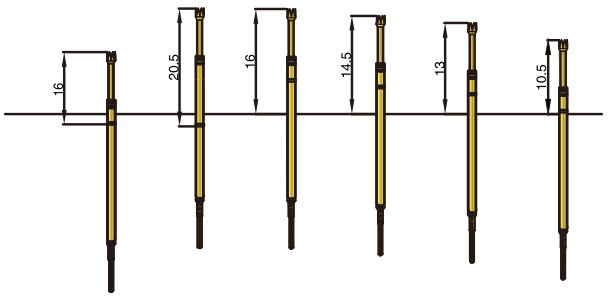
Mounting Hole Size:

CEM1 PMMA:	ϕ1.70mm(.067)
Epoxy Resin:	ϕ1.75mm(.069)

Operating Temperature:

Standard:	-40°C:+80°C
Special Design"C":	-100°C–+200°C

Introduction to use:



Ordering Example:

ORT100 2 91 150 2N A

Series / Tip(Material) / Tip Style / Tip Diameter / Spring Force / Gold Plating

Make Test More Effective

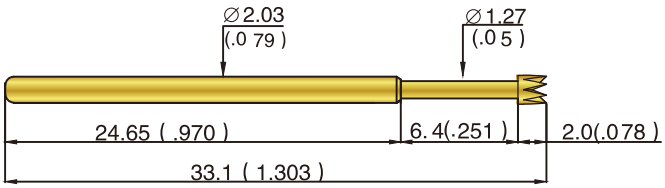
ORT003

ICT/FCT Test Probes

Installation Height:16mm(.63)
Grid:≥3.18(125Mil)

Mounting and Functional Dimensions:

ORT–003

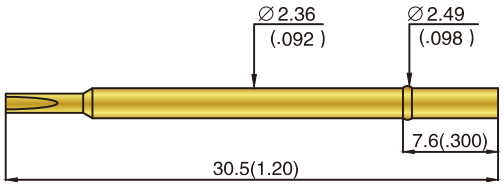


Tip Style	Series Number	Tip Dim
	308	2.54
	307	2.54
	204	2.54
	214	2.54
	217	2.54
	224	2.54
	289	2.54
	306	2.54
	302	2.54
	303	2.54
	288	2.54

Tip Style	Series Number	Tip Dim
	214	2.54
	233	2.54
	204	2.54
	313	1.27
	291	2.54
	319	2.54
	297	1.27
	277	1.27
	225	2.54
	307	1.27
	214	1.27
	214	1.27
	306	1.27
	305	1.27
	201	1.27
	291	1.27

Receptacle:

ORT–R125–4S



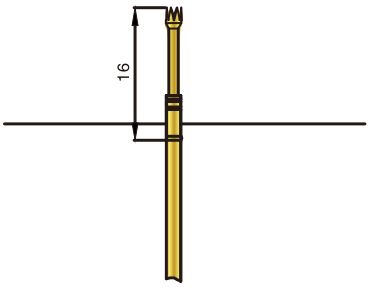
Materials(Plated):	
Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, gold-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, gold-plated

Mechanical/Electrical Data:	
Current Rating:	5amps
Contact Resistance:	50milliohms max
Full Stroke:	6.4mm
Rated Stroke:	4.3mm
Spring Force:	1.0/2.0/3.0N(chooseable)

Mounting Hole Size:	
CEM1 PMMA:	ϕ2.4mm(.94)
Epoxy Resin:	ϕ2.42mm(.095)

Operating Temperature:	
Standard:	-40°C:+80°C
Special Design"C":	-100°C-+200°C

Introduction to use:



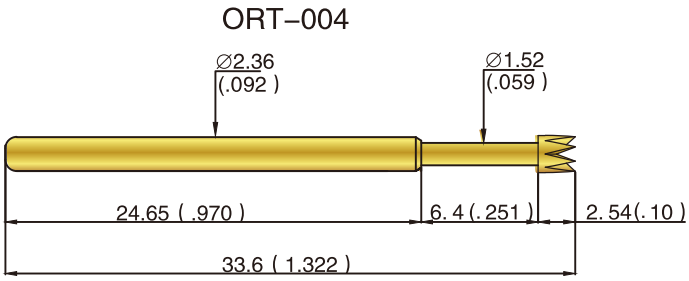
Ordering Example:

ORT004

ICT/FCT Test Probes

Installation Height:16.5mm(.65)
Grid):≥3.96(156Mil

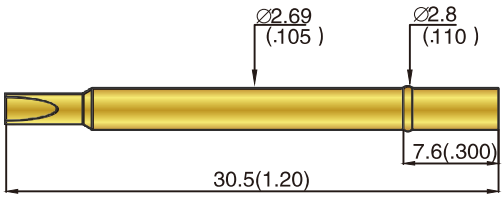
Mounting and Functional Dimensions:



Tip Style	Series Number	Tip Dim
	308	396
	307	396
	204	396
	214	396
	217	396
	224	396
	289	396
	306	396
	302	396
	303	396
	288	396

Tip Style	Series Number	Tip Dim
	214	396
	233	396
	204	396
	313	1.52
	291	396
	319	396
	297	1.52
	277	1.52
	225	396
	307	1.52
	214	1.52
	214	1.52
	306	152
	305	1.52
	201	1.52
	291	1.52

Receptacle:



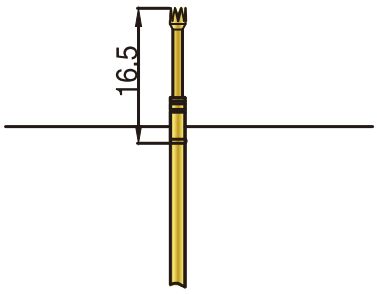
Materials(Plated):	
Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, gold-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, gold-plated

Mechanical/Electrical Data:	
Current Rating:	5amps
Contact Resistance:	50milliohms max
Full Stroke:	6.4mm
Rated Stroke:	4.3mm
Spring Force:	1.0/2.0/3.0N(chooseable)

Mounting Hole Size:	
CEM1 PMMA:	ϕ2.70mm(.106)
Epoxy Resin:	ϕ2.72mm(.107)

Operating Temperature:	
Standard:	-40°C:+80°C
Special Design"C":	-100°C-+200°C

Introduction to use:



Ordering Example:

ORT004 3 06 396 2N A

Series / Tip(Material) / Tip Style / Tip Diameter / Spring Force / Gold Plating

Make Test More Effective

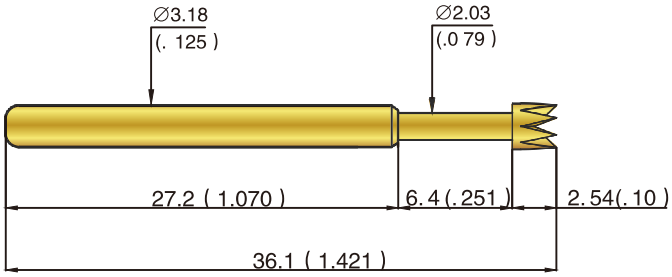
ORT005

ICT/FCT Test Probes

Installation Height:16.5mm(.65)
Grid:≥4.80(189Mil)

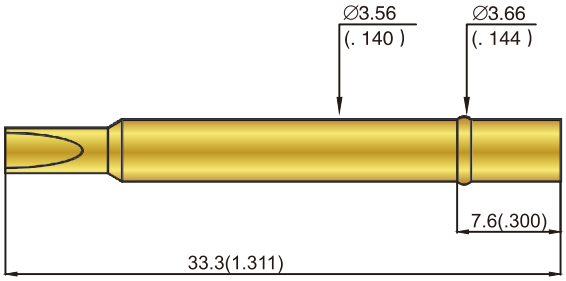
Mounting and Functional Dimensions:

ORT–005



Receptacle:

ORT–R189–4S



Tip Style	Series Number	Tip Dim
	308	396
	307	396
	204	396
	214	396
	217	396
	224	396
	289	396
	306	396
	302	396
	303	396
	288	396

Tip Style	Series Number	Tip Dim
	214	396
	233	396
	204	396
	313	2.03
	291	396
	319	396
	297	2.03
	277	2.03
	225	396
	307	2.03
	214	2.03
	214	2.03
	306	2.03
	305	2.03
	201	2.03
	291	2.03

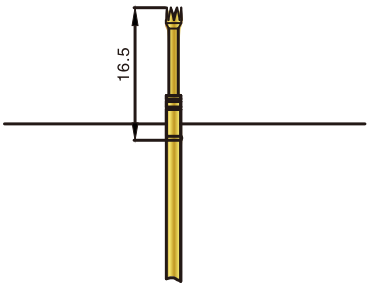
Materials(Plated):	
Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, gold-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, gold-plated

Mechanical/Electrical Data:	
Current Rating:	5amps
Contact Resistance:	50milliohms max
Full Stroke:	6.4mm
Rated Stroke:	4.3mm
Spring Force:	2.0/3.0/4.0N(chooseable)

Mounting Hole Size:	
CEM1 PMMA:	ϕ3.60mm(.141)
Epoxy Resin:	ϕ3.62mm(.142)

Operating Temperature:	
Standard:	-40°C:+80°C
Special Design"C":	-100°C-+200°C

Introduction to use:



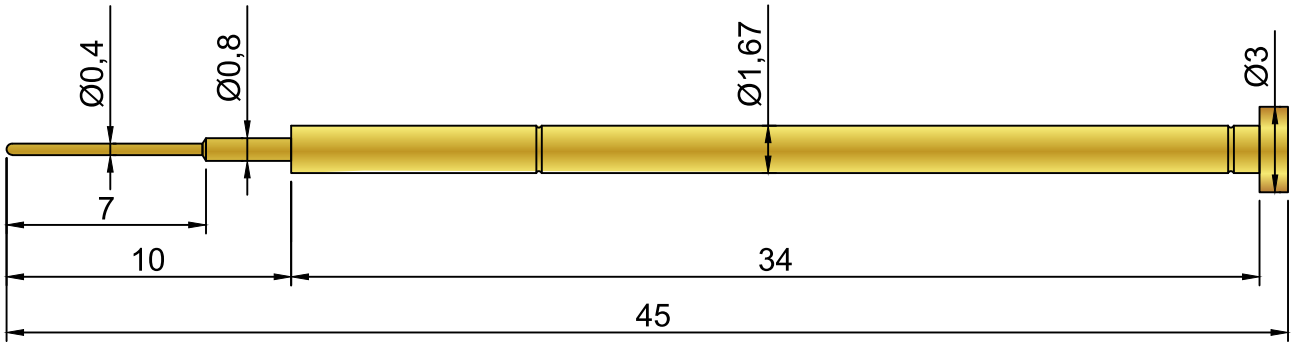
Ordering Example:

ORT005 3 06 396 2N A

Series / Tip(Material) / Tip Style / Tip Diameter / Spring Force / Gold Plating

ORT0.4FUlIY GOLD-PLATED CHASSIS PROBE

ICT/FCT Test Probes



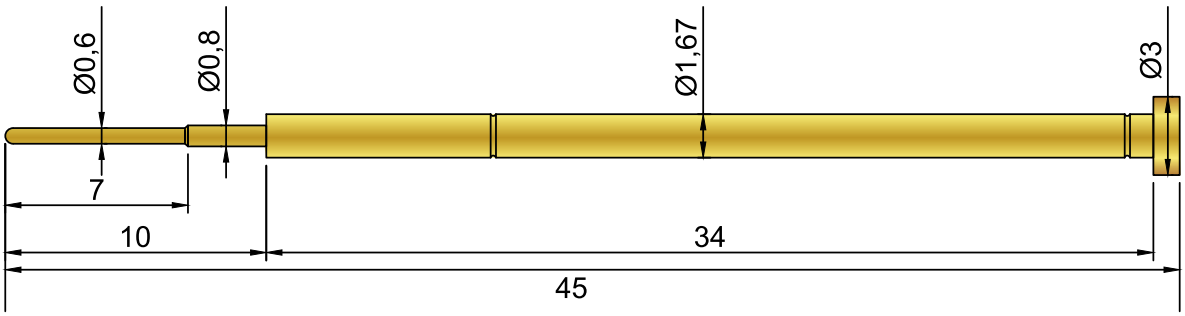
Materials(Plated):		
Barrel:	Phos-copper	AU ON NI
Plunger:	BeCu	AU ON NI
Spring:	S U S	AU ON NI
Receptacle:	Phos-copper	AU ON NI

Mechanical/Electrical Data:	
Current Rating:	0.5amps
Contact Resistance:	50milliohms max
Full Stroke:	3.0mm
Rated Stroke:	1.50mm
Spring Force:	150 $^{+20}_{-10}$g@1.5 mm 180 $^{+20}_{-10}$g@1.5 mm

Mounting Hole Size:	
CEM1 PMMA:	ϕ0.40mm
Epoxy Resin:	ϕ0.40mm

Operating Temperature:	
Standard:	-40°C:+80°C
Special Design"C":	-100°C-+200°C

ORT0.6FUlIY GOLD-PLATED CHASSIS PROBE



Materials(Plated):		
Barrel:	Phos-copper	AU ON NI
Plunger:	BeCu	AU ON NI
Spring:	S U S	AU ON NI
Receptacle:	Phos-copper	AU ON NI

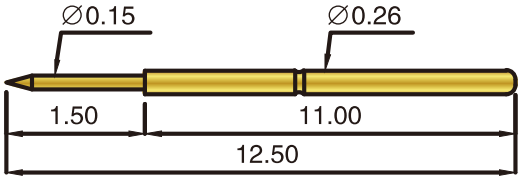
Mechanical/Electrical Data:	
Current Rating:	0.5amps
Contact Resistance:	50milliohms max
Full Stroke:	3.0mm
Rated Stroke:	1.50mm
Spring Force:	150 $^{+20}_{-10}$g@1.5 mm 180 $^{+20}_{-10}$g@1.5 mm

Mounting Hole Size:	
CEM1 PMMA:	ϕ0.40mm
Epoxy Resin:	ϕ0.40mm

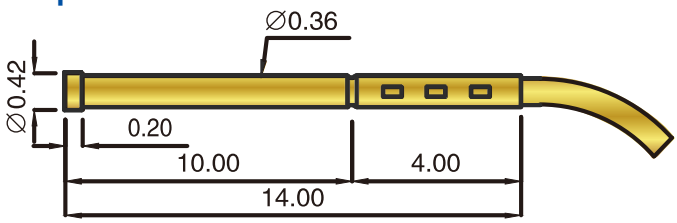
Operating Temperature:	
Standard:	-40°C:+80°C
Special Design"C":	-100°C-+200°C

P025 Series[70]

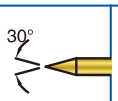
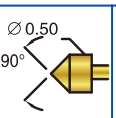
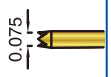
Minimum Test Pitch 0.55mm



Receptacle:



R025-1W 7:700mm L=700mm(900mm)
R025-1C 34#:0.40/0.16

Tip Style				
Serial Number	P025-B	P025-E	P025-J	P025-F

Materials(Plated):

Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, Au/Rh-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, Au on Ni plated

Mechanical/Electrical Data:

Current Rating:	0.50amps
Contact Resistance(:	50milliohms max
Full Stroke:	1.5mm
Rated Stroke:	1.00mm
Spring Force:	20g

Mounting Hole Size:

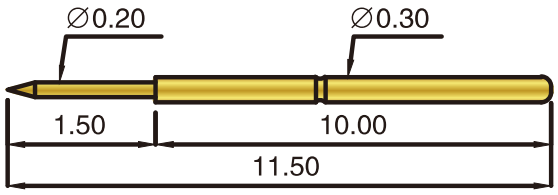
CEM1 PMMA:	ϕ0.40mm
Epoxy Resin:	ϕ0.40mm

Operating Temperature:

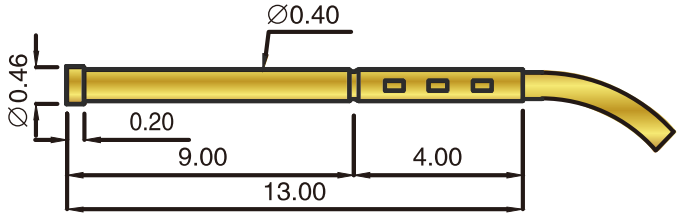
Standard:	-40˚C:+80˚C
Special Design"G":	-100˚C-+200˚C

P030 Series【60】

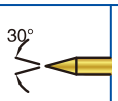
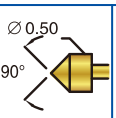
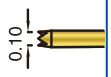
Minimum Test Pitch 0.65mm



Receptacle:



R030-1W 7:700mm L=700mm(900mm)
R030-1C (without thread) 32#:0.35/0.20

Tip Style				
Series Number	P030-B	P030-E	P030-J	P030-F

Materials(Plated):

Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, gold-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, Au on Ni plated

Mechanical/Electrical Data:

Current Rating :	0.50amps
Contact Resistance :	50milliohms max
Full Stroke :	1.5mm
Rated Stroke:	1.00mm
Spring Force:	20g

Mounting Hole Size:

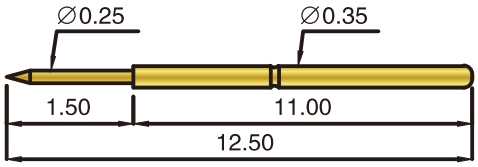
CEM1 PMMA:	ϕ0.45mm
Epoxy Resin:	ϕ0.45mm

Operating Temperature:

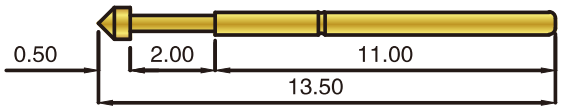
Standard:	-40˚C:+80˚C
Special Design"G":	-100˚C-+200˚C

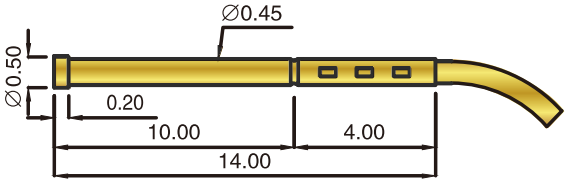
P035 Series【50】

Minimum Test Pitch 0.70mm

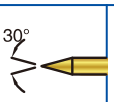
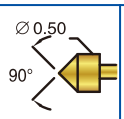
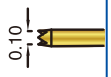


Receptacl:





R035-1W 7:700mm R035-1W 9:900mm L=700mm(900mm)
R035-1C (without thread) 32#:0.35/0.20

Tip Style				
Series Number	P035-B	P035-E	P035-J	P035-F

Materials(Plated):

Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, Au/Rh-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, Au on Ni plated

Mechanical/Electrical Data:

Current Rating:	0.50amps
Contact Resistance:	50milliohms max
Full Stroke:	1.5mm
Rated Stroke:	1.00mm
Spring Force:	40g

Mounting Hole Size:

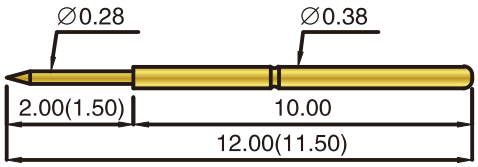
CEM1 PMMA:	ϕ0.50mm
Epoxy Resin:	ϕ0.50mm

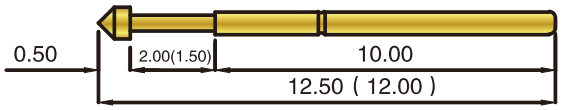
Operating Temperature:

Standard:	-40℃:+80℃
Special Design"C":	-100℃-+200℃

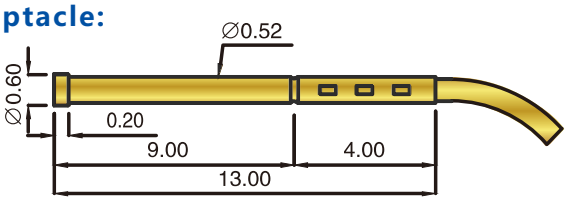
P038 Series【40】

Minimum Test Pitch 0.80mm

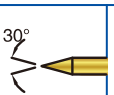
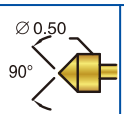
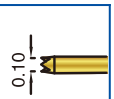




Receptacle:



R038-1W 7:700mm R038-1W 9:900mm L=700mm(900mm)
R038-1C (without thread) 30#:0.48/0.24

Tip Style				
Series Number	P038-B	P038-E	P038-J	P038-F

Materials(Plated):

Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, Au/Rh-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, Au on Ni plated

Mechanical/Electrical Data:

Current Rating:	0.50amps
Contact Resistance:	50milliohms max
Full Stroke:	2.00mm
Rated Stroke:	1.50mm
Spring Force:	40g

Mounting Hole Size:

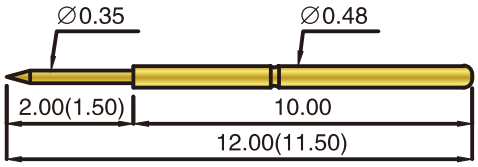
CEM1 PMMA:	ϕ0.60mm
Epoxy Resin:	ϕ0.60mm

Operating Temperature:

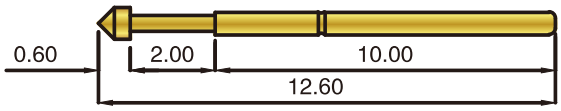
Standard:	-40℃:+80℃
Special Design"C":	-100℃-+200℃

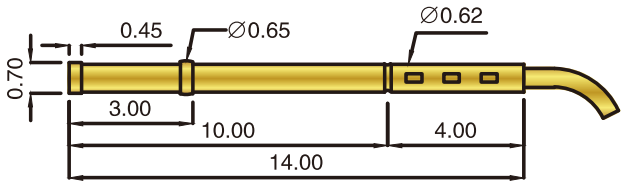
P048 Series【30】

Minimum Test Pitch 0.90mm

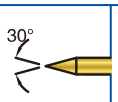
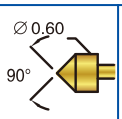
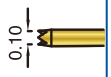


Receptacle:





R048-1VW 7:700mm R048-1VC(double rings) L=700mm(900mm)
R048-1W 7(sing horn ring) R048-1C(sing horn ring) 30#:0.48/0.24

Tip Style				
Series Number	P048-B	P048-E	P048-J	P048-F

Materials(Plated):

Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, Au/Rh-plated
Spring:	SUS304, Au on Ni Plated
Receptacle:	Brass, Au on Ni plated

Mechanical/Electrical Data:

Current Rating):	1amps
Contact Resistance:	50milliohms max
Full Stroke:	2.00mm
Rated Stroke:	1.50mm
Spring Force:	(20g)40g(In parentheses is customized product)

Mounting Hole Size:

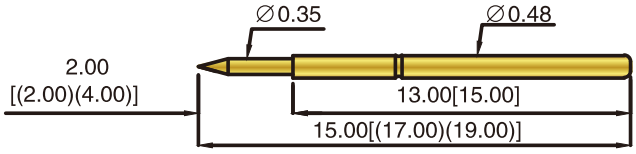
CEM1 PMMA:	ϕ0.70mm
Epoxy Resin:	ϕ0.70mm

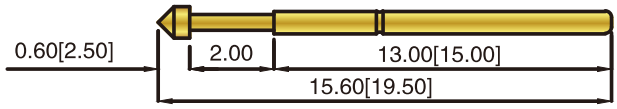
Operating Temperature:

Standard:	-40°C:+80°C
Special Design"C":	-100°C-+200°C

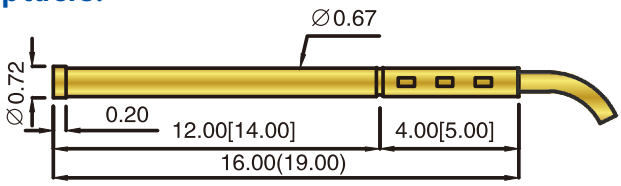
PM048【PL048】Series

Minimum Test Pitch 0.90mm

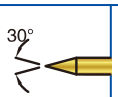
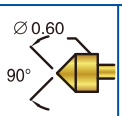




Receptacle:



RM048-1VW 7:700mm [RL048-1W 7:700mm] L=700mm(900mm)
RM048-1VC [RL048-1C] 30#:0.48/0.24

Tip Style				
Series Number	P048-B	P048-E	P048-J	P048-F

Materials(Plated):

Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, Au/Rh-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, Au on Ni plated

Mechanical/Electrical Data:

Current Rating:	1amps
Contact Resistance:	50milliohms max
Full Stroke:	2.00mm
Rated Stroke:	1.00mm
Spring Force:	55g[(70g)(40g)] (In parentheses is customized product)

Mounting Hole Size:

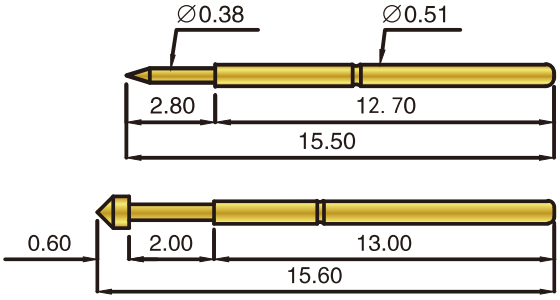
CEM1 PMMA:	ϕ0.70mm
Epoxy Resin:	ϕ0.70mm

Operating Temperature:

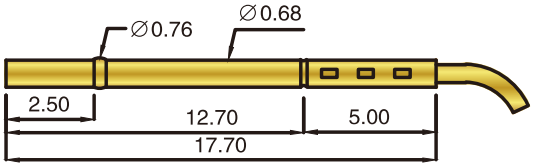
Standard:	-40°C:+80°C
Special Design"C":	-100°C-+200°C

P051 Series

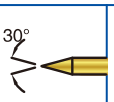
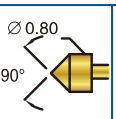
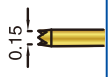
Minimum Test Pitch 0.90mm



Receptacle:



R051-2W7 R051-2C L=700mm(900mm)
R051-2WH7 30#:0.48/0.24

Tip Style				
Series Number	P051-B	P051-E	P051-J	P051-F

Materials(Plated):

Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, Au/Rh-Plated
Spring:	SUS304, Au on Ni Plated
Receptacle:	Brass, gold-plated

Mechanical/Electrical Data:

Current Rating:	0.50amps
Contact Resistance:	50milliohms max
Full Stroke:	1.50mm
Rated Stroke:	1.00mm
Spring Force:	40g

Mounting Hole Size:

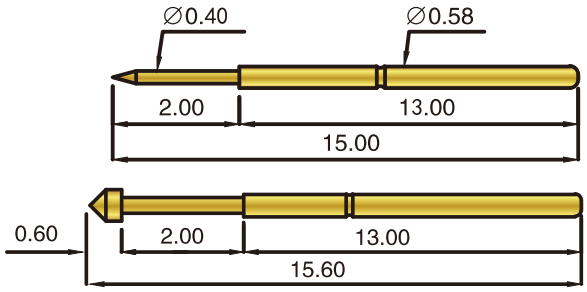
CEM1 PMMA:	ϕ0.70mm
Epoxy Resin:	ϕ0.70mm

Operating Temperature:

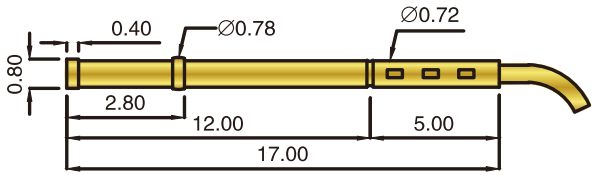
Standard:	-40℃:+80℃
Special Design"C":	-100℃-+200℃

P058 Series【20】

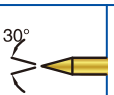
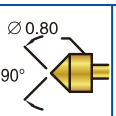
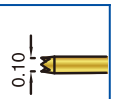
Minimum Test Pitch 1.00mm



Receptacle:



R058-1VW 7:700mm R058-1VC (without thread) L=700mm(900mm)
PermitiveName R058-W 7 PermitiveName R058-C 30#:0.48/0.24

Tip Style				
Series Number	P058-B	P058-E	P058-J	P058-F

Materials(Plated):

Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, Au/Rh-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, Au on Ni plated

Mechanical/Electrical Data:

Current Rating:	1amps
Contact Resistance:	50milliohms max
Full Stroke:	1.50mm
Rated Stroke:	1.00mm
Spring Force:	(20g)70g(In parentheses is customized product)

Mounting Hole Size:

CEM1 PMMA:	ϕ1.00mm
Epoxy Resin:	ϕ1.00mm

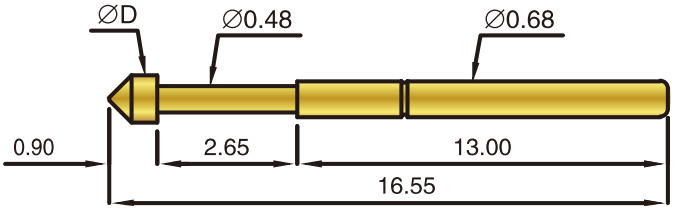
Operating Temperature:

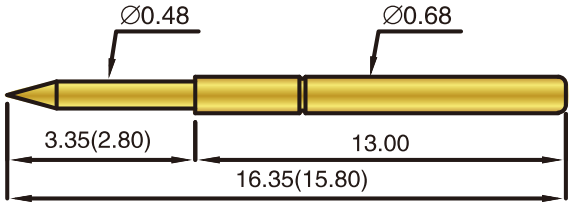
Standard:	-40℃:+80℃
Special Design"C":	-100℃-+200℃

ORT-PCB
PCB PROBE

P50 Series [0#]

Minimum Test Pitch 1.27mm





Tip Style	Series Number	Tip Dim
90°	1E	0.60
	E2	0.90
	E3	1.20
30°	1T	0.60
	T2	0.90
	T3	1.20
60°	1Q	0.60
	Q2	0.90
	Q3	1.20
	1LM	0.60
	LM2	0.90
	LM3	1.20
60°	1H	0.60
	H2	0.90
	H3	1.20
	1G	0.60
	G2	0.90
	G3	1.20
90°	1A	0.60
	A2	0.90
	A3	1.20
	1D	0.60
	D2	0.90
	D3	1.20

Tip Style	Series Number	Tip Dim
40°	S1	0.48
25°	1T	0.48
30°	B1	0.48
	J1	0.48
0.30	F1	0.48

Ordering example:

P50	E	2	165	0.75N
Series	Tip Style	Tip Diameter	Length	Spring Force

Explain:

A. Straight up probe head diameter is φ0.48mm

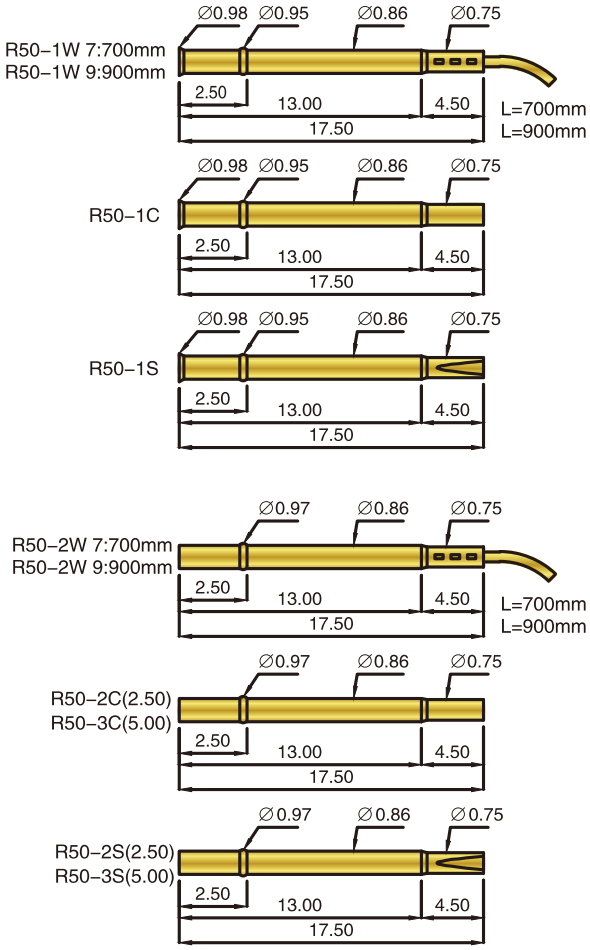
B. Probes diameter are expressed as 1, 2, 3. For example:

1E head is E, diameter is φ0.60mm

E2 head is E, diameter is φ0.90mm (standard head shape)

E3 head is E, diameter is φ1.20mm

Receptacle:



Materials(Plated):

Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, Au/Rh-plated
Spring:	SUS304, Au on Ni Plated
Receptacle:	Brass, Au on Ni plated

Mechanical/Electrical Data:

Current Rating:	1amps
Contact Resistance:	50milliohms max
Full Stroke:	2.60mm
Rated Stroke:	1.75mm
Spring Force:	(20g) (40g) 75g (120g)
	(In parentheses is customized product)

Mounting Hole Size:

CEM1 PMMA:	φ0.90mm
Epoxy Resin:	φ0.90mm

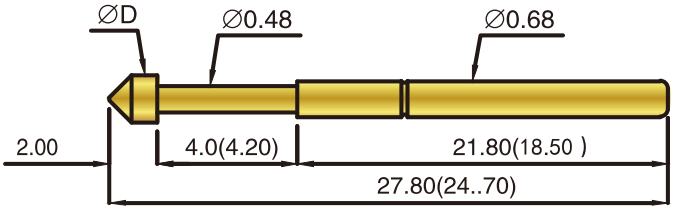
Operating Temperature:

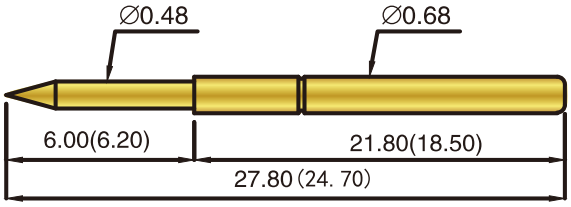
Standard:	-40°C:+80°C
Special Design"C":	-100°C-+200°C

ORT-PCB
PCB PROBE

PL50[P02] Series

Minimum Test Pitch 1.27mm





Tip Style	Series Number	Tip Dim
90°	1E	0.60
	E2	0.90
	E3	1.20
30°	1T	0.60
	T2	0.90
	T3	1.20
60°	1Q	0.60
	Q2	0.90
	Q3	1.20
	1LM	0.60
	LM2	0.90
	LM3	1.20
60°	1H	0.60
	H2	0.90
	H3	1.20
	1G	0.60
	G2	0.90
	G3	1.20
90°	1A	0.60
	A2	0.90
	A3	1.20
	1D	0.60
	D2	0.90
	D3	1.20

Tip Style	Series Number	Tip Dim
40°	S1	0.48
25°	1T	0.48
30°	B1	0.48
	J1	0.48
0.35	F1	0.48

Ordering example:

PL50	E	2	165	0.75N
Series	Tip Style	Tip Diameter	Length	Spring Force

Explain:

A. Straight up probe head diameter is φ0.48mm

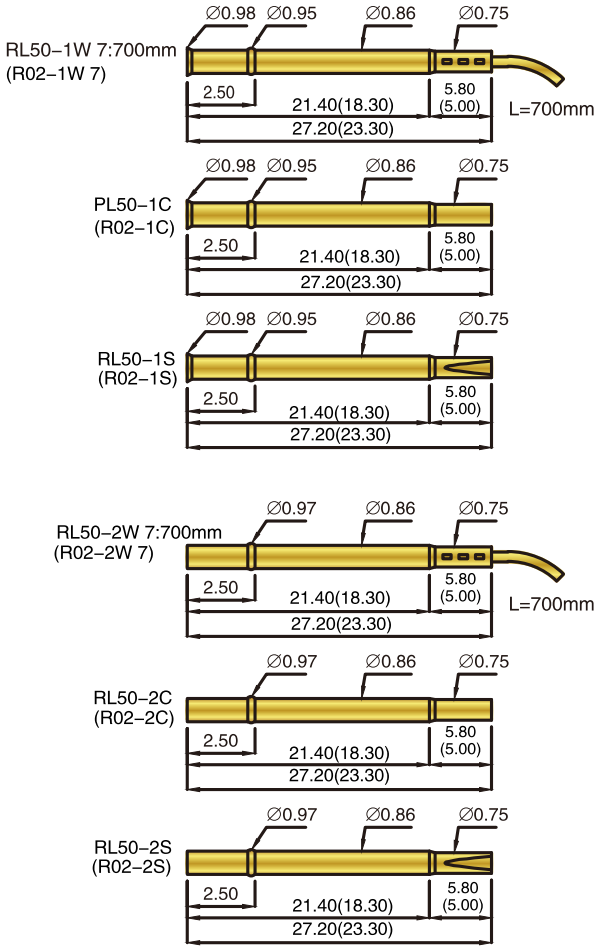
B. Probes diameter are expressed as 1, 2, 3. For example:

1E head is E, diameter is φ0.60mm

E2 head is E, diameter is φ0.90mm (standard head shape)

E3 head is E, diameter is φ1.20mm

Receptacle:



Materials(Plated):

Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, Au/Rh-plated
Spring:	SUS304, Au on Ni Plated
Receptacle:	Brass, Au on Ni plated

Mechanical/Electrical Data:

Current Rating:	1amps
Contact Resistance:	50milliohms max
Full Stroke:	4.00mm
Rated Stroke:	2.65mm
Spring Force:	100g (P02:90/120g)
	(In parentheses is customized product)

Mounting Hole Size:

CEM1 PMMA:	φ0.90mm
Epoxy Resin:	φ0.90mm

Operating Temperature:

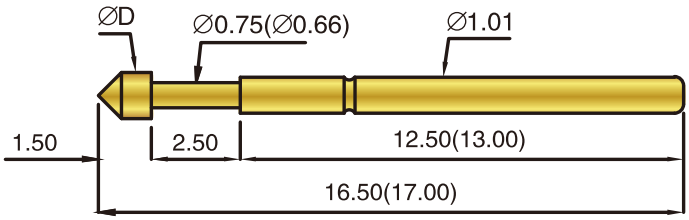
Standard:	-40℃:+80℃
Special Design"C":	-100℃-+200℃

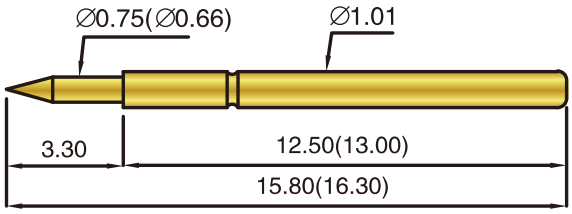
Make Test More Effective

ORT-PCB
PCB PROBE

P75 Series [1#]

Minimum Test Pitch 1.91mm





Tip Style	Series Number	Tip Dim
90°	1E	1.00
	E2	1.30
	E3	1.50
90°	1A	1.00
	A2	1.30
	A3	1.50
	1G	1.00
	G2	1.30
	G3	1.50
90°	1K	1.00
	LK	1.30
	LK	1.50
	1LM	1.00
	LM2	1.30
	LM3	1.50
	1D	1.00
	D2	1.30
	D3	1.50
60°	1H	1.00
	H2	1.30
	H3	1.50
60°	1Q	1.00
	Q2	1.30
	Q3	1.50
30°	1T	1.00
	T2	1.30
	T3	1.50

Tip Style	Series Number	Tip Dim
20°	B1	0.75
	J1	0.75
40°	S1	0.75
30°	T1	0.75
60°	Q1	0.75
0.30	F1	0.75
0.35	F2	0.75

Ordering example:

P75	E	2	165	1N
Series	Tip Style	Tip Diameter	Length	Spring Force

Explain:

A. Straight up probe head diameter is φ0.75(φ0.66) mm

B. Probes diameter are expressed as 1, 2, 3. For example:

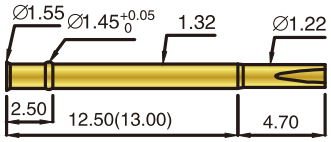
1E head is E, diameter is φ1.00mm

E2 head is E, diameter is φ1.30mm (standard head shape)

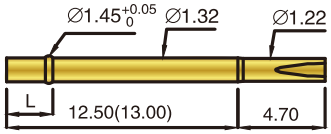
E3 head is E, diameter is φ1.50mm

Receptacle:

R75-1S (RT75-1S)

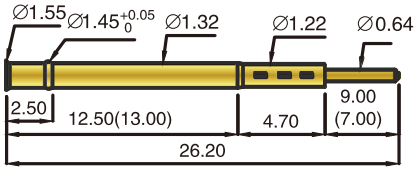


see the form below

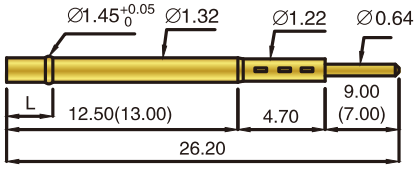


Receptacle Type	L
R75-2S(RT75-2S)	2.50
R75-3S(RT75-3S)	4.00

R75-1W (RT75-1W)



see the form below



Receptacle Type	L
R75-2W(RT75-2W)	2.50
R75-3W(RT75-3W)	4.00

Materials(Plated):

Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, Au/Rh-plated
Spring:	SUS304, Au on Ni Plated
Receptacle:	Brass, Au on Ni plated

Mechanical/Electrical Data:

Current Rating:	2amps
Contact Resistance:	50milliohms max
Full Stroke:	2.50mm
Rated Stroke:	1.75mm
Spring Force:	(60g) 100g (180g) (220g)

(In parentheses is customized product)

Mounting Hole Size:

CEM1 PMMA:	φ1.40mm
Epoxy Resin:	φ1.40mm

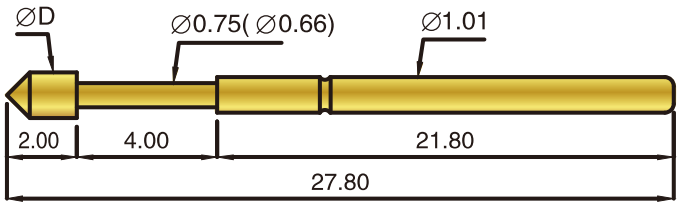
Operating Temperature:

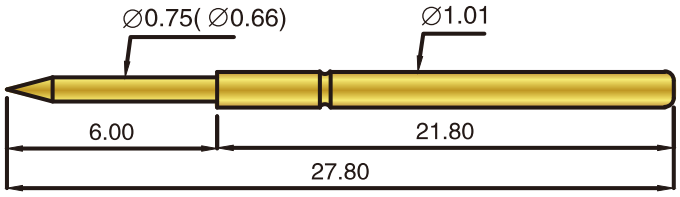
Standard:	-40°C:+80°C
Special Design"C":	-100°C-+200°C

ORT-PCB
PCB PROBE

Pm75 Series

Minimum Test Pitch 1.91mm





Tip Style	Series Number	Tip Dim
90°	1E	1.00
	E2	1.30
	E3	1.50
90°	1A	1.00
	A2	1.30
	A3	1.50
	1G	1.00
	G2	1.30
	G3	1.50
90°	1K	1.00
	LK	1.30
	LK	1.50
	1LM	1.00
	LM2	1.30
	LM3	1.50
	1D	1.00
	D2	1.30
	D3	1.50
60°	1H	1.00
	H2	1.30
	H3	1.50
60°	1Q	1.00
	Q2	1.30
	Q3	1.50
30°	1T	1.00
	T2	1.30
	T3	1.50

Tip Style	Series Number	Tip Dim
20°	B1	0.75
	J1	0.75
40°	S1	0.75
30°	T1	0.75
60°	Q1	0.75
0.30	F1	0.75
0.35	F2	0.75

Ordering example:

PM75	E	2	165	0.75N
Series	Tip Style	Tip Diameter	Length	Spring Force

Explain:

A. Straight up probe head diameter is φ0.75(φ0.66)mm

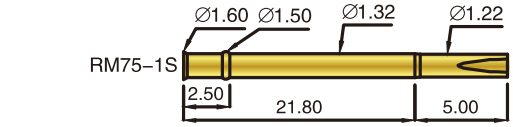
B. Probes diameter are expressed as 1, 2, 3. For example:

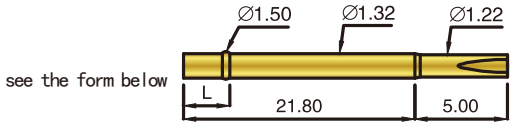
1E head is E, diameter is φ1.00mm

E2 head is E, diameter is φ1.30mm (standard head shape)

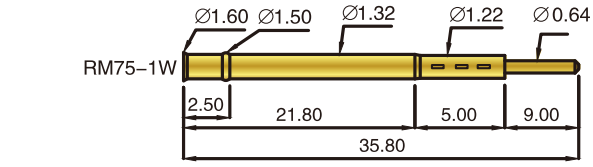
E3 head is E, diameter is φ1.50mm

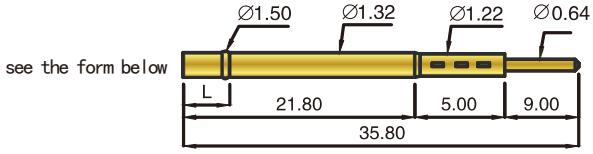
Receptacle:





Receptacle Type	L
RM75-2S	2.50
RM75-3S	4.00
RM75-4S	6.00





Receptacle Type	L
RM75-2W	2.50
RM75-3W	4.00
RM75-4W	6.00

Materials(Plated):

Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, Au/Rh-plated
Spring:	SUS304, Au on Ni Plated
Receptacle:	Brass, Au on Ni plated

Mechanical/Electrical Data:

Current Rating:	2amps
Contact Resistance:	50milliohms max
Full Stroke:	4.00mm
Rated Stroke:	2.65mm
Spring Force:	120g

Mounting Hole Size:

CEM1 PMMA:	φ1.40mm
Epoxy Resin:	φ1.40mm

Operating Temperature:

Standard:	-40℃:+80℃
Special Design"C":	-100℃-+200℃

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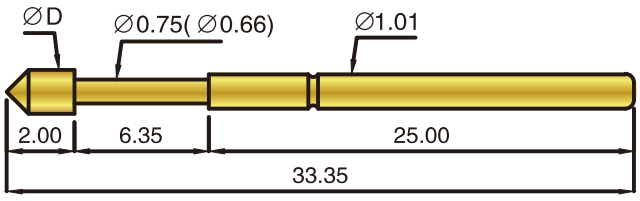
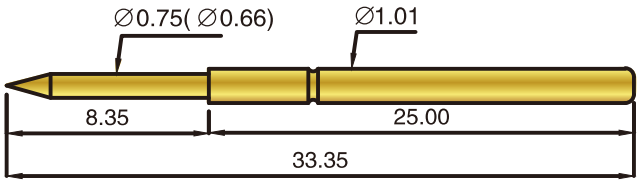
ORT-PCB
PCB PROBE

Pl75 Series

Minimum Test Pitch 1.91mm





Tip Style	Series Number	Tip Dim
90°	1E	1.00
	E2	1.30
	E3	1.50
90°	1A	1.00
	A2	1.30
	A3	1.50
	1G	1.00
	G2	1.30
	G3	1.50
90°	1K	1.00
	LK	1.30
	LK	1.50
	1LM	1.00
	LM2	1.30
	LM3	1.50
	1D	1.00
	D2	1.30
	D3	1.50
60°	1H	1.00
	H2	1.30
	H3	1.50
60°	1Q	1.00
	Q2	1.30
	Q3	1.50
30°	1T	1.00
	T2	1.30
	T3	1.50

Tip Style	Series Number	Tip Dim
20°	B1	0.75
	J1	0.75
40°	S1	0.75
30°	T1	0.75
60°	Q1	0.75
0.55	F1	0.75

Ordering example:

PL75	E	2	333	1.2N
Series	Tip Style	Tip Diameter	Length	Spring Force

Explain:

A. Straight up probe head diameter is ϕ0.75(ϕ0.66)mm

B. Probes diameter are expressed as 1, 2, 3. For example:

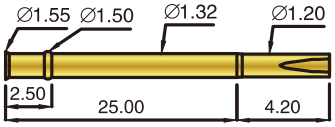
1E head is E, diameter is ϕ1.00mm

E2 head is E, diameter is ϕ1.30mm (standard head shape)

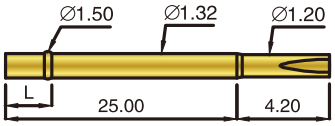
E3 head is E, diameter is ϕ1.50mm

Receptacle:

RL75-1S

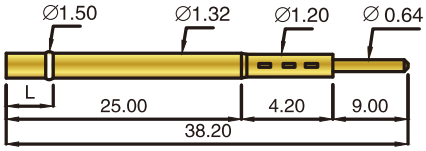


see the form below



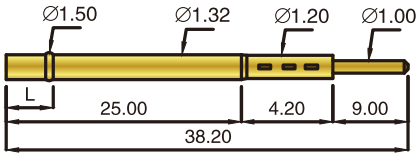
Receptacle Type	L
RL75-2S	2.50
RL75-3S	5.00
RL75-4S	7.50
RL75-5S	10.00

see the form below



Receptacle Type	L
RL75-2W	2.50
RL75-3W	5.00
RL75-4W	7.50
RL75-5W	10.00

see the form below



Receptacle Type	L
RL75-2T	2.50
RL75-3T	5.00
RL75-4T	7.50
RL75-5T	10.00

Materials(Plated):

Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, Au/Rh-plated
Spring:	SUS304, Au on Ni Plated
Receptacle:	Brass, Au on Ni plated

Mechanical/Electrical Data:

Current Rating:	2amps
Contact Resistance:	50milliohms max
Full Stroke:	6.35mm
Rated Stroke:	4.25mm
Spring Force:	(60g) (90g) 120g (200g) (200g)

(In parentheses is customized product)

Mounting Hole Size:

CEM1 PMMA:	ϕ1.40mm
Epoxy Resin:	ϕ1.40mm

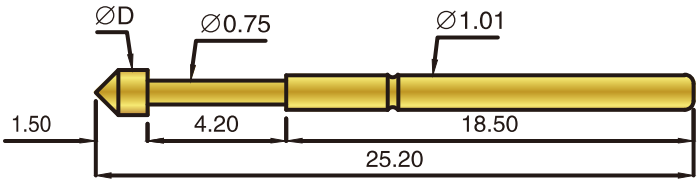
Operating Temperature:

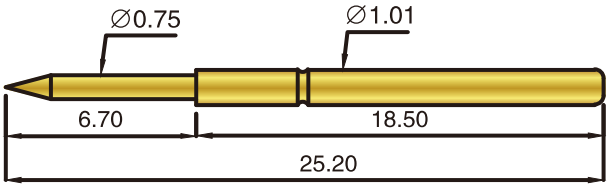
Standard:	-40°C:+80°C
Special Design"C":	-100°C-+200°C

ORT-PCB
PCB PROBE

P11 Series

Minimum Test Pitch 1.91mm





Tip Style	Series Number	Tip Dim
90°	1E	1.00
	E2	1.30
	E3	1.50
90°	1A	1.00
	A2	1.30
	A3	1.50
	1G	1.00
	G2	1.30
	G3	1.50
90°	1K	1.00
	LK	1.30
	LK	1.50
	1LM	1.00
	LM2	1.30
	LM3	1.50
	1D	1.00
	D2	1.30
	D3	1.50
60°	1H	1.00
	H2	1.30
	H3	1.50
60°	1Q	1.00
	Q2	1.30
	Q3	1.50
30°	1T	1.00
	T2	1.30
	T3	1.50

Tip Style	Series Number	Tip Dim
20°	B1	0.75
	J1	0.75
40°	S1	0.75
30°	T1	0.75
60°	Q1	0.75
0.30	F1	0.75

Ordering example:

P11	E	2	252	1.5N
Series	Tip Style	Tip Diameter	Length	Spring Force

Explain:

A. Straight up probe head diameter is ϕ0.75mm

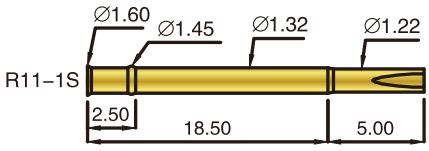
B. Probes diameter are expressed as 1, 2, 3. For example:

1E head is E, diameter is ϕ1.00mm

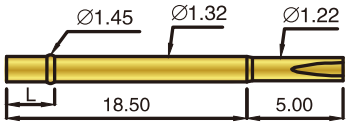
E2 head is E, diameter is ϕ1.30mm (standard head shape)

E3 head is E, diameter is ϕ1.50mm

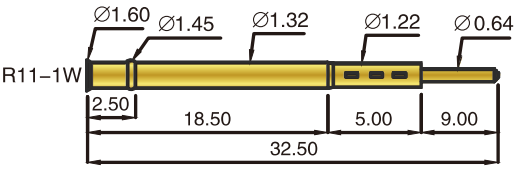
Receptacle:



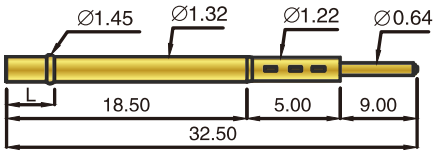
see the form below



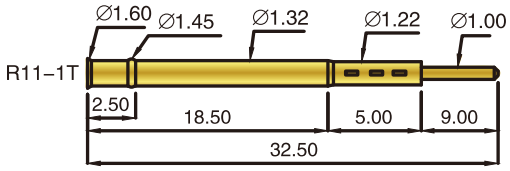
Receptacle Type	L
R11-2S	2.50
R11-3S	4.00



see the form below



Receptacle Type	L
R11-2W	2.50
R11-3W	4.00



Materials(Plated):

Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, Au/Rh-plated
Spring:	SUS304, Au on Ni Plated
Receptacle:	Brass, Au on Ni plated

Mechanical/Electrical Data:

Current Rating:	2amps
Contact Resistance:	50milliohms max
Full Stroke:	4.20mm
Rated Stroke:	2.80mm
Spring Force:	(80g)150g

(In parentheses is customized product)

Mounting Hole Size:

CEM1 PMMA:	ϕ1.40mm
Epoxy Resin:	ϕ1.40mm

Operating Temperature:

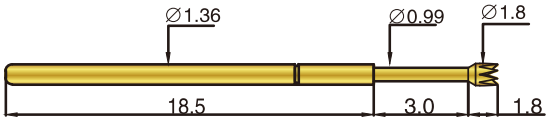
Standard:	-40℃:+80℃
Special Design"C":	-100℃-+200℃

Make Test More Effective

ORT-PCB
PCB PROBE

P1600 Series

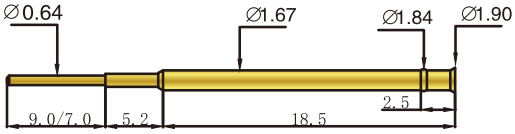
Minimum Test Pitch 2.54mm



P1600-E2

P1601-E2

P1602-E2



R160-1W/RT160-1W

R160-1S

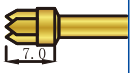
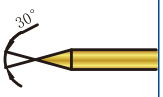
R160-1W

R160-2S

R160-2W

R160-3S

R160-3W

Tip Style	Series Number	Tip Dim
A2/A3		ϕ1.50/1.8
J1		ϕ0.99
E2/E3/E4 E5/E6/E8		ϕ1.5/1.8/2.0 ϕ2.5/3.0/4.0
F1		ϕ0.99
Q1		ϕ0.99
Q2		ϕ1.5
M3		ϕ1.5/1.8
LM2/LM3/LM4 LM5/LM6/LM8		ϕ1.5/1.8/2.0 ϕ2.5/3.0/4.0
B1		ϕ0.99
D1/D2/D3		ϕ1.3/1.5/1.8
T2/T3		ϕ1.5/1.8
H2/H3/H4 H5/H6/H8		ϕ1.5/1.8/2.0 ϕ2.5/3.0/4.0
G1/G2		ϕ1.0/1.5
K2/K3		ϕ1.5/1.8

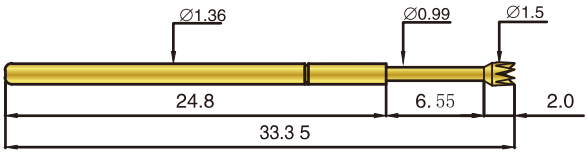
Specification

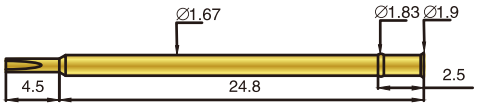
Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, gold-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, gold-plated
Mounting Hole Size:	ϕ1.70mm
Current Rating:	3amps
Contact Resistance:	50milliohms max
Spring Force:	180g

ORT-PCB
PCB PROBE

P100 Series

Minimum Test Pitch 2.54mm





R100-1S

see the form below

Receptacle Type	A (Length)
R100-2S	2.5
R100-3S	5.0
R100-4S	7.5
R100-5S	10
R100-6S	12

see the form below

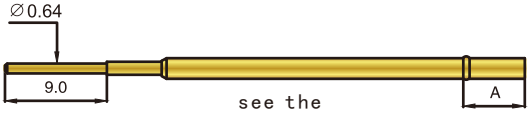
Receptacle Type	A (Length)
R100-2T	2.5
R100-3T	5.0
R100-4T	7.5
R100-5T	10

R100-4VT

R100-5VT

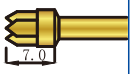
R100-4VW

R100-5VW



see the form below

Receptacle Type	A (Length)
R100-2W	2.5
R100-3W	5.0
R100-4W	7.5
R100-5W	10
R100-6W	120

Tip Style	Series Number	Tip Dim
A2/A3		ϕ1.50/1.8
J1		ϕ0.99
E2/E3		ϕ1.5/1.8
F1		ϕ0.99
Q1		ϕ0.99
Q2/Q1.3		ϕ1.5/1.3
M3		ϕ1.5/1.8
LM2/LM3		ϕ1.5/1.8
B1		ϕ0.99
D2/D3		ϕ1.5/1.8
T2/T3		ϕ1.5/1.8
H2/H3 H4/H5		ϕ1.5/1.8 ϕ2.0/2.5

Specification:

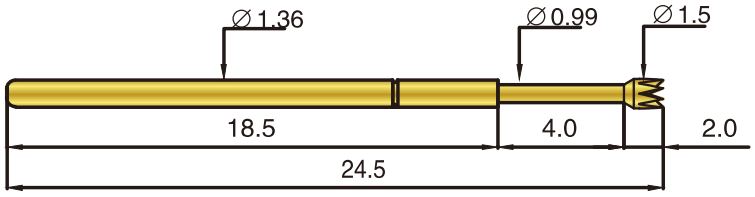
Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, gold-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, gold-plated
Mounting Hole Size:	ϕ1.70mm
Current Rating:	2amps
Contact Resistance:	50milliohms max
Spring Force:	40/90/120/180/250/280/350g

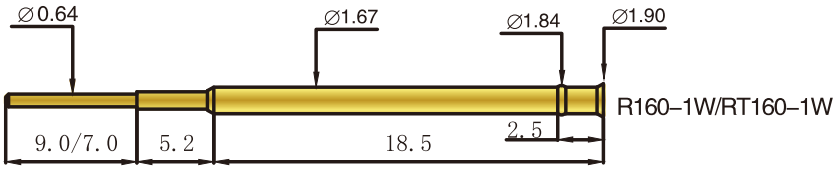
Make Test More Effective

ORT-PCB
PCB PROBE

P160 Series

Minimum Test Pitch 2.54mm





R160-1S

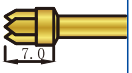
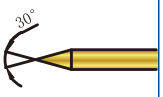
R160-1W

R160-2S

R160-2W

R160-3S

R160-3W

Tip Style	Series Number	Tip Dim
A2/A3		ϕ1.50/1.8
J1		ϕ0.99
E2/E3/E4 E5/E6/E8		ϕ1.5/1.8/2.0 ϕ2.5/3.0/4.0
F1		ϕ0.99
Q1		ϕ0.99
Q2		ϕ1.5
M3		ϕ1.5/1.8
LM2/LM3/LM4 LM5/LM6/LM8		ϕ1.5/1.8/2.0 ϕ2.5/3.0/4.0
B1		ϕ0.99
D1/D2/D3		ϕ1.3/1.5/1.8
T2/T3		ϕ1.5/1.8
H2/H3/H4 H5/H6/H8		ϕ1.5/1.8/2.0 ϕ2.5/3.0/4.0
G1/G2		ϕ1.0/1.5
K2/K3		ϕ1.5/1.8

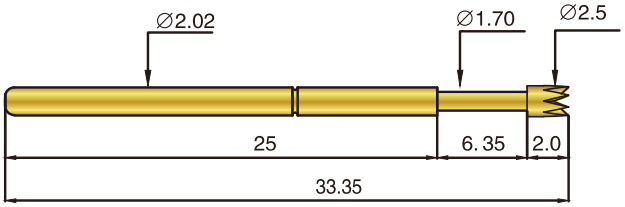
Specification:

Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, gold-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, gold-plated
Mounting Hole Size:	ϕ1.70mm
Current Rating:	2amps
Contact Resistance:	50milliohms max
Spring Force:	40/60/120/180/280g

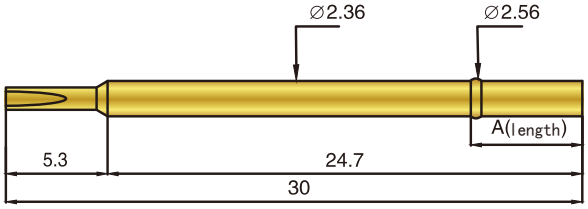
ORT-PCB
PCB PROBE

P125 Series

Minimum Test Pitch 3.18mm



Receptacle:



Tip Style	Series Number
	P125-B
	P125-J
	P125-H
	P125-A
	P125-D

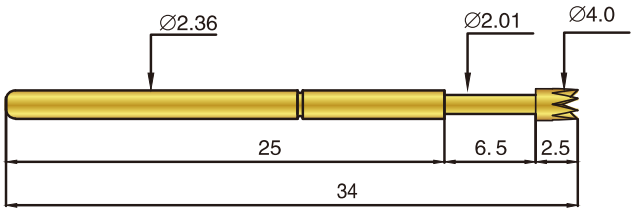
Receptacle Type	A(Length)
R125-1S	0(Flared)
R125-2S	2.5
R125-3S	5.0
R125-4S	7.5
R125-5S	10
R125-6S	13

Specification:

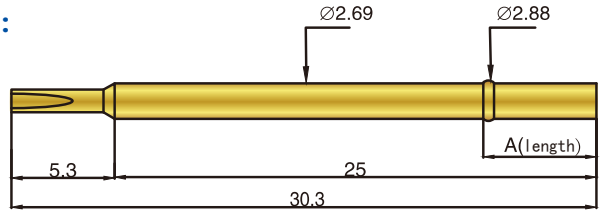
Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, gold-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, gold-plated
Mounting Hole Size:	ϕ 2.4mm
Current Rating:	3amps
Contact Resistance:	50milliohms max
Spring Force:	65/180/280/350g

P156 Series

Minimum Test Pitch 3.96mm



Receptacle:



Tip Style	Series Number
	P156-B
	P156-J
	P156-H
	P156-A
	P156-D

Receptacle Type	A(Length)
R156-1S	0(Flared)
R156-2S	2.5
R156-3S	5.0
R156-4S	7.5

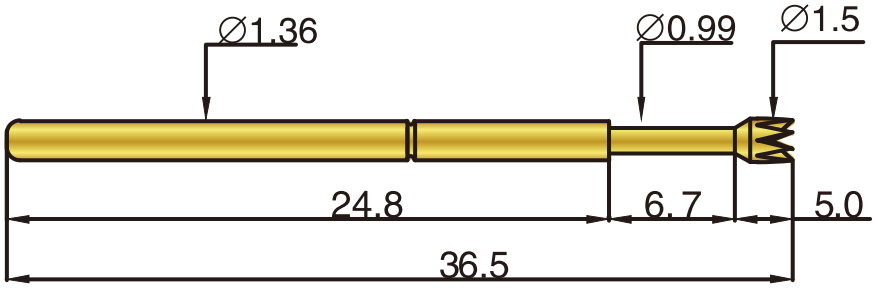
Specification:

Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, gold-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, gold-plated
Mounting Hole Size:	ϕ 2.75mm
Current Rating :	3amps
Contact Resistance :	50milliohms max
Spring Force:	200/250/280/380g

Make Test More Effective

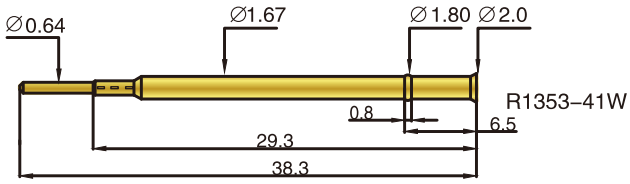
G1353 Series

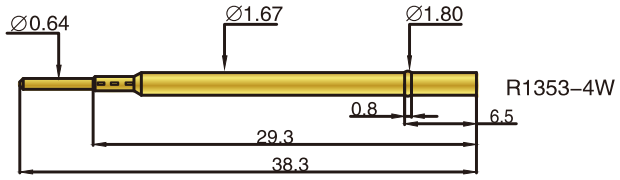
Minimum Test Pitch 2.54mm



Tip Style	Series Number
	G1353-B
	G1353-E
	G1353-H
	G1353-M3

Receptacle:



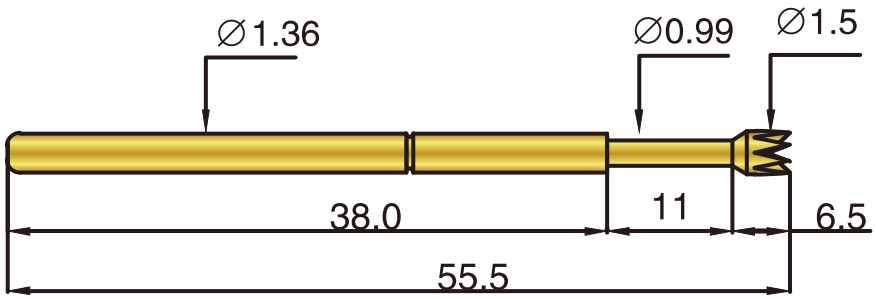


Specification:

Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, gold-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, gold-plated
Mounting Hole Size:	ϕ1.7mm
Current Rating:	2amps
Spring Force:	180/280g

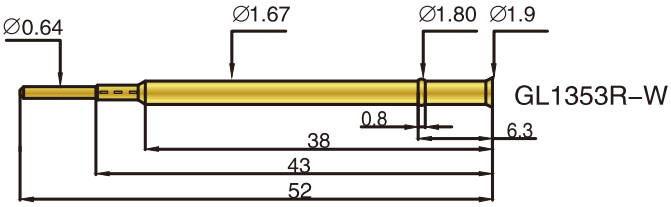
Gi1353 Series

Minimum Test Pitch 2.54mm



Tip Style	Series Number
	GI 1353-B
	GI 1353-E
	GI 1353-H
	GI 1353-M3

Receptacle:

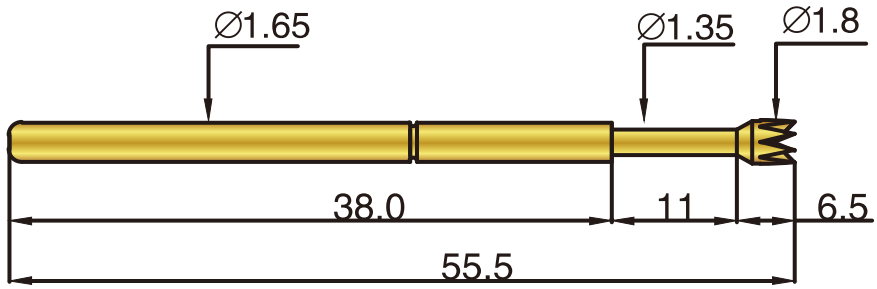


Specification:

Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, gold-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, gold-plated
Mounting Hole Size:	ϕ1.7mm
Current Rating:	2amps
Spring Force:	250g

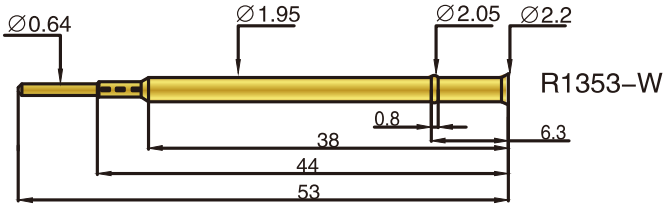
S1353 Series

Minimum Test Pitch 3.18mm



Tip Style	Series Number
	S1353-B
	S1353-E
	S1353-H
	S1353-M3

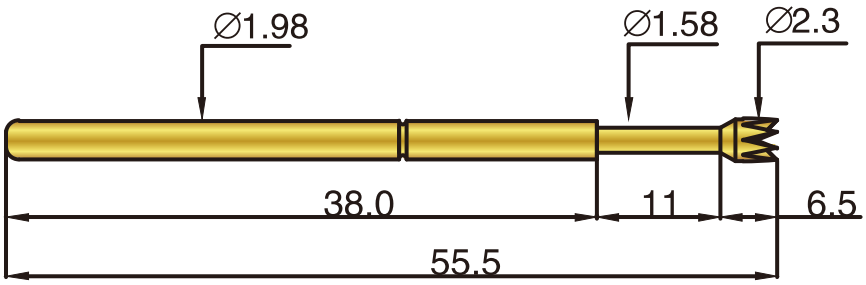
Receptacle:



Specification:	
Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, gold-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, Ni-plated
Mounting Hole Size:	ϕ 1.7mm
Current Rating:	2amps
Spring Force:	250g

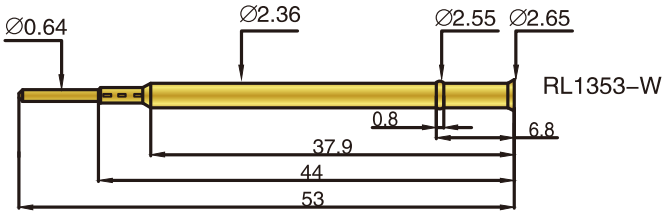
1353L Series

Minimum Test Pitch 3.96mm



Tip Style	Series Number
	1353L-B
	1353L-E
	1353L-H
	1353L-M3

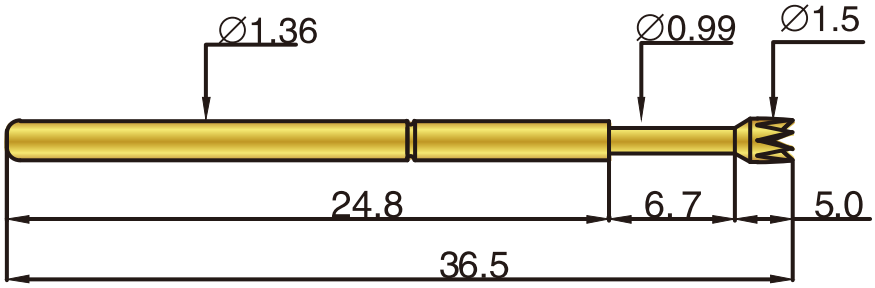
Receptacle:



Specification:	
Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, gold-plated
Spring:	SWP, Au on Ni Plated
Receptacle	Brass, Ni-plated
Mounting Hole Size:	ϕ 2.4mm
Current Rating:	3amps
Spring Force:	380g

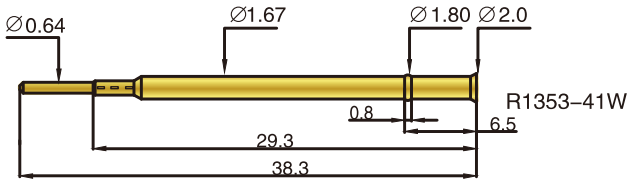
G1353 Series

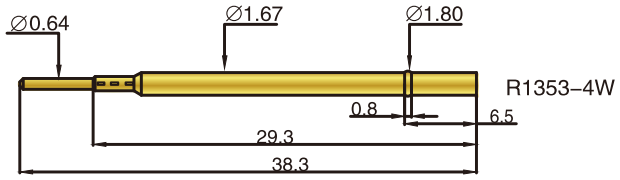
Minimum Test Pitch 2.54mm



Tip Style	Series Number
	G1353-B
	G1353-E
	G1353-H
	G1353-M3

Receptacle:



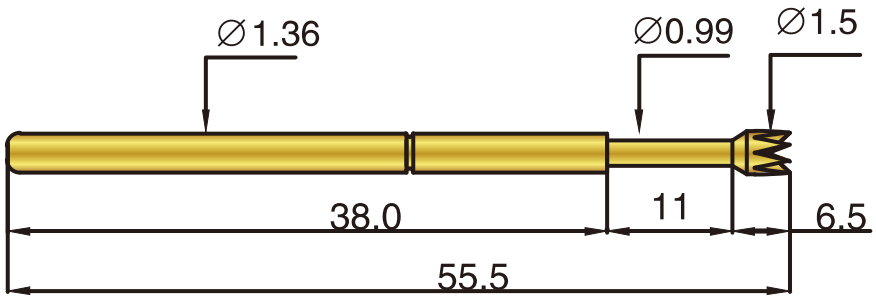


Specification:

Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, gold-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, gold-plated
Mounting Hole Size:	ϕ1.7mm
Current Rating:	2amps
Spring Force:	180/280g

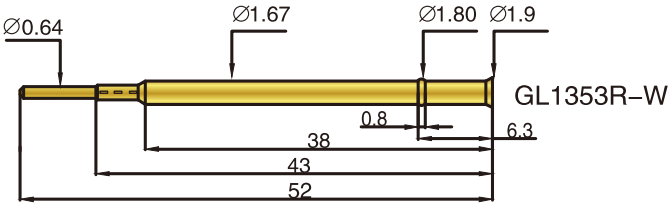
Gi1353 Series

Minimum Test Pitch 2.54mm



Tip Style	Series Number
	GI 1353-B
	GI 1353-E
	GI 1353-H
	GI 1353-M3

Receptacle:

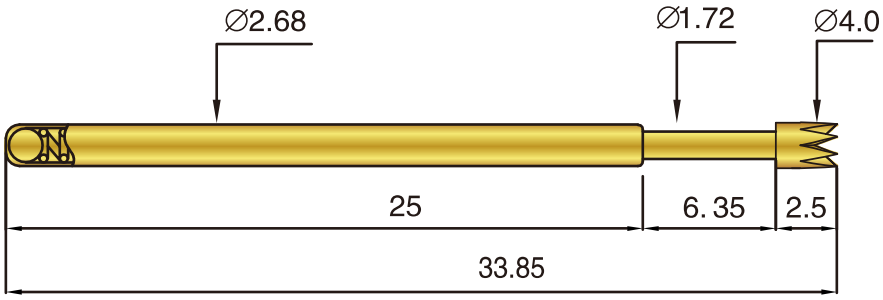


Specification:

Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, gold-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, gold-plated
Mounting Hole Size:	ϕ1.7mm
Current Rating:	2amps
Spring Force:	250g

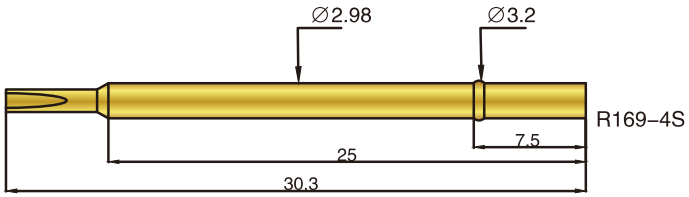
Pa169 Series

Minimum Test Pitch 4.3mm



Tip Style	Series Number
	PA169-B
	PA169-J
	PA169-H
	PA169-A
	PA169-D

Receptacle:

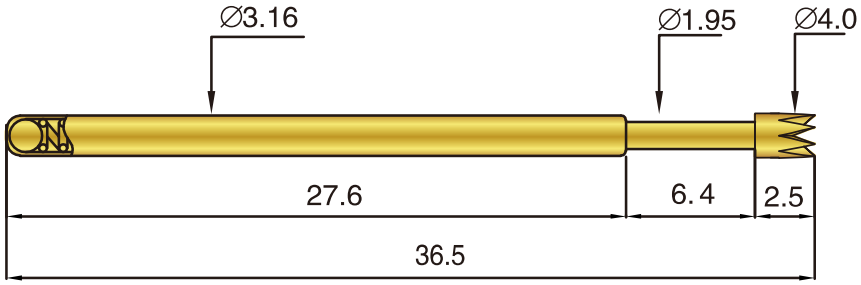


Specification:

Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, gold-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, gold-plated
Mounting Hole Size:	ϕ3.0mm
Current Rating:	5amps
Contact Resistance:	50milliohms max
Spring Force:	200g

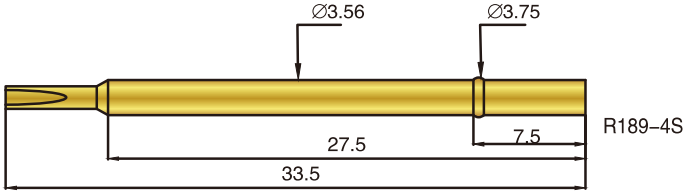
Pa189 Series

Minimum Test Pitch 4.8mm



Tip Style	Series Number
	PA189-B
	PA189-J
	PA189-H
	PA189-A
	PA189-D

Receptacle:



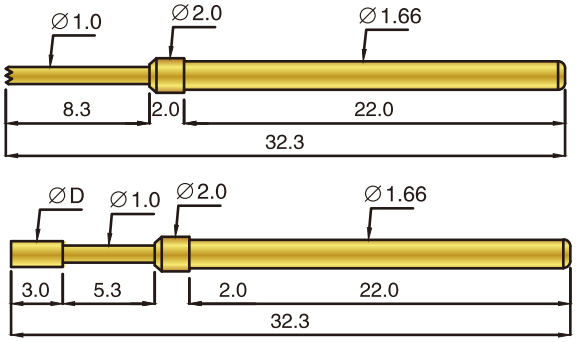
Specification:

Barrel:	Bronze, gold-plated
Plunger:	Becu/SK4, gold-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, gold-plated
Mounting Hole Size:	ϕ3.6mm
Current Rating:	5amps
Contact Resistance:	50milliohms max
Spring Force:	200/250/300/450g

ORT-Heavy Current

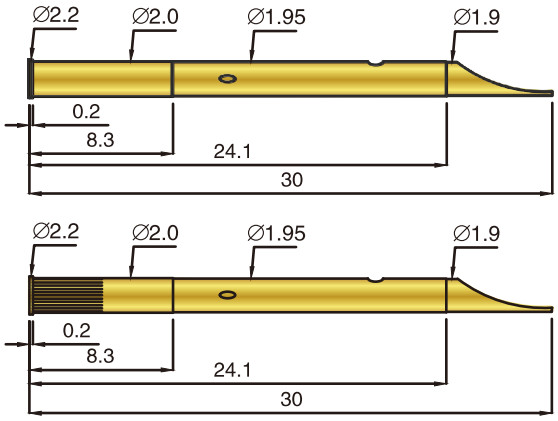
Heavy Current Test Probe(HC Probes)

HC118-3230 Series



Tip Style	Series Number	Tip Dim
H		1.0
G		1.0
D		1.0
306		1.0/2.0/2.5
214		0.5

Receptacle:



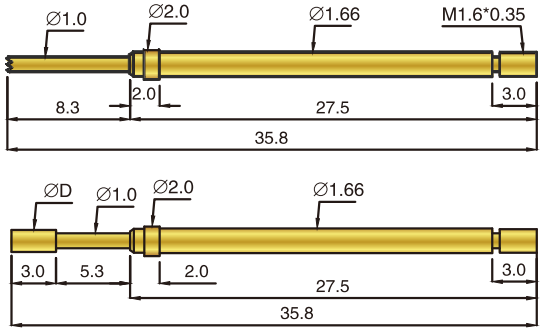
Specification:

Current Rating:	16A
Contact Ressistance:	10mΩmax
Full Stroke:	5.30mm
Operate Stroke:	4.00mm
Operate Spring Force:	(0.8N) 1.5N (2.2N)

Meterial and Plating:

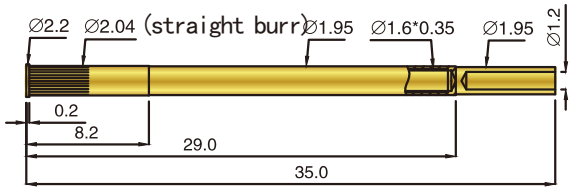
Plunger:	BeCu/SK4	Au on Ni Plated
Tube:	Brass	Au on Ni Plated
Spring:	SUS304	Au on Ni Plated
Receptacle:	Brsss	Au on Ni Plated

HC118-3580 Series



Tip Style	Series Number	Tip Dim
H		1.0
G		1.0
D		1.0
306		1.0/2.0/2.5
214		0.5

Receptacle:



Specification:

Current Rating:	16A
Contact Ressistance:	10mΩmax
Full Stroke:	5.30mm
Operate Stroke:	4.00mm
Operate Spring Force:	(0.8N) 1.5N (2.2N)

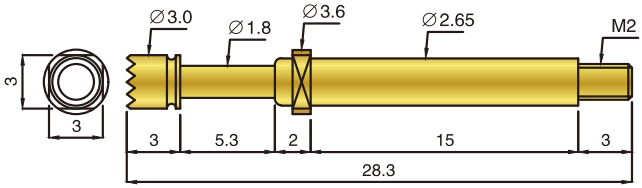
Meterial and Plating:

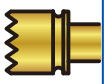
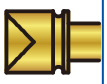
Plunger:	BeCu/SK4	Au on Ni Plated
Tube:	Brass	Au on Ni Plated
Spring:	SUS304	Au on Ni Plated
Receptacle:	Brsss	Au on Ni Plated

ORT-Heavy Current

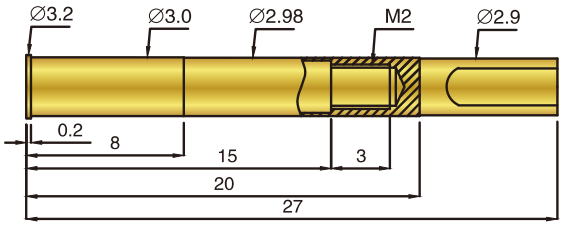
Heavy Current Test Probe(HC Probes)

HC120-2830 Series



Tip Style	Series Number	Tip Dim
H300/H400		3. 00/4. 00
A300/A400		3. 00/4. 00
LM300/LM400		3. 00/4. 00

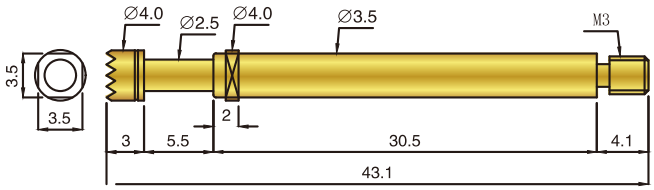
Receptacle:

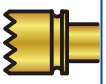


Specification:	
Current Rating:	24A
Contact Ressistance:	10mΩmax
Full Stroke:	5. 30mm
Operate Stroke:	4. 00mm
Operate Spring Force:	2. 3N(3N)

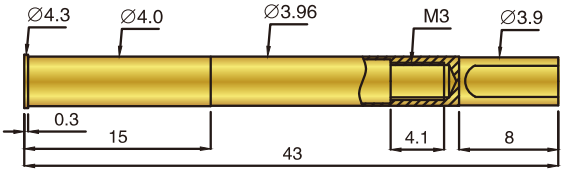
Meterial and Plating:		
Plunger:	BeCu/SK4	Au on Ni Plated
Tube:	Brass	Au on Ni Plated
Spring:	SUS304	Au on Ni Plated
Receptacle:	Brsss	Au on Ni Plated

HC150-4310 Series



Tip Style	Series Number	Tip Dim
H300/H400		3. 00/4. 00
A300/A400		3. 00/4. 00
LM300/LM400		3. 00/4. 00

Receptacle:



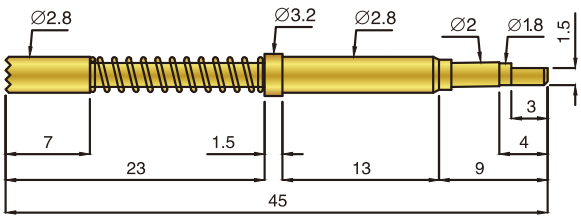
Specification:	
Current Rating:	50A
Contact Ressistance:	10mΩmax
Full Stroke:	5. 35mm
Operate Stroke:	4. 40mm
Operate Spring Force:	3N

Meterial and Plating:		
Plunger:	BeCu/SK4	Au on Ni Plated
Tube:	Brass	Au on Ni Plated
Spring:	SUS304	Au on Ni Plated
Receptacle:	Brsss	Au on Ni Plated

ORT-Heavy Current

Heavy Current Test Probe(HC Probes)

HC280-4500 Series



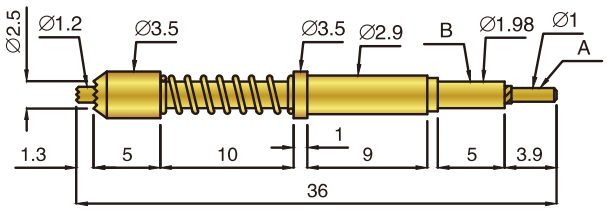
Specification:

Current Rating:	10A
Contact Ressistance:	20mΩmax
Full Stroke:	9.10mm
Operate Stroke:	4.00mm
Operate Spring Force:	3.2N

Meterial and Plating:

Plunger:	BeCu/SK4	Au on Ni Plated
Tube:	Brass	Au on Ni Plated
Spring:	SUS304	Au on Ni Plated

HC290-3600 Series



Specification:

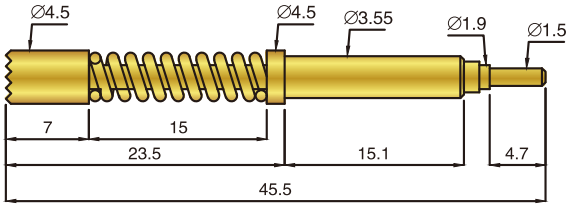
Current Rating:	16A
Contact Ressistance:	30mΩmax
Full Stroke:	4.4mm
Operate Stroke:	4.00mm
Operate Spring Force:	5.6N

Because between A and B has insulator, we suggest:
A uses ϕ1 leadwire to connect ,
B use 200*500 solder lug

Meterial and Plating:

Plunger:	BeCu/SK4	Au on Ni Plated
Tube:	Brass	Au on Ni Plated
Spring:	SUS304	Au on Ni Plated

HC355-4500 Series



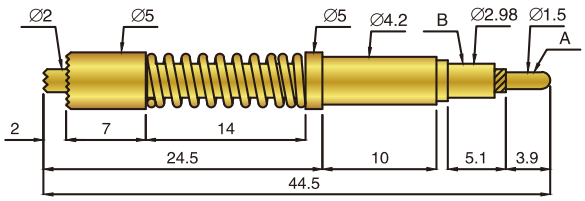
Specification:

Current Rating:	30A
Contact Ressistance:	15mΩmax
Operate Stroke:	7.70mm
Operate Spring Force:	(2N)4.8N

Meterial and Plating:

Plunger:	BeCu/SK4	Au on Ni Plated
Tube:	Brass	Au on Ni Plated
Spring:	SUS304	Au on Ni Plated

HC420-4450 Series



Specification:

Current Rating:	16A
Contact Ressistance:	30mΩmax
Full Stroke:	8.50mm
Operate Stroke:	6.30mm
Operate Spring Force:	3.8N

Because between A and B has insulator, we suggest:
A uses φ1.5 leadwire to connect ,
B use 300*500 solder lug

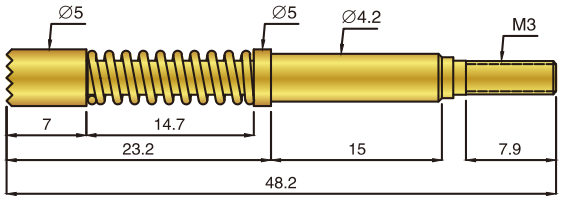
Meterial and Plating:

Plunger:	BeCu/SK4	Au on Ni Plated
Tube:	Brass	Au on Ni Plated
Spring:	SUS304	Au on Ni Plated

ORT-Heavy Current

Heavy Current Test Probe(HC Probes)

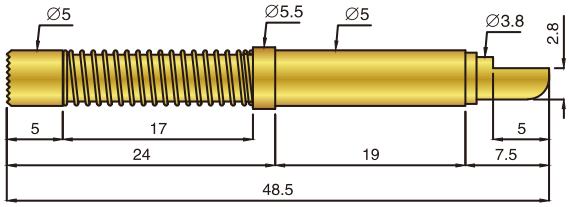
HC420-4820 Series



Specification:	
Current Rating:	30A
Contact Ressistance:	12mΩmax
Operate Stroke:	9.20mm
Operate Spring Force:	3N/3.5N/6N/10N/17N

Meterial and Plating:		
Plunger:	BeCu/SK4	Au on Ni Plated
Tube:	Brass	Au on Ni Plated
Spring:	SUS304	Au on Ni Plated

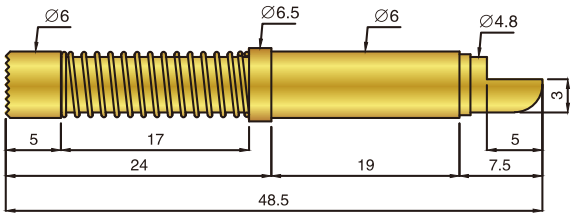
HC500-4850 Series



Specification:	
Current Rating:	60A
Contact Ressistance:	12mΩmax
Operate Stroke:	5.0mm
Operate Spring Force:	6N

Meterial and Plating:		
Plunger:	BeCu/SK4	Au on Ni Plated
Tube:	Brass	Au on Ni Plated
Spring:	SUS304	Au on Ni Plated

HC600-4850 Series



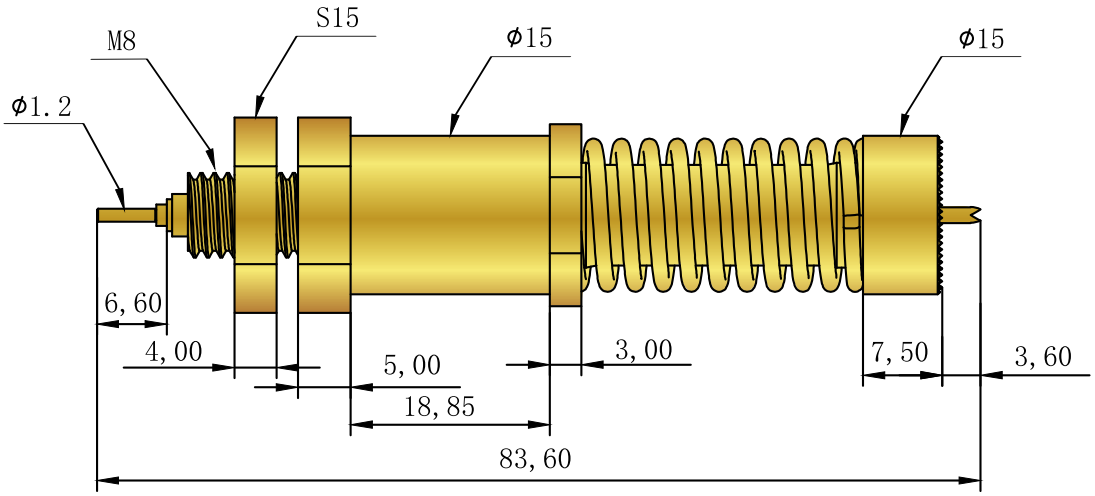
Specification:	
Current Rating:	60A
Contact Ressistance:	8mΩmax
Operate Stroke:	5.00mm
Operate Spring Force:	7N

Meterial and Plating:		
Plunger:	BeCu/SK4	Au on Ni Plated
Tube:	Brass	Au on Ni Plated
Spring:	SUS304	Au on Ni Plated

ORT-Heavy Current

Heavy Current Test Probe(HC Probes)

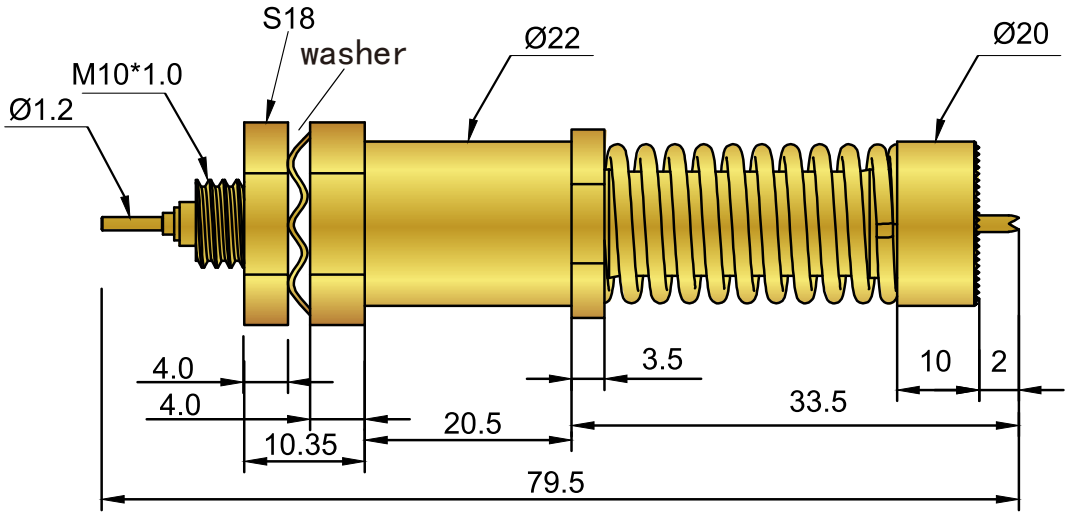
HC150-H-836 Series



Specification:

Current Rating:	100A
Operate Spring Force:	7N+15%@load 3mm 72N+15%@load 9.6mm

HC2200-H-70N Series



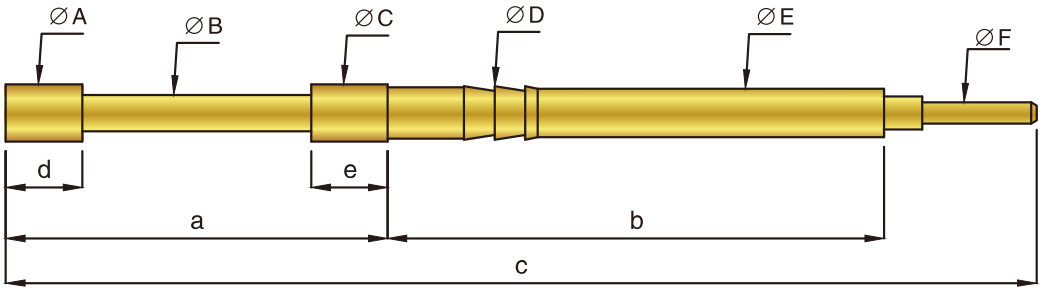
Specification:

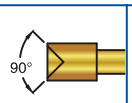
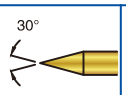
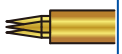
Current Rating:	Single voltage needle closure reaches 7N±15%, current needle closure 5MM reaches 70V±15%Contact
Ressistance:	Inner conductor<30mΩ Outer Conductor<20mΩ (Nut washer not included)
Operate Temperature:	In room temperature 25℃, the current of probe through 130A lasted for 4 hours, the temperature raise is less than 15℃

ORT-Heavy Current

Heavy Current Test Probe(HC Probes)

HP1/2/3/4/5/6 Series



Tip Style						
Series Number	A	B	G	J	H	Q

Spec / Type	A	B	C	D	E	F	a	b	c	d	e	Stroke	Mounting Hole Size	Mini Space	Spring Fprce	Tip Material	Current Rating
PH–1	1.20	0.75	1.20	1.00	0.97	0.47	7	9.50	20.5	1.0	1.0	3.5mm	1.00mm	1.70mm	(70g)100g	Ph/SK4	1A
PH–2	1.50	0.93	1.50	1.34	1.27	0.56	10	13.0	27.0	2.0	2.0	6.0mm	1.30mm	2.00mm	150g(200g)(300g)	Ph/SK4	2A
PH–3	2.00	1.29	2.00	1.83	1.77	0.75	16	16.0	36.0	2.0	2.0	8.3mm	1.80mm	2.50mm	150g	Ph/SK4	3A
PH–4	2.50	1.80	2.50	2.33	2.27	1.25	16	18.0	38.0	3.0	3.0	10.5mm	2.30mm	3.00mm	150g	Ph/SK4	6A
PH–5	3.50	2.50	3.50	3.23	3.17	1.62	16	18.0	38.0	3.0	3.0	10.0mm	3.20mm	4.20mm	(60g)200g(400g)	Brass	10A
PH–6	5.00	3.40	5.00	4.55	4.50	2.45	16	19.5	40.0	4.0	1.5	10.5mm	4.50mm	5.50mm	250g	Brass	12A

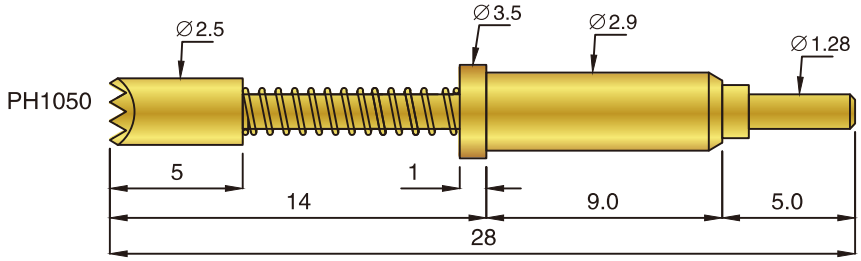
Ordering example:

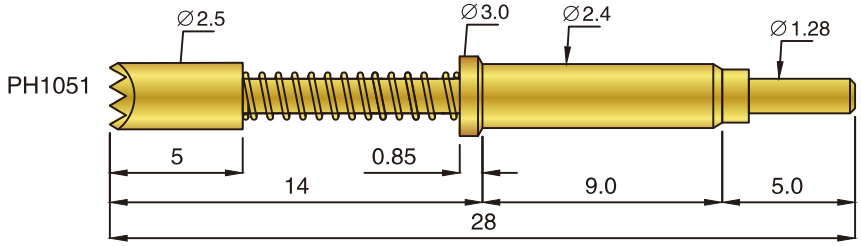
HP1	A	100	B	G	06
Series	Tip Type	Tip Diameter	Tip Meterial	Plated Meterial	Spring Force
			B:BeCu S:SK4 P:Ph R:Brass	G:Gold Plated N:Nickle Plated	06:60g 15:150g etc

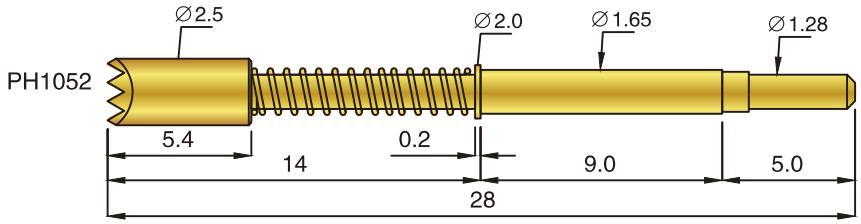
ORT-Heavy Current

Heavy Current Test Probe(HC Probes)

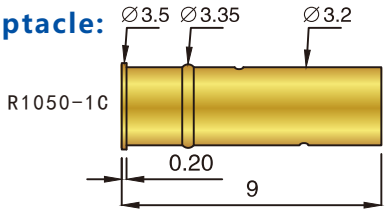
PH1050/1051/1052 Series

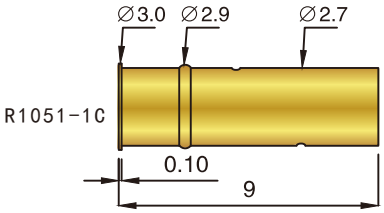


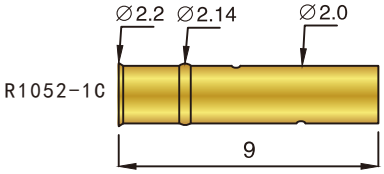


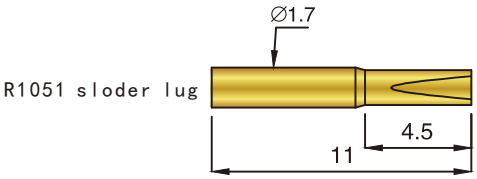


Receptacle:









Tip Style	Series Number
90°	A
60°	B
	G

Tip Style	Series Number
	LM
60°	H

Ordering example:

PH1050	A	250	B	G	20
Series	Tip Type	Tip Diameter	Tip Meterial	Plated Meterial	Spring Force
			B:BeCu S:SK4 P:Ph R:Brass	G:Gold Plated N:Nickle Plated	20:200g 25:250g etc

Specification:

Current Rating:	5A
Full Stroke:	PH1050:8.0mm PH1051:8.15mm PH1052:8.4mm
Full Stroke Elastic:	(200g)250g(350g)(400g)

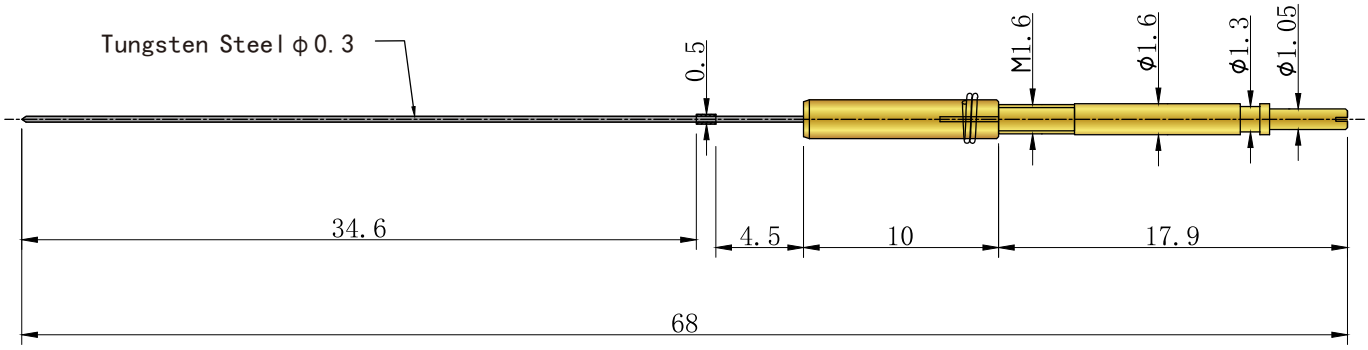
Meterial and Plating:

Plunger:	BeCu/SK4	Au on Ni Plated
Tube:	Brass	Au on Ni Plated
Spring:	SUS304	Au on Ni Plated
Sleeve:	Brass	Au on Ni Plated
Solder Lug:	Brass	Au on Ni Plated

ORT-Capacitance resistance

Capacitance Resistance Test (HC PROBES)

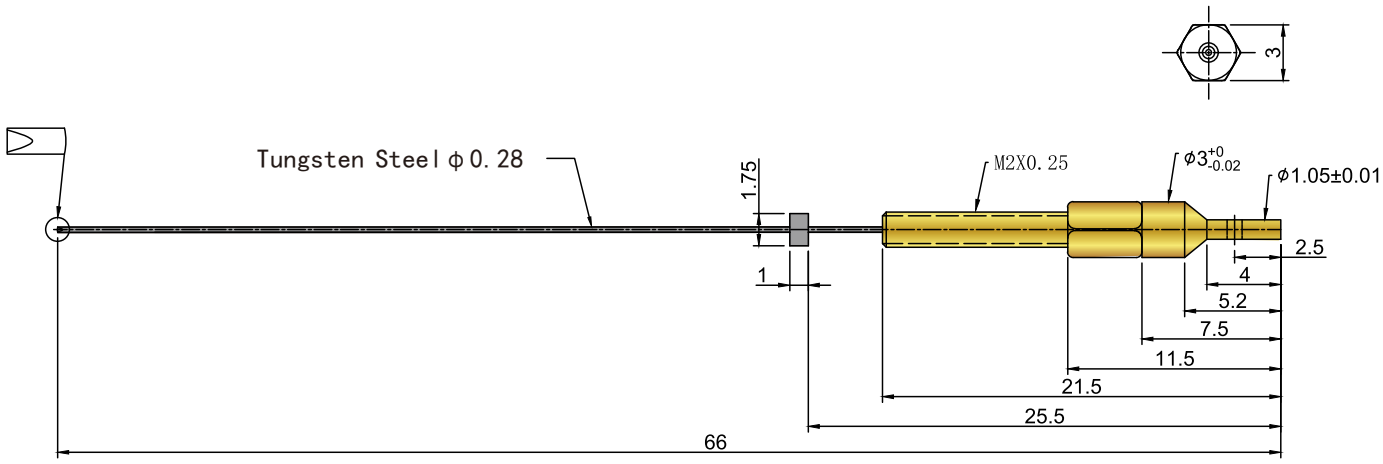
2X70L Capacitance Resistance Test Probe-0.3T



Meterial and Plating:	
Plunger:	Ungsten Steel, nickel
Screw Pipe:	Brass,gold plating
Tail Pin:	Brass,gold plating
Stop Collar:	Brass,gold plating

Specification:	
Full Stroke:	4.0mm
Rated Stroke:	3.0mm
Spring Force:	40±8gf@3.0mm
Spring Lifespan:	100,000 cycles

3X66L Capacitance Resistance Test Probe-0.3T



Meterial and Plating:	
Plunger:	Ungsten Steel, nickel
Screw Pipe:	Brass,gold plating
Tail Pin:	Brass,gold plating
Stop Collar:	Brass,gold plating

Specification:	
Full Stroke:	1.5mm
Rated Stroke:	1.35mm
Spring Force:	90±gf@1.35mm
Spring Lifespan:	200,000 cycles

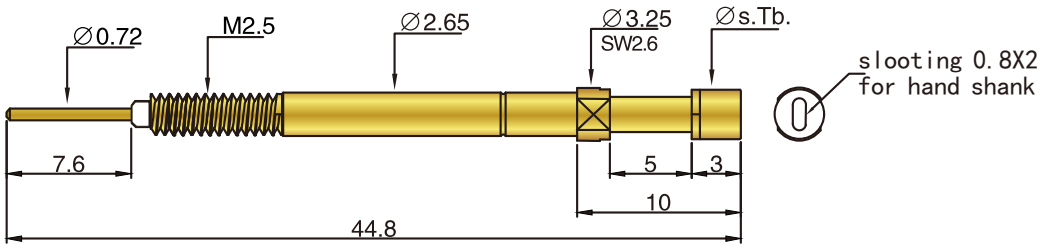
ORT886

138milSwitch Probe (Threaded)

Installation Height:10.2～15.2mm
Grid:≥3.5(138Mil)

Mounting and Functional Dimensions:

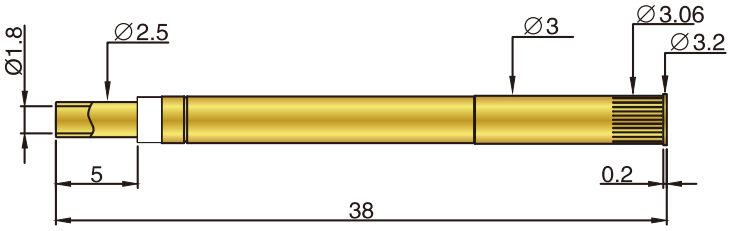
ORT-886



Tip Style	Series Number	Tip Dim
	17	300
	17	495

Receptacle:

ORT-885KB



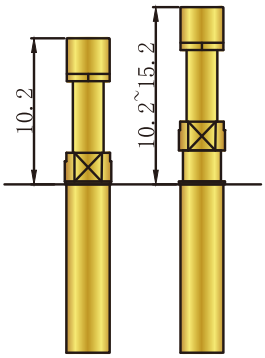
Materials(Plated):	
Barrel:	Brass, gold-plated
Plunger:	Becu, gold-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, gold-plated

Mechanical/Electrical Data:	
Current Rating:	3amps
Switch Stroke:	1.7mm
Full Stroke:	5.0mm
Rated Stroke:	4.2mm
Spring Force:	1N/2.5N(chooseable)

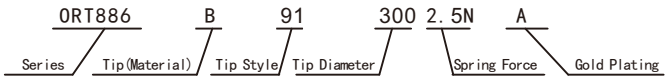
Mounting Hole Size:
CEM1 PMMA:sleeve are knurled ϕ3.0～3.02mm, sleeve without knurl ϕ2.98～2.99mm
Epoxy Resin:sleeve are knurled ϕ3.0～3.02mm, sleeve without knurl ϕ2.98～2.99mm

Operating Temperature:	
Standard:	-40°C:+80°C
Special Design"C" :	-100°C-+200°C

Introduction to use:



Ordering Example:

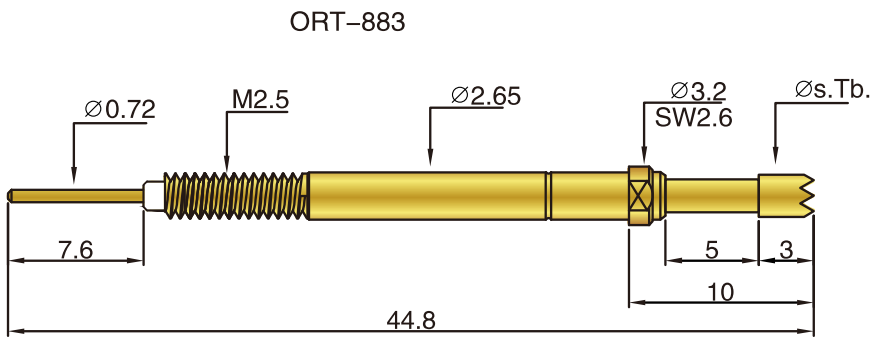


ORT883

138mil Switch Probe(threaded)

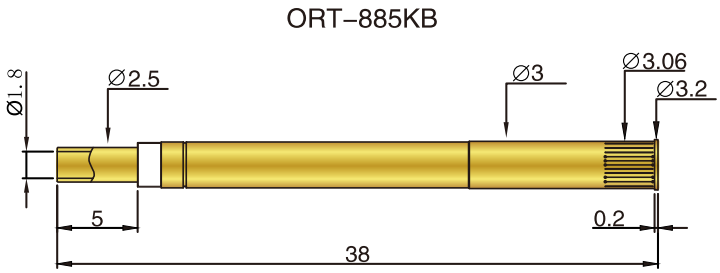
Installation Height:10.2～15.2mm
Grid:≥3.5(138Mil)

Mounting and Functional Dimensions:



Tip Style	Series Number	Tip Dim
	06	230
	17	230
	05	230
	16	180

Receptacle:



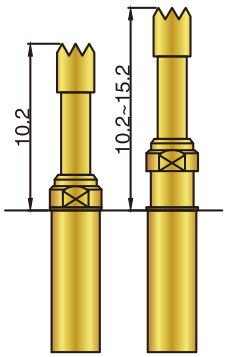
Materials(Plated):	
Barrel:	Brass, gold-plated
Plunger:	Becu, gold-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, gold-plated

Mechanical/Electrical Data:	
Current Rating:	3amps
Switch Stroke:	1.7mm
Full Stroke:	5.0mm
Rated Stroke:	4.2mm
Spring Force:	1N/2.5N(chooseable)

Mounting Hole Size:
CEM1 PMMA:sleeve are knurled ϕ3.0～3.02mm, sleeve without knurl ϕ2.98～2.99mm
Epoxy Resin:sleeve are knurled ϕ3.0～3.02mm, sleeve without knurl ϕ2.98～2.99mm

Operating Temperature:	
Standard:	-40°C:+80°C
Special Design"C":	-100°C-+200°C

Introduction to use:



Ordering Example:

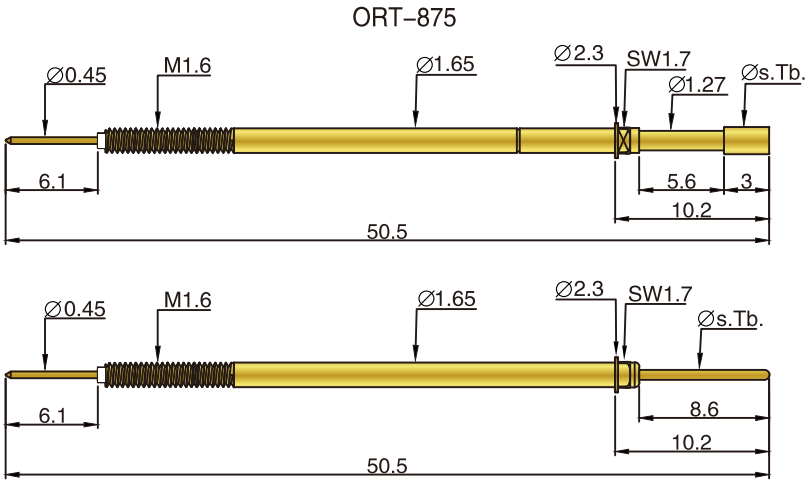
Make Test More Effective

ORT875

100mil Swithch Probe(Threaded)

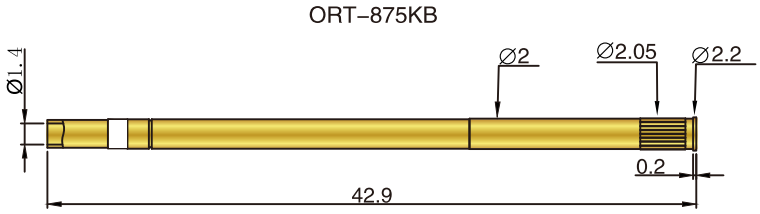
Installation Height:10.6～15.6mm
Grid:≥2.54(100Mil)

Mounting and Functional Dimensions:



Tip Style	Series Number	Tip Dim
	17	180
	06	180
	05	180
	16	065
	16	100
	11	065
	11	080

Receptacle:



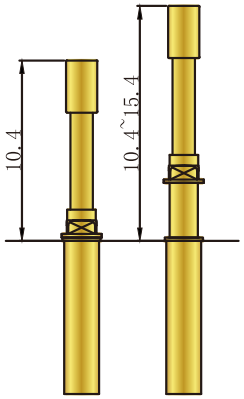
Materials(Plated):	
Barrel:	Brass, gold-plated
Plunger:	Becu, gold-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, gold-plated

Mechanical/Electrical Data:	
Current Rating:	3amps
Switch Stroke:	1.5mm
Full Stroke:	5.6mm
Rated Stroke:	4.0mm
Spring Force:	1.5N(chooseable)

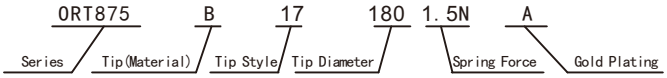
Mounting Hole Size:
CEM1 PMMA:sleeve are knurled φ2.02～2.03mm, sleeve without knurl φ1.99～2.0mm
Epoxy Resin:sleeve are knurled φ2.02～2.03mm, sleeve without knurl φ1.99～2.0mm

Operating Temperature:	
Standard:	-40°C:+80°C
Special Design"C":	-100°C-+200°C

Introduction to use:



Ordering Example:

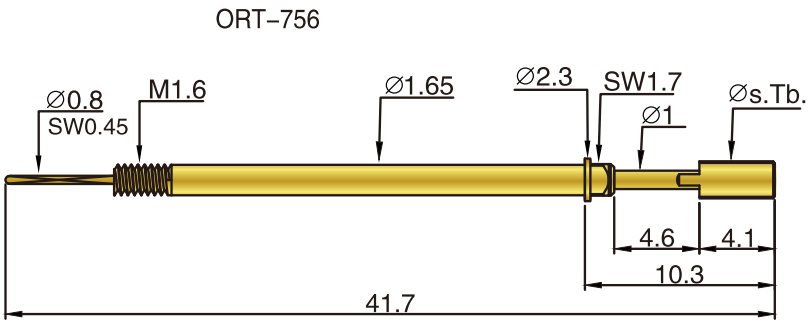


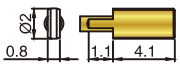
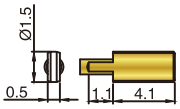
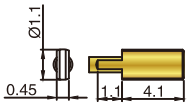
ORT756

100mil Threaded Probe (Anti-Rotate/Rotate)

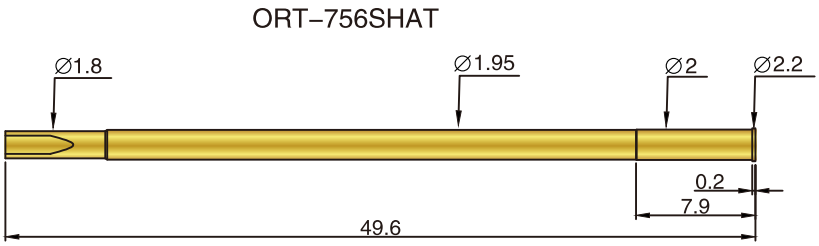
Installation Height:10.5mm
Grid:≥2.54(100Mil)

Mounting and Functional Dimensions:



Tip Style	Series Number	Tip Dim
	84	200
	84	150
	84	110
	14	200
	11	064

Receptacle:



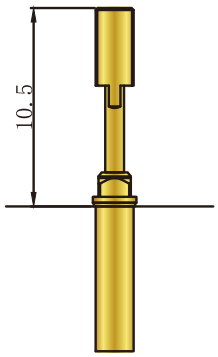
Materials(Plated):	
Barrel:	Brass, gold-plated
Plunger:	Becu, gold-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, gold-plated

Mechanical/Electrical Data:	
Current Rating:	5amps
Ri (Rtyp):	30milliohms max
Full Stroke:	4.4mm
Rated Stroke:	4.0mm
Spring Force:	2.8N(chooseable)

Mounting Hole Size:
CEM1 PMMA:sleeve are knurled φ2.00～2.02mm, sleeve without knurl φ1.99～2.0mm
Epoxy Resin:sleeve are knurled φ2.00～2.02mm, sleeve without knurl φ1.99～2.0mm

Operating Temperature:	
Standard:	-40°C:+80°C
Special Design"C":	-100°C-+200°C

Introduction to use:



Ordering Example:

ORT756 B 84 200 2.8N A

Series / Tip(Material) / Tip Style / Tip Diameter / Spring Force / Gold Plating

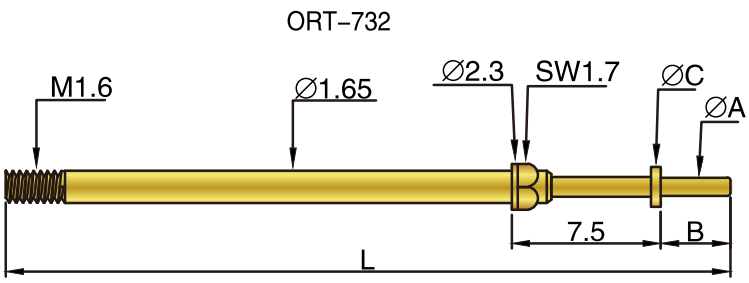
Make Test More Effective

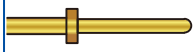
ORT732

100mil Step Probe

Installation Height:Hmm
Grid:≥2.54(100Mil)

Mounting and Functional Dimensions:

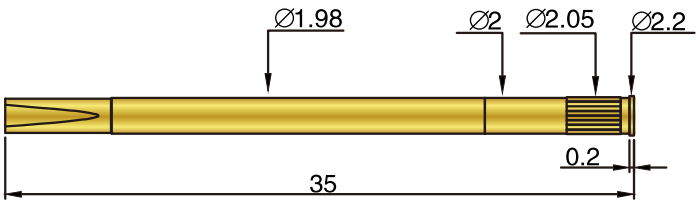


Tip Style	Series Number	Tip Dim
	16	
	11	
	11 G	

"G" is a special mark at the end of product number

Receptacle:

ORT-H732



Materials(Plated):

Barrel:	Brass, gold-plated
Plunger:	Becu, gold-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, gold-plated

IMechanical/Electrical Data:

Current Rating :	5amps
Ri (Rtyp):	30milliohms max
Full Stroke:	5.0mm
Rated Stroke:	4.0mm
Spring Force;	1.5N(chooseable)

Mounting Hole Size:

CEM1 PMMA:sleeve are knurled φ2.00～2.02mm, sleeve withoutknurl φ1.99mm

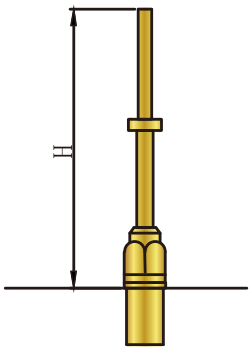
Epoxy Resin:sleeve are knurled φ2.00～2.02mm, sleeve without knurl φ1.99mm

Operating Temperature:

Standard:	-40°C:+80°C
Special Design"C":	-100°C-+200°C

Order Number	A Plunger Dia mm	B Plunger High mm	C Retainier Ring mm	L Length mm	H Intallation Hight mm
ORT732 B16 090 350 150	0.9	3.5	1.5	36.5	11.2
ORT732 B16 120 350 150	1.2	3.5	1.5	36.5	11.2
ORT732 B11 065 250 150	0.65	2.5	1.5	35.5	10.2
ORT732 B11 065 430 150	0.65	4.3	1.5	37.3	12.0
ORT731 B11 065 500 150	0.65	5.0	1.5	38.0	12.7

Introduction to use:



Ordering Example:

ORT732 B 16 090(A) 350(B) 150(C) 2.5N A

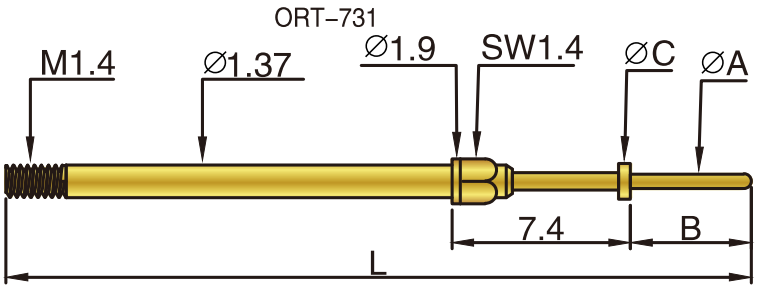
Series / Tip(Material) / Tip Style / Tip Diameter / Head height / Ring Diameter / Spring Force / Gold Plating

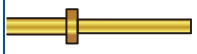
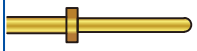
ORT731

94mil Step Probe

Installation Height:Hmm
Grid:≥2.4(94Mil)

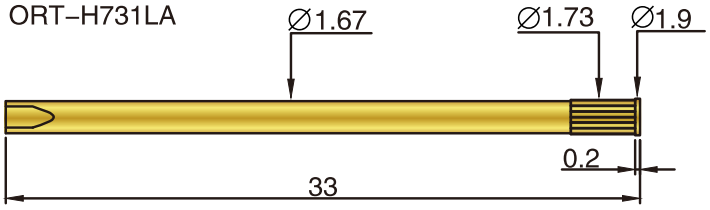
Mounting and Functional Dimensions:



Tip Style	Series Number	Tip Dim
	16	
	11	
	11 G	

"G" is a special mark at the end of product number

Receptacle:



Materials(Plated):

Barrel:	Brass, gold-plated
Plunger:	Becu, gold-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, gold-plated

Mechanical/Electrical Data:

Current Rating	5amps
Ri (Rtyp):	30milliohms max
Full Stroke:	4.4mm
Rated Stroke:	3.5mm
Spring Force:	1.2N(chooseable)

Mounting Hole Size:

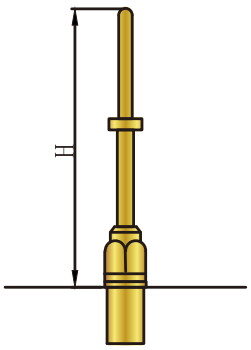
CEM1 PMMA:	φ1.67mm～φ1.68mm
Epoxy Resin:	φ1.67mm～φ1.68mm

Operating Temperature:

Standard:	-40°C:+80°C
Special Design"C":	-100°C-+200°C

Order Number	A Plunger Dia mm	B Plunger High mm	C Retainier Ring mm	L Length mm	H Intallation Hight mm
ORT731 B11 060 500 150	0.6	5.0	1.5	30.9	12.6
ORT731 B11 070 500 150	0.7	5.0	1.5	30.9	12.6
ORT731 B11 060 350 150	0.6	3.5	1.5	29.4	11.1
ORT731 B11 070 350 150	0.7	3.5	1.5	29.4	11.1
ORT731 B11 080 350 150	0.8	3.5	1.5	29.4	11.1
ORT731 B11 100 350 150	1.0	3.5	1.5	29.4	11.1
ORT731 B16 060 350 150	0.6	3.5	1.5	29.4	11.1

Introduction to use:



Ordering Example:

ORT731 B 11 060(A) 350(B) 150(C) 1.2N A

Series / Tip(Material) / Tip Style / Tip Diameter / Head height / Ring Diameter / Spring Force / Gold Plating

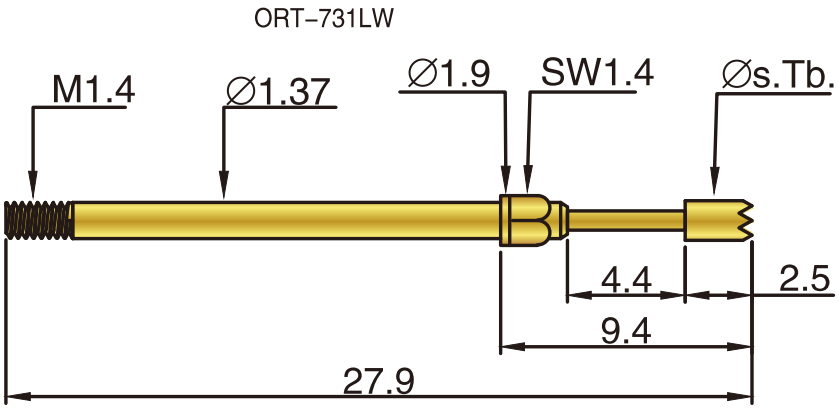
Make Test More Effective

ORT731LW

94mil Threaded Probe

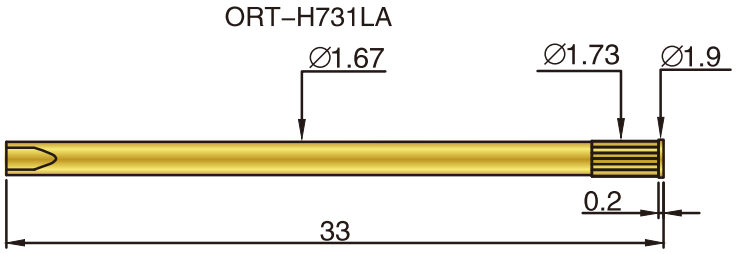
Installation Height:9.6mm
Grid:≥2.4(94Mil)

Mounting and Functional Dimensions:



Tip Style	Series Number	Tip Dim
	17	150
	06	150
	05	150
	16	075
	11	075

Receptacle:



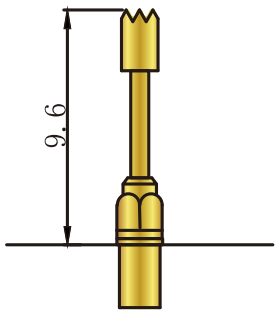
Materials(Plated):	
Barrel:	Brass, gold-plated
Plunger:	Becu, gold-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, gold-plated

Mechanical/Electrical Data:	
Current Rating:	5amps
Ri (Rtyp):	30milliohms max
Full Stroke:	4.4mm
Rated Stroke:	3.5mm
Spring Force;	1.2N(chooseable)

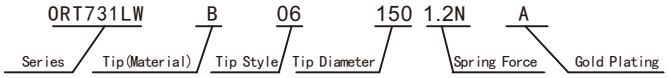
Mounting Hole Size:	
CEM1 PMMA:	ϕ1.67mm～ϕ1.68mm
Epoxy Resin:	ϕ1.67mm～ϕ1.68mm

Operating Temperature:	
Standard:	-40°C:+80°C
Special Design"C":	-100°C-+200°C

Introduction to use:



Ordering Example:

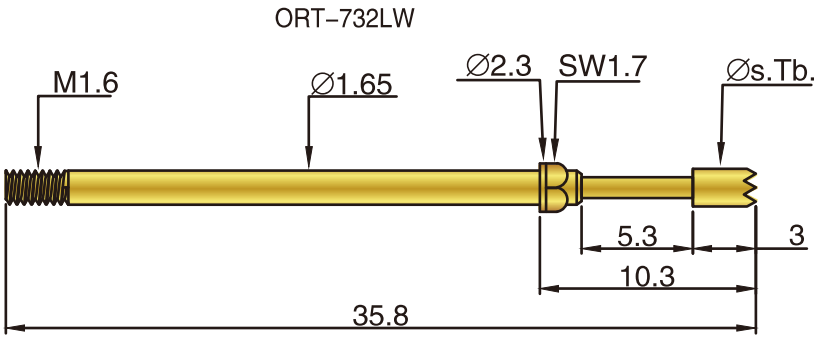


ORT732LW

100mil Step Probes

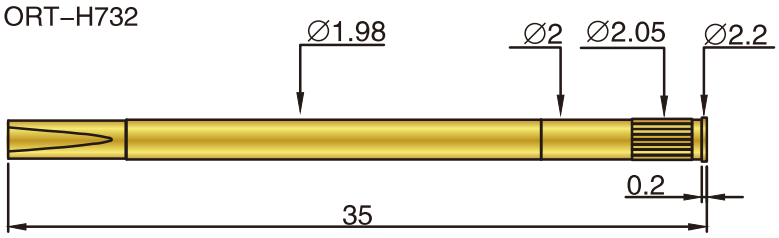
Installation Height:Hmm
Grid:≥2.54(100Mil)

Mounting and Functional Dimensions:



Tip Style	Series Number	Tip Dim
	17	150
	06	180
	05	200
	16	100
	11	100
	07	200
	12	200
	28	200
	14	200

Receptacle:



Materials(Plated):	
Barrel:	Brass, gold-plated
Plunger:	Becu, gold-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, gold-plated

Mechanical/Electrical Data:	
Current Rating:	5amps
Ri (Rtyp):	30milliohms max
Full Stroke:	5.0mm
Rated Stroke:	4.0mm
Spring Force:	1.5N(chooseable)

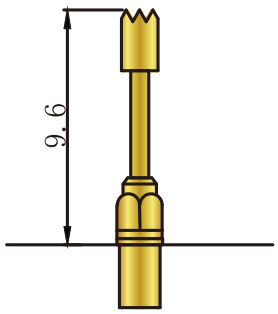
Mounting Hole Size:

CEM1 PMMA:sleeve are knurled φ2.00～2.02mm, sleeve without knurl φ1.99mm

Epoxy Resin:sleeve are knurled φ2.00～2.02mm, sleeve without knurl φ1.99mm

Operating Temperature:	
Standard:	-40°C:+80°C
Special Design"C":	-100°C-+200°C

Introduction to use:



Ordering Example:

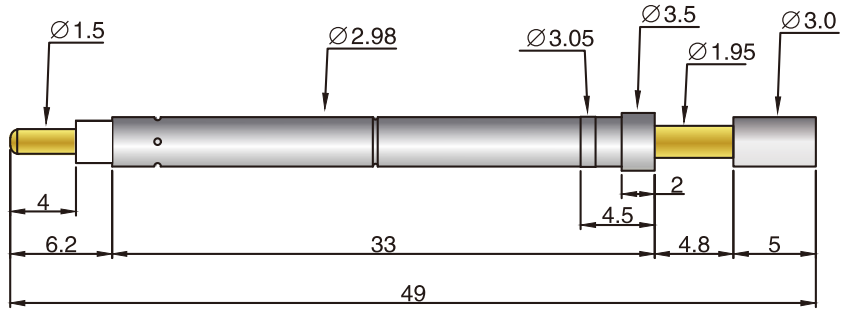
ORT732LW B 06 180 1.2N A

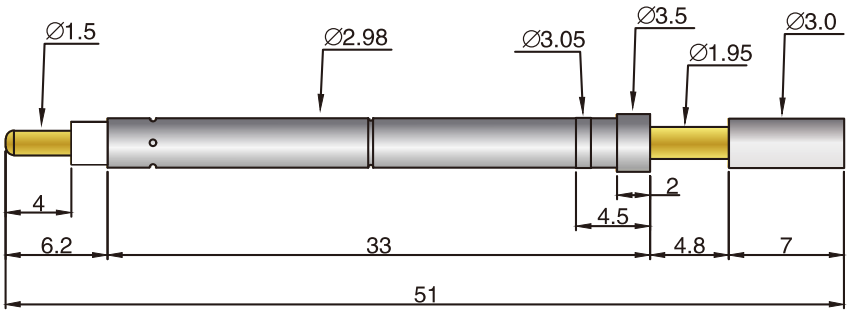
Series / Tip(Material) / Tip Style / Tip Diameter / Spring Force / Gold Plating

Make Test More Effective

Mounting and Functional Dimensions:

ORT-300K





Materials(Plated):	
Barrel:	Brass, Niplated
Plunger:	Becu, gold-plated
Spring:	SWP, Au on Ni Plated

Mechanical/Electrical Data:	
Current Rating:	5amps
Switch Stroke:	2.0mm
Full Stroke:	4.8mm
Rated Stroke:	3.2mm
Spring Force:	3N(chooseable)

Mounting Hole Size:	
CEM1 PMMA:	ϕ3.0mm
Epoxy Resin:	ϕ3.0mm

Operating Temperature:	
Standard:	-40°C:+80°C
Special Design"C":	-100°C-+200°C

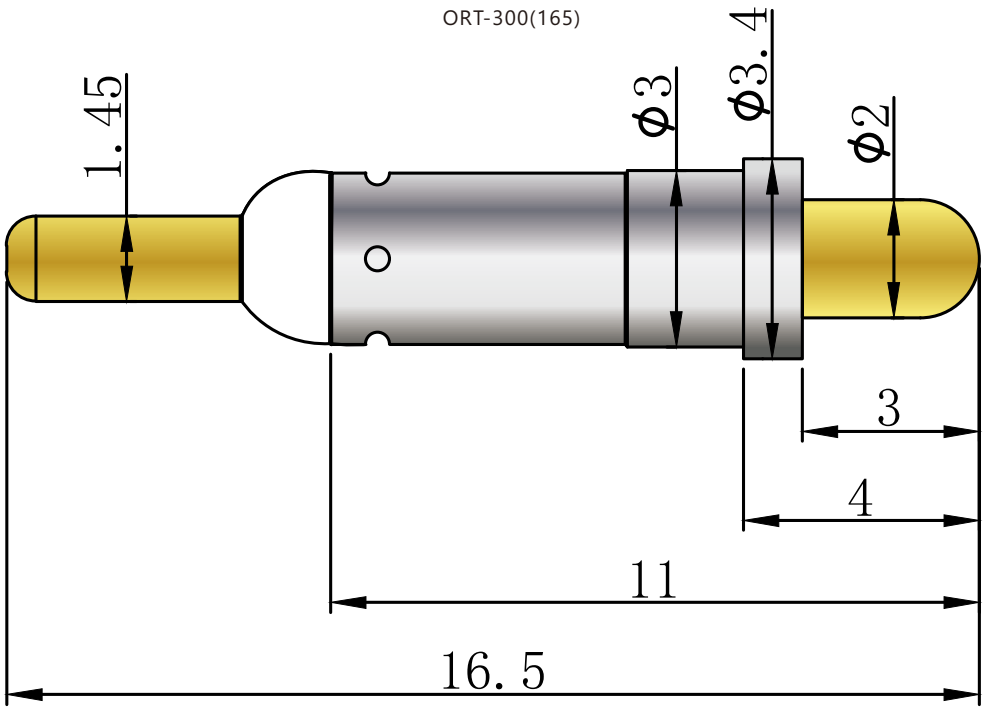
Ordering Example:

ORT300K P 02 300 3N A

Series / Tip(Material) / Tip Style / Tip Diameter / Spring Force / Gold Plating

ORT300 (165)

Mounting and Functional Dimensions:



Materials(Plated):	
Barrel:	Brass, Niplated
Plunger:	Becu, gold-plated
Spring:	SWP, Au on Ni Plated

Mechanical/Electrical Data:	
Current Rating:	5amps
Switch Stroke:	0.5mm
Full Stroke:	3.0mm
Rated Stroke:	2.0mm
Spring Force:	1.4N(chooseable)

Mounting Hole Size:	
CEM1 PMMA:	ϕ3.0mm
Epoxy Resin:	ϕ3.0mm

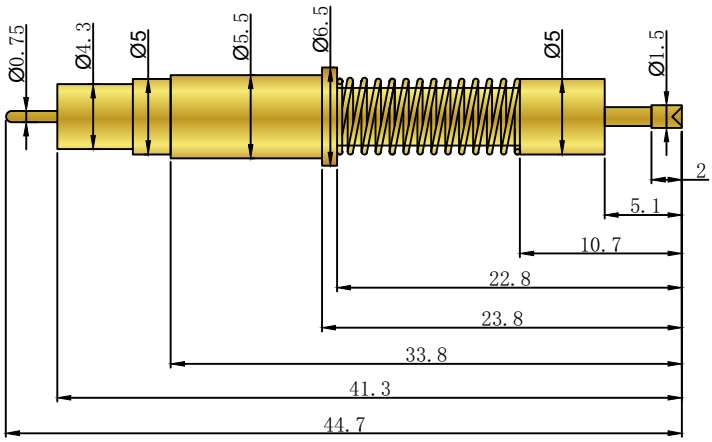
Operating Temperature:	
Standard:	-40°C:+80°C
Special Design"C":	-100°C-+200°C

Ordering Example:

ORT300	P	02	300	3N	A
Series	Tip(Material)	Tip Style	Tip Diameter	Spring Force	Gold Plating

Mounting and Functional Dimensions:

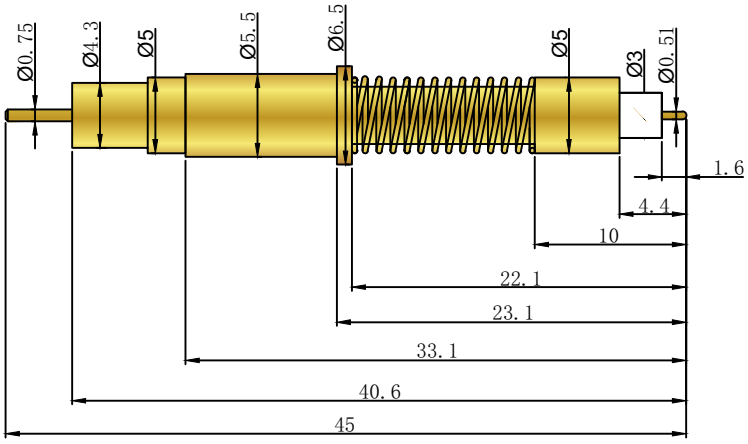
ORT-550



Materials(Plated):	
Barrel:	Brass, Niplated
Plunger:	Becu, gold-plated
Spring:	SWP, Au on Ni Plated

Mechanical/Electrical Data:	
Current Rating:	10amps
Full Stroke:	6.3mm
Rated Stroke:	4.2mm
Spring Force:	10N(chooseable)

ORT-550(450)

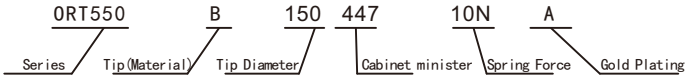


Materials(Plated):	
Barrel:	Brass, Niplated
Plunger:	Becu, gold-plated
Spring:	SWP, Au on Ni Plated

Mechanical/Electrical Data:	
Current Rating:	10amps
Full Stroke:	5.6mm
Rated Stroke:	4.2mm
Spring Force:	5N(chooseable)

Operating Temperature:	
Standard:	-40°C:+80°C
Special Design"C":	-100°C-+200°C

Ordering Example:



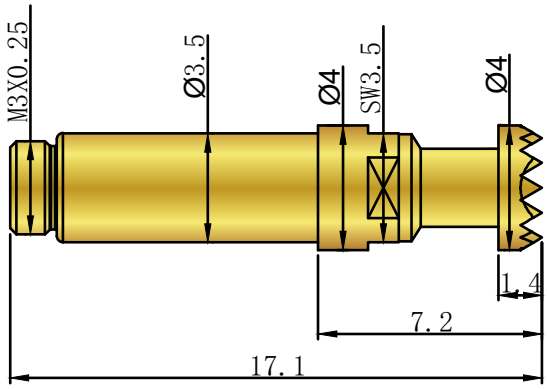
ORT552

200mil Threaded Probe(short)

Installation Height:7.3mm
Grid:≥5.08(200Mil)

Mounting and Functional Dimensions:

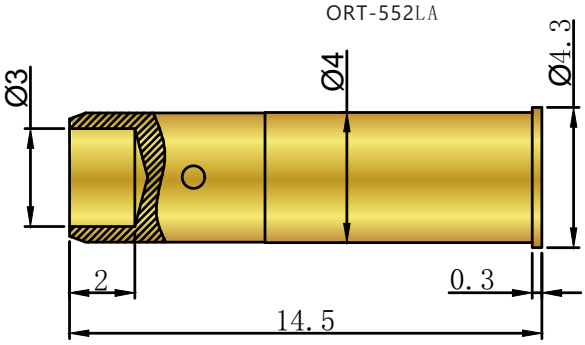
ORT-552



Tip Style	Series Number	Tip Dim
	06	230
	17	230

Receptacle:

ORT-552LA



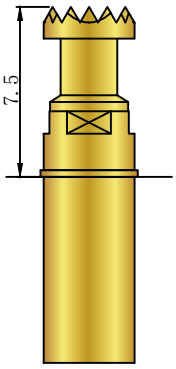
Materials(Plated):	
Barrel:	Brass, gold-plated
Plunger:	Becu, gold-plated
Spring:	SUS, Au on Ni Plated
Receptacle:	Brass, gold-plated

Mechanical/Electrical Data:	
Current Rating:	40amps
Ri (Rtyp):	20milliohms max
Full Stroke:	2.5mm
Rated Stroke:	2.0mm
Spring Force:	2N(chooseable)

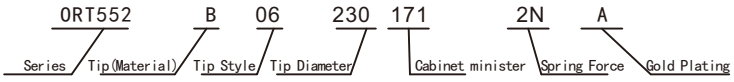
Mounting Hole Size:	
ORT-552LA:	3.98～4.0mm

Operating Temperature:	
Standard:	-40°C:+80°C
Special Design"C":	-100°C-+200°C

Introduction to use:



Ordering Example:



Make Test More Effective

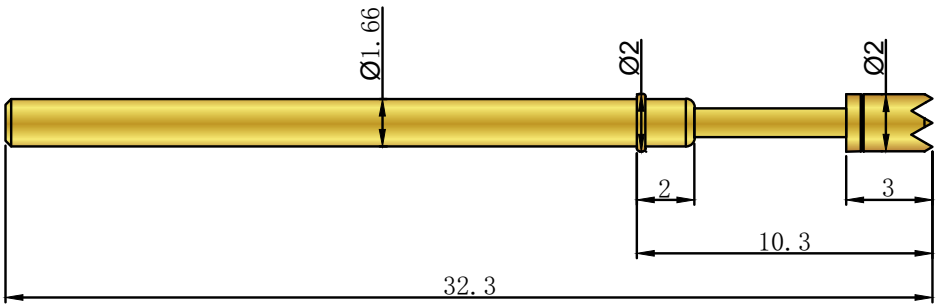
ORT772

100mil Insert Probe

Installation Height:10.5mm
Grid:≥2.54(100Mil)

Mounting and Functional Dimensions:

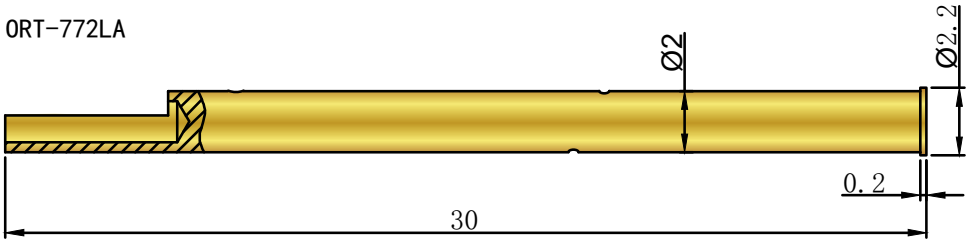
ORT-772



Tip Style	Series Number	Tip Dim
	17	200
	06	200
	02	200
	12	200

Receptacle:

ORT-772LA



Materials(Plated):	
Barrel:	Brass, gold-plated
Plunger:	Becu, gold-plated
Spring:	SUS, Au on Ni Plated
Receptacle:	Brass, gold-plated

Mechanical/Electrical Data:	
Current Rating:	16amps
Ri (Rtyp):	20milliohms max
Full Stroke:	5.3mm
Rated Stroke:	4.0mm
Spring Force:	1.5N(chooseable)

Mounting Hole Size:	
ORT-772LA:	1.98～2.0mm

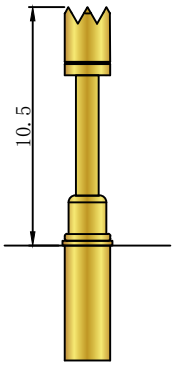
Operating Temperature:	
Standard:	-40°C:+80°C
Special Design"C":	-100°C-+200°C

Ordering Example:

ORT772 B 17 200 323 1.5N A

Series / Tip(Material) / Tip Style / Tip Diameter / Cabinet minister / Spring Force / Gold Plating

Introduction to use:



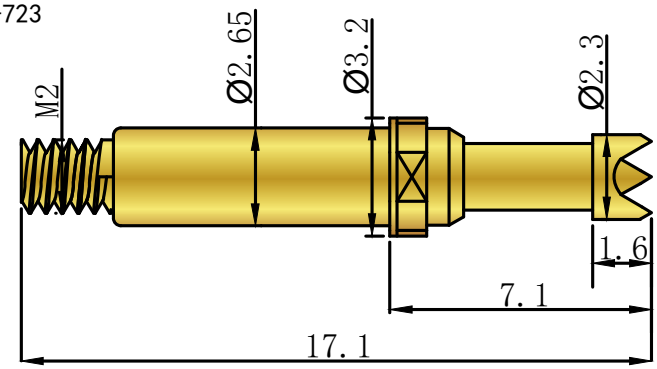
ORT723

157mil Threaded Probe(Short)

Installation Height:7.3mm
Grid:≥3.98(157Mil)

Mounting and Functional Dimensions:

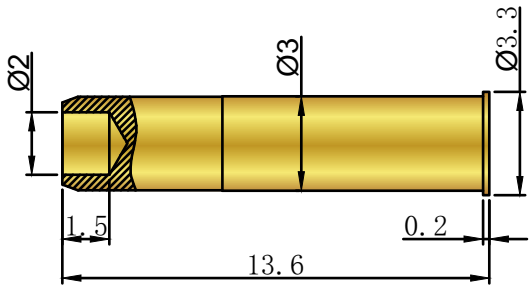
ORT-723



Tip Style	Series Number	Tip Dim
	17	230
	06	230
	02	230
	12	230

Receptacle:

ORT-723LA



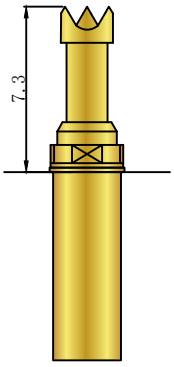
Materials(Plated):	
Barrel:	Brass, gold-plated
Plunger:	Becu, gold-plated
Spring:	SUS, Au on Ni Plated
Receptacle:	Brass, gold-plated

Mechanical/Electrical Data:	
Current Rating:	10amps
Ri (Rtyp):	20milliohms max
Full Stroke:	3.5mm
Rated Stroke:	2.8mm
Spring Force:	1.5N(chooseable)

Mounting Hole Size:	
ORT-723LA:	2.98～2.99mm

Operating Temperature:	
Standard:	-40°C:+80°C
Special Design"C":	-100°C-+200°C

Introduction to use:



Ordering Example:

ORT723 B 17 230 171 1.5N A

Series / Tip(Material) / Tip Style / Tip Diameter / Cabinet minister / Spring Force / Gold Plating

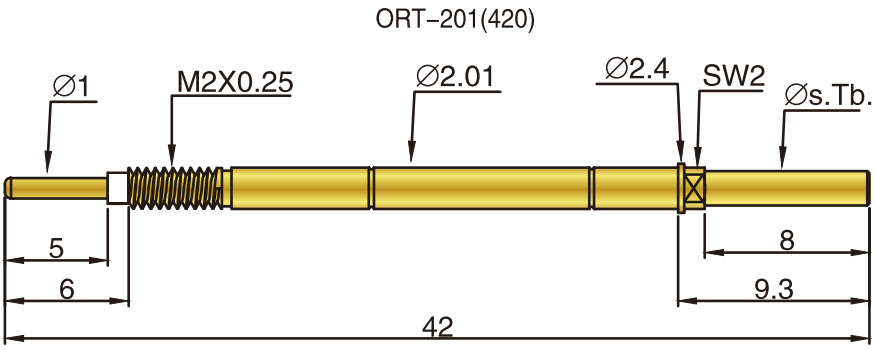
Make Test More Effective

ORT201 (420)

118mil Switch Probe(Threaded)

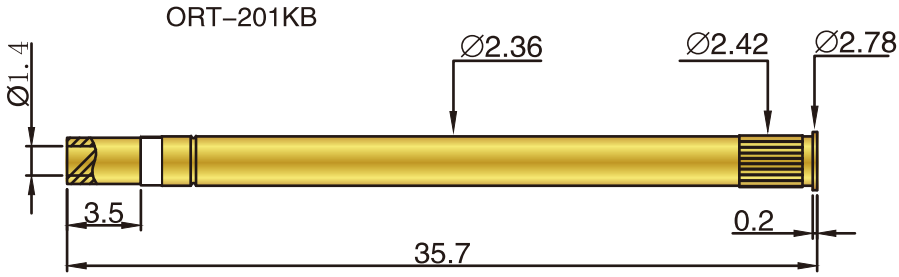
Installation Height:10.6～15.6mm
Grid:≥3.0(118Mil)

Mounting and Functional Dimensions:



Tip Style	Series Number	Tip Dim
	16	167
	16	100
	11	167

Receptacle:



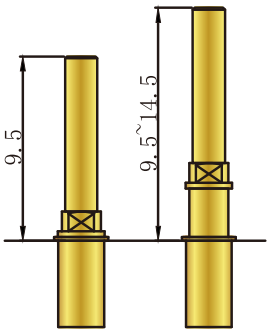
Materials(Plated):	
Barrel:	Brass, gold-plated
Plunger:	Becu, gold-plated
Spring:	SWP, Au on Ni Plated
Receptacle:	Brass, gold-plated

Mechanical/Electrical Data:	
Current Rating:	5amps
Switch Stroke:	1.2mm
Full Stroke:	4.0mm
Rated Stroke:	3.0mm
Spring Force:	1.5N(chooseable)

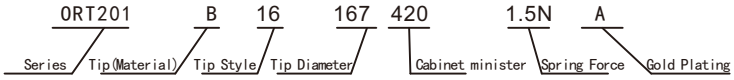
Mounting Hole Size:	
CEM1 PMMA:	φ2.36mm～φ2.38mm
Epoxy Resin:	φ2.36mm～φ2.38mm

Operating Temperature:	
Standard:	-40°C:+80°C
Special Design"C":	-100°C-+200°C

Introduction to use:

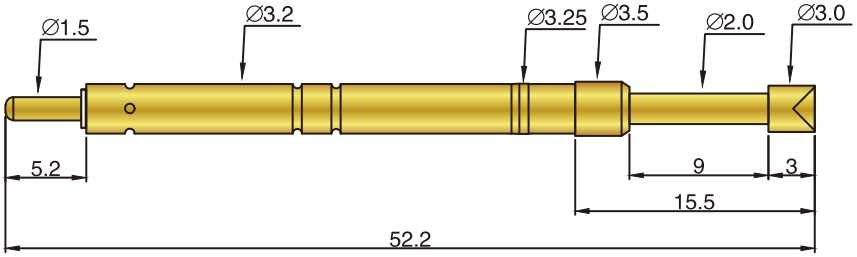


Ordering Example:

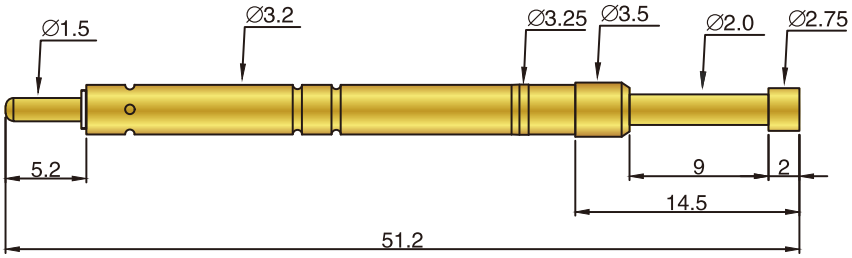


Mounting and Functional Dimensions:

ORT-320(522)



ORT-320(512)



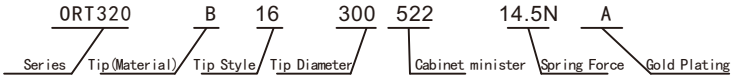
Materials(Plated):	
Barrel:	Brass, Ni plated
Plunger:	Becu, gold-plated
Spring:	SUS

Mechanical/Electrical Data:	
Current Rating:	5amps
Switch Stroke:	3.8mm
Full Stroke:	6.3mm
Rated Stroke:	4.2mm
Spring Force:	14.5N(chooseable)

Mounting Hole Size:	
CEM1 PMMA:	ϕ3.2mm
Epoxy Resin:	ϕ3.2mm

Operating Temperature:	
Standard:	-40°C:+80°C
Special Design"C":	-100°C-+200°C

Ordering Example:

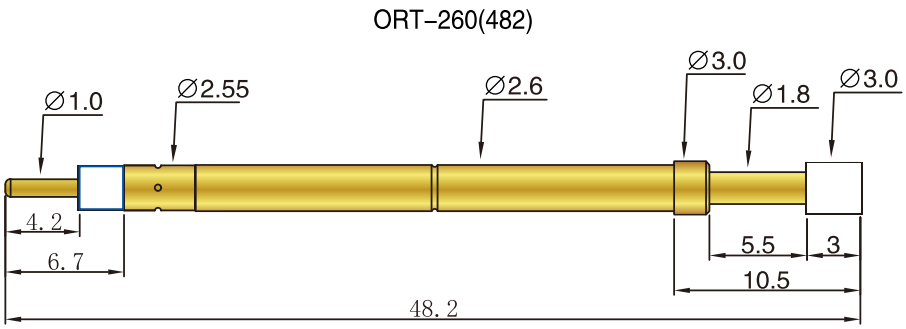


ORT260 (482)

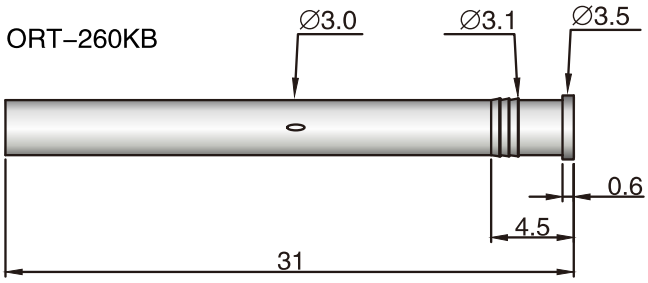
130mil Switch Probe

Installation Height:11.1mm
Grid:≥3.3(130Mil)

Mounting and Functional Dimensions:



Receptacle:



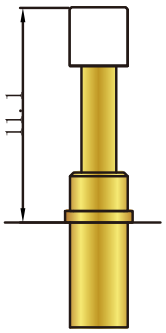
Materials(Plated):	
Barrel:	Brass, Ni plated
Plunger:	Becu, gold-plated
Spring:	SUS
Receptacle:	Brass, Ni plated

Mechanical/Electrical Data:	
Current Rating:	5amps
Switch Stroke:	2.5mm
Full Stroke:	5.5mm
Rated Stroke:	4.2mm
Spring Force:	2.5N(chooseable)

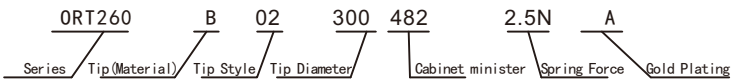
Mounting Hole Size:	
CEM1 PMMA:	φ3.00mm～φ3.02mm
Epoxy Resin:	φ3.00mm～φ3.02mm

Operating Temperature:	
Standard:	-40℃:+80℃
Special Design"C":	-100℃-+200℃

Introduction to use:

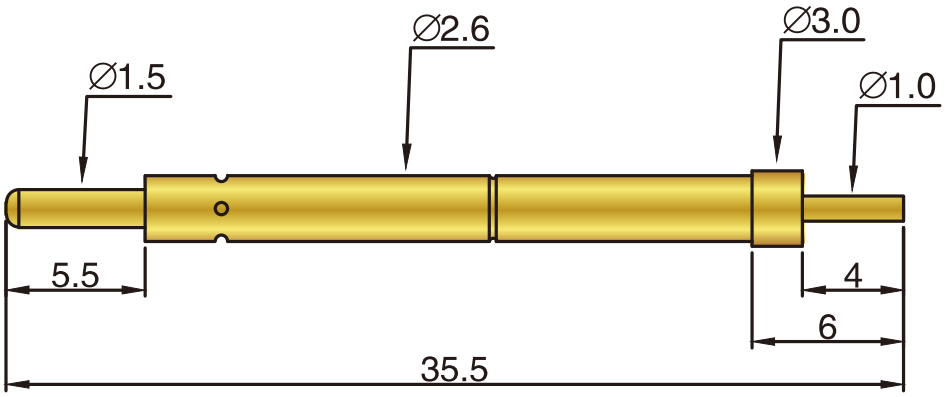


Ordering Example:



Mounting and Functional Dimensions:

ORT-260(355)



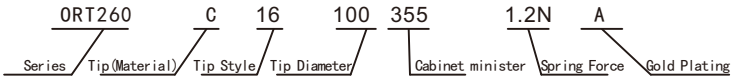
Materials(Plated):	
Barrel:	Brass, Ni plated
Plunger:	Brass, gold-plated
Spring:	SUS

Mechanical/Electrical Data:	
Current Rating:	5amps
Switch Stroke:	1.5mm
Full Stroke:	4.0mm
Rated Stroke:	4.0mm
Spring Force:	1.2N(chooseable)

Mounting Hole Size:	
CEM1 PMMA:	φ2.6mm
Epoxy Resin:	φ2.6mm

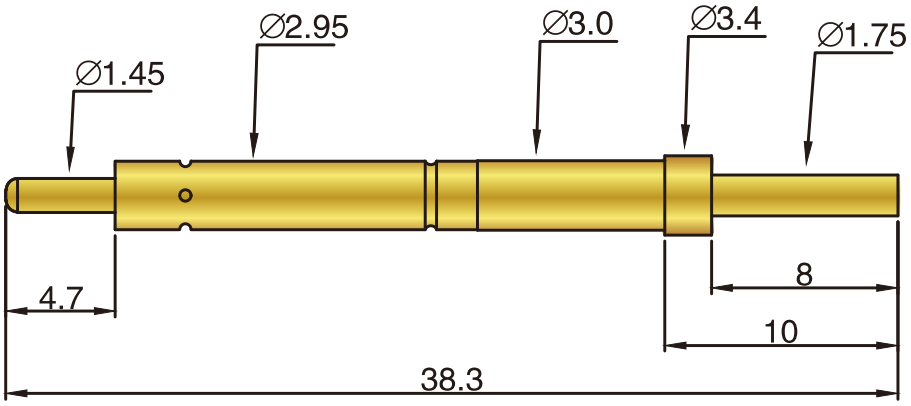
Operating Temperature:	
Standard:	-40°C:+80°C
Special Design"C":	-100°C-+200°C

Ordering Example:



Mounting and Functional Dimensions:

ORT-300(383)



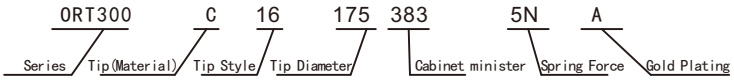
Materials(Plated):	
Barrel:	Brass, Ni plated
Plunger:	Brass, gold-plated
Spring:	SUS

Mechanical/Electrical Data:	
Current Rating:	5amps
Switch Stroke:	1.5mm
Full Stroke:	4.5mm
Rated Stroke:	4.0mm
Spring Force:	1.2N(chooseable)

Mounting Hole Size:	
CEM1 PMMA:	ϕ3.0mm
Epoxy Resin:	ϕ3.0mm

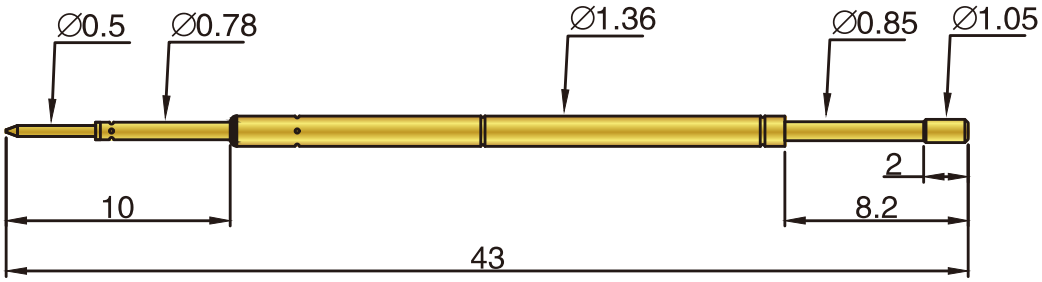
Operating Temperature:	
Standard:	-40˚C:+80˚C
Special Design"C":	-100˚C-+200˚C

Ordering Example:



Mounting and Functional Dimensions:

ORT-136(430)



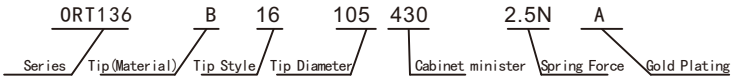
Materials(Plated):	
Barrel:	Bronze, gold-plated
Plunger:	Becu, gold-plated
Spring:	SUS

Mechanical/Electrical Data:	
Current Rating:	3amps
Switch Stroke :	1.5mm
Full Stroke:	4.3mm
Rated Stroke :	4.2mm
Spring Force:	2.5N(chooseable)

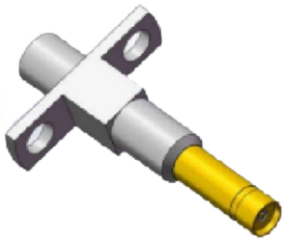
Mounting Hole Size:	
CEM1 PMMA:	ϕ1.38mm
Epoxy Resin:	ϕ1.38mm

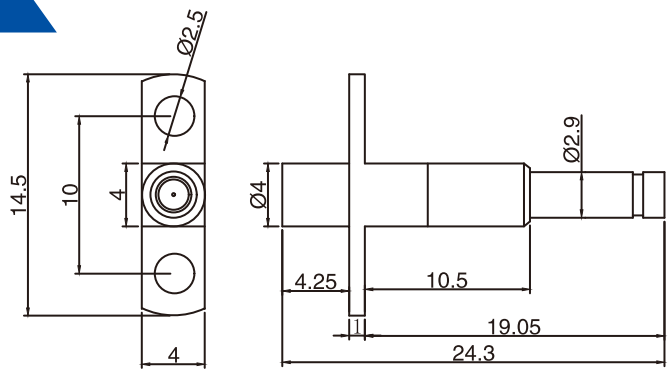
Operating Temperature:	
Standard:	-40°C:+80°C
Special Design"C":	-100°C-+200°C

Ordering Example:

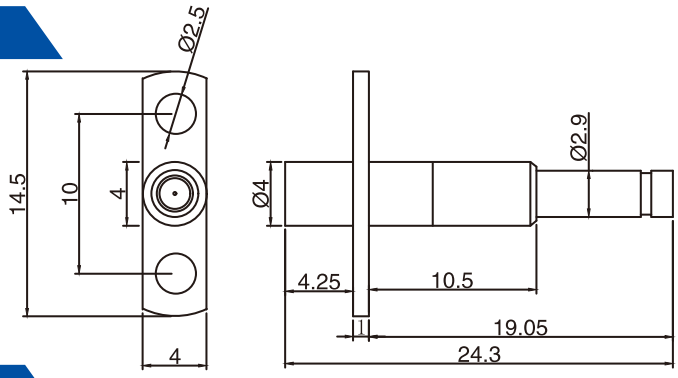


▶ ORT-RF-4029J

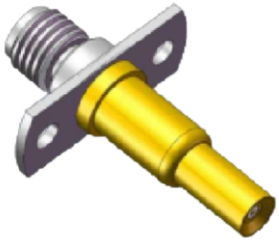


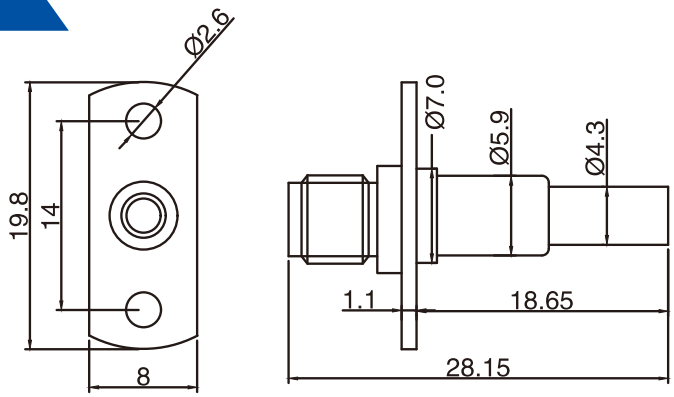


▶ ORT-RF-4129J

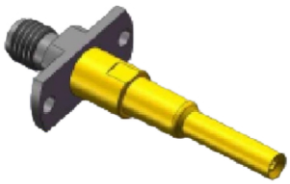


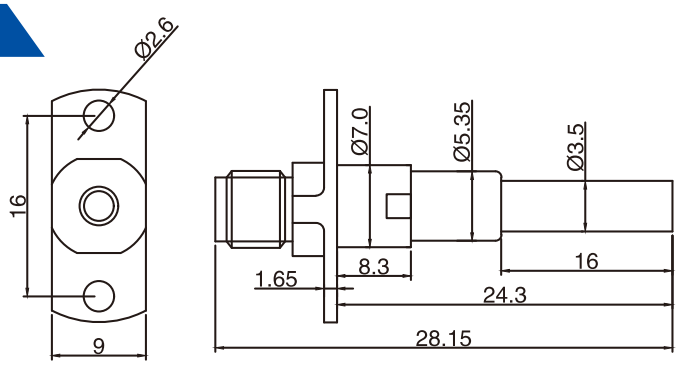
▶ ORT-RF-1343J





▶ ORT-RF-13516



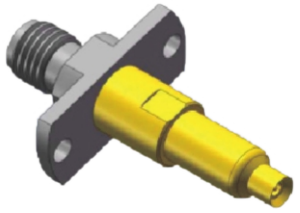


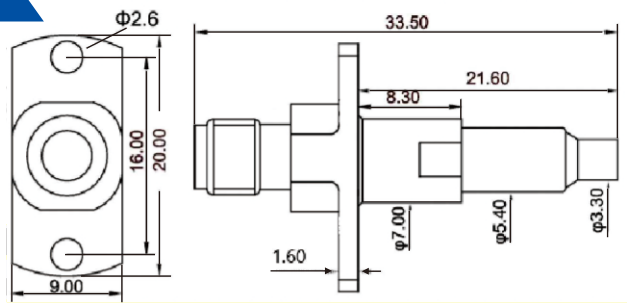
Ordering Example:

ORT - RF - 1033J

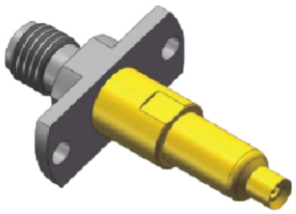
Series — Tip(Material)

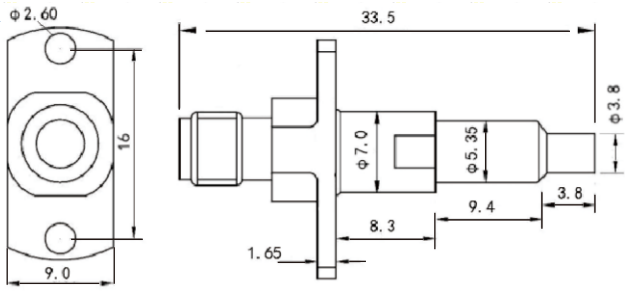
▶ ORT-RF-1033J



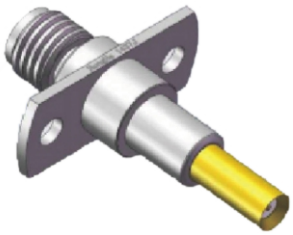


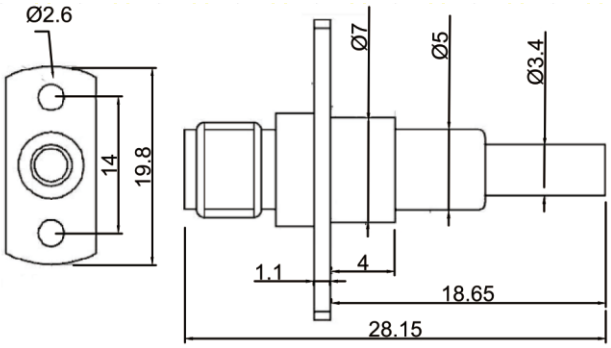
▶ ORT-RF-1038J



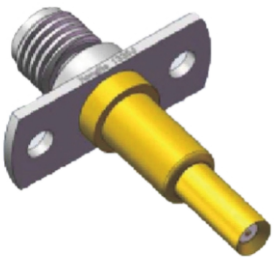


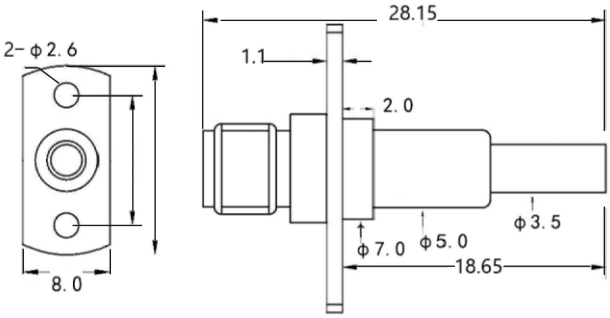
▶ ORT-RF-1437J





▶ ORT-RF-1335J



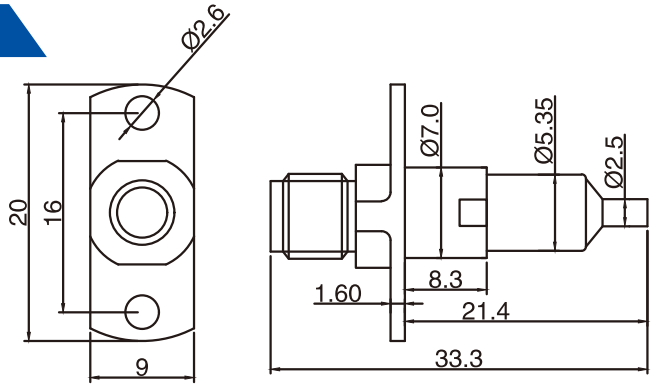


Ordering Example:

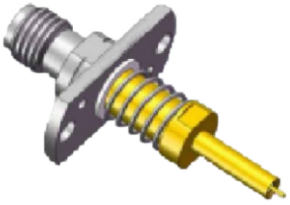
ORT - RF - 1033J

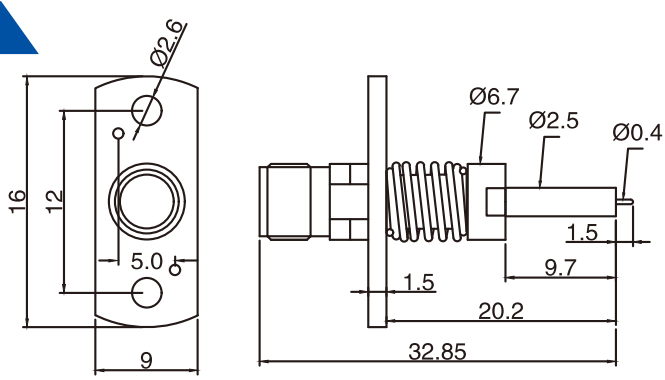
Series — Tip(Material)

▶ ORT-RF-1025J

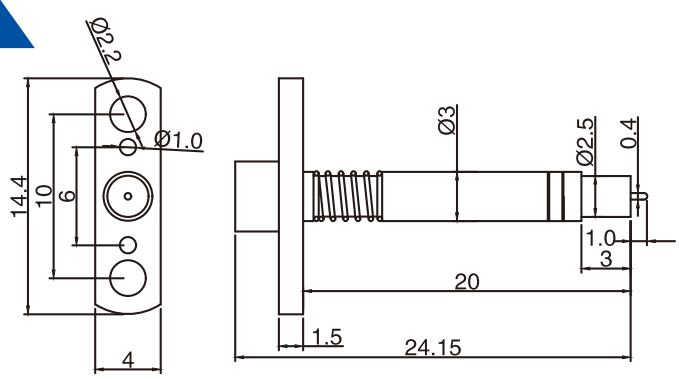


▶ ORT-RF-1124J

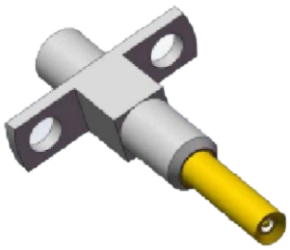


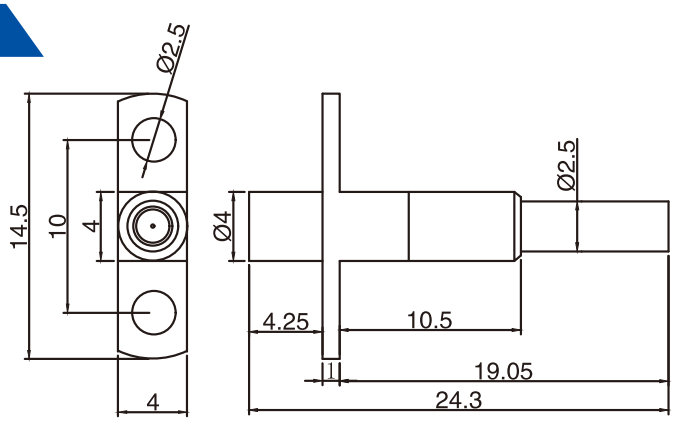


▶ ORT-RF-2025J



▶ ORT-RF-4025J



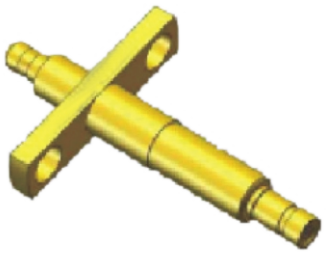


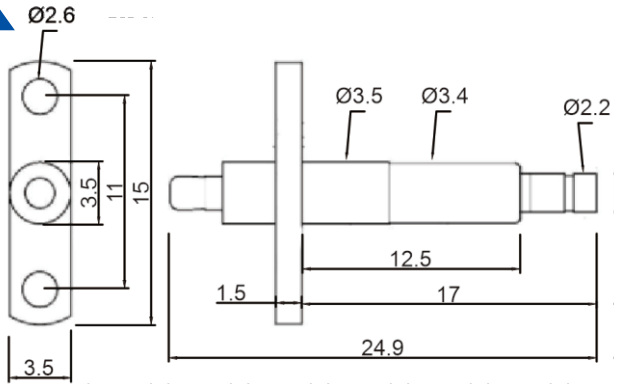
Ordering Example:

ORT - RF - 1033J

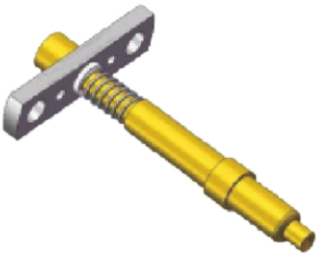
Series — Tip(Material)

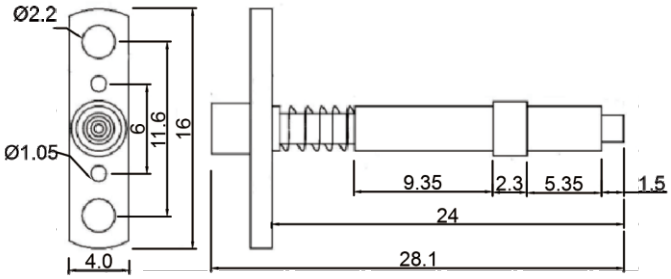
▶ ORT-RF-3022J



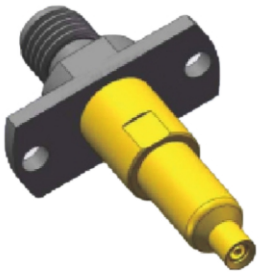


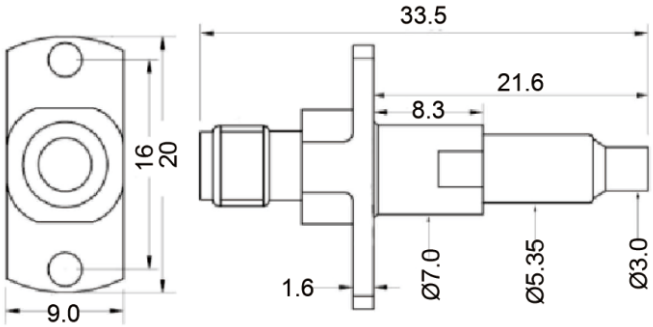
▶ ORT-RF-2018J



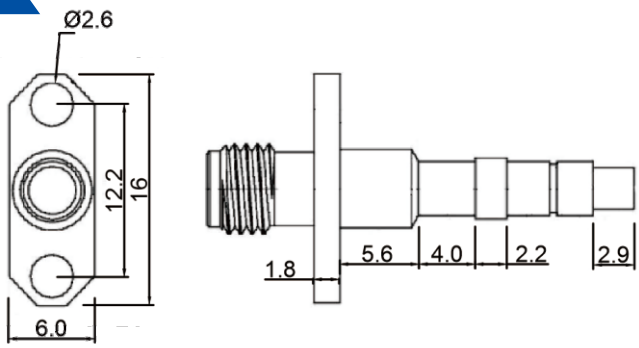


▶ ORT-RF-1030A





▶ ORT-RF-1629A

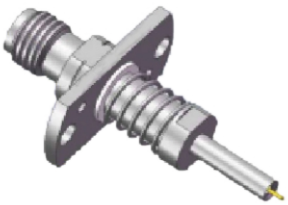


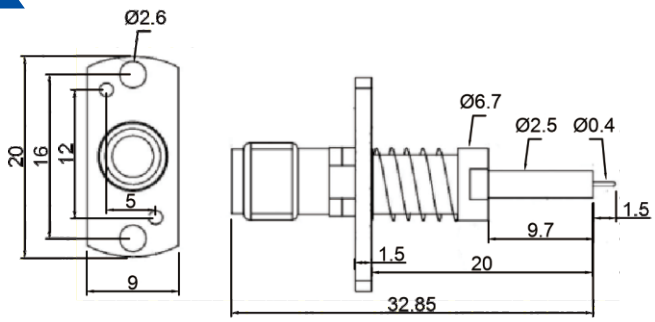
Ordering Example:

ORT - RF - 1033J

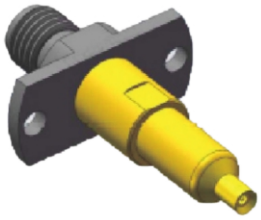
Series — Tip(Material)

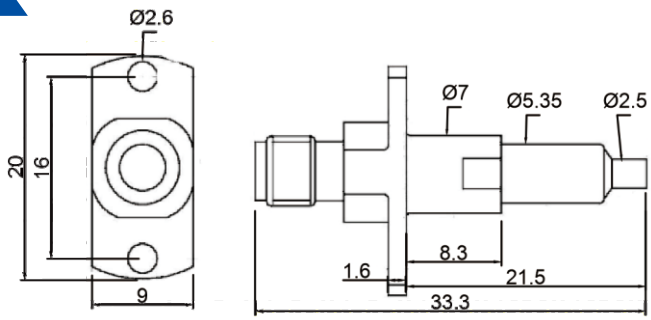
▶ ORT-RF-1125J



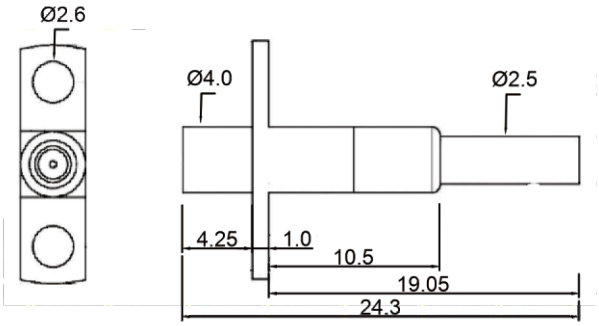


▶ ORT-RF-1026J

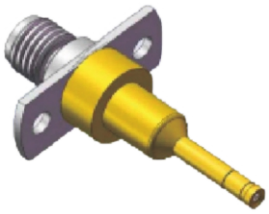


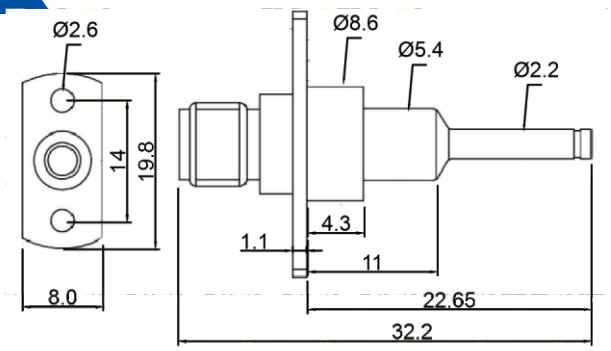


▶ ORT-RF-4125J



▶ ORT-RF-1022J



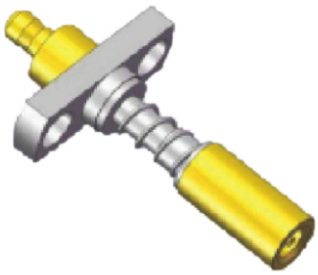


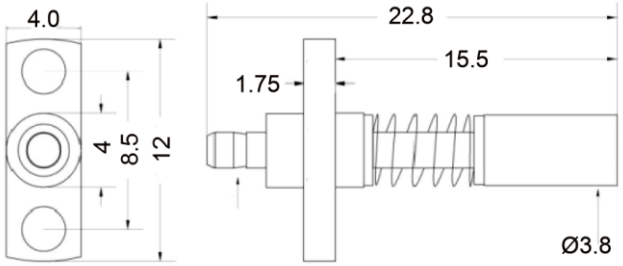
Ordering Example:

ORT - RF - 1033J

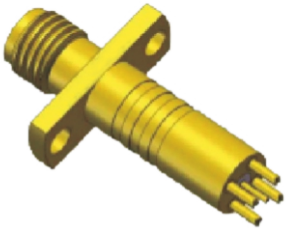
Series — Tip(Material)

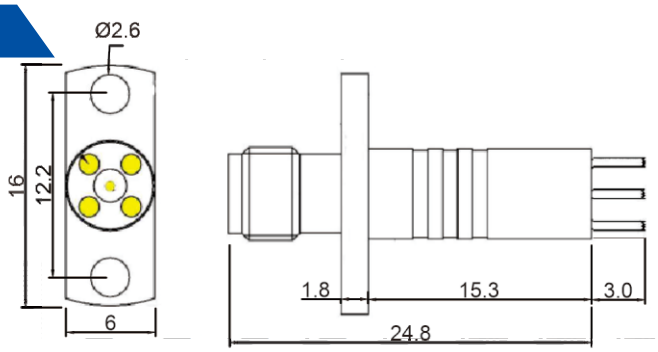
▶ ORT-RF-3034A 5N



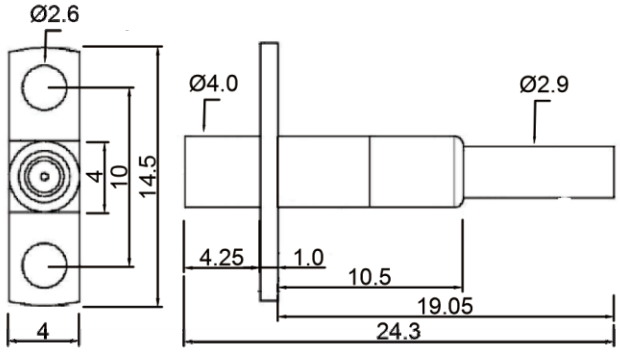


▶ ORT-RF-1015C

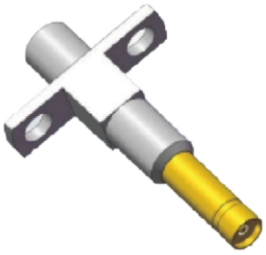


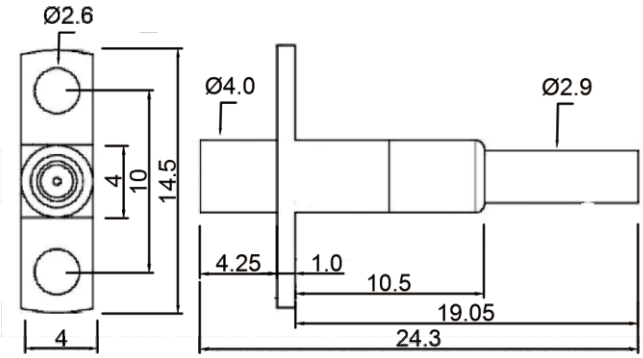


▶ ORT-RF-4129A



▶ ORT-RF-4029A



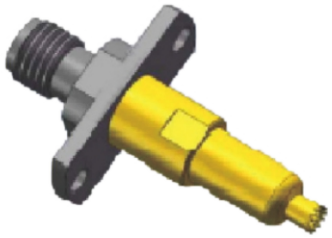


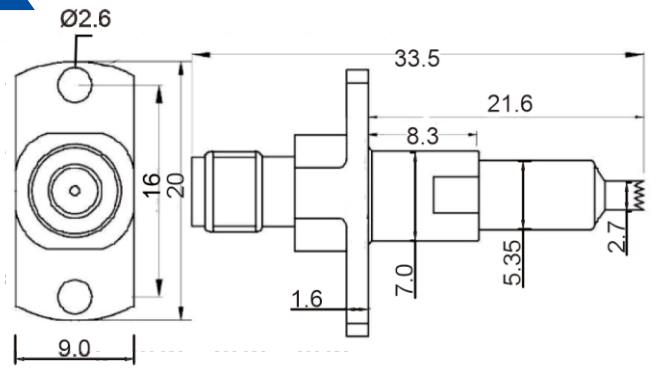
Ordering Example:

ORT - RF - 1033J

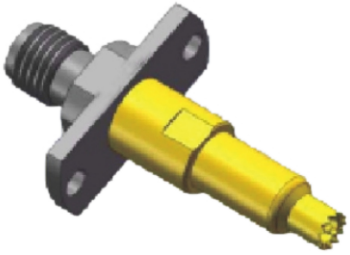
Series — Tip(Material)

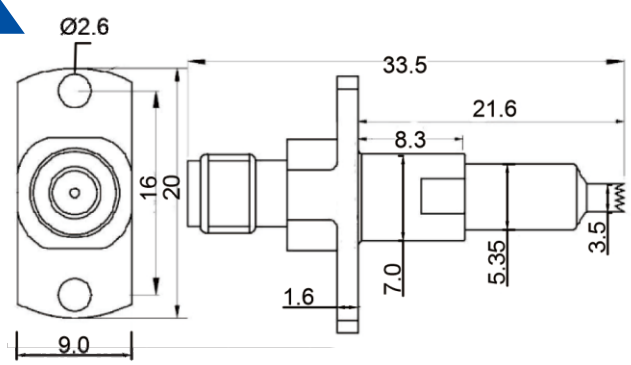
▶ ORT-RF-1027C



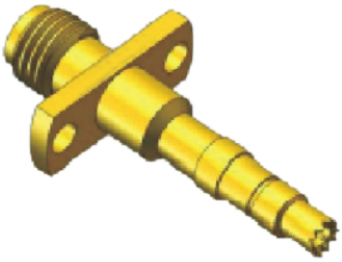


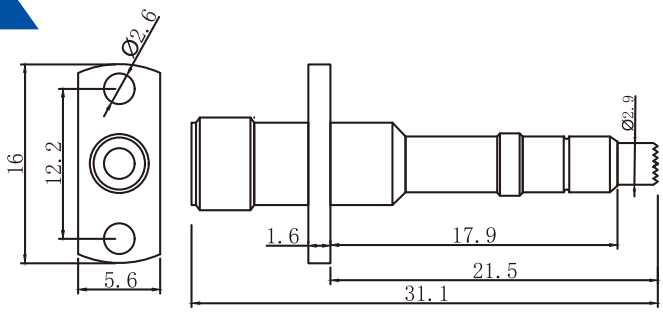
▶ ORT-RF-1035C



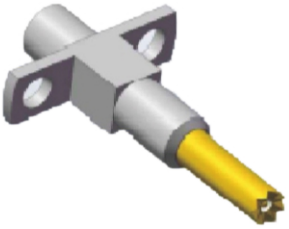


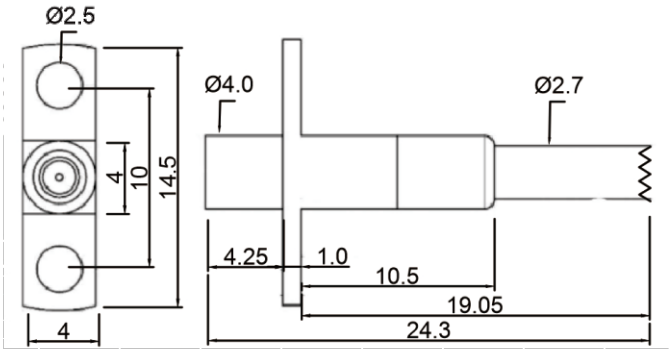
▶ ORT-RF-1629C





▶ ORT-RF-4027C



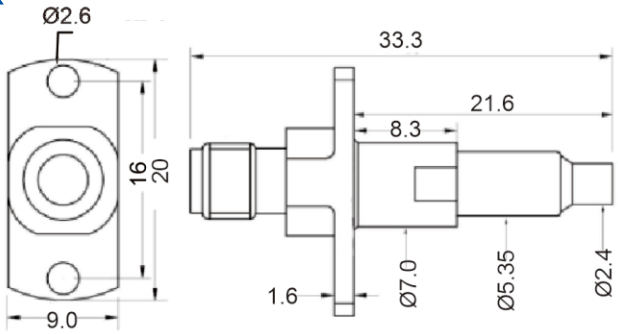


Ordering Example:

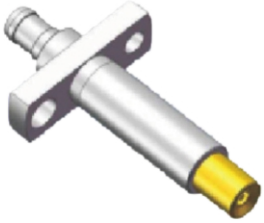
ORT - RF - 1033J

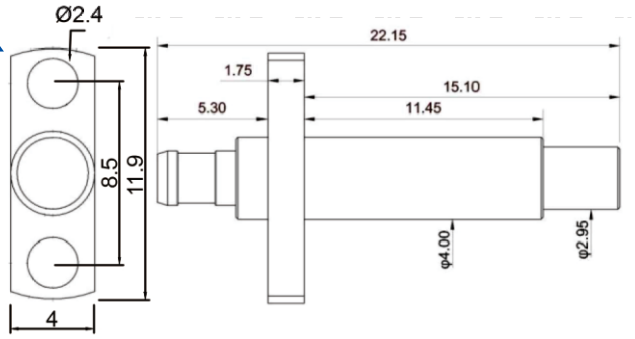
Series　　Tip(Material)

▶ ORT-RF-1024A

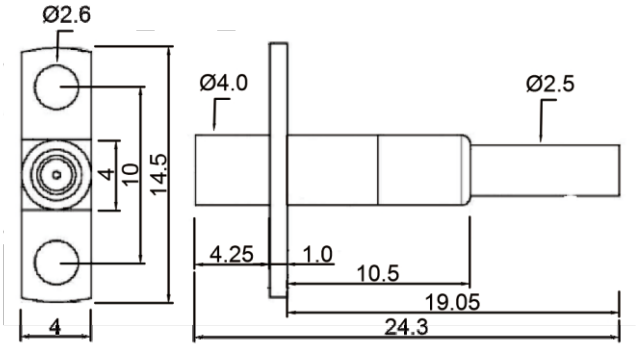


▶ ORT-RF-7029A

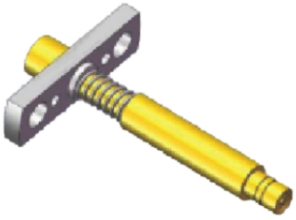


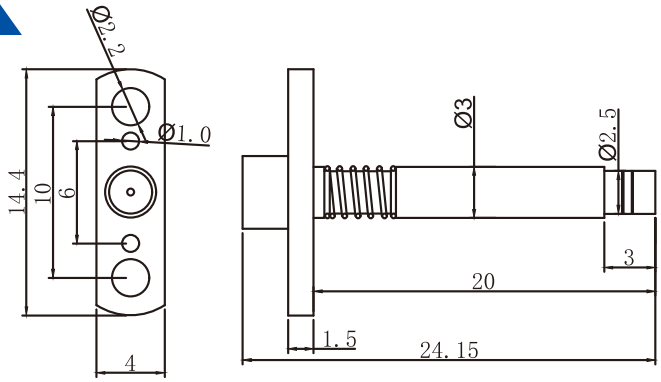


▶ ORT-RF-4125A



▶ ORT-RF-2022A



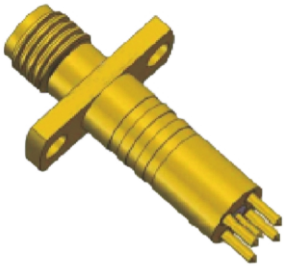


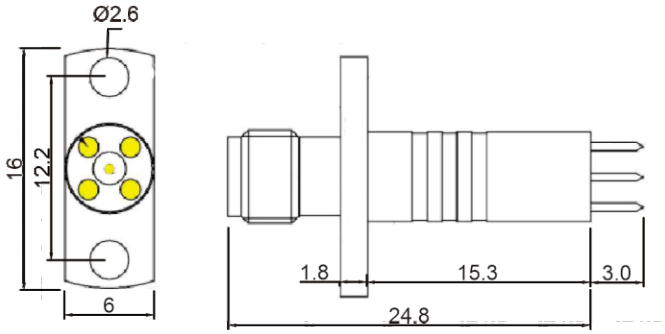
Ordering Example:

ORT - RF - 1033J

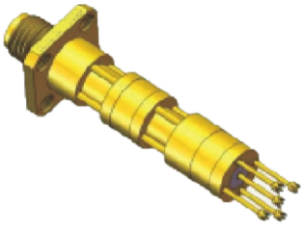
Series — Tip(Material)

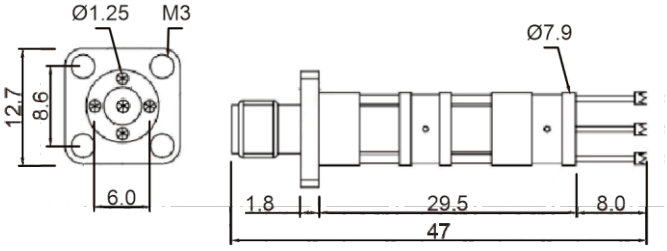
▶ ORT-RF-1015J



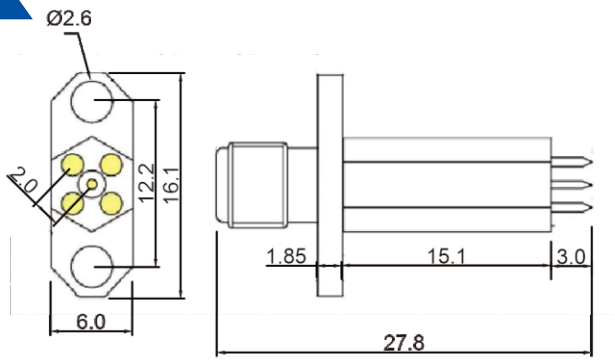


▶ ORT-RF-1505C

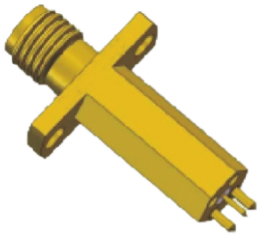


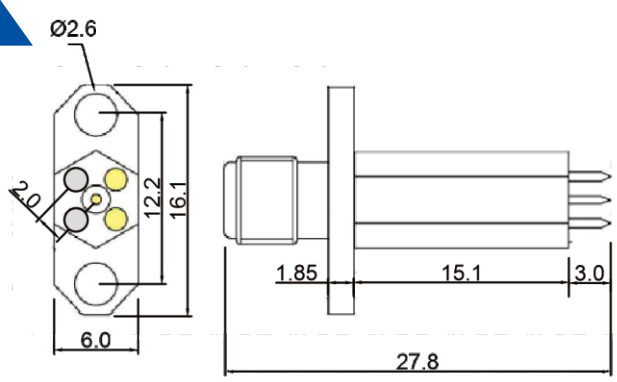


▶ ORT-RF-1605J



▶ ORT-RF-1603J



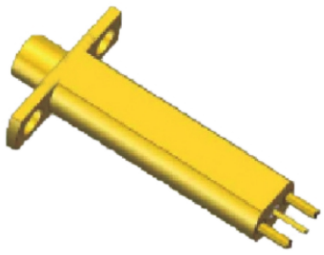


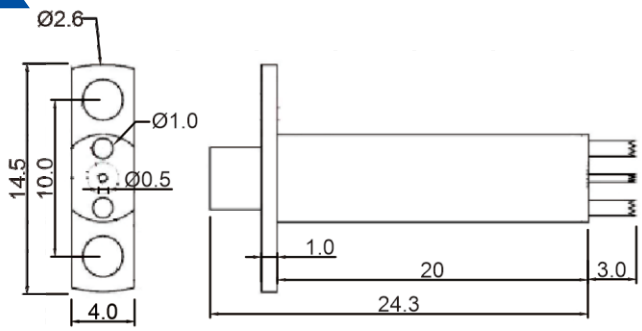
Ordering Example:

ORT - RF - 1033J

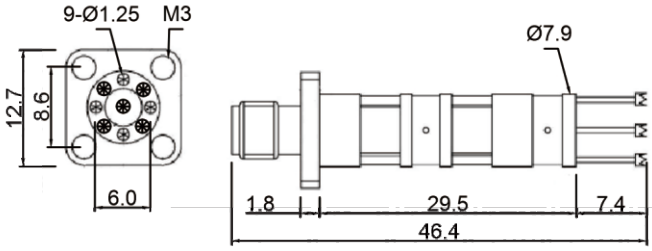
Series — Tip(Material)

▶ORT-RF-4003C

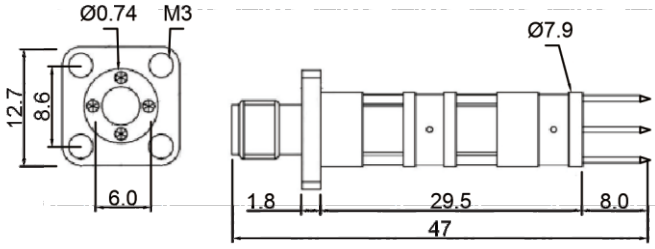




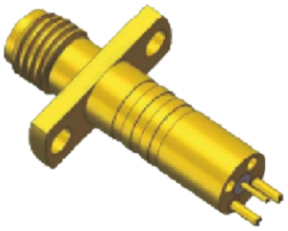
▶ORT-RF-1509C

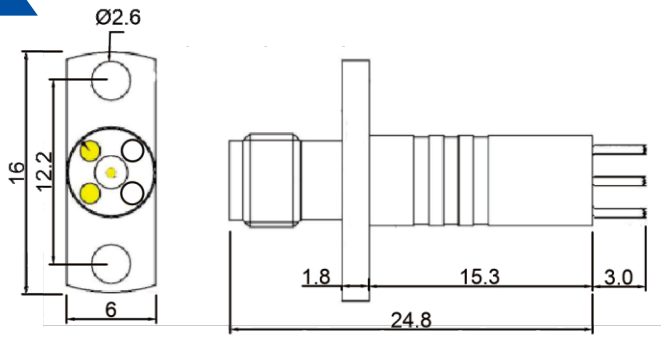


▶ORT-RF-1505J



▶ORT-RF-1013C



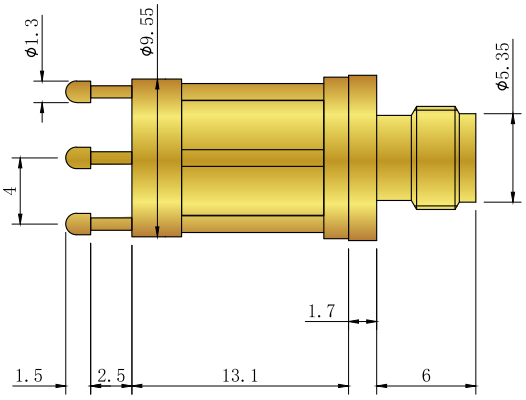


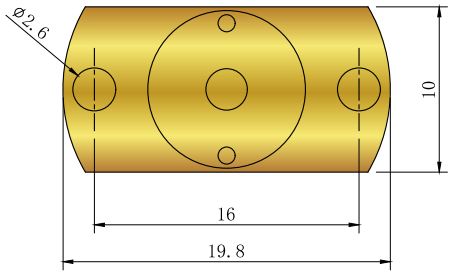
Ordering Example:

ORT - RF - 1033J

Series — Tip(Material)

▶ORT-955-245-D130

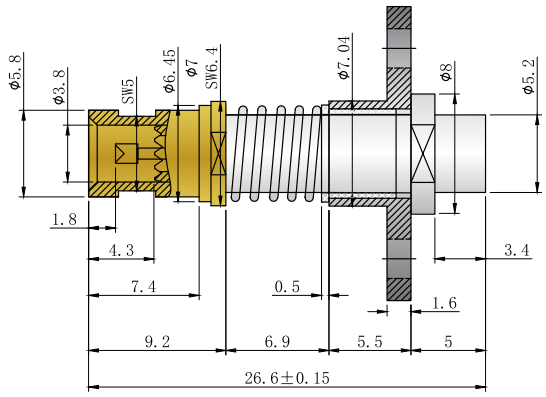


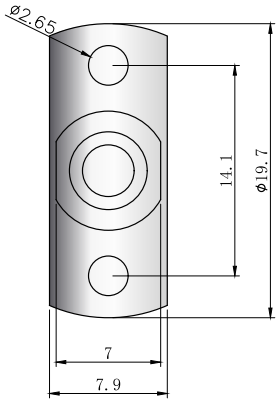


Specification	
Current Rating:	2A
Contact Ressistance :	100mΩmax
Full Stroke :	2.5mm
Rated Stroke:	1.6mm
Spring Force:	0.8N@1.6mm

Mechnical Life	
SMA Insert and Withdrawal Life:	>500次
Spring Tube Lifespan:	>10000次
Performance Life:	>10000次
Operating Frequency:	DC-3GHz5.
Insert Loss:	<0.30dB

▶ORT-RF-Radio Frequency Head





Specification : Center Probe	
Current Rating:	2A
Contact Ressistance :	100mΩmax
Full Stroke :	2.3mm
Rated Stroke:	1.6mm
Spring Force:	0.8N@1.6mm
Frequency Range:	DC-6Ghz VSWR≥1.4
Insert Loss:	0.5dB

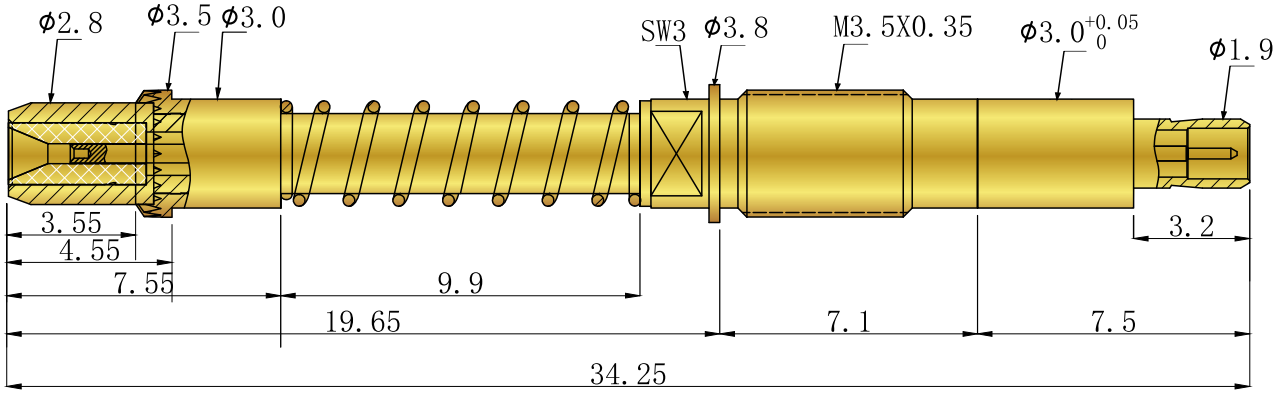
Mechnical Life: Outer Conductor	
Full Stroke :	3.8mm
Rated Stroke:	2.5mm
Spring Force:	6N@2.5mm

Ordering Example:

ORT - RF - 1033J

Series — Tip(Material)

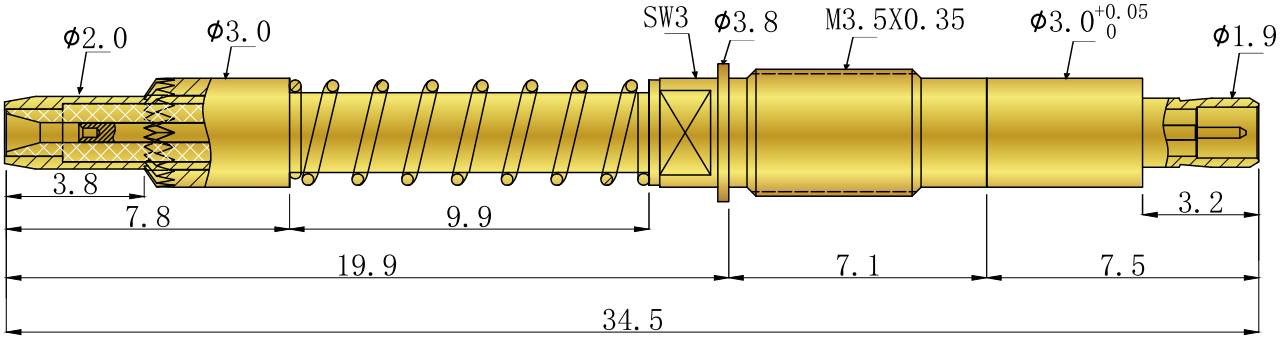
▶ORT-807-303-051-342



Specification : Center Probe	
Current Rating:	3A
Contact Ressistance :	50mΩmax
Full Stroke :	2.5mm
Rated Stroke:	1.1mm
Spring Force:	2N@1.1mm
Frequency Range:	DC-6GhzVSWR≥1.4
Insert Loss:	0.55dB

Mechnical Life : Outer Conductor	
Full Stroke :	4.1mm
Rated Stroke:	3.2mm
Spring Force:	5.5N@3.2mm

▶ORT-807-303-051-345



Specification : Center Probe	
Current Rating:	3A
Contact Ressistance :	50mΩmax
Full Stroke :	2.5mm
Rated Stroke:	1.1mm
Spring Force:	2N@1.1mm
Frequency Range:	DC-6GhzVSWR≥1.4
Insert Loss:	0.55dB

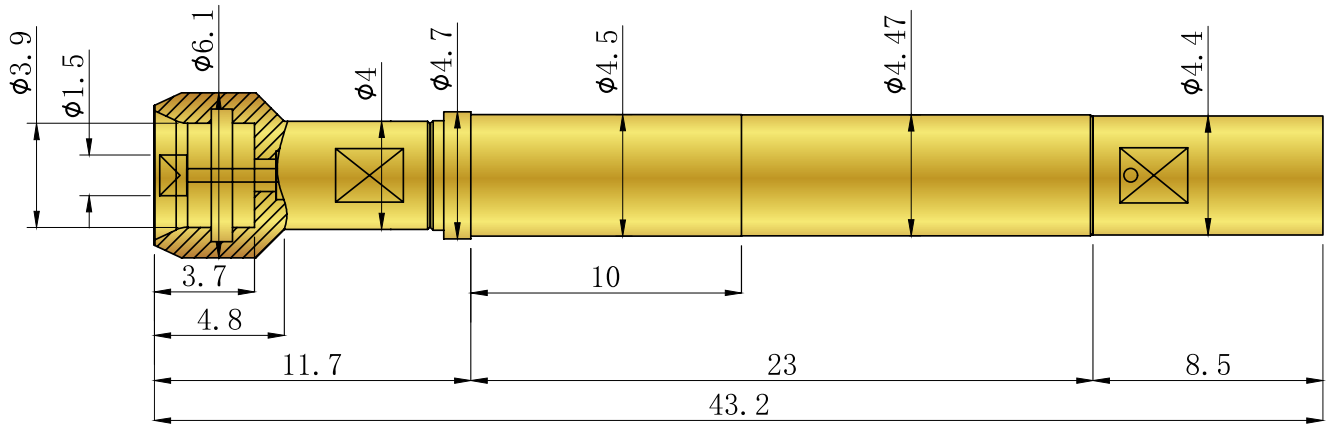
Mechnical Life : Outer Conductor	
Full Stroke :	4.1mm
Rated Stroke:	3.2mm
Spring Force:	5.5N@3.2mm

Ordering Example:

ORT - RF - 1033J

Series — Tip(Material)

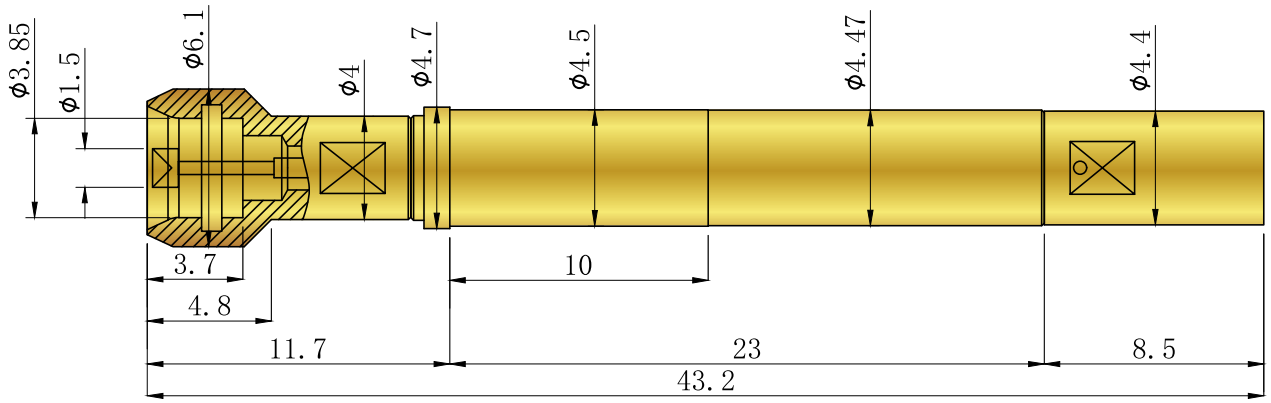
▶ ORT-860-303-150-432-4N



Specification : Center Probe	
Current Rating:	2A
Contact Ressistance :	100mΩmax
Full Stroke :	3.7mm
Rated Stroke:	2.0mm
Spring Force:	1.3N@2.0mm

Mechnical Life : Outer Conductor	
Full Stroke :	5.0mm
Rated Stroke:	4.0mm
Spring Force:	4N@4.0mm

▶ ORT-860-RF-610



Specification : Center Probe	
Current Rating:	5A
Contact Ressistance :	50mΩmax
Full Stroke :	3.7mm
Rated Stroke:	2.0mm
Spring Force:	2N@2.0mm

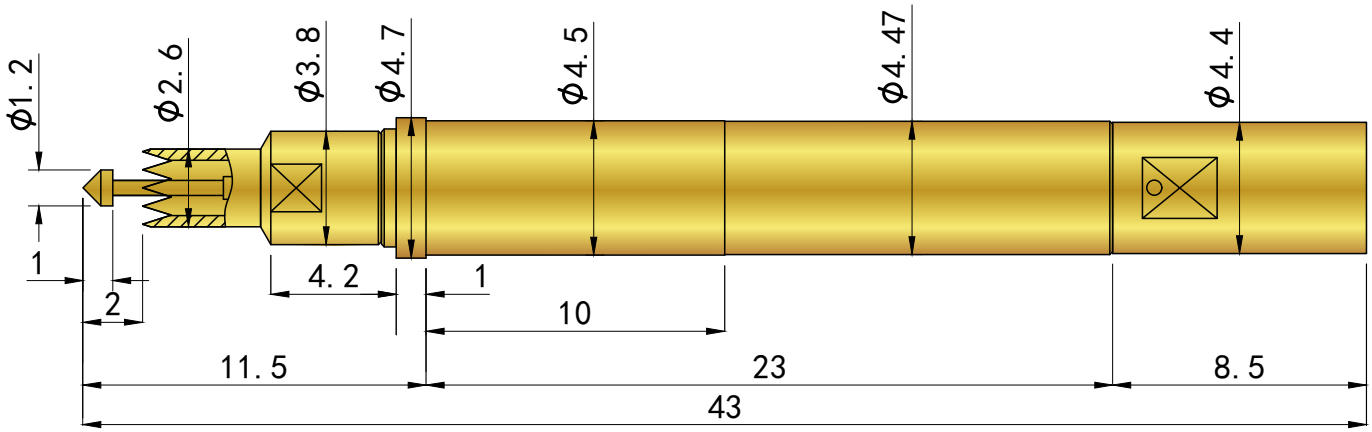
Mechnical Life : Outer Conductor	
Full Stroke :	5.0mm
Rated Stroke:	4.0mm
Spring Force:	8N@4.0mm

Ordering Example:

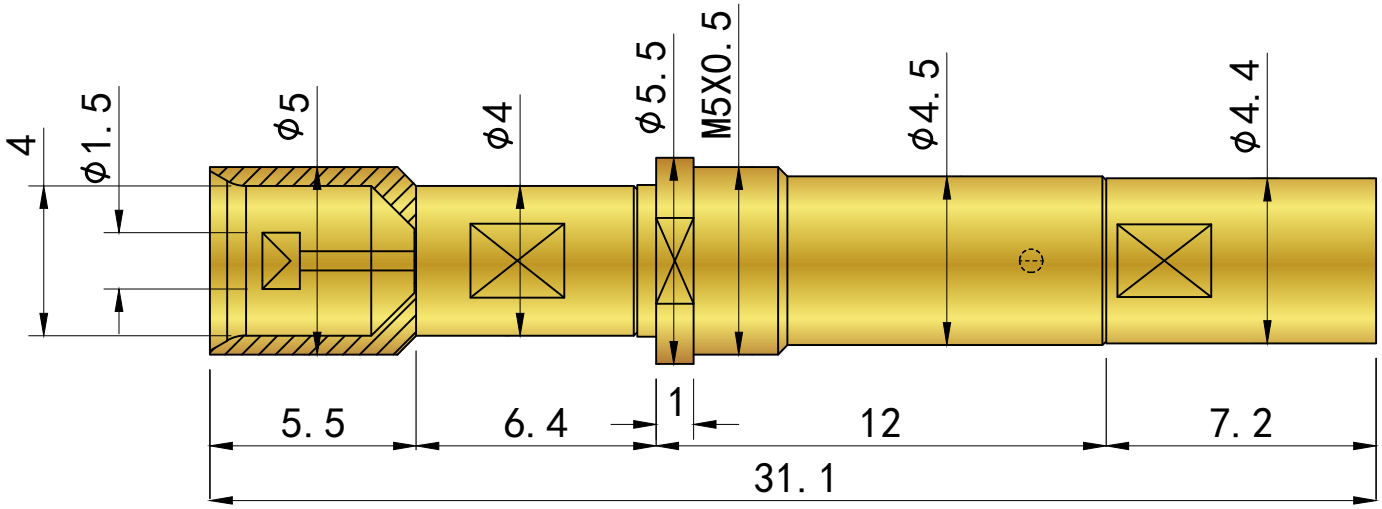
ORT - RF - 1033J

Series — Tip(Material)

▶ORT-810



▶ORT-440

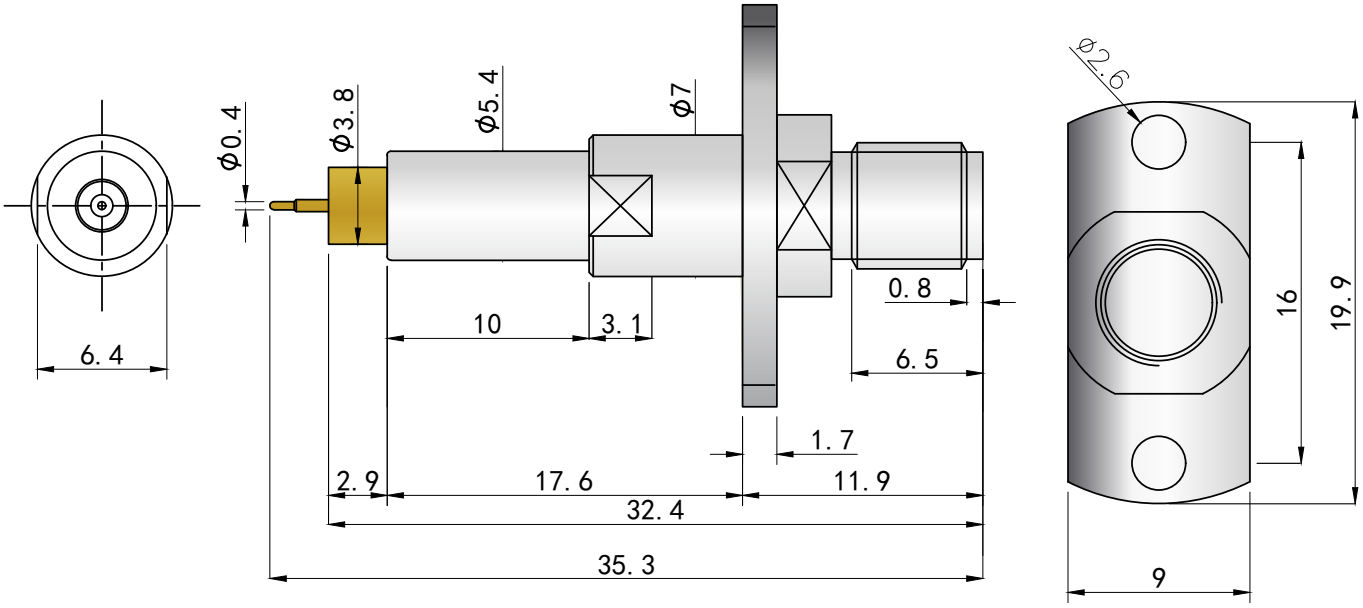


Ordering Example:

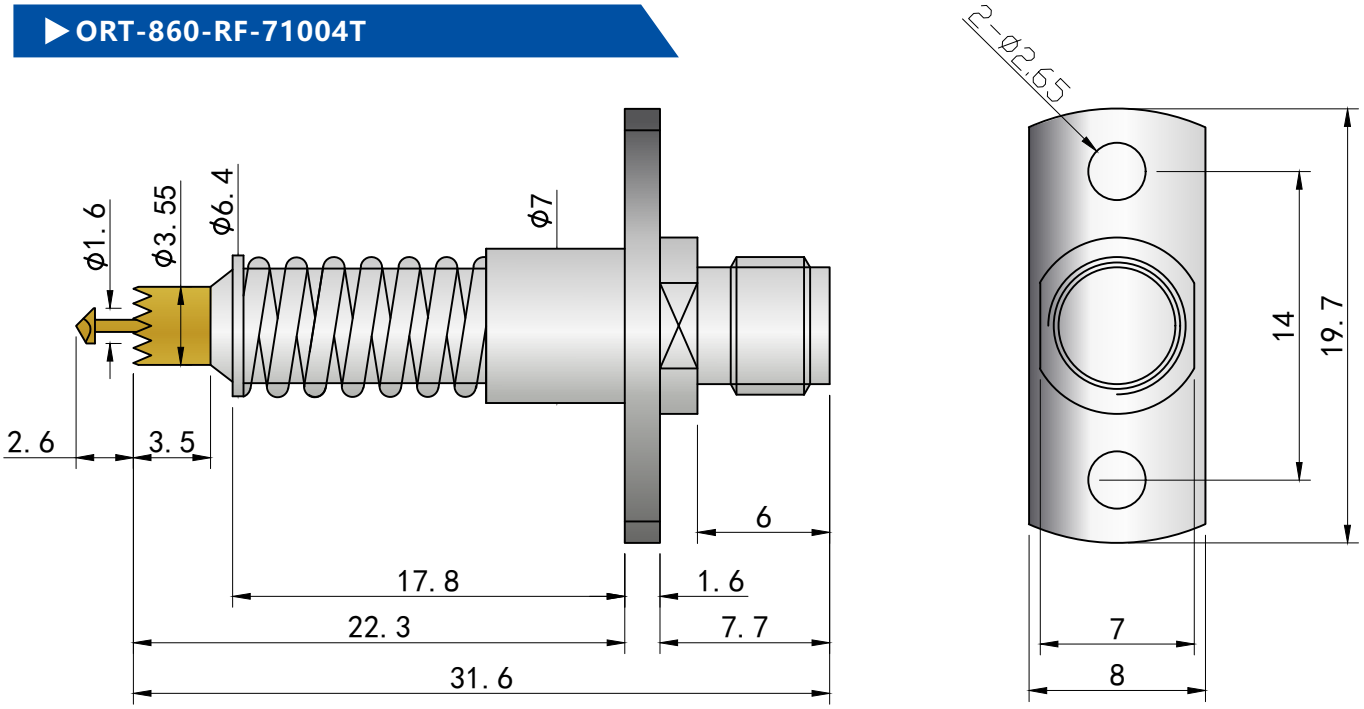
ORT - RF - 1033J

Series — Tip(Material)

▶ ORT-860-RF-0066J



▶ ORT-860-RF-71004T

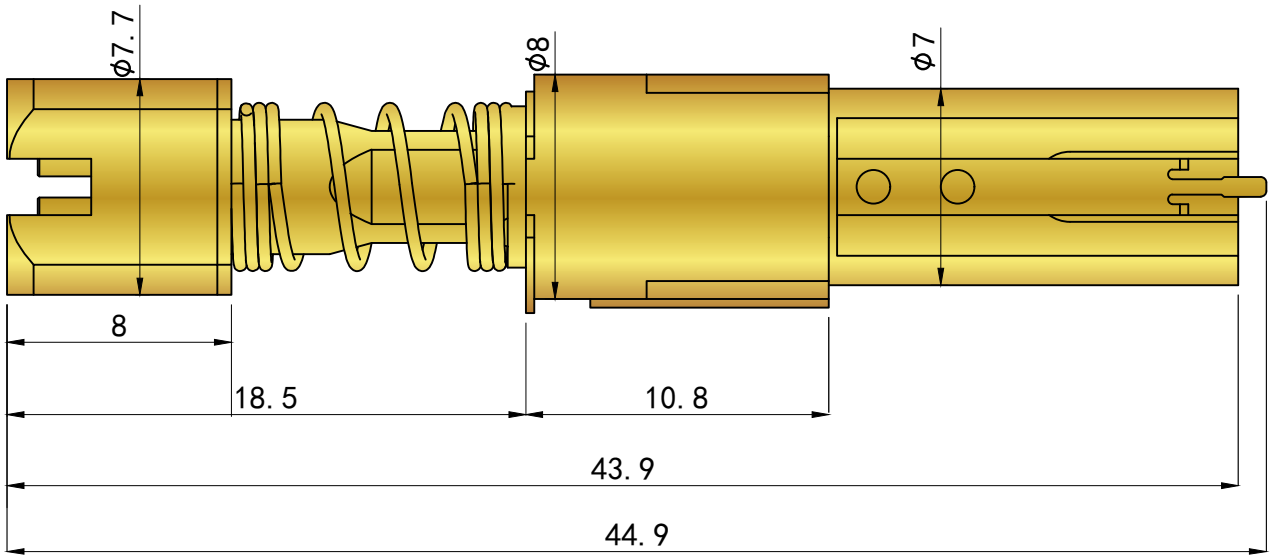


Ordering Example:

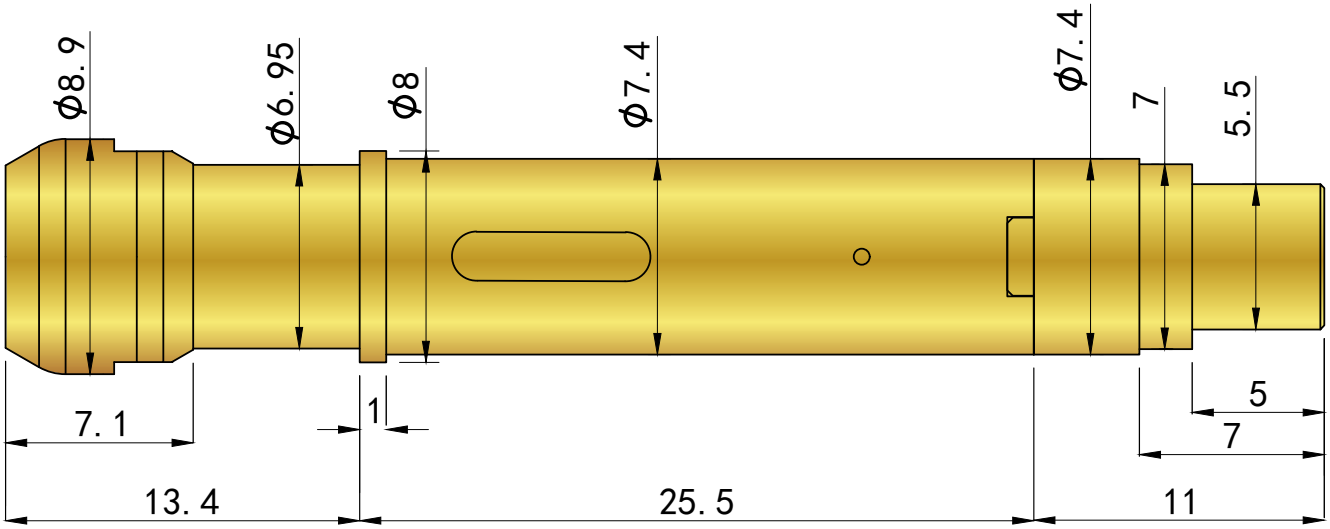
ORT - RF - 1033J

Series — Tip(Material)

▶ORT-802



▶ORT-819

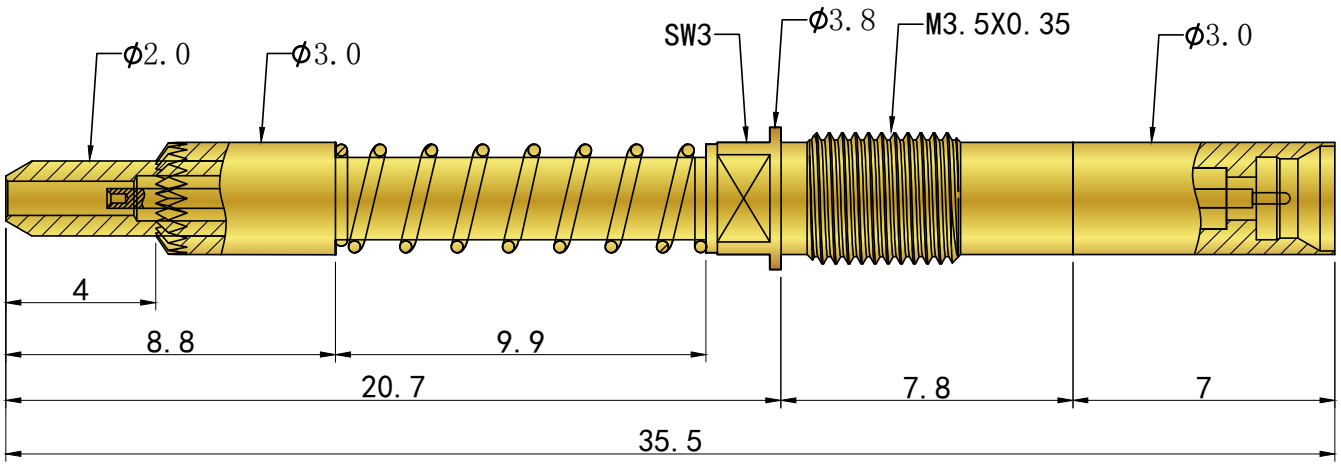


Ordering Example:

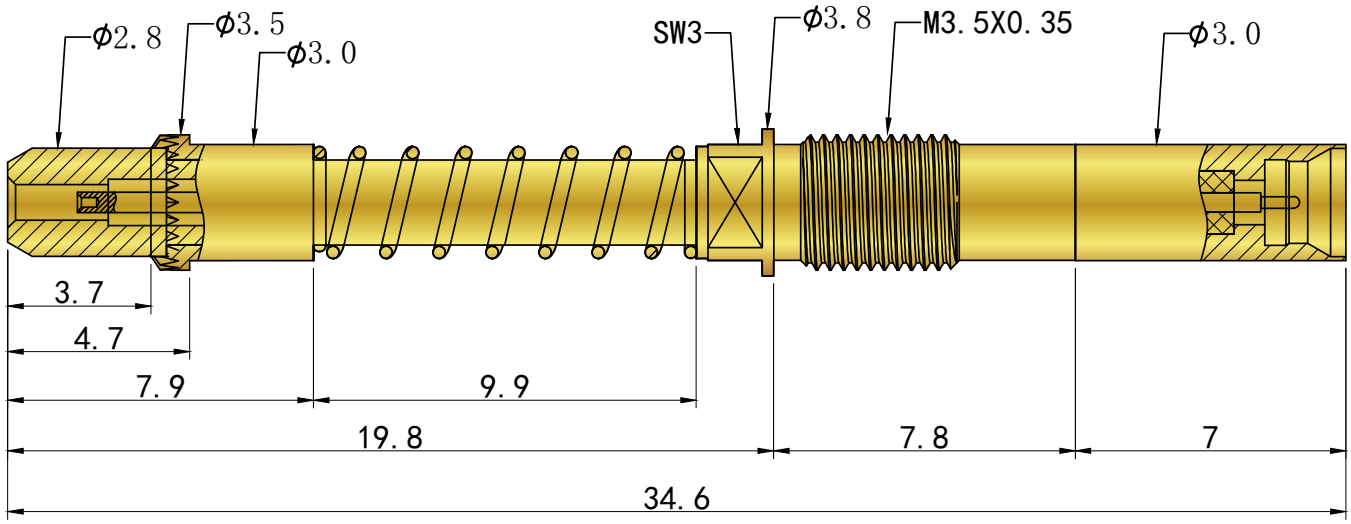
ORT - RF - 1033J

Series — Tip(Material)

▶ ORT-807-355



▶ ORT-807-346

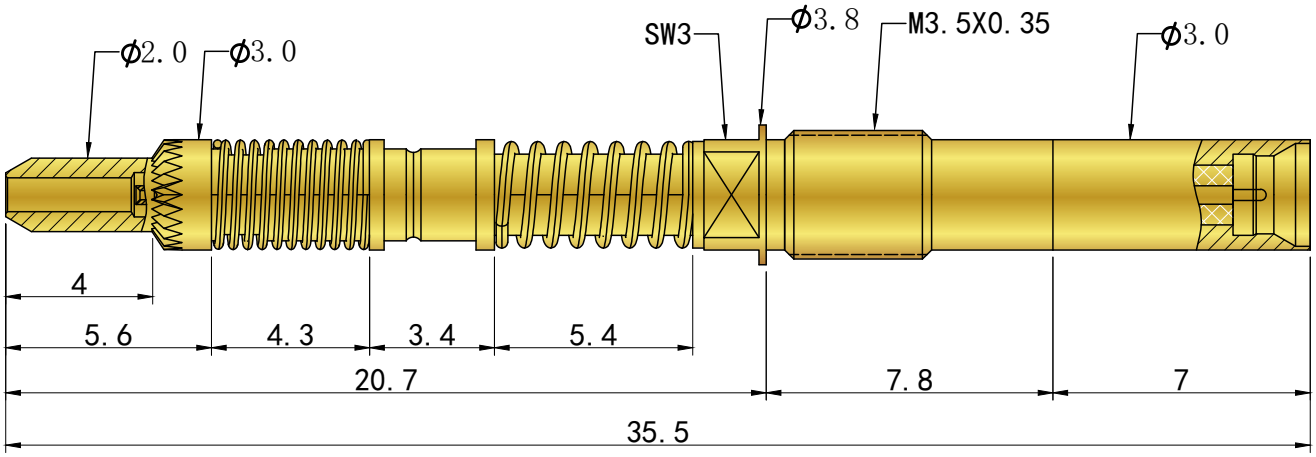


Ordering Example:

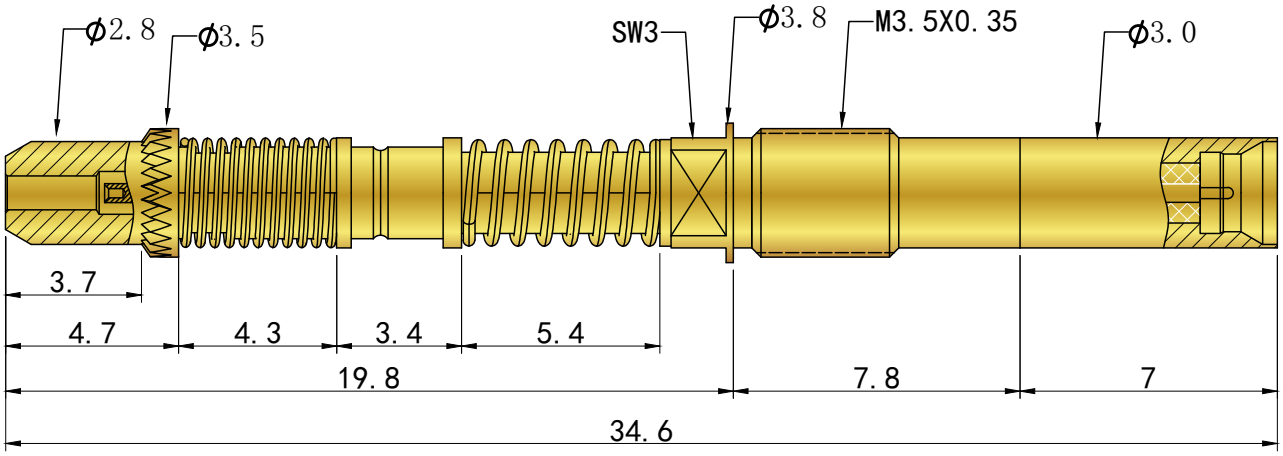
ORT - RF - 1033J

Series — Tip(Material)

▶ ORT-807-HTE



▶ ORT-807-HFM

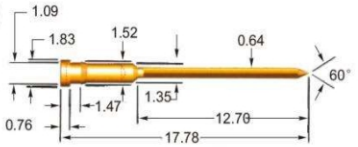


Ordering Example:

ORT - RF - 1033J

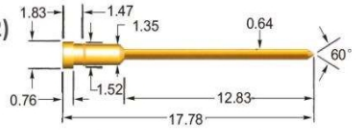
Series — Tip(Material)

ORT-301(SIP90-3)



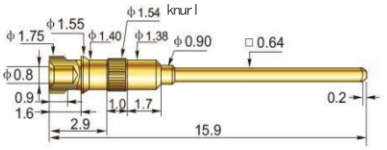
1.45mm drill Brass, gold-plated

ORT-401(SIP90-2)

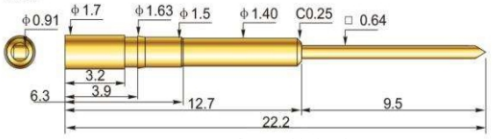


1.45mm drill Brass, gold-plated

ORT-140

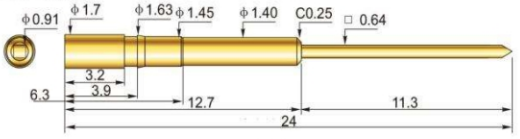


ORT-137



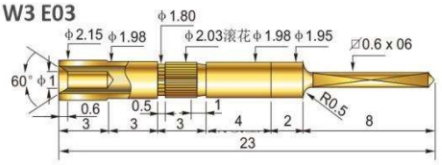
Brass, gold-plated

ORT-137-2400



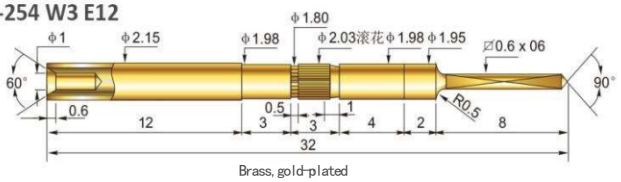
Brass, gold-plated

ORT-254 W3 E03



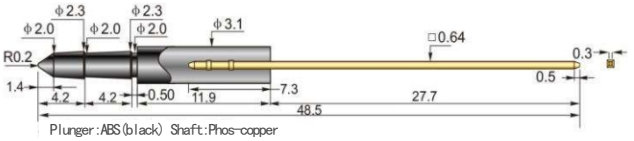
Brass, gold-plated

ORT-254 W3 E12



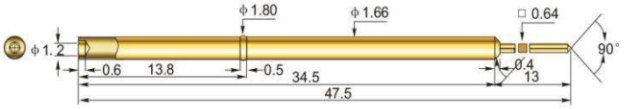
Brass, gold-plated

Agilent3070-0010H



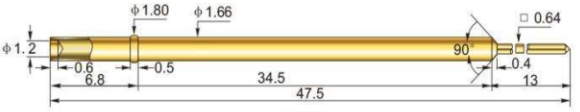
Plunger:ABS(black) Shaft:Phos-copper

LR166-4750



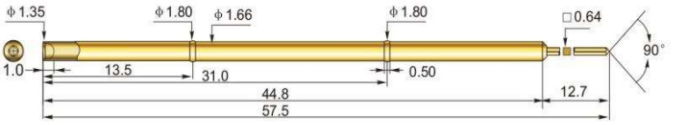
Brass, gold-plated

LR166-4750-680



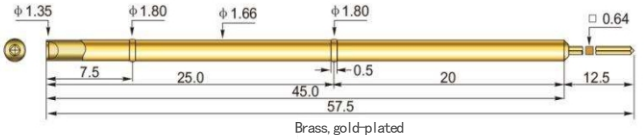
Brass, gold-plated

LR166-57.5-14.0



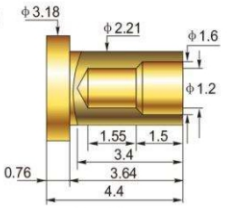
Brass, gold-plated

LR166-5750(2000-750)



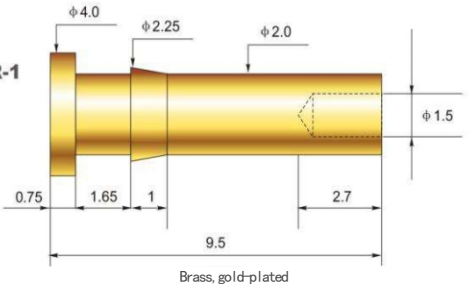
Brass, gold-plated

GR-2(0.2um)



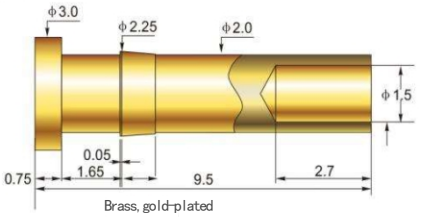
Brass, gold-plated

GR-1



Brass, gold-plated

GR-1(3.0)



Brass, gold-plated

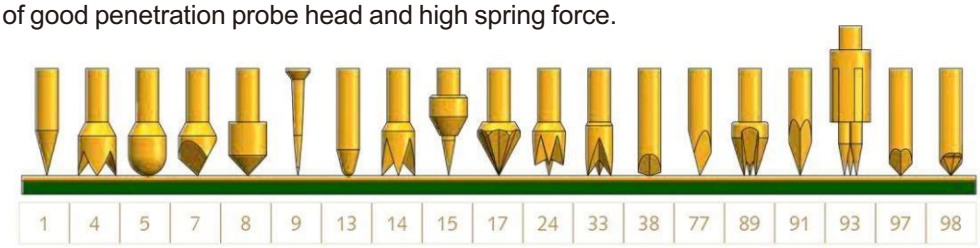
How to choose correct probe head shape

It’s essential to select the correct head shape when we choose probe. Most of pin shape can be used for multiple applications. We can base on the geometrical shape of test point to classify. In addition, it can according to the size of test point, and the condition of surface(degree of oxidation ,residue from welding) as well.

We need to try as many as pin shapes and spring force possible, so that we can find the optional combination.

Flat Surface

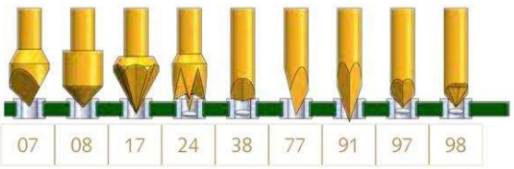
Lap the flat test points on the PCB.To make sure to get through OSP or dirty surface safely, we suggest: for example, tip series-91 with spear head, has good penetration and self-cleaning function. If the surface is clean, we can choose blunt shape to avoid stabbing(for example:tip series-05,bullet head). Warm tips: To protect multi-layer printed circuit board, we need to pay attention to the penetrate depth of the needle shape in outer layer, especially the combination of good penetration probe head and high spring force.



common needle shape choose

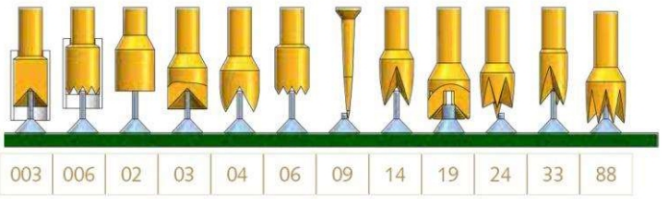
Through-hole

We can use the edge of pin head to touch the side of inner ring around surface or the tip to contact the bottom of hole.We can use the edge of pin head to touch the side of inner ring around surface or the tip to contact the bottom of hole.



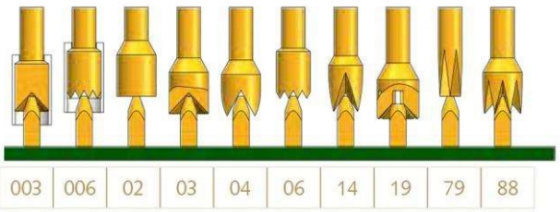
Dowel Pin

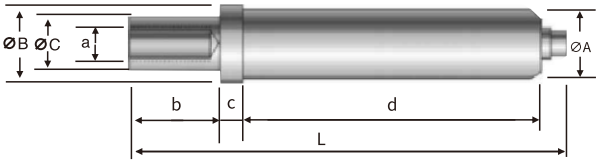
For dowel pin and component pin, we suggest use self-centering conical probe, in the same way, we can choose platy, protrude or external insolation shape as well.



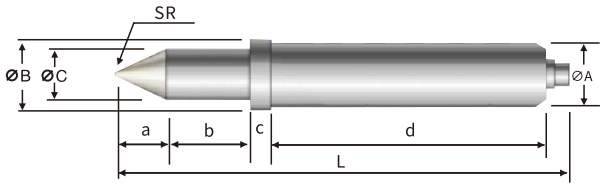
Columnar、Screw、Screwed Bolt

It’s similar with dowel pin,we can choose self-centering conical probe too.

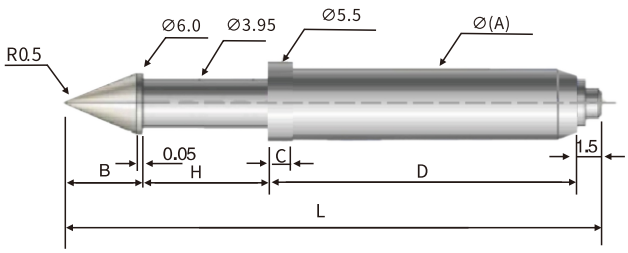




Type \ Spec	A	B	C	a	b	c	d	L	SR	Spring Force
GP-1T(M2)-32-2950-1.5N	3.20	3.5	2.5	M2	9.75	0.5	19.5	29.5		150g
GP-2T(M2)-50-3550-2.5N	5.0	5.5	3.95	M2	9.5	1.0	23.5	35.5		250g(350g)
GP-2T(M2.5)-50-3550-2.5N	5.0	5.5	3.95	M2.5	9.5	1.0	23.5	35.5		250g(350g)
GP-2T(M3)-50-3550-2.5N	5.0	5.5	3.95	M3	9.5	1.0	23.5	35.5		250g(350g)



Type \ Spec	A	B	C	a	b	c	d	L	SR	Spring Force
GP-1S-32-2950-1.5N	3.20	3.5	2.5	2.5	7.25	0.5	19.5	32	0.25	150g
GP-1L(5900)-32-3.8N	3.20	3.5	2.5	2.5	7.25	0.5	19.5	32	0.5	380g
GP-11S-40-3550-2N	4.0	4.5	3.5	3.5	6.0	0.5	23.5	35.5	0.5	200g
GP-11L(5600)-40-1.9N	4.0	4.5	3.0	5.0	15.0	0.6	34.4	56.0	0.5	190g
GP-2S-50-3550-2.5N	5.0	5.5	4.0	4.0	6.0	0.5	23.5	35.5	0.5	250g
GP-2SS(28.5)-50-1N	5.0	5.5	4.0	4.0	6.0	0.5	23.5	35.5	0.5	100g/480g
GP-2L(5600)-50-1.9N	5.0	5.5	4.0	5.0	15	1.5	33.5	56.0	0.5	185g
GP-2L(5900)-50-3.8N	5.0	5.5	4.0	6.0	13.6	1.0	36.0	59.0	0.5	380g
GP-3S-60-3750-2.5N	6.0	6.5	5.0	5.0	5.0	0.5	24.5	37.5	0.5	250g
GP-3SS(28.5)-60-4.8N	6.0	6.5	5.0	6.0	1.0	0.5	19.5	28.5	0.5	480g
GP-3L(5900)-60-3.8N	6.0	6.5	5.0	5.0	14.0	0.5	34.5	59.0	0.8	380g
GP-4L(5900)-70-3.8N	7.0	7.5	6.0	6.0	13.6	1.0	36.0	59.0	0.5	380g
GP-5S-75-3700-2.5N	7.5	8.0	6.5	7.0	3.0	0.5	24.5	37.0	0.5	250g



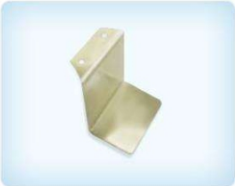
Type \ Spec	A	B	C	D	H	L	Spring Force
GP184-3-48-3550-2.5N(圆头)	4.8	0	1	24.5	11	35.5	250g
GP-2-48-4400-2.5N	4.8	7.5	1	24.5	10.5	44	250g
GP-2-50-4400-2.5N	5.0	7.5	1	24.5	10.5	44	250g
GP-2-52-4400-2.5N	5.2	7.5	1	24.5	10.5	44	250g
GP-2L-50-6400-3.5N	5.0	7.5	1.5	35	20	64	350g
GP-2L-50-6200-3.5N	5.0	7.5	1.5	35	18	62	350g
GP-2L-50-5900-3.5N	5.0	7.5	1.5	35	15	59	350g

Ordering Example:

GP	2	48	4400	2.5N
Series	Tip(Material)	Tip Diameter	Length	Spring Force

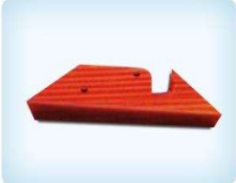
Fixture Accessories

bevel gear


gear protect block

split gasket washer (spacer)

round ball


hook

volute spiral flat spring

retaining bracket

toggle clamp ball

folding support rod

folding handle

U double bend handle

U-Shape handle

suitcase case buckle

suitcase case buckle

suitcase case buckle

gap spring

hinge

brass bullet door catch

rubber foot pad

iron frame buckle

Locating buckle(s)

Locating buckle(L)

L-Shaped connecting bracket

S-Shape connecting bracket

Round-Shape plastic connecting bracket

spring locating probe

dowel pin

guide pin GP-1

ICT fixture accessories

bearing housing

liner bearing

liner bearing

LM Shaft/Linear Optical Axis

Linear Optical Axis With Ring

stop block

Cylindrical Spring

M3/M4 Uninsulated Banana Plug

100 pin edge connector slot

Blue Polyoxy-methylene

100P Front Fender

CNC Micro Twist Drill(lengthen)

Alligatoe Clip

Banana Plug

Tools and other test accessories

Wire Winding Gun

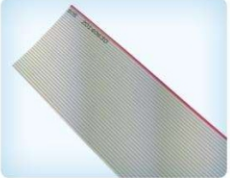
Wire Winding Gun Accessories

Ok Wire

ResetSwitch

50/75/100mil Wrap And Unwrap Tool

34/64 Box Header Connector


Ribbon Flat Data Cable

Tin Furnace And PCB Light Plate Test Fixture Accessories

High Temperature Pressing Buckle

Spring Shrapnel

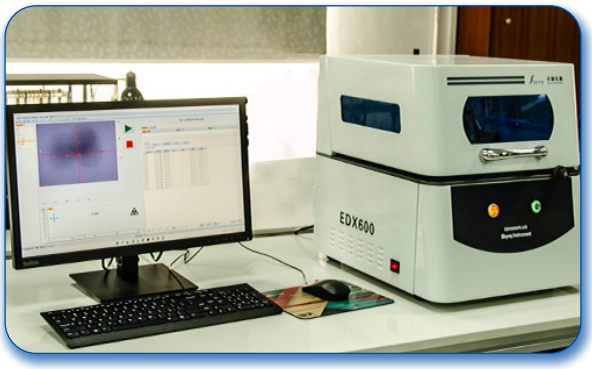
Hexagon Iron Colunm

EMI gasket

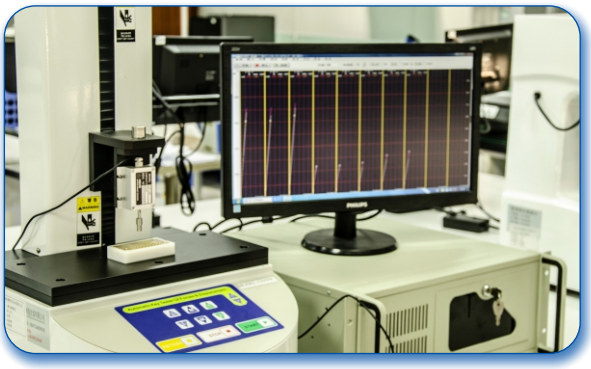
Pneumatic Rotary Air Cylinder

Equipments

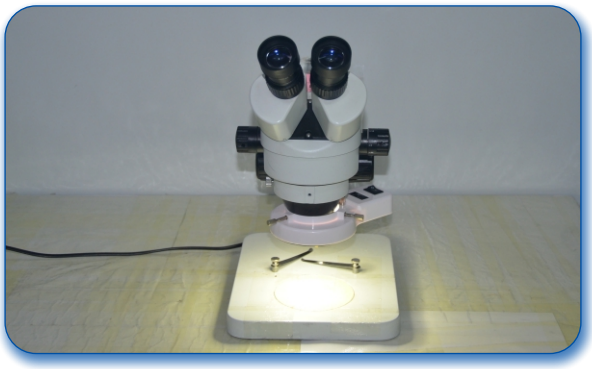
Hardness Test



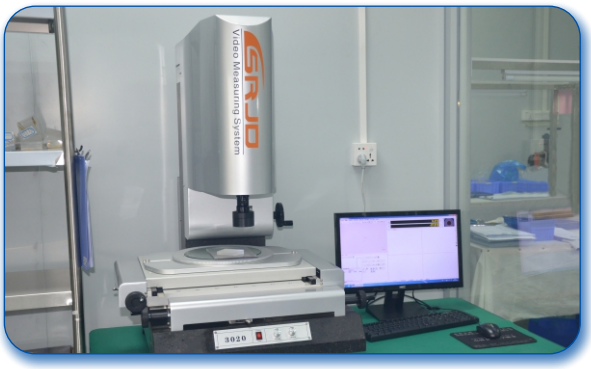
Gold Plated Film Tester



Elasticity Test



Projector



Two Dimension Measuring Instrument

Hi-Pot Tester

Ntework Analyzer

DCC Microscope

1.ICT probe mainly uses for online circuit test and functional test, also known as ICT test and FCT test , is the most application one. It's diameter usually between 2.54mm-1.27mm,the industry standard calls 100mil,75mil,50mil. and even more special only 0.19mm.

2.PCB probe is mainly based on the center distance and the shape of measured point on the PCB board, the closer between points, the thinner diameter we need to select.

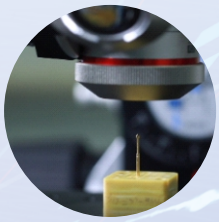
3.The test pitch of Micro-series probe is generally 0.25mm to 0.76mm.

4.Single switch probe has two currents(bidirectional current).

5.High frequency probe (Coaxial Probes) is used to test high frequency signals, with shielding rings can be tested within 10GHz , no shielding rings is within 500MHz .

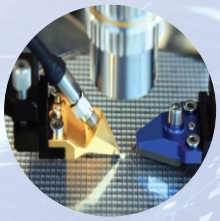
6.Rotary probe has average elasticity, but its penetration is very strong, and use in PCBA test which had processed by OSP.

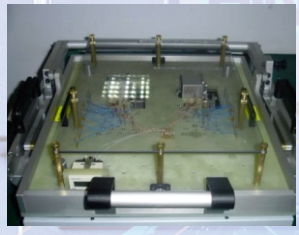
7.High current probe diameter is between 2.54mm-4.75mm.The maximum test current can reach 39amps.



8.Battery contact probe (Battery and Connector Contacts) is generally used to optimize the contact effect, with good stability and long life.

9. Automotive wire harness test probe is professionally used for diagnosing wire harness faulty, diameter between 1.0mm--3.5mm, current in 3A--50A.





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