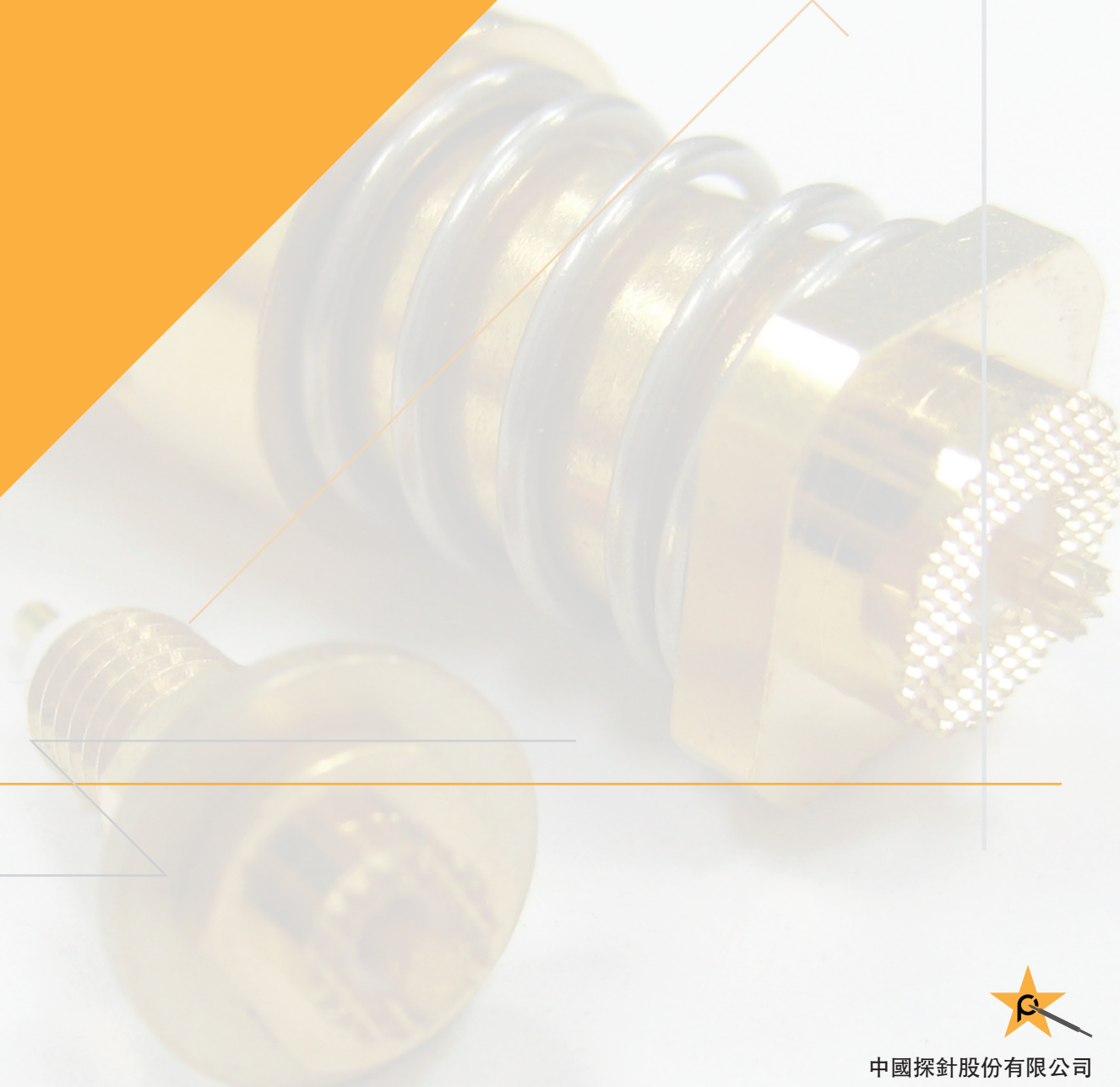




# Battery Probe

Battery Production  
High Current



# Table of Content

- 01 About Us: CCP
- 02 Testing Probe in Battery Production
- 03 C.C.P. Solutions
- 04 Product Verification & Equipment
- 05 Assembling Methods
- 06 Temperature Sensing Probe & One-Piece Probe
- 07 - 10 Coaxial One-Piece Probe
- 11 Harness Pogo Probe
- 12 Pogo Probe

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## Advantages



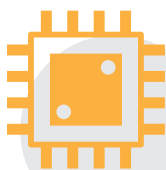
30 Years of Experience of Product Design with First-Tier Clients

Speedy and Flexible Design Process with Self-owned Turning and Plating Factory



Stable Products with Certified Quality Management System and High-end Equipment

## Product Lines



Testing Solutions



High Current Connector Solutions



Commercial Connector Solutions



Industrial Connector Solutions

# Probe in Battery Production

Battery Cell



Pre-Formation

Aging

Testing

Capacity  
Open Circuit Voltage  
ACIR

Battery Pack  
Battery Module

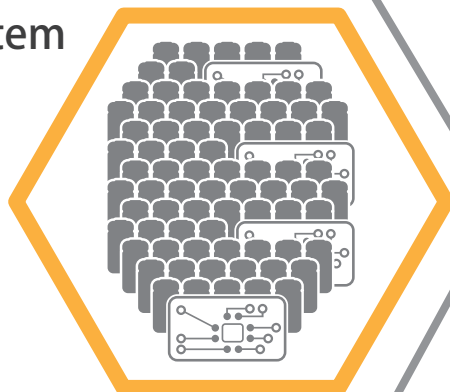


Capacity Sorting

Testing

DCIR  
ACIR  
Temperature

Battery System



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# Probe Solutions



One-Piece Probe



Coaxial One-Piece Probe



Harness Pogo Probe



Pogo Probe

Application	Battery Cell	Battery Module/ Battery Pack	Battery Module/ Battery Pack	Battery Cell
Advantage	Low Resistance	4-Wire Measurement	Durable to Harsh Enviroment	Easy to Replace
Max. Current	60 Amp	200 Amp	400 Amp	30 Amp
Resistance	<1 mΩ	<1 mΩ	<1 mΩ	<30 mΩ
Temperature	-40~200 °C	-40~200 °C	-40~150 °C	-40~150 °C

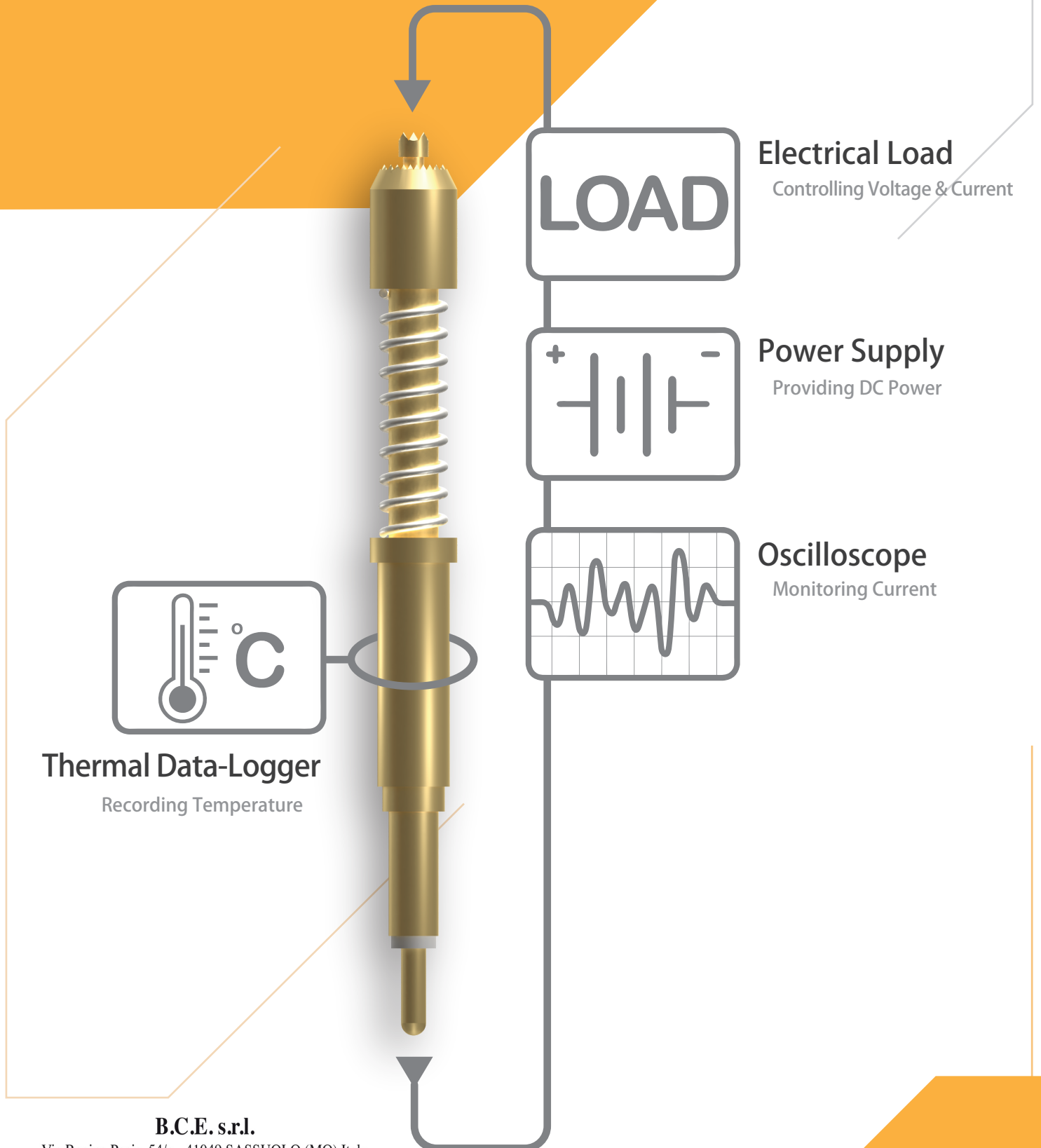
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# Product Verification & Equipment



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# Assembling Methods



Sleeve

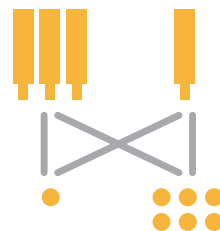


Wired Terminal



Nut & Ring Terminals

## Customized Fixture



Multiple to One  
One to Multiple



Concatenated  
Probe & Pad

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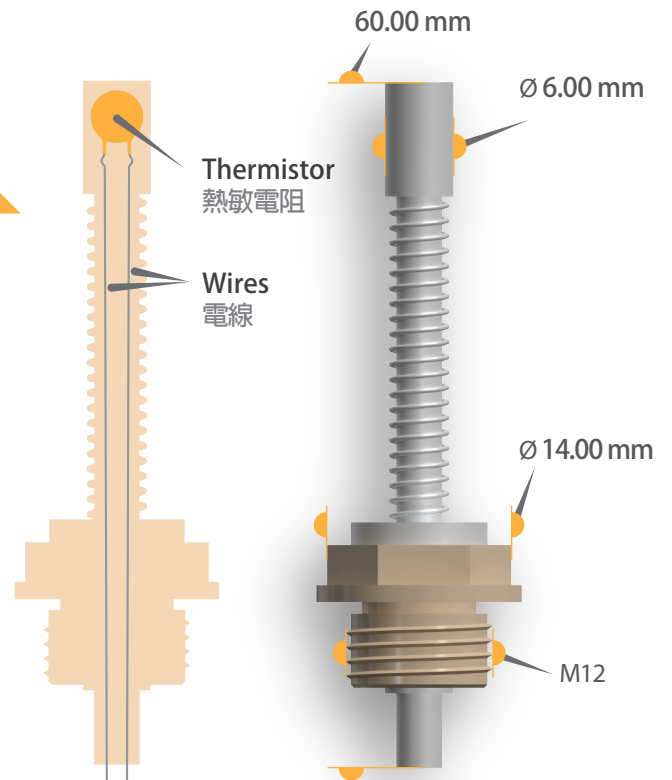
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# Temperature Sensing Probe & One-Piece Probe



## QT-T06-200A

Temperature Range	-40 ~ 200 °C
Recommended Stroke	15 mm
Spring Force	200 g
Probe Base/ Coating	Brass/ Ni
Housing	Nylon 6 +30% GF
Spring	SUS304

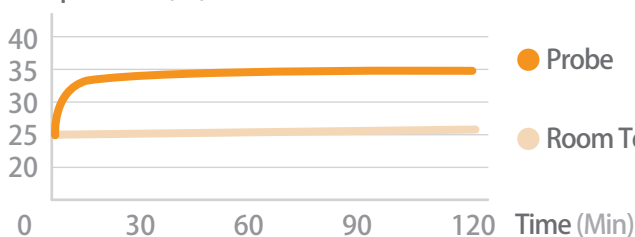


## CM-M1-300-12008

Current	8 Amp
Resistance	<10 mΩ
Recommended Center	5.5 mm
Temperature	$\Delta T < 15^\circ\text{C}$

Recommended Stroke	4 mm
Spring Force	350 g
Plunger Base/ Coating	BeCu/ Au
Barrel Base/ Coating	Brass/ Au
Spring	SUS304

Temperature (°C)



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**3-6  
amp**

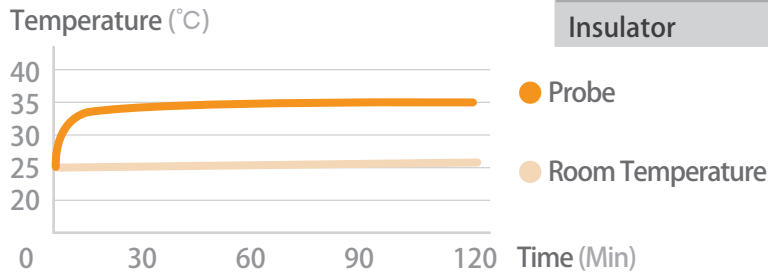
# Coaxial One-Piece Probe

## H003001M0

Current	3 Amp
Resistance	<10 mΩ
Recommended Center	2.5 mm
Temperature	$\Delta T < 15^\circ\text{C}$

Recommended Stroke	3.4 mm
Spring Force	100 g

Plunger Base/ Coating	BeCu/ Au
Barrel Base/ Coating	Brass/ Au
Spring	SUS304
Insulator	POM

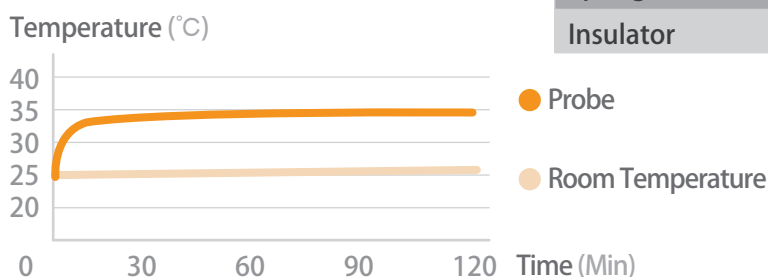


## H004003M0

Current	6 Amp
Resistance	<10 mΩ
Recommended Center	8 mm
Temperature	$\Delta T < 15^\circ\text{C}$

Recommended Stroke	4.2 mm
Spring Force	250 g

Plunger Base/ Coating	BeCu/ Au
Barrel Base/ Coating	Brass/ Au
Spring	SWP
Insulator	Teflon



# Coaxial One-Piece Probe

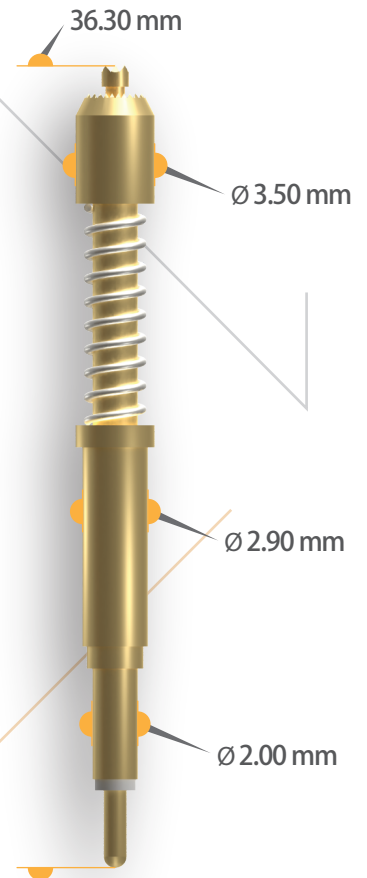
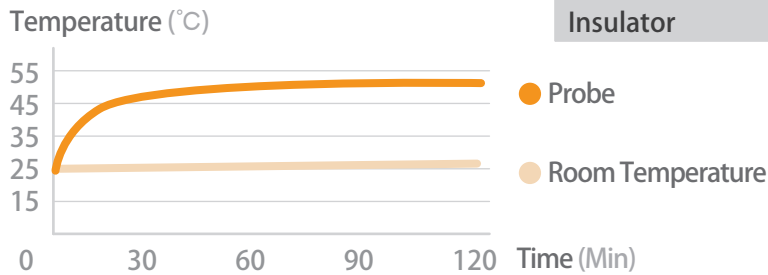
**15  
amp**

## CM-M6-350-10061

Current	15 Amp
Resistance	<10 mΩ
Recommended Center	3.7 mm
Temperature	$\Delta T < 30^\circ\text{C}$

Recommended Stroke	4 mm
Spring Force	550 g

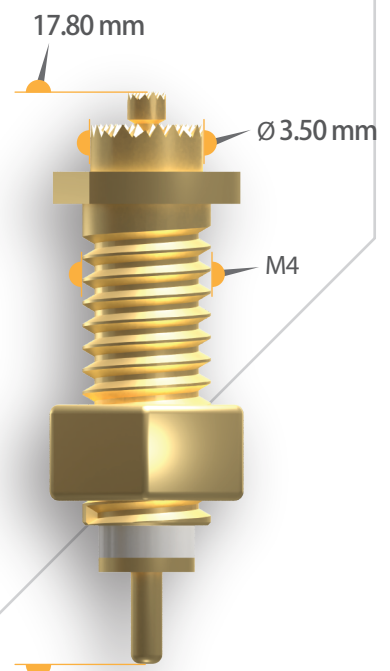
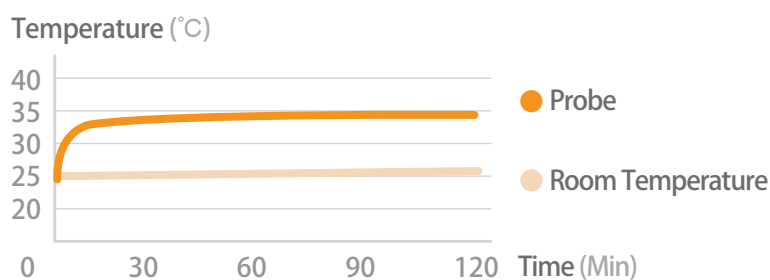
Plunger Base/ Coating	BeCu/ Au
Barrel Base/ Coating	Brass/ Au
Spring	SWP
Insulator	POM



## H015001M0

Current	15 Amp
Resistance	<5 mΩ
Recommended Center	8 mm
Temperature	$\Delta T < 15^\circ\text{C}$

Plunger Base/ Coating	BeCu/ Au
Barrel Base/ Coating	Brass/ Au
Spring	SWP
Insulator	Teflon



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# Coaxial One-Piece Probe

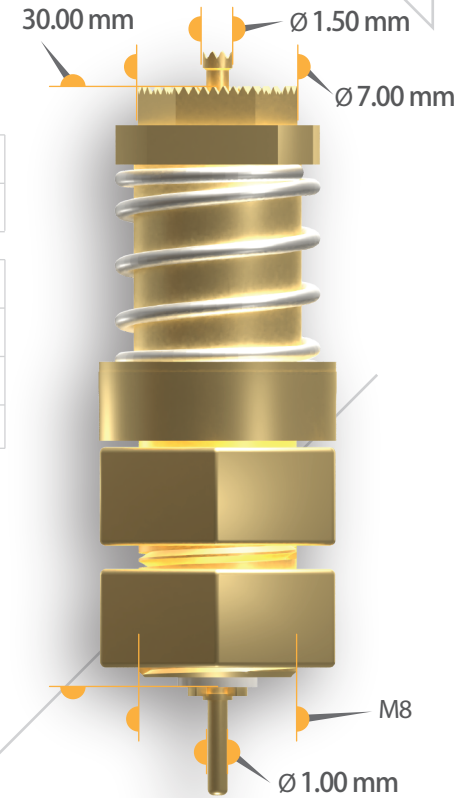
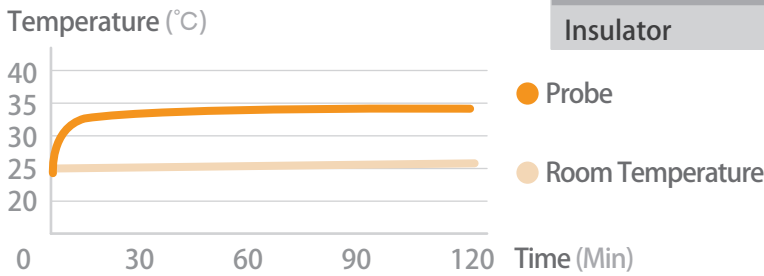
**50-60  
amp**

## H050002M0

Current	50 Amp
Resistance	<5 mΩ
Recommended Center	14 mm
Temperature	$\Delta T < 15^\circ\text{C}$

Recommended Stroke	4 mm
Spring Force	700 g

Plunger Base/ Coating	BeCu/ Au
Barrel Base/ Coating	Brass/ Au
Spring	SWP
Insulator	Teflon

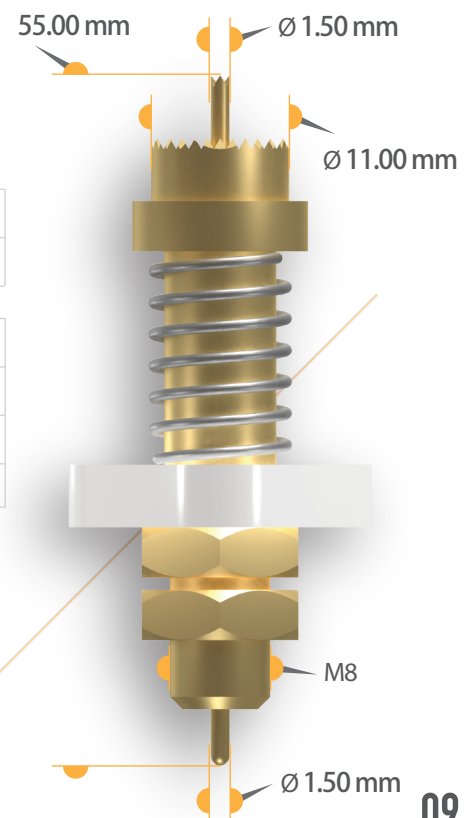
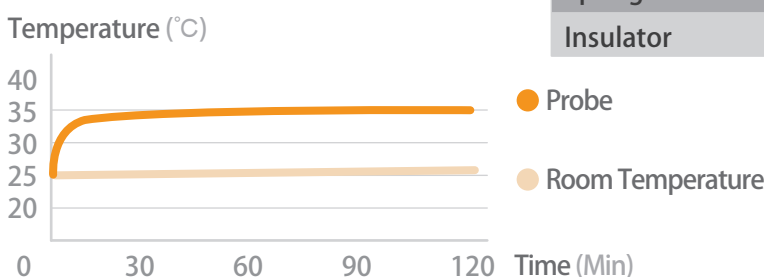


## CM-M1-900-12002

Current	60 Amp
Resistance	<5 mΩ
Recommended Center	22 mm
Temperature	$\Delta T < 15^\circ\text{C}$

Recommended Stroke	5 mm
Spring Force	1200 g

Plunger Base/ Coating	BeCu/ Au
Barrel Base/ Coating	Brass/ Au
Spring	SUS304
Insulator	PTFE



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# Coaxial One-Piece Probe

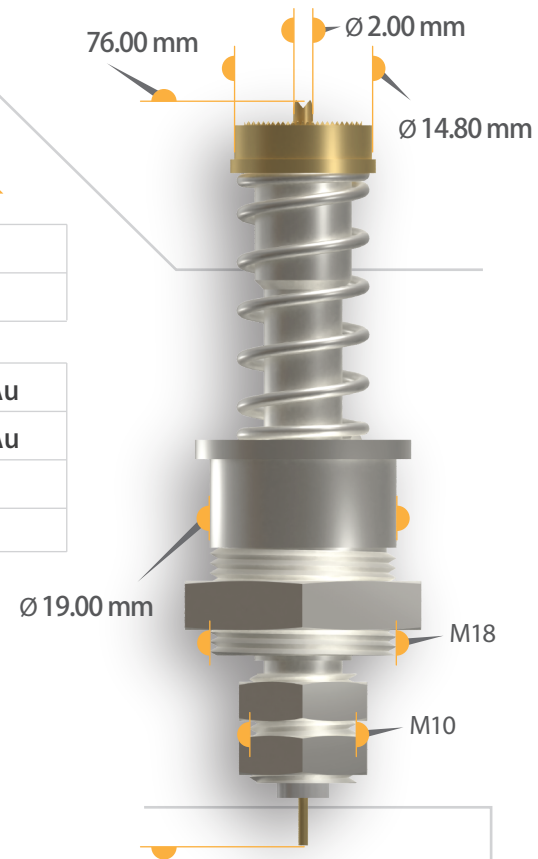
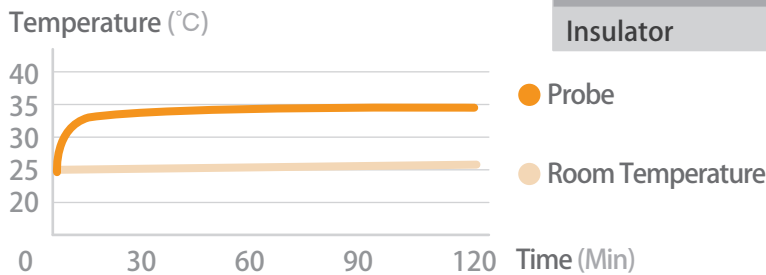
**80-100  
amp**

## H080001M0

Current	80 Amp
Resistance	<5 mΩ
Recommended Center	24 mm
Temperature	$\Delta T < 15^\circ\text{C}$

Recommended Stroke	8 mm
Spring Force	3500 g

Plunger Base/ Coating	BeCu/ Au
Barrel Base/ Coating	Brass/ Au
Spring	SUS304
Insulator	Teflon

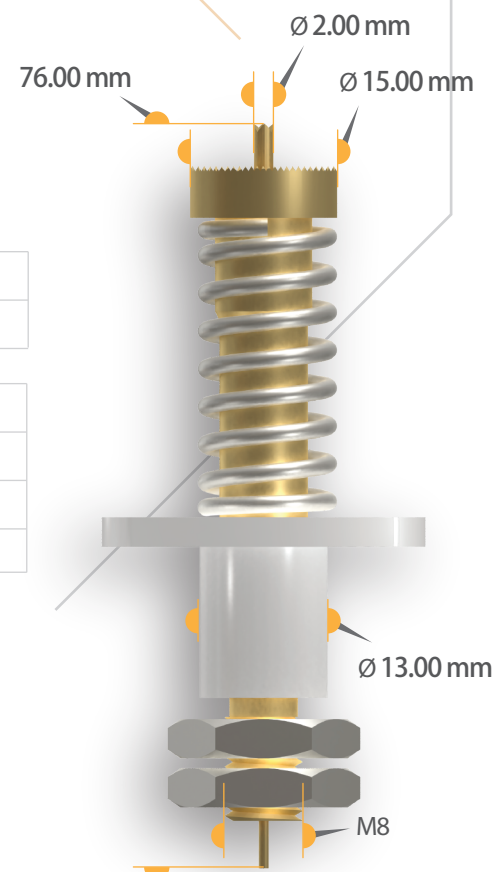
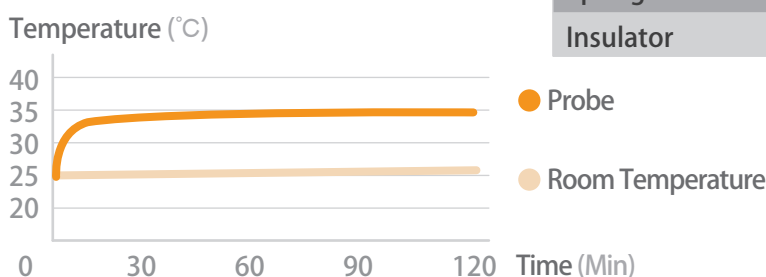


## H100001M0

Current	100 Amp
Resistance	<5 mΩ
Recommended Center	35 mm
Temperature	$\Delta T < 15^\circ\text{C}$

Recommended Stroke	8 mm
Spring Force	1000 g

Plunger Base/ Coating	BeCu/ Au
Barrel Base/ Coating	Brass/ Au
Spring	SUS304
Insulator	POM



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100-200  
amp

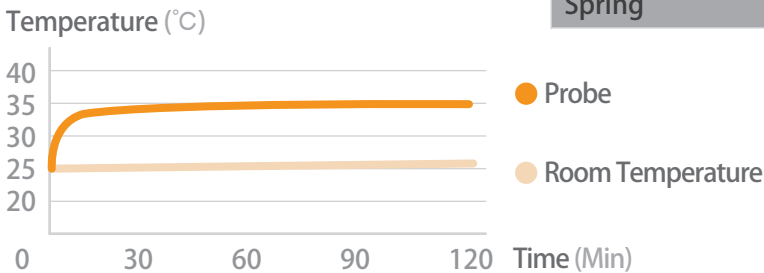
# Harness Pogo Probe

## H120002M

Current	100 Amp
Resistance	<30 mΩ
Recommended Center	18 mm
Temperature	ΔT<15°C

Recommended Stroke	7 mm
Spring Force	1500 g

Plunger Base/ Coating	Brass/ Ag
Barrel Base/ Coating	Brass/ Ag
Spring	SUS304

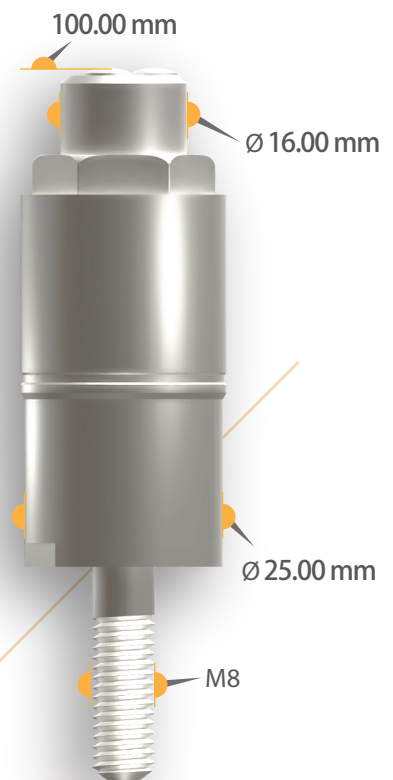
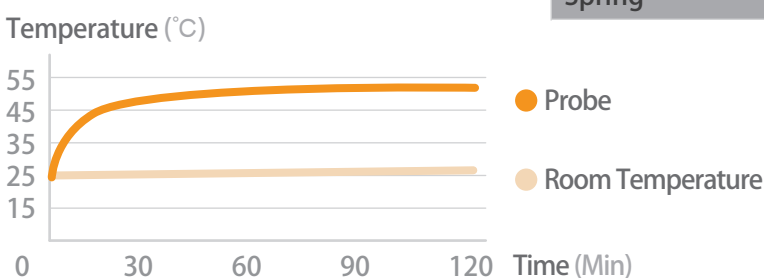


## CM-M1-160-17003

Current	200 Amp
Resistance	<5 mΩ
Recommended Center	28 mm
Temperature	ΔT<30°C

Recommended Stroke	7 mm
Spring Force	5000 g

Plunger Base/ Coating	Brass/ Ag
Barrel Base/ Coating	Brass/ Ag
Spring	SUS304



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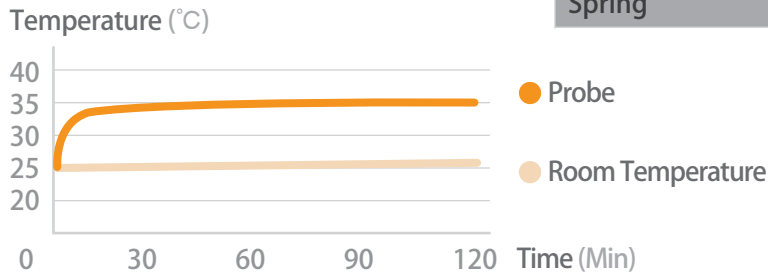
# Pogo Probe

**6-30  
amp**

## S-11T1-2545G

Current	6 Amp
Resistance	<100 mΩ
Recommended Center	3.97 mm
Temperature	$\Delta T < 15^\circ\text{C}$

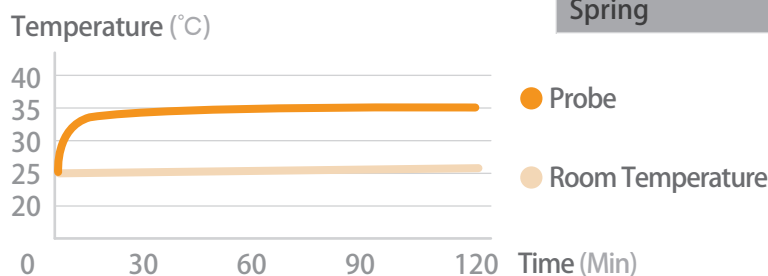
Recommended Stroke	4.2 mm
Spring Force	450 g
Plunger Base/ Coating	BeCu/ Au
Barrel Base/ Coating	Brass/ Au
Spring	SUS304



## H301001M0

Current	30 Amp
Resistance	<30 mΩ
Recommended Center	9 mm
Temperature	$\Delta T < 15^\circ\text{C}$

Recommended Stroke	2.3 mm
Spring Force	250 g
Plunger Base/ Coating	BeCu/ Au
Barrel Base/ Coating	Brass/ Au
Spring	SUS304



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