

In-Circuit Testing
Printed Circuit Board Testing



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C.C.P. Contact Probes Co., Ltd. is a leading global manufacturer of Contact Probes, Pogo Pins, Testprobes, Springloaded Connectors, and Crown Spring Connectors.

**ABOUT US** 

Introduction

In 1986 we began as a specialized provider of test probes and socket auxiliary solutions and slowly expanded our product portfolio in related industries such as electronic components manufacturing. Among our customers are renowned brands like Apple and Amazon and our products are revered by our customers for their exceptional reliability and superior quality.

Our research and development teams are continuously improving our existing products and bringing new innovations to the market to meet the growing demands of our clients. Since 2001 CCP Contact Probes has been a public traded company listed on the Taiwan Stock Exchange. Today CCP has subsidiaries in the United States, China, Germany, India, Japan and Singapore, meeting the needs of our customers around the world.

#### **Selected Customers**

FOXCONN







**ADVANTEST** 

#### Locations



## **ABOUT US**

History

## History

2018 CCP Germany, Singapore & India Established
2016 High Current Connector Product Line
2014 CCP USA Established
2003 Listed on Taiwan Stock Market (TW. 6217))
2002 Commercial Connector Product Line
2001 CCP Dongguan Factory Established
1986 CCP Established/ Testing Product Line

# **Company Culture**



**Yearly Home Visit** 



Employee's Children Summer Camp



Tuition Subsidy for Employee's Children

## **ABOUT US**

**Advantages** 



Over 30 Years of Product Development Experience Servicing Industry-leading Clients

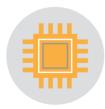


Agile and Flexible Design Process with Self-owned Turning and Plating Factory



A Proven Track-record of Reliability, an Industry Certified Quality Management System, and State-of-the-art Production Equipment

## **Product Lines**



Testing Solutions



Commercial Connector Solutions



High Current Connector Solutions



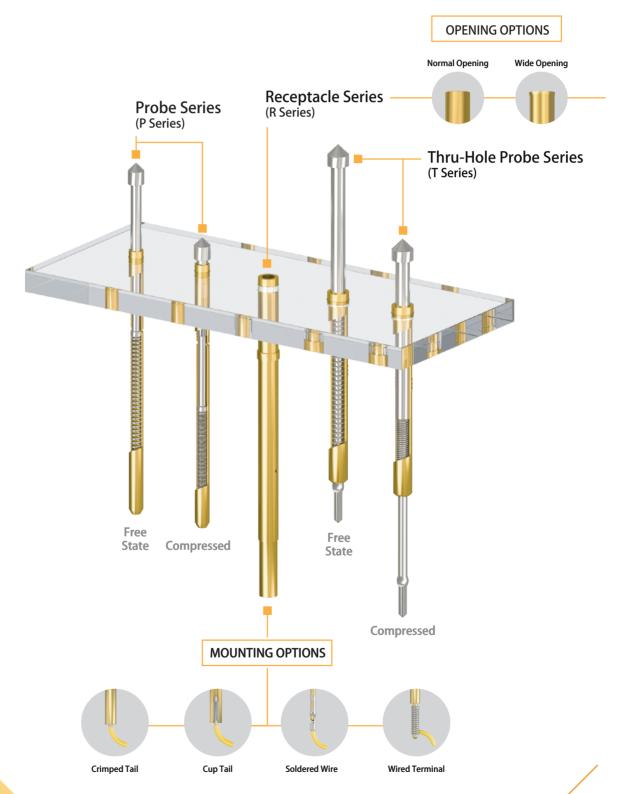
Industrial Connector Solutions

## **STRUCTURE**



## **CCP PROBE SERIES**

P Series R Series T Series

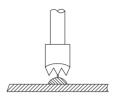






## Large 9 Points

Used to test long leads, terminals, wire wrap posts and pads.

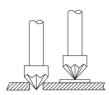




# LS

#### **Large Star**

Used to penetrate through holes, pads and gold edge fingers. Will not be contaminated by dust.

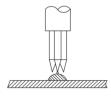




# LN3

### Large Needle 3

Used to test lands and pads. Needles can penetrate thin layers of oxides or contaminations.

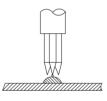




# LN7

#### Large Needle 7

Used to test lands and pads. Needles can penetrate thin layers of oxides or contaminations.

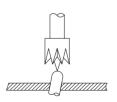


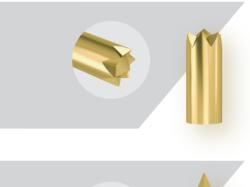


# L7

### **Large 7 Points**

Used to test lands, terminals, and wire wrap posts.

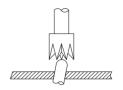




# L7M

Large 7 Points with Large Middle Center

Used to tes lands, terminals, and wire wrap posts.

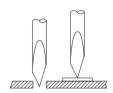




M<sub>3</sub>C

Medium 3 Side Chiseled

Used to test through holes, pads and gold edge fingers.

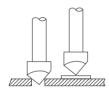




L3C

Large 3 Side Chiseled

Used to test through holes, pads and gold edge fingers.

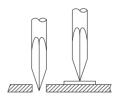




M4C

Medium 4 Side Chiseled

Used to test through holes, pads and gold edge fingers.

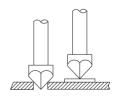


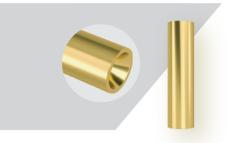


L4C

Large 4 Side Chiseled

Used to test through holes, pads and gold edge fingers.

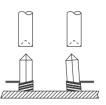




# MC

#### **Medium Cup**

Used to test long leads, terminals and wire wrap posts.

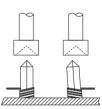




# LC

### **Large Cup**

Used to test long leads, terminals and wire wrap posts.

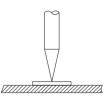




# MA

#### Medium Awl

Used to test through holes, pads and gold edge fingers.

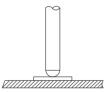




# MR

#### **Medium Round**

Used to test gold edge fingers and gold pads. Leaves no marks or indentations.

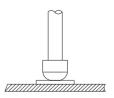




# LR

### **Large Round**

Used to test gold edge fingers and gold pads. Leaves no marks or indentations.

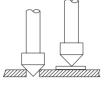




LA

## Large Awl

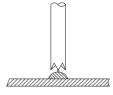
Used to test through holes, pads and gold edge fingers.



Μ4

#### **Medium 4 Points**

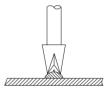
Used to test narrow lands. Will not be contaminated by dust.



**L4** 

### **Large 4 Points**

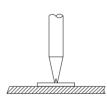
Used to test narrow lands. Will not be contaminated by dust.



**S4** 

#### **Small 4 Points**

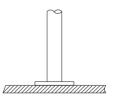
Used to test narrow lands. Will not be contaminated by dust.



 $\mathsf{MF}$ 

#### **Medium Flat**

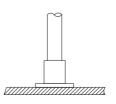
For testing pads and gold edge-fingers. Contact leaves no marks or indentations.



LF

#### Large Flat

For testing pads and gold edge-fingers. Contact assured leaves no marks or indentations.



## **P SERIES LIST**

b C d

**Coding Rule:** 

ICT-P: a-b-c-d-e:f-g-h-i

ICT-P: 020-1150-1000-0150-E: BC-Au-BR-Au

Materials P Series Dimensions P Series Dimensions Materials

Example:

a	b	C	d
Barrel Diameter in mm	Full Length in mm	Barrel Length in mm	Full Stroke in mm
Recommended Pitch 0.45mm			
0.20	11.50	10.00	01.50
Recommended Pitch 0.50mm			
0.26	12.50	11.00	01.50
Recommended Pitch 0.65mm			
0.30	11.50	10.00	01.50
Recommended Pitch 0.70mm			
0.35	12.50	11.00	01.50
Recommended Pitch 0.80mm			
0.38	12.00	10.00	02.00
0.38	12.50	10.00	02.00
Recommended Pitch 0.90mm			
0.48	12.00	10.00	02.00
0.48	12.60	10.00	02.00
Recommended Pitch 1.00mm			
0.58	15.00	13.00	02.00
0.58	15.60	13.00	02.00
Recommended Pitch 1.27mm			
0.68	16.35	13.00	03.35
0.68	16.55	13.00	02.65
0.68	24.70	18.50	04.20

e

Tip Type See Tip Type Page

f

**Plunger Base** 

BC: Beryllium Copper SK4: High Carbon Steel

g

Plunger Plating

Au: Gold Rh: Rhodium NA: None

h

**Barrel Base** 

PB: Phosphor Bronze

BR: Brass

**Barrel Plating** 

# **P SERIES LIST**

a	b	C	d
Barrel Diameter in mm	Full Length in mm	Barrel Length in mm	Full Stroke in mm
Recommended Pitch 1.90 m	nm		
1.01	16.35	13.00	03.35
1.01	17.04	13.00	02.54
1.01	24.20	18.50	04.20
1.01	33.30	25.00	06.30
1.01	38.30	25.00	06.30
Recommended Pitch 2.54 m	nm		
1.36	23.50	18.50	03.00
1.36	24.70	18.50	04.20
1.36	33.30	25.00	06.30
1.36	38.30	25.00	06.30
1.37	09.70	07.50	02.20
1.37	10.00	07.50	01.50
Recommended Pitch 3.17 m	nm		
2.00	33.35	25.00	06.35
Recommended Pitch 3.97m	m		
2.36	34.10	25.00	06.60

e

**Tip Type** See Tip Type Page

Plunger Base BC: Beryllium Copper SK4:High Carbon Steel

Plunger Plating

Au: Gold Rh: Rhodium NA: None

h

Barrel Base

PB: Phosphor Bronze

BR: Brass

**Barrel Plating** 

## R SERIES LIST



## **Coding Rule:**

## ICT-R:a-b-c-d-e:f-g

R Series Dimensions Materials

## Example:

ICT-R:020-032-0900-00-e:g-h

R Series Dimensions Materials

a	b	C	d
Probe Barrel Diameter in mm	Receptacle Diameter in mm	Probe Holding Length in mm	Collar Distance in mm
Recommended Pitch 0.45mm			
0.20	0.32	09.00	-
Recommended Pitch 0.50mm			
0.26	0.35	10.30	-
Recommended Pitch 0.65mm			
0.30	0.40	09.00	-
Recommended Pitch 0.70mm			
0.35	0.43	10.00	-
0.35	0.45	10.00	-
Recommended Pitch 0.80mm			
0.38	0.53	09.00	-
Recommended Pitch 0.90mm			
0.48	0.62	09.00	-
Recommended Pitch 1.00mm			
0.58	0.72	12.00	-
Recommended Pitch 1.27mm			
0.68	0.86	12.75	-
0.68	0.86	12.75	2.5
0.68	0.86	18.50	-
0.68	0.86	18.50	2.5

#### e

### Tail Type

N: No Tail

C: Cup Tail W9: Square Tail for

Wire Wrapping
Tail Length 9mm

T5: Round Tail for Crimped Terminal Tail Length 5mm

S: Soldered Wire



#### **Receptacle Base**

PB: Phosphor Bronze

**BR:** Brass

## g

**Receptacle Plating** 

## **R SERIES LIST**

a	b	C	d
Probe Barrel Diameter in mm	Receptacle Diameter in mm	Probe Holding Length in mm	Collar Distance in mm
Recommended Pitch 1.27mm			
1.01	1.31	12.70	0.0
1.01	1.31	12.70	4.0
1.01	1.31	12.70	2.5
1.01	1.31	18.50	0.0
1.01	1.31	18.50	2.5
1.01	1.31	18.50	4.0
1.01	1.31	25.00	0.0
1.01	1.31	25.00	7.5
Recommended Pitch 2.54mm			
1.36	1.66	18.50	0.0
1.36	1.66	18.50	2.5
1.36	1.66	18.50	5.5
1.36	1.66	25.00	0.0
1.36	1.66	25.00	2.5
1.36	1.66	25.00	5.0
1.36	1.66	25.00	7.5
1.37	1.66	07.50	2.5
1.37	1.66	07.50	0.0
Recommended Pitch 3.17mm			
2.00	2.36	25.00	0.0
2.00	2.36	25.00	7.5
Recommended Pitch 3.97mm			
2.36	2.69	24.70	7.6
2.36	2.69	24.70	0.0

### e

## Tail Type

N: No Tail
C: Cup Tail
W9: Square Tail for
Wire Wrapping
Tail Length 9mm

T5: Round Tail for Crimped Terminal
Tail Length 5mm
S: Soldered Wire

#### Receptacle Base

**PB:** Phosphor Bronze

BR: Brass

## g

#### **Receptacle Plating**

## T SERIES LIST



**Coding Rule:** 

### **Example:**

## ICT-T:a-b-c-d-e-f:g-h-i-j

## ICT-T:098-2050-0700-0450-LA-T5:BC-Au-PB-Au

T Series Dimensions	Materials	T Series	Dimensions
a	b	C	d
Barrel Diameter in mm	Full Length in mm	Board to Tip Length in mm	Full Stroke in mm
Recommended Pitch 1.70mm			
0.98	20.50	07.00	04.50
Recommended Pitch 2.00mm			
1.34	27.00	10.00	06.00
Recommended Pitch 2.50mm			
1.83	36.00	16.00	12.00
2.00	43.00	16.00	06.00
2.00	50.00	23.00	06.00
Recommended Pitch 0.80mm			
2.33	38.00	16.00	10.50
Recommended Pitch 0.90mm			
3.00	50.00	16.00	06.00
3.00	54.00	20.00	06.00
3.00	54.00	23.00	06.00
Recommended Pitch 1.27mm			
3.23	38.00	16.00	10.00

e

#### Tip Type

See Tip Type Page

Materials



#### Tail Type

N: No Tail C: Cup Tail

W9: Square Tail for Wire Wrapping

Tail Length 9mm
T5: Round Tail for

Crimped Terminal Tail Length 5mm

S: Soldered Wire

## g

#### **Plunger Base**

BC: Beryllium Copper PB: Phosphor Bronze SK4: High Carbon Steel

## h

#### **Plunger Plating**

Au: Gold Rh: Rhodium Ni: Nickel NA: None

### i

#### **Barrel Base**

PB: Phosphor Bronze

BR: Brass

POM: Polyoxymethylene

i

#### **Barrel Plating**

Au: Gold NA: None

14

## **QUALITY MANAGEMENT**

# **Quality System**

ISO 9001: 2015

**Quality Management System** 

ISO 14001: 2015

**Environmental Management System** 

IATF 16949: 2016

**Automotive Quality Management System** 

QC 080000

Hazardous Substance Process Management

## **Quality Assurance**









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