

# Contact Probes, Receptacles

## Minimum Mounting Pitch 3.0mm / 3.5mm / 4.5mm Series

Features: Receptacle's stopper portion is machined slightly smaller in I.D. to avoid probes from being pressed in too far.

**Contact Probes - Minimum Mounting Pitch 3.0mm**

**Receptacles - Minimum Mounting Pitch 3.0mm**

**Contact Probes**

No.	Part	Material	Surface Treatment
1	Plunger	C1730B	Rhodium Plating on Nickel Undercoat
2	Barrel	Brass	Gold Plating on Nickel Undercoat
3	Spring	Stainless Steel	-
4	Ball	SUS	-

Inside of Probe Barrel is greased.  
The receptacle has a stopper that prevents the probe from being pulled out.

**Receptacles**

No.	Material	Surface Treatment
5	German Silver	Gold Plating on Nickel Undercoat
6	Brass	Gold Plating on Nickel Undercoat

**NP84SF, NP84, NP84HD Tip Shapes**

**NR84 End Shapes**

Applicable Terminal P.1879

**Contact Probes - Minimum Mounting Pitch 3.5mm**

**Receptacles - Minimum Mounting Pitch 3.5mm**

**Contact Probes**

No.	Part	Material	Surface Treatment
1	Plunger	C1730B	Rhodium Plating on Nickel Undercoat
2	Barrel	Brass	Gold Plating on Nickel Undercoat
3	Spring	SWP	Gold Plating
4	Ball	SUJ	Gold Plating

Inside of Probe Barrel is greased.  
The receptacle has a stopper that prevents the probe from being pulled out.

**Receptacles**

Material	Surface Treatment
German Silver	Gold Plating on Nickel Undercoat

**NP90SF, NP90, NP90HD Tip Shapes**

**NR90 End Shapes**

**Contact Probes - Minimum Mounting Pitch 4.5mm**

**Receptacles - Minimum Mounting Pitch 4.5mm**

**Contact Probes**

No.	Part	Material	Surface Treatment
1	Plunger	C1730B	Rhodium Plating on Nickel Undercoat
2	Barrel	Brass	Gold Plating on Nickel Undercoat
3	Spring	Stainless Steel	Gold Plating
4	Ball	SUJ	Gold Plating

Inside of Probe Barrel is greased.  
The receptacle has a stopper that prevents the probe from being pulled out.

**Receptacles**

Material	Surface Treatment
German Silver	Gold Plating on Nickel Undercoat

**NR89SF, NP89S, NP89 Tip Shapes**

**NR89 End Shapes**

Contact Probes										Receptacles						
Part Number	Mounting Pitch (min.)	Full Stroke	Spring Pressure Initial	Spring Pressure 2/3 Stroke	Allowable Current	Resistance	Replacement Cycle (Reference)	Unit Price (1-69 pc)	Volume Discount Rate (70-99)	Volume Discount Rate (100-500)	Part Number	Matching Contact Probe	Mounting Hole for Press-Fitting Dimension (Reference)	Unit Price (1-69 pc)	Volume Discount Rate (70-99)	Volume Discount Rate (100-500)
NP84SF	3.0mm	6.3mm	10gf	50gf	1.5A	80mΩ	300,000 times				NR84	NP84SF NP84 NP84HD	2.41~2.46mm			
NP84			45gf	126gf												
NP84HD			77gf	200gf												
NP90SF	3.5mm (4.5mm)	6.4mm	10gf	50gf	1.5A	80mΩ	300,000 times				NR90	NP90SF NP90 NP90HD	2.77~2.82mm			
NP90			40gf	150gf												
NP90HD			146gf	250gf												
NP89SF	4.5mm	6.4mm	30gf	100gf	1.5A	80mΩ	300,000 times				NR89	NP89SF NP89S NP89	3.58~3.63mm			
NP89S			84gf	275gf												
NP89			170gf	450gf												

Mounting Pitch in ( ) is applicable to Tip Shape A and D. For orders larger than indicated quantity, please request a quotation.

Receptacles with Lead Wire									
Part Number	Lead Wire Color Selection	Lead Wire Length (mm)	Lead Wire	Lead	Receptacles Used				
NRB84	W (White)	400	Ø1.0	Ø0.08x40 pcs.	NR84-C				
NRB90	R (Red)	1000	Ø1.0	Ø0.08x40 pcs.	NR90-C				
NRB89	BL (Blue)		Ø1.0	Ø0.08x40 pcs.	NR89-C				

For orders larger than indicated quantity, please request a quotation.

Ordering Example: Part Number - Tip/End Shape - Lead Wire Color - Lead Wire Length

Example: NP84 - G - W - 1000

# Turn Probes

Features: The plunger rotates while stroking, breaking flux and oxide film. Mainly used for PCB open-shot testing. Receptacle stopper is machined smaller in I.D. to prevent fall-off of Probe.

**Turn Probes**

**Receptacles for Turn Probes**

**Turn Probes**

No.	Part	Material	Surface Treatment
1	Plunger	SK4	Rhodium Plating on Nickel Undercoat
2	Barrel	Brass*	Gold Plating on Nickel Undercoat
3	Spring	SWP	Gold Plating on Nickel Undercoat
4	Ball*	Brass	Gold Plating on Nickel Undercoat

\* For TNP60, the material of barrel is German silver. \* Ball is not included in TNP72.  
Inside of Probe Barrel is greased.

**Receptacles**

No.	Part	Material	Surface Treatment
5	Receptacles	Brass	Gold Plating on Nickel Undercoat
6	Wire Wrap Post	Brass	Gold Plating on Nickel Undercoat

The receptacle has a stopper that prevents the probe from being pulled out.

**TNP72**

**NR72**

**TNP10**

**NR10**

**TNP60**

**NR60**

**Turn Probe Tip Shape (C, K) Dimensions**

Part Number	d	d1	(L)	(L1)
TNP72	0.53	0.53	1.0	-
TNP10	0.73	1.0	1.4	2.5
TNP60	1.0	2.0	1.9	2.0

**Tip Shapes**

**NR60 End Shapes**

Turn Probes										Receptacles for Turn Probes							
Part Number	Mounting Pitch (min.)	Full Stroke	Spring Pressure Initial	Spring Pressure 2/3 Stroke	Allowable Current	Resistance	Replacement Cycle (Reference)	Unit Price (1-69 pc)	Volume Discount Rate (70-99)	Volume Discount Rate (100-500)	Part Number	Applicable Turn Probes	Mounting Hole for Press-Fitting Dimension (Reference)	Unit Price (1-69 pc)	Volume Discount Rate (70-99)	Volume Discount Rate (100-500)	
TNP72	1.27mm	4.5mm	10gf	50gf	1.5A	250mΩ	300,000 times				NR72	TNP72	0.93~0.94mm				
TNP10	1.9mm	5.5mm	20gf	140gf		200mΩ	300,000 times				NR10	TNP10	1.39~1.41mm				
TNP60	2.54mm	6.4mm	50gf	165gf		200mΩ	100,000 times				NR60	TNP60	1.77~1.79mm				

For orders larger than indicated quantity, please request a quotation. For NR60, please select the end shape. For orders larger than indicated quantity, please request a quotation.

Ordering Example: Part Number - Tip/End Shape

Example: TNP72 - C  
TNP60 - A  
NR60 - C

EX Example: Pattern C