

Contact Probes / Receptacles

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

Turn Probes

Feature: 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

NP84SF
NP84
NP84HD

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	Stainless Steel	-

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

Receptacles - Minimum Mounting Pitch 3.0mm

NR84

NP84SF, NP84, NP84HD Tip Shapes

NR84 End Shapes

Contact Probes - Minimum Mounting Pitch 3.5mm

NP90SF
NP90
NP90HD

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 falling out.

Receptacles - Minimum Mounting Pitch 3.5mm

NR90

NP90SF, NP90, NP90HD Tip Shapes

NR90 End Shapes

Contact Probes - Minimum Mounting Pitch 4.5mm

NP89SF
NP89S
NP89

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	Gold Plating
4	Ball	SUJ	Gold Plating

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

Receptacles - Minimum Mounting Pitch 4.5mm

NR89

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	Volume Discount Rate	Part Number	Matching Contact Probe	Mounting Hole for Press-Fitting Dimension (Reference)	Unit Price	Volume Discount Rate
NP84SF	3.0mm	6.3mm	10gf	50gf	1.5A	80mΩ	300,000 times	1-69 pcs.	70-99	NR84	NP84SF	2.41-2.46mm	1-69 pcs.	70-99
NP84			45gf	126gf										
NP84HD			77gf	200gf										
NP90SF	3.5mm (4.5mm)	6.4mm	10gf	50gf	1.5A	80mΩ	300,000 times	1-69 pcs.	70-99	NR90	NP90SF	2.77-2.82mm	1-69 pcs.	70-99
NP90			40gf	150gf										
NP90HD			146gf	250gf										
NP89SF	4.5mm	6.4mm	30gf	100gf	1.5A	80mΩ	300,000 times	1-69 pcs.	70-99	NR89	NP89SF	3.58-3.63mm	1-69 pcs.	70-99
NP89S			84gf	275gf										
NP89			170gf	450gf										

Receptacles with Lead Wire

Part Number	Lead Wire Color	Lead Wire Length (mm)	Lead Wire	Lead	Receptacle Used
NRB84	W (White)	400	01.0	00.08x40 pcs.	NR84-C
NRB90	R (Red)	1000	01.0	00.08x40 pcs.	NR90-C
NRB89	BL (Blue)	400	01.0	00.08x40 pcs.	NR89-C

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

Example: NP84 - G - W - 1000 - 1

Example: NR90 - B - BL - 400 - 1

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Feature: 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

Turn Probes

No.	Part	Material	Surface Treatment
1	Plunger	W1-9 Tool Steel	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	Receptacle	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 falling out.

Turn Probes 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

Receptacles for Turn Probes

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	Volume Discount Rate	Part Number	Applicable Turn Probes	Mounting Hole for Press-Fitting Dimension (Reference)	Unit Price	Volume Discount Rate
TNP72	1.27mm	4.5mm	10gf	50gf	0.5A	250mΩ	300,000 times	1-69 pcs.	70-99	NR72	TNP72	0.93-0.94mm	1-69 pcs.	70-99
TNP10	1.9mm	5.5mm	20gf	140gf	1A	200mΩ	300,000 times	1-69 pcs.	70-99	NR10	TNP10	1.39-1.41mm	1-69 pcs.	70-99
TNP60	2.54mm	6.4mm	50gf	165gf	1.3A	200mΩ	100,000 times	1-69 pcs.	70-99	NR60	TNP60	1.77-1.79mm	1-69 pcs.	70-99

Ordering Example: Part Number - Tip/End Shape - Days to Ship

Example: TNP72 - C - 1

Example: TNP60 - C - 1

Example: NR60 - C - 1

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