

Contact Probes Assemblies

Standard, Screw Mounting, Resin Sleeve, Spring Built-In, Thread Wire Connection

■ **Integrated Probe Assembly Features:** One-piece Contact Probe is constructed by one continuous pin from the tip to the end. Less contact points and good conductivity enable stable electrical continuity, regardless of the stroke length.

Standard

GNP6
GNP8
GNP12

Tip Shape Selection

Applicable Terminal P1879

Part Number	d	d1	d2	d3	d4
GNP6	0.6	0.65	0.5	(0.45)	0.3
GNP8	0.8	0.8	0.6	(0.55)	0.4
GNP12	1.2	1.25	1.05	(0.95)	0.8

No.	Part	Material	Surface Treatment
①	Plunger	ISO-TC90 Equiv.	Gold Plating on Nickel Undercoat
②	Spring	Spring Steel (JIS-SWSP)	Gold Plating
③	Sleeve	Brass*	Gold Plating on Nickel Undercoat
④	Collar	Brass	Nickel Plating

*The material of GNP6 is Phosphor Bronze.

• GNP6, GNP8, GNP12 Tip Shapes

A

B

C

G

H

■ **Features:** Screw Mounting Type allows height adjustments.

Screw Mounting

FNP10
FNP10N (with Nut)
FNP10HDN (with Nut)

Tip Shape Selection

Applicable Terminal P1879

No.	Part	Material	Surface Treatment
①	Plunger	ISO-TC90 Equiv.	Gold Plating on Nickel Undercoat
②	Spring	Spring Steel (JIS-SWSP)	Gold Plating
③	Sleeve	ISO-TC90 Equiv.	Nickel Plating
④	Collar	Brass	Gold Plating on Nickel Undercoat

Part	Material	B	(e)	T
Nut (FNP10N)	EN 1.4301 Equiv.	4	4.6	1.6
Nut (FNP13N)	EN 1.4301 Equiv.	5	5.8	2

Screw Mounting

FNP13
FNP13N (with Nut)
FNP13HDN (with Nut)

Tip Shape Selection

Applicable Terminal P1879

No.	Part	Material	Surface Treatment
①	Plunger	ISO-TC90 Equiv.	Gold Plating on Nickel Undercoat
②	Spring	Spring Steel (JIS-SWSP)	Gold Plating
③	Sleeve	ISO-TC90 Equiv.	Nickel Plating
④	Collar	Brass	Gold Plating on Nickel Undercoat

Part	Material	B	(e)	T
Nut (FNP10N)	EN 1.4301 Equiv.	4	4.6	1.6
Nut (FNP13N)	EN 1.4301 Equiv.	5	5.8	2

• FNP10, FNP10N, FNP10HDN Tip Shapes

A15

D15

E15

A18

D18

E18

• FNP13, FNP13N, FNP13HDN Tip Shapes

A

D

E

■ **Features:** Resin Sleeve Type has resin sleeves, and can be used to avoid electrical continuity of fixtures.

Resin Sleeve

FNP22SF
FNP22

Tip Shape Selection

Applicable Terminal P1879

No.	Part	Material	Surface Treatment
①	Plunger	ISO-TC90 Equiv.	Nickel Plating
②	Sleeve	Polycetal	-
③	Spring	Stainless Steel	-

Resin Sleeve

FNP40SF
FNP40

Tip Shape Selection

No.	Part	Material	Surface Treatment
①	Plunger	ISO-TC90 Equiv.	Nickel Plating
②	Sleeve	Polycetal	-
③	Spring	Stainless Steel	-

• FNP22SF, FNP22 Tip Shapes

A

C

H (Quartered)

TH

⚡ For Shape A, the material of head and shaft is brass and ISO-TC90 Equiv. respectively.

⚡ For Shape TH, the material of holder is BS and that of needle is JIS-SWRH.

• FNP40SF and FNP40 Tip Shapes

A

C

H (Quartered)

TH

⚡ For Shape A, the material of head and shaft is ISO-TC90 Equiv. and JIS-SWRH respectively.

⚡ For Tip Shape C, the material of plunger is JIS-SWRH.

⚡ For Shape TH, the material of holder is BS and that of needle is JIS-SWRH.

■ **Features:** Spring Built-In Type houses a spring, which causes no external interference and keeps out dust.

Spring Built-In

FNPS22

Tip Shape Selection

Applicable Terminal P1879

No.	Part	Material	Surface Treatment
①	Head	Brass	Electroless Nickel Plating
②	Plunger	JIS-SWRH	Nickel Plating
③	Bearing	Brass	Electroless Nickel Plating
④	Collar	Stainless Steel (JIS-SWSP)	-
⑤	Spring	Spring Steel (JIS-SWSP)	Gold Plating
⑥	Sleeve	German Silver	Electroless Nickel Plating

Spring Built-In

FNPS35

Tip Shape Selection

Applicable Terminal P1879

No.	Part	Material	Surface Treatment
①	Head	Brass	Electroless Nickel Plating
②	Plunger	ISO-TC90 Equiv.	Electroless Nickel Plating
③	Bearing	Brass	Electroless Nickel Plating
④	Collar	Brass	Electroless Nickel Plating
⑤	Spring	Stainless Steel	-
⑥	Sleeve	Brass	Electroless Nickel Plating

• FNPS22 Tip Shapes

A

B

C

H

TH

⚡ For Shape TH, the material of holder is BS and that of needle is JIS-SWRH.

• FNPS35 Tip Shapes

A

B

C

H

■ **Features:** No soldering is required as round crimp terminals and round lead wires are tucked in the threads and secured with nuts.

Thread Wire Connection

MNP50

Tip Shape Selection

Accessory: Nut (2 pcs.)

No.	Part	Material	Surface Treatment
①	Plunger	ISO-TC90 Equiv.	Gold Plating on Nickel Undercoat
②	Spring	Spring Steel (JIS-SWSP)	Gold Plating
③	Sleeve	Brass	Gold Plating on Nickel Undercoat
④	Collar	Brass	Nickel Plating
⑤	Nut	Stainless Steel	-

Thread Wire Connection

MNP50

Tip Shape Selection

Avoid tightening the nut exceeding the torque value of 0.98 N / m.

• MNP50 Tip Shapes

A

B

C

G

G8

J

Part Number	Mounting Pitch (min.)	Full Stroke	Spring Pressure Initial	2/3 Stroke	Allowable Current	Resistance	Replacement Cycle (Reference)	Mounting Hole for Press-Fitting Dimension (Reference)	Unit Price (1 ~ 69 pcs (s))	Volume Discount Rate 70~99	100~500
GNP6	0.8mm	3.4mm	26gf	80gf	0.5A		100,000 times	0.48~0.5mm			
GNP8	1.0mm	3.4mm	23gf	80gf	1A	50mΩ	300,000 times	0.58~0.6mm			
GNP12	1.5mm	4.0mm	32gf	95gf	3A			1.03~1.05mm			
FNP10	3.0mm	4.5mm	60gf	105gf	3A	80mΩ	300,000 times	M2×0.25			
FNP10N (with Nut)	(6.0mm)		56gf	175gf							
FNP10HDN (with Nut)			56gf	175gf							
FNP13	5.0mm	4.0mm	60gf	100gf	3A	80mΩ	300,000 times	M2.5×0.35			
FNP13N (with Nut)	(7.0mm)		58gf	175gf							
FNP13HDN (with Nut)			58gf	175gf							
FNP22SF	3.0mm	7.0mm	0gf	100gf	3A	80mΩ	300,000 times	1.98~2.00mm			
FNP22			150gf	220gf							
FNP40SF	5.0mm	17.0mm*	0gf	300gf				3.48~3.50mm			
FNP40			51gf	180gf							
FNPS22	3.0mm	8.0mm	66gf	200gf	3A	80mΩ	300,000 times	1.98~2.00mm			
FNPS35	4.0mm	8.0mm	66gf	200gf	5A	35mΩ	300,000 times	3.17~3.19mm			
MNP50	7.0mm~9.0mm>	7.6mm	228gf	455gf			300,000 times	4.18~4.2mm			

⚡ Mounting pitches in () are applicable to the contact probes with nut.

⚡ MNP50 mounting pitches in < > are applicable to G8 tip shape. * Tip shape A is 14.0mm, and TH is 9.5mm.



Ordering Example

Part Number	Tip Shape
GNP12	G
FNP10N	E15
FNP13	A
MNP50	G8



Example

