

Feature

1. Flux build-up prevention is taken through inserting molding around the resistor with resin.
2. A large variety of products lined up to support various applications.
3. Long Life Type Available.

F091 Series Rotary Potentiometer

Electrical characteristics

- Total Resistance.....1K Ω ~1M Ω
- Total Resistance Tolerance.....500 Ω <R<1M Ω : $\pm 20\%$
R $\leq$ 500 Ω or R $\geq$ 1M Ω : $\pm 30\%$
- Resistance Taper.....A,B,C
- Max. Operating Voltage.....AC50V.DC10V
- Rated Power.....Linear Taper B:0.05W
Other Tapers:0.025W
- Rotational Noise.....Less than 100mv
- Insulation Resistance.....More than100M Ω at DC 250v
- Withstand Voltage.....1 minute at AC 300V
- Residual Resistance.....Term.1~2:Less than 20 Ω
Term.2~3:Less than 20 Ω
- Gang Error(Dual Unit or Multi Unit).....-40dB~0dB $\pm$ 3dB

Mechanical characteristics

- Total Rotational Angle.....300° $\pm$ 10°
- Rotational Torque.....5 ~90 gf.cm
- Click Torque.....50gf.cm~200gf.cm
- Stopper Strength.....4.0Kgf.cm Min.
- Push-Pull Strength.....6.0Kgf Min
- Bushing Nut Tighten Strength.....8.0Kgf.cm Min
- Number of Detents(Click).....1C(Center Detent), 11C,21C,41C
- Lock Action Push(Pull).....200 gf.cm ~450 gf.cm

Durability

- Operating Temperature Range.....-10°C ~ +70°C
- Storage Temperature Range.....-30°C ~ +80°C
- Rotational Life.....Standard life:15,000 Cycles
Long life: 100,000 Cycles

Switch characteristics

- Contact ResistanceLess than 100m Ω
- Rated Power.....Push: 0.5A at DC 12V
Rotational: 3.0A at DC 16V
- Push Stroke Length.....0.5+0.5 /-0.3 mm
- Switch Angle.....50° Max
- Switch Torque.....Push:250~550 gf
Rotational: 100 ~350 gf.cm.
- Switch Circuit.....S.P.S.T & D.P.S.T
- Switch Life15,000 Cycles Min.

HOW TO ORDER

F091-	H	2	5	S	1	F	1	C	B	100K	1
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Model Series

Code	Terminal Configuration
H	Top Adjust, PC Pins
V	Side Adjust, PC Pins

Code	Gang Number
1	1 Gang
2	2 Gangs
3	3 Gangs
4	4 Gangs
6	6 Gangs

Code	Length Of Bushing
5	5.0mm
7	7.0mm
0	10mm

Code	Switch Type
N	No Switch
S	With Rotary Switch
M	With Momentary Switch
P	With Push Lock
B	With Both Momentary And Rotary Switch

Shaft Type & Length

See Note 1Full CCW PositionSee Note 2

Code	Resistance Taper
A	Audio (15A)
B	Linear(Single Unit:1B; Dual& Multit-Gangs:3B)
C	Reverse Audio(15C)
D	Audio (10A)

Code	Detent Option
0	No Shaft Detent
1	With Center Detent
2	With 11 Shaft Detents
3	With 21 Shaft Detents
4	With 41 Shaft Detents

Total Resistance

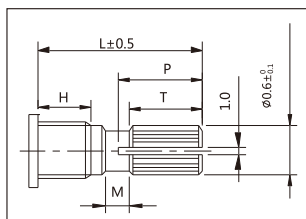
1K
2K
5K
10K
20K
50K
100K
200K
500K
1MEG

Code	Operation Life
(Blank)	Std. Life w/o anti-sulfur
1	Std. Life w/ anti-sulfur
2	Long Life w/ anti-sulfur
3	Long Life w/o anti-sulfur

Note 1: Shaft Type and Lengths

(1) No push lock

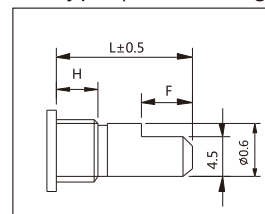
Q-Type



Code	1	2	3	4	5	6	7
L	10	12	15	17	20	25	30
P	4	5	7	10	13	14	14
T	4	4	6	9	12	12	12
M	1	1	1	2	2	2	4

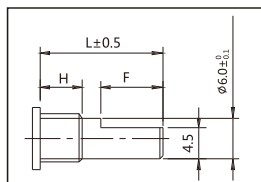
Bushing length H = 7							Bushing length H = 10						
Code	1	2	3	4	5	6	Code	1	2	3	4	5	6
L	15	17	18	20	25	30	L	18	19	20	22	25	30
P	6.5	8	9	11	12	14	P	6	7	6.5	8	11	14
T	5.5	7	8	10	10	12	T	5	6	6	7	10	12
M	1	1	1	1	2	4	M	1	1	1	2	2	4

A-Type (die-casting)



Bushing length H = 5				
Code	1	2	3	4
L	12.5	14.6	15	20
F	6	7	7	12

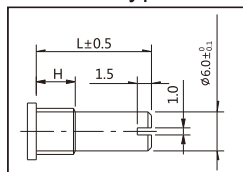
F-Type



Bushing length H = 5										
Code	1	2	3	4	5	6	7	8	9	0
L	10	12.5	15	17	17	20	20	25	25	30
F	4	6	7	5	9	7	12	12	15	12

Bushing length H = 7										Bushing length H = 10					
Code	1	2	3	4	5	6	7	8		Code	1	2	3	4	5
L	13	15	17	20	21.8	25	25	30		L	15	17	20	25	30
F	5	7	7	12	12	12	15	12		F	4	5.5	7	12	12

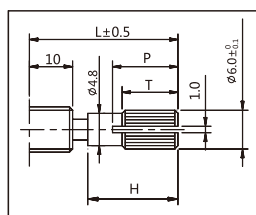
S-Type



Bushing length H = 5									Bushing length H = 7					Bushing length H = 10				
Code	1	2	3	4	5	6	7	8	Code	1	2	3	4	Code	1	2	3	4
L	7	8	10	15	17	20	25	30	L	15	20	25	30	L	15	20	25	30

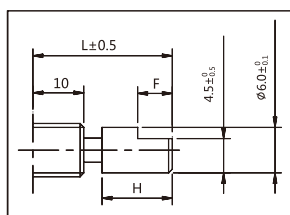
(2) with push lock

Q-Type



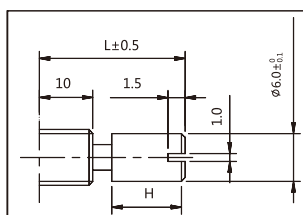
Bushing length=10			
Code	1	2	3
L	25	30	35
H	5.7	10.7	15.7
P	4	7	13
T	3	6	12

F-Type



Bushing length=10			
Code	1	2	3
L	25	30	35
F	4.5	7	12
H	5.7	10.7	15.7

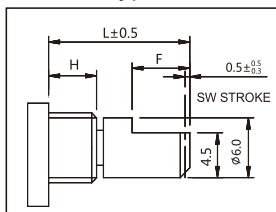
S-Type



Bushing length=10			
Code	1	2	3
L	25	30	35
H	5.7	10.7	15.7

(3) With momentary switch

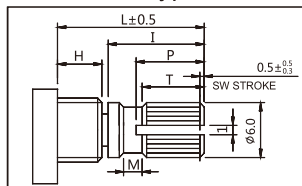
F-Type



Bushing length H = 5					
Code	1	2	3	4	5
L	10	15	20	25	30
F	3	7	12	12	12

Bushing length H = 7					Bushing length H = 10				
Code	1	2	3	4	Code	1	2	3	4
L	15	20	25	30	L	20	25	30	
F	6	10	12	12	F	7	12	12	

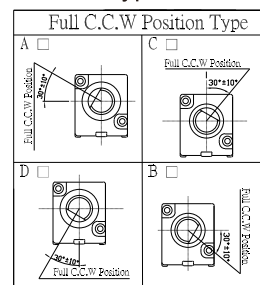
Q-Type



Bushing length H =10					Bushing length H =7							
Code	1	2	3		Code	1	2	3	4	5	6	7
L	20	25	30		L	15	15	20	20	25	25	30
P	6.5	11	14		P	6	6.5	11	12	12	14	14
T	6	10	12		T	6	5.5	10	11	10	12	12
M	1	2	4		M	1.2	1	1	1.2	2	2	4

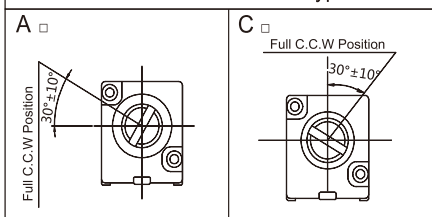
Note 2: Full C.C.W Shaft Position:

F/A-Type shaft

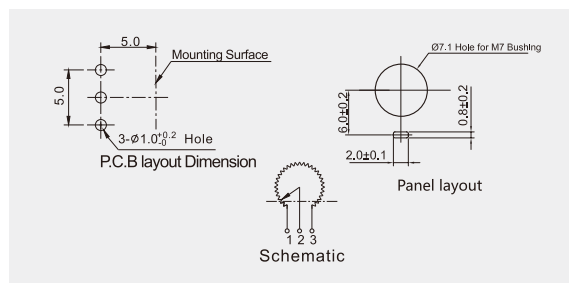
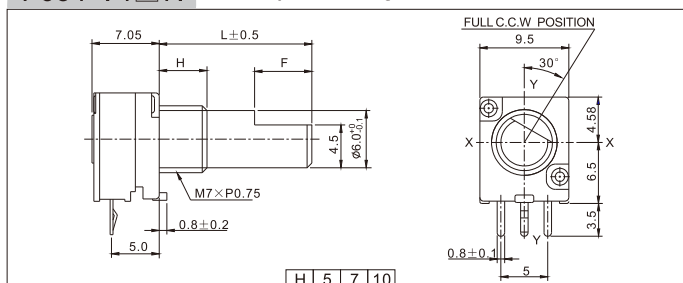


Q/S-Type shaft

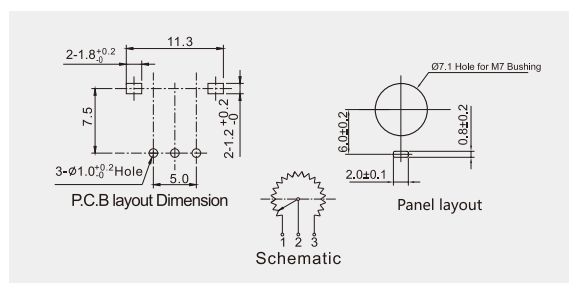
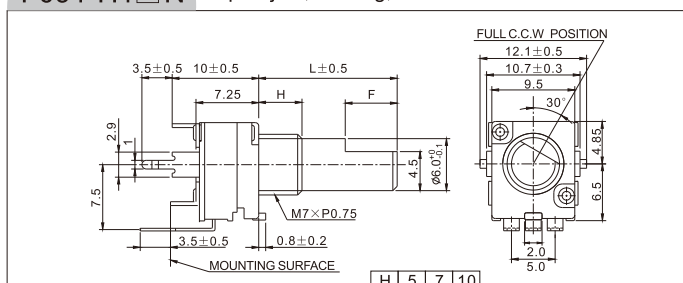
Full C.C.W Position Type



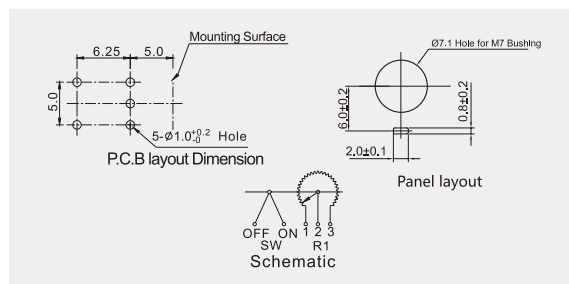
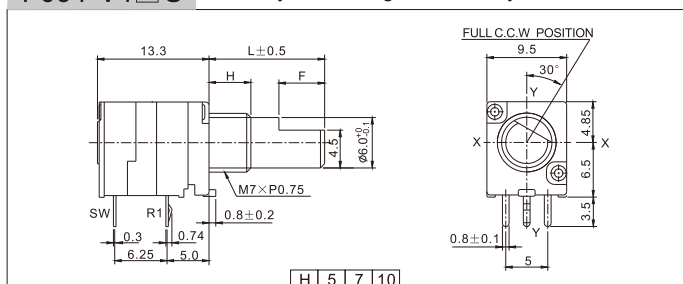
F091-V1□N Side Adjust, 1 Gang, No Switch



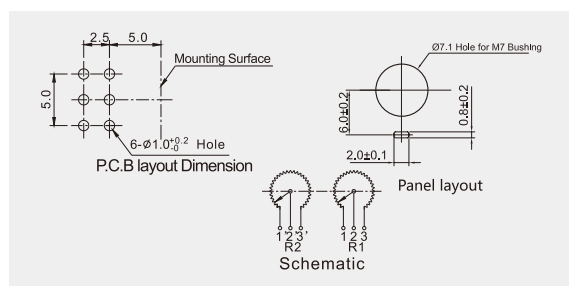
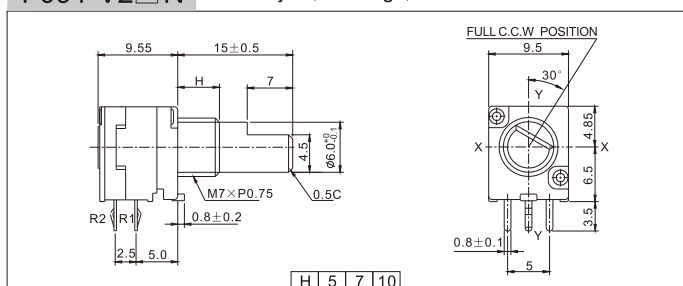
F091-H1□N Top Adjust, 1 Gang, No Switch



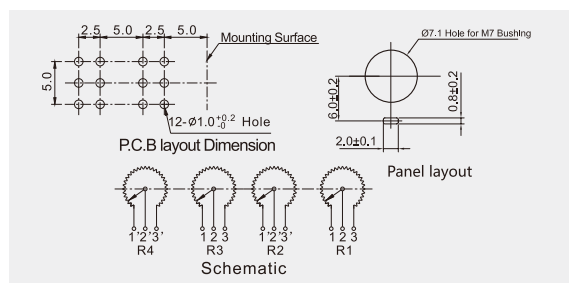
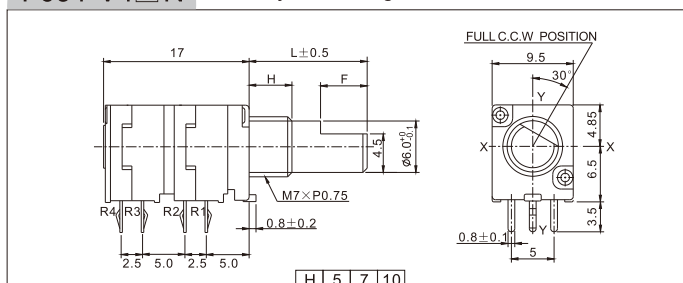
F091-V1□S Side Adjust, 1 Gang, With Rotary Switch



F091-V2□N Side Adjust, 2 Gangs, No Switch

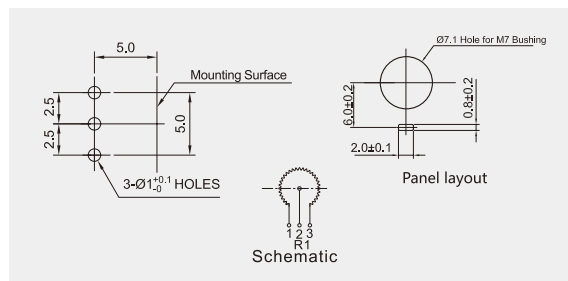
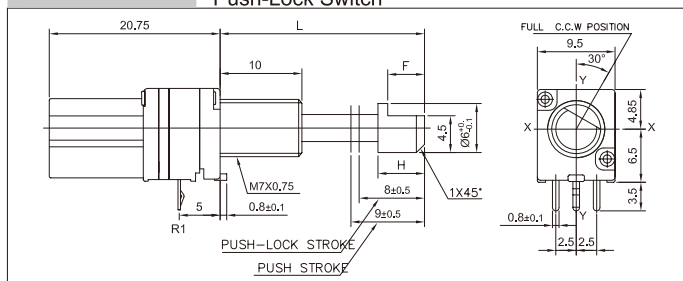


F091-V4□N Side Adjust, 4 Gangs, No Switch



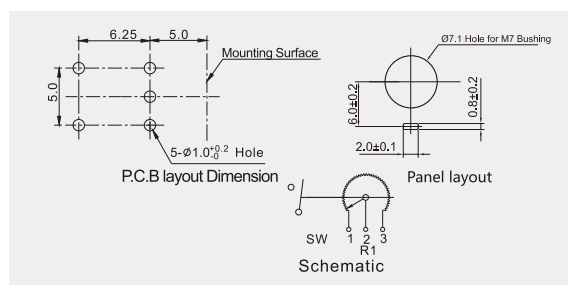
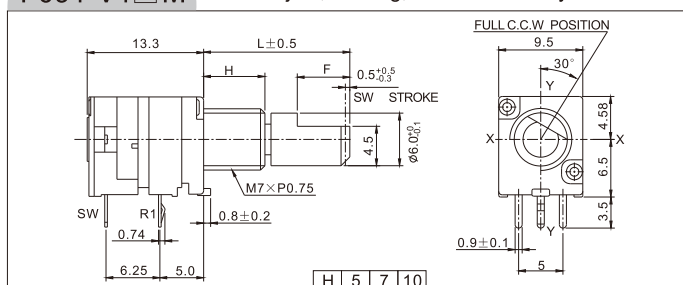
F091-V10P

Side Adjust, 1 Gang, 10mm Bushing Length, with Push-Lock Switch



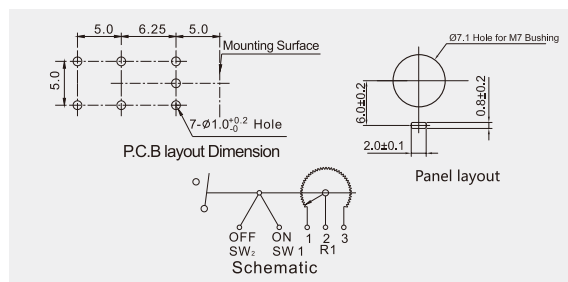
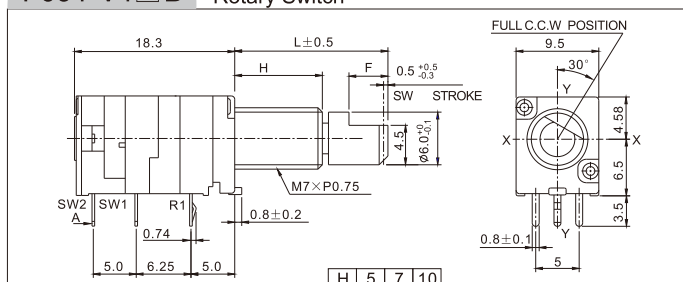
F091-V1□M

Side Adjust, 1 Gang, With Momentary Switch



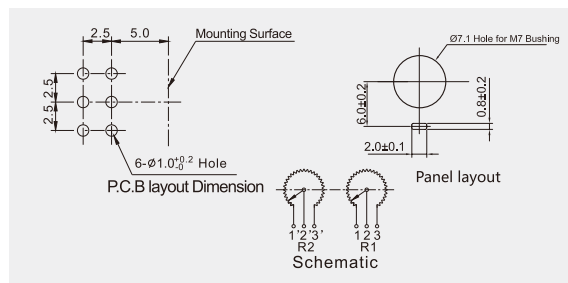
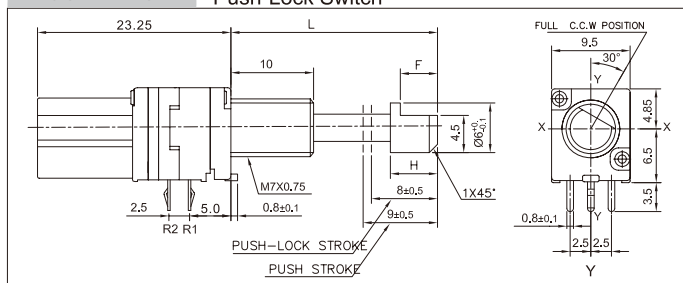
F091-V1□B

Side Adjust, 1 Gang, With Both Momentary and Rotary Switch



F091-V20P

Side Adjust, 2 Gangs, 10mm Bushing Length, with Push-Lock Switch



F091-H25N

Top Adjust, 2 Gangs, 5mm Bushing Length

