

Model P09x
 9mm Rotary Potentiometer
 Multi - Ganged
 Conductive Plastic Element
 100,000 Cycle Life
 Metal shaft / Bushing
 Switch / Push-Lock Option
 RoHS Compliant
 Concentric Shaft Option
 Center Tap Option



MODEL STYLES

Side Adjust, PCB pins, up to 8 gangs	P09xN
Side Adjust, PCB pins, up to 8 gangs, with Switch	P09xS
Top Adjust, PCB pins, up to 2 gangs	P09x5N
Side Adjust, PCB pins, with Push-Lock, up to 2 gangs	P09xP
PCB pins, with Concentric Shaft	P09xC
PCB pins, with Center Tap	P09xT

ELECTRICAL¹

Resistance Range, Ohms	1K-500K
Standard Resistance Tolerance	± 20%
Residual Resistance	20 ohms max.
Input Voltage, maximum	50 Vac max.
Power rating, Watts	Taper B: 0.05W Other Tapers: .025W
Dielectric Strength	300Vac, 1 minute
Insulation Resistance, Minimum	100M ohms at 250Vdc
Sliding Noise	100mV max.
Gang Error (Multi-ganged)	-40dB – 0dB, ±3dB
Switch Contact Resistance	< 100 milliohms
Switch Power Rated	3.0A at 16Vdc

¹ Specifications subject to change without notice.

Model P09x

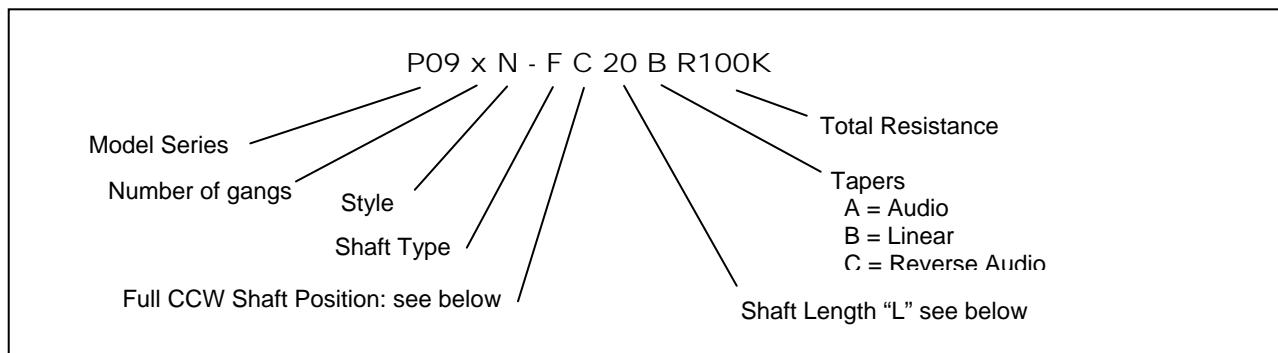
MECHANICAL

Total Mechanical Travel	$300^\circ \pm 10^\circ$
Static Stop Strength	50 oz-in
Rotational Torque	0.5 to 1.25 oz-in
Switch Rotational Angle, Maximum	50°

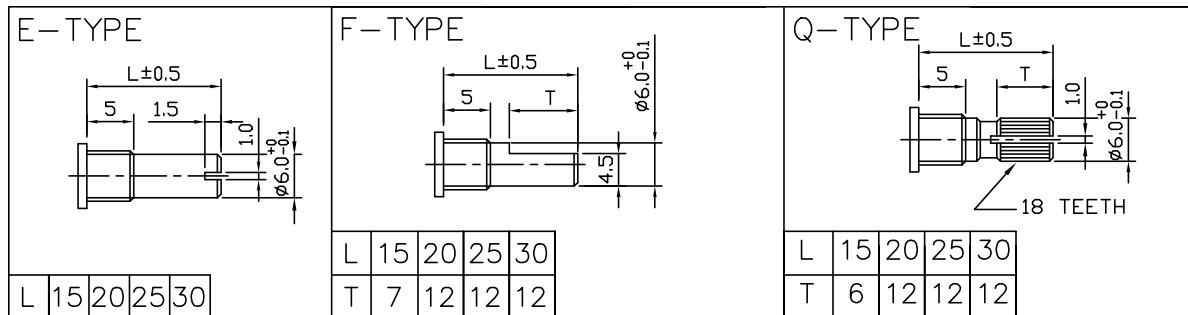
ENVIRONMENTAL

Operating Temperature Range	-10°C to +70°C
Rotational Life	100,000 cycles

ORDERING INFORMATION²



Shaft Types (P09xN, P09xS, P09x5N)



² Contact our customer service for custom designs and features.

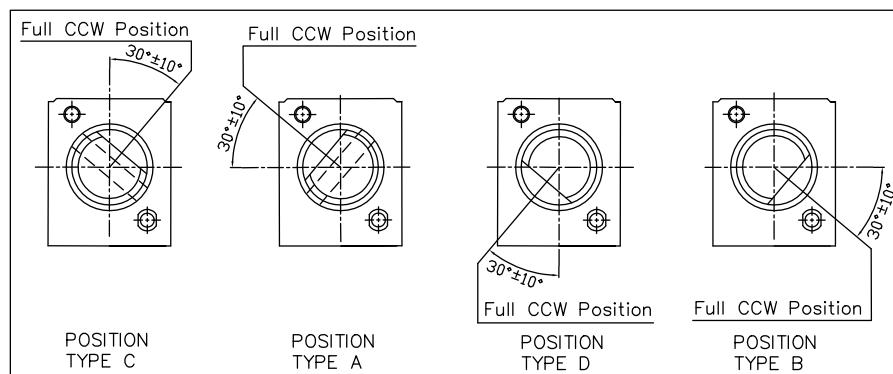
Model P09x

Shaft Types for Push-Lock (P09xP)

E-TYPE			F-TYPE			Q-TYPE					
$L \pm 0.5$	1.5	1.0	$L \pm 0.5$	T	$\phi 6.0^{+0.1}$	$L \pm 0.5$	T	$\phi 6.0^{+0.1}$			
M			M		4.5	M		1.0			
L	25	30	35	L	25	30	35	L	25	30	35
T	4.5	7	12	T	3	6	12	T	3	6	12
M	5.7	10.7	15.7	M	5.7	10.7	15.7	M	5.7	10.7	15.7

Shaft Position (F-Type Shaft)

Dashed lines on Type "C" and Type "A" shows position of adjustment slot for E-Type and Q-Type shafts



STANDARD RESISTANCE VALUES, OHMS

1K	2K	5K	10K	20K	50K	100K	200K	500K
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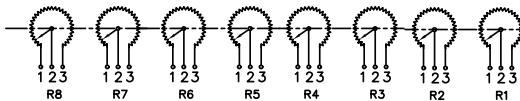
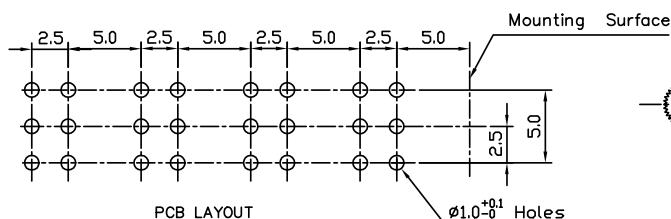
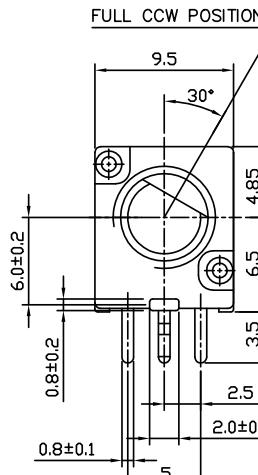
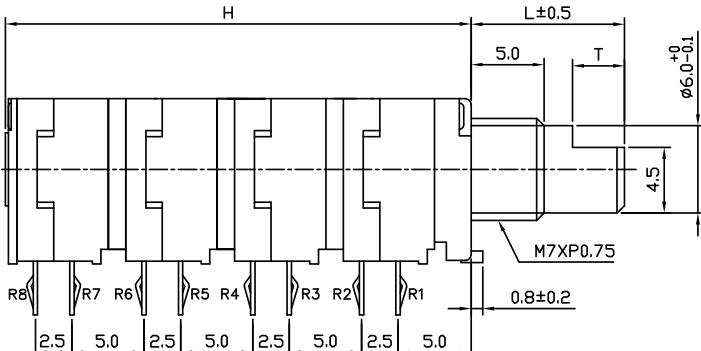
Model P09x

OUTLINE DRAWING

Model P09xN (Side Adjust, PCB pins, up to 8 gangs)

X = Number of Gangs

X	1	2	3	4	5	6	7	8
H	7.05	9.55	14.55	17.05	22.05	24.55	29.55	32.0

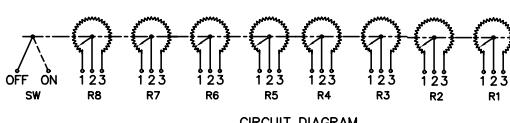
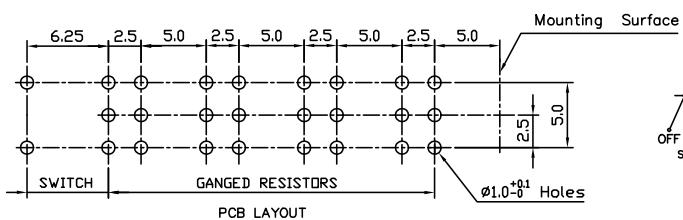
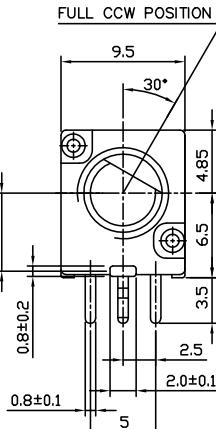
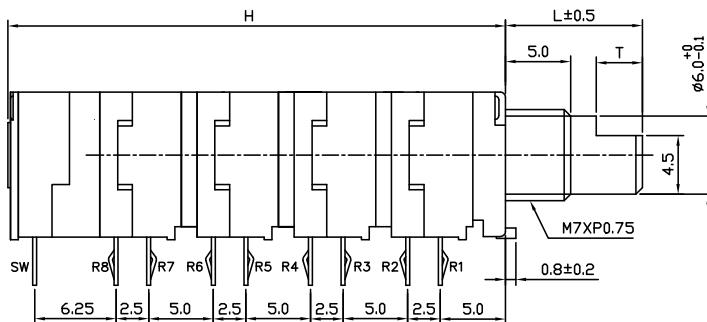


CIRCUIT DIAGRAM

Model P09xS (Side Adjust, PCB pins, up to 8 gangs, with Switch)

X = Number of Gangs + 1 Switch

X	1	2	3	4	5	6	7	8
H	13.3	15.8	20.8	23.3	28.3	30.8	35.8	38.25



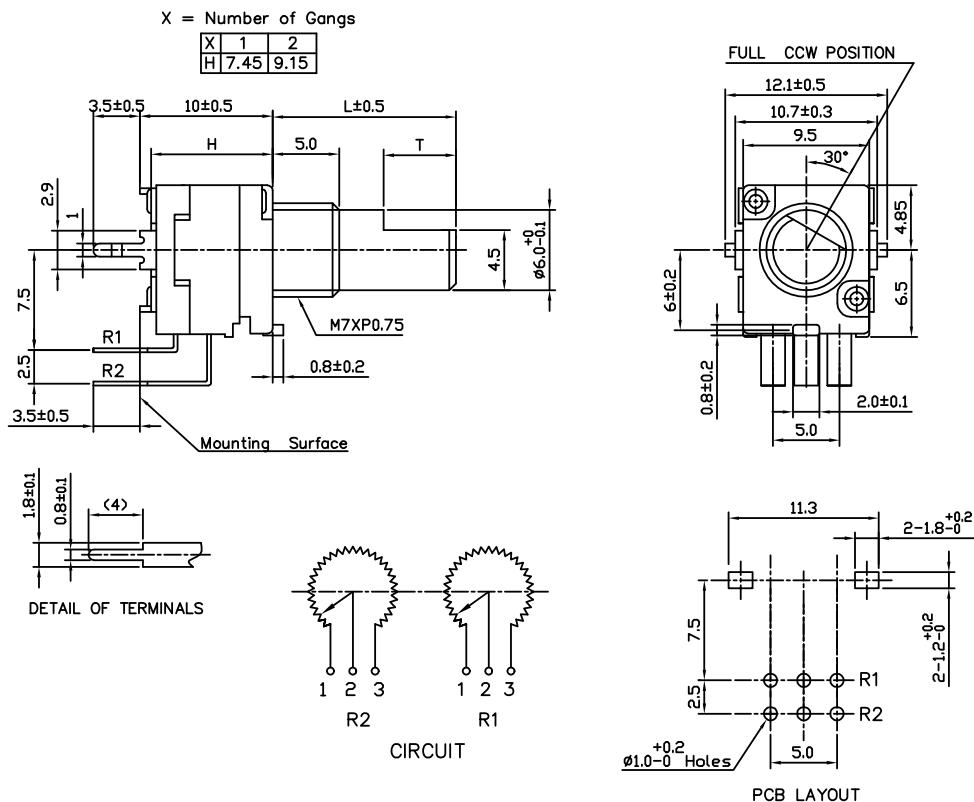
CIRCUIT DIAGRAM

BI Technologies Corporation
4200 Bonita Place, Fullerton, CA 92835 USA

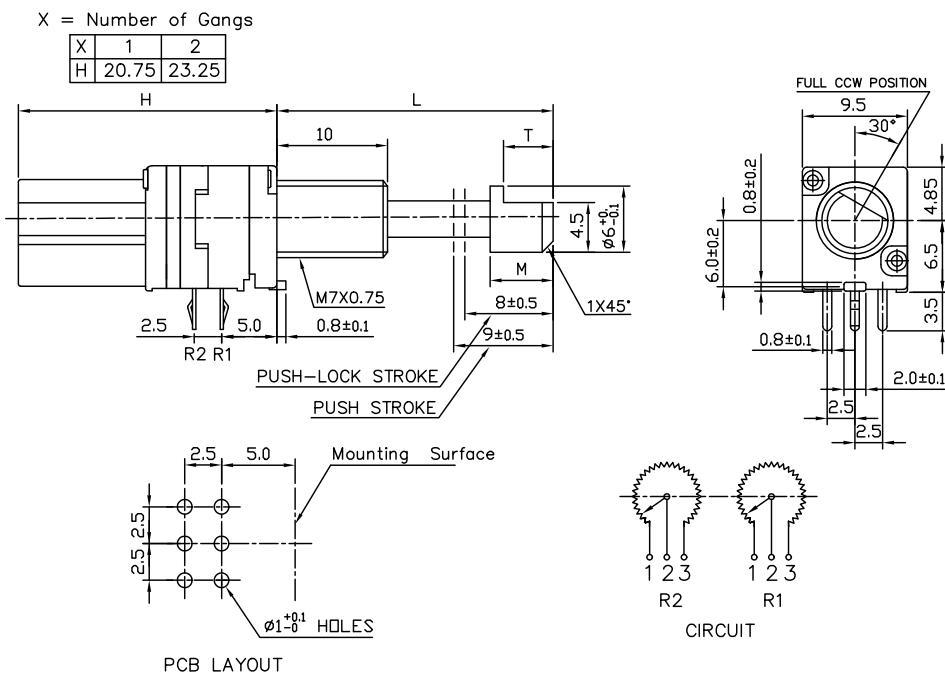
Phone: 714 447 2345 Website: www.biotechnologies.com

Model P09x

Model P09x5N (Top Adjust, PCB pins, up to 2 gangs)



Model P09xP (Side Adjust, PCB pins, with Push-Lock, up to 2 gangs)



Model P09x

Model P09xC and P09xT (PCB pins with Concentric Shaft and Center Tap Options)
This Diagram shows both options
Please consult factory for details

