

Thumb Joystick Controller - Potentiometer Type

Series 802



- Dual Axis
- Pushbutton Version
- Spring Return to Center
- 50° ($\pm 25^\circ$) Electrical Angle
- PCB Mount
- 100,000 Operations Life

▪  RoHS

Electrical Data (Note 1)

Electrical Travel	50° ($\pm 25^\circ$ from center)
Resistance Value	10k Ω $\pm 20\%$
Maximum Applied Voltage	30VDC
Power Rating	0.1W @ 70°C
Contact Noise (CRV)	< 10% total resistance
Contact Resistance (ENR)	< 15% C.R.V.
Resolution	Essentially Infinite
Center Return Accuracy	50% $\pm 3\%$
Insulation Resistance	> 100M Ω @ 250VDC
Withstand Voltage	250VAC 1 minute
Pushbutton Type	SPST (momentary)
Pushbutton Rating	12V, 50mA

Mechanical Data (Note 1)

Mechanical Travel	$\pm 30^\circ$ (60° overall) Circular pattern
Operating Force	220 ± 40 gf
Stopper Strength	> 3.1 Kgf (3 seconds min.)
Operating Temperature	-50°C ~ +125°C
Life Expectancy	> 100,000 random operations
Weight	Approx. 6g

• Special Specifications Available

Custom electrical angles, shaft modifications, hall effect type

Note 1: Customers should test and verify device performance in any given application. General specifications values are measured at temperatures of +15°C ~ +35°C. Specifications are subject to change without notice.

Product Versions

Series 802

Model: **802-20110-A**
Without Pushbutton

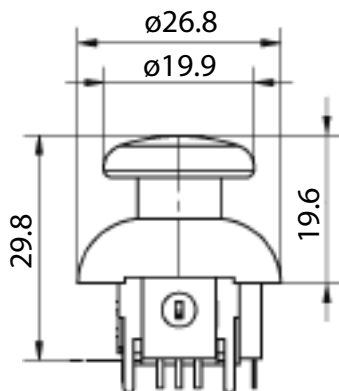
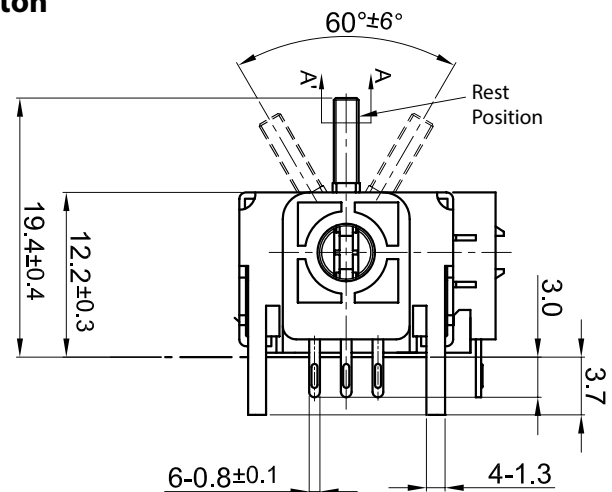
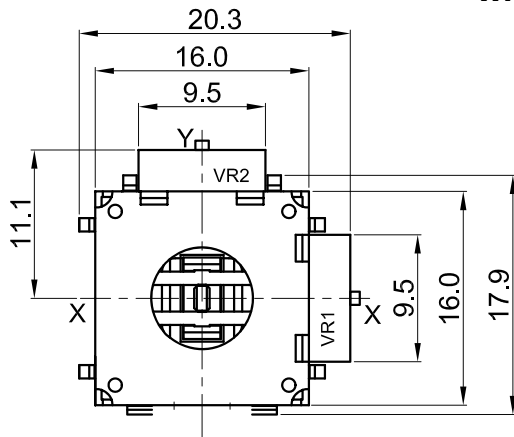


Model: **802-30110-A**
With Pushbutton



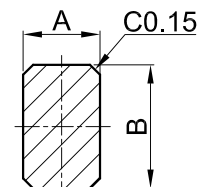
Dimensions (mm)

Model: 802-20110-A
Without Pushbutton



DETAIL A-A'(5/1)

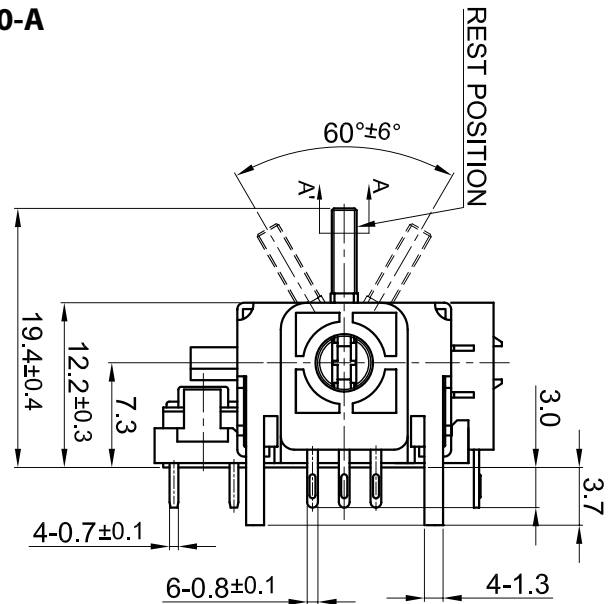
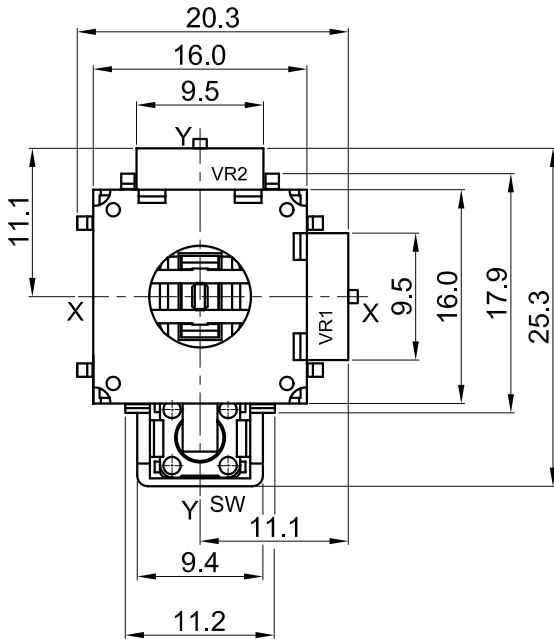
Code	P
A	1.15 ⁺⁰ _{-0.05}
B	1.85 ⁺⁰ _{-0.07}



Dimensions (mm)

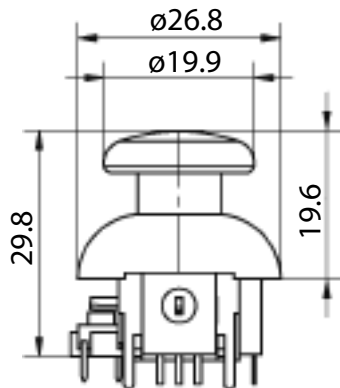
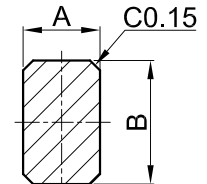
Series 802

**Model: 802-30110-A
With Pushbutton**



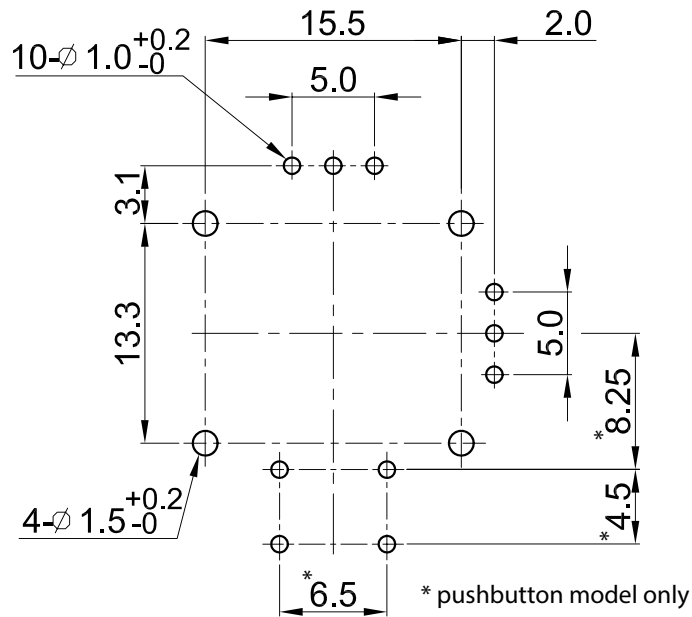
DETAIL A-A'(5/1)

Code	P
A	1.15 ⁺⁰ _{-0.05}
B	1.85 ⁺⁰ _{-0.07}



PCB Mounting Details

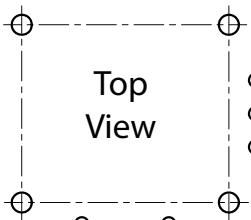
Series 802



Electrical Characteristics / Terminations

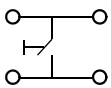
Y Potentiometer

1 2 3
○ ○ ○



○ 1
○ 2
○ 3

X Potentiometer



Switch (12V, 50mA, spst, momentary)

