

HALL EFFECT JOYSTICK

BTMJ25 SERIES

25 mm diameter hall effect joystick switch



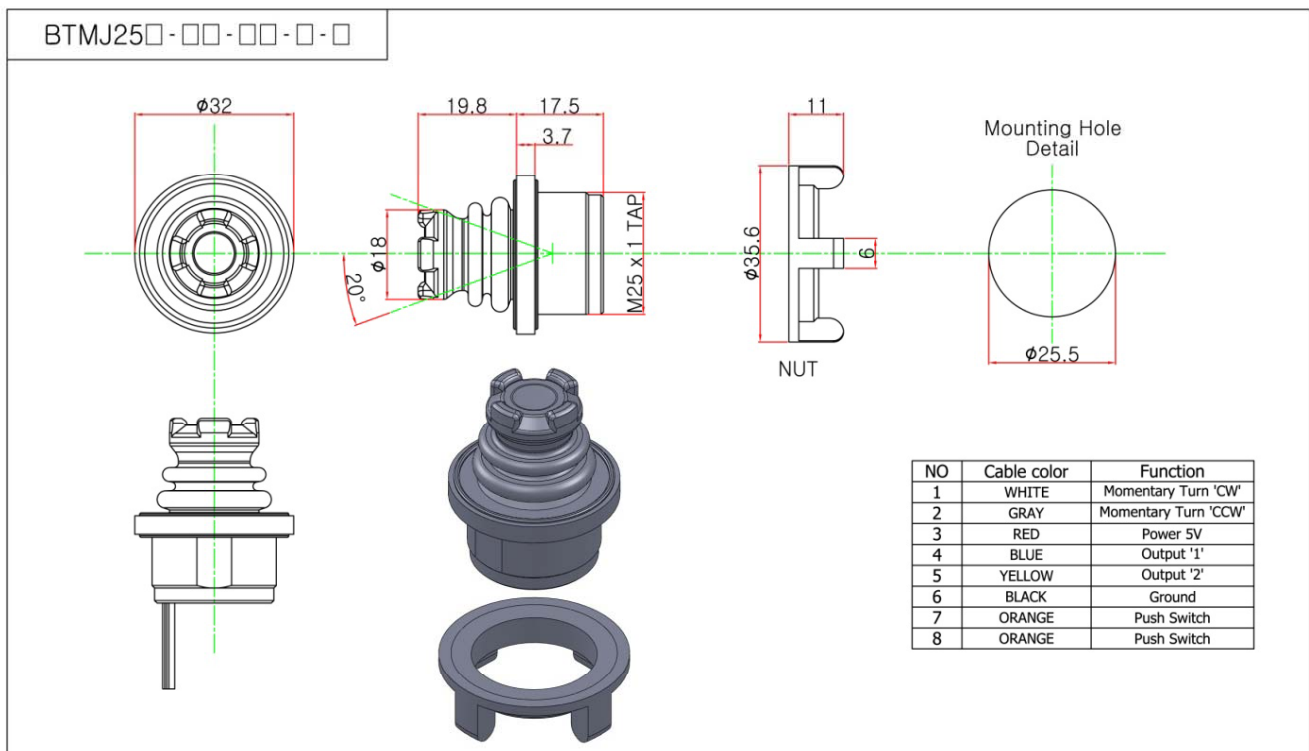
Features

- Contactless analogue proportional output and SPI output options with hall effect element
- Push switch, Momentary selection with joystick in one device
- Over 1 million long life
- Drop-in mounting with screw nut
- Shaft and panel seal to IP67
- RoHS compliant

Applications

- Long life for handheld remote control devices
- Medical equipments like as X-ray, CT, MRI devices
- Military vehicles-display navigation
- Useful for construction hydraulic controls and crane operation
- Numerous application for industrial equipments

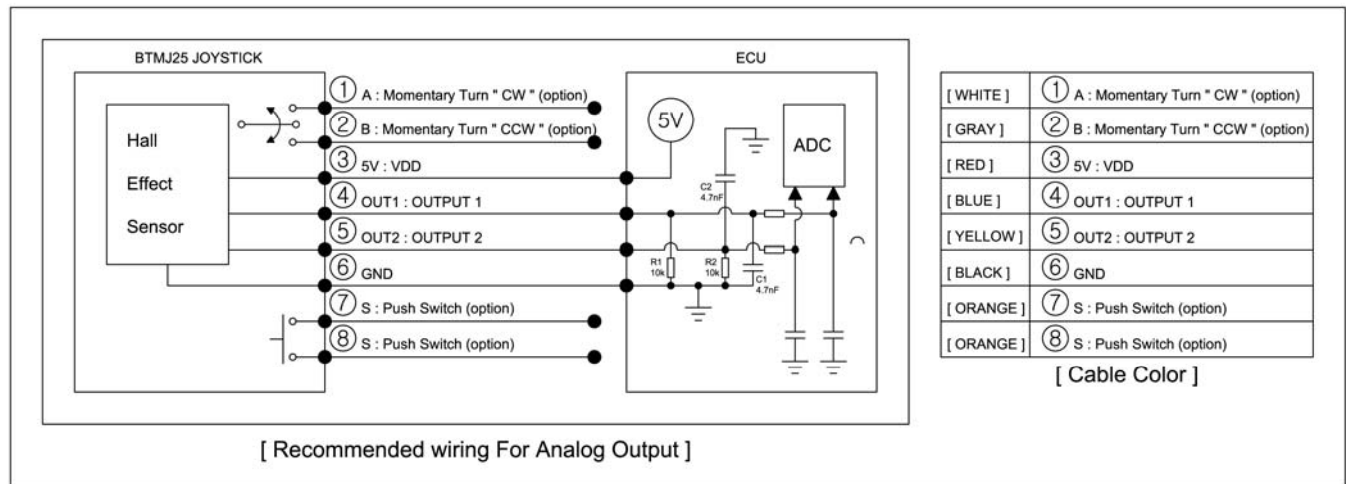
Standard Dimensions



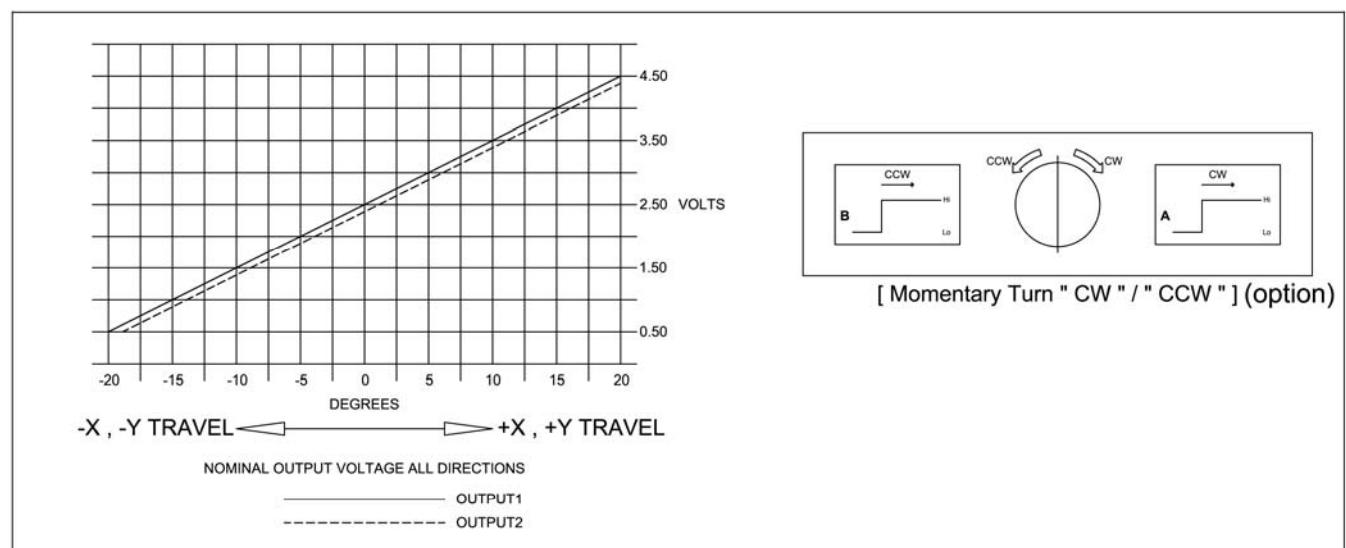
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Recommended application diagram



Joystick Output waveform



Electrical specifications

- Supplying voltage : DC 5 V \pm 10%
- Supplying current : 10 mA \pm 10%
- Out-put current : 8 mA \pm 10%
- Main clock frequency : 7 ~ 20 μ s
- Sampling Rate : 200 ~ 600 μ s
- Watch dog : 5 ms
- Insulation resistance : 100 Mohms on 250 VDC
- Withstanding Voltage : 1 min. at 300 VDC
- Electrical life : Over 1 million operation
- Rating of push button switch : 10 mA Max. at 12 VDC

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Mechanical specifications

- Joystick actuation force : 700 g Max \pm 30%
- Travel angle : $20^\circ \pm 10\%$
- Joystick mechanical operating life : Over 1 million operation
- Operating force of Push-button switch : Over 1 million operation
- Travel of Push-button switch : 0.4 ~ 0.6 mm
- Pull and push stroke strength of shaft : 2 kgf.cm for 1 min.
- Strength of end stop : 2 kgf.cm for 1 min.
- Operating temperature : - 40 ~ + 85 $^\circ\text{C}$

Soldering condition

- Hand soldering : 280 $^\circ\text{C}$ Max. during 2 sec Max.
- Wave soldering : 280 $^\circ\text{C}$ Max. Peak temperature during 2 sec Max.

Suggested Ordering Code

BTMJ25	P	-	5	S	-	100	C	-	R	-	C
Series BT BELTON M Magnetic J Joystick 25 Out diameter	Available Function J Joystick only P Joystick + Push switch M Joystick + Push switch + Momentary turn (option)		Operating Voltage 5 5 V	Seal Option S with sealing boot X without sealing boot		Cable Length (Option) 100 100 mm 050 50 mm	Termination C Cable P Pin header (option)		Operating Directions R Round 		Handle Options C Castle * Other handle can be made by order