

HALL EFFECT JOYSTICK

BTMJ44 SERIES

44 mm diameter **hall effect** joystick switch



Features

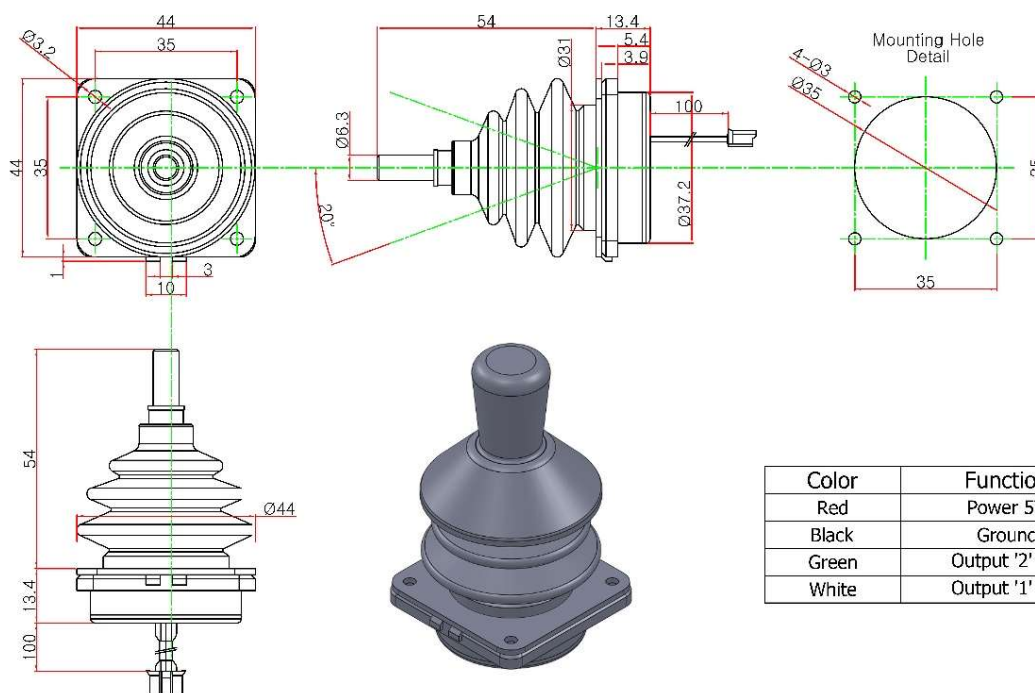
- Contactless analogue proportional output and SPI output options with hall effect element
- Over 1 million long life
- Rear mounting type
- Shaft and panel seal to IP67
- RoHS compliant

Applications

- Drone control devices
- Long life for handheld remote control devices
- Wheel chair control
- 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

BTMJ44 - - - -

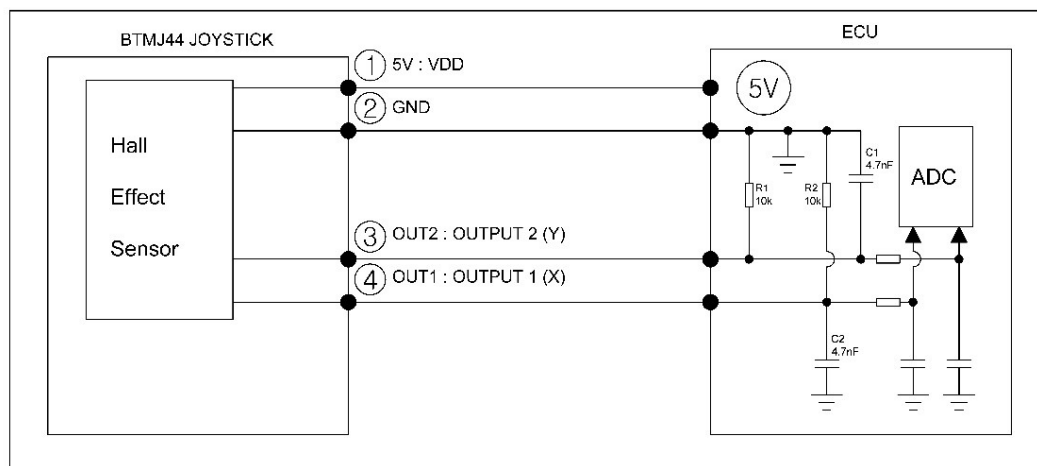


Color	Function
Red	Power 5V
Black	Ground
Green	Output '2' (Y)
White	Output '1' (X)

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Recommended application diagram

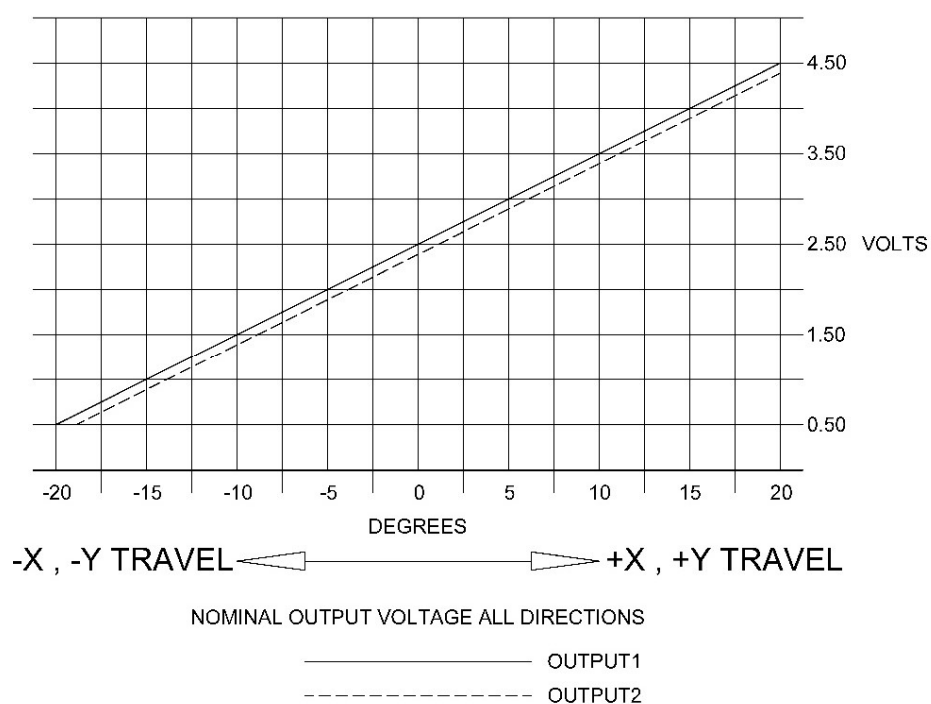


[Recommended wiring For Analog Output]

[RED]	① 5V : VDD
[BLACK]	② GND
[GREEN]	③ OUT2 : OUTPUT 2 (Y)
[WHITE]	④ OUT1 : OUTPUT 1 (X)

[Cable Color]

Joystick Output waveform



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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

Mechanical specifications

- Joystick actuation force : 200 g Max \pm 30%
- Travel angle : 20° \pm 10%
- Joystick mechanical operating life : Over 1 million operation
- 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 °C

Durability Characteristics

- Test conditions : 1,000,000 cycles of operation shall be performed under operating temp. range continuously at rate of 15 ~ 20 cycles/minute with load.
- Operating force : within specifications

Humidity Characteristics

- Test conditions : During 48 hours, put specimen in the chamber which is controlled at temp. 40 \pm 2 °C, moisture 90 ~ 95 % condition and then exposure to normal atmospheric condition for 1 hour.
- Insulation resistance : 100 Mohms on DC 250 V

Storage Temperature Range

- - 20 °C ~ + 85 °C

ANALOG & DIGITAL
REGENERATION UNITROTARY SWITCH &
ROTARY DIGITAL CODE SWITCH &
PUSH BUTTON SWITCHOPTICAL & MECH.
ENCODER SWITCHMILITARY / INDUSTRIAL
SWITCHVACUUM TUBE SOCKET &
TUBE SHIELDPOWER ENTRY
MODULEJACK & XLR
SOCKET


HALL EFFECT SWITCH

JOYSTICK
SWITCH

HALL EFFECT JOYSTICK

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Suggested Ordering Code

BTMJ44	J	-	5	S	-	100	C	-	R
Series BT BELTON M Magnetic J Joystick 44 Out diameter	Available Function J Joystick only		Operating Voltage 5 5 V	Seal Option S with sealing boot X without sealing boot		Cable Length 100 100 mm 050 50 mm (option)	Termination C Cable P Pin header (option)		Operating Directions R Round 

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