

Data Sheet for Joysticks

Thumb Joystick

Series TRY13



- 1 axis
- Ergonomic thumbwheel
- With spring return
- Sensitive response to user operation

The TRY13 series provides an ergonomic thumbwheel with proportional signal output. It can be integrated into handles of e.g. the TRY81 series, but also being used as stand-alone device. The wheel is available in different colors.

Electrical Data

| | |
|------------------------------------|--|
| Sensor | Hall Effect |
| Power Supply | 5 VDC ±0,5 VDC transient free |
| Resolution | 1,22 mV |
| Return to Center Voltage Tolerance | ±200 mV initial |
| Output Signal | 0..5 V / 0,5..4,5 V / 1..4 V / redundant outputs available |
| Output Impedance | 1,5 Ω |

Mechanical and Environmental Data

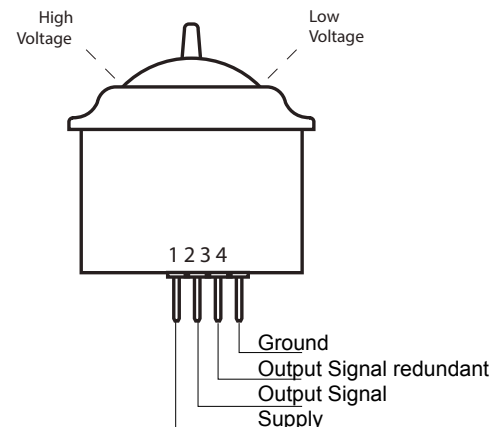
| | |
|------------------------------|-----------------------------|
| Mechanical Angle of Movement | 80° (±40° from center) |
| Expected Life | 5 million cycles |
| Break Out Force | 0,7 N |
| Sealing | IP67 (Joystick electronics) |
| Operating Temperature | -40°C..+85°C |
| Storage Temperature | -40°C..+85°C |
| EMC Immunity Level | EN61000-4-3 (extended) |
| EMC Emissions Level | EN61000-6-3:2001 |
| ESD | EN61000-4-2 (extended) |

Wiring

| Function | Pin | Wire Color |
|-----------------------------|-----|------------|
| Supply | 1 | red |
| Output Signal | 2 | blue |
| Output Signal redundant (*) | 3 | blue/white |
| Ground | 4 | black |

(*) optional; standard: Pin not connected.

Connection either by wire AWG28 (standard version), or with a TE Connectivity (4 position TE 3-647166-4 header connector, 2,54mm pitch).



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Order Description

| | | | | | | |
|--|--------------|----------|----------|------------------|------------------|------------------------|
| Series | TRY13 | | | | | |
| 1 Axis | 1 | | | | | |
| Square | | 0 | | | | |
| Spring Return | | | 1 | | | |
| Thumbwheel | | | | | | |
| Black | | | | 1 | | |
| Grey ^(*) | | | | 2 ^(*) | | |
| Red | | | | 3 | | |
| Blue ^(*) | | | | 4 ^(*) | | |
| Black with Tab | | | | 5 | | |
| Grey with Tab ^(*) | | | | 6 ^(*) | | |
| Red with Tab | | | | 7 | | |
| Blue with Tab ^(*) | | | | 8 ^(*) | | |
| Output Signal | | | | | | |
| 0..5,0 V (rail to rail) ^(†) | | | | | 1 | |
| 0,5..4,5 V ^(†) | | | | | 2 | |
| 1..4 V ^(†) | | | | | 3 ^(†) | |
| Connection | | | | | | |
| Wire AWG28 (Standard) | | | | | | |
| 4position connector, 2,54mm pitch ^(*) | | | | | | -/ S ^(*) |

^(*) upon request

^(†) Redundant Dual Signal Output available (parallel or inverse signals)



Thumbwheels in black, red, blue, grey - with and without tab.



Integration into Hand-Grip Joystick (e.g. TRY81)

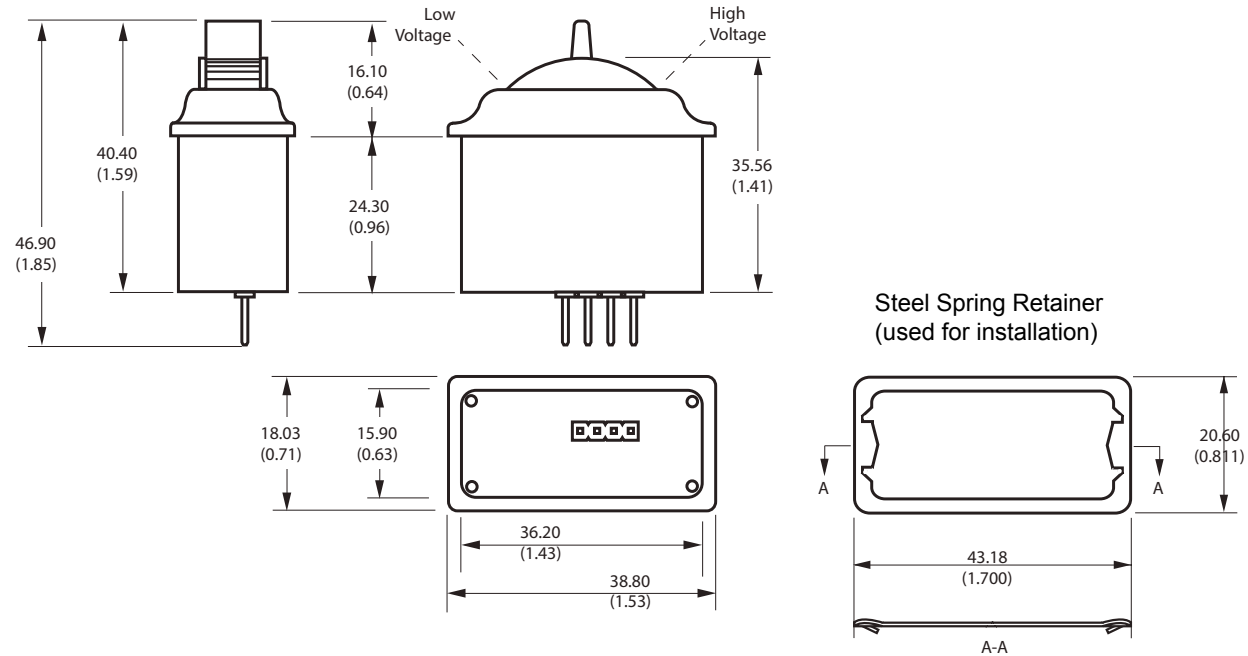
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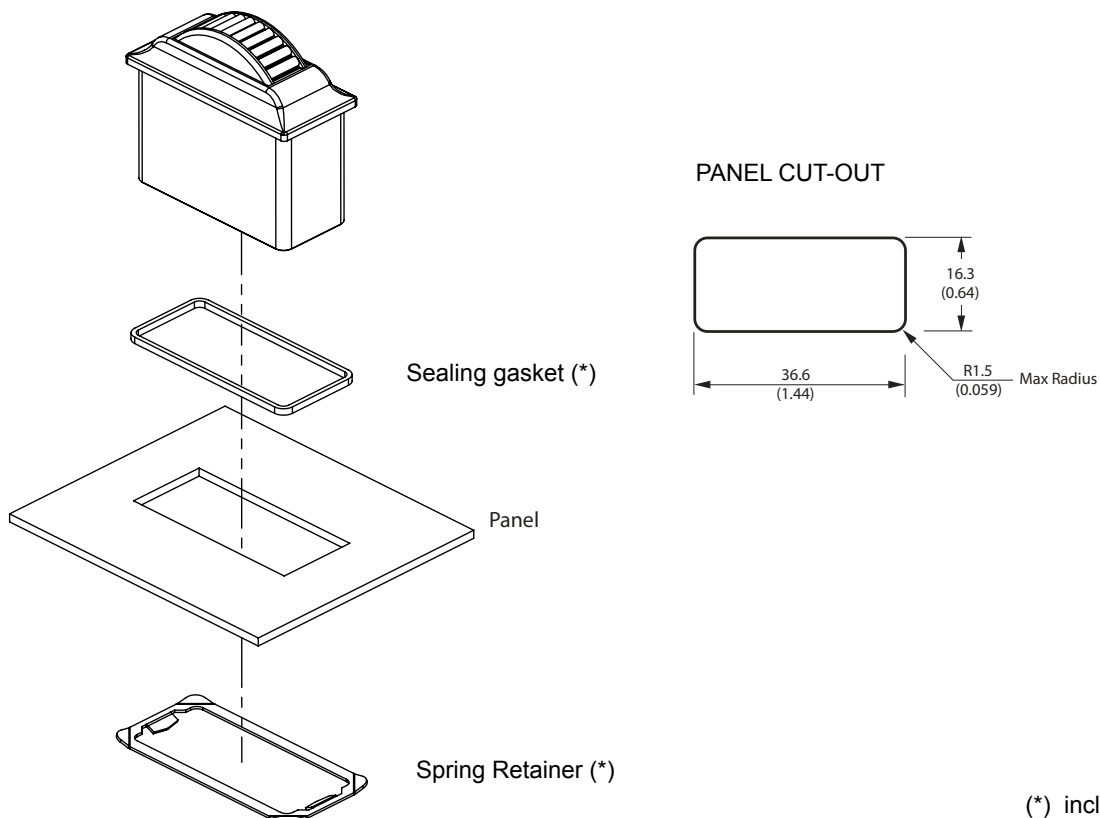
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Drawing



Mounting



All dimensions in mm (inch)