

# 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

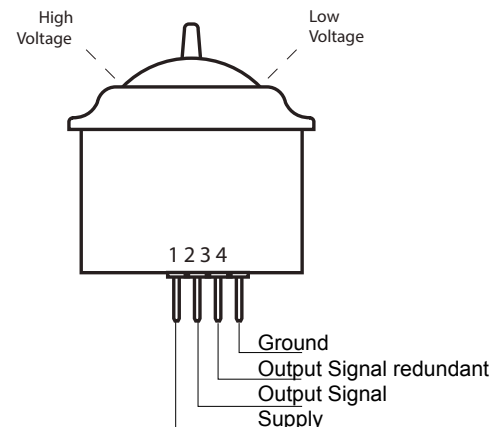
Mechanical Angle of Movement	80° (±40° from center)
Expected Life	5 million cycles
Break Out Force	0,7 N
Sealing	IP67 (Joystick electronics)
Operating Temperature	-40°C..+85°C
Storage Temperature	-40°C..+85°C
EMC Immunity Level	EN61000-4-3 (extended)
EMC Emissions Level	EN61000-6-3:2001
ESD	EN61000-4-2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

<b>Series</b>	<b>TRY13</b>					
<b>1 Axis</b>	<b>1</b>					
<b>Square</b>		<b>0</b>				
<b>Spring Return</b>			<b>1</b>			
<b>Thumbwheel</b>						
<b>Black</b>				<b>1</b>		
Grey (*)				2 (*)		
<b>Red</b>				<b>3</b>		
Blue (*)				4 (*)		
<b>Black with Tab</b>				<b>5</b>		
Grey with Tab (*)				6 (*)		
<b>Red with Tab</b>				<b>7</b>		
Blue with Tab (*)				8 (*)		
<b>Output Signal</b>						
<b>0..5,0 V (rail to rail) (*)</b>					<b>1</b>	
<b>0,5..4,5 V (*)</b>					<b>2</b>	
1..4 V (*)					3 (*)	
<b>Connection</b>						
<b>Wire AWG28 (Standard)</b>						
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.



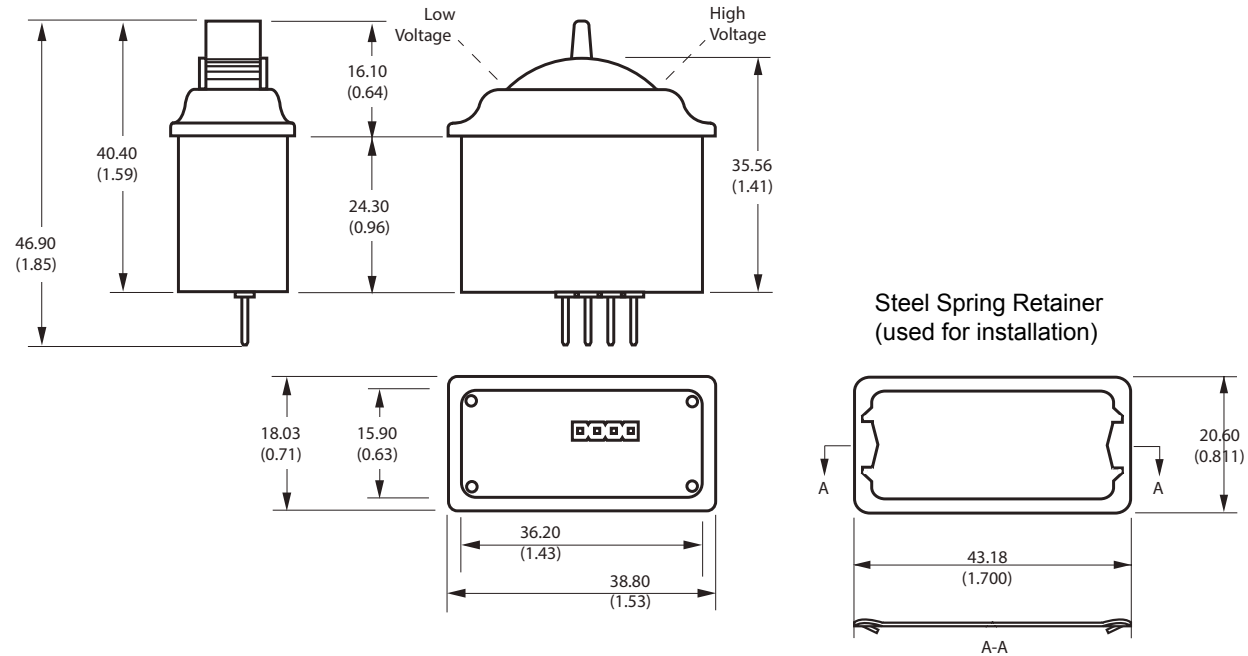
Integration into Hand-Grip Joystick (e.g. TRY81)

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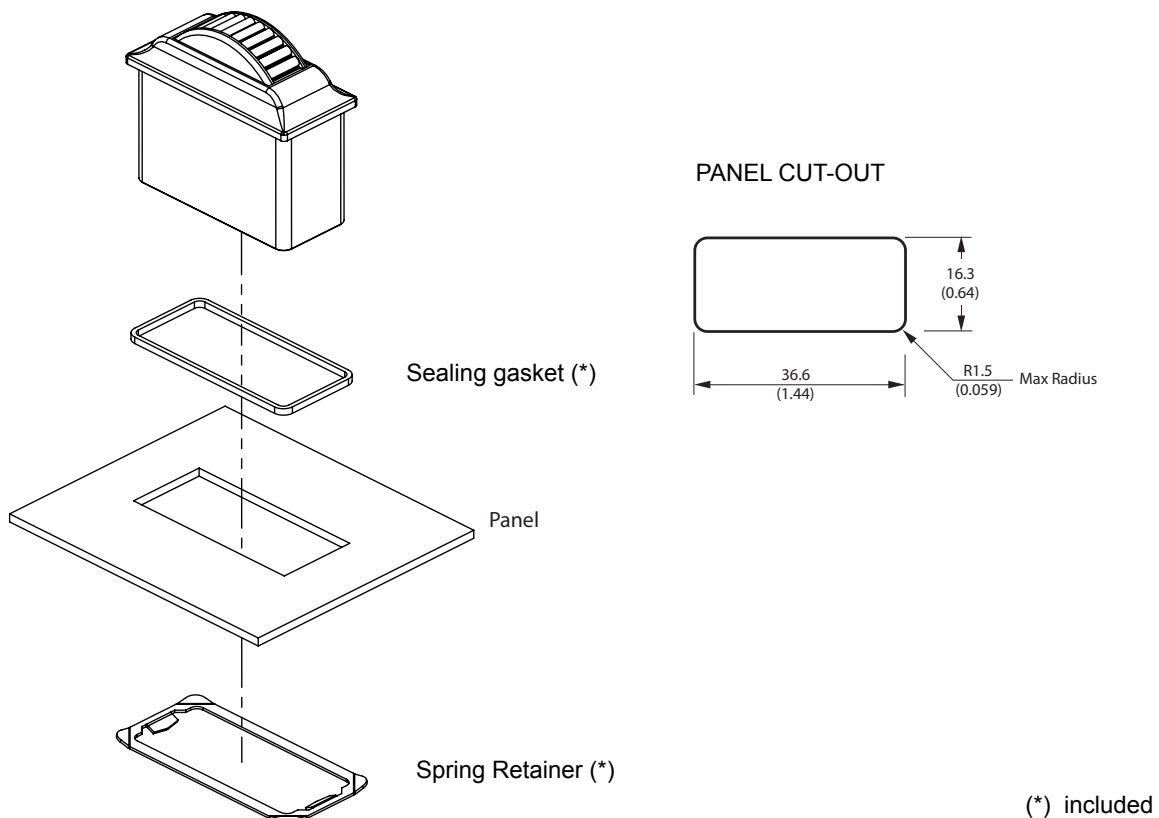
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## Drawing



## Mounting



All dimensions in mm (inch)