



TS2 Series
Mini joystick



Features

- Smallest joystick
- 2 axis thumb controller
- Contactless hall effect technology
- Standard IP67 above panel
- Four actuator options

Applications

- Large hand grip joysticks
- Industrial remote controllers
- Armrest control panels

Description

The TS2 is the smallest 2-axis industrial joystick in the world and its operation principle is based on hall effect technology. Due to its very compact size and threaded mounting body, it can be easily mounted in small remote controllers, armrest control panels, and large cobra joysticks. The TS2 joystick comes with an elastomer actuator and standard IP67 above panel protection. Based on many years of experience, this joystick packs fantastic quality in a very small package.

Specification

MECHANICAL (X & Y AXIS)	
Angle Of Movement	30° (15° Each Direction)
Expected Cycle Life	2.5 Million
Centering	Spring Return
Max. Vertical Load	50 lbF
Max. Horizontal Load	15 lbF*

* Measured 0.50" Above Panel Surface

ELECTRICAL	
Sensor Type	Hall Effect
Resolution	12 Bit
Supply Voltage	5VDC ± 0.01VDC
Output Voltage	See Options
Center Voltage	± 100MV
Overvoltage Max.	20VDC
Reverse Polarity Max.	-10VDC

ENVIRONMENTAL	
Operating Temperature	-40°F to 185°F
Storage Temperature	-40°F to 185°F
IP Sealing Above Flange	IP67
EMC Immunity Level	EN61000-4-3 *Compliance To 30A/m
EMC Emissions Level	EN61000-6-3
ESD Immunity Level	EN61000-4-2 *Compliance To ±15kV/±8kV
Vibration Testing	Per SAE J1455 Section 4.9 & MIL-STD810G 514.6
Mechanical Shock	Per SAE J1455 Section 4.10 & MIL-STD-202G

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■ Specification



10" 28AWG CABLE OR
14" 28AWG POTTED WIRE
TERMINATION

JST CONNECTOR (ANALOG)		
PIN #	WIRE COLOR	DESCRIPTION
1	Red	Power (+5V)
2	Yellow	Y Axis Sensor
3	Blue	X Axis Sensor
4	Black	Ground

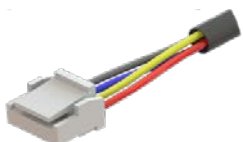
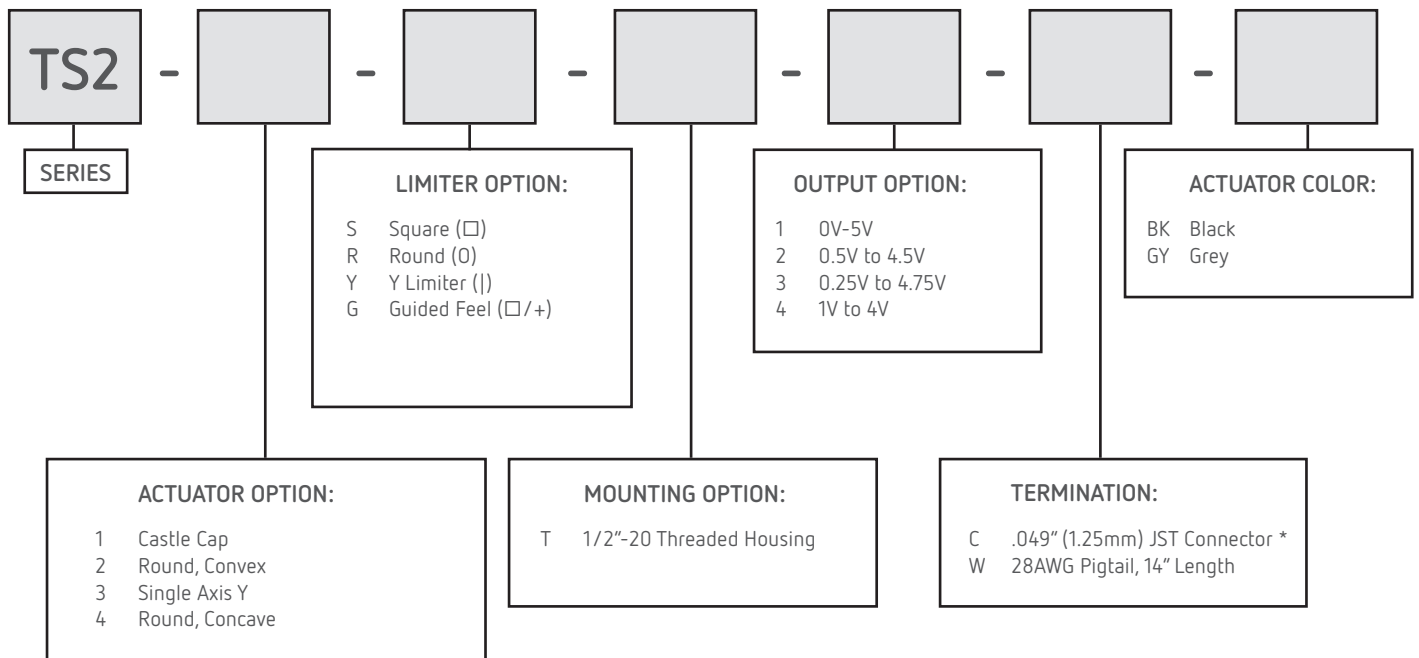
MATERIALS	
Housing	Mineral & Glass Filled Nylon
Boot/ Actuator	Silicone

IP RATING: IP67 (ABOVE PANEL, ALL CONFIGURATIONS)

** Optional

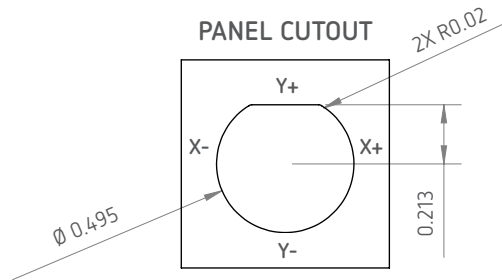
* Extended Testing Levels

■ Product Configuration Guide

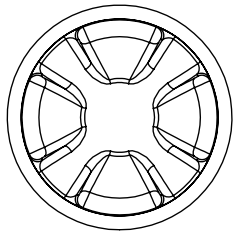


* Note: Connectorized Version (Termination Option „C“) Supplied With JST Connector & 14" (28AWG) Mating Wire Harness

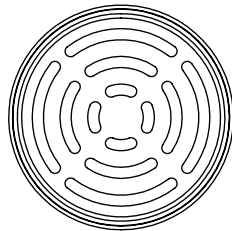
Micro 2 Axis Thumbstick (Scale 2:1)



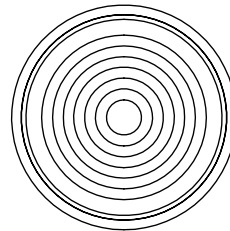
CASTLE



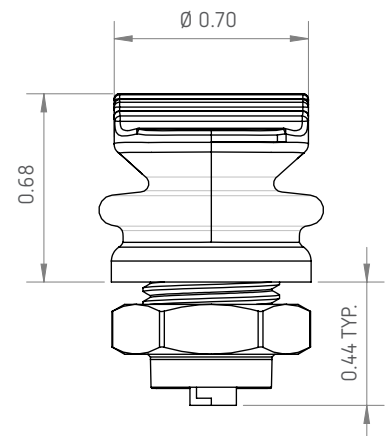
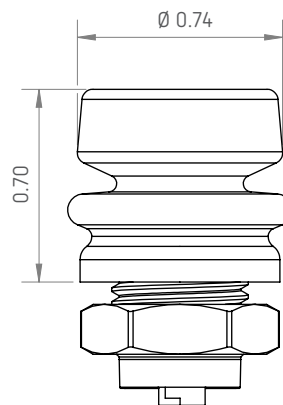
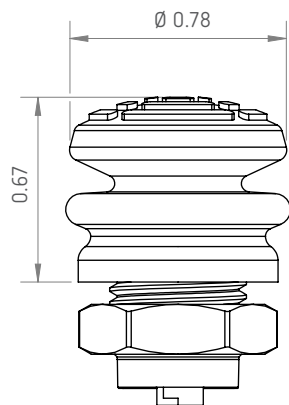
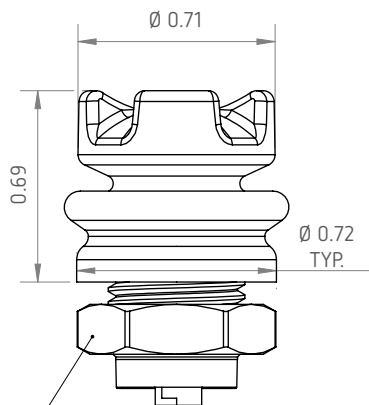
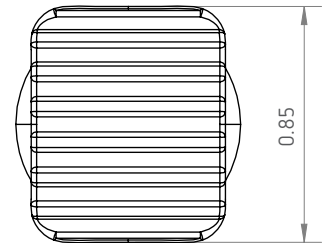
ROUND, CONVEX



ROUND, CONCAVE



SINGLE AXIS, Y



1/2" -20 NUT

4 PIN LATCH LOCK CONNECTOR
(+5V, GND, X OUTPUT, Y OUTPUT)