

# TS2 Series Specifications

MECHANICAL (X & Y AXES)	
ANGLE OF MOVEMENT	30° (15° EACH DIRECTION)
EXPECTED CYCLE LIFE	2.5 MILLION
CENTERING	SPRING RETURN
MAX. VERTICAL LOAD	50lbf
MAX. HORIZONTAL LOAD	15lbf*

\* 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

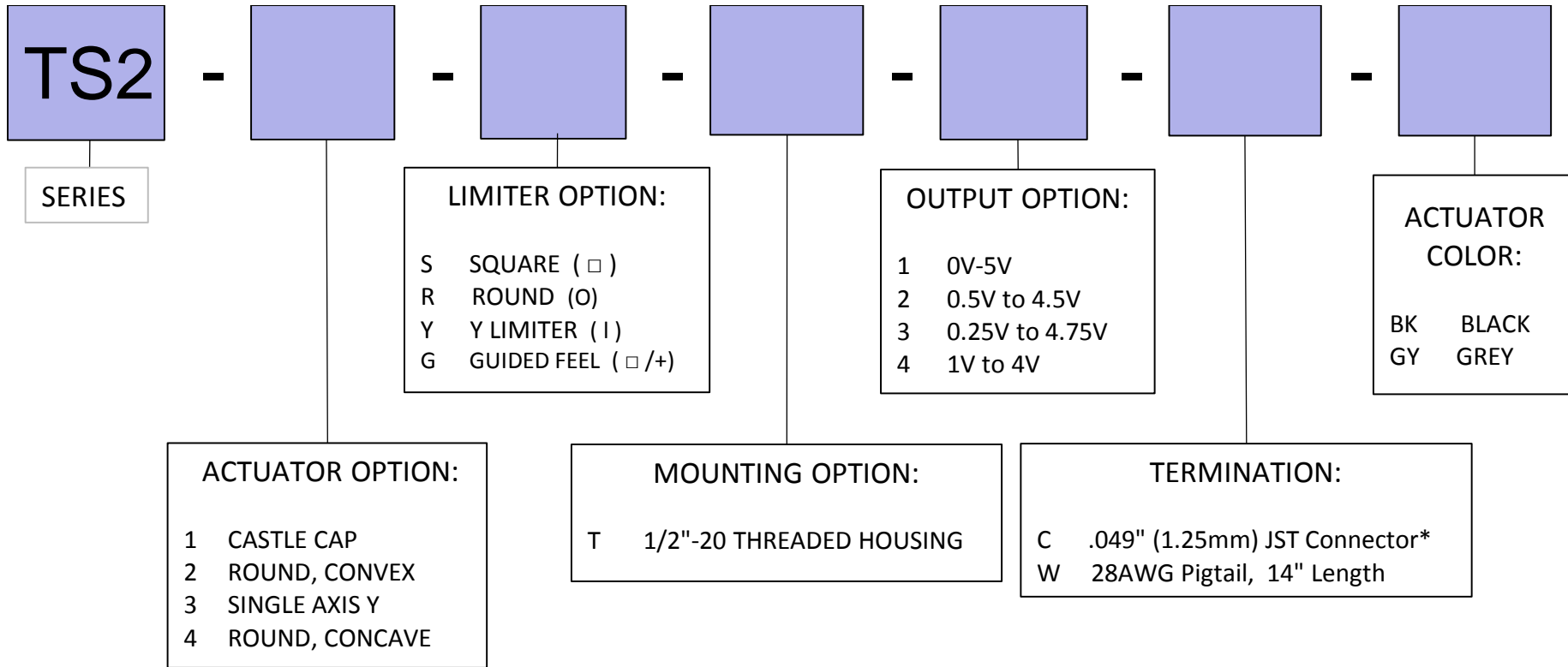
JST CONNECTOR		
PIN #	WIRE COLOR	DESCRIPTION
1	RED	POWER (+5V)
2	YELLOW	Y AXIS SENSOR
3	BLUE	X AXIS SENSOR
4	BLACK	GROUND



MATERIALS	
HOUSING	MINERAL & GLASS FILLED NYLON
BOOT/ACTUATOR	SILICONE

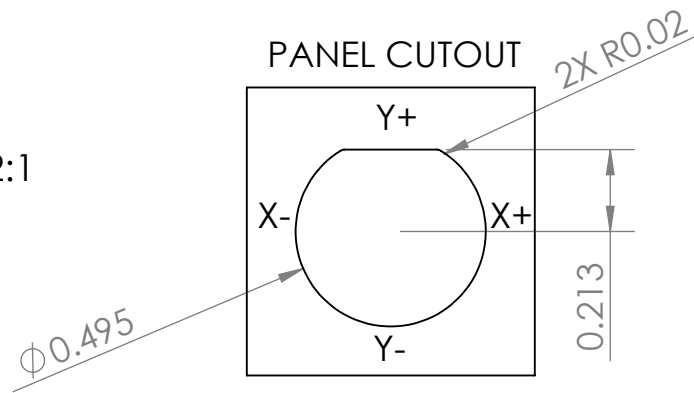
IP RATING: IP67 (ABOVE PANEL, ALL CONFIGURATIONS)

\*Extended Testing Levels

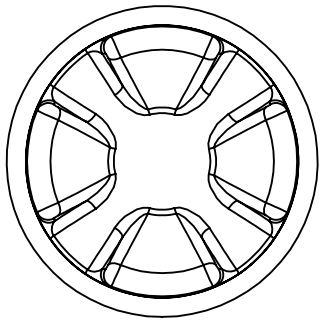


\*Note: Connectorized Version (Termination Option "C") Supplied With JST Connector & 14" (28AWG) Mating Wire Harness

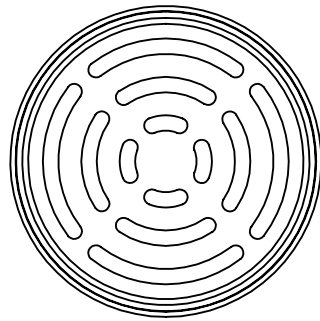
# TS2 SERIES MICRO 2 AXIS THUMBSTICK SCALE 2:1



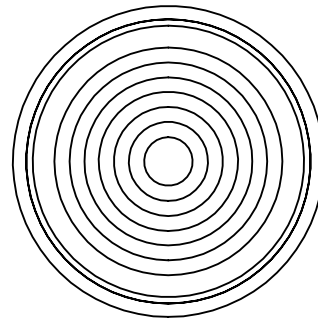
CASTLE



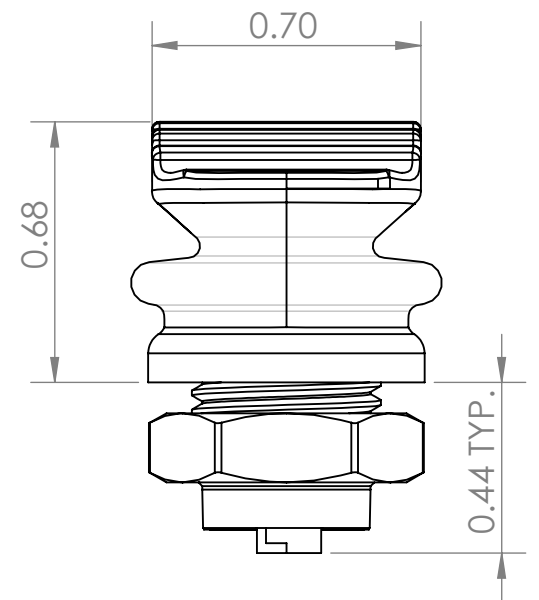
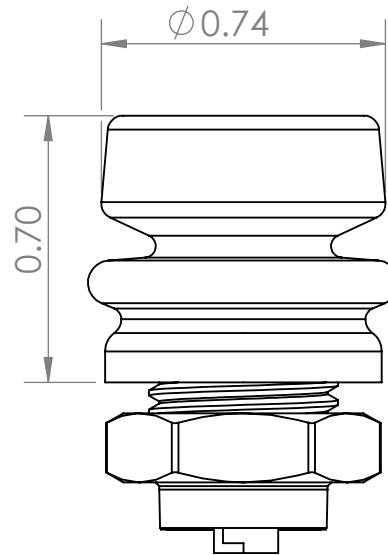
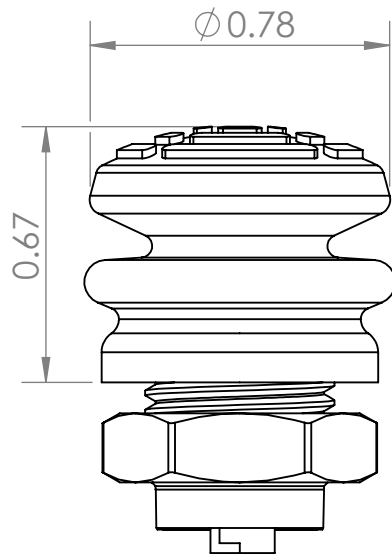
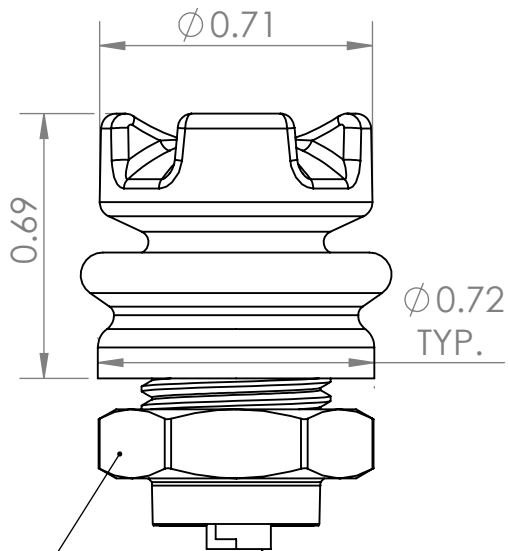
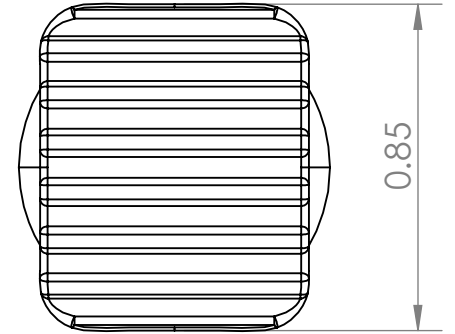
ROUND, CONVEX



ROUND, CONCAVE



SINGLE AXIS, Y



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