

# AXIAL FORCE AND TORQUE (SWT) SERIES TRANSDUCERS

## FEATURES

- Measure both Force and Torque
- High Accuracy Both Bridges
- Low Crosstalk
- Low Creep
- 5pt T/C Axial & CW/CCW Torsion Calibration
- Proprietary Modulus Compensated Strain Gages



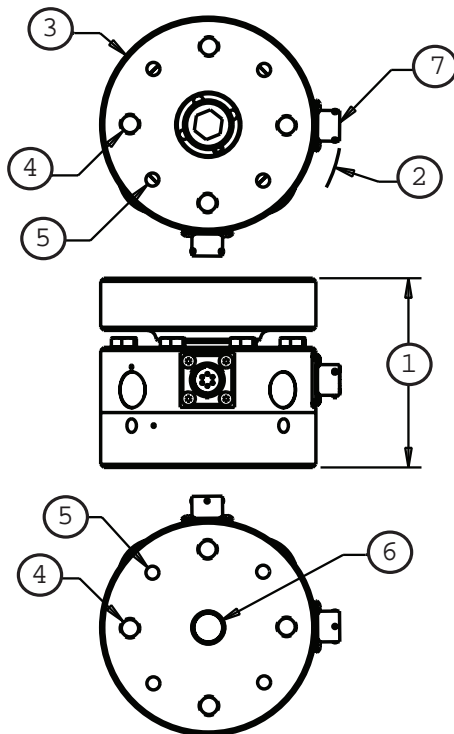
## SPECIFICATIONS

Model Capacity U.S. lbf./ in-lb	SWT-10		SWT-10		SWT-20	
	300/150, 500/250, 1K/500, Axial Force Bridge	Torque Bridge	2K/1K, 5K/2K Axial Force Bridge	Torque Bridge	10K/3K Axial Force Bridge	Torque Bridge
<b>PARAMETERS</b>						
<b>ACCURACY</b>						
Nonlinearity, % Rated Output	+/-0.040	+/-0.070	+/-0.040	+/-0.070	+/-0.040	+/-0.070
Hysteresis, % Rated Output	+/-0.040	+/-0.050	+/-0.040	+/-0.050	+/-0.040	+/-0.050
Nonrepeatability, % Rated Output	+/-0.020	+/-0.050	+/-0.020	+/-0.050	+/-0.020	+/-0.050
Creep, % in 20 minutes	+/-0.025	+/-0.025	+/-0.025	+/-0.025	+/-0.025	+/-0.025
Zero Balance, % Rated Output	+/-2.0	+/-2.0	+/-2.0	+/-2.0	+/-2.0	+/-2.0
<b>TEMPERATURE</b>						
Range, Compensated, °F	+15 to +115	+15 to +115	+15 to +115	+15 to +115	+15 to +115	+15 to +115
Range, Compensated, °C	-10 to +45	-10 to +45	-10 to +45	-10 to +45	-10 to +45	-10 to +45
Range, Operating, °F	-65 to +200	-65 to +200	-65 to +200	-65 to +200	-65 to +200	-65 to +200
Range, Operating, °C	-55 to +90	-55 to +90	-55 to +90	-55 to +90	-55 to +90	-55 to +90
Effect on Sensitivity, % Rdg/ °F	+/-0.0008	+/-0.0008	+/-0.0008	+/-0.0008	+/-0.0008	+/-0.0008
Effect on Sensitivity, % Rdg/ °C	+/-0.0015	+/-0.0015	+/-0.0015	+/-0.0015	+/-0.0015	+/-0.0015
Effect on Zero, % Rated Output/ °F	+/-0.0015	+/-0.0015	+/-0.0015	+/-0.0015	+/-0.0015	+/-0.0015
Effect on Zero, % Rated Output/ °C	+/-0.0027	+/-0.0027	+/-0.0027	+/-0.0027	+/-0.0027	+/-0.0027
<b>ELECTRICAL</b>						
Rated Output, mV/V, Nominal	1.0	1.5	2.0	2.5	2.0	1.0
Excitation Voltage, VDC Maximum	20	20	20	20	20	20
Input Resistance, Ohms	350	350	350	350	350	350
Output Resistance, Ohms	350	350	350	350	350	350
Insulation Resistance, Megohm	5000	5000	5000	5000	5000	5000
Bayonet Connector	PT02E-10-6P (MS3112E-10-6P)					
<b>MECHANICAL</b>						
Safe Overload Range, % Capacity	+/-150	+/-150	+/-150	+/-150	+/-150	+/-150
Weight lb	4.15	4.15	10.6	10.6	32.19	32.19
Flexure Material	Aluminum			Steel		

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## DIMENSIONS

Model	SWT-10	SWT-10	SWT-20
Capacity	300/150, 500/250, 1K/500,	2K/1K, 5K/2K	10K/3K
Dimensions	inch	inch	inch
1.	3.63	3.63	4.7
2.	R 2.53	R 2.53	R 3.5
3.	4.12 Dia.	4.12 Dia.	6.06 Dia
4.	3/8 -24 .66 Deep on 3.00 B.C.	3/8 -24 .66 Deep on 3.00 B.C.	3/8-24 .66 Deep on 3.00 B.C.
5.	.25 SF on 3.00 B.C.	.25 SF on 3.00 B.C.	.25 SF on 3.00 B.C.
6.	5/8-18 .95 Deep	5/8-18 .95 Deep	5/8-18 1.05 Deep



### OPTIONS

- Additional bridges
- Output adjustment to standard
- Compression overload protection
- Integral cable
- Custom connectors
- Connector Protectors

### ACCESSORIES

- Mating connector
- Loading fixtures
- Interconnect cable
- Shunt calibration resistor
- Instrumentation