



- *High torsional stiffness*
- *0.1% accuracy*
- *Capacities from 50 to 5K lb-in*
- *AND 20002 & 10262 configured flanges*
- *SAE 4340 Alloy Steel*
- *Supplied with mating connector*

The T123 is designed to support the housing of motors, generators, pumps, and similar devices and accurately measure the non-rotating reaction torque values where the rotating member of the device under test is passed through the center of the sensor. The T123 with inherent low-end measurement capability can be installed at the driver or absorber end of the measurement chain. The flanges, pilot diameters and bolting studs of the T123 are configured to AND standards. AC carrier or DC strain gage signal conditioning electronics can be used with the T123. A removable calibration arm and interconnecting cable assemblies are available as options. In-house calibration of the T123 with SensorData electronics will be provided free of charge or with customer-supplied electronics for a fee.

## Specifications

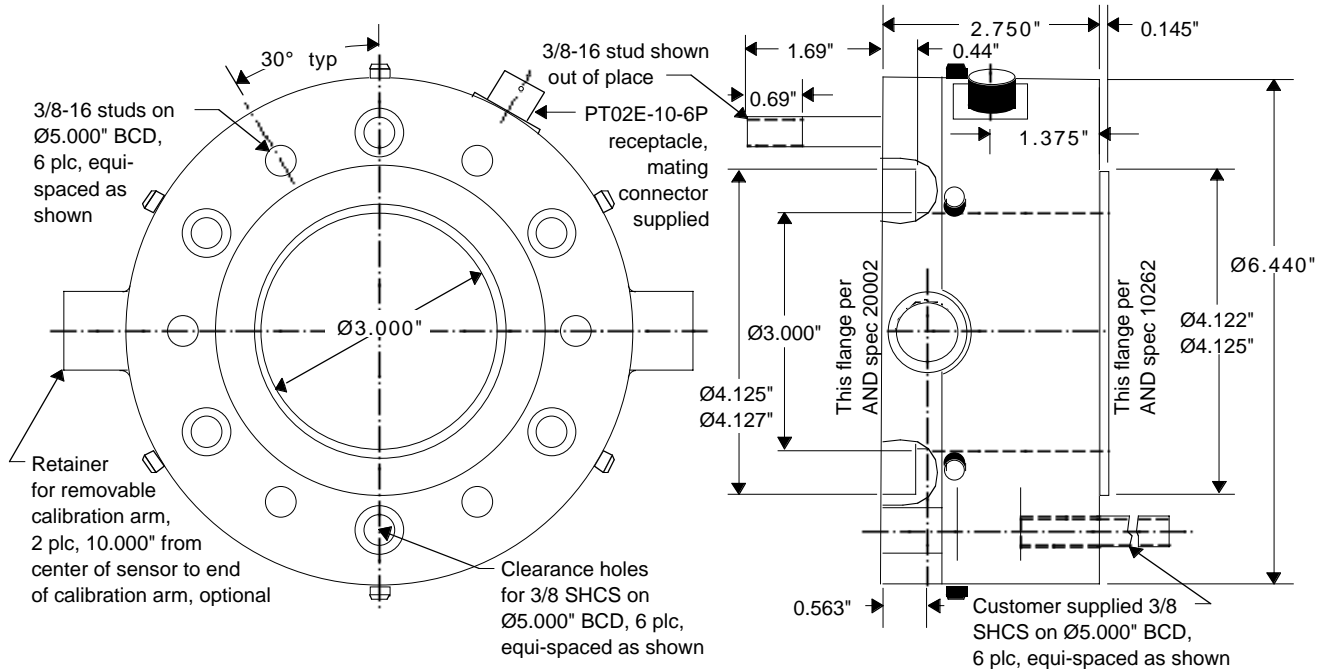
(Subject to change without notice)

Rated Capacity	50, 100, 200, 500, 1K, 2K, 5K lb-in
Nonlinearity	0.10% of rated output
Hysteresis	0.10% of rated output
Nonrepeatability	0.05% of rated output
Rated Output, typical	2.00 mV/V
Zero Balance	+/-1% of rated output
Temperature Range, operating	-65 to +200 F
Temperature Range, compensated	+70 to +170 F
Temperature Effect on Output	0.002% of load/F
Temperature Effect on Zero	0.002% of rated output/F
Bridge Resistance, typical	700 ohms
Excitation Voltage, bridge, typical	10 VDC or VAC rms
Excitation Voltage, bridge, maximum <sup>(1)</sup>	20 VDC or VAC rms
Insulation Resistance, bridge to case	>5000 megohms at 50 VDC
Maximum Load, safe <sup>(2)</sup>	150%
Maximum Load, ultimate <sup>(3)</sup>	300%
Torsional Stiffness, typical	See table next page
Extraneous Loads, maximum	See table next page
Number of Bridges	1
Weight	<14 lb
Construction	SAE 4340 Alloy Steel

<sup>(1)</sup> Temperature gradients caused by higher excitation voltages may effect performance.

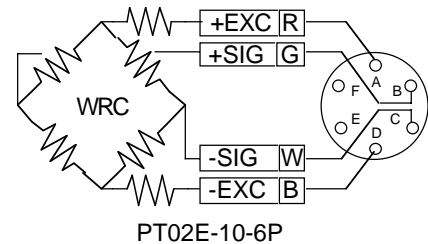
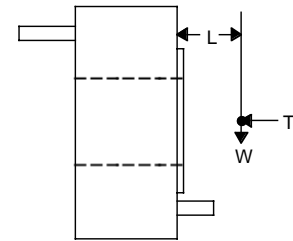
<sup>(2)</sup> With load centered maximum torque that can be applied without producing a permanent shift in performance characteristics.

<sup>(3)</sup> With load centered maximum torque that can be applied without physical damage.



Rated Capacity lb-in	Torsional Stiffness lb-in/rad	Maximum		
		Overhung Moment W X L lb-in	Shear W lb	Thrust T lb
50	42,000	380	135	425
100	42,000	380	135	425
200	110,000	500	190	475
500	270,000	775	360	700
1K	575,000	1,100	510	1,000
2K	1,350,000	2,500	600	1,800
5K	4,000,000	3,800	820	3,500

Do not exceed the maximum overhung moment or shear, whichever occurs first.



### ORDERING INFORMATION

- T123-Capacity: Standard; supplied with receptacle and mating connector.
- Calibration arm: Optional; length from center of sensor to end of calibration arm 10 inches.
- Cable Assembly: Optional; 10 ft., color coded, shielded, mating connector sensor end, customer specified connector instrument end.
- Cable Assembly: Optional; 10 ft., color coded, shielded, mating connector sensor end, leads stripped and tinned instrument end.

### IMPORTANT NOTICE

Dimensions above are in inches unless otherwise noted. Manufacturer not responsible for any modification to product, fixtures, or accessories made by user or third party. User should request certified drawings before designing mountings or fixtures. Manufacturer reserves right to modify or change design, dimensions, specifications, and features of this product without prior written notice. Changes to NOTICE must be in writing and accepted by manufacturer.