

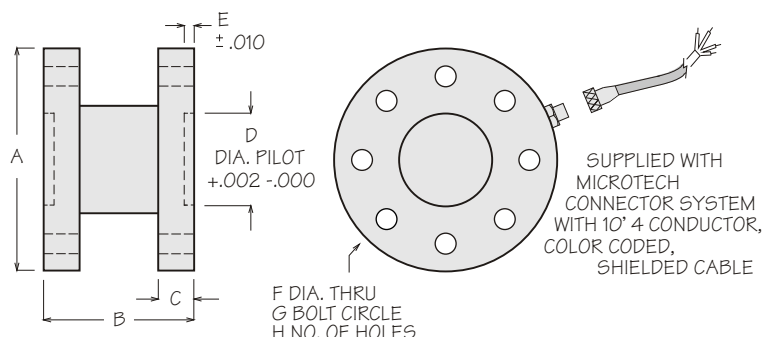
GENERAL PURPOSE FLANGED REACTION TORQUE SENSOR

TRS SERIES

CAPACITY RANGES:

500, 1,000, 2,000, 5,000, 10,000,
20,000, 50,000, 100,000 INCH LBS.

The TRS Series reaction torque sensors offer long term reliability due to non moving parts and state of the art bonded foil strain gages. The anodized aluminum TRS Series is also available as a two axis sensor, torque and thrust, on special request. Whenever possible, the best approach for precision torque measurements is via reaction torque sensing, eliminating high maintenance and high cost of slip rings, bearings, and brushes.



SPECIFICATIONS

Rated Output (R.O.):	2 mV/V nominal
Nonlinearity:	0.1% of R.O.
Hysteresis:	0.1% of R.O.
Nonrepeatability:	0.05% of R.O.
Zero Balance:	1.0% of R.O.
Compensated Temp. Range:	60° to 160°F
Safe Temp. Range:	-65° to 200°F
Temp. Effect on Output:	0.005% of Load/°F
Temp. Effect on Zero:	0.005% of R.O./°F
Terminal Resistance:	350 ohms nominal
Excitation Voltage:	10 VDC
Safe Overload:	150% of R.O.

MODEL	CAPACITY INCH LBS.	DIMENSIONS (INCHES)								WT. LBS.
		A DIA.	B	C	D	E	F	G	H	
TRS-500	500	3.00	2.00	.50	1.25	.125	.28	2.25	4	.7
TRS-1K	1,000	3.00	2.00	.50	1.25	.125	.28	2.25	4	.7
TRS-2K	2,000	3.00	2.00	.50	1.25	.125	.28	2.25	4	.7
TRS-5K	5,000	4.00	2.50	.50	1.50	.125	.28	3.25	8	1.2
TRS-10K	10,000	4.50	2.50	.75	1.50	.125	.28	3.75	8	2.2
TRS-20K	20,000	4.50	3.00	.75	2.00	.125	.34	3.75	8	2.2
TRS-50K	50,000	6.75	3.50	1.00	3.00	.125	.41	5.75	8	7.2
TRS-100K	100,000	6.75	3.50	1.00	3.00	.125	.41	5.75	8	7.2

MODEL	MAX.			
	TORSIONAL STIFFNESS INCH LBS./RAD.	OVERHUNG MOMENT W x S INCH LBS.	SHEAR W LBS.	THRUST P LBS.
TRS-500	190K	500	750	1,500
TRS-1K	190K	500	750	1,500
TRS-2K	380K	1,000	1,500	2,000
TRS-5K	930K	2,000	2,000	3,000
TRS-10K	2,700K	5,000	4,000	6,000
TRS-20K	5,800K	10,000	6,500	10,000
TRS-50K	8,000K	24,000	12,000	18,000
TRS-100K	20,000K	50,000	20,000	30,000

Options

TH Thrust Bridge
(Consult our applications engineers
For torque thrust load combinations.)

GOD Strain Gages installed on Outside
Diameter for thru hole applications

LOAD CARRYING CAPACITY:

W = Weight of test device
S = Distance to center of gravity of test unit
P = Thrust
W x S = Overhung moment
Do not exceed moment (W x S) or shear
(W), whichever value is attained first.