

# FUTEK MODEL TRS500

Drawing Number: FI1002-A

INCH [mm] | R.O.= Rated Output

AMPLIFIED WIRING CODE

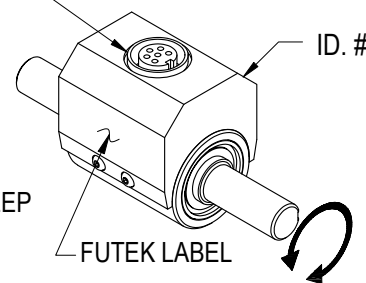
Power	Ground	Signal	*Auto ID
RED PIN 'A'	BLACK PIN 'B'	GREEN PIN 'C'	WHITE PIN 'D'

\*When used w/Futek Model IHH350

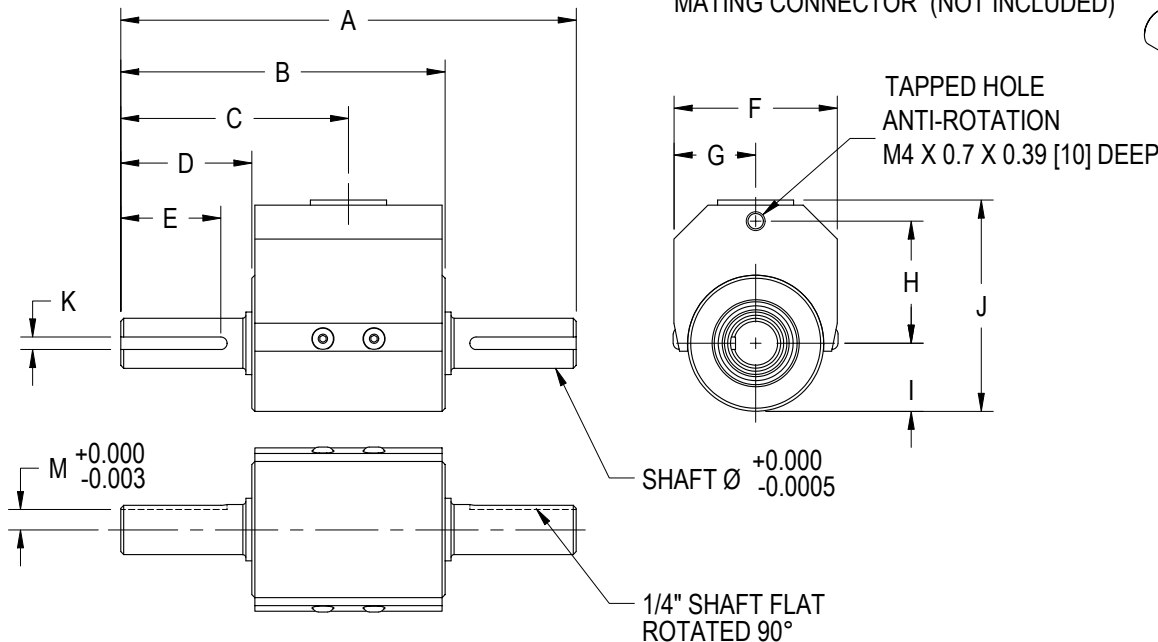
## NON-CONTACT SHAFT TO SHAFT ROTARY TORQUE SENSOR MAGNETOELASTIC TECHNOLOGY



LUMBERG KGR-60 RECEPTACLE  
LUMBERG SV-60  
MATING CONNECTOR (NOT INCLUDED)



+OUTPUT  
(CW)



CAPACITY		Shaft Ø	A	B	C	D	E	F	G	H	I	J	K	M				
in-lb	N m																	
8.85	1	1/4" Flat	4.25	3.09	2.13	1.16	0.75	1.64	0.82	1.22	0.68	2.12	--	0.105				
17.7	2		[108.0]	[78.5]	[54.1]	[29.5]	[19.1]	[41.6]	[20.8]	[31.0]	[17.3]	[53.8]	--	[2.66]				
44.25	5		88.5	10	177	20	3/8"	4.63	3.28	2.32	1.35	1.00	1.64	0.82	1.22	0.68	2.12	0.125
442.5	50	Keyed	[117.6]	[83.3]	[58.9]	[34.3]	[25.4]	[41.6]	[20.8]	[31.0]	[17.3]	[53.8]	[3.17]	--				
885	100	1/2" Keyed	[117.6]	[83.3]	[58.9]	[34.3]	[25.4]	[41.6]	[20.8]	[31.0]	[17.3]	[53.8]	[3.17]	--				
1770	200	3/4" Keyed	[215.9]	[156.7]	[109.5]	[59.2]	[41.3]	[108.0]	[19.1]	[53.6]	[54.1]	[126.2]	[4.77]	--				
4425	500	1" Keyed	[254.0]	[173.2]	[128.5]	[80.5]	[44.5]	[108.0]	[19.1]	[53.6]	[54.1]	[126.2]	[6.35]	--				
8850	1000																	

### SPECIFICATIONS:

**RATED OUTPUT** 0.5 (-F.S.) TO 4.5 (+F.S.) Volts DC nom. ( $\pm 20$  mV optional)

**SAFE OVERLOAD** 150% of R.O.

**ZERO BALANCE** +2.5 VDC

**EXCITATION (VDC OR VAC)** +5.0 Volts regulated (12 VDC for 20mV option)

**NONLINEARITY**  $\pm 0.5\%$  of R.O.

**HYSTERESIS**  $\pm 0.5\%$  of R.O.

**NONREPEATABILITY**  $\pm 0.25\%$  R.O.

**TEMP. SHIFT ZERO**  $\pm 0.02\%$  of R.O. / °F [ $\pm 0.04\%$  of R.O. / °C]

**TEMP. SHIFT SPAN**  $\pm 0.02\%$  of R.O. / °F [ $\pm 0.04\%$  of Load / °C]

**OPERATING TEMP.** 14 to 158°F [-10 to 70°C]

**FREQUENCY RESPONSE** 10,000 Hz, minimum

**ROTATIONAL SPEED** 5000 RPM (higher RPMs available)

**RESISTANCE TO MAGNETIC FIELDS** 400 Gauss minimum

**INSULATION TO GROUND** >100,000 M Ohms

**CURRENT DRAW** 20 mA Max

**CONNECTOR:** 6 pin Lumberg KGR-60 Receptacle

**ACCESSORIES AND RELATED INSTRUMENTS AVAILABLE**

**CALIBRATION (STD)** 5 pt CW

**CALIBRATION (AVAILABLE)** CCW

**CALIBRATION TEST EXCITATION** 5 VDC (12 VDC for 20 mV option)