

FUTEK MODEL TRD605

Drawing Number: FI1030-D

INCH [mm] R.O.= Rated Output

CONNECTOR CODE (CABLE PACKAGE WIRING CODE)

Torque Connections

Power	GROUND	SIGNAL OUTPUT	GROUND
PIN 'F' (RED)	PIN 'E' (BLACK)	PIN 'C' (GREEN)	PIN 'D' (WHITE)

Angle Connections

Power	GROUND	Signal (Angle 1)	Signal (Angle 2)
PIN 'H' (ORANGE)	PIN 'E' (BLACK)	PIN 'B' (BLUE)	PIN 'G' (BROWN)

Shunt Cal Connections

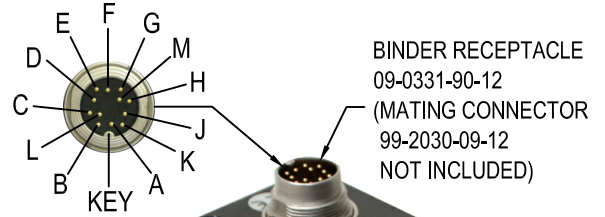
Power	GROUND
PIN 'K' (PURPLE)	PIN 'A' (YELLOW)

Shield Connection

Shield (Floating)
PIN 'M'

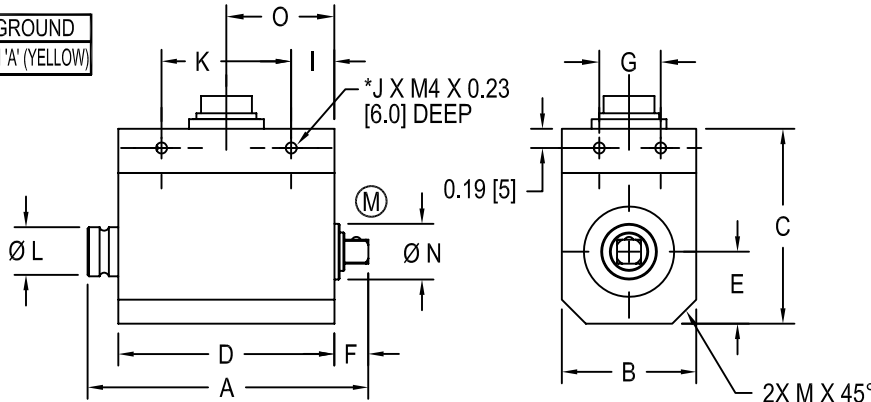
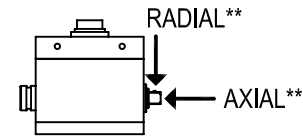
NON CONTACT SQUARE DRIVE ROTARY TORQUE SENSOR w/ ENCODER

CE COMPLIANT



-OUTPUT
(CCW)

+OUTPUT
(CW)



(M) = MEASURING SIDE

TORQUE SENSOR WITH SQUARE DRIVE PER DIN 3121 E, F, G & H.

* ANTI-ROTATION HOLES, NOT TO BE USED TO SUPPORT LOAD.

** MAXIMUM LOAD ALLOWED, NOT FOR MEASUREMENT.

ITEM #	Capacity in-lb	N m	Sq. Drive	A	B	C	D	E	F	G	J	I	K	Ø L	M	Ø N	O	**MAX. AXIAL FORCE lb [N]	**MAX. RADIAL FORCE lb [N]	WEIGHT lb [kg]	
FSH02024	106	12	1/4"	2.95	1.1	2.04	2.28	0.55	0.33	0.31	6	0.43	-	0.51	0.32	0.39	1.46	34	7	0.6	
FSH02025	159	18		[75]	[28]	[52]	[58]	[14]	[8.5]	[8]					[13]	[8]	[10]	[37]	[150]	[30]	[0.26]
FSH02026	443	50	3/8"	3.97	1.49	2.28	2.32	0.75	0.84	0.55	8	0.47	1.38	0.98	0.40	0.67	1.50	112	13.5	1.1	
FSH02027	558	63		[101]	[38]	[58]	[59]	[19]	[21.5]	[14]						[17]	[38]	[38]	[500]	[60]	[0.48]
FSH02028	885	100	1/2"	4.17	1.49	2.28	2.32	0.75	1.02	0.55	8	0.47	1.38	0.98	0.40	0.67	1.50	157 [700]	22.5 [100]	1.1	
FSH02029	1328	150		[106]	[38]	[58]	[59]	[19]	[26]	[14]					[10]	[17]	[38]	225 [1000]	22.5 [100]		[0.50]
FSH02030	1416	160																			
FSH02031	2213	250	3/4"	5.31	2.28	2.99	2.52	1.14	1.57	1.18	8	0.55	1.41	1.57	0.71	1.18	1.57	450	34	3.3	
FSH02032	2655	300		[135]	[58]	[76]	[64]	[29]	[40]	[30]						[30]	[40]	[40]	[2000]	[150]	[1.50]
FSH02033	4425	500																			
FSH02034	8851	1000	1"	6.97	2.87	3.54	2.87	1.43	2.26	1.77	8	0.55	1.77	1.97	0.71	1.57	1.73	900	56	6.2	
				[177]	[73]	[90]	[73]	[36.5]	[57.5]	[45]				[50]	[18]	[40]	[44]	[4000]	[250]	[2.80]	

TORQUE SPECIFICATIONS:

RATED OUTPUT	±5VDC
SAFE OVERLOAD	150% of R.O.
ZERO BALANCE	±1% of R.O.
EXCITATION	11-26 VDC, 1 Watt
NONLINEARITY	±0.2% of R.O.
HYSTERESIS	±0.1% of R.O.
NONREPEATABILITY	±0.2% R.O.
TEMP. SHIFT ZERO	±0.01% of R.O. / °F [±0.02% of R.O. / °C]
TEMP. SHIFT SPAN	±0.01% of Load / °F [±0.02% of Load / °C]
OPERATING TEMP.	-13 to 176°F [-25 to +80°C]
COMPENSATED TEMP.	41 to 122°F [+5 to +50°C]
ROTATIONAL SPEED	7000 RPM MAX
CONNECTOR:	12 pin Binder Series #581 (09-0331-90-12)

ACCESSORIES AND RELATED INSTRUMENTS AVAILABLE

CALIBRATION (STD)	Certificate of Conformance
CALIBRATION (AVAILABLE)	5pt CW and CCW
CALIBRATION TEST EXCITATION	12 VDC
SHUNT CALIBRATION	With sensor fully connected apply 11-26 VDC to Pins A & K to generate 5VDC nom output.

ENCODER SPECIFICATIONS:

OUTPUT	IMPULSE (TTL)
PULSES / REV	2 x 360
EXCITATION	5 VDC
ANGLE 1- LEADING PULSE	
ANGLE 2- TRAILING PULSE (90°)	

FUTEK
ADVANCED SENSOR TECHNOLOGY, INC.

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