

# FUTEK MODEL TRD605

# NON CONTACT SQUARE DRIVE ROTARY TORQUE SENSOR w/ ENCODER

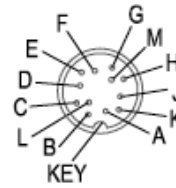
**CE COMPLIANT**

Drawing Number: FI1030-A

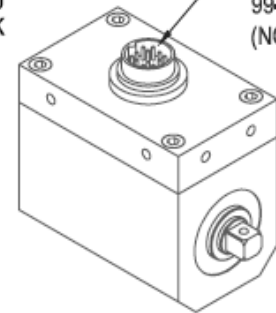
INCH [mm] R.O.= Rated Output

CONNECTOR CODE (CABLE PACKAGE WIRING CODE)

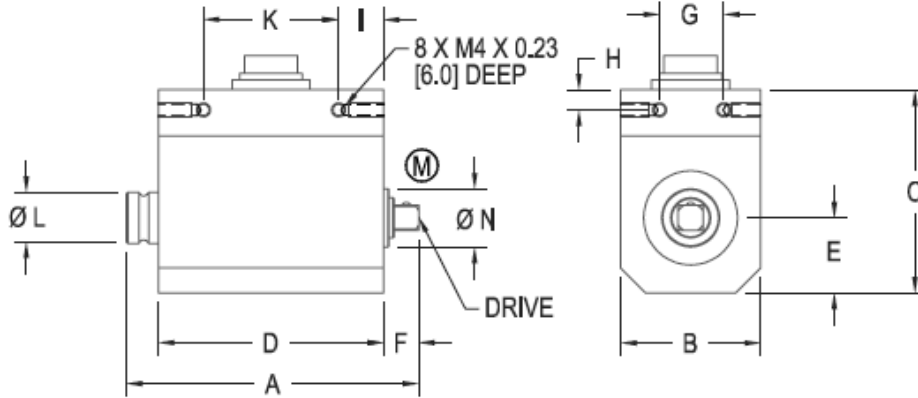
GND (Shunt Cal)	Signal (Angle 1)	Signal (Torque)	GND (Torque)
PIN 'A' (YELLOW)	PIN 'B' (BLUE)	PIN 'C' (GREEN)	PIN 'D' (WHITE)
GND (Sensor, Angle)	Power (Sensor)	Signal (Angle 2)	Power (Angle)
PIN 'E' (BLACK)	PIN 'F' (RED)	PIN 'G' (BROWN)	PIN 'H' (ORANGE)
N/C	Power (Shunt Cal)	N/C	Shield (Floating)
PIN 'J'	PIN 'K' (PURPLE)	PIN 'L'	PIN 'M'



BINDER RECEPTACLE  
09-0331-90-12  
MATING CONNECTOR  
99-2030-09-12  
(NOT INCLUDED)



+OUTPUT  
(CW)



(M)=MEASURING SIDE

STOCK #	Capacity in-lb	Capacity N m	Sq. Drive	A	B	C	D	E	F	G	H	I	K	L Ø	N Ø	MAX AXIAL FORCE lb	MAX AXIAL FORCE (N)	MAX RADIAL FORCE lb	MAX RADIAL FORCE (N)
FSH02024	106	12	1/4"	2.95	1.1	2.04	2.28	0.55	0.33	0.31	0.19	0.43	-	0.51	-	34	150	7	30
FSH02025	159	18		[75]	[28]	[52]	[58]	[14]	[8.5]	[8]	[5]	[11]	-	[13]	-				
FSH02026	443	50	3/8"	3.97	1.49	2.28	2.32	0.75	0.84	0.55	0.19	0.47	1.38	0.98	0.67	112	500	13.5	60
FSH02027	558	63		[101]	[38]	[58]	[59]	[19]	[21.5]	[14]	[5]	[12]	[35]	[25]	[17]				
FSH02028	885	100	1/2"	4.17	1.49	2.28	2.32	0.75	1.02	0.55	0.19	0.47	1.38	0.98	0.67	157	700	22.5	100
FSH02029	1328	150		[106]	[38]	[58]	[59]	[19]	[26]	[14]	[5]	[12]	[35]	[25]	[17]	225	1000	22.5	100
FSH02030	1416	160	3/4"	5.31	2.28	2.99	2.52	1.14	1.57	1.18	0.19	0.55	1.41	1.57	1.18	450	2000	34	150
FSH02031	2213	250		[135]	[58]	[76]	[64]	[29]	[40]	[30]	[5]	[14]	[36]	[40]	[30]				
FSH02032	2655	300																	
FSH02033	4425	500																	
FSH02034	8851	1000	1"	6.97	2.87	3.54	2.87	1.43	2.26	1.77	0.19	0.55	1.77	1.97	1.57	900	4000	56	250
				[177]	[73]	[90]	[73]	[36.5]	[57.5]	[45]	[5]	[14]	[45]	[50]	[40]				

## TORQUE SPECIFICATIONS:

RATED OUTPUT	±5VDC
SAFE OVERLOAD	150% of R.O.
ZERO BALANCE	±1% of R.O.
EXCITATION	11-26 VDC
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 R.O. / °F [±0.02% of Load / °C]
OPERATING TEMP.	-13 to 176°F [-25 to +80°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°)	

系泰機電有限公司

Tel : (04)2706-9659  
Fax: (04)2452-0110

[www.accusystech.com](http://www.accusystech.com)

E-mail: [sales@accusystech.com](mailto:sales@accusystech.com)