

# FUTEK MODEL TRD600

# NON CONTACT SQUARE DRIVE ROTARY TORQUE SENSOR

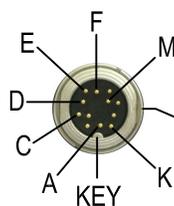
Drawing Number: FI1026-C

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



CONNECTOR CODE  
(CABLE PACKAGE WIRING CODE)

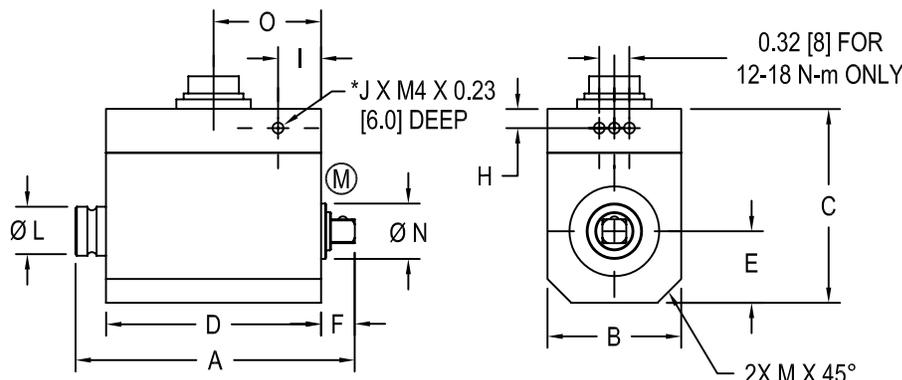
Power	Ground	Signal	Return (Signal)
PIN 'F' (RED)	PIN 'E' (BLACK)	PIN 'C' (GREEN)	PIN 'D' (WHITE)
Shield	Shunt Cal	Shunt Cal (Gnd)	
PIN 'M' (Floating)	PIN 'K' (PURPLE)	PIN 'A' (YELLOW)	



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



**-OUTPUT**  
(CCW)      **+OUTPUT**  
(CW)

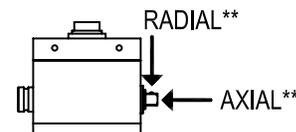


(M) = MEASURING SIDE

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	H	I	J	Ø L	M	Ø N	O	**MAX.AXIAL FORCE lb[N]	**MAX.RADIAL FORCE lb[N]	ROTATIONAL SPEED (MAX)	WEIGHT lb[kg]
FSH02008	106    12	1/4"	2.95	1.1	2.04	2.28	0.55	0.33	0.19	0.43	6	0.51	0.32	0.393	1.46	34	6.8	12000 RPM	0.7 [0.30]
FSH02009	159    18		[75]	[28]	[52]	[58]	[14]	[8.5]	[5]	[11]		[13]	[8]	[10]	[37]	[150]	[30]		
FSH02010	443    50	3/8"	2.93	1.49	2.28	1.73	0.75	0.71	0.24	0.87	3	0.98	0.40	0.75	0.91	112	13.5	9000 RPM	0.8 [0.36]
FSH02011	558    63		[74.5]	[38]	[58]	[44]	[19]	[18]	[6]	[22]		[25]	[10]	[19]	[23]	[500]	[60]		
FSH02012	885    100	1/2"	3.11	1.49	2.28	1.73	0.75	0.89	0.24	0.87	3	0.98	0.40	0.75	0.91	157 [700]	22.5 [100]	7000 RPM	0.9 [0.40]
FSH02013	1328    150		[79]	[38]	[58]	[44]	[19]	[22.5]	[6]	[22]		[25]	[10]	[19]	[23]	225 [1000]	22.5 [100]		
FSH02014	1416    160																		
FSH02015	2213    250	3/4"	3.82	2.28	2.99	1.97	1.14	1.18	0.19	0.98	3	1.57	0.40	1.18	1.06	450	34	7000 RPM	2.2 [1.00]
FSH02016	2655    300		[97]	[58]	[76]	[50]	[29]	[30]	[5]	[25]		[40]	[10]	[30]	[27]	[2000]	[150]		
FSH02017	4425    500																		
FSH02018	8851    1000	1"	4.41	2.87	3.54	2.24	1.43	1.36	0.19	1.12	3	1.97	0.71	1.57	1.10	900	56	7000 RPM	3.1 [1.40]
			[112]	[73]	[90]	[57]	[36.5]	[34.5]	[5]	[28.5]		[50]	[18]	[40]	[28]	[4000]	[250]		

## 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 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]

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.



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sensori e trasduttori      Via Paolo Uccello 4 20148 Milano  
Tel +39 02 48 009 757 Fax +39 02 48 002 070 info@dspmindustria.it www.dspmindustria.it