

FUTEK MODEL TRS705

Drawing Number: FI1248-C

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)

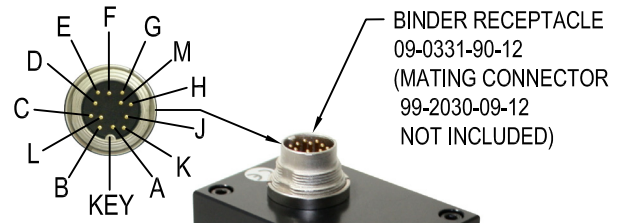
Shield Connection

Shield (Floating)
PIN 'M'

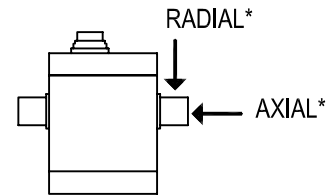
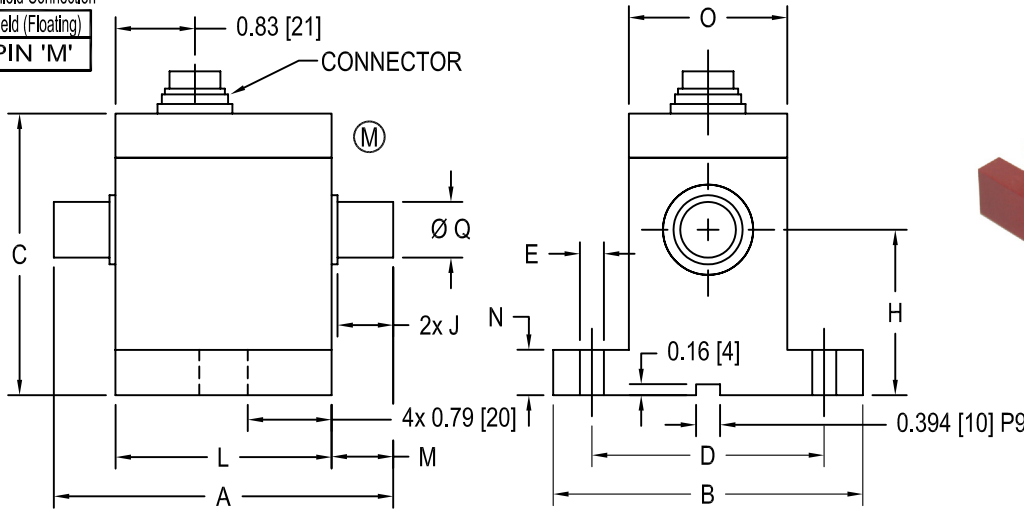
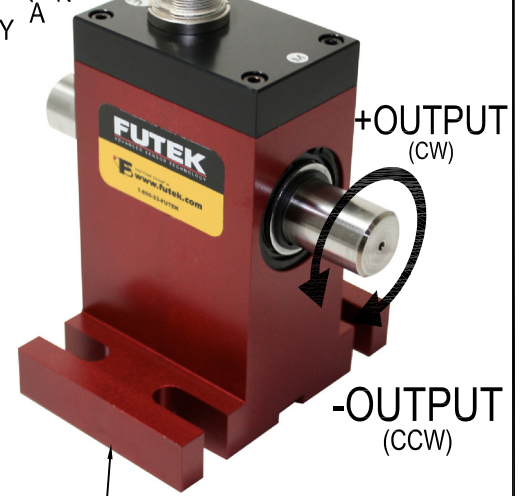
NON CONTACT SHAFT TO SHAFT ROTARY TORQUE SENSOR W/ ENCODER

CE COMPLIANT

FOR 100-1000 Nm SEE FI1249



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



(M)=MEASURING SIDE

* MAXIMUM LOAD ALLOWED, NOT FOR MEASUREMENT.

ITEM #	CAPACITY in-lb N-m	Ø Q	A	B	C	D	E	H	J	L	M	N	O	*MAX AXIAL FORCE lb[N]	*MAX RADIAL FORCE lb[N]	WEIGHT lb[kg]
FSH02562	8.9	1												4 [20]	3 [15]	1.1 [0.50]
FSH02563	17.7	2	0.394	3.54	2.28	3.27	1.77	0.28	1.77	0.59	2.28	0.63	0.47	11 [50]	5 [25]	
FSH02564	44.3	5	[10] g6	[90]	[58]	[83]	[45]	[7]	[45]	[15]	[58]	[16]	[12]	22 [100]	11 [50]	
FSH02565	88.5	10												33 [150]	11 [50]	2.2 [1.00]
FSH02566	177	20	0.669	4.17	3.35	4.02	2.36	0.35	2.48	0.87	2.32	0.91	0.59	33 [150]	33 [150]	
FSH02567	443	50	[17] g6	[106]	[85]	[102]	[60]	[9]	[63]	[22]	[59]	[23]	[15]	44 [200]	33 [150]	

TORQUE SPECIFICATIONS:

RATED OUTPUT	±5VDC
SAFE OVERLOAD	150% of R.O.
ZERO BALANCE	±1% of R.O.
EXCITATION (VDC)	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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Drawing Number: FI1249-C

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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)
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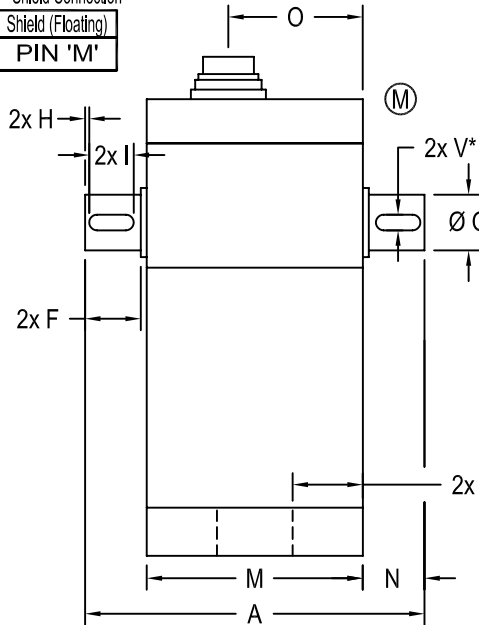
Shunt Cal Connections

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

Shield Connection

Shield (Floating)

PIN 'M'



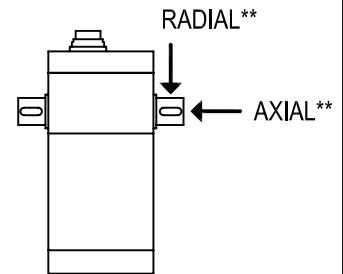
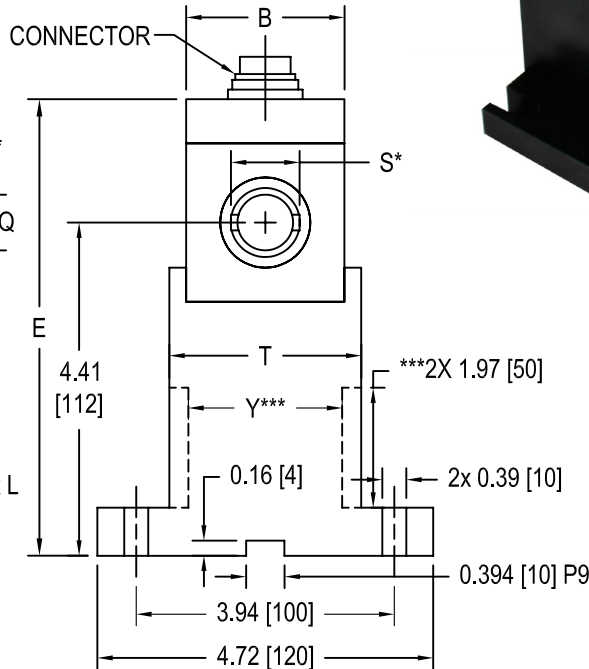
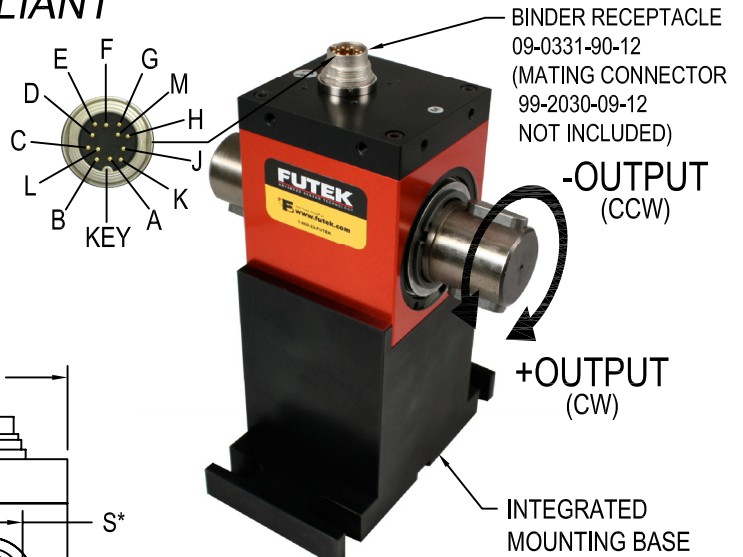
(M) = MEASURING SIDE

* FEATHER KEYWAYS PER DIN 6885, KEYWAYS COME PRE-INSTALLED.

** MAXIMUM LOAD ALLOWED, NOT FOR MEASUREMENT.

NON CONTACT SHAFT TO SHAFT ROTARY TORQUE SENSOR W/ ENCODER
FOR 1-50 Nm SEE FI1248

CE COMPLIANT



ITEM #	CAPACITY in-lb N m	Ø Q	A	B	E	F	H	I	L	M	N	O	S*	T	V*	Y***	**MAX.AXIAL FORCE lb[N]	**MAX.RADIAL FORCE lb[N]	WEIGHT lb[kg]
FSH02568	885 100	1.102	4.92	2.28	6.26	1.06	0.08	0.87	0.79	2.52	1.20	1.57	1.34	2.68	0.315	-	90 [400]	56 [250]	5.2
FSH02569	1770 200	[28] g6	[125]	[58]	[159]	[27]	[2]	[22]	[20]	[64]	[30.5]	[40]	[34]	[68]	[8] p9	-	90 [400]	67 [300]	[2.36]
FSH02570	4425 500	1.654	7.76	2.87	6.52	2.28	0.12	1.97	0.98	2.87	2.44	1.73	1.89	3.27	0.551	2.87	180 [800]	90 [400]	9.5
FSH02571	8851 1000	[42] g6	[197]	[73]	[165.5]	[58]	[3]	[50]	[25]	[73]	[62]	[44]	[48]	[83]	[14] p9	[73]	225 [1000]	90 [400]	[4.30]

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