

# FUTEK MODEL TFF400

# FLANGE TO FLANGE REACTION TORQUE SENSOR WITH BLIND CENTER

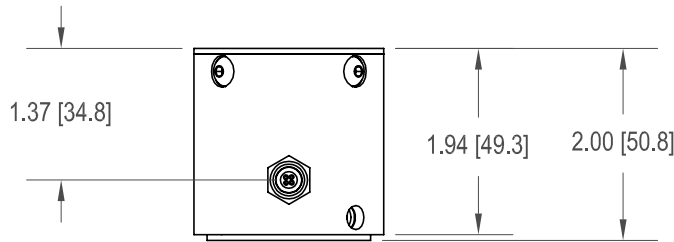
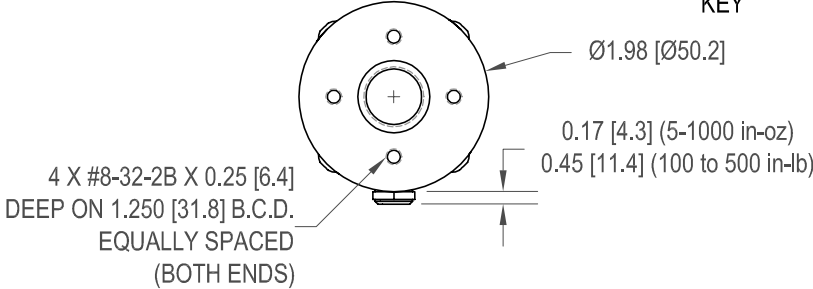
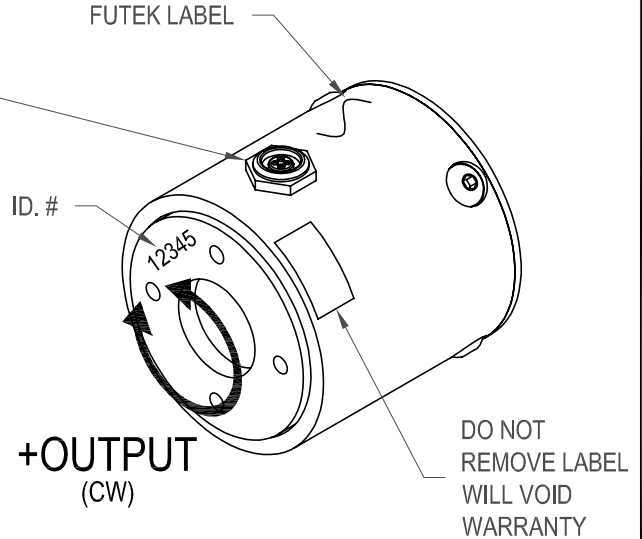
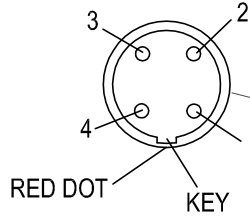
Drawing Number: FI1133

(Previously T5100/T5101)

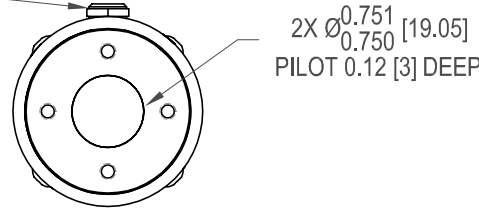
INCH [mm] | R.O.= Rated Output

WIRING CODE (CC4)

+Excitation	-Excitation	+Signal	-Signal
1 Red	4 Black	2 Green	3 White



LEMO RECEPTACLE  
EGG.OB.304.CLL  
MATING CONNECTOR  
FGG.OB.304.CLAD35  
(NOT INCLUDED)



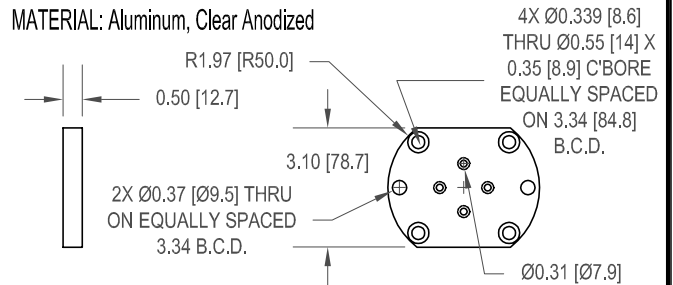
STK#	CAPACITY		TORSIONAL STIFFNESS
	in-oz	Nm	in-oz/rad
FSH00268	5*	0.04	325
FSH00269	10*	0.08	700
FSH00270	20*	0.15	1600
FSH00271	50*	0.37	3500
FSH00272	100*	0.75	7300
FSH00273	160*	1.2	11000
FSH00274	400*	3.0	30000
FSH00275	1000	7.5	71000
FSH00276	100 in-lb	12	77000 in-lb/rad
FSH00277	200 in-lb	24	95000 in-lb/rad
FSH00278	500 in-lb	60	199000 in-lb/rad

\* WITH OVERLOAD PROTECTION  
FOR HIGHER CAPACITIES REFER TO MODELS TFF600-750  
AND TDF600-675

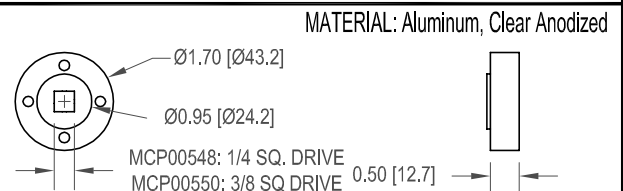
## SPECIFICATIONS:

RATED OUTPUT	1.5 mV/V nom. (5 in-oz) 2 mV/V nom. (10 in-oz to 500 in-lb)
SAFE OVERLOAD	300% (5 to 400 in-oz) 150% (1000 in-oz to 500 in-lb)
ZERO BALANCE	±1% of R.O.
EXCITATION (VDC OR VAC)	18 MAX
BRIDGE RESISTANCE	350 Ω nom. (5 to 1000 in-oz) 700 Ω nom. (100 to 500 in-lb)
NONLINEARITY	±0.2% of R.O.
HYSTERESIS	±0.2% of R.O.
NONREPEATABILITY	±0.05% of R.O.
TEMP. SHIFT ZERO	±0.002% of R.O./°F [0.0036% of R.O./°C]
TEMP. SHIFT SPAN	±0.002% of LOAD/°F [0.0036% of LOAD/°C]
COMPENSATED TEMP.	60 to 160°F [15 to 72°C]
OPERATING TEMP.	-60 to 200°F [-50 to 93°C]
WEIGHT	9 oz [250 g]
MATERIAL	ALUMINUM
CONNECTOR:	4 Pin LEMO Receptacle (EGG.OB.304.CLL)
ACCESSORIES AND RELATED INSTRUMENTS AVAILABLE	
CALIBRATION (STD)	5 pt. CW; 60.4KΩ SHUNT CAL. VALUE (5 to 1000 in-oz) 100KΩ SHUNT CAL. VALUE (100 to 500 in-lb)
CALIBRATION (OPT)	5pt. CCW
CALIBRATION TEST EXCITATION	10 VDC

## MCP00549 - OPTIONAL MOUNTING PLATE



## OPTIONAL 1/4" & 3/8" SQUARE ADAPTER



**FUTEK**  
ADVANCED SENSOR TECHNOLOGY, INC.

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10 THOMAS  
IRVINE, CA 92618 USA  
1-800-23-FUTEK (38835)

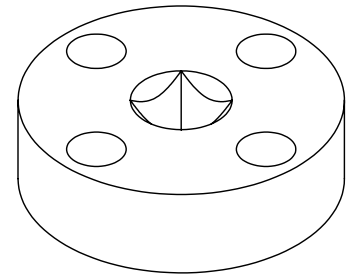
INTERNET:  
<http://www.futek.com>

**FUTEK MODEL ZAC120**

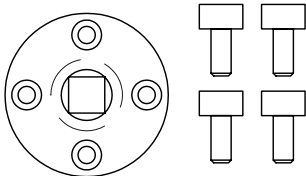
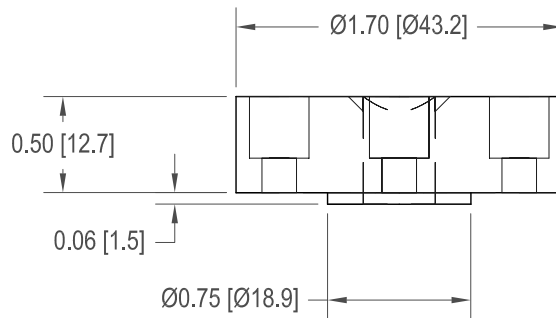
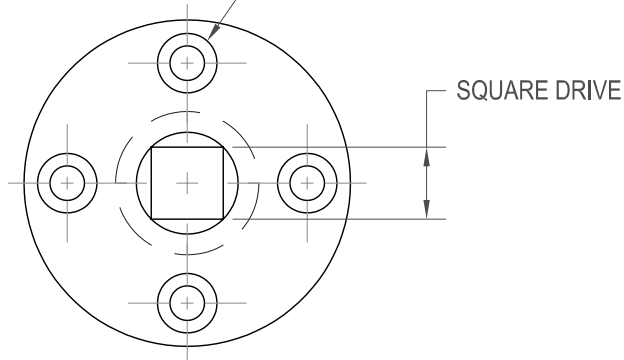
**FEMALE SQUARE DRIVE ADAPTER  
FOR FUTEK MODEL TFF400, TDD400 AND TDF400**

Drawing Number: FI1219

INCH [mm] | Material: Aluminum

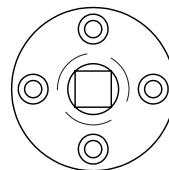


4 X Ø0.18 [4.6] THRU  
C'BORE Ø0.31 [7.9] X 0.32 [8.1] DEEP  
EQUALLY SPACED ON 1.25 [31.8] B.C.D.

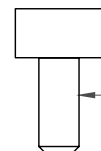


PACKAGE INCLUDES ONE  
ADAPTER AND 4 SCREWS

PACKAGE STOCK#	SQUARE DRIVE
FSH02361	1/4"
FSH02362	3/8"



ADAPTER STOCK#	SQUARE DRIVE	MAX LOAD
MCP00548	1/4"	1500 in-oz
MCP00550	3/8"	750 in-lb



#8-32 x 3/8L  
SOCKET HEAD  
CAP

SCREW STOCK#  
GOD00074

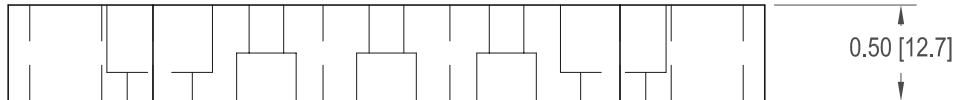
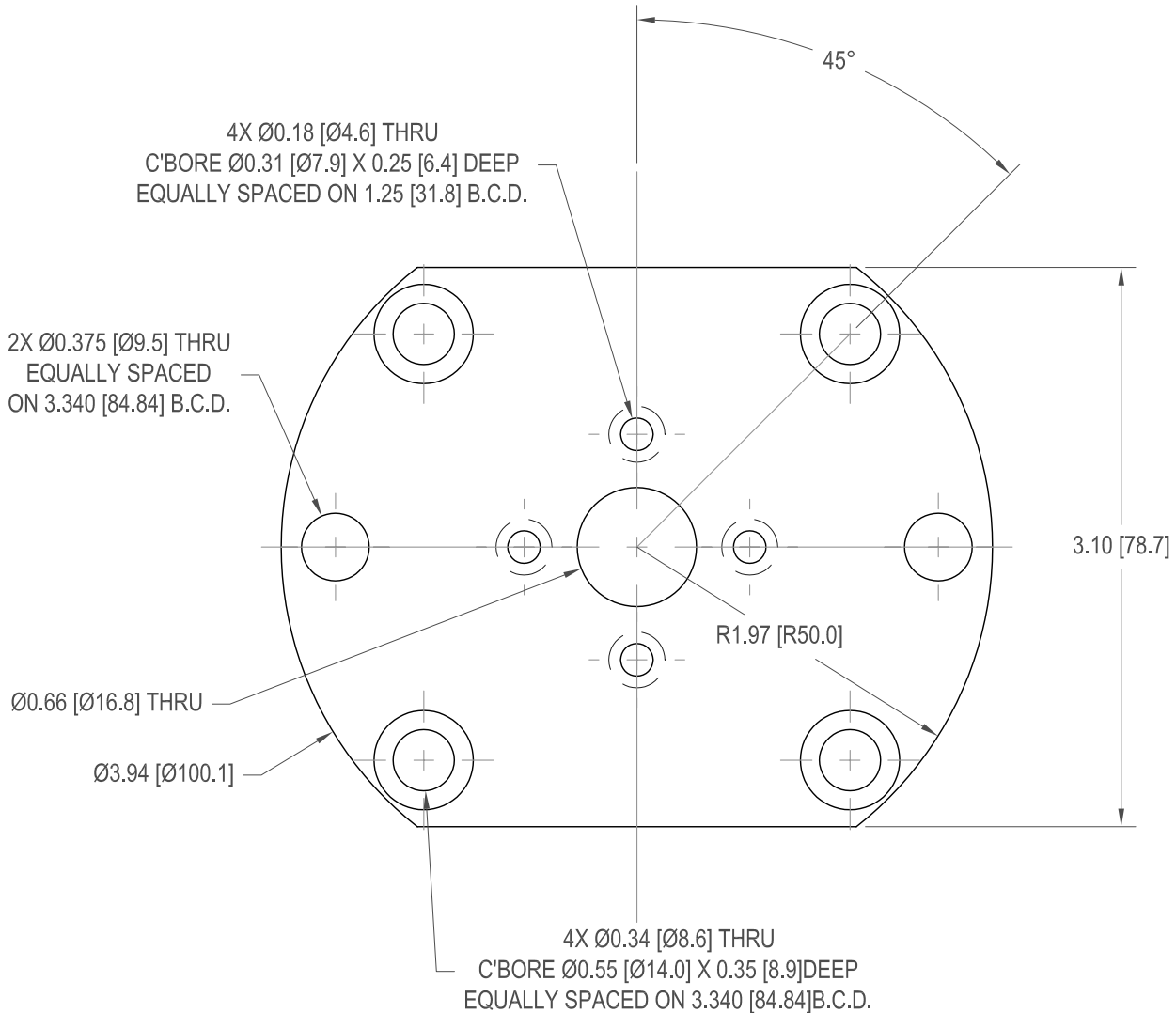
# FUTEK MODEL ZAC140

## FLANGE TORQUE ADAPTER W/ MOUNTING SCREWS

Drawing Number: FI1237-A

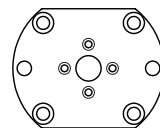
FOR MODELS TFF400, TFF425, & TDF400

INCH [mm] MATERIAL: ALUMINUM



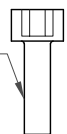
PACKAGE STOCK NO. FSH02366

INCLUDES ONE ADAPTER AND 4 SCREWS



ADAPTER STK  
NO. MCP00549

#8-32 X 1/2L  
SOCKET HEAD  
CAP



SCREW STK  
NO. GOD00174