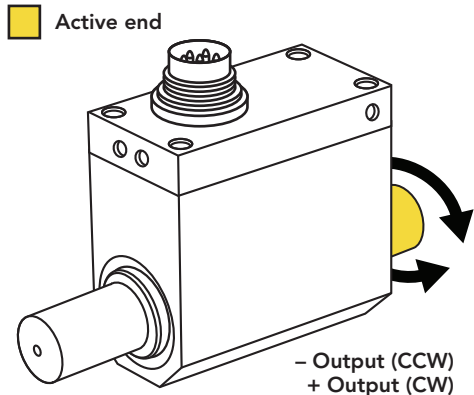




### FEATURES

- Utilizes strain gauge technology
- Angle speed feedback
- Compact size
- Can operate up to 7000 RPM



### SPECIFICATIONS

#### PERFORMANCE

Nonlinearity	±0.2% of RO
Hysteresis	±0.1% of RO
Nonrepeatability	±0.2% of RO
Rotational Speed	7000 Max

#### ELECTRICAL

Rated Output (RO)	±5 VDC
Excitation	11–26 VDC, 1 Watt
Connector	12 pin Binder Series #581 (09-0331-90-12)

#### MECHANICAL

Safe Overload	150% of RO
Zero Balance	±1% of RO
Material	Aluminum (Housing), Steel Alloy (Shaft)
IP Rating	IP40

#### TEMPERATURE

Operating Temperature	-13 to 176°F (-25 to 80°C)
Compensated Temperature	41 to 122°F (5 to 50°C)
Temperature Shift Zero	±0.01% of RO/°F (±0.02% of RO/°C)
Temperature Shift Span	±0.01% of RO/°F (±0.02% of RO/°C)

#### CALIBRATION

Calibration Test Excitation	12 VDC
Calibration (standard)	Certificate of Conformance
Calibration (available)	5-pt CW & CCW
Shunt Calibration Value	With sensor fully connected apply 11–26 VDC to Pins A & K to generate 5 VDC nom output

#### ENCODER

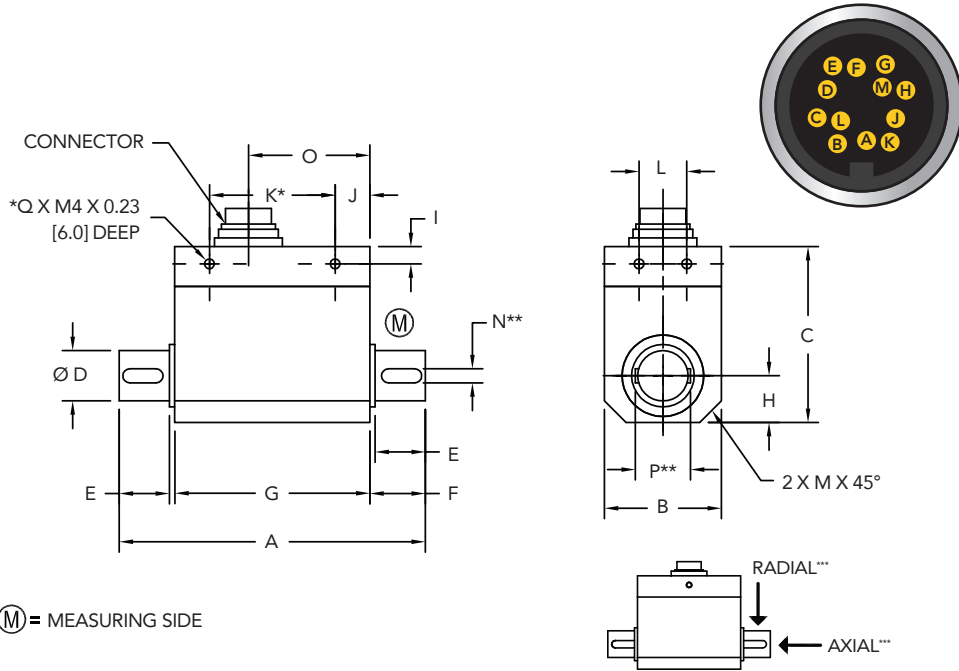
Output	Impulse (TTL)
Pulses per Revolution	2 × 360
Excitation	5 VDC
Angle 1	Leading Pulse
Angle 2	Trailing Pulse (90°)

#### CONFORMITY

RoHS	2014/30/EU
CE	<a href="#">Declaration of Conformity</a>

# Model TRS605

## DIMENSIONS inches [mm]



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

\*\*FEATHER KEYWAYS APPLY TO 20 AND 50 Nm PER DIN 6885, KEYWAYS COME PRE-INSTALLED

## TORQUE CONNECTOR CODES

PIN	COLOR	DESCRIPTION
C	Green	Signal Output
D	White	Ground
E	Black	Ground
F	Red	Power

## ANGLE CONNECTOR CODES

PIN	COLOR	DESCRIPTION
B	Blue	Signal (Angle 1)
E	Black	Ground
G	Brown	Signal (Angle 2)
H	Orange	Power

## SHUNT CAL CONNECTOR CODES

PIN	COLOR	DESCRIPTION
A	Yellow	Ground
K	Purple	Power

## SHIELD CONNECTOR CODES

PIN	COLOR	DESCRIPTION
M	Floating	Shield

## CAPACITIES

ITEM #	in-lb	Nm	Ø D	A	B	C	E	F	G	H	I	J	K*	L	M	N**	O	P**	Q*	*** Max Axial Force lb [N]	*** Max Radial Force lb [N]	Weight lb [kg]
FSH02052	9	1	0.394 [10] g6	3.62 [92]	1.10 [28]	2.04 [52]	0.63 [16]	0.67 [17]	2.28 [58]	0.55 [14]	0.19 [5]	0.43 [11]	-	0.31 [8]	0.31 [8]	N/A	1.46 [37]	N/A	6	4.5 [20]	1 [5]	0.7 [0.30]
FSH02053	18	2																		11 [50]	1 [5]	
FSH02054	44	5																		11 [50]	2 [10]	
FSH02055	89	10	0.630 [16] g6	4.09 [104]	1.49 [38]	2.28 [58]	0.78 [20]	0.90 [23]	2.32 [59]	0.75 [19]	0.19 [5]	0.47 [12]	1.38 [35]	0.55 [14]	0.40 [10]	0.197 [5]	1.50 [38]	0.787 [20]	8	34 [150]	4.5 [20]	1.3 [0.60]
FSH02056	177	20																		34 [150]	7 [30]	
FSH02057	443	50																		45 [200]	11 [50]	



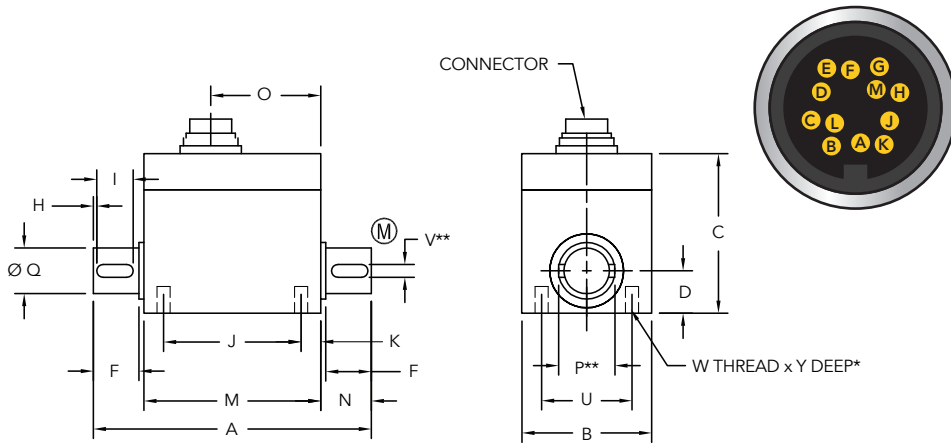
RoHS



U.S. Manufacturer

# Model TRS605

## DIMENSIONS inches [mm]

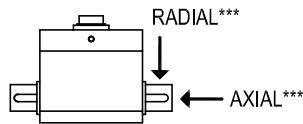


(M) = MEASURING SIDE

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

\*\* FEATHER KEYWAYS COME PRE-INSTALLED.

\*\*\* MAXIMUM LOAD ALLOWED. NOT FOR MEASUREMENT.



## TORQUE CONNECTOR CODES

PIN	COLOR	DESCRIPTION
C	Green	Signal Output
D	White	Ground
E	Black	Ground
F	Red	Power

## ANGLE CONNECTOR CODES

PIN	COLOR	DESCRIPTION
B	Blue	Signal (Angle 1)
E	Black	Ground
G	Brown	Signal (Angle 2)
H	Orange	Power

## SHUNT CAL CONNECTOR CODES

PIN	COLOR	DESCRIPTION
A	Yellow	Ground
K	Purple	Power

## SHIELD CONNECTOR CODES

PIN	COLOR	DESCRIPTION
M	Floating	Shield

## CAPACITIES

ITEM #	in-lb	Nm	Ø Q	A	B	C	D	F	H	I	J	K	M	N	O	P**	U	V**	W	Y	*** Max Axial Force lb [N]	*** Max Radial Force lb [N]	Weight lb [kg]
FSH02058	885	100	1.102 [28] g6	4.92 [125]	2.28 [58]	2.99 [76]	1.14 [29]	1.06 [27]	0.08 [2]	0.87 [22]	1.54 [39]	0.49 [12.5]	2.52 [64]	1.20 [30.5]	1.57 [40]	1.34 [34]	1.69 [43]	0.315 [8] p9	M5	0.31 [8]	90 [400]	56 [250]	2.3 [1.06]
FSH02059	1770	200																			90 [400]	67 [300]	
FSH02060	4425	500	1.654 [42] g6	7.76 [197]	2.87 [73]	3.54 [90]	1.44 [36.5]	2.28 [58]	0.12 [3]	1.97 [50]	1.46 [37]	0.71 [18]	2.87 [73]	2.44 [62]	1.73 [44]	1.89 [48]	2.05 [52]	0.551 [14] p9	M6	0.39 [10]	180 [800]	90 [400]	6.4 [2.90]
FSH02061	8851	1000																			225 [1000]	90 [400]	

Drawing Number: FI1410

FUTEK reserves the right to modify its design and specifications without notice.  
Please visit <http://www.futek.com/salesterms> for complete terms and conditions.

10 Thomas, Irvine, CA 92618 USA

Tel: (949) 465-0900

Fax: (949) 465-0905

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



SCIGATE AUTOMATION (S) PTE LTD

No. 1 Bukit Batok Street 22 #01-01 Singapore 659592

Tel: (65) 6561 0488

Fax: (65) 6562 0588

Email: [sales@scigate.com.sg](mailto:sales@scigate.com.sg)

Web: [www.scigate.com.sg](http://www.scigate.com.sg)

Business Hours: Monday - Friday 8.30am - 6.15pm



RoHS



U.S. Manufacturer