

Rotary Transducer

Operating Instructions

Summary

This Rotary Transducer is designed to measure the torque during tightening processes. It is suitable for use in all manual applications and with all **non**-impact power tools.

The QuickTec system is fitted to this Transducer, which allows Transducer information to be automatically downloaded to QuickTec compatible readout devices such as the PETA system.

The Transducer is calibrated so that exactly 2mV/V output is produced at the maximum Transducer torque value. This value is marked on the Transducer and may have to be entered into readout devices other than QuickTec compatible devices.

Operation

The Rotary Transducer should be secured onto the tool output drive and a socket or suitable drive element fitted to the Transducer output shaft. Failure to observe the maximum Transducer torque capacity, may cause irreversible damage to the Transducer.

Connect the Transducer to the readout device, select an appropriate operating mode and then operate the tool in the normal way. In the interests of accuracy it is essential to maintain the correct alignment between the Fastener, Transducer and Tool.

If the male square drive detent pin is not required, this may be removed with a stepped punch (for location purposes) of Ø2.3mm for a ¼" square drive, Ø3.95mm for a ⅜" or ½" square drive and Ø6.3mm for a ¾" or 1" square drive.

Specifications

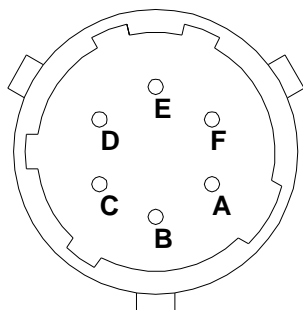
Bridge Resistance	350ohm
Output Sensitivity	2mV/V
Static Accuracy	±1% of Maximum torque value
Stability of zero offset with temperature	±0.1% of Maximum torque value / °C
Overload Capacity	25% of Maximum torque value
Temperature Range	5 to 40°C
Humidity	10 to 75% non-condensing

Table 1

Hex & Square Drive size	Torque Rating (N.m)	Maximum RPM	
		Continuous	Intermittent
1/4" Hex	5	5000	11,000
1/4" Hex	20	5000	11,000
1/4" Sq.	20	5000	11,000
3/8" Sq.	75	2500	10,000
1/2" Sq.	180	2500	7,600
3/4" Sq.	500	2000	5,000
1" Sq.	1400	1000	4,400

Continuous duty is defined as 100% duty in either direction, intermittent duty as 10% of that working time.

The transducer should be returned to the supplier or manufacturer for recalibration and certification every 12 months.



View of Connector

Conn	Function
A	+ ve Excitation
B	- ve Excitation
C	+ ve Signal
D	- ve Signal
E	Digital Clock
F	Dig I/O
Shell	Earth

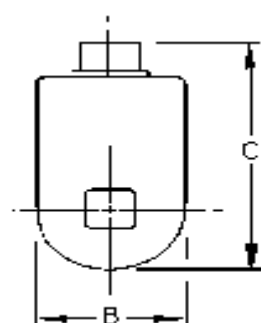
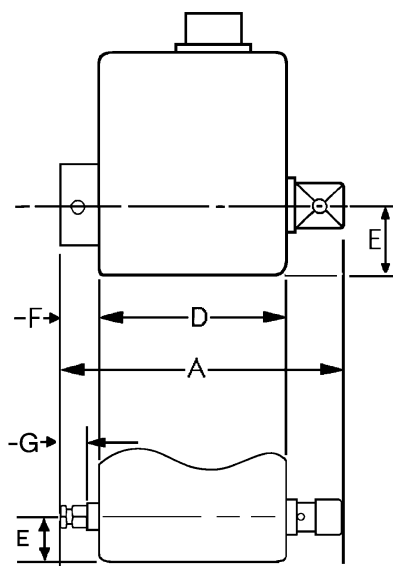


TABLE 2

Drive	Dimensions in mm							Weight (grams)
	A	B	C	D	E	F	G	
1/4" Hex	116	30	68	56	13	39	25.5	207
1/4" Sq.	71.5	30	71.5	56	13	6	---	196
3/8" Sq.	77	30	74	56	15	8	---	235
1/2" Sq.	87	42	82.5	58	21	12	---	425
3/4" Sq.	106	52	93.5	60	26	21	---	755
1" Sq.	125	63	104	64.5	31.5	29	---	1500

CE MARKING

Manufacturer: MHH Engineering Co. Ltd.
Bramley
Guildford
Surrey
GU5 0AJ

Declares that this product has been assessed and complies with the requirements of the relevant CE Directives