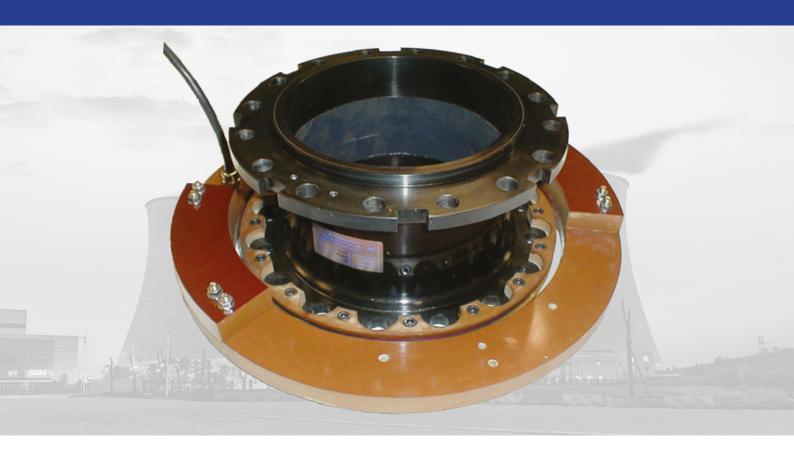


The force in torque management



TF Series

Coupling-based rotary torque transducer system.

The TF series was one of the first spacer coupling torque transducers that we instrumented in the 1980's. The TF series is ideal for specially engineered units based on any proprietary coupling manufacturer's spacer. Most torques and speeds can be accommodated and all of our TF couplings are rated to 65°C with a 100°C option.

Various signal-conditioning packages are available to suit your specific requirements and bench mounted displays (for torque only) are supplied as standard.

The TF's sealed data transmission system can be used in the presence of water, oil, grease and dust making it robust and durable for the harshest of conditions. No bearings are used so the unit is effectively maintenance-free. All hubs are parallel bored as required before despatch. The TF can be supplied as standard or it can also be designed to your specific requirements.

For pricing, availability or further technical information about the TF series of rotary torque transducers, contact us via our website at www.crane-electronics.com or get in touch via email at sales@crane-electronics.com.

Technical Specification

Accuracy: +/-0.5% of FS

(Bi-directional)

Calibration Level: Specified on certificate

Overload Capacity: 150% FS

Operating Temp: +5 to +65°C

Optional Temp Range: -0 to +100°C

Output Signal at zero torque: 10 kHz Nominal Output at +FS torque: 15 kHz

Nominal Output at -FS torque: 5kHz

Non-linearity: ±0.2% FS

Repeatability: $\pm 0.05\%$ FS

Hysteresis: ±0.1% FS

Zero Shift: ±0.01% FS/°C

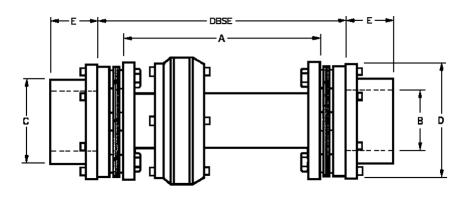
Span Shift: $< \pm 0.02\%$ FS/°C

As of 2013 the system is ATEX approved and Certified by MET Laboratories to meet CSA Standard C22.2.

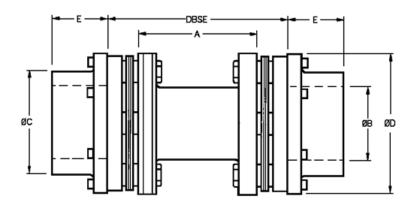
ATEX Certified for Zone 2 (ATEX Category 3) all gas groups T4 IEC61010 certified

CSA listing number:-E113696 Complies with CSA C22.2 No. 213-M1987 Class 1, Division 2, Groups A, B, C, D.

Dimensions



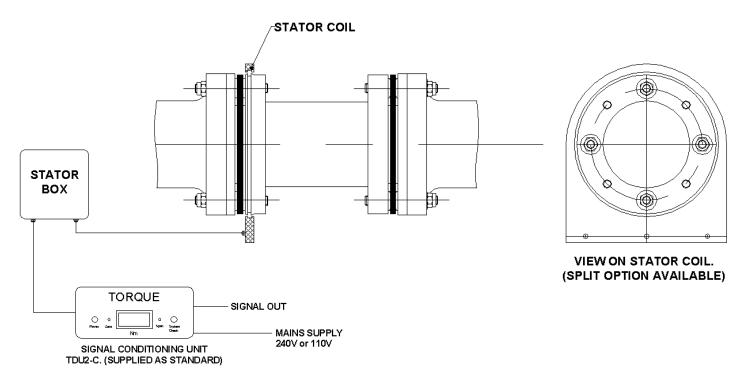
TFC	Rated Torque	Max Speed		Min	ØВ	С	D	E
	(Nm)	Balanced	Unbalanced	DBSE	(Max)			_ E
0013	125	25000	7000	190	36	54	86	40
0027	315	20000	6000	215	46	69	105	45
0075	715	16500	5200	240	65	90	130	55



TFC	Rated Torque	Max Speed		Min	ØВ			Е
	(Nm)	Balanced	Unbalanced	DBSE	(Max)	С	D	Ē
0135	1290	14400	4800	225	80	112	152	62
0230	2200	12000	4700	255	90	131	179	70
0300	2900	15300	5700	255	84	119	155	84
0500	4800	12800	5000	275	100	143	185	100
0750	7000	11300	4600	295	110	161	209	110
1050	10000	10100	4200	315	134	187	235	134
1500	14300	9000	3900	340	148	208	262	148
2000	19000	8200	3700	365	161	225	288	161

Other ratings and customer sizes are available.

System Schematic (torque only)



Signal Conditioning Unit (Bench Mounted) Output Options:- 4-12-20mA, +/-10Vdc.

Other display options:

- Bench mounted display for speed, output signal 0-10Vdc
- 19" rack, for torque, speed and power, or a combination.
- Wall mounted cabinet



