



## **TSS Static Torque Transducer**

Square to square static torque reaction transducer.

The TSS range of torque reaction transducers provide a cost-effective solution to static or semirotary torque measurement issues. Typically, these units are used with torque wrenches and other square drive tools. A range of digital readouts and amplifiers, with different features, are available for these transducers.

Intermediate ratings are available at no extra cost. Parallel shaft and flanged units are also available; see our TLSP, TLSF and TSF ranges. The TSS is also available with gauge coatings suitable for sub-sea installations.

The TSS is available in a variety of sizes ranging from 5Nm up to 75,000Nm.

For pricing, availability or further technical information about the TSS series of static torque transducers, contact us via our website at <a href="https://www.crane-electronics.com">www.crane-electronics.com</a> or get in touch via email at sales@crane-electronics.com.

## **Technical Specification**

**Nominal Sensitivity:** 1.5mV/V (1Nm unit is

1.0 mV/V)

**Repeatability:** ±0.05% fs

**Accuracy:** ±1.0% (10%-100% FS)

Operating Temp: 0 to +80°C

Overload Capacity: 150% fs

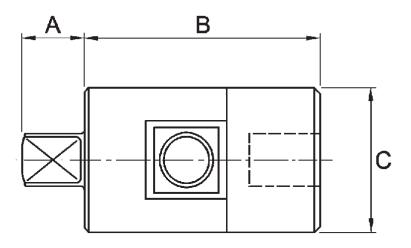
**Compensated Range:** 20 to +60°C

Bridge Supply: 10V

Storage Temp: $-30 \text{ to } +90^{\circ}\text{C}$ Bridge Resistance:700 ohmsZero Shift: $< \pm 0.01\%/\text{C}^{\circ}$ Non-linearity: $\pm 0.1\%$  fsSpan Shift: $< \pm 0.02\%/\text{C}^{\circ}$ 

**Hysteresis:**  $\pm 0.1\%$  fs

## **Dimensions**



Model No.	Size	Square Size	Α	В	С
TSS-5	5Nm	1/4"	7.5	41	32
TSS-10	10Nm	1/4"	7.5	41	32
TSS-50	50Nm	3/8"	11.5	58	35
TSS-100	100Nm	1/2"	15.5	58.5	35
TSS-500	500Nm	3/4"	23	79	54
TSS-1K	1KNm	1"	28	79	54
TSS-5K	5KNm	1½"	39	123	85
TSS-10K	10KNm	2½"	55	158	120
TSS-75K	75KNm	3½"	79	185	180

## **Wiring Details**

The TSS5 to TSS100 have a 3 metre flying lead, not a connector. Where connectors are fitted the mating plug is also supplied.

PIN	Designation	Flying Lead Colours		
А	Excitation (+)	Red		
С	Excitation (-)	Blue		
F	Signal (+)	Yellow		
E	Signal (-)	Green		
В	N/C			
D	N/C			

