

Chatillon® STS Series Torque Sensors

Specification Sheet

SS-ST5-0210

February 2010

The CHATILLON® STS Series torque sensors are full-bridge strain gauge sensors complete with 15-pin plug. These sensors are used exclusively with the Chatillon DFS-R-ND Series digital indicator. The sensor's torque values and sensitivity factors are stored in memory within the sensor plug. When connected to a DFS-R-ND indicator, the capacity and calibration points are automatically recognized by the instrument. The instrument then becomes a full-featured torque measurement instrument. The STS Series torque sensor meets ASTM E4 and BS EN ISO 7500 part 1 for a $\pm 0.3\%$ accuracy sensor. The sensors are connected to the DFS-R-ND with a retractable cord that extends fully to nearly 9 ft. (3 m).

Features

- Plug & Play Operation
- DFS-R-ND Gauge
- Accuracy up to 0.1% FS
- NIST Calibration with Data
- 1 Year Warranty

Specifications

Accuracy:	$\pm 0.3\%$ of Full Scale
Input Resistance:	1000 ohms ± 100
Output Resistance:	1000 ohms ± 100
Rated Output:	2.0 mV/V
Safe Overload:	150% Full Scale
Non-Linearity:	$\pm 0.05\%$ Full Scale
Hysteresis:	$\pm 0.05\%$ of Full Scale
Zero Balance:	$\pm 0.1\%$ of Full Scale
Operating Temperature:	40°F to 110°F 5°C to 45°C
Instrument Weight:	1.5 lb (0.7kg)
Shipping Weight:	2 lbs (1 kg)



Shown: STS sensor attached to the Chatillon DFS-R-ND gauge for torque measurement.



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Force Measurement

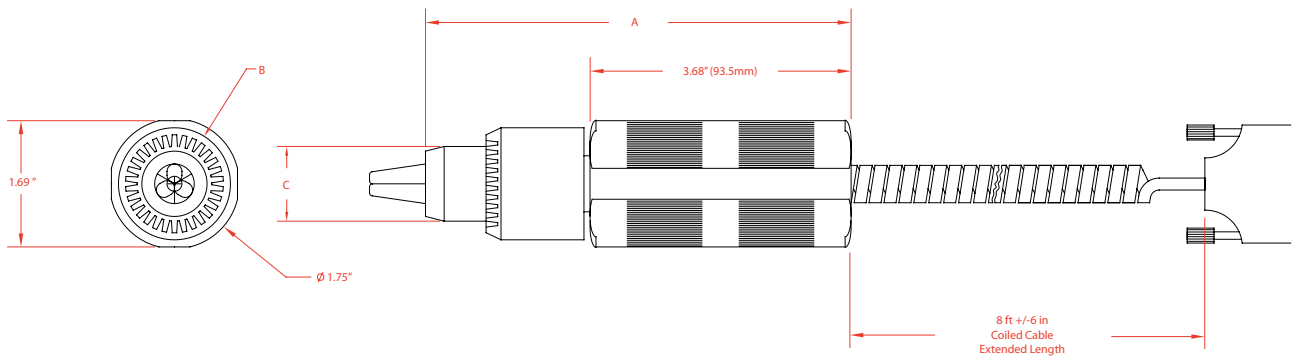
Ordering

STS Series

Model	oz-in	lbf-in	kg-cm	N-cm	N-m
STS-0003	50 x 0.005	3 x 0.0005	3.5 x 0.005	35 x 0.005	0.35 x 0.0001
STS-0012	192 x 0.02	12 x 0.002	12.5 x 0.002	125 x 0.02	1.25 x 0.0002
STS-0050	800 x 0.1	50 x 0.005	50 x 0.005	500 x 0.05	5 x 0.0005
STS-0100	-	100 x 0.01	100 x 0.01	1000 x 0.1	10 x 0.001
STS-0200	-	200 x 0.02	200 x 0.02	2000 x 0.2	20 x 0.002



Shown: STS sensor attached to the B200308 torque fixture for measuring cap torque strength.



Capacity	A	B	C	Sample Size
50 oz-in	5.62"	1.25"	1.0"	1/16 - 3/8"
12 lb-in	6.0"	1.62"	1.2"	5/64 - 1/2"
50 lb-in	6.0"	1.62"	1.2"	5/64 - 1/2"
100 lb-in	6.0"	1.62"	1.2"	5/64 - 1/2"
200 lb-in	6.0"	1.62"	1.2"	5/64 - 1/2"

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ISO 9001/2000
 ISO/IEC17025
 Manufacturer