Rotating Torque Sensors

s_FY01 Series

(rotary socket torque sensor with round shaft)

s_FY01 torque sensor series generalities

s_FY01 series is a rotary socket torque sensor with round shaft and keys, specifically designed for general purposes torque measurements.

Within the other potential uses, there are the electrical motor monitoring, the torque testing benches, and any other application for which a torque monitoring would be required (optionally, the torque sensor can be provided with a digital indicator).

s_FY01 torque sensor is based on steel alloy shaft, on which is duly applied a full *Weathstone* strain gauge bridge. A silvered slip ring assembly coupled to a brushes set, allows the ***s_FY01*** torque sensor to be used for rotary application, with maximum rotational speed up to 2500 rpm.

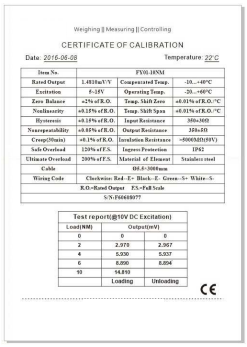
Mentioned coupling transmits the correct voltage for the torque sensitive bridge excitation to, and collect the transduction output signal (mV) from the rotating square drive torque sensor.

s-FY01 rotary torque sensor

Each unit is CE compliant and it is provided with its factory traceable (to *Chinese National Metrological Network*), calibration certificate.

s_FY01 torque sensor series main characteristics:

- **several measuring ranges are available within the *s_FY01* series;**
- **improved overall accuracy, cost effective;**
- **strain gauge based technology, slip ring rotary torque sensor;**
- **rotational speed up to 2500 rpm, clockwise, counterclockwise;**



CERTIFICATE OF CALIBRATION

sample of calibration certificate

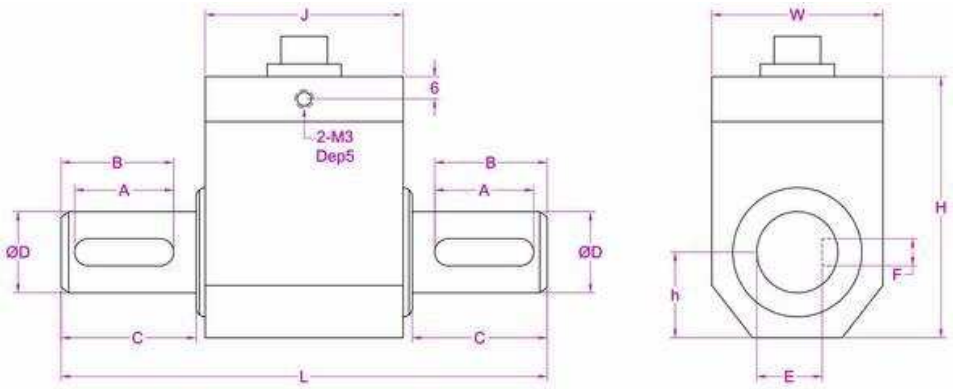
s_FY01 torque sensor series specifications:

- available ranges:	±10, ±20, ±30, ±50, ±100, ±200, ±300 and ±500 Nm;
- rated output:	1.2 to 2 mV / V;
- excitation:	from 5 to 15 Vdc (maximum);
- zero balance:	±2 % R.O.;
- linearity error:	±0.15 % R.O.;
- hysteresis:	±0.15 % R.O.;
- non repeatability:	±0.05 % R.O.;
- creep (30 min):	±0.1 % R.O.;
- safe overload:	120 % F.S.;
- ultimate overload:	200 % F.S.;
- compensated temperature:	-10 to +40 °C;
- operating temperature:	-20 to +60 °C;
- temperature shift (*zero*):	±0.01 % R.O./ °C;
- temperature shift (*span*)	±0.01 % R.O./ °C;
- input bridge resistance:	350 ±30 ohms;
- output bridge resistance:	350 ±10 ohms;
- insulation resistance:	> 5000 Mohms (50 V);
- ingress protection:	IP62;
- shaft material:	stainless steel;
- electrical connection:	socket connector with cap (flying connector provided);
- max rotational speed:	2500 rpm.

Certificate of Compliance

sample of manufacturer CE certificate

s_FY01 torque sensor series dimensions:



Capacity(NM)	L	H	W	A	B	C	D	E	F	J	h
10/20/30/50/100	108	58	38	22	25	30	18	15	6	44	19
200/300/500	143	73.5	53	30	35	40	28	24	8	56	27

Torque sensor s_FY01 dimensions (mm, unless differently specified)

s-FY01 rotary torque sensor

s-FY01 rotary torque sensor with connector fitted

s_FY01 torque sensor series manufacturer:

s_FY01 torque sensor manufacturer is a Chinese growing company consolidating its European, North and South Americas markets, capable of design and manufacturing several strain gauges based sensors, like miniature and button shaped load cells, static torque sensors, and obviously several others dynamic torque sensors, including no-contact versions (brushes and slip rings free). All the products (starting from strain gauges, elastic bodies, and finished products), are duly submitted to the production end quality controls. Custom design of force and torque based sensors is also welcome.

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