

Rotating Torque Sensors

s_FYF SERIES

(shaft to shaft rotary torque sensor)

s_FYF torque sensor series generalities

s_FYF series is a shaft to shaft rotary torque sensor, 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_FYF 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_FYF torque sensor to be used for rotary application, with maximum rotational speed up to 1800 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.

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



s-FYF rotary torque sensor

s_FYF torque sensor series main characteristics:

- several measuring ranges are available within the s_FYF series;
- improved overall accuracy, cost effective;
- strain gauge based technology, slip ring rotary torque sensor;
- rotational speed up to 1800 rpm, clockwise, counterclockwise;

s_FYF torque sensor series specifications:

- available ranges:	± 0.1 , ± 0.2 , ± 0.5 , ± 1 , ± 2 , ± 3 and ± 5 Nm;
- rated output:	1 mV / V;
- excitation:	from 3 to 15 Vdc (maximum);
- zero balance:	± 2 % R.O.;
- linearity error:	± 0.2 % R.O.;
- hysteresis:	± 0.2 % R.O.;
- non repeatability:	± 0.1 % 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):	± 0.02 % R.O./ °C;
- temperature shift (span)	± 0.02 % R.O./ °C;
- input bridge resistance:	380 $\pm$ 30 ohms;
- output bridge resistance:	350 $\pm$ 5 ohms;
- insulation resistance:	> 5000 Mohms (50 V);
- ingress protection:	IP62;
- shaft material:	stainless steel;
- electrical connection:	socket connector with cap (flying connector provided);
- recommended rotational speed:	1800 rpm.

FORSERTEK Weighing Measuring Controlling	
CERTIFICATE OF CALIBRATION	
Date: 2016-06-08	Temperature: 22 °C
Item No.	7101-1001
Rated Output	1.000mV/V
Excitation	F-12V
Operating Temp.	-10...+40°C
Zero Balance	± 0.01 % F.S.
Temp. Shift Zero	± 0.01 % F.S./°C
Linearity	± 0.02 % F.S.
Temp. Shift Line	± 0.01 % F.S./°C
Repeatability	± 0.01 % F.S.
Input Resistance	380-400Ω
Non-repeatability	± 0.01 % F.S.
Output Resistance	350-360Ω
Creep (30min)	± 0.01 % F.S.
Insulation Resistance	>5000Ω/50V
Safe Overload	120% of F.S.
Ultimate Overload	200% of F.S.
Material of Elastic	Stainless steel
Calib.	ISO 9001
Wiring Code	Checklist Ref. 10 - Black, L, Green, S+ White, S-
R.O. of Full Scale	1.00000000
FORSERTEK Co., Limited	

sample of calibration certificate

Certificate of Compliance	
Certificate Number: BCTC-160806040	
Applicant:	FORSERTEK Co., Limited 20 Zhenyuan Rd., Baotou Industrial Zone, Longgang Dist., Shenzhen, China 518109
Manufacturer:	FORSERTEK Co., Limited 20 Zhenyuan Rd., Baotou Industrial Zone, Longgang Dist., Shenzhen, China 518109
Product:	Torque sensor
Trademark:	FORSERTEK
Model:	PT01
Test Standard:	EN 61326-1:2013 EN 61326-2-1:2013
The EUT identified above has been tested by us with the listed standards and found to comply with the essential EMC Directive (2014/53/EU). It is qualified to use CE marking to demonstrate the compliance with EMC Directive. It is only valid in connection with the test report number: BCTC-160806040.	
CE	
This certificate of conformity is based on a single evaluation of the submitted product. The manufacturer is responsible for ensuring that the product continues to comply with the applicable standards. The manufacturer is responsible for ensuring that the product continues to comply with the applicable standards.	
May 26, 2016	

sample of manufacturer CE certificate



SPARE S.r.l.
Strumentazione,
sistemi e
sensori

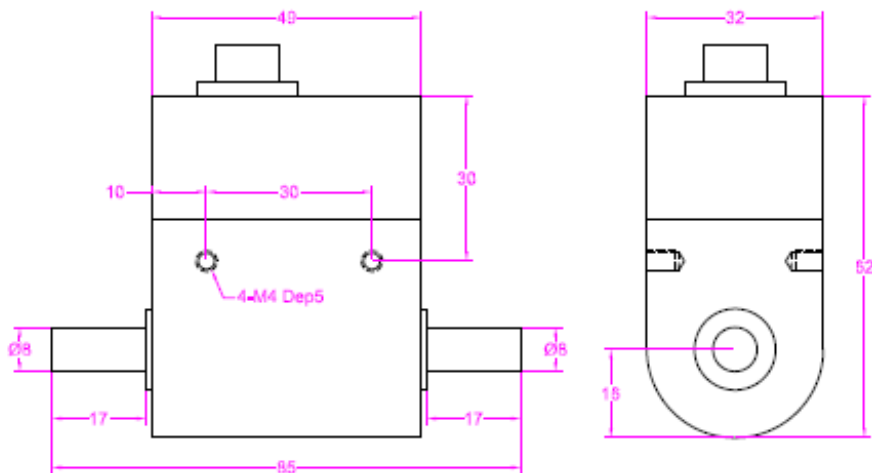
<http://www.spare.it> - e-mail: sales@spare.it

MANDARIN
普通话 PRODUCT LINE

AUTOMATION & CONTROL

SILVER SERIES

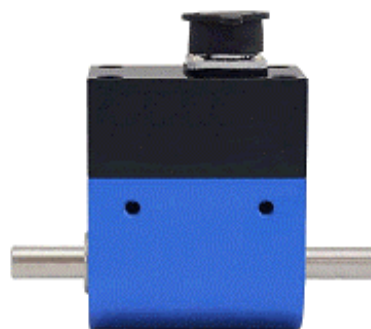
s_FYF torque sensor series dimensions:



Torque sensor s_FYF dimensions (mm, unless differently specified)



s-FYF rotary torque sensor



s-FYF rotary torque sensor (side view)

s_FYF torque sensor series manufacturer:

s_FYF 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.



SPARE S.r.l.

Via Carlo Spagnolo, 4
27057 Varzi - Pavia - Italia
tel. (+39) 0383-54.51.51
fax (+39) 0383-54.50.51
<http://www.spare.it> - sales@spare.it

Distribution by: