



ATC805S

Torque Sensor

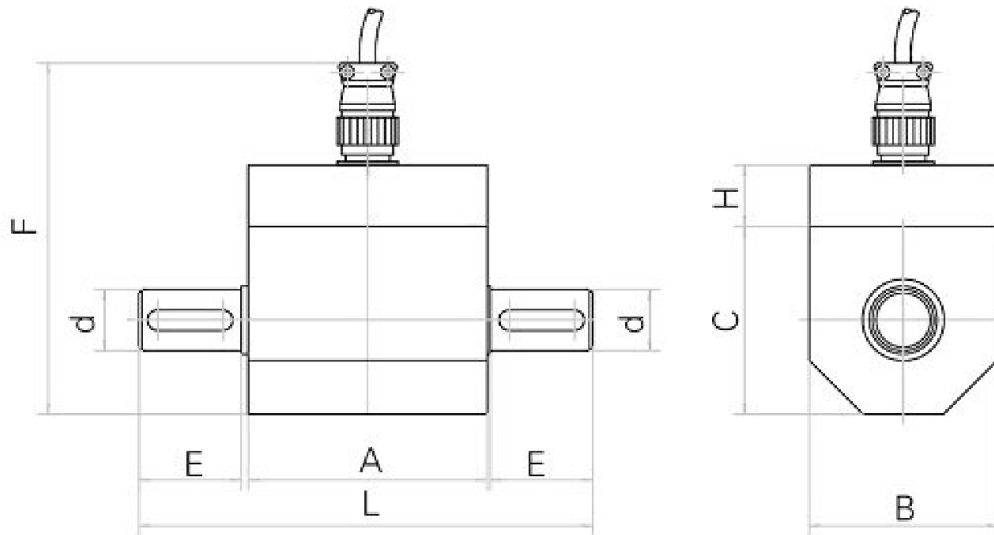
ATC805S ultra-small torque sensor based on the unique technology of ion beam sputtering thin-film strain bridge. It is suitable for all kinds of measurement sites requiring small volume and high speed. The product outputs frequency signals is 4-20mA current signal, suitable for long-distance transmission.

This series of sensors have strong anti-interference ability and easy to use and install.

—Range 0.5N·m, 1N·m, 5N·m, 10N·m, 20 N·m, 50N·m, 100N·m, 200N·m, 500N·m

Technical Features:

- Small size, lightweight, can be installed in any position and direction
- Can measure both static and rotating torque, high detection accuracy, good stability, and strong anti-interference.
- Continuous measurement of positive and negative torque without repeated zero adjustments.
- Strong anti-interference can be installed in any position and direction.
- Detect rotating power equipment such as motors, engines, fans, mixers, propellers, drilling machinery, and other equipment.
- Can be used to manufacture viscometers, electro-pneumatic, hydraulic torque wrenches.



SIZE AND MEASUREMENT

Nm	d	L	E	A	F	C	B	H	L x W x H	Key	Weight
5-100	18	133	30	70	101	55	55	18	25X6X6	Single Key	1kg
>100-500	25	153	30	91	115	65	65	18	30X8X7	Single Key	1.5kg

Data Specification

model		ATC805S							
Accuracy class		J1: ±0.1%F.S J2: 0.2%F.S J3 ±0.3%F.S							
Rated torque		Nm	1	2	10	20	50	100	200
Output signal		S1: 5-15KHz S2: 4-20mA S3: 1-5V S4: 1-10V S5: 0-±5V S6: 0-±10V							
Sensitivity error		%	< ±0.2						
Angle speed measurement		Choose	Yes/No						
Temperature error / 10 °C		%	< ±0.05						
Rated output temperature influence		%	< ±0.1						
Zero balance temperature effect		%	< ±0.1						
Linear deviation, including hysteresis		%	< ±0.1						
Relative standard deviation of repeatability DIN 1319		%	< ±0.05						
Supply voltage		V	11-30						
Reference temperature		°C[°F]	+23[+73.4]						
Standard temperature range		°C[°F]	+10...+60[+50...+140]						

Operating temperature range	°C[°F]	-10...+60[+14...+140]						
Storage temperature range	°C[°F]	-50...+70[-13...+158]						
Mechanical parameters (related to rated torque)								
Static limit load	%	150						
Static breaking load	%	300						
Bending limit moment	N m	0.23	0.93	1.2	2.3	6	11	23
Axial limit force	kN	0.34	1.1	0.6	1.9	2.5	5.5	8.8
Lateral limit force	N	5.7	18.2	9	26	50	80	125
Torsional angle at rated torque	°	0.85						
Moment of inertia	kgm ² 10 ⁻³	0.000 003	0.000 003	0.01 271	0.013 75	0.015 72	0.02 189	0.02 421
Maximum allowable speed	rpm	A1:0-3000rpm A2: 0-6000rpm A3: 0-8000rpm A4: 0-10000rpm						
Protection grade en60529		IP50						
Weight	kg	0.36	0.36	0.57	0.59	0.65	0.72	0.69

Each type of irregular stress is allowed only at its given limit value (bending moment, lateral load or axial load, exceeding the rated speed). Otherwise, the limit must be reduced. For example, if there is 30% bending moment and 30% lateral load, only 40% axial load is allowed, provided that the rated torque is not exceeded. Under the maximum additional load, a measurement error of 1% of the rated torque may occur.

Accessories:

Connecting cable q197a, length 6 m

Keep the changes.

All details describe our products in general form only. They should not be construed as express warranties and do