

DTS 208

DYNAMIC TORQUE SENSOR

Product Advantages

This sensor uses a non-contact wear-free and maintenance-free technology to convert the torque into an electrical signal. The shaft is conditioned with a strain gages. Related electronic circuit responds according to torque being measured. This produces a measurement signal that is dependent on the torque. This sensor supports multiple output signal types depends on various application requirements.



Design Characteristics

- Non-contact dynamic torque
- It has high precision, stability, and noise prevention features.
- It does not require repeated zeroing adjustments and can measure both positive and negative torque.
- It is compact, lightweight, and easy to install.
- It has a keyed shaft connection at both ends.
- There is a speed measurement option, and power calculation can be performed.
- Torque sensor optionally available with integrated OLED panel, display torque, speed and power.

Areas of application

- Automotive & Aerospace (Steering, Gearing, Motors, Engines, Transmissions, Shafts, Driveline Systems)
- Drilling Systems
- Textile Machines
- Pumps
- Mechanical Conveying Technology
- Fitness & Workout Gears

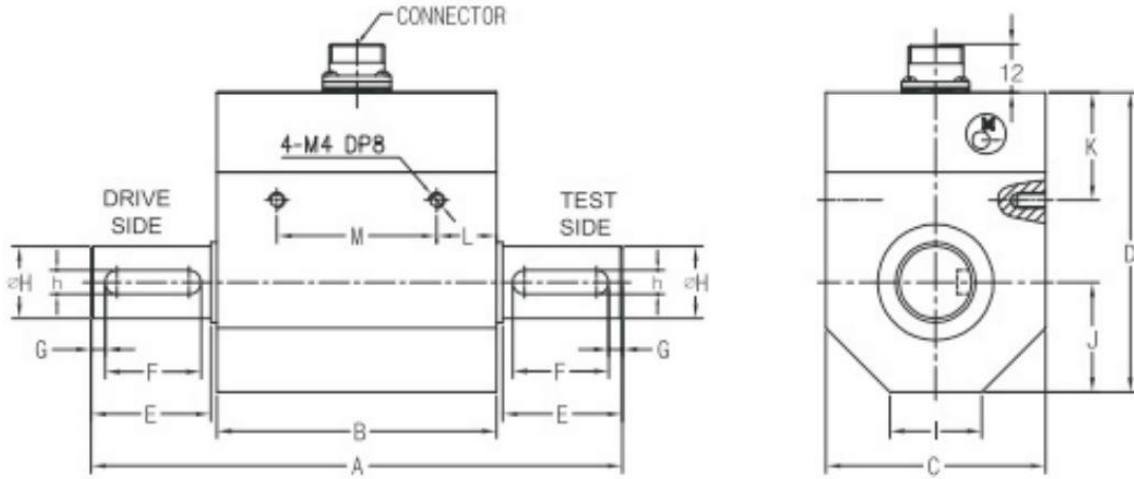
Specifications

Range (Nm)	5
	10,20,30,50
	100,200,300,500
Accuracy	±0.2%F.S(Standard)
	±0.1%F.S(Optional)
Supply	12~24VDC
Torque Output	10±5KHZ(Standard)
	4~20mA
	±5V
	±10V
	RS485
	RS232(Optional)
Speed Output	Max Speed<8000RPM
	60 Pulse (Standard)
	4~20mA
	0~10V
	RS485
	RS232(Optional)
Supply Current	<100mA
Temp. Effect on Zero	±0.2%F.S/10°C
Temp. Effect on Output	±0.2%F.S/10°C
Compensated Temp. Range	-10~+60°C
Operating Temp. Range	-20~+75°C
Electrical Connection	8 Pin
Safe Overload	200%
Cable Length	5m

8-Pin Electrical Connection (The output signal coexists with communication)

Power Plug	Pin5	Red	●	Power Supply: Vin+
	Pin6	Black	●	Power Supply: Vin -
Signal				Pulse/Current/Voltage
	Pin3	Green	●	Torque
	Pin4	Yellow	●	Speed
	Pin1	White	○	Signal/(GND)
	Pin2	Blue	●	None or Null
Communication				RS485
	Pin7	Brown	●	A
	Pin8	Orange	●	B
Signal-(Common) must use white GND,can't use power supply-; Vin- and Gnd and are not equal-level,there is a voltage difference				

Dimensions



Range (N.m)	A	B	C	D	E	F	G	H	h	I	J	K	L	M
5,10,20,30,50,100	133	70	55	75	30	24	3.5	18	6	23	27.5	27	15	40
200,300,500	144	70	65	85	35	30	3	28	8	29	32.5	28	12	46

Ordering Code

