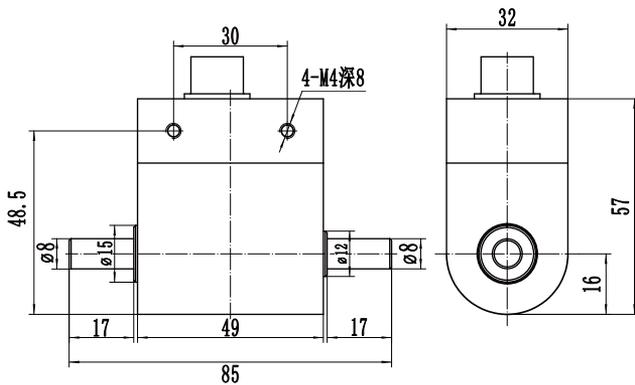


DYN-205 动态扭矩传感器
 Dynamic torque sensor


外形尺寸 External Dimension



量程 (N.m) 0.1 0.2 0.3 0.5 1 2 3 5

参数表 Parameters Table

量程 Capacity	0-5N.m
转速量程 Speed Signal	≤ 4000 rpm
转速信号 Speed Capacity	1.0-2.0mv/V
零点输出 Zero Balance	$\pm 2\%$ F.S.
非线性 Non-Linearity	0.1%F.S.
滞后 Hysteresis	0.03%F.S.
重复性 Repeatability	0.03%F.S.
蠕变(30分钟) Creep(30min)	0.03%F.S.
温度灵敏度漂移 Temp Effect on Output	0.03%F.S./10°C
零点温度漂移 Temp Effect on Zero	0.1%F.S./10°C
响应时间 Response Time	1.0ms(50%反应)
响应频率 Response Frequency	1kHz
最大扭转角 Maximum torsion angle	$2.60 \times 10 \text{rad}(0.149^\circ)$
惯性力矩 Moment of inertia	0.38kgcm
转子振动固有频率	19.4kHz
Natural frequency of rotor vibration	
扭力常数 Torsion constant	$3.85 \times 10 \text{Nm/rad}$
材质 Material	不锈钢
年稳定性 Stability per yer	0.3%/年
负载电阻 Load resistance	$> 2 \text{k}\Omega$
使用电压 Operating Temp Range	DC 24V 0.2A
消耗电流 Current Consumption	$< 150 \text{mA}$
工作环境 Work Environment	-10-50°C 0-85%RH
安全过载 Safe Overload	200%
电缆线规格 Cable Specifications	$\phi 5 \times 3 \text{m}$
线缆极限拉力 Cable ultimate pull	10kg

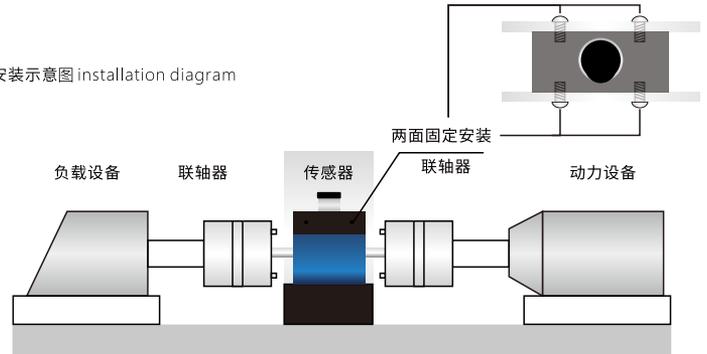
产品综述 Product Reviews
特性:

- 电阻应变为敏感元件和集成电路构成的一体产品。
- 精度高, 性能稳定可靠。
- 可高速长时间运转
- 输出正反转矩信号。
- 两端均为键连接。
- 最高转速不超过4000转/分钟。

Characteristic:

- Resistance strain is an integrated product composed of sensitive elements and integrated circuits.
- High precision, stable and reliable performance.
- High speed and long time operation
- Output positive and reverse torque signal.
- Both ends are key connected.
- The maximum speed shall not exceed 4000 rpm.

安装示意图 installation diagram



传感器受力图 Force diagram of sensor

