

DYN-207 动态扭矩传感器 Dynamic torque sensor



产品综述 Product Reviews

特性:

抗干扰性强、精度高稳定性好、输出信号数字化功能、体积小、重量轻、易于安装、能源及信号非接触传递功能、传递信号时与是否旋转，转速和转向无关、不需要反复调零即可连续传递正反扭矩信号、没有集流环等磨损件、可高转速长时间运行、外壳与旋转盘之间无轴承、可适应长时间高速运转、可以传递静止/旋转/静态/动态扭矩信号。

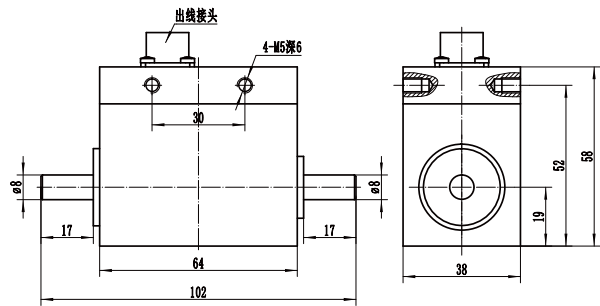
Characteristic:

Strong anti-interference, high precision, good stability, small size, light weight, easy installation, non-contact transmission function of energy and signal, independent of rotation speed and steering when transmitting signal, can continuously transmit positive and negative torque signal without repeated zero adjustment, without wearing parts such as collector ring, and can run at high speed for a long time. It can be used for long-time high-speed operation and can transmit static / rotating / static / dynamic torque signals.

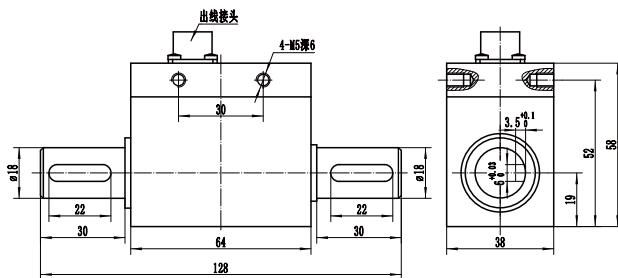
参数表 Parameters Table

| | |
|--|--------------------|
| 量程 Capacity | 0-200N.m |
| 转速量程 Speed Signal | ≤4000rpm |
| 转速信号 Speed Capacity | 1.0~1.5mV/V |
| 零点输出 Zero Balance | ±2%F.S. |
| 非线性 Non-Linearity | 0.5%F.S. |
| 滞后 Hysteresis | 0.5%F.S. |
| 重复性 Repeatability | 0.2%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 | 1ms(50%反应) |
| 响应频率 Response Frequency | 1kHz |
| 显示范围 Display Range | -99999-99999 |
| 最大扭转角 Maximum torsion angle | 2.60x10rad(0.149°) |
| 惯性力矩 Moment of inertia | 0.38kgcm |
| 转子振动固有频率 Natural frequency of rotor vibration | 19.4kHz |
| 扭力常数 Torsion constant | 3.85x10Nm/rad |
| 材质 Material | 不锈钢 |
| 年稳定性 Stability per yer | 0.3%/年 |
| 负载电阻 Load resistance | >2kΩ |
| 使用电压 Operating Temp Range | DC 24V 0.2A |
| 消耗电流 Current Consumption | <150mA |
| 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 | φ5x3m |
| 线缆极限拉力 Cable ultimate pull | 10kg |

外形尺寸 External Dimension

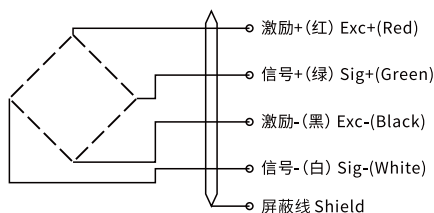


量程(N·m) 0.05 0.1 0.2 0.3 0.5 1 2 3 5

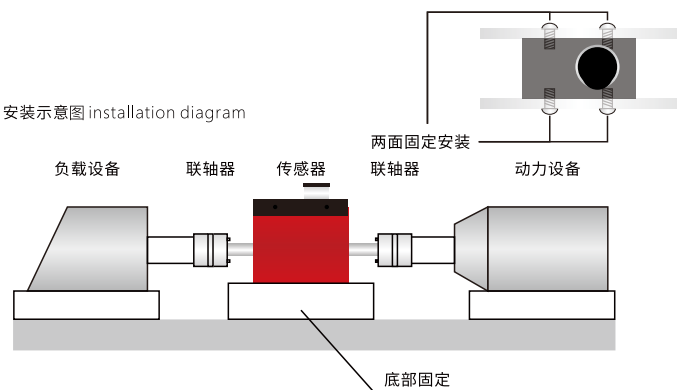


量程(N·m) 10 20 30 50 100 200

传感器接线示意图 Sensor wiring diagram



安装示意图 installation diagram



传感器受力图 Force diagram of sensor

