

ELHM力传感器



- 量程：500 ~ 10000Lbf (2.5kN ~ 50kN)
- 超紧凑纽扣式设计或螺钉安装设计
- 满量程输出：2mV/V
- 高稳定性
- 压力或拉力/压力

产品描述

ELHM力传感器采用紧凑封装设计，适用于空间受限的应用。

ELHM采用低噪音箔式金属应变片组成的惠斯通桥原理设计，零点稳定性好，长期稳定性好，2mV/V的满量程输出，外形紧凑，非常适合于空间受限的需要长期稳定性好的应用。该传感器触力连接方式为SAE或公制螺纹标准。同时还提供多种选项可供选择：外形尺寸、补偿温度、输入电压、电缆长度等都可为客户量身定制，是测试测量应用的理想选择。

特点

- 低压力或拉力类型
- 测量量程：500 ~ 10000Lbf (2.5kN ~ 50kN)
- 低噪音
- 高可靠性

应用

- 拉索负载
- 称重
- 推力测量
- 长期稳定性力测量
- 振动测试
- 材料测试
- 吊车和绞车负载

ELHM力传感器

标准量程

| 量程 | | 过载量程 | 传感器类型 | | 满量程输出 |
|------|-----|----------|---------|---------|----------|
| N | lbf | | 压力 | 压力&拉力 | |
| 2.5K | 500 | 1.5 x FS | ELHM-B2 | - | 2 mV / V |
| 5K | 1K | 1.5 x FS | ELHM-B2 | - | 2 mV / V |
| 10K | 2K | 1.5 x FS | ELHM-B3 | ELHM-T3 | 2 mV / V |
| 25K | 5K | 1.5 x FS | ELHM-B4 | ELHM-T4 | 2 mV / V |
| 50K | 10K | 1.5 x FS | ELHM-B4 | ELHM-T4 | 2 mV / V |

注：类型B：正向输出为压力。类型T：正向输出为拉力。

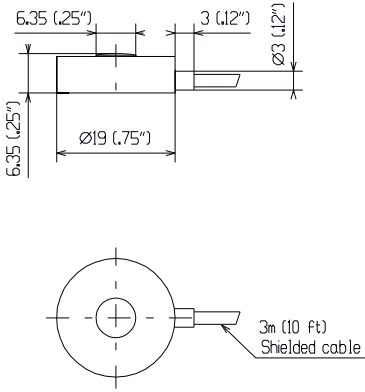
性能参数

| 参数 | 值 | 注释 |
|---------|-------------------------------------|-----------------|
| 供电电压 | 5VDC | |
| 输入阻抗 | 350Ω nom. | |
| 输出阻抗 | 350Ω nom. | |
| 非重复性 | ±0.25 % FSO | |
| 非线性 | ±0.3%FSO | |
| 迟滞 | ±0.1%FSO | |
| 热零点漂移 | ±0.02%FSO /°C | |
| 热灵敏度漂移 | ±0.02% /°C | |
| 工作温度 | -50°C to 120°C | |
| 补偿温度 | 20°C to 80°C | 可选其它补偿温度，请参考第三页 |
| 零点偏移 23 | ±2 % FSO typ. | |
| CE认证 | EN 61010-1, EN 50081-1, 50082- EN 1 | |

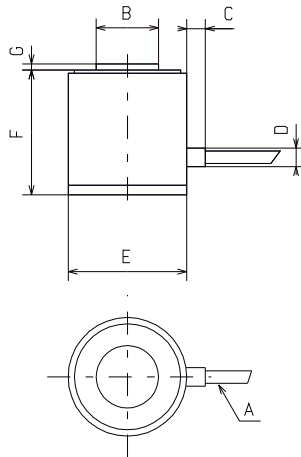
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外形尺寸

ELHM-B2

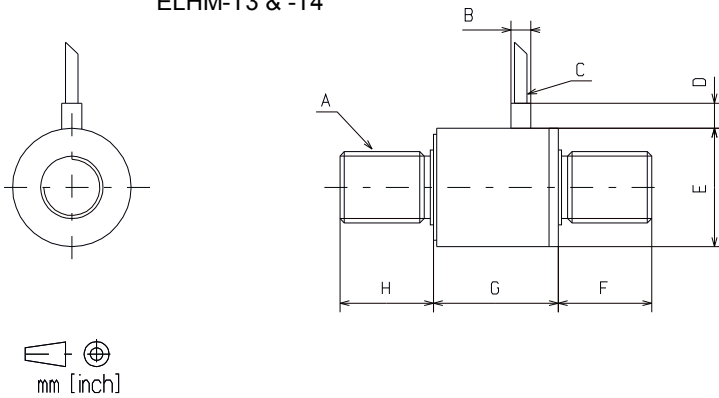


ELHM-B3 & -B4



| ITEM | ELHM-B3 2KLb 10KN | ELHM-B4 5KLb to 10KLb 25KN to 50KN |
|------|------------------------------|--|
| A | 3m (10 ft) shielded cable | 3m (10 ft) shielded cable |
| B | ∅ 10 (0.39") | ∅ 18 (0.71") |
| C | 3 (0.12") | 3 (0.12") |
| D | ∅ 3 (0.12") | ∅ 3 (0.12") |
| E | ∅ 19 (0.75") | ∅ 25 (0.98") |
| F | 20 (0.79") | 25 (0.98") |
| G | 1 (0.04") | 1 (0.04") |

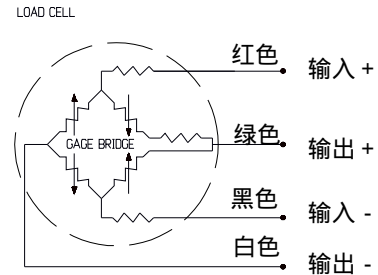
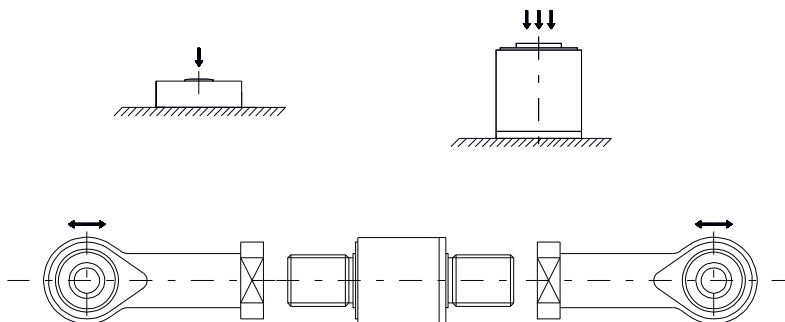
ELHM-T3 & -T4



| ITEM | ELHM-T3 2KLb 10KN | ELHM-T4 5KLb to 10KLb 25KN to 50KN |
|------|-------------------------------------|--|
| A | -T3E : 3/8-24 UNF -T3M : M10x1.5 | -T4U : 5/8-18 UNF -T4M : M16x2 |
| B | ∅ 3 (0.12") | ∅ 3 (0.12") |
| C | 3m (10 ft) shielded cable | 3m (10 ft) shielded cable |
| D | 3 (0.12") | 3 (0.12") |
| E | ∅ 19 (0.75") | ∅ 25 (0.98") |
| F | 15 (0.59") | 25 (0.98") |
| G | 20 (0.79") | 25 (0.98") |
| H | 15 (0.59") | 25 (0.98") |

安装

电气连接



ELHM力传感器

可选参数

| 选项 | 编号 | 描述 |
|--------|------|---|
| 补偿温度 | Z0 | -40 ~ 20 |
| | Z1 | -20 ~ 40 |
| | Z2 | 0 ~ 60 |
| | Z* | 非标准, 请与MEAS联系 |
| 供电电压 | V00 | 将00以数字代替, 表示供电电压, 范围为1 ~ 10VDC |
| 特殊电缆长度 | L00F | 将00以数字代替, 表示长度, 单位为英尺, 量程单位为Lbf |
| | L00M | 将00以数字代替, 表示长度, 单位为米, 量程单位为N |
| 电缆接头 | C | 微型公接头 (W/O公接头) |
| | RS | RJ电话型接头 (W/O公接头) |
| 校正 | AC | Alternate calibration: units with studs are calibrated in tension by default. Option AC provides compression calibration in addition to tension calibration |

产品选型

| 型号 | - | 主体结构 | 螺纹类型 | - | 量程&单位 ⁽¹⁾ | | - /可选参数 |
|------|---|-------|------------|---|----------------------|------|--|
| | | | | | | | |
| ELHM | - | B2 | M : 公制 | - | 2.5KN | 500L | /Z0, Z1, Z2, or Z* /V1 thru V10 or V* /L00F or L00M /C or RS /AC |
| | | B2 | U, E : SAE | | 5KN | 1KL | |
| | | B3/T3 | | | 10KN | 2KL | |
| | | B4/T4 | | | 25KN | 5KL | |
| | | | | | 50KN | 10KL | |

(1)注: L=磅力; N=牛顿。公制螺纹必须是量程为牛顿, 电缆长度单位为米。SAE螺纹必须是量程为磅力, 电缆长度为英寸。
 例如: ELHM-T3E-2KL-/Z1/L10F/C

联系方式

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