




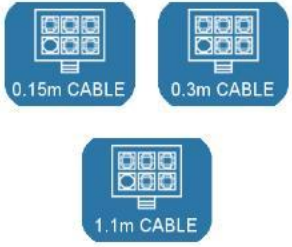
## 数据表

# 氧化锆 O<sub>2</sub> 传感器 探头系列—螺纹安装外壳

### 特性

- 35 氧化锆 (ZrO<sub>2</sub>) 传感元件
- 17 寿命长, 非消耗性技术
- 35 集成加热元件
- 17 高精度
- 35 需要外部接口板以运行<sup>1</sup>



|   |   |  |  |
|---|---|--|--|
| <h4>响应时间</h4>  <p>&lt; 4 secs</p> | <h4>加热器电压</h4>  <p>4.35 V<br/>VOLTAGE</p> | <h4>气体温度</h4>  <p>-100°C to<br/>+250°C<br/>TEMPERATURE</p> | <h4>端子</h4>  <p>0.15m CABLE    0.3m CABLE<br/>1.1m CABLE</p> |
|---|---|--|--|

### 优点

- 35 无需参考气体
- 17 无需温度稳定
- 35 可提供多种探头安装位置: 28mm, 45mm & 55mm
- 17 M18x1.5 螺纹安装

### 输出值

|                    |                |
|--------------------|----------------|
| 氧气压力范围             | 2mbar—3bar max |
| 精度                 | 5mbar max      |
| 内部运行温度             | 700°C          |
| 响应时间 (10—90% step) | < 4s           |
| 预热时间 (传感器运行前)      | 60s            |
| 预热时间 (待机唤醒)        | 20s            |
| 输出稳定时间             | ~ 180s         |

### 技术规格

|                         |  |
|-------------------------|--|
| 加热电压 <sup>2</sup>       |  |
| 工作                      | 4.35V <sub>DC</sub> ± 0.1V <sub>DC</sub> (1.85A) |
| 待机                      | 2V <sub>DC</sub> (0.85A)                         |
| 700°C下的泵阻抗 <sup>3</sup> | < 6kΩ  |
| 允许气体温度                  | -100°C ~ +250°C                                  |
| 气体流速                    | 0—10 m/s   |
| 重复允许加速度                 | 5g   |
| 偶然允许加速度                 | 30g  |
| 安装螺纹                    | M18 x 1.5  |

可根据要求提供其他传感器选项, 请发送邮件至:  
[technical@sstsensing.com](mailto:technical@sstsensing.com)

需要帮助? 询专家请致电 +  
44 (0)1236 459 020并寻求  
“技术”援助

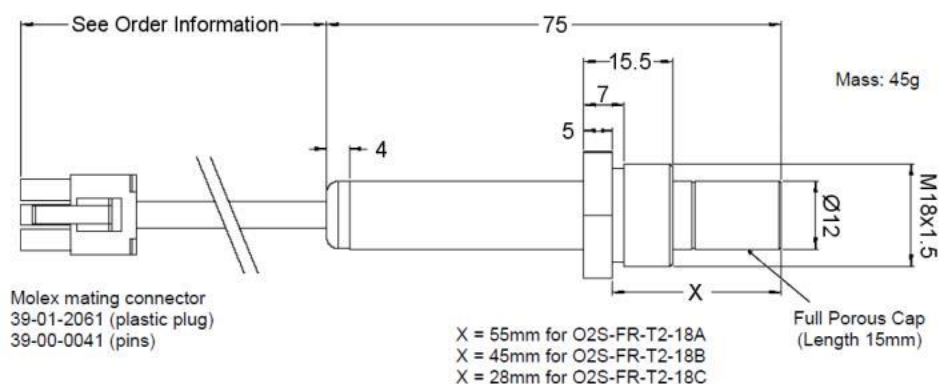


- 1) 接口板单独售卖; 请联系 [technical@sstsensing.com](mailto:technical@sstsensing.com) 获取详情。
- 2) 由于电源电缆中的电压降, 必须尽可能靠近传感器测量加热电压。
- 3) 应将泵电路中所使用的恒流源设计为可驱动高达6kΩ的负载。

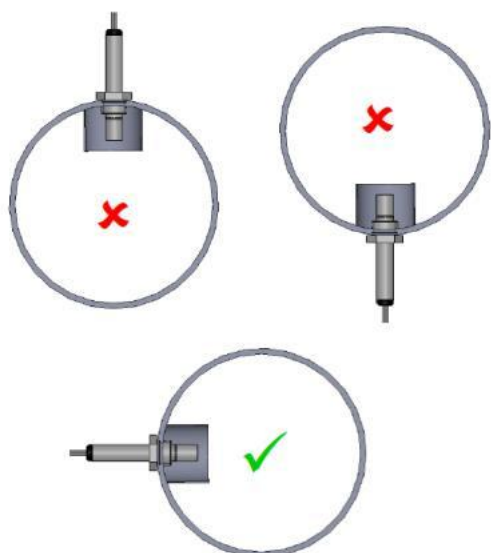
深圳市新世联科技有限公司

## 外形图纸和安装信息

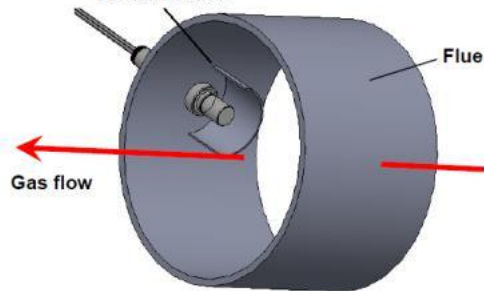
所有尺寸单位为mm。



Molex mating connector  
39-01-2061 (plastic plug)  
39-00-0041 (pins)

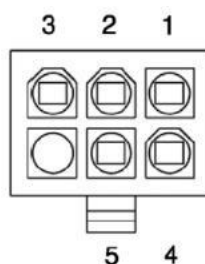


Baffle to protect sensor from direct gas flow and possible contamination



## 电气接口

Molex 连接器



| Pin | 定义          |
|-----|-------------|
| 1   | 泵(红色)       |
| 2   | 公共(黑色)      |
| 3   | 加热器(1) (黄色) |
| 4   | 传感(蓝色)      |
| 5   | 加热器(2) (黄色) |

## 订购信息

使用以下型号定义规则，生成您的指定型号。仅使用对您需要的传感器和输出选项的字母和数字—忽略您不需要的字母和数字。

O 2 S - F R - T 2 - 1 8 X - X X X

| 探头长度             |
|------------------|
| <b>A</b><br>55mm |
| <b>B</b><br>45mm |
| <b>C</b><br>28mm |

| 端子                       |
|--------------------------|
| <b>Blank</b><br>0.15m 电缆 |
| <b>002</b><br>0.3m 电缆    |
| <b>003</b><br>1.1m 电缆    |

### CAUTION

Do not exceed maximum ratings and ensure sensor(s) are operated in accordance with their requirements. Carefully follow all wiring instructions. Incorrect wiring can cause permanent damage to the device.

Zirconium dioxide sensors are damaged by the presence of silicone. Vapours (organic silicone compounds) from RTV rubbers and sealants are known to poison oxygen sensors and MUST be avoided. Do NOT use chemical cleaning agents.

**Failure to comply with these instructions may result in product damage.**

### INFORMATION

As customer applications are outside of SST Sensing Ltd.'s control, the information provided is given without legal responsibility. Customers should test under their own conditions to ensure that the equipment is suitable for their intended application.

For detailed information on the sensor operation refer to application note AN0043 Operating Principle and Construction of Zirconium Dioxide Oxygen Sensors.

**For technical assistance or advice, please email:**  
[technical@sstsensing.com](mailto:technical@sstsensing.com)

**General Note:** SST Sensing Ltd. reserves the right to make changes to product specifications without notice or liability. All information is subject to SST Sensing Ltd.'s own data and considered accurate at time of going to print.

