

热式质量流量计

Proline t-mass I 500

插入式流量计，具有高长期稳定性，采用分体型设计，最多可以带4路输入/输出



优势:

- 灵活设置，提供21种标准气体选项，也可以选择用户自备混合气体
- 高水平的过程控制：高测量精度（Premium）和高测量重复性
- 可靠监测：检测过程扰动和反向流
- 安装灵活：适用口径范围广，可以安装在圆形管路或矩形管道中测量
- 完整查看过程信息和诊断信息：提供多种用户自定义输入/输出组合方式和现场总线
- 降低复杂性和多变性：允许用户自定义输入/输出功能
- 带自校验功能：采用Heartbeat Technology心跳技术

产品规格参数

- **最大测量误差** Gas: 1.0% o.r. (10 to 100% o.f.s.), 0.1% o.f.s. (1 to 10% o.f.s.)
- **测量范围** 20 to 733501 kg/h (44 to 1669340 lb/h)
- **介质温度范围** -40 °C to +180°C (-40 °F to +356°F)
- **最大过程压力** -0.5 to 20 bar_g (-7.25 to 290 psi_g)
- **接液部件材质** Materials for insertion tube Stainless steel, 1.4404 (316/316L) Process connections, process coupling Stainless steel, 1.4404 (316/316L) Sensing element Unidirectional Stainless steel, 1.4404 (316/316L) Alloy C22, 2.4602 (UNS N06022); Bidirectional Stainless steel, 1.4404 (316/316L) Reverse flow detection Stainless steel, 1.4404 (316/316L) Clamping rings PEEK PVDF 1.4404 (316/316L) Flat ring seal EPDM FKM

详细信息和最新价格参见:

www.endress.com.cn/615B

应用领域: t-mass I采用专利的传感器设计，基于热式原理插入在管道中进行质量流量测量，具有超高测量稳定性。它能够实时有效补偿过程条件变化：温度、压力、流向和气体类型。t-mass I 500采用创新的分体式变送器，保证严苛工况条件下具有最大安装灵活性和最高操作

安全性。Heartbeat Technology心跳技术保证了测量的可靠性和校验的合规性。

特征和规格

气体

测量原理

热式

产品标题

Insertion flowmeter with long-term stability as remote version with up to 4 I/Os.

Flexible, convenient programming based on 21 standard gases or freely definable gas mixtures thereof.

Measurement of utility and process gases as well as gas mixtures in circular piping or rectangular ducts.

传感器特点

High level of process control – premium measurement accuracy and repeatability. Reliable monitoring – detection of process disturbances and reverse flow. Flexible installation – suitable for large dimensional range and circular pipes or rectangular ducts.

Insertion version for DN 80 to 1500 (3 to 60"). Bidirectional measurement; high measuring performance. Patented drift-free sensor with SIL 2.

变送器特点

Full access to process and diagnostic information – numerous, freely combinable I/Os and fieldbuses. Reduced complexity and variety – freely configurable I/O functionality. Integrated verification – Heartbeat Technology.

Remote version with up to 4 I/Os. Backlit display with touch control and WLAN access. Standard cable between sensor and transmitter.

公称口径范围

DN 80 to 1500 (3 to 60")

气体

接液部件材质

Materials for insertion tube
Stainless steel, 1.4404 (316/316L)
Process connections, process coupling
Stainless steel, 1.4404 (316/316L)
Sensing element
Unidirectional
Stainless steel, 1.4404 (316/316L)
Alloy C22, 2.4602 (UNS N06022);
Bidirectional
Stainless steel, 1.4404 (316/316L)
Reverse flow detection
Stainless steel, 1.4404 (316/316L)
Clamping rings
PEEK
PVDF
1.4404 (316/316L)
Flat ring seal
EPDM
FKM

测量变量

Massflow, temperature, standard volume flow, volume flow, Free air delivery, velocity, heat flow, energy flow, density

最大测量误差

Gas: 1.0% o.r. (10 to 100% o.f.s.), 0.1% o.f.s. (1 to 10% o.f.s.)

测量范围

20 to 733501 kg/h (44 to 1669340 lb/h)

最大过程压力

-0.5 to 20 bar_g (-7.25 to 290 psi_g)

介质温度范围

-40 °C to +180°C (-40 °F to +356°F)

气体

环境温度范围

-40 to 60°C (-40 to 140°F)

Optional:

Transmitter: -50 to 60°C (-50 to 140°F),

Sensor: -60 to 60°C (-60 to 140°F)

变送器外壳材质

Aluminium, AlSi10Mg, coated

Polycarbonate

防护等级

IP66/67, Type 4X enclosure Sensor: IP68, Type 6P (optional)

显示/操作

4-line backlit display with touch control (operation from outside)

Configuration via local display and operating tools possible

Remote display available

输出

4-20 mA HART (active/passive)

4-20 mA (active/passive)

Pulse/frequency/switch output (active/passive)

Relay output

输入

Status input

4-20 mA input

数字通信

HART, Modbus RS485

电源

DC 24V

AC 100 to 240V

防爆认证

ATEX, cCSAus, IECEx, NEPSI, JPN, UK Ex, EAC

气体

产品安全性

CE, C-tick

功能安全性

Functional safety according to IEC 61508, applicable in safety-relevant applications in accordance with IEC 61511

计量认证和证书

Calibration performed on accredited calibration facilities (acc. to ISO/IEC 17025)

Heartbeat Technology complies with the requirements for measurement traceability according to ISO 9001:2015 – Section 7.1.5.2 a

压力认证和证书

CRN

材料证书

3.1 material

NACE MR0175/MR0103

更多信息 www.endress.com.cn/6I5B