

热式质量流量计

Proline t-mass F 300

管道式流量计，高长期稳定性，搭配操作便捷的一体型变送器。



详细信息和最新价格参见:

www.endress.com.cn/6F3B

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
- 轻松维护：可拆除传感器
- 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** 0.5 to 3750 kg/h (1.1 to 8250 lb/h)
- **介质温度范围** -40 °C to +180°C (-40 °F to +356 °F)
- **最大过程压力** PN40 / Cl. 300 / 20K
- **接液部件材质** Measuring tubes DN 15 to 50 (½ to 2"): stainless cast steel, CF3M/1.4408 DN 65 to 100 (2½ to 4"): stainless steel, 1.4404 (316/316L) Process connections Flange connections Stainless steel, 1.4404 (F316/F316L) Threaded connections 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)

应用领域: t-mass F采用专利的传感器设计，基于热式原理进行管道式质量流量测量，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。一体型变送器在操作和系统集

成方面具有很高的灵活性：操作和接线在变送器的同一侧，可选远程显示，可自由配置I/O功能和多样的系统集成方式。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

Inline flowmeter with drift-free sensor and a compact, easily accessible transmitter. 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 small line sizes.

传感器特点

High level of process control – premium measurement accuracy and repeatability. Reliable monitoring – detection of process disturbances and reverse flow. Easy maintenance – removable sensor. Inline version with DN 15 to 100 (1/2 to 4"). Bidirectional measurement; high measuring performance.

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. Compact dual-compartment housing with up to 3 I/Os. Backlit display with touch control and WLAN access.

公称口径范围

DN 15 to DN 100 (1/2" to 4")

气体

接液部件材质

Measuring tubes

DN 15 to 50 (½ to 2"): stainless cast steel, CF3M/1.4408

DN 65 to 100 (2½ to 4"): stainless steel, 1.4404 (316/316L)

Process connections

Flange connections

Stainless steel, 1.4404 (F316/F316L)

Threaded connections

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)

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

0.5 to 3750 kg/h (1.1 to 8250 lb/h)

最大过程压力

PN40 / Cl. 300 / 20K

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

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

3 outputs:

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

气体

电源

DC 24V

AC 100 to 240V

防爆认证

ATEX, cCSAus, IECEx, NEPSI, JPN

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

PED, CRN

材料证书

3.1 material

NACE MR0175/MR0103

更多信息 www.endress.com.cn/6F3B