

Proline Prosonic Flow G 500超声波流量计

波动工况下的气体测量专家，坚固耐用，搭配最多带4路输入/输出的分体式变送器



详细信息和最新价格参见:

www.endress.com.cn/9G5B

优势:

- 可以测量严苛工况下的用户自备混合气体，设备使用灵活
- 即使环境潮湿或夹杂有湿气，仍具有最高可靠性，传感器不受冷凝的影响
- 高过程控制性能，在线温压补偿
- 高效解决方案：多变量测量，无压损
- 提供完整的过程和诊断信息：多个用户自定义输入/输出接口组合
- 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** Volume flow (standard): - $\pm 1.0\%$ o.r. for 3 to 40 m/s (9.84 to 131.23 ft/s) - $\pm 2\%$ o.r. for 0.3 to 3 m/s (0.98 to 9.84 ft/s) Volume flow (optional calibration): - $\pm 0.5\%$ o.r. for 3 to 40 m/s (9.84 to 131.23 ft/s) - $\pm 1.0\%$ o.r. for 0.3 to 3 m/s (0.98 to 9.84 ft/s) Corrected volume flow (standard): - $\pm 1.5\%$ o.r. for 3 to 40 m/s (9.84 to 131.23 ft/s) - $\pm 2.5\%$ o.r. for 0.3 to 3 m/s (0.98 to 9.84 ft/s) Corrected volume flow (optional calibration): - $\pm 1.0\%$ o.r. for 3 to 40 m/s (9.84 to 131.23 ft/s) - $\pm 1.5\%$ o.r. for 0.3 to 3 m/s (0.98 to 9.84 ft/s) Sound Velocity: $\pm 0.2\%$ o.r.
- **测量范围** Gas: 0.3 m/s to 40 m/s
- **介质温度范围** -50 to 150 °C (-58 to +302°F) -50 to 100 °C (-58 to +212°F) with integrated pressure cell
- **最大过程压力** 0.7 to 101 bar a (10.15 to 1464.88 psi a)
- **接液部件材质** Measuring tube: 1.4408/1.4409 (CF3M) Transducer: 1.4404 (316, 316L, Titan Grade 2)

应用领域: Prosonic Flow G广泛用于各类气体测量，即使在湿气、气体属性和组分变化的应用场合中，也能可靠进行流量测量。耐压传感器外壳带爆破片，降低了安全风险。创新的分体式变送器设计保证了在苛刻工况条件下具有最大安装灵活性和最高操作安全性。心跳技术确保合规，过程始终安全。

特征和规格

气体

测量原理

超声波流量测量

产品标题

Highly robust gas specialist for fluctuating process conditions as remote version with up to 4 I/Os.

Flexible device with user-definable gas mixtures for demanding measuring tasks.

Accurate measurement of natural and process gas in the chemical as well as oil and gas industries.

传感器特点

Maximum reliability even with humid or wet gas – sensor design insensitive to condensate. High-performance process control – real-time pressure- and temperature-compensated values. Efficient solution – multivariable, no pressure loss.

Direct measurement: flow, pressure & temperature. Wetted parts: titanium / 316L. Maximum measuring accuracy: 0.5 %.

变送器特点

Full access to process and diagnostic information – numerous, freely combinable I/Os. 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 25 to 300 (1 to 12")

气体

接液部件材质

Measuring tube: 1.4408/1.4409 (CF3M)

Transducer: 1.4404 (316, 316L, Titan Grade 2)

测量变量

Volume flow, corrected volume flow, mass flow, flow velocity, speed of sound, pressure, temperature, density, dynamic viscosity, energy flow, Wobbe index, methane fraction, calorific value, molar mass

最大测量误差

Volume flow (standard):

- $\pm 1.0\%$ o.r. for 3 to 40 m/s (9.84 to 131.23 ft/s)
- $\pm 2\%$ o.r. for 0.3 to 3 m/s (0.98 to 9.84 ft/s)

Volume flow (optional calibration):

- $\pm 0.5\%$ o.r. for 3 to 40 m/s (9.84 to 131.23 ft/s)
- $\pm 1.0\%$ o.r. for 0.3 to 3 m/s (0.98 to 9.84 ft/s)

Corrected volume flow (standard):

- $\pm 1.5\%$ o.r. for 3 to 40 m/s (9.84 to 131.23 ft/s)
- $\pm 2.5\%$ o.r. for 0.3 to 3 m/s (0.98 to 9.84 ft/s)

Corrected volume flow (optional calibration):

- $\pm 1.0\%$ o.r. for 3 to 40 m/s (9.84 to 131.23 ft/s)
- $\pm 1.5\%$ o.r. for 0.3 to 3 m/s (0.98 to 9.84 ft/s)

Sound Velocity: $\pm 0.2\%$ o.r.

测量范围

Gas: 0.3 m/s to 40 m/s

最大过程压力

0.7 to 101 bar a (10.15 to 1464.88 psi a)

介质温度范围

-50 to 150 °C (-58 to +302°F)

-50 to 100 °C (-58 to +212°F) with integrated pressure cell

环境温度范围

-40 to 60 °C (-40 to +140 °F)

Optional: -50 to 60 °C (-58 to +140 °F)

气体

传感器外壳材质

Stainless Steel, 1.4404(316/316L), 1.4408/1.4409 (CF3M)

变送器外壳材质

AlSi10Mg, coated; 1.4409 (CF3M) similar to 316L

Polycarbonate

防护等级

Sensor remote version: IP66/67, type 4X enclosure

Transmitter remote version: 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

输出

4 outputs:

4-20 mA HART (active/passive)

4-20 mA (active/passive)

Pulse/frequency/switch output (active/passive)

Double pulse output (active/passive)

Relay output

输入

Status input

4-20 mA input

数字通信

HART, Modbus RS485

电源

AC 100 to 230 V / DC 24 V (non-hazardous area)

防爆认证

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

产品安全性

CE, C-tick

气体

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/9G5B