

Proline Promass I 100

科里奥利质量流量计

该质量流量计带超紧凑型变送器，可同时进行在线粘度测量与流量测量。



FLEX

优势:

- 节能 - 全通径设计，可将压损降至最低
- 减少过程测量点 - 多变量测量（流速、密度、温度）
- 节省安装空间 - 无需进出口直管段
- 精小型变送器 - 可测量最小流量
- 省时的现场操作，无需额外的软件与硬件 - 内置网络服务器
- 综合验证 - Heartbeat 技术

产品规格参数

- **最大测量误差** Mass flow (liquid): $\pm 0.1\%$ Volume flow (liquid): $\pm 0.1\%$ Mass flow (gas): $\pm 0.5\%$ Density (liquid): $\pm 0.0005 \text{ g/cm}^3$
- **测量范围** 0 to 180 000 kg/h (0 to 6600 lb/min)
- **介质温度范围** -50 to $+150 \text{ }^\circ\text{C}$ (-58 to $+302 \text{ }^\circ\text{F}$)
- **最大过程压力** PN 100, Class 600, 63K
- **接液部件材质** Measuring tube: Titanium grade 9 Connection: Titanium grade 2

详细信息和最新价格参见:

www.endress.com.cn/811B

应用领域: 单直管设计的Promass I 100流量计除了同普通科氏力质量流量计一样可测量质量流量、密度与温度外，还可在线测量粘度。与现有的最小型变送器配套使用，Promass I 100流量计可用于测量最小流量，是系统集成商、撬装设备制造商以及其他设备制造商的首选。

特征和规格

Density/Concentration

测量原理

科里奥利质量流量

Density/Concentration

产品标题

Combines in-line viscosity and flow measurement with an ultra-compact transmitter.

Measuring liquids and gases in applications requiring low pressure loss and gentle fluid treatment.

传感器特点

Energy - saving – full-bore design enables minimal pressure loss. Fewer process measuring points – multivariable measurement (flow, density, temperature). Space - saving installation – no in-/outlet run needs.

Straight, easy-to-clean single-tube system. TMB technology. Measuring tube made of Titanium.

变送器特点

Space - saving transmitter – full functionality on the smallest footprint.

Time - saving local operation without additional software and hardware – integrated web server. Integrated verification – Heartbeat Technology.

Robust, ultra-compact transmitter housing. Highest degree of protection: IP69. Local display available.

公称口径范围

DN 8 to 80 ($\frac{3}{8}$ to 3")

接液部件材质

Measuring tube: Titanium grade 9

Connection: Titanium grade 2

测量变量

Mass flow, density, temperature, volume flow, corrected volume flow, reference density, concentration, viscosity

最大测量误差

Mass flow (liquid): ± 0.1 %

Volume flow (liquid): ± 0.1 %

Mass flow (gas): ± 0.5 %

Density (liquid): ± 0.0005 g/cm³

Density/Concentration**测量范围**

0 to 180 000 kg/h (0 to 6600 lb/min)

最大过程压力

PN 100, Class 600, 63K

介质温度范围

-50 to +150 °C (-58 to +302 °F)

环境温度范围

Standard: -40 to +60 °C (-40 to +140 °F)

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

传感器外壳材质

1.4301/1.4307 (304L), corrosion resistant

变送器外壳材质

Compact: AlSi10Mg, coated

Compact/ultra - compact: 1.4301 (304)

防护等级

Standard: IP66/67, type 4X enclosure

Option: IP69

显示/操作

4 - line backlit display available (no local operation)

Configuration via web browser and operating tools possible

输出

4 - 20 mA HART (active)

Pulse/frequency/switch output (passive)

输入

None

数字通信

HART, Modbus RS485, EtherNet/IP, PROFIBUS DP, PROFINET

Density/Concentration

电源

DC 20 to 30 V

防爆认证

ATEX, IECEx, cCSAus, INMETRO, NEPSI, EAC

产品安全性

CE, C-Tick, EAC marking

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 (TÜV SÜD attestation)

压力认证和证书

PED, CRN

材料证书

3.1 material

卫生型认证和证书

3-A, EHEDG, cGMP

气体

测量原理

科里奥利质量流量

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气体

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公称口径范围

DN 8...80 ($\frac{3}{8}$...3")

接液部件材质

测量管：9级钛

连接部件：2级钛

测量变量

质量流量、密度、温度、体积流量、校正体积流量、参考密度、浓度、粘度

最大测量误差

质量流量（液体）：±0.1 %

体积流量（液体）：±0.1 %

质量流量（气体）：±0.5 %

密度（液体）：±0.0005 g/cm³

测量范围

0...180 000 kg/h (0...6600 lb/min)

最大过程压力

PN 100, Cl. 600, 63K

介质温度范围

-50...+150 °C (-58...+302 °F)

气体

环境温度范围

标准：-40...+60 °C (-40...+140 °F)

可选：-50...+60 °C (-58...+140 °F)

传感器外壳材质

1.4301/1.4307 (304L)，耐腐蚀

变送器外壳材质

一体式：铝合金AlSi10Mg涂层

一体式/超紧凑型一体式：1.4301 (304)

防护等级

标准：IP66/67，Type 4X

可选：IP69

显示/操作

四行背光显示（无现场操作）

通过网页服务器和调试软件设置

输出

4...20 mA HART（有源）

脉冲/频率/开关量输出（无源）

输入

无

数字通信

HART、Modbus RS485、EtherNet/IP、PROFIBUS DP、PROFINET

电源

20...30 VDC

防爆认证

ATEX、IECEX、cCSAus、INMETRO、NEPSI

计量认证和证书

在认证标定装置上执行标定（符合ISO/IEC 17025标准）

Heartbeat Technology（心跳技术）符合ISO 9001:2008标准章节7.6 a的溯源校验要求（TÜV认证）

气体
压力认证和证书

PED、CRN

材料证书

3.1材料证书

卫生型认证和证书

3-A、EHEDG

粘度
测量原理

科里奥利质量流量

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介质温度范围 -50 to $+150 \text{ }^\circ\text{C}$ (-58 to $+302 \text{ }^\circ\text{F}$)**环境温度范围**Standard: -40 to $+60 \text{ }^\circ\text{C}$ (-40 to $+140 \text{ }^\circ\text{F}$)Option: -50 to $+60 \text{ }^\circ\text{C}$ (-58 to $+140 \text{ }^\circ\text{F}$)**传感器外壳材质**

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变送器外壳材质

Compact: AlSi10Mg, coated

Compact/ultra - compact: 1.4301 (304)

防护等级

Standard: IP66/67, type 4X enclosure

Option: IP69

粘度

显示/操作

4 - line backlit display available (no local operation)
Configuration via web browser and operating tools possible

输出

4 - 20 mA HART (active)
Pulse/frequency/switch output (passive)

输入

None

数字通信

HART, Modbus RS485, EtherNet/IP, PROFIBUS DP, PROFINET

电源

DC 20 to 30 V

防爆认证

ATEX, IECEx, cCSAus, INMETRO, NEPSI, EAC

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压力认证和证书

PED, CRN

材料证书

3.1 material

卫生型认证和证书

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液体

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标准：IP66/67, Type 4X

可选：IP69

显示/操作

四行背光显示（无现场操作）

通过网页服务器和调试软件设置

输出

4...20 mA HART（有源）

脉冲/频率/开关量输出（无源）

液体

输入
无**数字通信**

HART、Modbus RS485、EtherNet/IP、PROFIBUS DP、PROFINET

电源

20...30 VDC

防爆认证

ATEX、IECEX、cCSAus、INMETRO、NEPSI、EAC

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3.1材料证书

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更多信息 www.endress.com.cn/8I1B