

Proline Promass A 500 / 8A5B



详细信息和最新价格参见:

www.endress.com.cn/8A5B

优势:

- 最高过程安全性：自排空测量管设计
- 较少过程测量点：多参数测量(流量、密度、温度)
- 节省安装空间：无前/后直管段长度要求
- 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
- 降低复杂性和多样性：用户自定义输入/输出功能
- 自带验证功能：内置Heartbeat Technology (心跳技术)

产品规格参数

- **最大测量误差** 质量流量（液体）：±0.10 % 体积流量（液体）：±0.10 % 质量流量（气体）：±0.50 % 密度（液体）：±0.0005 g/cm³
- **测量范围** 0...450 kg/h (0...16.5 lb/min)
- **介质温度范围** -50...+205 °C (-58...+401 °F)
- **最大过程压力** PN 40, Cl. 300, 20K, 400 bar (5800 psi)
- **接液部件材质** 测量管：1.4539 (904L)；Alloy C22 2.4602 (UNS N06022)合金 连接部件：1.4539 (904L)；Alloy C22 2.4602 (UNS N06022)合金；1.4404 (316/316L)

应用领域: Promass A具有自排空功能，即使在高压工况条件下也能进行极小流量液体和气体的高精度测量。能够在各种苛刻工况条件下进行连续过程控制。与创新的分体式变送器配套使用，在苛刻工况条件下Promass A 500仍具有最大安装灵活性和最高操作安全性。Heartbeat Technology (心跳技术)确保始终合规，保证过程安全。

特征和规格

液体

测量原理

液体

产品标题

std_productprofile_product_usp_7832.

Measuring accurately smallest quantities of liquids and gases for continuous process control.

传感器特点

Highest process safety – self-drainable measuring tube design. Fewer process measuring points – multivariable measurement (flow, density, temperature). Space-saving installation – no in-/outlet run needs. Nominal diameter: DN 1 to 4 ($\frac{1}{2}$ to $\frac{1}{8}$ "). Process pressure up to 400 bar (5800 psi). Medium temperature up to +205 °C (+401 °F).

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 1...4 ($\frac{1}{2}$... $\frac{1}{8}$ ")

接液部件材质

测量管：1.4539 (904L)；Alloy C22 2.4602 (UNS N06022)合金

连接部件：1.4539 (904L)；Alloy C22 2.4602 (UNS N06022)合金；
1.4404 (316/316L)

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

最大测量误差

质量流量（液体）：±0.10 %

体积流量（液体）：±0.10 %

质量流量（气体）：±0.50 %

密度（液体）：±0.0005 g/cm³

液体

测量范围

0...450 kg/h (0...16.5 lb/min)

最大过程压力

PN 40, Cl. 300, 20K, 400 bar (5800 psi)

介质温度范围

-50...+205 °C (-58...+401 °F)

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 (304), 耐腐蚀

传感器接线盒 (标准)：铝合金AlSi10Mg涂层

传感器接线盒 (可选)：1.4301 (304)、1.4404 (316L)

变送器外壳材质

铝合金AlSi10Mg涂层；1.4409 (CF3M), 类同316L；聚碳酸酯

防护等级

分体式传感器 (标准)：IP66/67, Type 4X

分体式传感器 (可选)：IP69分体式变送器：IP66/67, Type 4X

显示/操作

四行背光显示, 触摸键操作 (外部操作)

通过现场显示单元和调试软件设置

输出

4路输出：

4...20 mA HART (有源/无源)

4...20 mA WirelessHART

4...20 mA (有源/无源)

脉冲/频率/开关量输出 (有源/无源)

双脉冲输出 (有源/无源)

继电器输出

液体

输入

状态输入

4...20 mA输入

数字通信

HART、PROFIBUS PA、FOUNDATION Fieldbus、Modbus RS485、Profinet、Ethernet/IP、OPC-UA

电源

24 VDC

100...230 VAC

100...230 VAC / 24 VDC (非危险区)

防爆认证

ATEX、IECEX、cCSAus、NEPSI、INMETRO、EAC

产品安全性

CE认证、C-tick认证、EAC认证

功能安全性

功能安全遵循IEC 61508标准，允许在IEC 61511标准规定的安全应用中使用

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 SÜD认证）

压力认证和证书

CRN

材料证书

3.1材料证书

卫生型认证和证书

3-A、EHEDG

气体

测量原理

产品标题

std_productprofile_product_usp_7832.

Measuring accurately smallest quantities of liquids and gases for continuous process control.

传感器特点

Highest process safety – self-drainable measuring tube design. Fewer process measuring points – multivariable measurement (flow, density, temperature). Space-saving installation – no in-/outlet run needs. Nominal diameter: DN 1 to 4 ($\frac{1}{2}$ " to $\frac{1}{8}$ "). Process pressure up to 400 bar (5800 psi). Medium temperature up to +205 °C (+401 °F).

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 1...4 ($\frac{1}{2}$ "... $\frac{1}{8}$ ")

接液部件材质

测量管：1.4539 (904L)；Alloy C22 2.4602 (UNS N06022)合金
连接部件：1.4539 (904L)；Alloy C22 2.4602 (UNS N06022)合金；
1.4404 (316/316L)

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

最大测量误差

质量流量（液体）：±0.10 %

体积流量（液体）：±0.10 %

质量流量（气体）：±0.50 %

密度（液体）：±0.0005 g/cm³

气体

测量范围

0...450 kg/h (0...16.5 lb/min)

最大过程压力

PN 40, Cl. 300, 20K, 400 bar (5800 psi)

介质温度范围

-50...+205 °C (-58...+401 °F)

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 (304), 耐腐蚀

传感器接线盒 (标准)：铝合金AlSi10Mg涂层

传感器接线盒 (可选)：1.4301 (304)、1.4404 (316L)

变送器外壳材质

铝合金AlSi10Mg涂层；1.4409 (CF3M), 类同316L；聚碳酸酯

防护等级

分体式传感器 (标准)：IP66/67, Type 4X

分体式传感器 (可选)：IP69。分体式变送器：IP66/67, Type 4X

显示/操作

四行背光显示, 触摸键操作 (外部操作)

通过现场显示单元和调试软件设置

输出

4路输出：

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4...20 mA WirelessHART

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双脉冲输出 (有源/无源)

继电器输出

气体

输入

状态输入

4...20 mA输入

数字通信

HART、PROFIBUS PA、FOUNDATION Fieldbus、Modbus RS485、Profinet、Ethernet/IP、OPC-UA

电源

24 VDC

100...230 VAC

100...230 VAC / 24 VDC (非危险区)

防爆认证

ATEX、IECEX、cCSAus、NEPSI、INMETRO、EAC

产品安全性

CE认证、C-tick认证、EAC认证

功能安全性

功能安全遵循IEC 61508标准，允许在IEC 61511标准规定的安全应用中使用

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 SÜD认证）

压力认证和证书

CRN

材料证书

3.1材料证书

卫生型认证和证书

3-A、EHEDG

密度**测量原理**

产品标题

std_productprofile_product_usp_7832.

Measuring accurately smallest quantities of liquids and gases for continuous process control.

传感器特点

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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.

Density/Concentration**测量原理**

产品标题

std_productprofile_product_usp_7832.

Measuring accurately smallest quantities of liquids and gases for continuous process control.

传感器特点

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Density/Concentration

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 1 to 4 ($\frac{1}{24}$ to $\frac{1}{8}$ ")

接液部件材质

Measuring tube: 1.4539 (904L); Alloy C22, 2.4602 (UNS N06022)

Connection: 1.4539 (904L); Alloy C22, 2.4602 (UNS N06022); 1.4404 (316/316L)

测量变量

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

最大测量误差

Mass flow (liquid): ± 0.10 %

Volume flow (liquid): ± 0.10 %

Mass flow (gas): ± 0.50 %

Density (liquid): ± 0.0005 g/cm³

测量范围

0 to 450 kg/h (0 to 16.5 lb/min)

最大过程压力

PN 40, Class 300, 20K, 400 bar (5800 psi)

介质温度范围

-50 to +205 °C (-58 to +401 °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)

Density/Concentration**传感器外壳材质**

1.4301 (304), corrosion resistant

Sensor connection housing (standard): AlSi10Mg, coated

Sensor connection housing (option): 1.4301 (304); 1.4404 (316L)

变送器外壳材质

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

防护等级

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

Sensor remote version (option): IP69. 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 WirelessHART

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, PROFIBUS DP, PROFIBUS PA, FOUNDATION Fieldbus, Modbus
RS485, Profinet, Ethernet/IP, OPC-UA

电源

DC 24 V

AC 100 to 230 V

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

Density/Concentration

防爆认证

ATEX, IECEx, cCSAus, NEPSI, INMETRO, EAC

产品安全性

CE, C-tick, EAC marking

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 traceable verification according to ISO 9001:2008 – Section 7.6 a (TÜV SÜD attestation)

压力认证和证书

CRN

卫生型认证和证书

3-A, EHEDG

更多信息 www.endress.com.cn/8A5B