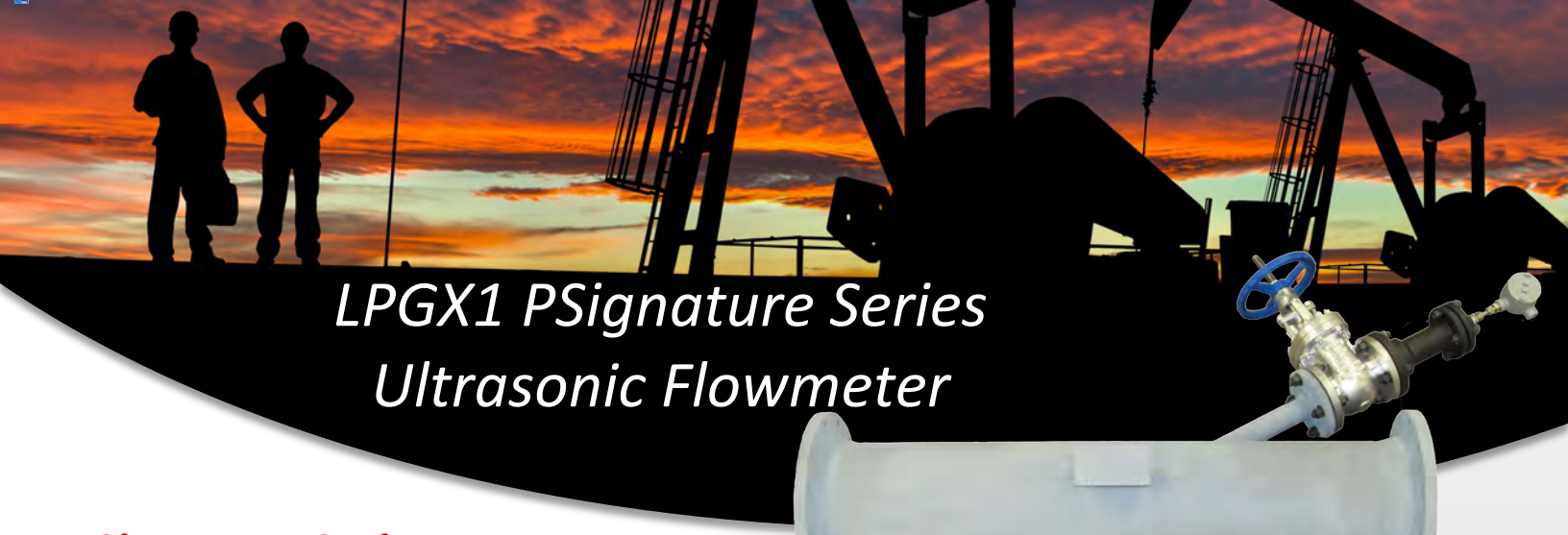


# LPGX1 PSignature Series Ultrasonic Flowmeter



## PSignature Series

LPGX1 Low Pressure Gas Ultrasonic Flowmeter

### Applications

- Flare Gas
- Vent Gas
- Bio Gas
- Fuel Gas
- Process Gases

### Features

- Measures velocity, volumetric and mass flow
- Suitable for varying gas composition
- Molecular weight calculations
- High turndown ratio
- Low cost and custom design options

PROCON SYSTEMS

Procon has designed, assembled and tested ultrasonic flowmeters for over 20 years with thousands of installations. All our flowmeters are engineered to meet specific application and customer requirements at very competitive prices

www.proconsystems.com

## Why purchase flowmeters from Procon?

- Flowmeters completely assembled, tested, inspected and shipped ready for installation
- Optional “on-line” transducer insertion and removal
- All quotes include calculations with accuracy and specific drawings
- Meets all applicable North American codes and standards (Details specified on quotes and drawings)
- In-house low pressure flow calibration loop, used for verification, improved accuracy, reduced straight run and new design testing
- Combines tested, proven and new technologies with engineering and know-how to provide the best solutions for our valued customers.
- More than 25 Years of flare meter application and service experience. Factory trained service technicians and stocked parts to minimize downtime.

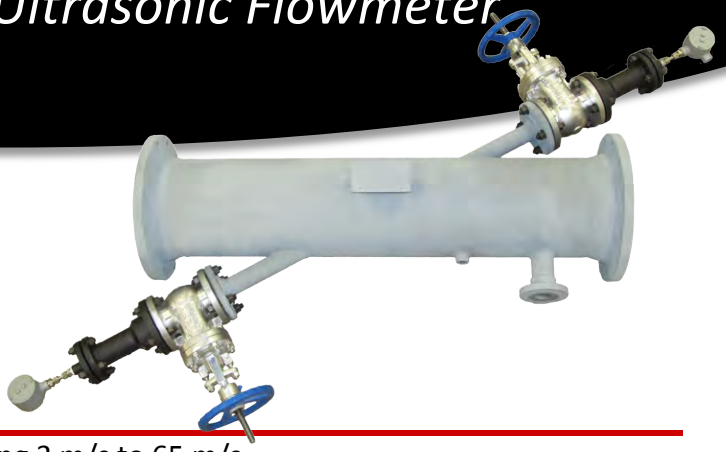

**CANADA**
Toll Free 1-866-255-2921

**USA**
Toll Free 1-866-455-2921




Version no.: 2.0 Jan.2020

# LPGX1 PSignature Series Ultrasonic Flowmeter



## General Specifications:

For additional technical details see ordering information.

## Flowcell

| | |
|---|---|
| **Flow/Accuracy:** | Typical ±2.0% of velocity reading 3 m/s to 65 m/s<br>Typical ±3.0% of velocity reading 0.1 m/s to 3 m/s<br>Typical ±1.0% with calibration<br>Flow calculations with Accuracy Statements provided for each application<br>Typical accuracies based on 6” or larger lines with adequate straight run, typically 20D upstream / 10D downstream for gas applications |
| **Repeatability:** | ±0.2% of Reading |
| **Size:** | 1 – 96 inches |
| **Rating:** | ASME CLASS 150 – 600 |
| **CSA:** | Class 1, Div.1 or Div.2, Groups A, B, C & D |
| **Design Temperature:** | -50°F to 482°F (-45°C to 250°C) |
| **Ambient Temperature:** | -40°F to 140°F (-40°C to 60°C) |

## Electronics

| | |
|---|---|
| **Enclosure:** | CSA approved for Class 1, Div. 1 or Div.2, Group A, B, C & D areas – Enclosure epoxy coated aluminum, IP66 / NEMA 4X |
| **Display:** | 128 x 128 Dot Matrix LCD Display with 4 keys |
| **Ambient Temperature:** | -40°F to 140°F (-40°C to 60°C), LCD Display will blank out at -10°C |
| **Storage Temperature:** | -67°F to 167°F (-55°C to 75°C) |
| **Weight & Dimensions:** | 9.8 in x 6.3 in (248 mm x 160 mm)<br>10 lbs (4.5 kg) |
| **Power Supply:** | 670mW maximum, 12-28 VDC |
| **Inputs/Outputs:** | 1x USB (not Intrinsically Safe) and 1x Frequency Output, Additional I/O available |

**Documentation** (Standard with all Flowmeters)**:**

Drawings, Flow Calculations, Manuals, Certificate of Compliance, Welding Procedures and Qualifications, Hydrotest, NDE Reports, Material Test Reports, CSA, Programming Sheet, ITP, PWF, Optional flow calibration

# LPGX1 PSignature Series Ultrasonic Flowmeter

## Ordering Information

LPGX1 - A - B - C - D - E - F - G - H - I - J - K - L - M - N - O

Example: LPGX1-06-150-RF-LC-1-I-2-100-N-1-2-1-1-CRN-NAC-F001000

| Option Code | Description |
|---|---|
| **A** | **Nominal Size** |
| 01..96 | Nominal Size in Inches |
| **B** | **Rating** |
| --- | No Rating (Typical for Weld Prep Flowmeters) |
| 150 | |
| 300 | |
| 600 | |
| **C** | **End Connections** |
| RF | Raised Face Flange |
| FF | Flat Face Flange |
| WP | Weld Prep |
| **D** | **Material of Construction** |
| CS | Carbon Steel |
| LC | Low Temp Carbon Steel |
| 34 | 304 Stainless Steel |
| 36 | 316 Stainless Steel |
| **E** | **# Of Paths** |
| 1 | Single Path |
| 2 | Dual Path |
| **F** | **Transducer Ports** |
| T | Threaded |
| W | Socket Weld |
| F | Flanged |
| C | Threaded Insertion Mechanism |
| I | Flanged Insertion Mechanism |
| **G** | **Extra Ports on Flowcell body** |
| 0..9 | Number of additional ports (Port Details to be shown on Drawing) |
| **H** | **Max Flow** |
| XXX | XX m/s Custom Max Flow Velocity in m/s (Gas Composition required to confirm Max. Range) |
| 010 | Max Flow Velocity in m/s (Gas Composition required to confirm Max. Range) |
| 050 | Max Flow Velocity in m/s (Gas Composition required to confirm Max. Range) |
| 065 | Max Flow Velocity in m/s (Gas Composition required to confirm Max. Range) |
| 100 | Max Flow Velocity in m/s (Gas Composition required to confirm Max. Range) - Expected availability June 2020 |
| 120 | Max Flow Velocity in m/s (Gas Composition required to confirm Max. Range) - Expected availability June 2020 |
| **I** | **Operating Temperature Range** |
| N | -50°F to 302°F (-45°C to +150°C) |
| H | -50°F to +482°F (-45°C to +250°C) (Expected availability December 2020) |

| | |
|---|---|
| **J** | **Mounting /Configuration** |
| 1 | Direct Mount / CLASS 1, Div.1 |
| 2 | Direct Mount / CLASS 1, Div.2 |
| **K** | **Power** |
| 2 | 12-28 VDC (External Options available for other voltages) |
| **L** | **Additional Input / Output SLOT1** |
| 0 | None |
| 1 | 1 RS485 Serial Port, Isolated Modbus Protocol and 2 Configurable Digital Outputs |
| **M** | **Additional Input / Output SLOT2** |
| 0 | None |
| 1 | 1 RTD Sensor Input, Configurable for 4 Wire PT100 and 1 Bridge Type Pressure Sensor Input |
| **N** | **Optional Extras and Specials (Can be more than one)** |
| CRN | Canadian Registration Number (Specify Province or Provinces) |
| NAC | NACE Certificate of Compliance |
| PMI | Positive Material Identification |
| HAR | Hardness Testing of Production Welds |
| PWH | Post Weld Heat Treatment |
| YEL | Yellow Flow Arrows Painted on each side of the Flowcell |
| JET | Jet Lube Petro Tape only |
| ICO | Internal Coating (Specify Details) |
| SSS | Special (Specify) |
| **O** | **Drawing #** |
| F00XXXX | Flowmeter Drawing # |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