# LPGX1 PSignature Series Ultrasonic Flowmeter

## **PSignature Series**

LPGX1 Low Pressure Gas Ultrasonic Flowmeter

#### Applications

#### Features

- Flare Gas
- Vent Gas
- Bio Gas
- Fuel Gas
- Process Gases
- Measures velocity, volumetric and mass flow
- Suitable for varying gas composition
- Molecular weight calculations
- High turndown ratio
  - Low cost and custom design options

## 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.

PROCON

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

#### CANADA

#### Toll Free 1-866-255-2921

USA Toll Free 1-866-455-2921

## 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
	Typical ±3.0% of velocity reading 0.1 m/s to 3 m/s
	Typical ±1.0% with calibration
	Flow calculations with Accuracy Statements provided for each application
	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)
	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



### **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	e	
0196	Nominal Size in Inches	
B Rating		
	No Rating (Typical for Weld Prep Flowmeters)	
150		
300		
600		
C End Connect	tions	
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	
Т	Threaded	
W	Socket Weld	
F	Flanged	
С	Threaded Insertion Mechanism	
1	Flanged Insertion Mechanism	
G Extra Ports on Flowcell body		
0.9	Number of additional ports (Port Details to be shown	
09	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)	
	Max Flow Velocity in m/s (Gas Composition required	
	to confirm Max. Range) - Expected availability June 2020	
120	to confirm May Dange)	
	LO COMITTI IVIAX. Kangej - Expected availability June 2020	
H	-50  F = 0.502  F (-45  C = 0.150  C)	
	-50 + 10 + 482 + (-45 + 10 + 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	
CRN	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 #	



Procon Systems (2013) Inc. Calgary, AB CANADA 9504 Horton Road SW Calgary, AB T2V 2X4 Toll Free: 1-866-255-2921 Phone: 403-255-2921 Fax: 403-255-3928

Procon Systems (2013) Inc. Regina, SK S4P-0J3 CANADA Toll-free: 1-866-455-2921 Phone: 306-206-2727 Procon Systems (2013) Inc. Edmonton, AB CANADA 6025 – 99th Street NW

Edmonton, AB T6E 3P1 Toll free: 1-877-844-6665 Phone: 780-437-0244 Fax: 780-438-2893

Procon Technologies Inc.

Naperville, IL USA 530 Industrial Drive Naperville, IL 60563 Toll-free: 1-866-455-2921 Phone: 630-357-8540 Fax: 630-357-4918

Procon Measurements and Controls Inc. Cambridge, ON N1R-4T5 CANADA Toll-free: 1-866-455-2921 Phone: 519-267-3121 Fax: 519-267-3127



Procon Technologies Inc. Hightstown, NJ 08520 USA Toll-free: 1-866-455-2921

Phone: 609-819-7070

Fax: 630-357-4918



www.proconsystems.com