

## PRESSURE TRANSMITTER

**Model IGP10****FEATURES**

- Intelligent HART / 4-20 mA version or economical 4 to 20 mA version
- Compact light weight and direct to processing mounting
- Corrosion-resistant epoxy finish
- Accuracy to  $\pm 0.07\%$  of span
- Push button configuration/LCD indicator to set-up displays
- Field-proven silicon strain gauge technology
- Ambient temperature effects to  $\pm 0.2\%$  URL per 100°F (55°C)

**TYPICAL APPLICATIONS**

- Fuel tank level
- Offshore oil rigs
- Process control
- Sanitary
- Pulp & paper
- Chemical process

**EXCEPTIONAL VALUE**

The combination of small size, light weight, direct mounting, standard materials, and wide measurement capability with high performance make this an exceptionally cost effective solution for process pressure measurement.

**DIRECT PROCESS MOUNTING**

Because of their light weight and external threaded connection, these transmitters can be installed directly on process piping without mounting brackets. However, for unique requirements, an optional bracket is offered and connection can be made to the standard 1/4 NPT internal thread.

**WIDE RANGEABILITY**

Three absolute pressure versions are offered to allow spans from 1 to 3000 PSI (7 to 21 000 kPa), and four gauge pressure versions are offered to allow spans from 1 to 6000 PSI (7 to 42 000 kPa).

**EASILY ADAPTABLE**

With process connection of 316L SS or Hastelloy C, and sensor diaphragm available in either 316L SS, Hastelloy C, or highly corrosion resistant Co-Ni-Cr, this transmitter is an excellent choice for the vast majority of process pressure measurements.

**PRESSURE TRANSMITTER**  
**Model IGP10**

**PERFORMANCE**

Full Scale Pressure Range (FSPR) .....0-30, 300, 3000, 6000 PSI (0-2, 21, 210, 420 bar)

Accuracy (linearity, hysteresis & repeatability)

Digital output.....±0.05% of calibrated range  
4-20 mA output.....±0.06% of calibrated range

Process Temperature Range

Silicone Fill Fluid.....-50°F to 250°F (-45°C to 121°C)

Fluorinert Fill Fluid .....-20°F to 250°F (-28°C to 121°C)

Ambient Temperature Range

Silicone Fill Fluid.....-40°F to 185°F (-40°C to 85°C)

Fluorinert Fill Fluid .....-20°F to 185°F (-28°C to 85°C)

Ambient Temperature Effect .....±(0.03% URL + 0.06% span)

Communication Protocol .....HART, 4-20 mA DC and digital output

Stability.....±0.05% of URL per year

**ELECTRICAL**

Supply Voltage.....11.5 to 43 Vdc

Output Load .....0-1450 Ohms

Output Signal (as specified)

Version -D Electronics .....Digital FoxCom and/or 4-20 mA DC, configurable

Version -T Electronics .....Digital HART and 4-20 mA dc

Version -F Electronics .....Digital FOUNDATION fieldbus (FISCO compliant)

Version -P Electronics .....Digital Profibus

Version -A Electronics .....Analog 4-20 mA dc

Version -V Electronics .....Analog 1 to 5 V dc, low power

RFI Protection .....0.1% error between 27% 1000 MHz at 30 V/m field intensity

Response Time.....5.0 seconds for output to reach first valid measurement

**MECHANICAL CONNECTION**

Process Connection .....1/4 NPT direct to process connection

**MATERIALS OF CONSTRUCTION**

Sensor Fill Fluid .....Dow Corning DC200 or 3M Fluorinert FC43

Enclosure Classification.....Meets IEC IP66 and NEMA 4X

Identification.....Laser etched onto body

**SPAN, RANGE LIMIT CODES**

Span Code	Span Limits		Range Limits	
	PSI	bar	PSI	bar
C	1 and 30	0.07 and 2.1	0 and 30	0 and 2.1
D	10 and 300	0.7 and 21	0 and 300	0 and 21
E	100 and 3000	7 and 210	0 and 3000	0 and 210
F	2000 and 6000	140 and 420	0 and 6000	0 and 420

**MAXIMUM OVER-RANGE & PROOF PRESSURE RATING**

Span Code	Maximum Over-Range		Proof Pressure Rating	
	PSI	bar	PSI	bar
C	45	3.15	120	8.27
D	450	31.5	1200	82.7
E	4500	315	11500	793
F	8400	588	22000	1517

**CERTIFICATIONS**

FM/CSA

Intrinsic Safety: (F and C versions) Class 1, Division 1, Groups A, B, C, D; Class II, Division 1, Groups E, F, G; Class III, Division 1  
Explosion Proof/Dust Ignition Proof: (F and C versions) Class 1, Division 1, Groups B,C, D; Class II, Division 1, Groups E, F, G; Class III, Division 1  
Nonincendive (V and C versions): Class 1, Division 2, Groups A, B, C, D; Class II, Division 2, Groups E, F, G; Class III, Division 2

**GENERAL NOTES**

1. REPLACEABLE/INTERCHANGEABLE ELECTRONICS MODULE DETERMINES THE ELECTRONICS VERSION AND OUTPUT SIGNAL.
2. TOPWORKS CAN BE ROTATED TO ANY POSITION WITHIN ONE TURN COUNTERCLOCKWISE OF THE FULLY TIGHTENED POSITION.
3. CONDUIT CONNECTIONS (TWO) ARE EITHER 1/2 NPT, M20, OR PG 13.5. PLUG UNUSED CONNECTION WITH METAL PLUG SUPPLIED BY FOXBORO.

