

# FLUSH DIAPHRAGM PRESSURE TRANSMITTERS Series 1701

- ▶ Stainless steel wetted parts with flush diaphragm
- ▶ G1/2, G3/4 or G1 threads and sanitary
- ▶ Voltage and current output models

The 1701 series features a stainless steel flush diaphragm on a threaded process connection making it ideal for slurries, suspended solids in liquids and viscous liquids where recessed diaphragms could become blocked. The 1701 is suitable for both static and dynamic pressure measurement in the ranges from 1bar to 400bar and is available with a choice of electrical outputs and connections.

## Specifications

### Input

<b>Pressure range</b>	0 to 400bar Gauge, 0 to 25bar Absolute
<b>Proof pressure</b>	>2 x full scale (1.5 x for 400 bar)
<b>Burst pressure</b>	>2 x full scale
<b>Fatigue life</b>	Designed for more than 100 million cycles

### Performance

<b>Long term drift</b>	±0.3% span/annum
<b>Accuracy</b>	±0.25%
<b>Thermal error</b>	2% max
<b>Compensated temperatures</b>	-20° to 80°C
<b>Operating temperatures</b>	-25°C to 85°C (media -25°C to 125°C)
<b>Zero tolerance</b>	1% of span
<b>Span tolerance</b>	1% of span

### Mechanical Configuration

<b>Pressure port</b>	See ordering chart
<b>Wetted parts</b>	316 S/S: Seals <100bar Viton >100bar Nitrile
<b>Electrical connection</b>	See ordering chart
<b>Enclosure</b>	304 S/S
<b>Fill Fluid</b>	Silicon oil or food grade
<b>Vibration</b>	10g rms, 20 - 2000Hz
<b>Acceleration</b>	10g
<b>Shock</b>	100g 11ms
<b>Approvals</b>	CE, Ex II 1G, Eex ia IIC T4
<b>Weight</b>	225gm

### Voltage Output units

<b>Output</b>	See ordering chart
<b>Supply voltage (Vs)</b>	12 to 36 Vdc
<b>Supply voltage sensitivity</b>	0.005% FS/Volt
<b>Min. load resistance</b>	10Kohm
<b>Current consumption</b>	15mA max

### Current Output units

<b>Output</b>	4-20mA 2 wire
<b>Supply voltage (Vs)</b>	12 to 36vdc (IS units 14-28 volts)
<b>Supply voltage sensitivity</b>	0.005% FS/Volt
<b>Max. loop resistance</b>	(Vs-12) x 50 ohms

## Table of Dimensions

	Dim A	Dim B	Dim C	Dim D
<b>G1/2" Thread</b>	76.5	15.0	27.0	18.0
<b>G3/4" Thread</b>	78.5	16.0	34.0	22.0
<b>G 1" Thread</b>	80.5	19.0	44.0	27.0



## Dimensions (in mm)

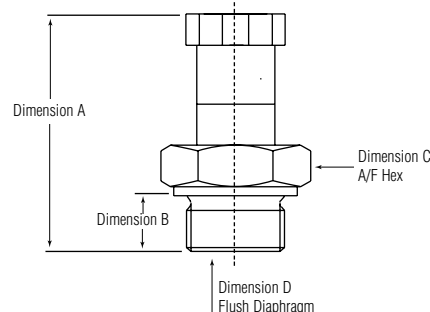
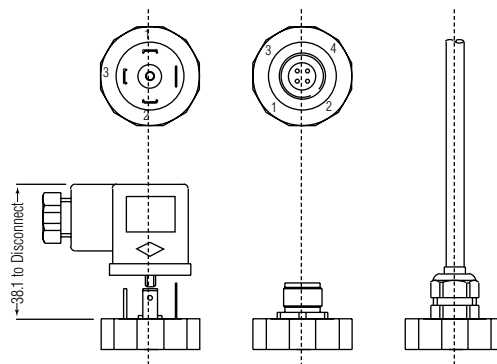
### MECHANICAL CONNECTION

Inch Thread

**Fixed Plug to DIN  
43650 (1701X-G3)**

**M12 x 1  
(1701X-E3)**

**2m Cable  
(1701X-F3)**



Intrinsically Safe units length increased by 27mm

## How to Order

	<b>1701</b>	<b>B</b>	<b>G</b>	<b>A10</b>	<b>F1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>G</b>	<b>3</b>	<b>2</b>	<b>0</b>
<b>Series</b>												
<b>1701</b>												
<b>Output</b>												
<b>B</b> - 4-20mA												
<b>S</b> - 0-10V												
<b>Datum</b>												
<b>G</b> - Gauge												
<b>A</b> - Absolute -1 to 25 bar												
<b>Pressure Range</b>												
<b>A10</b> - 1 bar; <b>A16</b> - 1.6 bar; <b>A25</b> - 2.5 bar; <b>A40</b> - 4 bar; <b>A60</b> - 6 bar;												
<b>B10</b> - 10 bar; <b>B16</b> - 16 bar; <b>B25</b> - 25 bar; <b>B40</b> - 40 bar; <b>B60</b> - 60 bar;												
<b>C10</b> - 100 bar; <b>C16</b> - 160 bar; <b>C25</b> - 250 bar; <b>C40</b> - 400 bar; <b>1A0</b> - -1 to 0 bar												
<b>Pressure Connection</b>												
<b>*F1</b> - G1/2" DIN 3852; <b>F2</b> - G3/4" DIN 3852; <b>F3</b> - G1" DIN 3852												
<b>*Not available with ranges ≤1.6 bar</b>												
<b>Filling Fluid</b>												
<b>1</b> - Silicon Oil												
<b>2</b> - Food compatible, Mobil DTEFM32												
<b>Seal</b>												
<b>1</b> - Viton <100 bar												
<b>5</b> - Nitrile ≥100 bar												
<b>Diaphragm Material</b>												
<b>0</b> - Stainless Steel												
<b>Electrical Connection</b>												
<b>E</b> - M12 x 1 (4 Pin)												
<b>F</b> - Cable Gland including 2m Cable												
<b>G</b> - Fixed Plug to DIN 43650												
<b>Approvals</b>												
<b>3</b> - CE Mark												
<b>G</b> - Intrinsic Safety Ex II 1G, EEx ia IIC T4 (-20<Ta<+60°C)												
<b>Accuracy</b>												
<b>2</b> - ±0.25%												
<b>Special Versions</b>												
<b>0</b> - Standard												

## Pin Configuration

Electrical Connection				
		DIN 43650	M12x1 (4-pin)	Cable
2-wire-system	Supply +	1	1	White
	Supply -	2	2	Brown
	Ground	Ground pin	4	Drain
3-wire-system	Supply +	1	1	White
	Supply -	2	2	Brown
	Signal +	3	3	Green
	Ground	Ground pin	4	Drain