

1701 Series - Flush Diaphragm Pressure Transmitters

- ▶ 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	
Pressure range	0 to 400bar Gauge, 0 to 25bar Absolute
Proof pressure	>2 x full scale (1.5 x for 400 bar)
Burst pressure	>2 x full scale
Fatigue life	Designed for more than 100 million cycles
Performance	
Long term drift	±0.3% span/annum
Accuracy	±0.25%
Thermal error	2% max
Compensated temperatures	-20° to 80°C
Operating temperatures	-25°C to 85°C (media -25°C to 125°C)
Zero tolerance	1% of span
Span tolerance	1% of span
Mechanical Configuration	
Pressure port	See ordering chart
Wetted parts	316 S/S: Seals <100bar Viton >100bar Nitrite
Electrical connection	See ordering chart
Enclosure	304 S/S
Fill Fluid	Silicon oil or food grade
Vibration	10g rms, 20 - 2000Hz
Acceleration	10g
Shock	100g 11ms
Approvals	CE, Ex II TG, Eex ia IIC T4
Weight	225gm
Voltage Output units	
Output	See ordering chart
Supply voltage (Vs)	12 to 36 Vdc
Supply voltage sensitivity	0.005% FS/Volt
Min. load resistance	10Kohm
Current consumption	15mA max
Current Output units	
Output	4-20mA 2 wire
Supply voltage (Vs)	12 to 36vdc (IS units 14-28 volts)
Supply voltage sensitivity	0.005% FS/Volt
Max. loop resistance	(Vs-12) x 50 ohms

Table of Dimensions

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



Dimensions (in mm)

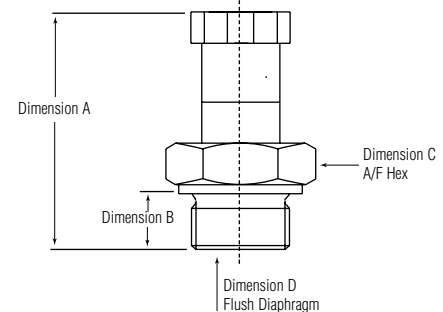
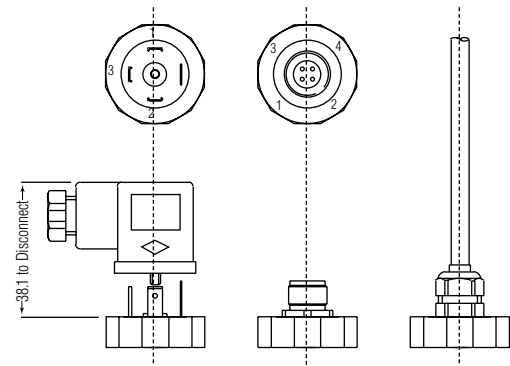
MECHANICAL CONNECTION

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

1701 B G A10 F1 1 1 0 G 3 2 0

Series _____
1701

Output _____
B - 4-20mA
S - 0-10V

Datum _____
G - Gauge
A - Absolute -1 to 25 bar

Pressure Range _____
A10 - 1 bar; A16 - 1.6 bar; A25 - 2.5 bar; A40 - 4 bar; A60 - 6 bar;
B10 - 10 bar; B16 - 16 bar; B25 - 25 bar; B40 - 40 bar; B60 - 60 bar;
C10 - 100 bar; C16 - 160 bar; C25 - 250 bar; C40 - 400 bar; 1A0 - -1 to 0 bar

Pressure Connection _____
*F1 - G1/2" DIN 3852; F2 - G3/4" DIN 3852; F3 - G1" DIN 3852
*Not available with ranges ≤1.6 bar

Filling Fluid _____
1 - Silicon Oil
2 - Food compatible, Mobil DTEFM32

Seal _____
1 - Viton <100 bar
5 - Nitrile ≥100 bar

Diaphragm Material _____
0 - Stainless Steel

Electrical Connection _____
E - M12 x 1 (4 Pin)
F - Cable Gland including 2m Cable
G - Fixed Plug to DIN 43650

Approvals _____
3 - CE Mark
G - Intrinsic Safety Ex II 1G, EEx ia IIC T4 (-20<Ta<+60°C)

Accuracy _____
2 - ±0.25%

Special Versions _____
0 - 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