1701 Series-Flush Diaphragm Pressure Transmitters

- Stanless 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 15 PSI to 5802 PSI (1 bar to 400 bar) and is available with a choice of electrical outputs and connections.

Specifications

Input	
Pressure Range	0 to 6000 psi (0 to 400 bar) Gauge 0 to 370 psi (0 to 25 bar) 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	±0.2% span/annum
Accuracy	0.25%
Thermal Error	2% max
Compensated Temperature	-13°F to +185°F (-25°C to +85°C)
Operating Temperatures	-13°F to +185°F (-25°C to +85°C) -13°F to +257°F (-25°C to +125°C) media
Zero Tolerance	1% of span
Span Tolerance	1% of span
Mechanical Configuration	
Pressure Port	see ordering chart
Wetted Parts	316 S/S: Seals <100 bar Viton® >100 bar Nitrite
Electrical Connection	see ordering chart
Enclosure	IP65 = G (with connector fitted) IP67 = E & F
Fill Fluid	Silicon oil or food grade
Vibration	10g rms, 20 - 2000Hz
Acceleration	10g
Shock	100g 11ms
Approvals	CE, EXII 1G, E Exia II CT4
Weight	225gm
Voltage Output Units	
Output	see ordering chart
Supply Voltage (Vs)	14 to 36Vdc
Supply Voltage Sensitivity	0.005% FS/Volt
Min. Load Resistance	10Kohm
Current Consumption	15 mA 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

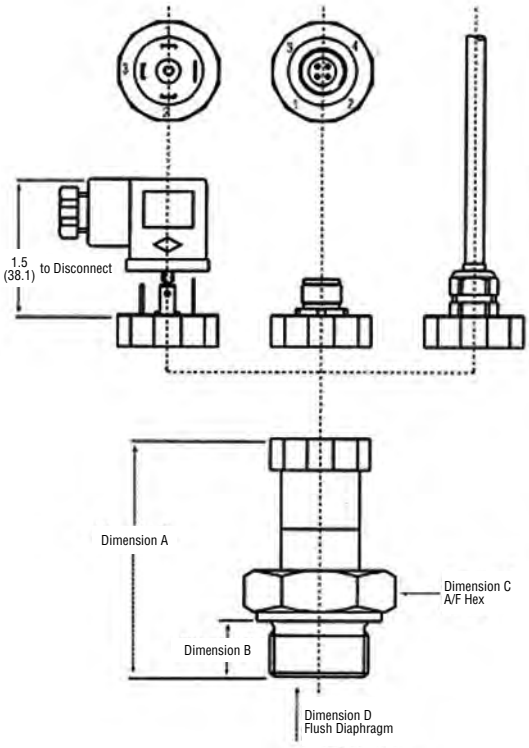
EMC Specifications

Emissions & Immunity according to EN61326.

Dimensions inch (mm)

MECHANICAL CONNECTION
Inch Thread

Fixed Plug to DIN 43650 (1701X-G3) | **M12 x 1 (1701X-E3)** | **2m Cable (1701X-F3)**



	Dim A	Dim B	Dim C	Dim D
G1/2˝ Thread	3.01 (76.5)	0.59 (15.0)	1.06 (27.0)	0.71 (18.0)
G3/4˝ Thread	3.09 (78.5)	0.63 (16.0)	1.34 (34.0)	0.87 (22.0)
G1˝ Thread	3.17 (80.5)	0.75 (19.0)	1.73 (44.0)	1.10 (28.0)

Intrinsically Safe units length increased by 1.06˝ (27 mm).

Order from: C A Briggs Company; 622 Mary Street; Suite 101 - Warminster, PA 18974
Phone: 267-673-8117 - 800-352-6265 - Fax: 267-673-8118; E-Mail: Sales@cabriggs.com - www.cabriggs.com

How to Order

Use the **bold** characters from the chart below to construct a product code

1701 B G A10 F2 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[1] **F2** - G3/4″ DIN 3852
F3 - G1″ DIN 3852

Filling Liquid
1 - Silicon Oil
2 - Food compatible, Mobil DTEFM32

Seal
1 - Viton® <100 bar
2 - 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

Electrical Connections

Electrical Connection Code	2-Wire System			3-Wire System			
	Supply +	Supply –	Ground	Supply +	Supply –	Signal +	Ground
E M12 x 1 (4-pin)	1	2	4	1	2	3	4
F Cable	WH	BR	DRAIN	WH	BR	G	DRAIN
G “DIN 43650”	1	2	GROUND	1	2	3	GROUND

Cable Legend:
WH = White
BR = Brown
G = Green

Notes:
1. Not available for ranges ≤1.6mb.

PRESSURE TRANSDUCERS

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