

Overview

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Oil & Gas equipment needs a pressure transducer that is reliable and able to withstand extreme environmental and pressure conditions. Bifold's Pressure Transmitters offer a solution to high priced, unreliable alternatives. The PT01U is CSA approved explosion proof, and the PT01A carries the ATEX approval. They feature all stainless steel wetted parts, a broad selection of pressure connections and a wide choice of electrical outputs. Our manufacturing process includes the latest automated equipment, producing consistent sensor performance. The compact yet rugged construction of these units makes them ideal for installation where space in a hazardous environment is at a premium.

Specifications

Performance

Long Term Drift:	0.2% FS/YR (non-cumulative).
Accuracy:	0.25% FS.
Thermal Error:	±2% max, ±1% typical / 212°F (100°C).
Compensated Temperatures:	-40°F to +203°F (-40°C to +95°C).
Operating Temperatures:	-40°F to +203°F (-40°C to +95°C).
Zero Tolerance, Max:	0.5% of span.
Span Tolerance, Max:	0.5% of span.
Fatigue Life:	Designed for more than 100 million cycles.

Mechanical Configuration

Pressure Port:	See Selection Chart on page 1.
Wetted Parts:	17-4 PH Stainless Steel.
Electrical Connection:	Cable (3-Wire).
Enclosure:	IP67.
Vibration:	BSEN 60068-2-6 (FC) Sine (20G). BSEN 60068-2-64 (FH) Random (14.1 Grms). BSEN 60068-2-27 (Ea) (50G, 11ms).
Shock:	

Certification Approvals

PT01U



CSA (US), Certificate Number xxxxxxxx.



Class I, Division I, Groups A, B, C and D for both Canada & USA.



Additional for Canada, Class I, Zone I Exd IIC T4 Gb.

Additional for USA, Class I, Zone I AExd T4 Gb.

PT01A



ATEX, Certificate Number Baseefa xxxxxxxx.

Exd IIC T4 Gb (Ambient Temperature: -40°C to +95°C).

EMC Specifications

Emissions Tests:

EN61326-1:2006 and EN61326-2-3:2006

EN55011:2007

Radiated Emissions:

30-230MHz 30dB μ V/M @10M

230-1000MHz 37dB μ V/M @10M

Immunity Tests:

EN61326-1:2006 and EN61326-2-3:2006

EN61000-4-2:2009

Electrostatic Discharge:

±4Kv contact

±8Kv air

EN61000-4-3:2006

Radiated Immunity:

10V/M 80-1000MHz

3V/M 1400-2000MHz

1V/M 2000-2700MHz

EN61000-4-4:2004

Fast Transients:

±0.25, 0.5, 1Kv

Individual Specifications

Voltage

Output (3-Wire):	0V min. to 10V max (See Selection Chart on page 1).
Supply Voltage:	1 Volt above full scale to 30V max @ 4.5 mA.
Source & Sinks:	2 mA

Current

Output (2-wire):	4-20 mA
Supply Voltage:	8-24 Volts measured at the input to the transducer terminals
Maximum Loop Resistance:	(Supply Voltage-8) × 50 ohms

Ratiometric

Output:	0.5 to 4.5 V (Source and sink 2 mA)
Supply Voltage:	5 Vdc ±10% @ 4.5 mA

Accuracy of Information
We take care to ensure that product information in this catalogue is reasonably accurate and up-to-date. However, our products are continually developed and updated so to ensure accurate and up-to-date information please refer to the product catalogue issue list on our web site or contact a member of our sales team.

When selecting a product, the applicable operating system design must be considered to ensure safe use. The products function, material compatibility, adequate ratings, correct installation, operation and maintenance are the responsibilities of the system designer and user.

Quality Assurance
All Bifold products are manufactured to a most stringent QA programme to ensure that every product will give optimum performance and reliability. We are third party certified to BS EN ISO 9001:2008. Functional test certificates, letter of conformity and copies of original mill certificates, providing total traceability are available on request, to BS EN 10204 3.1 where available. We reserve the right to make changes to the specifications and design etc., without prior notice.

PT01A & PT01U

PRESSURE CAPABILITY

Pressure Range	Proof Pressure (x Full Scale)	Burst Pressure (x Full Scale)
100-300 psi / 7-20 bar	3.00 x FS	40 x FS
500-1,500 psi / 40-100 bar	3.00 x FS	20 x FS
2,000-6,000 psi / 160-400 bar	3.00 x FS	10 x FS
10,000 psi / 700 bar	3.00 x FS	>60,000 psi / 4000 bar
15,000 psi / 1,000 bar	2.50 x FS	>60,000 psi / 4000 bar

Pressure Ports

Code: 08 - 1/8" - 27 NPT External
Torque: 2-3 TFFT*

Code: 02 - 1/4" - 18 NPT External
Torque: 2-3 TFFT*

Code: 0H - 1/2" NPT
Torque: 2-3 TFFT*

Code: 04 - 7/16" - 20 UNF with 37° Flare †
Torque: 15-16 NM

Code: 1J - 7/16" - 20 UNF with O-Ring ††
Torque: 18-20 NM

Code: 0E - 1/4" - 18 NPT Internal
Torque: 2-3 TFFT*

Code: 1G - Schraeder 7/16" Internal ‡
Torque: 18-20 NM

Code: 4B - 1/4" Female (7/16 UN with Schraeder Deflator)
Torque: 15-16 NM

Code: 1P - SAE 6 (7/16"-18 UNF 2A) ††
Torque: 18-20 NM

Code: 4C - 1/4" - 18 NPTF External (Dryseal)
Torque: 2-3 TFFT*

Code: 4D - 1/8" - 27 NPTF External (Dryseal)
Torque: 2-3 TFFT*

Code: 4N - SAE 3 (3/8" - 24 UNF External) ~
Torque: 18-20 NM

Code: 0S - G 1/8" A Stud (BS 5380 Port)
Torque: 30-35 NM

Code: 01 - G 1/4" - 27 External
Torque: 30-35 NM

Code: 05 - G 1/4" A Integral Face Seal
Torque: 30-35 NM

Code: 0A - G 1/4" - 19 PT (JIS) or BSPT
Torque: 30-35 NM

Code: 4P - G 1/2" A 27A/F
Torque: 30-35 NMi

Code: 0L - M12 x 1.5
Torque: 28-30 NM

Code: 2T - M12x1.5 HP Metal Washer Seal
Torque: 30-35 NM

Code: 0A - M12 x 1.5 Straight
Torque: 2-3 TFFT*

*NPT Threads 2-3 turns from finger tight. Wrench tighten 2-3 turns.

Notes:

- The diameter of all cans is 0.965" (24.5 mm)
- Hex is 0.866" (22 mm) Across Flats (A/F) for deep socket mounting, except Fitting Code 4P which is 1.063" (27 mm).
- O-Ring material, where applicable, is Viton

- † Externally conforms to - SAE #4, J514.
- †† Externally conforms to - SAE #4, J1926-2.
- ‡ Internally SAE #4 Female.
- ‡‡ Heavy duty.
- ~ Externally conforms to - SAE J1926/2:3/8-24.

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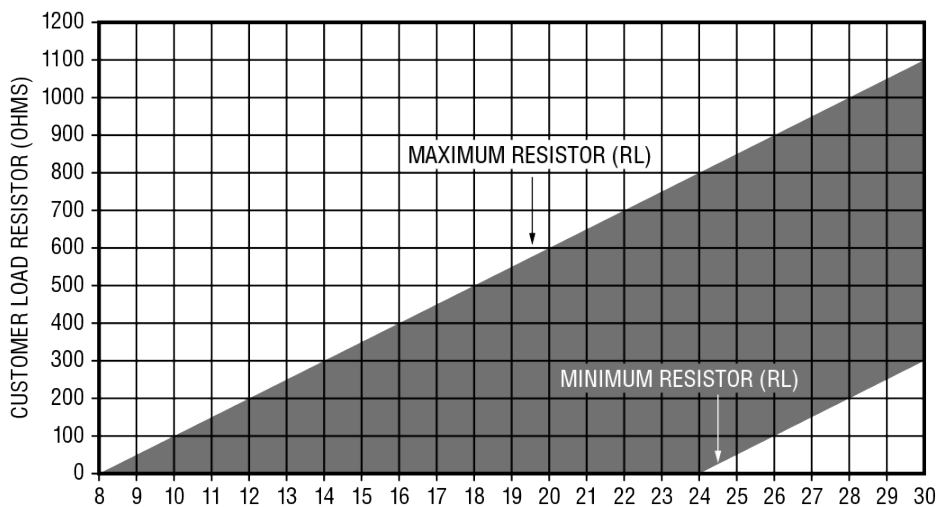
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CABLE-OUT TYPE		
Wire Color	Voltage Mode	Current Mode
Red	Supply	Supply
Black	Ground	Return
White	V _{OUT}	No Connect

Current Output Mode (Load Resistor Range)



Minimum Resistor Value = $50 * (+V - 24)$ for $+V > 24V$
 Maximum Resistor Value = $50 * (+V - 8)$ for $+V > 8V$