



Type A2 Heavy Industrial and Hazardous Locations Pressure Transmitter

APPLICATIONS

Test stands, compressor control, hydraulic systems, oil field equipment, upstream oil and gas production, natural gas compression and transfer control

BENEFITS AND FEATURES

- Choice of 1.0, 0.5 or 0.25% accuracy
- Pressure ranges from 5 psi through 10,000 psi
- CE mark is standard
- 17-4 pH and 316L SS sensors available
- 304 SS case in standard, welded or explosion proof construction
- Six output signals to choose from

PERFORMANCE SPECIFICATIONS

Reference temperature 68°F (20°C)

Accuracy Class (% Span) **0.25%** **0.5%** **1.0%**

Nonlinearity

Terminal Point ≤0.15 ≤0.25 ≤0.50

BFSL ≤0.10 ≤0.20 ≤0.30

Hysteresis* ≤0.05 ≤0.10 ≤0.10

Nonrepeatability ≤0.05 ≤0.05 ≤0.05

*Hysteresis ≤0.10 for pressure range 5000 psi and above.

Stability:

Sensor Material 316L SS: ≤0.1% FS/year

Sensor Material 17-4PH: Less than 0.5% FS/year

Durability: Greater than 10 million cycles (for standard 17-4 PH sensors)

Response Time: Less than 2 ms

PHYSICAL SPECIFICATIONS

Case: Material 304SS

Ingress Protection Rating:

Enclosure	Rating
Basic	(IP65, NEMA 4X)
Zero/Span	(IP65, NEMA 4X)
All Welded (w/Z/S)	(IP65, NEMA 4X)
All Welded (w/o Z/S)	(IP67, NEMA 6)
Explosion Proof	(IP65, NEMA 7,9)

- Optional absolute pressure ranges available
- Available externally adjustable zero and span access
- FM, UL, CSA and ATEX listings available

Designed for heavy industrial and hazardous location applications, the new Ashcroft® A2 pressure transmitter is a durable instrument that provides considerable specification flexibility in terms of performance, construction and optional features. Specify a base unit from a broad choice of standard ranges, process connections, output signals and elec-



trical terminations or customize the transmitter from a long list of optional features and construction variables.

ENVIRONMENTAL SPECIFICATIONS

Temperature Limits:

Process: -40 to +125°C (-40 to 257°F)

Storage: -40 to +125°C (-40 to 257°F)

Standard Compensation:

-20 to +85°C (-4 to 185°F)

Extended Compensation:

-40 to +125°C (-40 to 257°F)

Temperature Effect:

Accuracy Class **0.25%** **0.5%** **1.0%**

Std. Comp. %/105°C

Zero (% Span) ≤0.5 ≤1.0 ≤1.0

Span (% Reading) ≤0.5 ≤1.0 ≤1.0

Ext. Comp. %/165°C

Zero (% Span) ≤1.0 ≤1.5 N/A

Span (% Reading) ≤1.0 ≤1.5 N/A

Humidity Effects: No performance effects from 0 to 95% relative humidity, non-condensing, 0-100% RH with "W" enclosure.

Vibration Effect:

Shock: 100g Peak, 11ms

Random: 10g RMS, 20-2000Hz

Sweep: 50-2000Hz, 5g peak

Position Effect: ≤ 0.02% Typical

FUNCTIONAL SPECIFICATIONS

Ranges: Vacuum, compound and pressure from 0-5 psi through 0-10,000. Equivalent ranges in bar available.

Sensors: 17-4 pH SS standard; 316L is also available

Pressure Reference: Gauge reference is standard; absolute reference optional

Outputs: Choose from 0-5Vdc, 0-10Vdc, 1-5Vdc, 1-6Vdc, 4-20mA, 0.5-4.5Vdc

Electrical Connections:

Connector Options

• Hirschmann® Style – DIN 43650-A

• M12 threaded

• PTO2A-8-4P – Bendix® style 4 pin

Cable Options

• ½ NPT Conduit – 36" shielded PVC cable, 24 AWG

• ½ NPT Conduit – 36" flying leads, 18 AWG

• 36" shielded PVC cable, 24 AWG

CE Mark (standard):

EN 61326:1997 + A1: 1998 Annex A

Heavy Industrial Immunity (Annex A, Table A.1)

Light Industrial/Residential Emission (Table 4)

TO ORDER THE A2 PRESSURE TRANSMITTERS:

Type Configuration (A2)	Accuracy/Temp. Errors	Enclosure	Pressure Connection	Output Signal	Electrical Termination	Pressure Range	Enclosure	Optional X-Variations
(A) 0.25%/±0.5% (-4°F to +185°F)	(S) Basic	(M01) ½ NPT-M	(F04) ½ NPT-F	(05) 0-5 Vdc	Integral (Pigtail)	(5#) 5 psi	(G) Gauge	(XCL) Non-standard calibration
(B) 0.50%/±1.0% (-4°F to +185°F)	(Z) Zero & Span Access	(M02) ¼ NPT-M	(MG2) G ¼ M	(10) 0-10 Vdc	(F2) 3 ft cable	(100#) 100 psi	(P) Pressure Sensor	(XHZ) Intrinsic Safety Listing
(C) 1.00%/±1.0% (-4°F to +185°F)	(Y) Welded with Zero & Span Access	(F02) ¼ NPT-F	(MG4) G ½ M	(15) 1-5 Vdc	(P1) (specify length)	(150#) 150 psi	(A) Absolute Pressure Sensor	(XNS) 316 Sensor Material
(D) 0.25%/±1.0% (-40°F to +257°F)	(W) Welded w/out Zero & Span Access	(MEK) ¾"-20 SAE-M	(VF2) ¼ VCR-F, Std. Fin.	(16) 1-6 Vdc	Hirschmann Style Form A, DIN 43650-A	(300#) 300 psi		
(E) 0.50%/±1.5% (-40°F to +257°F)	(X) Explosion-Proof Enclosure	(F09) ¾"-18 (¼)-F (Aminco)	(S15) 1½" Tri-Clamp Sanitary	(RM) 0.5-4.5 Vdc Ratio Metric	(D1) with mate, (specify length)	(500#) 500 psi		
		(M04) ½ NPT-M	(S20) 2" Tri-Clamp Sanitary	(42) 4-20mA	(D2) with mate, no cable			
					(D0) with mate, no cable			
					(D1) with mate, (specify length)			
					4-Pin Bendix Style			
					(B4) w/o mating conn.			
					(H1) with mate, no cable			
					(L1) with mate, 3" cable			
					(P2) with mate, (specify length)			
					½ NPT-M Conduit			
					(C1) with 3" pigtail			
					(P7) (specify length)			
					½ NPT-M Conduit			
					(C2) 3" flying leads			
					(C3) (specify length)			
					M12 Threaded			
					(EW) w/o mating conn.			
					(E0) with mate, no cable			
					(E2) with mate, 3" cable			
					(E1) with mate, (specify length)			