

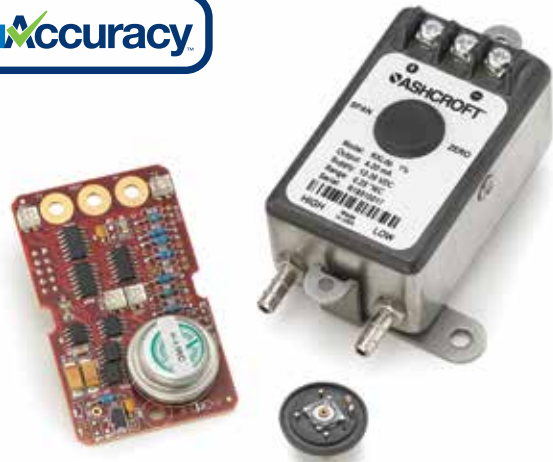
## RXLdp Ultra-Low Differential Pressure Transmitter

### FEATURES

- Current and voltage output signals available
- Custom ranges available
- Board level OEM versions available
- Si-Glas™ technology enables precise measurement and control of very low pressures

### TYPICAL USES

- HVAC/R
- Fume hood control
- Clean room/lab pressurization
- Laminar flow
- Leak detection
- Medical
- Fan tracking
- Glovebox and velocity measurements



**RXLdp**  
Pressure Transmitter



\*See Approvals on page 2 regarding CE and RoHS certifications.

### PERFORMANCE SPECIFICATIONS

Reference Temperature:	70°F ±2°F (21°C ±1°F)
Accuracy Class:	±1.0% of span (Terminal Point Method: includes non-linearity, hysteresis, non-repeatability, zero offset and span setting errors)
Stability:	±0.5% of span/year at reference conditions
Media Compatibility:	Clean, dry and non-corrosive gas NOT FOR USE ON LIQUIDS
Standard Response Time:	250ms

### ENVIRONMENTAL SPECIFICATIONS

Temperature Limits:	Storage: -40°F to 180°F (-40°C to 82°C) Operating: 0°F to 160°F (-18°C to 70°C) Compensated: 40°F to 125°F (4.4°C to 52°C)
Thermal Coefficients:	Zero: ±0.025% of span/°F Span: ±0.025% of span/°F (from 70°F/21°C reference temperature)
Vibration Sweep:	<0.05% span/g temporary effect 0-60Hz
Humidity Effects:	No performance effect at 10-95% R.H. noncondensing
EMC:	CE model compliant to EN61326: 1997 Annex A. Harmonized heavy industrial transmitter specification

### FUNCTIONAL SPECIFICATIONS

Mounting Position Effect:	≥0.5 IWC: ±0.1% of span/g <0.5 IWC: ±0.25% of span/g Calibrated horizontally (STD.), unless otherwise specified. Mounting Position Effect easily corrected with zero potentiometer
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### KEY BENEFITS

- Broad temperature capability
- Superior long-term stability and repeatability
- High overpressure protection
- On board voltage regulation allows use of low cost unregulated power supply
- 3 year warranty

Max. Static (Line) Pressure:	25 psi	Proof:	15 psid	Burst:	25 psid
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### ELECTRICAL SPECIFICATIONS

Circuit Protection:	Reverse Wiring Protected
Potentiometers:	Externally accessible, non-interactive Zero: ±5% of span Span: ±3% of span
Supply Current:	<6 mA for Voltage output
Warm-up Time:	5sec (Max.) to meet stated specifications from initial Power-up

# Data Sheet

## RXLdp Ultra-Low Differential Pressure Transmitter

Output Signal:	4-20 mA (2 wire)	12-36 Vdc
	0-5 Vdc (3 wire)	12-36 Vdc
	1-5 Vdc (3 wire)	12-36 Vdc
	1-6 Vdc (3 wire)	12-36 Vdc
	0-10 Vdc (3 wire)	12-36 Vdc
	Output signal is independent of power supply changes: 12-36 Vdc range without effect on output signal	

### PHYSICAL SPECIFICATIONS

Electrical Connection:	Screw Termination
Weight:	4.5 oz
Environmental Rating:	NEMA 1
Pressure Connections:	1/8" NPT Female, 1/4" and 1/2" barbed Male

### WETTED MATERIAL

Media: Clean, dry air/gases compatible with Aluminum, Titanium, PBT, Buna, Silicon, Glass, Gold, Silicone Rubber, Silicone RTV and Stainless Steel  
**NOT FOR USE ON LIQUIDS**

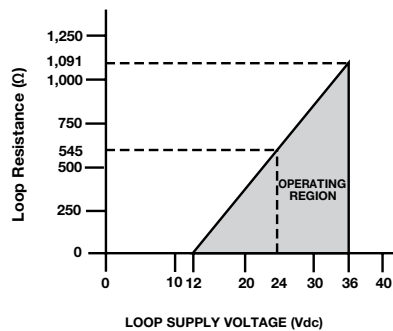
### NON-WETTED MATERIAL

Housing: Stainless Steel/Lexan

### APPROVALS:

\*Only units with 4-20 mA output and a housing (MB1 = no housing) are available with the 'XCE' option and are CE and ROHS compliant.  
 CE Marked: Per DoC

### LOAD LIMITATIONS 4-20 mA OUTPUT



$$V_{min} = 12V + [0.022A \cdot (R_L)]$$

\*includes a 10% safety factor  
 $R_L = R_s + R_w$   
 $R_L$  = Loop Resistance (ohms)  
 $R_s$  = Sense Resistance (ohms)  
 $R_w$  = Wire Resistance (ohms)

### TruAccuracy

### What Does It Mean?

Ashcroft's TruAccuracy™ specification is exclusively based on terminal point methodology instead of statistically derived schemes like 'best fit straight line'.

TruAccuracy™ means the Ashcroft RXLdp has ±1.00% of span accuracy out of the box. Zero and span setting errors are already included in the ±1.00% of span accuracy spec.

The RXLdp is ready to be installed with no additional calibration adjustments required.

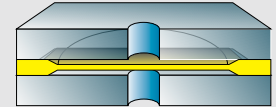
A unit from another manufacturer advertised as ±1.00% best fit straight line may actually be a ±2.00% to ±3.00% device. Using best fit straight line method, the accuracy spec does not include zero and span setting errors, which can be as much as ±1.00% each.

### Ashcroft® Si-Glas™ Sensor Technology

Featuring a highly reliable variable capacitance sensor using the patented Ashcroft® Si-Glas™ sensor. This ultra-thin single crystal diaphragm provides inherent sensor repeatability and stability.

### Sensor Cross Section

The silicon diaphragm sensor has no glues or other organics to contribute to drift or mechanical degradation over time.



# Data Sheet

## RXLdp Ultra-Low Differential Pressure Transmitter

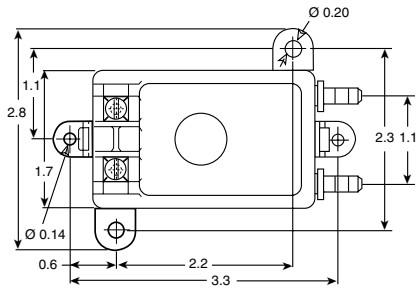
ORDERING CODE	Example:	RX7	F01	42	ST	2IW	-XNH
<b>Model</b>							
RX7 - RXLdp Series, ±1.00% of span, ±0.025% of span T.C. /°F		RX7					
<b>Pressure Connection</b>							
F01 - 1/8 NPT Female			F01				
MB1 - Board level/No case							
MB2 - 1/4 Barbed Male							
MB8 - 1/8 Barbed Male							
<b>Output Signal</b>							
05 - 0-5 Vdc							
10 - 0-10 Vdc							
15 - 1-5 Vdc							
16 - 1-6 Vdc							
42 - 4-20 mA				42			
<b>Electrical Termination</b>							
ST - Screw Terminal					ST		
<b>Pressure Range</b>							
<b>Unidirectional Ranges (differential)</b>							
P1IW - 0.10 IWD							
P25IW - 0.25 IWD							
P5IW - 0.50 IWD							
P75IW - 0.75 IWD							
1IW - 1.00 IWD							
1P5IW - 1.50 IWD							
2IW - 2.00 IWD						2IW	
2P5IW - 2.50 IWD							
3IW - 3.00 IWD							
5IW - 5.00 IWD							
10IW - 10.00 IWD							
25IW - 25.00 IWD							
50IW - 50.00 IWD							
<b>Bi-directional Ranges</b>							
P05IWL - ±0.05 IWD							
P1IWL - ±0.10 IWD							
P25IWL - ±0.25 IWD							
P5IWL - ±0.50 IWD							
1IWL - ±1.00 IWD							
2IWL - ± 2.00 IWD							
2P5IWL - ±2.50 IWD							
5IWL - ±5.00 IWD							
10IWL - ±10.00 IWD							
25IWL - ±25.00 IWD							
50IWL - ±50.00 IWD							
<b>Option (if indicating an option(s) must include an "X")</b>							
CE - CE Approval (with 4-20 mA only)							-X__
CL - Custom pressure range calibration							
NH - Stainless steel tag							NH
NN - Paper tag							
RH - 9 pt. NIST Traceable calibration report							
RK - Back plate adapter							
V9 - Vertical Calibration							
X1 - Fast response time							
X2 - Slow response time							

**RXLdp Ultra-Low Differential Pressure Transmitter**

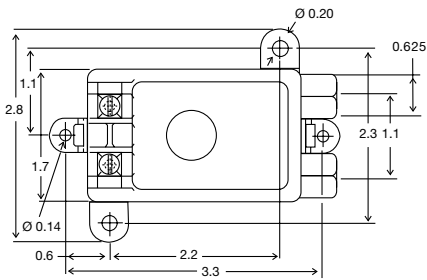
**DIMENSIONS**

For reference only, consult Ashcroft for specific dimensional drawings

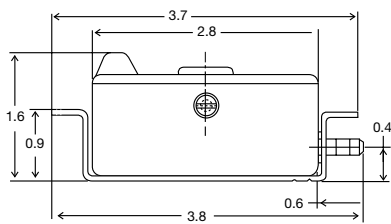
**MB2 or MB8 Connection**



**F01 Connection**



**MB2 or MB8 Connection**



**MB1 Board Level**

