

# Model 425 Wing Union Pressure Transmitter



- Long life X-750 material
- Rugged, robust design
- 1502 51 mm [2 in] wing union size
- RFI/EMI protected
- Intrinsically safe
- Quick delivery service
- 0.2 % accuracy
- Optional on-board temperature sensor
- Intrinsically safe available (2N option only)
- CE approved

## Notes

1. Accuracies stated are expected for best fit straight line for all errors including linearity, hysteresis and non-repeatability thru zero.
2. Availability varies with range.
3. Working pressure and approval limited to 15000 psi. Amplifier will allow overpressure readings to 20000 psi.

**How to order:** (Quick-ship range/option combinations available. See Web site.)  
Combine the order code, range code, and options code. For example:

**BP425**    **DV**    **45c**  
Order code    Range code    Options code

## Order codes

BP425    Model 425 wing union pressure transmitter

## Range codes

Range code	Range
DR	0 psi to 5000 psi
DS	0 psi to 6000 psi
DV	0 psi to 10000 psi
EJ	0 psi to 15000 psi
EL	0 psi to 20000 psi <sup>3</sup>

## Specifications

### Performance

Pressure ranges    0 psi to 5000 psi; 0 psi to 6000 psi; 0 psi to 10000 psi;  
0 psi to 15000 psi; 0 psi to 20000 psi<sup>3</sup>

Accuracy<sup>1</sup>    ±0.2 % best fit straight line

Calibration    5-point calibration: 0 %, 50 %, and 100 % of full scale

Output    4 mA to 20 mA, two-wire

Resolution    Infinite

### Environmental

Temperature, operating    -43 °C to 93 °C [-45 °F to 200 °F]

Temperature, compensating    -34 °C to 82 °C [-30 °F to 180 °F]

Temperature effect, zero    0.018 % full scale/°C [0.01 % full scale/°F]

Temperature effect, span    0.018 % reading/°C [0.01 % reading/°F]

Temperature effect, sealing    Hermetically sealed IP68/NEMA 6P

### Electrical

Supply voltage    9 Vdc to 28 Vdc

Insulation resistance    ≥100 MΩ @ 50 Vdc

Max. loop resistance    950 ohm @ 28 V decreasing linearly to 0 ohm @ 9 V

Circuit protection    Reverse polarity protection of supply leads

RFI/EMI protection    Noise immunity from 5000 Hz to 1 GHz

Frequency response    Customer specified and factory installed filter for frequency response of min. 10 Hz to max. of 2500 Hz

Zero and span adjustment    Field adjustable by removing connector

Shunt calibration data    Included

Electrical termination (std)    MS-3102E-14S-2P, 4-pin stainless steel hermetic equal

### Mechanical

Media    Corrosive and abrasive service, Inconel X-750

Overload, safe    150 % rated full scale pressure or limit of wing union 1502 fitting

Overload, burst    250 % rated pressure or limit of wing union 1502 fitting

Pressure port    1502 wing union, 51 mm [2 in] pipe, male sub end

Wetted parts material    Inconel X-750

Weight    2722 g [6 lb]

Case material    Inconel X-750 (labels are welded stainless steel with embossed characters)

**Option codes**

	<b>Many range/option combinations are available in our quick-ship and fast-track manufacture programs. Please see <a href="http://sensing.honeywell.com/TMsensor-ship">http://sensing.honeywell.com/TMsensor-ship</a> for updated listings.</b>
<b>Pressure ranges<sup>3</sup></b>	0 psi to 5000 psi; 0 psi to 6000 psi; 0 psi to 10000 psi; 0 psi to 15000 psi; 0 psi to 20000 psi
<b>Temperature compensation</b>	-34 °C to 82 °C [-30 °F to 180 °F]
<b>Internal amplifiers</b>	<b>2n(2N)</b> . 4 mA to 20 mA, two-wire output; intrinsically safe
<b>Electrical termination</b>	MS-3102E-14S-2P, 4 pin stainless steel hermetic <b>6a.</b> Bendix PTIH-10-6P (or equivalent) 6 pin (max. 121 °C [250 °F])
<b>Shunt calibration</b>	<b>3d.</b> Remote buffered shunt calibration
<b>Special calibration<sup>2</sup></b>	<b>9a.</b> 10 point (5 up/5 down) 20 % increments @ 21 °C [70 °F] <b>9b.</b> 20 point (10 up/10 down) 10 % increments @ 21 °C [70 °F]
<b>Wetted diaphragm</b>	<b>10e.</b> Inconel X-750
<b>Zero and span adjustment</b>	<b>14b.</b> Top access to pots
<b>Temperature sensing options</b>	<b>45c.</b> RTD output direct to connector. Gives temperature as a resistance reading. Intrinsically safe <b>45d.</b> RTD with temperature as a 4 mA to 20 mA output. Not intrinsically safe.

**Internal amplifiers**

Amplifier specifications	Intrinsically safe amp: Option 2n(2N)***
<b>Output signal</b>	4 mA to 20 mA
<b>Input power (voltage)</b>	9 Vdc to 28 Vdc
<b>Input power (current)</b>	4 mA to 24 mA
<b>Frequency response (amp)</b>	2500 Hz
<b>Power supply rejection</b>	60 db
<b>Operating temperature</b>	-43 °C to 93 °C [-45 °F to 200 °F]
<b>Reverse voltage protection</b>	Yes
<b>Short circuit protection</b>	Yes
<b>Wiring code: connector (std)</b>	A No connection B (+) Output C (+) Supply D Case ground

\*\*\* See Honeywell's Web site for the most up-to-date information regarding intrinsically safe approvals, ref. #008-0547-00.

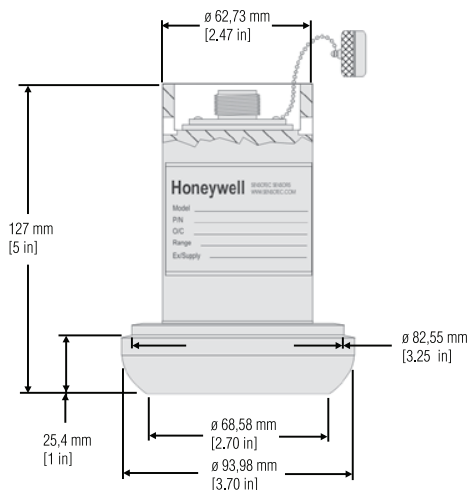
**Typical system diagram**

See <http://sensing.honeywell.com/TMsensor-help> for system information.

**Wiring code**

	Amp (NS), 3-cond, 4 pin, ground
A	No connection
B	(+) Output
C	(+) Supply
D	Case ground

**Mounting dimensions and characteristics**



For reference only



**Special requirements (consult factory)**

Have a special requirement? New case pressure, different cable lengths, electrical connectors, or materials? Consult our factory by calling +1 614-850-5000 (800-848-6564). Customization is key to our test and measurement business. Special outputs, wiring codes, and calibrations are all standard to us.

Specifications subject to change.

**Questions?** Contact us at either 1-800-848-6564, +1 614-850-5000, or our Web site for customized options: (<http://sensing.honeywell.com/TMsensor-help>).