

# 6:1 TURN-DOWN INDUSTRIAL DIFFERENTIAL PRESSURE TRANSMITTER

**PX771A Series**  
4 to 20 mA Output  
0-17 inH<sub>2</sub>O to 0-300 psid

**\$1005**  
All Models



PX771A-025DI, \$1005, shown smaller than actual size.



PX771A transmitter, shown with iSeries strain and process meters and controllers featured on page D-7, which start at \$150 and are shown smaller than actual size.

- ✓ 2-Year Warranty
- ✓ 0.15% FS Accuracy
- ✓ Explosion-Proof Electrical Housing
- ✓ Stainless Steel Wetted Parts

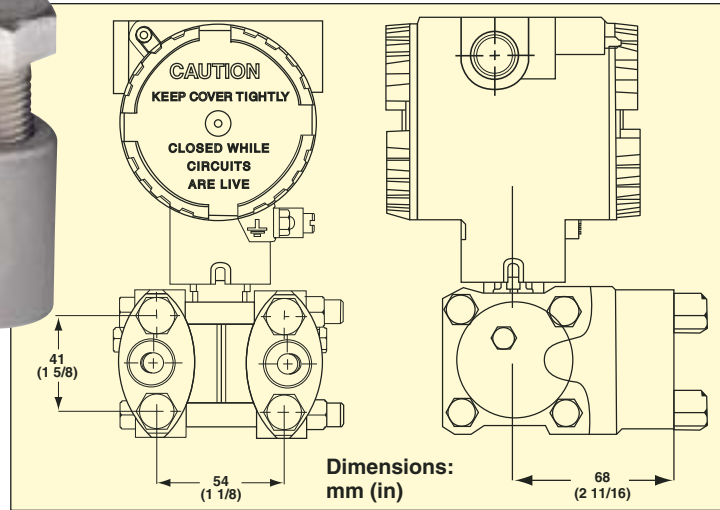
- ✓ Process Wetted Parts Meet NACE Specification MR0175-91
- ✓ High Common-Mode Pressure Rejection
- ✓ 6:1 Turn-Down Capability
- ✓ ±600% Zero Suppression or Elevation
- ✓ NEMA 4X (IP66) Housing
- ✓ 4 to 20 mA or 1 to 5 Vdc Output

The OMEGA® PX771A low-power pressure transmitter is a compact, high-performance unit, designed to measure differential pressure and transmit a 4 to 20 mA signal. It has an adjustable range with a turn-down ratio of 6:1, and it comes factory-calibrated at the highest span. Ranges from 17 inH<sub>2</sub>O to 300 psid are available. Zero and span adjustments are accessed inside the electronic housing. The zero point can be elevated and suppressed up to ±600%. This transducer has an internal silicon diaphragm into which piezoresistive strain gages are diffused, then interconnected to form a pressure sensitive Wheatstone bridge.

# FOR GAGE, DIFFERENTIAL, AND VACUUM MEASUREMENTS



Optional PX771-AD,  
1/2 NPT adaptors,  
\$90 each.  
Shown smaller  
than actual size.



## SPECIFICATIONS

**Service:** Liquid, gas or vapor

**Excitation:**

24 Vdc, 7 to 36 Vdc mA output,  
6 to 42 Vdc @ 1.6 mA voltage output

**Output:** 4 to 20 mA (2 wire) or 1 to 5 Vdc  
(3 wire) jumper selectable

**Max Loop Resistance:**

(Supply voltage – 7) x 50 Ω

**Accuracy:** ±0.1% of URL

(upper range limit, includes linearity,  
hysteresis and repeatability)

**Stability:** ±0.25% of URL

(upper range limit) 1 year

**Span Adjust:** 16 to 100% URL

(DIP switches and pot)

**Zero Adjust:** -600 to 600% LRL

(lower range limit)

**Operating Temperature:**

**Process:** -40 to 104°C (-40 to 220°F)

**Electrical:** -32 to 85°C (-25 to 185°F)

**Ambient Total Thermal Effects:**

0.010% URL/°F for -25 to 75°F  
0.015% URL/°F for 75 to 185°F  
(0.020% URL/°F for 100 inH<sub>2</sub>O)

**Response Time:** 63% response

1 ms or 50 ms with damping

**Static Pressure Effect:**

+0.05% of URL <100 psi ranges  
+0.1% of URL for 100 and 300 psi ranges

**EMI Effect:** ±1% URL @ 10 V/m from

20 to 500 MHz. Meets /SAMA  
PMC-33-1C with cover in place and  
electrical wiring in grounded conduit.

**Approvals:** UL/CUL

Hazardous Location: I/II, C, D

Non-incendive: I/II/A, B, C, D

**Wetted Parts:** 316 SS

**Process Connection:** 1/4 NPT internal,

1/2 NPT with optional adaptors

**Fill Fluid:** DC 200 silicone

**Housing:** Low copper aluminum,  
epoxy coated, NEMA 4X (IP66)

**Electrical Connection:** 1/2 NPTF  
conduit, with internal screw terminals

**Weight:** 2.9 kg (6.4 lb)

**Compatible Meters:**

DP41-E, DP25-E,  
DP24-E, DP460,  
DP3002-E and others  
(see section D for  
complete selection)



■ MOST POPULAR MODELS HIGHLIGHTED!

## To Order (Specify Model Number)

RANGE	MODEL NO.	PRICE	MAX WORK PRES	COMPATIBLE METERS*
0-17 to 0-100 inH <sub>2</sub> O	PX771A-100WCDI	\$1005	2000 psi	iSeries, DP25B-E, DP41-E, DP460-E
0-50 to 0-300 inH <sub>2</sub> O	PX771A-300WCDI	1005	2000 psi	iSeries, DP25B-E, DP41-E, DP460-E
0-4.2 to 0-25 psi	PX771A-025DI	1005	2000 psi	iSeries, DP25B-E, DP41-E, DP460-E
0-17 to 0-100 psi	PX771A-100DI	1005	2000 psi	iSeries, DP25B-E, DP41-E, DP460-E
0-50 to 0-300 psi	PX771A-300DI	1005	2000 psi	iSeries, DP25B-E, DP41-E, DP460-E

## OPTIONS AND ACCESSORIES

-SUFFIX or MODEL NO.	PRICE	DESCRIPTION
-M3	\$175	3 1/2 digit LCD local indicator (FM approval not available with option)
PX771-AD	90	1 pair of stainless steel 1/2 NPT adaptors
PX771A-MB-KIT	65	2" pipe mounting bracket (order separately), flange mount
PX771A-MB-KIT-N	65	Neck mounting bracket kit (order separately)
OP-17	15	Reference Book: Measure for Measure

\* See section D for compatible meters.

Comes with complete operator's manual.

**Ordering Examples:** PX771A-300WCDI, industrial transmitter with 0-50 to 0-300 inH<sub>2</sub>O range, \$1005. PX771A-100WCDI, industrial transmitter with 0-17 to 0-100 inH<sub>2</sub>O range, \$1005.



#### UNITED STATES

[www.omega.com](http://www.omega.com)  
1-800-TC-OMEGA  
Stamford, CT.

#### CANADA

[www.omega.ca](http://www.omega.ca)  
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1-800-TC-OMEGA

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0800-8266342

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#### CZECH REPUBLIC

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