

Explosion Proof Transducer (Amplified)

Series 423X, 425X, 426X

Features

- ▶ Diffused silicon sensor for high accuracy
- ▶ Explosion proof enclosure for hazardous locations
- ▶ Superior EMI, ESD and RFI protection
- ▶ Rugged stainless steel construction
- ▶ NEMA 4X, 7 and 9
- ▶ ATEX/IECEx certification for 425X Series only
- ▶ Modular concept
- ▶ Built-in high pressure snubber (2000 psi and above)
- ▶ cULus, CE approved

Applications

- ▶ Oil & gas pipelines
- ▶ Oil patch
- ▶ Petrochemical plants
- ▶ Refineries
- ▶ Pulp and paper mills
- ▶ Coal and oil fired power plants
- ▶ Cement plants
- ▶ Gas transfers for fuel systems
- ▶ Gas panels
- ▶ Gas mixing systems



General Specifications*


Accuracy (LH & R):	±0.25% FSO at 75°F (±0.5% for vacuum only [-23]) typical
Long Term Stability:	±0.5% FSO of calibration curve
Typical Life Cycle:	100 million cycles
Proof Pressure:	2 times rated pressure or 13,000 psi max. (896 bar), whichever is less
Input:	
423X:	Excitation voltage: 11 to 30 VDC
426X:	Excitation voltage: 14 to 30 VDC
425X:	Excitation voltage: 12 to 28 VDC
Supply Current:	3.0 mA maximum (no load)
Output:	
423X:	Output: 0.5 to 5.5 VDC Full scale output: 5.0 VDC ± 1% Zero output: 0.5 VDC ± 2%
426X:	Output: 1 to 11 VDC Full scale output: 10 VDC ± 1% Zero output: 1.0 VDC ± 2%
425X:	Output: 4 to 20 mA Full scale output: 16 mA ± 1% Zero output: 4 mA ± 2%
Wetted Parts:	17-4 PH (fitting)** & 300 series stainless steel (sensor)

* See product configurator for additional options.

** Consult factory for 316SS option

MILLIVOLT SERIES - 423X & 426X	
Cable	Signal
Red	+ Excitation
White	+ Output
Black	Common
Bare	Drain
MILLIAMPER SERIES - 425X	
Red	+ Excitation
Black	- Excitation
Bare	Drain

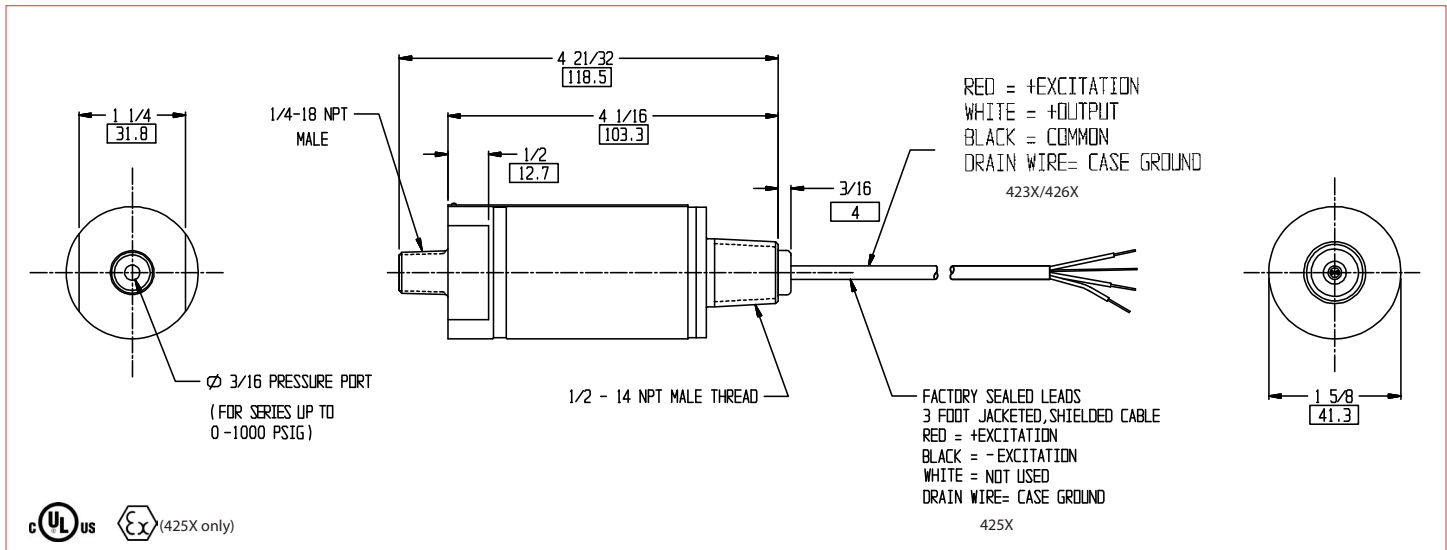
Wiring Code

Enclosure:	NEMA 4X, 300 series stainless steel
Pressure Connection:	1/4"-18 NPT male
Electrical Connection:	3 conductor for voltage series and 2 conductor for current series, 24 awg, PVC jacketed, shielded cable, 3 ft. (1 m) long with integral strain relief and case ground (standard).
Temperature Ranges:	
Operating:	-40° to 185°F (-40° to 85°C)
Compensated:	0° to 160°F (-18° to 71°C)
Storage:	-40° to 185°F (-40° to 85°C)
Temperature Shift:	
Zero & Span:	0.0125% per °F over compensated range reference
Vibration:	15 g's, 10-2000 Hz, MIL-STD 202
Shock:	50 g's, 11 ms, MIL-STD 202 Method 213, Cond. G.
Approvals:	
All:	cULus approved as telemetering equipment for use in hazardous locations (UL File E146589, WYMW, WYMW7) as follows: Class I, Div. 1, Groups A, B, C & D Class II, Groups E, F & G.
425X only:	ATEX/IECEx Certification: CE 0081  2 G D, Ex d IIC 91°C (T5) Gb, Ex tb IIIC T100°C Db IP66, -40°C ≤ Tamb ≤ 85°C, DEMKO 04 ATEX 0334369, IECEx UL 13.0036X
Weight:	
423X & 426X:	7.4 oz. (221 grams) to 1000 psi 9.9 oz. (281 grams) 2,000 psi and higher
425X:	7.4 oz. (210 grams) to 1000 psi 9.4 oz. (266 grams) 2,000 psi and higher
Warranty:	1 year warranty

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Technical Drawings



Product Configurator

Example: 425X -04 -A

Base Model

423X	0.5 - 5.5 VDC analog output (NOT ATEX APPROVED)
425X	4 - 20 mA analog output
426X	1 - 11 VDC analog output (NOT ATEX APPROVED)

Pressure Range

-23	0 - 29.9" of Hg (Vacuum)
-25	0 - 5 psi (0 - 0.35 bar)
-01 ¹	0 - 15 psi (0 - 1 bar)
-21 ¹	0 - 30 psi (0 - 2.1 bar)
-03 ¹	0 - 50 psi (0 - 3.5 bar)
-22 ¹	0 - 60 psi (0 - 4.1 bar)
-04 ¹	0 - 100 psi (0 - 6.9 bar)
-05 ¹	0 - 150 psi (0 - 10.3 bar)
-06 ¹	0 - 200 psi (0 - 13.8 bar)
-07 ¹	0 - 300 psi (0 - 20.7 bar)
-08	0 - 500 psi (0 - 34.5 bar)
-19	0 - 600 psi (0 - 41 bar)
-10	0 - 1,000 psi (0 - 69 bar)
-11	0 - 1,500 psi (0 - 104 bar)
-12 ²	0 - 2,000 psi (0 - 138 bar)
-13 ²	0 - 3,000 psi (0 - 207 bar)
-14 ²	0 - 4,000 psi (0 - 276 bar)
-15 ²	0 - 5,000 psi (0 - 345 bar)
-16 ²	0 - 6,000 psi (0 - 414 bar)
-17 ²	0 - 7,500 psi (0 - 517 bar)
-18 ²	0 - 10,000 psi (0 - 689 bar)

Blank	Gauge pressure (standard)
-A	Absolute pressure range (<300psi)

Options

-Z10	1 to 5V output (available only on 423X models)
-Z11	1 to 6V output (available only on 423X models)
-Z12	0.5 to 4.5V output (available only on 423X models)
-Z15	Calibrated in "bar" unit
-Z16	0.2 to 10V output (available only on 426X models)
-Z17 ³	For high pressure models with larger orifice
-Z18	Z17 and Z10 options combined
-ZXXY ⁴	Special pressure ranges
-WXXX	Additional length of free leads (in inches)

Process Connection

Blank	1/4-18 NPT male (standard)
-P1	7/16-20 UNF-2B female (SAE#4)
-P3	7/16-20 UNF-2A male (SAE#4)
-P4	1/2" NPT male
-P5	1/2" NPT female
-P6	1/4" NPT female

Notes

- 1: Available in absolute range
- 2: Built-in surge protector
- 3: For pressure >1kpsi with a 3/16 diameter pressure port orifice, no surge protector will be offered.
- 4: Add suffix ZXXY for special pressure range calibration. XX = significant digits. Y = number of trailing zeros. Example: 130 psi calibration: add -Z131



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