

423X, 425X, 426X Transducers

Explosion Proof Transducer Series 423X, 425X, 426X

- ✦ 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



Barksdale's **420X Series Explosion Proof Transducers** prevent an explosion from occurring when operated in a Division 1 environment. Barksdale's **420X Series** transducers prevent personal injury and machinery damage by preventing the explosion the first place. Energy generated within the transducer is of such a low level that intermittently present flammable vapors will not be ignited. External zener barriers are not required in order to meet UL requirements for a non-incendive installation. The lower cost of not having to install zener barriers means that the positive aspects of intrinsically safe and explosion proof are combined in Barksdale non-incendive transducers. Three models are available: **Series 423X** (0-5V), **Series 425X** (4-20mA) and **Series 426X** (0-10V).

423X, 425X, 426X Transducers

Play It Safe with Barksdale Transducers

Barksdale is ready to help keep your personnel and equipment safe with a complete line of transducers and transmitters especially designed to meet pressure sensing requirements in harsh environments or hazardous locations. We have the ideal product to meet your hazardous location requirements: **420 Series Explosion Proof Transducers**, **430 Series Non-Incendive Transducers** and **440 Series Intrinsically Safe Transducers**.

420X Series Transducers:

- Explosion Proof
- NEMA 4X for environmental protection
- NEMA 7 & 9 for explosion proof protection
- No zener barrier means simpler installation and lower cost
- UL & C-UL Listed

423X, 425X, 426X Transducers and Explosion Proof Transducers

come standard with:

- 300-Series Stainless Steel Housing
- Nema 4X Enclosure Rating
- Built-in Pressure Snubber
- UL, C-UL and CE Listed

Typical Applications

Explosion proof, intrinsically safe and non-incendive transducers are needed in hazardous locations where flammable gases, vapors, liquids or dust particles are present. The following are examples of typical applications where these products may be used:



- 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

Need Something Special?

Our hazardous location transducer and transmitters can be custom designed to meet your special requirements. Call us. We're just a phone call away. 1-800-835-1060.

423X, 425X, 426X Transducers

Performance Characteristics

Accuracy (LH & R) ±0.25% FSO
 Repeatability ±0.15%
 Typical Life 100 million cycles
 Proof Pressure 2X rated pressure or 13,000 PSI (884 bar), whichever is less
 Warranty 3 years

Excitation Voltage

423X 9 to 30 VDC
 425X 12 to 28 VDC (See sales drawing)
 426X 14 to 30 VDC

Output Signal

423X 0.5 to 5.5 VDC (standard)
 425X 4-20 mA
 426X 1 to 11 VDC (standard)

Physical

Wetted Material 300 & 17-4 PH Series Stainless Steel
 Enclosure NEMA 4X, 300 Series Stainless Steel
 Pressure Connection 1/4-18 NPT male (standard)
 Electrical Connection 1/2-14 NPT male conduit (w/4 conductor, 22 AWG, 3 foot, PVC jacketed & shielded cable)
 Pressure Snubber 2000 PSI and above (standard)

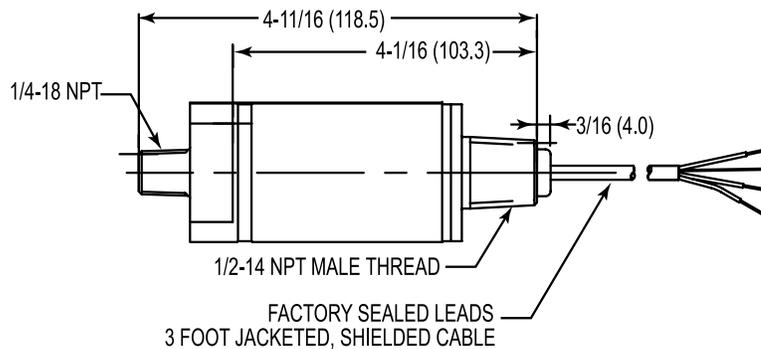
Environmental

Operating Temp -40° to +185°F (-40° to +85°C)
 Compensated Temp
 423X +30° to +130°F (-1° to +54°C)
 425X 0° to +160°F (-18° to +71°C)
 426X +30° to +130°F (-1° to +54°C)
 Temperature Shift (Zero and Span) ±0.0125% per °F over compensated temperature range

Standard Options

A - Absolute Pressure
 P4 - 1/2-14 NPT male pressure connection
 P5 - 1/2-14 NPT female pressure connection
 P6 - 1/4-18 NPT female pressure connection
 WXX - Non-standard cable length (XX indicates length in inches)
 ZXXYP - Non-standard calibrated pressure range (XX = Significant Digits, Y = Number of Zeroes)

Wiring Code			
Millivolt - Series 425X			
A	1	Red	+ Excitation
B	2	Black	- Excitation
D	4	Bare	Drain



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Explosion Proof Transducer

Series 423X, 425X, 426X

Base Model	423X	0.5 - 5.5 VDC Analog Output
	425X	4 - 20 mA Analog Output
	426X	1 - 11 VDC Analog Output
Pressure Range	-23	0 - 29.9 In. Hg Vacuum
	-25	0 - 5 PSI (0 - .34 bar)
	-01	0 - 15 PSI (0 - 1 bar)
	-21	0 - 30 PSI (0 - 2 bar)
	-22	0 - 60 PSI (0 - 4 bar)
	-03	0 - 50 PSI (0 - 3.4 bar)
	-04	0 - 100 PSI (0 - 6.8 bar)
	-05	0 - 150 PSI (0 - 10.2 bar)
	-06	0 - 200 PSI (0 - 13.6 bar)
	-07	0 - 300 PSI (0 - 20.4 bar)
	-08	0 - 500 PSI (0 - 34 bar)
	-10	0 - 1000 PSI (0 - 68 bar)
	-12	0 - 2000 PSI (0 - 136 bar)
	-13	0 - 3000 PSI (0 - 204 bar)
	-14	0 - 4000 PSI (0 - 272 bar)
	-15	0 - 5000 PSI (0 - 340 bar)
	-16	0 - 6000 PSI (0 - 408 bar)
	-17	0 - 7500 PSI (0 - 510 bar)
	-18	0 - 10,000 PSI (0 - 680 bar)
Options	-A	Absolute pressure range - OPTIONAL (Max. pressure 300 PSI)
	-Z15	Calibration in Bar
	-WXXX	Extra cable length - XX = length in inches
	-ZXXY	Non-standard pressure range; See note 1
	-P1	7/16-20 UNF-2B female pressure connection
	-P3	7/16-20 UNF-2B male pressure connection
	-P4	1/2" NPT male pressure connection
	-P5	1/2" NPT female pressure connection
	-P6	1/4" NPT female pressure connection
	-P7	1/8"-27 NPT male pressure connection
Example:	425X-04	100 psi transducer with 4-20 mA output and 1 meter shielded cable

Note 1: Non-standard pressure range option: Add suffix -ZXXY where XX = significant digits and Y = number of trailing zeros. Example: 130 psi calibration: add -Z131

Barksdale

CONTROL PRODUCTS

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