Explosion Proof Diaphragm Switch

D1X, D2X Series

Features

- ► Hermetically sealed
- Explosion proof housing for hazardous location
- ► Tamper proof setpoint adjustment
- ldeal for pressure or vacuum

Applications

- Pump & compressor monitoring
- Hydraulic power units
- Oil & gas
- Food & beverage
- Utility & power generation
- Mining

General Specifications*

A	0.50/ -f.th llit-li-l			
Accuracy:	± 0.5% of the adjustable range			
Switch: Type: Rating:	Single pole double throw (SPDT) Snap Action; single circuit 10 amps @ 125/250 VAC; 3 amps @ 480 VAC (Class A or H limit switch). Consult sales drawing for ratings of optional limit switches.			
Wetted Parts: Process Fitting: Diaphragm:	303 stainless steel 17-7 PH stainless steel			
Enclosure:	Die-cast aluminum, anodized and painted			
Electrical Connection:	Screw terminals on covered terminal strip via 1/2" NPT (D1X) and 3/4" NPT (D2X) conduit fittings.			
Enclosure Ratings:	NEMA 4, 7, 9			
Pressure Connection:	1/4" NPT Female			
Approvals: UL (standard):	All models are UL approved for use in hazardous locations Class I, Groups B, C, & D; Class II, Groups E, F, & G. UL File No. E37043			

^{*} See product configurator for additional options.

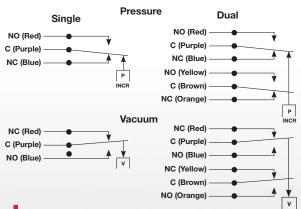
Wiring Code

Lead	Circuit #1		Circu	ıit #2
	Pressure	Vacuum	Pressure	Vacuum
Normally Closed Blue		Red	Orange	Yellow
Common	Purple	Purple	Brown	Brown
Normally Open	Red	Blue	Yellow	Orange



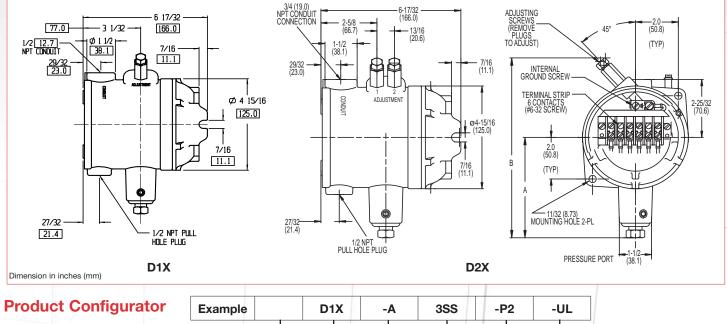
Approvals (cont.): CSA (standard):	All models are CSA approved for use in hazardous locations Class I, Groups B, C & D; Class II, Groups E, F, & G. CSA File No. LR22354			
ATEX (optional):	Ex models are ATEX certified per ISSeP 03 ATEX 122X & marked as follows: CE 0081 II2 GD EEx d IITC, T6 T85°C			
Temperature Range:	050 1- 140505 (540 1- 17400)			
Operating:	-65° to +165°F (-54° to +74°C)			
Storage:	-65° to +200°F (-54° to 93°C)			
Adjustment Instructions: Pressure:	Turn adjustment screw counterclockwise to raise actuation point.			
Vacuum:	Turn adjustment screw clockwise to increase setpoint (higher vacuum).			
Options:	- Cleaned for oxygen service - Factory pre-set			
Shipping Weight:	7.0 lbs. approximate			

Wiring Diagram





Technical Drawing



	100	1 1	
Hermetically sealed limit switch option - Class I,			
Division II (requires AA, CC or HH limit switch)			

Base Configuration

D1X	Single setpoint housed version
D2X	Single setpoint housed version

Limit Switch¹

-A	VAC; (standard for pressure range 3SS, 80SS or 150SS)
-B	10 amps @ 125/250/480 VAC; 2 amps @ 600 VAC; 0.05 amps @ 125 VDC; 0.03 amps @ 250 VDC
-H	10 amps @ 125/250 VAC; 3 amps @ 480 VAC; (standard for pressure range 18SS)
-J	10 amps @ 125/250 VAC; 3 amps @ 480 VAC; (comes with an elastomer boot)
-M	10 amps @ 125/250 VAC; 3 amps @ 480 VAC; 0.5 amps @ 125 VDC; 0.25 amps @ 250 VDC
-GH	1 amp @ 125 VAC; 1 amp @ 24 VDC with Gold Contacts
-AA	Hermetically sealed; 4 amps @ 125/250

10 amps @ 125/250 VAC; 3 amps @ 480

Options

-UL	UL & CSA Approval
-EX	ATEX Certified, -EX in place o UL for ATEX only
-Z1	Oxygen cleaned (not available w/ UL)

Factory pre-set (consult factory)

Draggura Connection

_	Pressure Connection					
	Blank	Std 1/4" NPT female				
	ыапк	pressure connection				
	-P2	1/2" NPT female pressure				
	-62	connection				

Adjustable Pressure Range

Adjustable Range (PRESSURE)					Approx. Deadband ²	Proof	
		Decreasing - psi (bar)		Increasing - psi (bar)		(Actuation Value)	Pressure
		Min	Max	Min	Max	psi-(bar)	psi (bar)
	3SS	.03 (.00)	2.85 (.2)	.18 (.01)	3 (.2)	.0715 (001)	10 (.7)
	18SS	.4 (.03)	17.74 (1.2)	.66 (.04)	18 (1.2)	.1226 (.0102)	60 (4.1)
	80SS	.5 (.03)	76.6 (5.2)	3.9 (.3)	80 (5.4)	1.6 - 3.4 (.12)	160 (10.9)
	150SS	1.5 (.10)	144 (9.8)	7.5 (.5)	150 (10.2)	2.3 - 6.0 (.24)	300 (20.4)

	Adjustable Range (VACUUM)				Approx. Deadband ²	Proof	
	Decreasing - In. Hg		Increasing - In. Hg		(Actuation Value)	Pressure	
	Min	Max	Min	Max	In. Hg	In. Hg	
3SS	0.06	5.72	0.34	6	.1428	6	
18SS	0.8	29.2	1.6	30	.48	30	

NOTES:

-CC

-HH

VAC (not available on vacuum models)
Hermetically sealed; 10 amps @ 125/250

VAC (not available on vacuum models)
Hermetically sealed; 5 amps @ 125/250

VAC (not available on vacuum models)

¹ Consult Supplemental Guide for specific deadband values

² Deadband values indicated when used with the "standard" limit switch