Explosion Proof Diaphragm Switch

D1X, D2X Series

Features

- ▶ Hermetically sealed
- Explosion proof housing for hazardous location
- Tamper proof setpoint adjustment
- Ideal for pressure or vacuum
- UL, CSA, ATEX approved
- ► NEMA 4, 7, 9 & IP66

Applications

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

General Specifications*

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:	303 stainless steel				
Diaphragm:	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 connection.				
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.

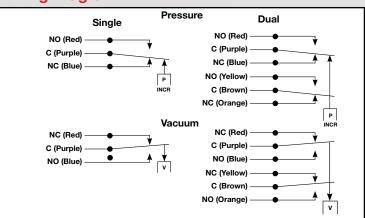
Wiring Code

Lead	Circuit #1		Circu	uit #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 marked as follows: C € 0081, ISSeP 08 ATEX024X (L) II 2G D, Ex d IIC T6 Ex tD A21 IP66 T80°C -40°C ≤ Tamb ≤ +75°C
Temperature Range: Operating:	-40° to +165°F (-40° 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:	Factory pre-set
Shipping Weight:	Single - approximate 5.0 lbs. Double - approximate 5.5

Wiring Diagram

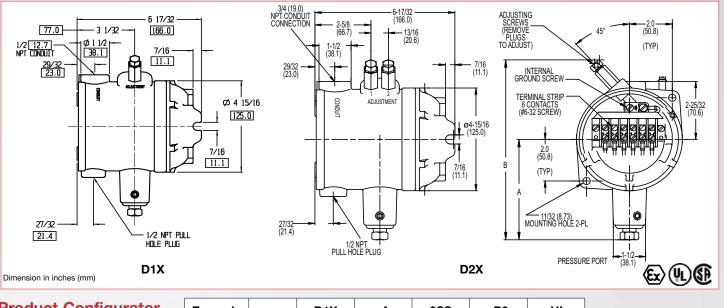




Explosion Proof Diaphragm Switch

D1X, D2X Series





Product Configurator Example D1X -A 3SS -P2 -UL Hermetically sealed limit switch option - Class I, Division II (requires AA, CC or HH limit switch) D1X -UL UL 8

D1X	Single setpoint housed versio
D2X	Dual setpoint housed version

Limit Switch¹

-A	10 amps @ 125/250 VAC; 3 amps @ 480 VAC; (standard for pressure range 3SS, 80SS or 150SS)
-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 VAC (not available on vacuum models)

			-UL	UL & CSA Approval
			-EX	ATEX Certified, -EX in place of UL for ATEX only
			-Sxxx	Factory pre-set (consult factory)
		_	- Pres	ssure Connection
			Blar	1/4" NPT female pressure connection (standard)
			-P2	1/2" NPT female pressure connection
Adjustable Pressure Ra	inge ——			

	Adjustable Range (PRESSURE)			Approx. Deadband ²	Proof	
	Decreasing	g - 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	
	Decreasi	ng - 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

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