

Pressure

Explosion Proof Compact Switch

Series 9671X, 9681X, 9692X

Features

- ▶ ATEX approved
- ▶ NEMA 4X, 7 & 9
- ▶ NACE compliant
- ▶ SPDT and DPDT switch
- ▶ Safe to adjust during operation
- ▶ Dia-seal/piston sensor
- ▶ Dual sealed for DIV 1 & DIV 2 applications

Applications

- ▶ BOP closing units
- ▶ Safety panels
- ▶ Pipelines
- ▶ Chemical and petrochemical plants
- ▶ Pulp and paper mills
- ▶ Pump and gas compressors
- ▶ Turbines
- ▶ Oil & gas applications



General Specifications*

Accuracy:	±2% of full scale	
Typical Life:	2.5 million cycles	
Switch:	SPDT, snap action, Class CC simulated DPDT (optional)	
Wetted Parts:	316 stainless steel	
Process Fitting:		
Seals:		Viton® Diaphragm (9671X & 9681X) Viton® O-ring and Teflon® backup ring (9692X)
Piston:		Stainless steel (on 9692X)
Enclosure:	316 stainless steel	
Electrical Connection:	1/2" NPT male conduit connection, 18 AWG, 18" (300 mm) free leads	
Electrical Rating:	11 amps @ 125/250VAC 5 amps @ 30 VDC (CC Class)	
Enclosure Ratings:	NEMA 4X, 7 & 9	

Pressure Connection:	1/4" NPT female
Approvals:	CE 0081 Ex 2 G, EEX d IIC T6, LCIE 08 ATEX 6074X UL # E37043 CSA # LR22354 UL&CSA Approved for use in hazardous locations Class I, Groups A,B,C,& D; Class II, Groups E,F,& G (Group A, UL Only)
Ambient Temperature:	-20° to +165°F (-29° to +74°C)
EMI/RFI:	EN55011
Vibration:	10g's 10-500 Hz, MIL-STD202F
Shock:	50g's, 11 mS, MIL-S-901C
Adjustment:	Internal adjustment wheel with built in set-screws (#6) ¹
Shipping Weight:	Approximately 1.85 lbs.

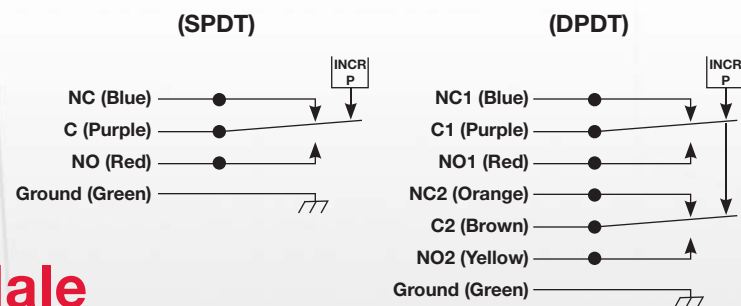
¹ Need to loosen set screw (#6) at all times when resetting adjustment.

* See product configurator for additional options.

Wiring Code

Lead	9692X/9681X (Pressure)		9671X (Vacuum)	
	Circuit #1	Circuit #2	Circuit #1	Circuit #2
Normally Open	Red	Yellow	Blue	Orange
Common	Purple	Brown	Purple	Brown
Normally Closed	Blue	Orange	Red	Yellow
Ground	Green		Green	

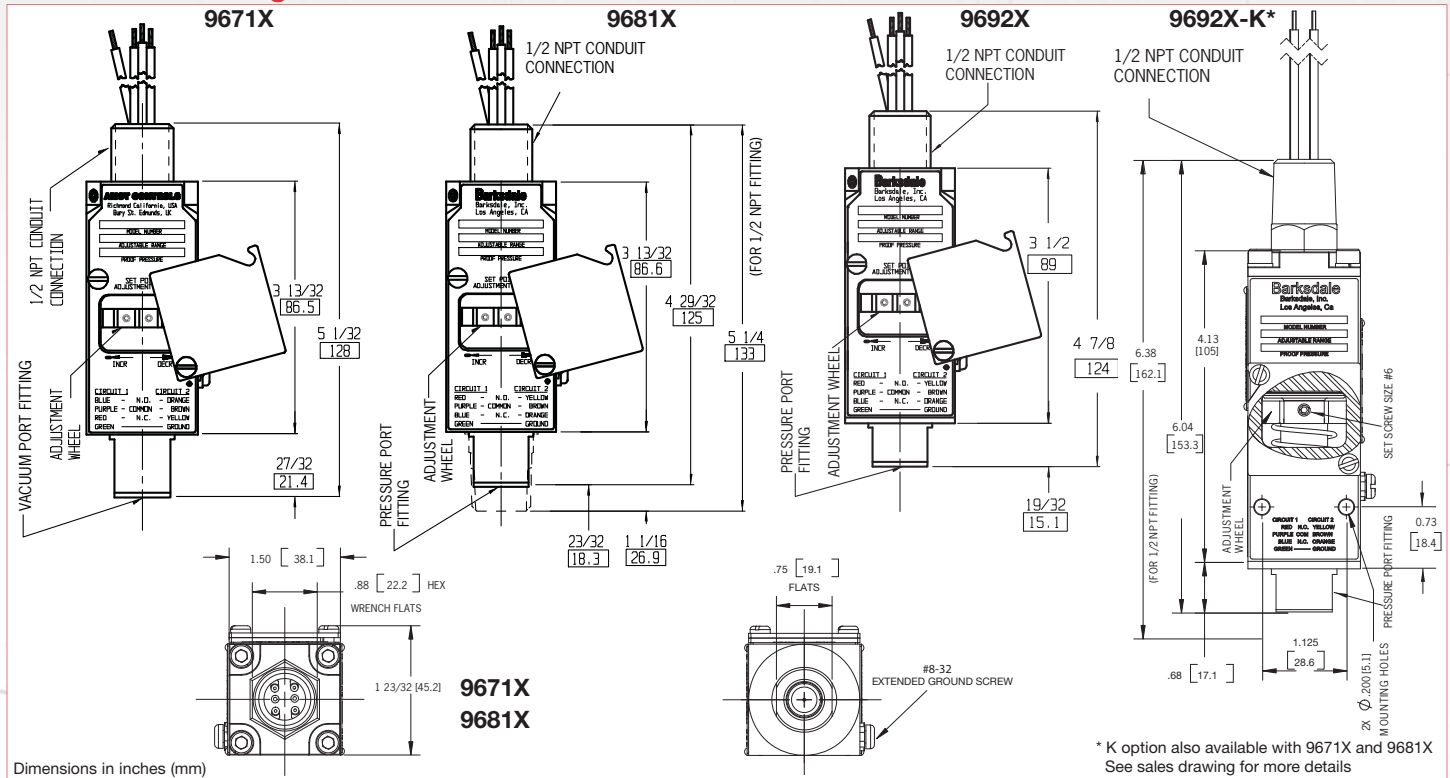
Wiring Diagram



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Technical Drawings



Product Configurator

Example: 9681X -1CC -2 -K -W036

Base Model

9671X	Vacuum switch, 1 - 30 in. Hg.
9681X	Pressure switch, 2 - 500 psi
9692X	Pressure switch, 100 - 7500 psi

Limit Switch

-1CC	SPDT Switch, 11 amps @ 125/250 VAC; 5 amps @ 30 VDC
-2CC	DPDT Switch, 11 amps @ 125/250 VAC; 5 amps @ 30 VDC
-1GH	SPDT gold contact switch, 1 amp @ 125 VAC
-2GH	DPDT gold contact switch, 1 amp @ 125 VAC

Pressure Ranges for 9681X & Vacuum Ranges for 9671X

		Adjustable Range				Approx. Deadband ¹ (Actuation Value)	Proof Pressure
		Decreasing - psi (bar)		Increasing - psi (bar)			
		Min	Max	Min	Max	psi-(bar)	psi (bar)
9671X	Blank	1" Hg	21" Hg	5" Hg	30" Hg	4 - 9" Hg	30" Hg
9681X	-1	2 (.1)	12 (.8)	3 (.2)	15 (1)	1 - 3 (.07 - .2)	1000 (69)
	-2	5 (.3)	125 (8.6)	7 (.5)	150 (10.3)	2 - 25 (.1 - 1.7)	1000 (69)
	-3	25 (1.7)	260 (17.9)	32 (2.2)	300 (20.6)	7 - 40 (.5 - 2.8)	1000 (69)
	-4	50 (3.4)	440 (30.3)	65 (4.5)	500 (34.4)	15 - 60 (1 - 4.1)	1000 (69)

NOTES:

¹ Deadband values indicated when used with the "CC" limit switch
² Contact factory for other possible connection options

Options

- Wxxx Extra wire length (XXX = inches)
- Sxxx Factory preset (consult factory)

- K Mounting holes and conduit wrench flats
- T Wire locking for adjustment cover (no UL, CSA, ATEX)

Process Connection²

- Blank 1/4" NPT Female (standard)
- P1 7/16-20 SAE female process connection

Wetted Material

- Blank Viton® diaphragm/O-rings (standard)
- B Buna-N diaphragm/O-rings
- E EPR diaphragm/O-rings (UL, CSA, and ATEX not available for this option)

Pressure Range for 9692X

		Adjustable Range				Approx. Deadband ¹ (Actuation Value)	Proof Pressure
		Decreasing - psi (bar)		Increasing - psi (bar)			
		Min	Max	Min	Max	psi-(bar)	psi (bar)
9692X	-1	100 (6.9)	600 (41.4)	150 (10.3)	750 (51.7)	50 - 150 (3.4 - 10.3)	15000 (1034)
	-2	150 (10.3)	800 (55.2)	220 (15.2)	1000 (69)	70 - 200 (4.7 - 13.8)	15000 (1034)
	-3	400 (27.6)	2600 (179)	500 (34.5)	3000 (207)	100 - 400 (6.7 - 27.6)	15000 (1034)
	-4	700 (48.2)	4400 (303)	840 (57.9)	5000 (345)	140-600 (9.6 - 41.4)	15000 (1034)
	-5	1000 (69)	6700 (462)	1200 (82.8)	7500 (517)	140-800 (9.6 - 55.2)	15000 (1034)
	-6	150 (10.3)	800 (55.2)	220 (15.2)	3000 (207)	50-1000 (3.4-68.9)	15000 (1034)