

# Pressure

## Explosion Proof Compact Switch

**Series 9671X, 9681X, 9692X**

### Features

- ▶ IECEx & ATEX approved
- ▶ NEMA 4X, 7 & 9
- ▶ NACE compliant
- ▶ SPDT and DPDT switch
- ▶ Safe to adjust during operation
- ▶ Dia-seal/piston sensor
- ▶ Hazardous location dual seal approved for Canada
- ▶ Lower ambient temperature option (-40° F to 149° F)

### 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\*

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

\* See product configurator for additional options.



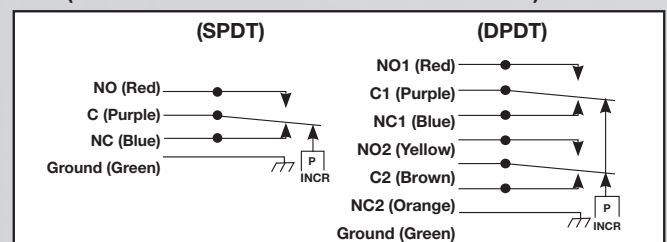
<b>Pressure Connection:</b>	1/4" NPT female (standard) See configurator for more options
<b>Approvals:</b> ATEX/IECEX	CE 0081, LCIE 08 ATEX 6074X II 2 G, Ex d IIC T6 Gb IECEX LCIE 17.0001X  UL # E37043 CSA # LR22354
<b>Ambient Temperature:</b>	-4° to +104°F (-20° to +40°C)  LT Option: (not UL or CSA) -40° F to 149° F (-40°C to +65°C) (Consult factory)
<b>EMI/RFI:</b>	EN55011
<b>Vibration:</b>	10g's 10-500 Hz, MIL-STD-202F
<b>Shock:</b>	50g's, 11 mS, MIL-S-901C
<b>Adjustment:</b>	Internal adjustment wheel with built in locking set-screws (#6) <sup>1</sup>
<b>Shipping Weight:</b>	Approximately 1.85 lbs.

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

### Wiring Code

	9692X/9681X (Pressure)		9671X (Vacuum)	
Lead	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 (9681X/9692X models) (NO/NC contacts are reversed on 9671X model)

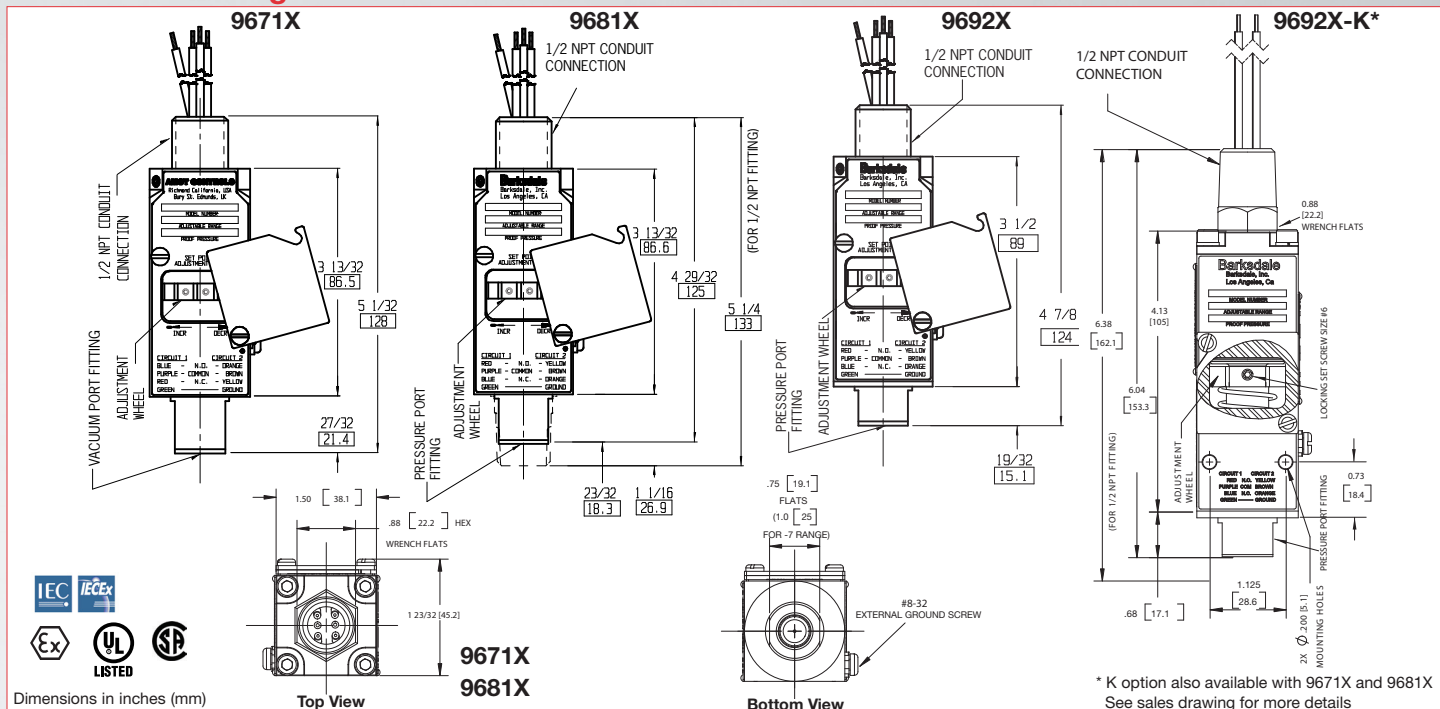




# Explosion Proof Compact Switch

## Series 9671X, 9681X, 9692X

### Technical Drawings



### Product Configurator

Example: **A** **9681X** **-1CC** **-2** **-AL** **-K** **-W036-LT**

#### Approvals

Blank	All approvals (ATEX & IECEx, UL & CSA)
A <sup>1</sup>	ATEX & IECEx only

#### Base Model

9671X	Vacuum switch, 1 - 30 in. Hg.
9681X	Pressure switch, 2 - 500 psi
9692X	Pressure switch, 100 - 10000 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 <sup>2</sup> (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)

#### Pressure Range for 9692X

9692X	Adjustable Range				Approx. Deadband <sup>2</sup> (Actuation Value)	Proof Pressure
	Decreasing - psi (bar)		Increasing - psi (bar)			
	Min	Max	Min	Max	psi-(bar)	psi (bar)
-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)
-7	5000 (344.8)	8800 (606.9)	5200 (358.6)	10000 (689.7)	200-2000 (13.8-137.9)	15000 (1034)

#### NOTES:

<sup>1</sup> For -LT, Low temperature option, 'A' option in approvals must be selected. Not UL or CSA approved.

<sup>2</sup> Consult factory for lead-time and availability.

<sup>3</sup> Deadband values indicated when used with the "CC" limit switch.

<sup>4</sup> Contact factory for other possible connection options.

#### Options

-Wxxx	Extra wire length (XXX = inches)
-Sxxx	Factory preset (consult factory)
-T	Wire lock feature for adjustment cover screws
-LT <sup>1</sup>	Low temp: -40° F to 149° F [Must select option 'A'] Consult factory
-K	Mounting holes and conduit wrench flats

#### Housing Option

Blank	316 stainless steel housing
-AL	Aluminum housing (-K only)

#### Process Connection<sup>3</sup>

Blank	1/4" NPT female (standard)
-P1	7/16-20 SAE female process connection
-P3	1/2" NPT female process connection
-P4	1/2" NPT male process connection

#### Wetted Material

Blank	Viton® diaphragm/O-rings (standard)
Blank <sup>1</sup>	For -LT Option (consult factory)
-B	Buna-N diaphragm/O-rings
-E	EPR diaphragm/O-rings (UL and ATEX not available with this option; CSA only available on the 9692X models)