



**Explosion Proof
(NEMA 4X, 7, 9 and 13)**

DESCRIPTION

The Neo-Dyn® Smart-Switch™ is a solid state pressure switch designed for a wide range of explosion-proof applications in pneumatic and hydraulic systems up to 6000 psig. Pressure indication, switch status and operational status are indicated continuously on the front panel. Options include a 4-20 mA output, RS485 communications and scaleable LED display. All units have selectable "Fail-Safe" electrical configurations.

Operating Pressure Data

Adjustable Range Number	Adjustable Set Point Range		Deadband (adjustable % of full scale)	Maximum Operating Pressure	Proof Pressure
	Increasing	Decreasing			
01	0.06 to 3	0.03 to 2.97	1 to 99	7.5	15
02	0.1 to 5	0.05 to 4.95	1 to 99	12.5	25
04	0.3 to 15	0.15 to 14.85	1 to 99	37.5	75
05	0.6 to 30	0.30 to 29.7	1 to 99	75	150
07	2 to 100	1.00 to 99.0	1 to 99	250	500
10	6 to 300	3 to 297	1 to 99	750	900
11	10 to 500	5.0 to 495	1 to 99	1250	1500
12	20 to 1000	10 to 990	1 to 99	2500	3000
14	60 to 3000	30 to 2970	1 to 99	3000	5000
16	120 to 6000	60 to 5940	1 to 99	6000	10000

All values given in psig.

Standard Specifications

Enclosure

Explosion proof (NEMA 4X, 7, 9 and 13) for Division 1 and 2; Class I, Groups B, C and D; Class II, Groups E, F and G hazardous locations

Electrical Connection

¾ - 14 NPT female conduit connection with terminal block

Pressure Connection

½ - 14 NPT Female
¼ - 18 NPT Female (Range 16)
⅞ - 20 SAE Female (optional)

Temperature Range

Operating: -15F to +140 F
(-26C to +60 C)
Storage: -30F to +170 F
(-34C to +77 C)

Solid State Switching

(2) SPST or (1) DPST
240 VAC or 350 VDC, 120mA max.

Relay Switching

(2) SPDT or (1) DPDT
6 amps resistive, 125/250 VAC
5 amps, 30 VDC

Power Source

115 VAC, 220 VAC

Shipping Weight

Approximately 6 pounds

Approvals

U.L. / CSA / Atex

Accuracy Statement

0.2% FSO

Ordering Sequence — Select desired option for each category

OPTIONS

Wetted Material

5 316 stainless steel port and diaphragm heliarc welded

Adjustable Range

01 0.03 psig dec. to 3.0 psig inc. (2.07 millibar dec. to 206.9 millibar inc.)
02 0.05 psig dec. to 5.0 psig inc. (3.4 millibar dec. to 34 bar inc.)
04 0.15 psig dec. to 15 psig inc. (10.3 millibar dec. to 10.3 bar inc.)
05 0.30 psig dec. to 30 psig inc. (20.7 millibar dec. to 20.6 bar inc.)
07 1.0 psig dec. to 100 psig inc. (68.9 millibar dec. to 6.9 bar inc.)
10 3.0 psig dec. to 300 psig inc. (207 bar dec. to 20.68 bar inc.)
11 5.0 psig dec. to 500 psig inc. (34 bar dec. to 34.4 bar inc.)
12 10 psig dec. to 1000 psig inc. (69 bar dec. to 68.9 bar inc.)
14 30 psig dec. to 3000 psig inc. (2.1 bar dec. to 207 bar inc.)
16 60 psig dec. to 6000 psig inc. (4.14 bar dec. to 413.7 bar inc.)

Input Power

A 115 VAC, 50/60 Hz
D 18 - 28 VDC
E 220 VAC, 50/60 Hz

Switch Configuration

D Solid State Switch, 240 VAC; 350 VDC, 120 mA max.
R Mechanical Relay, 6 amps 125 or 250 VAC; 5 amps 30 VDC

Miscellaneous

E ⅞ - 20 SAE port (not available on Range 16)
Q Scaleable readout
V Analog Output (4 - 20 mA)
Z RS485 Communication

Accessories

801EP-PIPE Pipe mounting bracket

801EP-COMM MS Windows® based software and IBM® PC based RS485 Card

Ordering Procedure

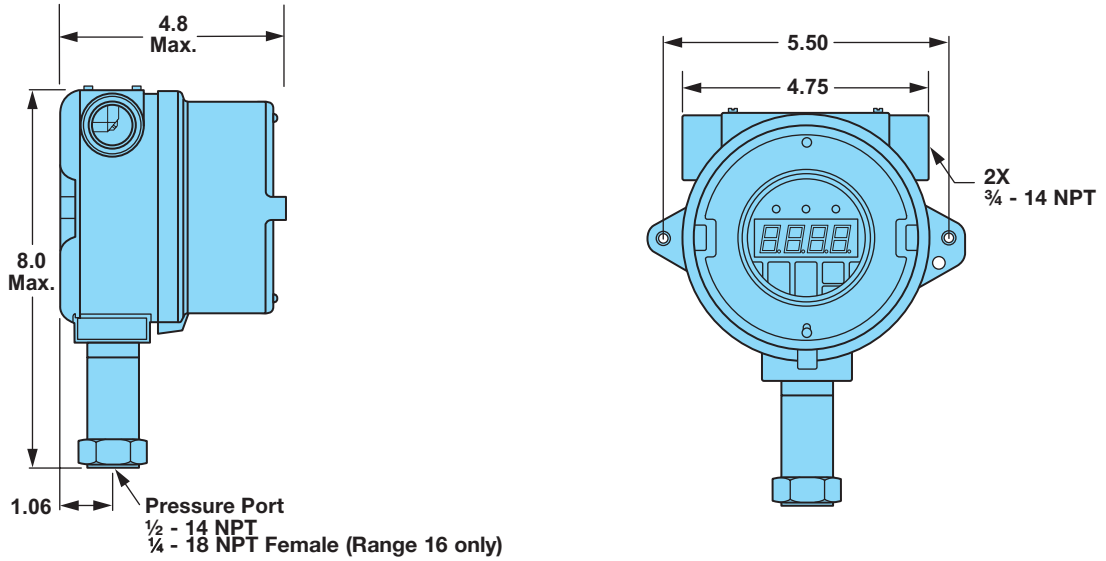
- When factory presetting is desired, stipulate set point, increasing AND decreasing, on purchase order
- Insert available option number or letter designation as required
- Miscellaneous items must be ordered as a separate line item

Example

Series
Wetted Material
Adjustable Range
Input Power
Switch Configuration
Options

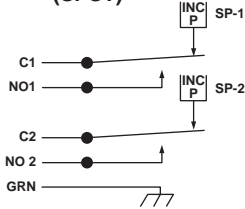
801EP502AR

Envelope Dimensions

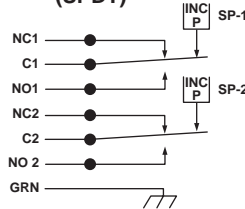


Electrical Form

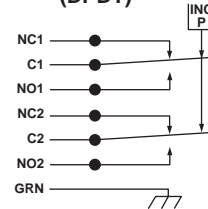
Solid State DC (SPST)



FORM "C" (SPDT)

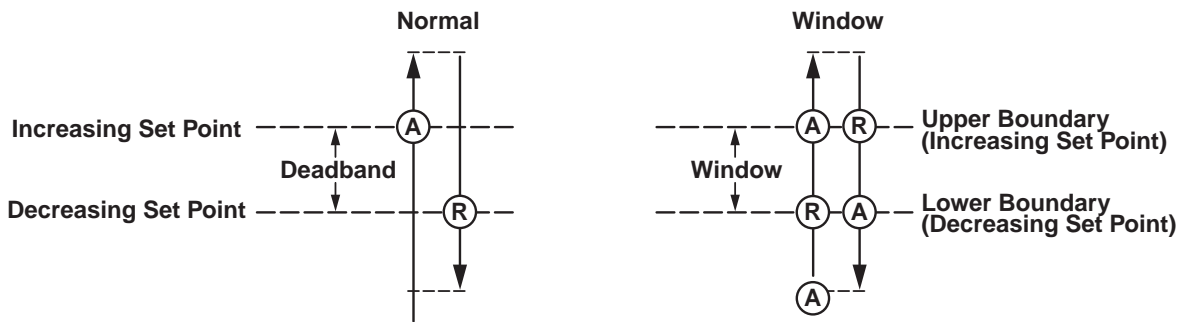


FORM "CC" (DPDT)



Both SP-1 & SP-2 must be set to the same values to simulate this configuration

Operational Modes



(A) = Switch Activates
(R) = Switch Resets