



**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			
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
09	5 to 250	2.50 to 247.5	1 to 99	625	750
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  
7/16 - 20 SAE Female (optional)

### Temperature Range

Operating: -15°F to +140°F  
(-26°C to +60°C)

Storage: -30°F to +170°F  
(-34°C 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 / FM  
Cenelec / CE (pending)

## Ordering Sequence — Select desired option for each category

### OPTIONS

#### Wetted Material

5 316 stainless steel port and diaphragm heliarc welded

#### Adjustable Range

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 1.03 bar inc.)
05	0.30 psig dec. to 30 psig inc.	(20.7 millibar dec. to 2.07 bar inc.)
07	1.0 psig dec. to 100 psig inc.	(68.9 millibar dec. to 6.9 bar inc.)
09	2.5 psig dec. to 250 psig inc.	(.17 bar dec. to 17.2 bar inc.)
11	5.0 psig dec. to 500 psig inc.	(.34 bar dec. to 34.5 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.	(4.1 bar dec. to 414 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 7/16 - 20 SAE port  
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

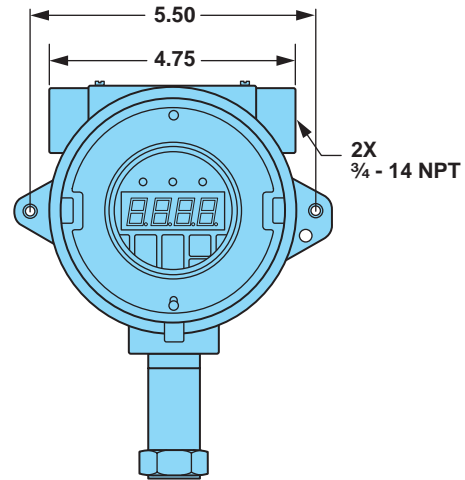
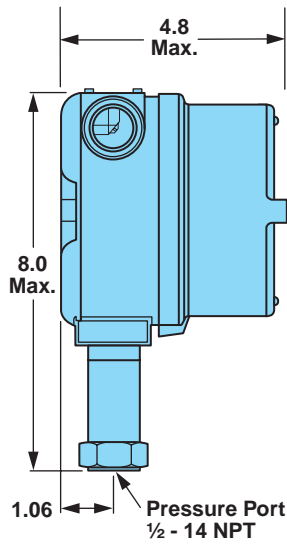
- When factory presetting is desired, stipulate set point, increasing AND decreasing, on purchase order
- Insert available option number or letter designation as required
- Miscellaneous items must be ordered as a separate line item

## Example

Series  
Wetted Material  
Adjustable Range  
Input Power  
Switch Configuration  
Options

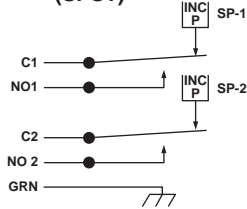
801EP5 07 AR \_

**Envelope Dimensions**

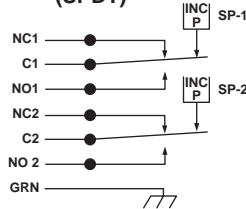


**Electrical Form**

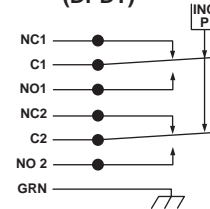
**Solid State DC (SPST)**



**FORM "C" (SPDT)**

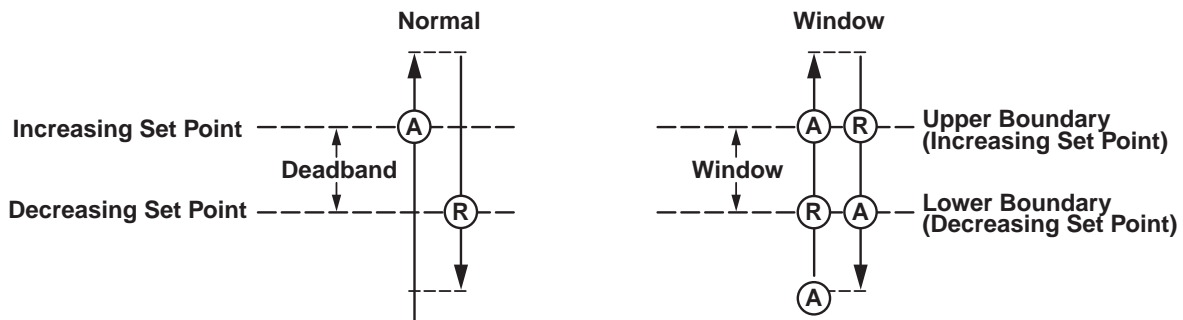


**FORM "CC" (DPDT)**



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

**Operational Modes**



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