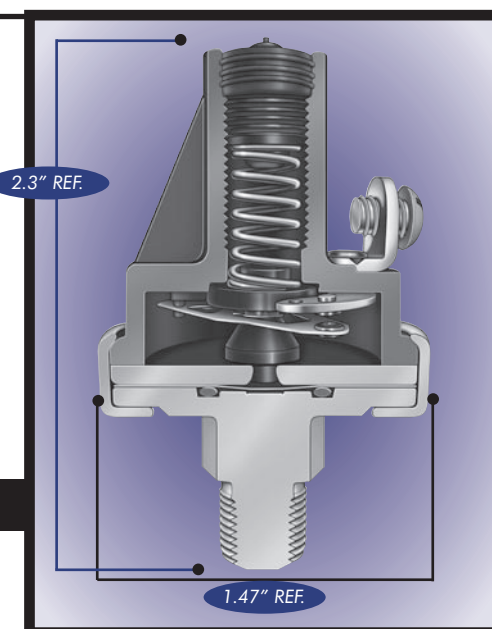


# Set Points from 10-400 psi

## 5000 Series Ultra Duty Pressure Switch

Honeywell Sensing and Control has designed a high pressure/low set point pressure switch for applications that see sudden pressure spikes and high system pressures that can result in early switch failures. This series has been strengthened to prevent cracking of the base with plated steel and screw machined components in a 3-piece design. Modifications to the effective area of the pressure cavity and size of the diaphragm button and diaphragm o-ring are what makes the switch capable of handling sudden pressure transients and high system pressures that are common in applications such as braking, transmission and hydraulic systems.

The switch's physical appearance is similar to our 5000 Series switches with a height of only 2.3" (approx) and a diameter of 1.47". In comparison to our 5000 Series Switch the burst rating has significantly increased from 1250 psi to over 4000 psi on the new design.



### Specifications

Type: Direct action blade contact

Contacts: Silver alloy, gold plated

Set Point Range: 10-400 PSI

Operating Pressure: 500 PSI

Proof Pressure: 2000 PSI

Burst Pressure: 4000 PSI

Base: Plated Steel — Screw Machined  
3-piece construction

Diaphragm: Polyimide Film

Connector: 1/8-27 NPT Male Thread

Temperature Range: -40°F to +250°F

Terminals: #8-32 screws, 1/4" blade,  
280 Series Metripack

Circuitry: SPST-N.O., N.C., SPDT

Cover: Glass Reinforced Polyester

Options: Base connector sizes, wire  
leads, N.O./N.O. dual circuit and  
N.C./N.C. dual circuit.

### Ratings:

Resistive: 15 AMP- 6 VDC

8 AMP- 12 VDC

4 AMP- 24 VDC

Inductive: 1 AMP- 120 VAC

0.5 AMP- 240 VAC

| 5000 Series Ultra Duty Pressure Switches |                |           | 2 Terminals  |              | Metri-Pack Integral Connector (See Note 1) |                |           |        |
|------------------------------------------|----------------|-----------|--------------|--------------|--------------------------------------------|----------------|-----------|--------|
| Contact Setting                          | Factory Set At | Circuitry | Screw Part # | Blade Part # | Contact Setting                            | Factory Set At | Circuitry | Part # |
| 10-35 PSI<br>± 4 psi                     | 20 PSI         | N.O.      | 83298        | 83313        | 10-30 PSI<br>± 4 psi                       | 20 PSI         | N.O.      | 83328  |
|                                          |                | N.C.      | 83299        | 83314        |                                            |                | N.C.      | 83329  |
|                                          |                | DC*       | 83300        | 83315        |                                            |                | DC*       | 83330  |
| 35-75 PSI<br>± 6 psi                     | 60 PSI         | N.O.      | 83301        | 83316        | 30-65 PSI<br>± 5 psi                       | 45 PSI         | N.O.      | 83331  |
|                                          |                | N.C.      | 83302        | 83317        |                                            |                | N.C.      | 83332  |
|                                          |                | DC*       | 83303        | 83318        |                                            |                | DC*       | 83333  |
| 75-150 PSI<br>± 10 psi                   | 100 PSI        | N.O.      | 83304        | 83319        | 65-125 PSI<br>± 7 psi                      | 85 PSI         | N.O.      | 83334  |
|                                          |                | N.C.      | 83305        | 83320        |                                            |                | N.C.      | 83335  |
|                                          |                | DC*       | 83306        | 83321        |                                            |                | DC*       | 83336  |
| 150-250 PSI<br>± 15 psi                  | 200 PSI        | N.O.      | 83307        | 83322        | 125-200 PSI<br>± 10 psi                    | 165 PSI        | N.O.      | 83337  |
|                                          |                | N.C.      | 83308        | 83323        |                                            |                | N.C.      | 83338  |
|                                          |                | DC*       | 83309        | 83324        |                                            |                | DC*       | 83339  |
| 250-400 PSI<br>± 20 psi                  | 300 PSI        | N.O.      | 83310        | 83325        | 200-400 PSI<br>± 15 psi                    | 300 PSI        | N.O.      | 83340  |
|                                          |                | N.C.      | 83311        | 83326        |                                            |                | N.C.      | 83341  |
|                                          |                | DC*       | 83312        | 83327        |                                            |                | DC*       | 83342  |

### Approximate Dead Band Standard Switches

| Contact Setting | Dead Band  |
|-----------------|------------|
| 10-35 PSI       | 15-25 PSI  |
| 35-75 PSI       | 25-35 PSI  |
| 75-150 PSI      | 40-60 PSI  |
| 150-250 PSI     | 50-70 PSI  |
| 250-400 PSI     | 80-100 PSI |

### Metri-Pack Switches

|             |             |
|-------------|-------------|
| 10-30 PSI   | 20-35 PSI   |
| 30-65 PSI   | 35-55 PSI   |
| 65-125 PSI  | 60-85 PSI   |
| 125-200 PSI | 85-115 PSI  |
| 200-400 PSI | 150-200 PSI |

**Note 1:** Mating connector for N.O. and N.C. is Packard Part# 15300027; Mating connector for DC is Packard Part# 12034147.

**DC\*:** The N.C. is the reference circuit for the DC Switch; the N.O. circuit is not adjusted. The approximate dead band between the N.C. and N.O. circuit is shown in the charts. For applications requiring the N.O. circuit as the reference circuit, the N.C. circuit is not adjusted.