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: Polymide 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

	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					

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 #
		N.O.	83298	83313			N.O.	83328
10.05.00		N.C.	83299	83314		00.001	N.C.	83329
10-35 PSI ±4 psi	20 PSI	DC*	83300	83315	10-30 PSI ± 4 psi	20 PSI	DC*	83330
		N.O.	83301	83316			N.O.	83331
		N.C.	83302	83317			N.C.	83332
35-75 PSI ± 6 psi	60 PSI	DC*	83303	83318	30-65 PSI ± 5 psi	45 PSI	DC*	83333
		N.O.	83304	83319		85 PSI	N.O.	83334
		N.C.	83305	83320	(5.5.65.80)		N.C.	83335
75-150 PSI ±10 psi	100 PSI	DC*	83306	83321	65-125 PSI ± 7 psi		DC*	83336
		N.O.	83307	83322			N.O.	83337
150 050 001		N.C.	83308	83323	105 000 001		N.C.	83338
150-250 PSI ± 15 psi	200 PSI	DC*	83309	83324	125-200 PSI ± 10 psi	165 PSI	DC*	83339
		N.O.	83310	83325			N.O.	83340
050 400 50		N.C.	83311	83326	000 400 50		N.C.	83341
250-400 PSI ± 20 psi	300 PSI	DC*	83312	83327	200-400 PSI ± 15 psi	300 PSI	DC*	83342

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				
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.

