

PRESSURE/VACUUM SWITCHES

Nominal Range ⁽¹⁾			Overpressure Ratings		Approximate Deadband ⁽²⁾ Switch Element					
			Proof psi	Burst psi	20	24, 31	50	22	32	
VACUUM										
-30" Hg	760mm Hg	-100 kPa	250	400	0.3-0.7	1.5-4.0	0.5-2.2	0.4-1.0	2.1-4.2	
COMPOUND										
-15" H ₂ O/	-375mm H ₂ O/	-3.7 kPa	20	35	0.15-0.75/	1.5-2.5/	.45-2.0/	0.2-1.0/	2.1-3.5/	
15" H ₂ O	375mm H ₂ O	3.7 kPa			0.15-0.75	1.5-2.5	0.45-2.0	0.2-1.0	2.1-3.5	
-30" H ₂ O/	-760mm H ₂ O/	-7.5 kPa	20	35	0.30-0.60/	1.5-2.5/	0.45-2.0/	0.4-0.9/	2.1-3.5/	
30" H ₂ O	760mm H ₂ O	7.5 kPa			0.30-0.60	1.5-2.5	0.45-2.0	0.4-0.9	2.1-3.5	
-30" Hg/	-760mm Hg/	-100 kPa	250	400	0.5-1.0/	2.0-3.5/	0.75-2.5/	0.7-1.4/	2.8-4.2/	
15 psi	1.0 kg/cm ²	100 kPa			0.3-0.7	0.5-2.0	0.5-1.0	0.4-1.0	0.7-2.1	
-30" Hg/	-760mm Hg/	-100 kPa	250	400	1.0-1.5/	3.0-6.0/	1.2-4.5/	1.4-2.1/	4.2-8.4/	
30 psi	2.0 kg/cm ²	200 kPa			0.3-0.8	1.0-2.0	0.7-1.5	0.4-1.1	1.4-2.8	
-30" Hg/	-760mm Hg/	-100 kPa	250	400	2.0-3.0	5.0-9.0	2.5-7.0	2.8-4.2	7.0-12.0	
60 psi	4.0 kg/cm ²	400 kPa			0.7-1.5	3.0-5.0	1.1-4.0	1.0-2.1	4.2-7.0	
PRESSURE										
10" H ₂ O	250mm H ₂ O	2.5 kPa	20	35	0.2-0.5	1.0-2.0	0.35-1.5	0.3-0.7	1.4-2.8	
30" H ₂ O	750mm H ₂ O	7.5 kPa	20	35	0.3-0.6	1.5-2.5	4.5-2.0	0.4-0.85	2.1-3.5	
60" H ₂ O	1500mm H ₂ O	15 kPa	20	35	0.5-1.3	1.5-3.5	0.9-2.5	0.7-1.8	2.1-5.0	
100" H ₂ O	2500mm H ₂ O	25 kPa	20	35	0.6-1.6	2.5-5.5	1.1-4.0	0.8-2.3	3.5-7.7	
150" H ₂ O	3750mm H ₂ O	37 kPa	20	35	1.0-2.5	4.5-8.5	1.7-6.5	0.1-0.5	6.0-12.0	
15 psi	1.0 kg/cm ²	100 kPa	500	1000	0.1-35	0.5-1.5	0.2-1.0	0.1-0.7	0.7-2.1	
30 psi	2.5 kg/cm ²	200 kPa	500	1500	0.1-50	0.5-1.5	0.3-1.0	0.14-0.70	0.7-2.1	
60 psi	4.0 kg/cm ²	400 kPa	500	1500	0.3-1.0	1.0-3.5	0.7-2.5	0.4-1.4	1.4-5.0	
100 psi	7.0 kg/cm ²	700 kPa	1000	3000	0.5-1.7	1.5-5.0	1.1-3.5	0.7-2.5	2.1-7.0	
200 psi	14 kg/cm ²	1400 kPa	1000	3000	1-3	5-13	2-9	1.4-4.5	7.0-18.2	
400 psi	28 kg/cm ²	2800 kPa	2400	3000	4-7.5	5-24	5.5-15	5.6-10.5	7.0-33.6	
600 psi	42 kg/cm ²	4200 kPa	2400	3000	4-11	9-30	7-20	5.6-15.4	12.6-42	
1000 psi	70 kg/cm ²	7000 kPa	12000	18000	7-30	30-110	18-70	10-42	42-154	
3000 psi	210 kg/cm ²	21000 kPa	12000	18000	15-60	80-235	37-160	21-84	112-329	

DIFFERENTIAL PRESSURE SWITCHES

Nominal Range ⁽¹⁾			Overpressure Ratings		Approximate Deadband ⁽²⁾⁽⁴⁾ Switch Element				
			Static psi	Proof psi	20	24, 31	50	22	32
30" H ₂ O	750mm H ₂ O	7.5 kPa	5.4	21.6	0.3-0.6	1.5-2.5	0.45-2.0	0.4-0.8	2.1-3.5
60" H ₂ O	1500mm H ₂ O	15 kPa	5.4	21.6	0.5-1.3	1.5-3.5	0.9-2.5	0.7-1.8	2.1-5.0
100" H ₂ O	2500mm H ₂ O	25 kPa	5.4	21.6	0.6-1.6	2.5-5.5	1.1-4.0	0.8-2.2	3.5-7.7
150" H ₂ O	3750mm H ₂ O	37 kPa	5.4	21.6	1.0-2.5	4.5-8.5	1.8-6.5	1.4-3.5	6.3-12.0
15 psid	1 kg/cm ²	100 kPa	500	2000	0.5-1.0	2.0-5.0	0.7-3.5	0.7-1.4	2.8-7.0
30 psid	2.5 kg/cm ²	200 kPa	500	2000	1.0-2.0	2.0-5.0	1.5-3.5	1.4-2.8	2.8-7.0
60 psid	4 kg/cm ²	400 kPa	500	2000	2.0-4.0	3.0-6.0	3.0-4.5	2.8-5.6	4.2-8.5
100 psid	7 kg/cm ²	700 kPa	1000	4000	4.0-10.0	11.0-20.0	7.0-15.0	5.6-14.0	16.0-28.0
200 psid	14 kg/cm ²	1400 kPa	1000	4000	5.0-15.0	12.0-40.0	10.0-86.0	7.0-21.0	17.0-56.0
400 psid	28 kg/cm ²	2800 kPa	2400	8000	10.0-20.0	20.0-60.0	15.0-40.0	14.0-28.0	28.0-84.0
600 psid	42 kg/cm ²	4200 kPa	2400	3000	20.0-40.0	80.0-150.0	30.0-115.0	28.0-56.0	112.0-210.0

TEMPERATURE RANGE SELECTION

Adjustable Range		Max. Temperature	Approximate Deadband ⁽²⁾ Switch Element				
°F	°C		°F	20	24, 31	50	22
-40 to 60	-40 to 16	400	1.0-2.0	3.0-8.0	1.5-5.5	1.4-4.0	8.0-16.0
0 to 100	-20 to 40	400	1.5-3.0	5.0-12.0	2.2-8.5	1.5-5.0	9.0-20.0
75 to 205	20 to 95	400	1.5-3.5	8.0-16.0	2.5-12.0	2.0-6.0	10.0-24.0
150 to 260	65 to 125	400	1.5-3.0	5.0-12.0	2.2-8.5	2.0-6.0	10.0-24.0
235 to 375	110 to 190	500	1.5-3.5	5.0-12.0	2.2-8.5	2.0-6.0	10.0-24.0
350 to 525	175 to 275	700	2.0-4.5	8.0-16.0	3.2-12.0	2.5-8.6	15.0-34.0
500 to 750 ⁽⁴⁾	260 to 400	900	4.0-8.0	16.0-30.0	7.0-24.0	5.0-17.0	30.0-50.0

NOTES:

1. Switches may generally be set between 15% and 100% of nominal range on increasing pressure.
Consult factory for applications where setpoints must be lower.

2. All deadbands are given in English units as shown in the nominal range column.
Deadbands shown are for switches with Buna N diaphragm.
Approximate deadbands for optional diaphragms:

- Viton: Multiply Buna N value by 1.4
- Teflon: Multiply Buna N value by 1.2
- Stainless Steel: Multiply Buna N value by 1.7
- Monel: Multiply Buna N value by 1.7

For dual (2 SPDT) variations, multiply single switch value by 1.6

3. Available with remote mount thermal system only.
4. Deadbands given are for zero static working pressure.