

This broad Ashcroft® switch series is easy to use and readily retrofits to virtually all process, industrial and OEM applications.

- Single or dual independently adjustable setpoints meet all setpoint requirements
- Watertight NEMA 4X, IP66 enclosure
- Choice of switch elements for all applications, including hermetically sealed
- Fixed or adjustable deadband
- Standard pressure connection materials:

1 - FUNCTION

- LPA** - Pressure control, single setpoint, adjustable deadband
- LPD** - Pressure control, two independently adjustable setpoints, fixed deadband
- LPS** - Pressure control, single setpoint, fixed deadband
- LDA** - Differential pressure control, single setpoint, adjustable deadband
- LDD** - Differential pressure control, two independently adjustable setpoints, fixed deadband
- LDS** - Differential pressure control, single setpoint, fixed deadband

2 - ENCLOSURE

- N4** - NEMA 4/4X, IP66 (watertight and corrosion resistant)

3 - SWITCH ELEMENTS FOR LPA & LDA CONTROLS

Code	Description/Maximum Electrical Ratings UL/CSA Listed
H	General purpose 10A, 125/250 Vac 1/2A, 125 Vdc 1/4A, 250 Vdc
J	Hermetically sealed switch, general purpose 11A, 125/250 Vac 5A, 30 Vdc

SWITCH ELEMENTS FOR LPD, LPS, LDD & LDS CONTROLS

Code		Switch Elements UL/CSA Listed
Single (PS)	Dual (PD)	
K ⁽⁴⁾	KK	Narrow deadband 15A, 125/250 Vac
F ⁽⁴⁾	FF	Sealed environment proof 15A, 125/250 Vac
G ⁽⁵⁾	GG	General purpose 15A, 125/250/480 Vac 1/2A, 125 Vdc 1/4A, 250 Vdc
P ⁽³⁾	PP	Hermetically sealed switch, narrow deadband 5A, 125/250 Vac
J	JJ	Hermetically sealed switch, general purpose 11A, 125/250 Vac 5A, 30 Vdc

Pressure psi ranges
- 316L SS

Differential psid ranges
- Nickel-plated brass⁽⁷⁾

Pressure and differential inches of water ranges
- Epoxy coated carbon steel

- Approved for UL, CSA and FM⁽⁷⁾ ratings
- Wide choice of actuators, including designs for fire-safe and NACE applications⁽⁷⁾
- Readily available

4 - ACTUATOR SEAL⁽¹⁾

Code & Material	Process Temp. ⁽²⁾ Limits °F	Range			
		Vac. in. H ₂ O	0-600 psi	1000 psi	2000-3000 psi
B-Buna N	0 to 150	●	●	●	●
V-Viton	20 to 300	●	●	●	
T-Teflon	0 to 150	●	●	●	●
S-SS ^{(6),(8)}	0 to 300		●	●	
P-Monel ⁽⁶⁾	0 to 300		●	●	

5 - PRESSURE PORT⁽¹⁾

Order Code	
25	¼ NPT Female
06	¼ NPT Female and ½ NPT Male Combination
07	½ NPT Female

6 - OPTIONS

See pages 229-230

7 - STANDARD PRESSURE RANGES

See page 228

NOTES:

1. These items are wetted by process fluid.
2. Ambient operating temperature limits -20 to 150°F, all styles. Setpoint shift of ±1% of range per 50°F temperature change is normal. Switches calibrated at 70°F reference.
3. Estimated dc rating, 2.5A, 28 Vdc (not UL listed).
4. Estimated dc rating, .4A, 120 Vdc (not UL listed).
5. Not UL listed at 480 Vac.
6. Available on pressure only.
7. Refer to Option Table.
8. Order Option XUD, stainless steel process connection.

TO ORDER THIS L-SERIES PRESSURE SWITCH:

- Select:** LPD N4 GG B 25 XK3 30 psi
1. Function: _____
 2. Enclosure: _____
 3. Switch Element: _____
 4. Actuator Seal: _____
 5. Pressure Port: _____
 6. Options (see pages 229-230): _____
 7. Pressure Range (see page 228): _____



CE
LOOK FOR THIS AGENCY MARK ON OUR PRODUCTS

HERMETICALLY SEALED SWITCH

We recommend hermetically sealed switch elements for improved reliability. The hermetically sealed switch provides uncompromising contact protection in harsh or corrosive environments. The Ashcroft L Series is also approved for installation in Division II hazardous areas when supplied with hermetically sealed contacts.

- Features:
- UL-recognized component, guide WSQ2, File E85076
 - All-stainless steel welded construction





Nominal Ranges and Deadbands Pressure and Temperature Switches, L- and G-Series

PRESSURE/VACUUM SWITCHES												
Nominal Range ⁽¹⁾		Overpressure Ratings		Approximate Deadband ⁽²⁾ Switch Element (Buna-N Diaphragm)								
				LPA-GPA ⁽³⁾		LPS-GPS ⁽⁴⁾			LPD-GPD ⁽⁴⁾			
Nominal Range ⁽¹⁾		Proof psi	Minimum Burst psi	Switch Element								
				J, H	G	J, H	K, F	P	GG	JJ, HH	KK, FF	PP
Vacuum												
-30 in.Hg	-760 mmHg	500	1000	6-24	2.5-4	4-6	1-2	1-2.5	3-5.5	4-6.5	1-2	1-2.5
Compound												
-30 in.Hg/ 15 psi	-760 mmHg/ 1.0 kg/cm ²	500	1000 3-12	6-24 1-2.5	2.5-4 1-3.5	4-6 0.5-1.5	1-2 0.5-2	1-2.5 1.5-3.5	3-5.5 1.5-4	4-6.5 1-2	1-2 1-2	1-2.5
Pressure												
30 in.H ₂ O	750 mmH ₂ O	20	35	4.0-27	1.5-3.5	2.0-4.0	0.5-1.0	0.7-2.0	2.1-4.9	2.8-5.6	0.7-1.4	0.7-2.8
60 in.H ₂ O	1500 mmH ₂ O	20	35	5.0-54	1.5-4	2.5-5.0	0.5-1.4	1.0-2.5	3-5.6	3.5-7.0	0.7-2.0	2-3.5
100 in.H ₂ O	2500 mmH ₂ O	20	35	8.5-90	2.0-5.5	4.0-8.5	1.0-2.0	1.4-3.0	4-7.7	5.6-11.7	1.4-2.8	2-4.2
150 in.H ₂ O	3750 mmH ₂ O	20	35	18-135	5.0-11	10-18	1.5-3.0	2.0-6.0	7.0-16	14-25.1	2.1-4.2	5-9.2
15 psi	1 kg/cm ²	500	1500	2.5-13	1.0-1.5	1.0-2.5	0.5-1.0	0.75-1.5	1.4-2.1	1.4-3.5	.7-1.4	1-1.4
30 psi	2 kg/cm ²	500	1500	3.0-27	1.0-2.8	1.0-3.2	.75-1.5	1-1.8	1.4-5	3-6	1-2.1	1.4-2.5
60 psi	4 kg/cm ²	500	1500	5.0-54	2.0-4.0	2.0-4.5	1.0-2.0	1.0-2.5	3-7	4-8	1.4-2.8	1.4-3.5
100 psi	7 kg/cm ²	1000	3000	10-90	3-6	5.0-10	1.0-2.5	1.4-3.2	7-12	7.0-14	1.4-3.5	3-7
200 psi	14 kg/cm ²	1000	3000	18-180	7-14	10-18	1.0-4.0	5.0-8.0	10-23	14-25	1.4-5.6	7.0-11.2
400 psi	28 kg/cm ²	2400	3000	45-360	16-30	16-45	4.0-8.0	5.0-15	22-42	22-63	5.6-11.2	7.0-21
600 psi	42 kg/cm ²	2400	3000	75-540	16-50	20-75	5.0-15	6.0-25	22-70	28-105	7.0-21	8.0-35
1000 psi ⁽¹⁰⁾	70 kg/cm ²	12000	14000	160-900	75-130	50-160	7.0-30	10-85	70-180	70-223	10-42	14-119
2000 psi	140 kg/cm ²	12000	14000	350-1800	150-200	150-350	20-50	25-110	209-279	209-488	28-70	35-154
3000 psi	210 kg/cm ²	12000	14000	400-2600	180-250	180-400	30-70	30-190	251-349	251-558	42-98	42-226

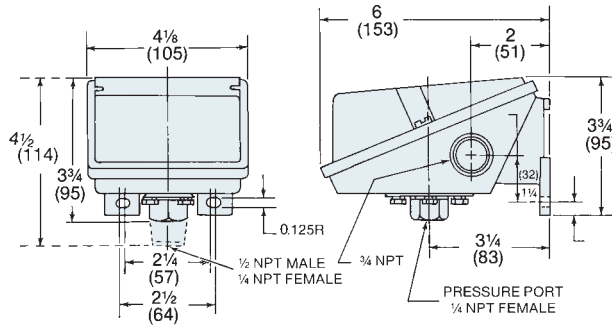
DIFFERENTIAL PRESSURE SWITCHES												
Nominal Range ⁽¹⁾		Overpressure Ratings		Approximate Deadband ^(2,7) Switch Element (Buna-N Diaphragm)								
				LDA-GDA ⁽³⁾		LDS-GDS ⁽⁴⁾			LDD-GDD ⁽⁴⁾			
Nominal Range ⁽¹⁾		Static psi	Minimum Proof psi	Switch Element								
				J, H	G	J, H	K, F	P	GG	JJ, HH	KK, FF	PP
Pressure												
30 in.H ₂ O	750 mmH ₂ O	5.4	21.6	4.0-27	1.5-3.5	2.0-4.0	0.5-1.0	0.7-2.0	2.1-4.9	2.8-5.6	0.7-1.4	0.7-2.8
60 in.H ₂ O	1500 mmH ₂ O	5.4	21.6	5.0-54	1.5-4.0	2.5-5.0	0.5-1.4	1.0-2.5	2.5-6	3.5-7.0	0.7-2.0	2-3.5
100 in.H ₂ O	2500 mmH ₂ O	5.4	21.6	8.5-90	4.0-5.5	4.0-8.5	1.0-2.0	1.4-3.0	5.6-7.7	5.6-11.9	1.4-2.8	2-4.2
150 in.H ₂ O	3750 mmH ₂ O	5.4	21.6	18-135	5.0-11	10-18	1.5-3.0	2.0-6.0	7.0-15.4	14-25.2	2.1-4.2	2.8-8.4
30 psid	2 kg/cm ²	500	2000	3.0-27	1.0-2.5	1.0-3.0	1.0-1.5	1.0-1.8	2-5	3-6	1-2.1	1.4-2.4
60 psid	4 kg/cm ²	500	2000	5-54	2-4	2-4.5	1-2	1-2.5	3-7	4-8	1.4-2.8	1.4-3.5
200 psid	14 kg/cm ²	1000	4000	18-180	10-15	10-18	1.0-4.0	5.0-8.0	14-23	14-30	1.4-5.6	7.0-11.2
400 psid	28 kg/cm ²	1000	8000	45-360	16-30	16-45	4.0-8.0	5.0-15	22.4-42	22.4-36	5.6-11.2	7.0-21.0

TEMPERATURE RANGE SELECTION												
Adjustable Range		Max. Temp. °F	Approximate Deadband ⁽⁸⁾ Switch Element									
			LTA-GTA ⁽³⁾		LTS-GTS ⁽⁴⁾			LTD-GTD ⁽⁴⁾				
°F	°C	°F	Switch Element									
				J, H	G	J, H	K, F	P	GG	JJ, HH	KK, FF	PP
-40 to 60	-40 to 16	400	18-90	4.0-10	9.0-18	1.5-3	2-5	4-10	9.0-18	1.5-3	2-5	
0 to 100	-20 to 40	400	30-90	5.0-15	10-30	1.5-5.5	3-7	5-15	10-30	1.5-4.5	3-7	
75 to 205	20 to 95	400	34-120	6.0-18	10-34	3-5.5	3-8	6-18	10-34	3-5.5	3-8	
150 to 260	65 to 125	400	25-100	3-13	9.0-25	1.5-4	3-7	3-13	9.0-25	1.5-4	3-7	
235 to 375	110 to 190	500	35-130	6-19	10-35	2-5.5	3-8	6-17	10-35	2-5.5	3-8	
350 to 525 ⁽⁹⁾	175 to 275	700	40-165	5-27	15-40	3-7	3.5-11	5-27	15-40	3-7	3.5-11	
500 to 750 ⁽⁶⁾	260 to 400	900	50-200	20-36	5-10	6-21	20-36	20-36	36-60	5-10	6-21	

NOTES:

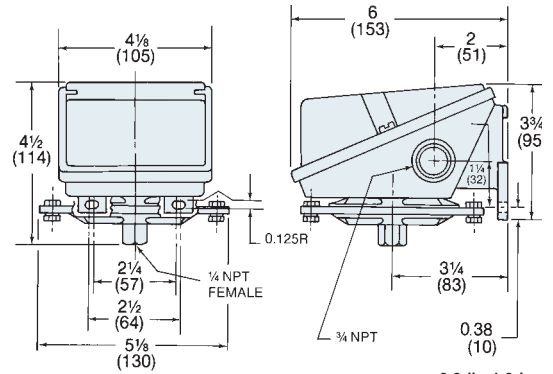
- Switches may generally be set between 15% and 100% of nominal range on increasing pressure. Consult factory for applications where setpoints must be lower.
- All deadbands are given in English units as shown in the nominal range column. Deadbands shown are for switches with Buna N diaphragm.
- Approximate 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
- Deadbands for LTA, LPA and LDA are adjustable between the values shown for all diaphragm materials.
- Deadbands for LPS, LPD, LDS, LDD, LTD, and LDS models are fixed within the range of values shown.
- Switches can be set at increase or decrease throughout the nominal range.
- Available with remote mount thermal system only.
- Deadbands given are for zero static working pressure.
- All deadbands given in °F.
- Not available with 2 1/4" stem.
- Proof pressure is 4000 psi with stainless steel and monel welded diaphragms.

Pressure Switch – psi Ranges



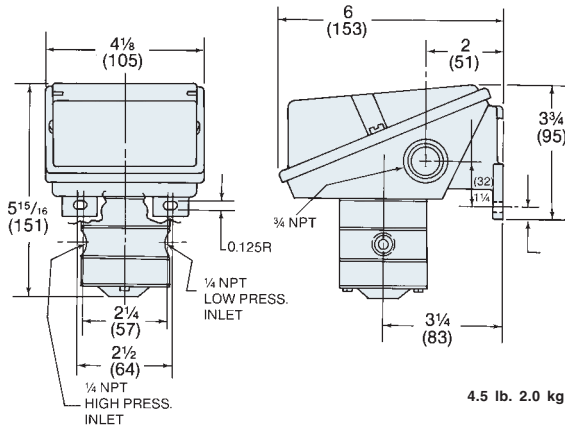
2.7 lb. 1.2 kg

Pressure Switch – Inches Of Water Ranges



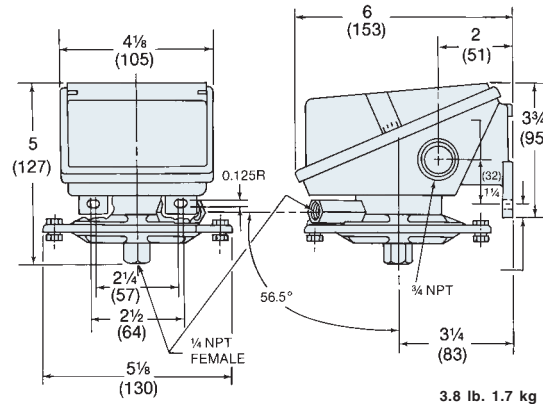
3.6 lb. 1.6 kg

Differential Pressure Switch – psi Differential Ranges



4.5 lb. 2.0 kg

Differential Pressure Switch – Inches Of Water Ranges



3.8 lb. 1.7 kg