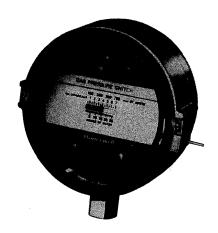
# C437D, E, F, G, H; C637B GAS/AIR PRESSURE SWITCHES



# Pressure or Differential Pressure limit controls for industrial gas systems.

C437 has spst switching; C637 has spdt switching. Models for lockout applications must be manually reset before resuming operation. Models with pressure range of 1 to 26 in. wc [0.25 to 6.5 kPa] have restrictive orifice in inlet pressure channel to compensate for momentary surges in gas pressure. Ambient Temperature Rating: 32°F to 125°F 0°C to 52°C]. Connections: 1/2 in. NPT female for main or high pressure; 1/8 in. NPT female for vent or low pressure. Listed by Underwriters Laboratories Inc.: File No. MP2168, Guide No. MFHX; Industrial Risk Insurers (formerly FIA) approvable; CSA certified: File No. LR1620, Guide No. 180-W-1.16; Factory Mutual approved: Report Nos. 22018, 24127, J.I. IF4A3.AF.

#### Replacement Parts:

106729 Cover Glass, 6 in. [152.5 mm] diameter.

139870A Cover Glass for Rainproof Enclosures

106747 Cover Retaining Ring for C437 and C637 models manufactured before 1973.

137631 Cover Retaining Ring for C437 and C637 models manufactured in 1973 and 1974.

137558 Retaining Clip for Retaining Ring on C437 and C637 models manufactured in 1973 and 1974.

118733 Retaining Clip for C437 and C637 models manufactured since 1975.

## **Equivalent Simetric Units:**

PRESSURE RANGE	WATER mm	kPa
1/2 to 5-1/2 in. water	10.0 to 150.0	0.124 to 1.337
1 to 26 in. water	50.0 to 700.0	0.249 to 6.464
1/2 to 5 psi	351.5 to 3516.0	3.447 to 34.47
1 to 10 psi	703.0 to 7031.0	6.895 to 68.95
1-3/4 in. water	44.5	0.44
1/2 psi	351.5	3.447
1 psi	703.0	6.895
0.25 in. water	6.5	0.062
0.15 in. water at 1/2 in. water	3.8 at 12.7	0.037 at 0.1243

### Switch Ratings (amperes):

MODEL	LOAD	120 Vac	240 Vac	120 Vdc	240 Vdc
C437D,E,G,H	Full Load Locked Rotor Res. Load	8.0 48.0 10.0	5.1 30.6 5.0	2.4 24.0 5.0	1.2 12.0 2.0
C437F,J,K	Full Load Locked Rotor Res. Load	8.0 48.0 10.0	5.1 30.6 5.0	2.0 20.0 8.0	1.0 10.0 4.0
C637B	62.5 VA at 120 and 240 Vac, Pilot Duty				

#### Accessories:

4074BWK Mounting Brackets, for surface mounting. 4074BWN Orifice Tool.

388448U Orifice - 0.006 in. [0.15 mm] dia.

388448N Orifice - 0.008 in. [0.20 mm] dia.

388448C Orifice — 0.011 in. [0.28 mm] dia.

388448E Orifice - 0.018 in. [0.46 mm] dia.

ORDER PRESSURE NUMBER RANGE	DIFFERENTIAL	MAXIMUM SURGE PRESSURE		MERCURY	SWITCH ACTION	MANUAL RESET (lockout on switch	
		psi	kPa	SWITCH	(Breaks)	Break)	
C437D1005	1 to 26 in. water	1-3/4 in.	5.0	34.5	Spst	Rise	Yes
C437D1013	1/2 to 5 psi	1/2 psi	15.0	103.4	Spst	Rise	Yes
C437D1021	1 to 10 psi	1 psi	30.0	206.8	Spst	Rise	Yes
C437E1004	1 to 26 in. water	1-1/4 in.	5.0	34.5	Spst	Fall	Yes
C437E1012	1/2 to 5 psi	1/4 psi	15.0	103.4	Spst	Fall	Yes
C437E1020	1 to 10 psi	1/2 psi	30.0	206.8	Spst	Fall	Yes
C437E1038	1/2 to 5-1/2 in. water	0.25 in.	3.0	20.7	Spst	Fall	Yes
C437F1003	1 to 26 in. water	1-1/4in.	5.0	34.5	2 Spsť	Fall and Rise	No
C437F1011	1/2 to 5 psi	1/4 psi	15.0	103.4	2 Spsť	Fall and Rise	No
C437F1029	1 to 10 psi	1/2 psi	30.0	206.8	2 Spsť	Fall and Rise	No
C437F1037	1/2 to 5-1/2 in. water	0.25 in.	3.0	20.7	2 Spsť	Fall and Rise	No
C437F1045°	1 to 26 in. water	1 1/4in.	5.0	34.5	2 Spst <sup>a</sup>	Fall and Rise	No
C437F1052°	1/2 to 5 psi	1/2 psi	15.0	103.4	2 Spst <sup>a</sup>	Fall and Rise	No
C437F1060°	1 to 10 psi	1/2 psi	30.0	206.8	2 Spst <sup>e</sup>	Fail and Rise	No
C437F1078°	1/2 to 5 1/2 in. water	0.25 in.	3.0	20.7	2 Spst <sup>e</sup>	Fall and Rise	No
C437G1002	1 to 26 in. water	1-1/4 in.	5.0	34.5	Spst	Rise	No
C437G1028	1/2 to 5 psi	1/4 psi	15.0	103.4	Spst	Rise	No
C437G1036	1 to 10 psi	1/2 psi	30.0	206.8	Spst	Rise	No
C437G1069e	1 to 26 in. water	1-1/4 psi	5.0	34.5	Spst	Rise	No
C437G1077°	1/2 to 5 psi	114 psi	15.0	103.4	Spst	Rise	No
C437G1085°	1 to 10 psi	1/2 psi	30.0	206.8	Spst	Rise	No
C437H1001	1 to 26 in. water	1-1/4 in.	5.0	34.5	Spst	Fall	No
C437H1027	1/2 to 5 psi	1/4 psi	15.0	103.4	Spst	Fall	No
C437H1035	1 to 10 psi	1/2 psi	30.0	206.8	Spst	Fall	No
C437H1043	1/2 to 5-1/2 in. water	0.25 in.	3.0	20.7	Spst	Fall	No
C437H1076°	1 to 26 in. water	1-1/4 in.	5.0	34.5	Spst	Fall	No
C437H1084°	1/2 to 5 psi	1/4 psi	15.0	103.4	Spst	Fall	No
C437H1092°	1 to 10 psi	1/2 psi	30.0	206.8	Spst	Fall	No
C437J1008 <sup>b</sup>	1 to 26 in. water	1-3/4 in.	5.0	34.5	2 Spst*	Fall and Rise	Yes°
C437J1016 <sup>b</sup>	1/2 to 5 psi	112 psi	15.0	103.4	2 Spsť	Fall and Rise	Yes°
C437K1007 <sup>b</sup>	1 to 26 in. water	1-1/4 in.	5.0	34.5	2 Spsť	Fall and Rise	Yesd
C437K1015 <sup>b</sup>	1/2 to 5 psi	1/4 psi	15.0	103.4	2 Spst <sup>a</sup>	Fall and Rise	Yes⁴
C637B1002	1 to 26 in. water	1-1/4 in.	5.0	34.5	Spdt	Fall'	No
C637B1010	1 to 10 psi	112 psi	30.0	206.8	Spdt	Fall'	No
C637B1028	1/2 to 5 psi	1/4 psi	15.0	103.4	Spdt	Fall'	No
C637B1036	1/2 to 5-1/2 in. water	0.15 in.	3.0	20.7	Spdt	Fall'	No

 $<sup>\</sup>ensuremath{^{^{a}}}\textsc{Two}$  separate circuits. One circuit breaks and the other makes on a pressure rise or fall.

<sup>&</sup>lt;sup>b</sup>Dual spst switch (one normally open and one normally closed) with 4 leads serves function of spdt switch.

<sup>°</sup>Lockout on rise.

<sup>&</sup>lt;sup>d</sup>Lockout on fall.

<sup>&</sup>lt;sup>e</sup>Weatherproof enclosure (NEMA 3R).

Breaks R-W and makes R-B on fall.