

5100 Series

Cracking Pressure Spring Ranges

Consult your local distributor or the factory for replacement spring part numbers. (Please have your complete valve part number ready when calling.)

Cracking Pressure Ranges (psig)

10–15	82–117	346–450	1201–1400
16–24	118–162	451–575	1401–1900
25–41	163–230	576–710	1901–2400
42–57	231–285	711–999	
58–81	286–345	1000–1200	

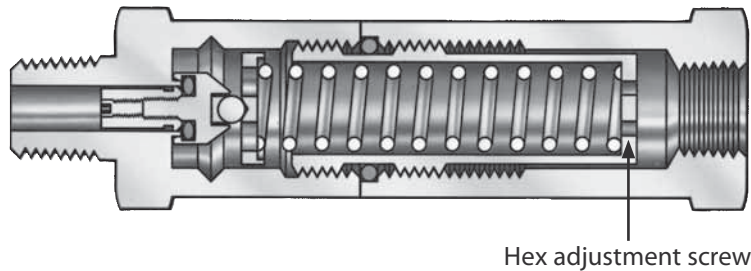
Adjustment

The 5100 Series relief valve is adjustable to $\pm 15\%$ of its nominal cracking pressure as follows:

1. Remove discharge line (in-line mounted unit) or override ring & rod (ASME type)
2. "Break" body joint by wrenching hexes. DO NOT USE PIPE WRENCH.
3. Insert proper size hex wrench (see table below) into the outlet end and turn clockwise to increase the cracking pressure, or counterclockwise to decrease.
4. After adjustment, hold the hex wrench stationary relative to the inlet end and turn the body to tighten the joint.
5. Test adjusted unit for cracking pressure.

Hex Wrench Size

Size	Nominal Cracking Pressure (psig)	
	450 & Under	451 & Over
1/8"	7/32"	7/32"
1/4"	5/16"	1/4"
3/8"	5/16"	1/4"
1/2"	1/2"	3/8"
3/4"	5/8"	1/2"
1"	5/8"	1/2"
1 1/4"	3/4"	3/4"



Air Flow Rates (5100-MP)

Inline valves, 1/2"–1"

Crack Pressure PSIG	Percent Over Pressure Beyond Cracking (SCFM air at room temperature)							
	10%				25%			
	1MP	2MP/3MP	4MP	6MP/8MP	1MP	2MP/3MP	4MP	6MP/8MP
15	1.0	1.5	5.0	9.0	3.0	5.0	50	52
20	1.5	2.0	10	12	4.0	5.0	60	63
25	2.0	2.7	25	27	5.4	6.5	65	67
30	2.4	4.6	30	36	6.2	13	68	71
40	3.0	5.5	34	55	6.5	25	72	100
50	3.0	10.5	40	65	8.0	29	74	110
75	4.2	14	50	70	13	38	80	114
100	6.0	25	54	90	17	55	90	130
125	8.5	32	70	120	22	58	110	136
150	10	36	72	150	27	78	115	200
200	13	40	135	190	40	96	250	375
250	16	50	150	210	43	115	280	450
300	20	60	180	225	52	127	400	600
400	25	80	270	270	68	150	600	900
500	36	46	110	190	108	120	320	700
750	45	58	130	210	90	130	420	1200
1000	47	64	170	210	160	160	620	1280
1200	67	74	240	250	200	200	1000	1500
1400	84	84	450	395	—	—	—	—
1600	110	110	720	405	—	—	—	—
1800	160	160	810	510	—	—	—	—
2000	190	190	850	515	—	—	—	—
2200	220	220	900	520	—	—	—	—
2400	240	240	990	675	—	—	—	—

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Hydraulic Flow Curves

