

# 402/403 Series

## Pilot-Operated Pressure Regulating Valve

### DIMENSIONS & WEIGHTS – inches/pounds

| Size   | Face-to-Face<br>A |                 |                 | Centerline to Top<br>B |                  | Overall<br>C     |                  | Weight<br>(lbs) |
|--------|-------------------|-----------------|-----------------|------------------------|------------------|------------------|------------------|-----------------|
|        | Screwed           | 150#<br>Flanged | 300#<br>Flanged | Single<br>Spring       | Double<br>Spring | Single<br>Spring | Double<br>Spring |                 |
| 1/2"   | 4-1/2             |                 |                 | 12                     | 14-3/8           | 14-3/8           | 16-3/4           | 19              |
| 3/4"   | 4-1/2             |                 |                 | 12                     | 14-3/8           | 14-3/8           | 16-3/4           | 19              |
| 1"     | 4-1/2             |                 |                 | 12                     | 14-3/8           | 14-3/8           | 16-3/4           | 19              |
| 1-1/4" | 8-3/16            |                 |                 | 12-3/4                 | 15-1/8           | 16-1/8           | 18-1/2           | 35              |
| 1-1/2" | 8-3/16            |                 |                 | 12-3/4                 | 15-1/8           | 16-1/8           | 18-1/2           | 36              |
| 2"     | 8-3/4             | 8-1/4           | 8-3/4           | 13                     | 15-3/8           | 17-1/8           | 19-1/2           | 50              |
| 2-1/2" |                   | 9-1/8           | 9-3/4           | 13-3/4                 | 16-1/8           | 18-1/4           | 20-5/8           | 70              |
| 3"     |                   | 9-3/4           | 10-1/2          | 14-3/4                 | 16-1/8           | 19-3/4           | 22-1/8           | 82              |
| 4"     |                   | 13-1/2          | 14              | 16                     | 18-3/8           | 24               | 26-3/8           | 170             |

### CAPACITIES – Steam (lbs/hr) Air (scfm)

| Inlet Press. | Outlet Press. | 1/2", 3/4" |     | 1"    |      | 1-1/4" |      | 1-1/2" |      | 2"    |      | 2-1/2" |       | 3"    |       | 4"    |       |
|--------------|---------------|------------|-----|-------|------|--------|------|--------|------|-------|------|--------|-------|-------|-------|-------|-------|
|              |               | Steam      | Air | Steam | Air  | Steam  | Air  | Steam  | Air  | Steam | Air  | Steam  | Air   | Steam | Air   | Steam | Air   |
| 20           | 0-10          | 175        | 60  | 425   | 145  | 600    | 204  | 850    | 289  | 1300  | 442  | 2750   | 935   | 3850  | 1309  | 4900  | 1666  |
| 30           | 0-10          | 270        | 88  | 655   | 213  | 924    | 300  | 1309   | 425  | 2002  | 650  | 4235   | 1375  | 5929  | 1925  | 7546  | 2450  |
|              | 20            | 203        | 67  | 493   | 162  | 696    | 228  | 986    | 323  | 1508  | 494  | 3190   | 1045  | 4466  | 1463  | 5684  | 1862  |
| 50           | 0-20          | 385        | 130 | 935   | 315  | 1320   | 444  | 1870   | 629  | 2860  | 962  | 6050   | 2035  | 8470  | 2849  | 10780 | 3626  |
|              | 30            | 343        | 116 | 833   | 281  | 1176   | 396  | 1666   | 561  | 2548  | 858  | 5390   | 1815  | 7546  | 2541  | 9604  | 3234  |
| 100          | 0-50          | 690        | 231 | 1675  | 561  | 2364   | 792  | 3349   | 1122 | 5122  | 1716 | 10835  | 3630  | 15169 | 5082  | 19306 | 6468  |
|              | 60            | 637        | 214 | 1547  | 519  | 2184   | 732  | 3094   | 1037 | 4732  | 1586 | 10010  | 3355  | 14014 | 4697  | 17836 | 5978  |
|              | 80            | 455        | 151 | 1105  | 366  | 1560   | 516  | 2210   | 731  | 3380  | 1118 | 7150   | 2365  | 10010 | 3311  | 12740 | 4214  |
| 125          | 0-60          | 865        | 287 | 2100  | 697  | 2964   | 984  | 4199   | 1394 | 6422  | 2132 | 13585  | 4510  | 19019 | 6314  | 24206 | 8036  |
|              | 70            | 805        | 270 | 1955  | 655  | 2760   | 924  | 3910   | 1309 | 5980  | 2002 | 12650  | 4235  | 17710 | 5929  | 22540 | 7546  |
|              | 100           | 588        | 196 | 1428  | 476  | 2016   | 672  | 2856   | 952  | 4368  | 1456 | 9240   | 3080  | 12936 | 4312  | 16464 | 5488  |
| 150          | 0-70          | 1019       | 343 | 2474  | 833  | 3492   | 1176 | 4947   | 1666 | 7566  | 2548 | 16005  | 5390  | 22407 | 7546  | 28518 | 9604  |
|              | 100           | 858        | 287 | 2083  | 697  | 2940   | 984  | 4165   | 1394 | 6370  | 2132 | 13475  | 4510  | 18865 | 6314  | 24010 | 8036  |
|              | 125           | 609        | 214 | 1479  | 519  | 2088   | 732  | 2958   | 1037 | 4524  | 1586 | 9570   | 3355  | 13398 | 4697  | 17052 | 5978  |
| 200          | 0-100         | 1337       | 445 | 3247  | 1080 | 4584   | 1524 | 6494   | 2159 | 9932  | 3302 | 21010  | 6985  | 29414 | 9779  | 37436 | 12446 |
|              | 150           | 1001       | 333 | 2431  | 808  | 3432   | 1140 | 4862   | 1615 | 7436  | 2470 | 15730  | 5225  | 22022 | 7315  | 28028 | 9310  |
|              | 175           | 739        | 245 | 1794  | 595  | 2532   | 840  | 3587   | 1190 | 5486  | 1820 | 11605  | 3850  | 16247 | 5390  | 20678 | 6860  |
| 250          | 0-125         | 1652       | 550 | 4012  | 1335 | 5664   | 1884 | 8024   | 2669 | 12272 | 4082 | 25960  | 8635  | 36344 | 12089 | 46256 | 15386 |
|              | 175           | 1358       | 452 | 3298  | 1097 | 4656   | 1548 | 6596   | 2193 | 10088 | 3354 | 21340  | 7095  | 29876 | 9933  | 38024 | 12642 |
|              | 200           | 1138       | 378 | 2763  | 918  | 3900   | 1296 | 5525   | 1836 | 8450  | 2808 | 17875  | 5940  | 25025 | 8316  | 31850 | 10584 |
| 300          | 0-150         | 2016       | 665 | 4896  | 1615 | 6912   | 2280 | 9792   | 3230 | 14976 | 4940 | 31680  | 10450 | 44352 | 14630 | 56448 | 18620 |
|              | 200           | 2016       | 665 | 4896  | 1615 | 6912   | 2280 | 9792   | 3230 | 14976 | 4940 | 31680  | 10450 | 44352 | 14630 | 56448 | 18620 |
|              | 250           | 1250       | 417 | 3035  | 1012 | 4284   | 1428 | 6069   | 2023 | 9282  | 3094 | 19635  | 6545  | 27489 | 9163  | 34986 | 11662 |
| 400          | 0-200         | 2657       | 875 | 6452  | 2125 | 9108   | 3000 | 12903  | 4250 | 19734 | 6500 | 41745  | 13750 | 58443 | 19250 | 74382 | 24500 |
|              | 280           | 2146       | 711 | 5211  | 1726 | 7356   | 2436 | 10421  | 3451 | 15938 | 5278 | 33715  | 11165 | 47201 | 15631 | 60074 | 19894 |
| 450          | 0-225         | 2975       | 984 | 7225  | 2389 | 10200  | 3372 | 14450  | 4777 | 22100 | 7306 | 46750  | 15455 | 65450 | 21637 | 83300 | 27538 |
|              | 280           | 2975       | 984 | 7225  | 2389 | 10200  | 3372 | 14450  | 4777 | 22100 | 7306 | 46750  | 15455 | 65450 | 21637 | 83300 | 27538 |

For capacities of other gases multiply the air capacities by the following factors: Argon-0.85 Co2-0.81 Helium-2.69 Nitrogen-1.02