**Section 215.TABLE A Rate of Discharge**

Minimum required rate of discharge in cubic feet per minute (CFM) of air for safety relief valves. Discharge measured at 60 degrees F. and atmospheric pressure (14.7 pounds per square inch).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Surface Area Sq. Ft. | CFM | Surface Area Sq. Ft. | CFM | Surface Area Sq. Ft. | CFM |
|  |  |  |  |  |  |
| 20 | 258 | 185 | 1,600 | 900 | 5,850 |
| 25 | 310 | 190 | 1,640 | 950 | 6,120 |
| 30 | 360 | 195 | 1,670 | 1,000 | 6,380 |
| 35 | 408 | 200 | 1,710 | 1,050 | 6,640 |
| 40 | 455 | 210 | 1,780 | 1,100 | 6,900 |
| 45 | 501 | 220 | 1,850 | 1,150 | 7,160 |
| 50 | 547 | 230 | 1,920 | 1,200 | 7,410 |
| 55 | 591 | 240 | 1,980 | 1,250 | 7,660 |
| 60 | 635 | 250 | 2,050 | 1,300 | 7,910 |
| 65 | 678 | 260 | 2,120 | 1,350 | 8,160 |
| 70 | 720 | 270 | 2,180 | 1,400 | 8,410 |
| 75 | 762 | 280 | 2,250 | 1,450 | 8,650 |
| 80 | 804 | 290 | 2,320 | 1,500 | 8,900 |
| 85 | 845 | 300 | 2,380 | 1,550 | 9,140 |
| 90 | 885 | 310 | 2,450 | 1,600 | 9,380 |
| 95 | 925 | 320 | 2,510 | 1,650 | 9,620 |
| 100 | 965 | 330 | 2,570 | 1,700 | 9,860 |
| 105 | 1,010 | 340 | 2,640 | 1,750 | 10,090 |
| 110 | 1,050 | 350 | 2,700 | 1,800 | 10,330 |
| 115 | 1,090 | 360 | 2,760 | 1,850 | 10,560 |
| 120 | 1,120 | 370 | 2,830 | 1,900 | 10,800 |
| 125 | 1,160 | 380 | 2,890 | 1,950 | 11,030 |
| 130 | 1,200 | 390 | 2,950 | 2,000 | 11,260 |
| 135 | 1,240 | 400 | 3,010 | 2,050 | 11,490 |
| 140 | 1,280 | 450 | 3,320 | 2,100 | 11,720 |
| 145 | 1,310 | 500 | 3,620 | 2,150 | 11,950 |
| 150 | 1,350 | 550 | 3,910 | 2,200 | 12,180 |
| 155 | 1,390 | 600 | 4,200 | 2,250 | 12,400 |
| 160 | 1,420 | 650 | 4,480 | 2,300 | 12,630 |
| 165 | 1,460 | 700 | 4,760 | 2,350 | 12,850 |
| 170 | 1,500 | 750 | 5,040 | 2,400 | 13,080 |
| 175 | 1,530 | 800 | 5,300 | 2,450 | 13,300 |
| 180 | 1,570 | 850 | 5,590 | 2,500 | 13,520 |

Surface area = Total outside surface area of container in square feet. When the surface area is not stamped on the name plate or when the marking is not legible, the area can be calculated by using one of the following formulas:

a) Cylindrical container with hemispherical heads area = (overall length in feet times outside diameter in feet times 3.1416)

b) Cylindrical container with semi-ellipsoidal heads. Area = (overall length in feet plus 0.3 outside diameter in feet) times diameter in feet times 3.1416.

c) Spherical Container. Area = Outside diameter in feet squared times 3.1416

Flow Rate SCFM Air = cubic feet per minute of air required at standard conditions, 60 degrees F. and atmospheric pressure (14.7 psia).

The rate of discharge may be interpolated for intermediate values of surface area. For container with total outside surface area greater than 2,000 sq. ft., the required flow rate can be calculated using the formula, Flow Rate SCFM Air = 22.11A degrees .82, where A= outside surface area of the container in square feet.