## Power Flame Incorporated ${ }^{\circ}$



## K7 Metering Valve

K7 Series Modulating Oil Valve offers improved flow accuracy thanks to a single piece final assembly which over comes hysteresis. The valve also has the ability to operate in both a Clock Wise (CW) or Counter Clock Wise (CCW) direction allowing it to be bi-directional. The valve will operate with \#2 fuel oil, B20 Bio-diesel, and liquid propane. The K7 Valve comes in two body sizes 3 " and 4" in diameter. There are multiple sizes within each body size. The 3" model is UL listed for \#2 fuel oil (B20 approval is pending).


# Power Fame 

## K7 METERING VALVE FLOW RATES

|  |  | Pressure Drop Across Valve in PSIG |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\mathbf{1 0}$ | $\mathbf{2 5}$ | $\mathbf{5 0}$ | $\mathbf{7 5}$ | $\mathbf{1 0 0}$ |  |  |
| Model \# | Cv | \#2 Oil Capacity (GPH) @ Open Position (0.85 S.G., 60 F) |  |  |  |  |  |  |
| K7-3-0 | 0.013 | 0.8 | 2.6 | 4.1 | 5.8 | 7.1 | 8.2 |  |
| K7-3-1 | 0.043 | 2.8 | 8.9 | 14.1 | 19.9 | 24.4 | 28.2 |  |
| K7-3-2 | 0.07 | 4.5 | 14.4 | 22.7 | 32.1 | 39.3 | 45.4 |  |
| K7-3-3 | 0.105 | 6.8 | 21.6 | 34.1 | 48.2 | 59.1 | 68.2 |  |
| K7-3-4 | 0.146 | 9.5 | 29.9 | 47.3 | 66.9 | 81.9 | 94.6 |  |
| K7-3-5 | 0.192 | 12.5 | 39.5 | 62.5 | 88.4 | 108.3 | 125.0 |  |
| K7-3-6 | 0.408 | 26.5 | 83.9 | 132.7 | 187.7 | 229.8 | 265.4 |  |
| K7-3-7 | 0.543 | 35.3 | 111.6 | 176.4 | 249.5 | 305.5 | 352.8 |  |
| K7-3-8 | 0.703 | 45.7 | 144.6 | 228.6 | 323.3 | 395.9 | 457.2 |  |

Table 1: Full Open Position Flow Rates in Imperial Units

|  |  | Pressure Drop Across Valve in kPa |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 6.9 | 68.9 | 172.4 | 344.7 | 517.1 | 689.5 |
| Model \# | Cv | \#2 Oil Capacity (LPH) @ Open Position (0.85 S.G., $15.5^{\circ} \mathrm{C}$ ) |  |  |  |  |  |
| K7-3-0 | 0.013 | 3.1 | 9.8 | 15.5 | 21.9 | 26.9 | 31.0 |
| K7-3-1 | 0.043 | 10.7 | 33.8 | 53.4 | 75.5 | 92.4 | 106.7 |
| K7-3-2 | 0.07 | 17.2 | 54.3 | 85.9 | 121.5 | 148.8 | 171.9 |
| K7-3-3 | 0.105 | 25.8 | 81.6 | 129.1 | 182.5 | 223.6 | 258.2 |
| K7-3-4 | 0.146 | 35.8 | 113.2 | 179.0 | 253.2 | 310.1 | 358.1 |
| K7-3-5 | 0.192 | 47.3 | 149.6 | 236.6 | 334.6 | 409.8 | 473.2 |
| K7-3-6 | 0.408 | 100.5 | 317.8 | 502.3 | 710.4 | 870.0 | 1,004.6 |
| K7-3-7 | 0.543 | 133.5 | 422.3 | 667.7 | 944.3 | 1,156.6 | 1,335.5 |
| K7-3-8 | 0.703 | 173.1 | 547.3 | 865.3 | 1,223.8 | 1,498.8 | 1,730.7 |

Table 2: Full Open Position Flow Rates in SI Units

