



Orifice Plate Assembly

When an orifice plate assembly is used as an integral part of a flow control valve control circuit, it provides the differential pressure (ΔP) to power the flow control pilot. The opening and closing of the pilot causes the flow control valve to throttle accordingly.

Total head loss across the valve is reduced by locating sensing ports close to the orifice plate, to sense downstream pressure before it recovers.

The orifice plate internal diameter is calculated and machined according to valve size and required flow limitation.



Technical Data

Body material:

Fusion bonded epoxy Steel or Stainless Steel

Orifice plate: Stainless Steel

Sensing ports: 1/8" NPT

Standard calculated differential pressure:

0.4 bar (5.5 psi)

Dimensions

| Size | | Z | | X | | d | | D | |
|------|------|-----|------|-----|------|----|------|----|------|
| mm | inch | mm | inch | mm | inch | mm | inch | mm | inch |
| 40 | 1.5 | 80 | 3.1 | 36 | 1.4 | 20 | 0.8 | 25 | 1 |
| 50 | 2 | 94 | 3.7 | 53 | 2.1 | 20 | 0.8 | 25 | 1 |
| 65 | 2.5 | 106 | 4.2 | 61 | 2.4 | 20 | 0.8 | 25 | 1 |
| 80 | 3 | 126 | 5 | 73 | 2.9 | 20 | 0.8 | 25 | 1 |
| 100 | 4 | 155 | 6.1 | 96 | 3.8 | 20 | 0.8 | 25 | 1 |
| 150 | 6 | 210 | 8.3 | 150 | 5.9 | 20 | 0.8 | 25 | 1 |
| 200 | 8 | 265 | 10.4 | 195 | 7.7 | 20 | 0.8 | 25 | 1 |
| 250 | 10 | 320 | 12.6 | 245 | 9.6 | 20 | 0.8 | 25 | 1 |
| 300 | 12 | 372 | 14.6 | 295 | 11.6 | 20 | 0.8 | 25 | 1 |
| 350 | 14 | 418 | 16.5 | 345 | 13.6 | 24 | 0.9 | 30 | 1.2 |
| 400 | 16 | 482 | 19 | 395 | 15.6 | 20 | 0.8 | 25 | 1 |
| 450 | 18 | 535 | 21.1 | 443 | 17.4 | 20 | 0.8 | 28 | 1.1 |
| 500 | 20 | 590 | 23.2 | 501 | 19.7 | 22 | 0.9 | 30 | 1.2 |
| 600 | 24 | 697 | 27.4 | 599 | 23.6 | 35 | 1.4 | 50 | 2 |

