

Orifice Plate Assembly

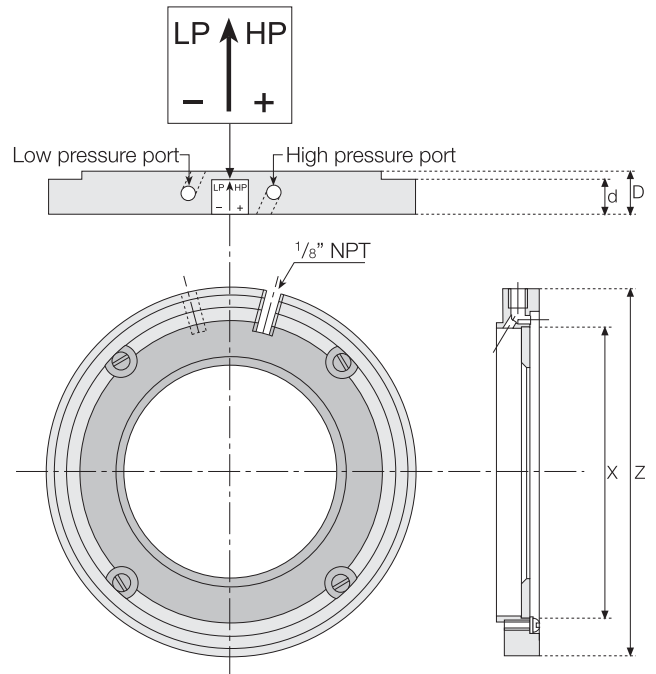
When an orifice plate assembly is used as an integral part of a flow control valve control circuit, it provides the differential pressure (ΔP) to power the flow control pilot. The opening and closing of the pilot causes the flow control valve to throttle accordingly. Total head loss across the valve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

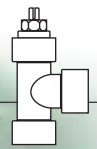
Technical Data

- 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 |
| 50 | 2 | 94 | 3 11/16 | 53 | 2 1/16 | 20 | 3/4 | 25 | 1 |
| 65 | 2 1/2 | 106 | 4 3/16 | 61 | 2 3/8 | 20 | 3/4 | 25 | 1 |
| 80 | 3 | 126 | 4 15/16 | 73 | 2 7/8 | 20 | 3/4 | 25 | 1 |
| 100 | 4 | 155 | 6 1/8 | 96 | 3 3/4 | 20 | 3/4 | 25 | 1 |
| 150 | 6 | 210 | 8 1/4 | 150 | 5 15/16 | 20 | 3/4 | 25 | 1 |
| 200 | 8 | 265 | 10 3/8 | 195 | 7 11/16 | 20 | 3/4 | 25 | 1 |
| 250 | 10 | 320 | 12 5/8 | 245 | 9 5/8 | 20 | 3/4 | 25 | 1 |
| 300 | 12 | 372 | 14 5/8 | 295 | 11 5/8 | 20 | 3/4 | 25 | 1 |
| 350 | 14 | 418 | 16 7/16 | 345 | 13 5/8 | 24 | 15/16 | 30 | 1 3/16 |
| 400 | 16 | 482 | 19 | 395 | 15 9/16 | 20 | 3/4 | 25 | 1 |
| 450 | 18 | 535 | 21 1/16 | 443 | 17 7/16 | 20 | 3/4 | 28 | 1 1/8 |
| 500 | 20 | 590 | 23 1/4 | 501 | 19 3/4 | 22 | 7/8 | 31 | 1 3/16 |





Orifice Assembly

When an orifice assembly is used as an integral part of a flow control valve control circuit, it provides a Pressure Differential (ΔP) in direct proportion to the flow rate. This ΔP sensed by the flow control pilot, powering it to open or close. The opening and closing of the pilot causes the flow control valve to throttle accordingly. The orifice internal diameter is calculated and machined according to valve size and required flow limitation.

Technical Data

Body material:

Coated Cast Iron (2"; DN50), Coated Steel (3"; DN80)

Orifice plate: Stainless Steel

Sensing ports: 1/4" NPT

Standard calculated (ΔP): 0.4 bar (5.5 psi)



| Size | DN50 | 2" | DN80 | 2" |
|------|----------|---------------------------------|-------|----------------------------------|
| D | 95 mm | 3 ³ / ₄ " | 91 mm | 3 ⁹ / ₁₆ " |
| LB | 60 mm | 2 ³ / ₈ " | 70 mm | 2 ³ / ₄ " |
| LT | 19 mm | 3/4" | 30 mm | 1 ³ / ₁₆ " |
| P | 5 mm | 3/16" | 5 mm | 3/16" |
| R | 44.9mm | 1 ³ / ₄ " | 84mm | 3 ⁵ / ₁₆ " |
| TF | G2 | 2" BSP-F | R3 | 3" BSP-F |
| TM | R2 | 2" BSP-T | R3 | 3" BSP-T |
| TP | 1/4" NPT | | | |

