



American Thermowell

www.americanthermowell.com

BUILT ON A TRADITION OF EXCEEDING QUALITY AT EVERY STEP.

Revised (10/14/2022)

Universal Orifice Plate

Engineered for all flow points and made to improve measurement performance

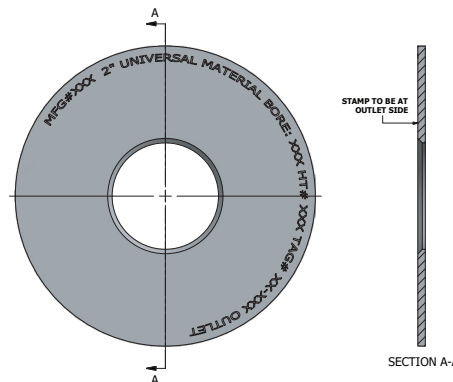
American Thermowell universal orifice plates perform reliably under the most challenging conditions, while also making installation convenient and cost effective.

Orifice plates provide the most reliable and accurate flow measurement for gas, liquid and steam, across a variety of industries. American Thermowell orifice plates are designed and built to meet our client's requirements, whether they are custom designed or standard. With established standards for manufacturing, all plates are shipped out only after they are tested, inspected and ready to install.

The universal size orifice plates are the most economical style of plates available because of low initial cost, less maintenance, less storage space required, and the necessity of stocking plates for various pressure ratings is eliminated.

Features & Benefits:

- Orifice plates available with a maximum diameter of 48"
- All American Thermowell orifice plates are inspected and stamped before being released from production.
- Custom designs available based on clients application requirements
- Large selection of materials available
- NACE compliant



Bore Styles:

- Beveled
- Restriction
- Quadrant
- Segmental
- Eccentric



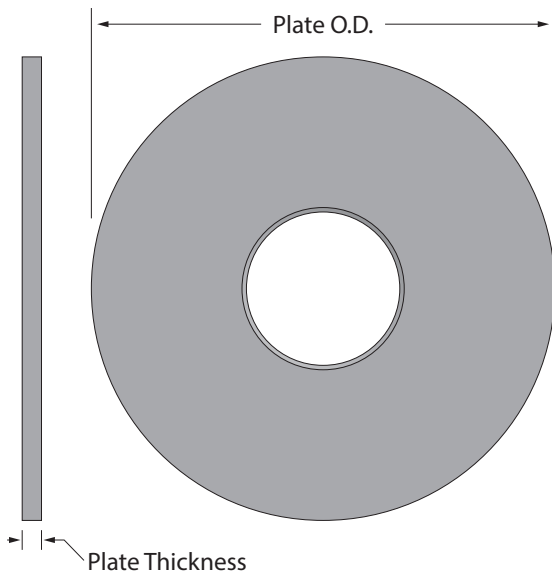
— Built on a tradition of exceeding quality at every step —

UNIVERSAL ORIFICE PLATES

| Line Size | Plate O.D. | Plate Thickness | Blank WT. (lbs.) |
|-----------|------------|-----------------|------------------|
| 1/2" | 1.000 | 1/8" | 0.06 |
| 3/4" | 1.125 | 1/8" | 0.06 |
| 1" | 1.3125 | 1/8" | 0.06 |
| 1-1/2" | 2.000 | 1/8" | 0.11 |
| 2" | 2.4375 | 1/8" | 0.17 |
| 2-1/2" | 2.8125 | 1/8" | 0.25 |
| 3" | 3.4375 | 1/8" | 0.34 |
| 4" | 4.4062 | 1/8" | 0.55 |
| 6" | 6.4375 | 1/8" | 1.18 |
| 8" | 8.4375 | 1/8" | 2.03 |
| 10" | 10.6875 | 1/4" | 6.41 |

| Line Size | Plate O.D. | Plate Thickness | Blank WT. (lbs.) |
|-----------|------------|-----------------|------------------|
| 12" | 12.5938 | 1/4" | 9.61 |
| 14" | 14.000 | 1/4" | 11.91 |
| 16" | 16.000 | 3/8" | 15.41 |
| 18" | 18.000 | 3/8" | 18.45 |
| 20" | 20.000 | 3/8" | 22.78 |
| 24" | 24.000 | 3/8" | 32.80 |
| 26" | 26.000 | 3/8" | 62.00 |
| 30" | 30.000 | 1/2" | 112.00 |
| 34" | 34.000 | 1/2" | 134.00 |
| 36" | 36.000 | 1/2" | 156.00 |
| 42" | 42.000 | 3/4" | 338.00 |

Universal Orifice Plates are manufactured to the same recommendations and standards as the paddle-type orifice plates. They are completely interchangeable in most orifice fittings and RTJ Plate Holders



Bore Tolerances & Drain/Vent Dimensions

| Drain & Vent Dimensions | | | |
|-------------------------|--------------------|--------------------|--------------------|
| Orifice Bore | Vent or Drain Hole | Orifice Bore | Vent or Drain Hole |
| Less Than 1.000" | None | 8.376 to 9.250" | 5/16" |
| 1.000 to 3.500" | 3/32" | 9.251 to 10.000" | 11/32" |
| 3.501 to 4.125" | 1/8" | 10.0001 to 10.875" | 3/8" |
| 4.126 to 5.000" | 5/32" | 10.876 to 11.625" | 13/32" |
| 5.001 to 6.000" | 3/16" | 11.626 to 12.500" | 7/16" |
| 6.001 to 6.750" | 7/32" | 12.501 to 13.250" | 15/32" |
| 6.751 to 7.500" | 1/4" | 13.251" & Larger | 1/2" |
| 7.501 to 8.375" | 9/32" | | |

| Tolerance for Orifice Plates | | | |
|------------------------------|----------------|--------------------|----------------|
| Orifice Bore | +/- Tolerances | Orifice Bore | +/- Tolerances |
| Less Than .250" | 0.001 | 4.000" to 9.999" | 0.0020 |
| .250" to .499" | 0.001 | 10.000" to 19.999" | 0.0050 |
| .500 to 1.999" | 0.0010 | 20.000" & up | 0.0100 |
| 2.000" to 3.999" | 0.0015 | | |

Material Options: 316 Stainless Steel, 304 Stainless Steel, Carbon Steel, 310 Stainless Steel, 321 Stainless Steel, 347 Stainless Steel, Alloy 20, C-276, Duplex, Incoloy 800, Monel 400, and Titanium (For a complete list, talk to an American Thermowell sales representative today).



Specializing in instrumentation and process control hardware.

- ✓ Thermowells
- ✓ Bleed & Flush Rings
- ✓ Orifice Plates
- ✓ Valves

