

Concentric Orifice Plate

Product Overview



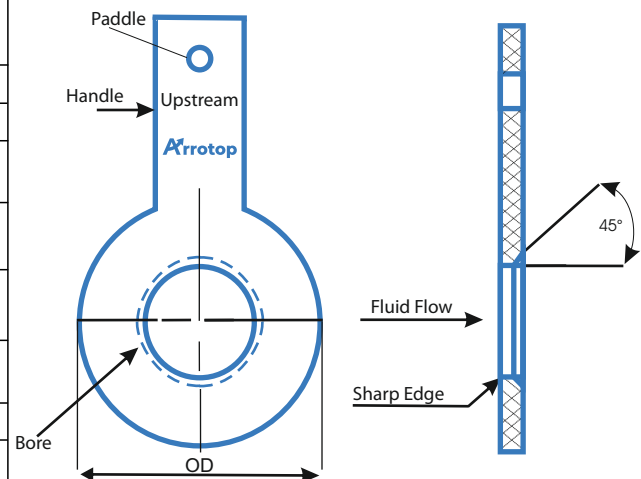
The **Arrotop Concentric Orifice Plate (Model Number: ARO-CP-001)** is a fundamental device used in fluid flow measurement. It consists of a flat, circular plate with a centrally located circular hole. When installed in a pipeline, it creates a restriction that results in a differential pressure drop, which can be measured to determine the flow rate. Known for its simplicity and accuracy, the Concentric Orifice Plate is a fundamental component in various industrial applications.

Key Features

- ▶ **High Accuracy** : Ensures precise flow measurement with well-defined pressure drop.
- ▶ **Versatility** : Suitable for a wide range of fluids, including gases, liquids, and steam.
- ▶ **Durability** : Constructed from high-quality materials to withstand harsh industrial environments.
- ▶ **Ease of Installation** : Can be installed in various orientations.
- ▶ **Low Maintenance** : Simple design with minimal moving parts reduces maintenance needs.
- ▶ **Cost-Effective** : Provides accurate measurement at a lower cost compared to other devices.
- ▶ **Wide Range of Sizes** : Available in sizes from 0.5" to 24".
- ▶ **Customizable** : Various materials and coatings are available to handle specific conditions.
- ▶ **Robust Construction** : Designed to endure high pressure and temperature variations.
- ▶ **Reliable Performance** : Consistent and repeatable measurements.

Technical Specifications

Model Number	ARO-CP-001
Material	SS 304/L, 316/L, Duplex, Super Duplex, Hastelloy, Carbon Steel, Monel, Inconel, PP, PVC, PTFE-coated, Stellite-coated (special alloys on request)
Sizes	0.5" to 24" (up to 48" on request)
Beta Ratio	0.1 to 0.75
Thickness	3.18 mm, 6.35 mm, 9.52 mm, 12.7 mm (other on request)
Effective Range	Typically suitable for Reynolds numbers between 5,000 and (10^8)
Standards	ISO 5167, ASME B16.36, BS 1042, API 2530, AGA Report 3
Preferred Range for Accuracy	10,000 to 1,000,000
Fluid Types	Low viscosity and clean liquid, gas, or dry steam
Accuracy	$\pm 0.5\%$ of maximum flow rate
Repeatability	$\pm 0.1\%$ of the indicated flow rate
Tapping Methods	Flange Taps, Corner Taps, Radius Taps



Sizes and Dimensions

DN (Nominal Diameter)	Orifice Diameter (mm)	Plate Thickness (mm)
DN15 (0.5")	15	3.18
Dn25 (1")	25	3.18
DN50 (2")	50	6.35
DN100 (4")	100	6.35
DN150 (6")	150	9.52
Dn200 (8")	200	9.52
DN300 (12")	300	12.7
DN400 (16")	400	12.7
DN600 (24")	600	12.7

Advantages

- High Accuracy
- Versatility
- Durability
- Ease of Installation
- Low Maintenance
- Cost-Effective
- Wide Range of Sizes
- Customizable
- Robust Construction
- Reliable Performance

Applications

- Chemical Processing
- Oil and Gas
- Power Generation
- Water Treatment
- Food and Beverage
- Pharmaceutical
- HVAC Systems- Mining
- Pulp and Paper
- Marine and Shipbuilding
- Automotive



Additional Features

- ▶ **Customization** : Available in various materials and sizes to meet specific application requirements.
- ▶ **Accessories** : Gaskets, bolts, and nuts available upon request.
- ▶ **Compliance** : Meets international standards ensuring reliable and accurate performance.
- ▶ **Installation Support** : Technical support available for installation and maintenance.
- ▶ **Calibration Services** : Optional calibration services to ensure precise measurements.
- ▶ **Documentation** : Comprehensive documentation provided for installation, operation, and maintenance.

Conclusion

Arrotop's Concentric Orifice Plates (Model Number: ARO-CP-001) offer reliable and accurate solutions for fluid flow measurement. With a focus on quality and innovation, Arrotop delivers products that ensure superior performance and longevity. Choose Arrotop for your orifice plate requirements and experience our commitment to excellence.

Contact Us



sales@arrotop.in
export@arrotop.in



www.arrotop.in



+91 9930498865
+91 9930498815