FLOW MEASURES
PRIVATE LIMITED

ORIFICE PLATE

An Orifice Plate is the simplest form of a primary flow element producing differential pressure, when inserted in a conduit running full to determine the flowrate of the flowing fluid. It is a metal plate with an orifice, through which the fluid flows.The differential Pressure generated is directly proportional to the fluid flow rate. Material of construction is guided by the process parameters including temperature, process medium etc, flowing through the pipe. It is one of the most accepted, efficient and versatile methods of measuring flow.

SPECIAL FEATURES

- Suitable for liquid, gas and steam flow measurement
- Accuracy ≤±0.1 % with calibrated spool, typically ≥ 2 to 3%
- Calibration may be performed, if required
- Proven technology
- Easy installation and maintenance
- Orifice design based on ISO5167-2, ISO TR15377, ASME MFC-3M and AGA3 industry standards
- Accurate, repeatable and reliable
- Applicable for viscous, highly viscous liquid contains sediments and suspended solid, hydrocarbon and contaminated fluid
- Unique design ensures the proper alignment within pipe, resulting in higher accuracy
- Application with low Reynolds number
- Extended working life

TYPES

- Concentric square edged
- Quarter circle
- Conical entrance
- Segmental
- Eccentric

APPLICATIONS

- Oil and gas Industry
- Process measurement allocation
- Water and waste water treatment and distribution
- Chemical and petrochemical Industry
- Mining and basic material industry
- Pulp and paper industry
- Power generation
- All sorts of flow measurements in liquid, gas or steam applications of various industries

info@flowmeasures.com
www.flowmeasures.com

TECHNICAL SPECIFICATION

Design Standards:
ISO 5167-2, ISO TR 15377, ASME MFC-3M and AGA-3 Industry Standards

Line size:
DN15 (½") to DN1200 (48") (Special sizes are available)

Pressure rating:
150# to 2500#

Material:
Orifice Plates: 304SS/316SS/321SS, UNS S31803/UNS S32760/UNS S31254 Alloy 400/625/825/C276 Tantalum, Titanium (Others available on request)
Flange: Carbon steel & SS Standard. Specials DSS, SDSS & Monel. Others on request.

Plate size:
Available for line sizes from 25 mm to 1250 mm

Plate thickness:
Standard thickness of 3mm & 10mm. Flanges (API / ASME), Hubs, Carriers and Welded directly into piping.

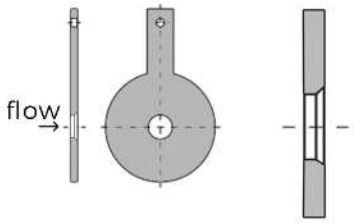
Pressure taps:
Corner pressure tap, D & D/2 pressure tap and flange pressure tap.

Marking:
All plates are marked with the line size, bore size, material of plate, customer's Tag Number, Flange Class and Face type

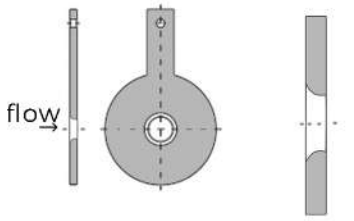
β ratio:
0.15 to0.80 (Dependent on design of orifice plate)

Design Specifications:

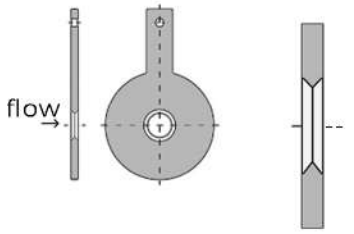
Concentric type:
Design standard-per ISO5167-2
Size ≥ 2" (50mm)
Beta (d/D): 0.2 ≤ β ≤ 0.75



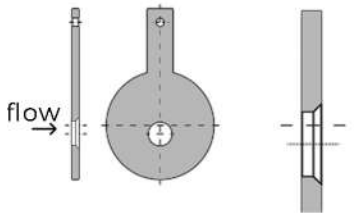
Quarter circle type:
Design standard-per ISO5167-2 /TR 15377
Size ≥ 2" (50mm)
Beta (d/D): 0.245 ≤ β ≤ 0.600



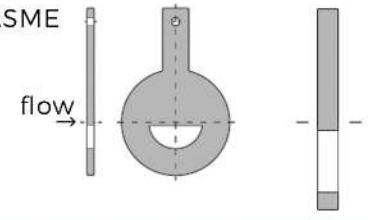
Conical entrance type:
Design standard-per ISO5167-2 /TR 15377
Size ≥ 2" (50mm)
Beta (d/D): 0.100 ≤ β ≤ 0.316



Eccentric type:
Design standard-per ISO5167-2 /TR 15377
Size ≥ 4" (100mm)
Beta (d/D): 0.460 ≤ β ≤ 0.840



Segmental type:
Design standard-per ISO5167-2/ASME
Size ≥ 4" (100mm)
Beta (d/D): 0.350≤ β ≤ 0.800



Company address:

Flow Measures Global,
9921, Carmel Mountain Rd,
Suite 300, San Diego, CA-92129
United States of America.

Flow Measures Private Limited,
Second Floor, New Door No. 4/2,
Old Door No. 9/2, Sundaram Street, Vetri Nagar,
Chennai - 600 082 Tamil Nadu, India