



4" ORIFICE PLATE

500 Series 'Universal' Orifice Plates

Universal orifice plates are used within orifice meters (see Roto-Boss™ brochure), some types of Orifice Flange Unions and also in Annular Chambers. They are termed as "universal" as they are manufactured to industry standard outer diameters and plate thicknesses to comply with measurement standards such as MFC-3M, ISO 5167 and AGA 3.

ST500OP-02

Nominal Pipe Size	Plate O.D in inches	Plate Thickness
2"	2.437	0.125
3"	3.437	0.125
4"	4.406	0.125
6"	6.437	0.125
8"	8.437	0.250
10"	10.687	0.250
12"	12.593	0.250
14"	14.000	0.250
16"	16.000	0.375
18"	18.000	0.375
20"	20.000	0.500
24"	24.000	0.500

As with any orifice plate application, there are a few types of bore inlet depending upon the flowing medium that is being measured. Below is a reference guide based for orifice plate inlets based on flowing medium;

Flowing Medium		Square Edge Concentric orifice	Quarter Circle or Conical entrance orifice	Eccentric orifice	Segmental orifice
Gas	clean	++	-	+	+
	dirty	-	-	++	++
Liquid	clean	++	++	+	+
	viscous	-	++	-	-
	dirty	+	+	++	++
	corrosive	+	+	+	+
Steam		+	+	+	-
++ preferred + suitable - not suitable					

FEATURES

- TAG, ANSI Class, Size (in DN), Bore, Material & Type etched on periphery of plate
- Orifice bore/plate type: **SQC** (Square Edge Concentric), **1/4** (Quarter Circle), **CON** (Conical), **SQE** (Eccentric), **SEG** (Segmental)
- Materials: Carbon Steel, Stainless Steel 304 & 316, Duplex, Super Duplex, Monel, Inconel
- Sizes: 0.5" to 24" (15DN to 600DN) – other sizes available upon request
- Drain or Vent holes can be added for AGA 3 plates. ISO 5167 does not permit the use of drain or vent holes
- Manufactured in accordance with ISO 5167, AGA 3, MFCM-3M

ORDERING INFORMATION

Part number format for ordering is as follows; **SIZE-ANSI-TYPE-BORE-MTL**

Size	0.5" - 24" (other sizes available upon request)		
ANSI	150, 300, 600, 900, 1500 & 2500		
Bore	'd' dimension in inches (provided by customer or sized by calculation)		
Hole (if required)	V = Vent, D = Drain		
MTL	304 = 304 St. Steel	D = Duplex	M = Monel
	316 = 316 St. Steel	SD = Super Duplex	I = Inconel

WORKED EXAMPLES

Note: "V" or "D" is indicated in the part number only if a Vent or Drain is required

ST500OP-14-150-SQC-0.5-316	14" 150 ANSI, Square Edge Concentric with a 0.5" bore in 316 St. Steel
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