

EMCO Orifice Plates Serie ISB/3 with Exchangeable Orifice Plate for RTJ Flanges

Principle

EMCO orifice plates are used as primary elements in flow measurement Of liquid, gas and steam according to the differential pressure principle.

Construction

Design and calculation

standards : ISO 5167, ASME MFC-3M, ISA-RP 3.2,
Shell Flow Meter Engineering
Handbook, L. K. Spink, AGA no. 3

Sizes : 1" - 20" according to ANSI B 16.36
50 mm < D < 1000 mm according to
ISO 5167 and 50 < D < 900 mm
According to ASME MFC-3M

Orifice plate : Separate from holder
Bore (d) : $d > 12,5$ mm
 β (d/D) : $0,2 < \beta < 0,75$
Plate thickness : 3 mm
Holder width : 27 mm; * 28.5 mm, ** 30 mm, *** 32 mm.

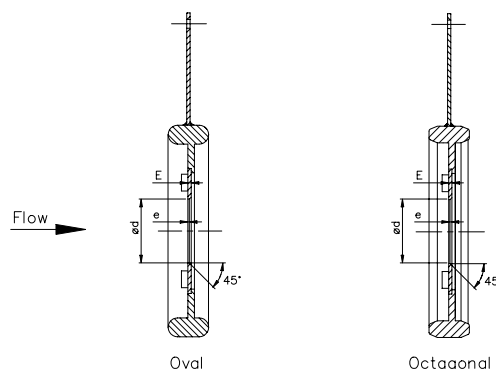
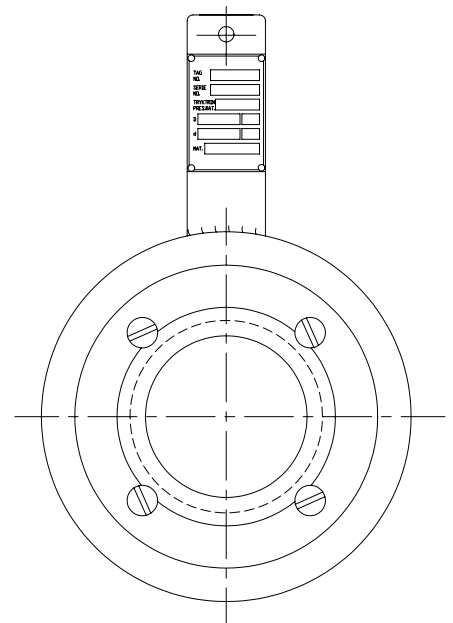
Material holder : Carbon steels, AISI 316, Monel, 6Mo and
others on request

Plate : AISI 316, Monel, 6Mo and others on
Request

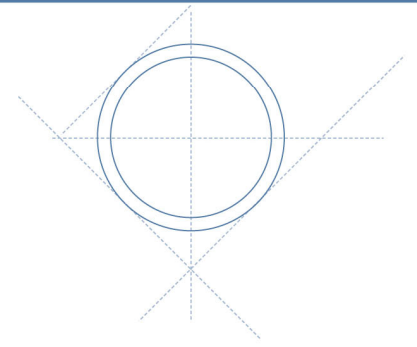
Vent or drain hole : On request

Mounting style : Between RTJ flanges according to
ANSI B16.36, API 6

Holder type : Oval or octagonal.

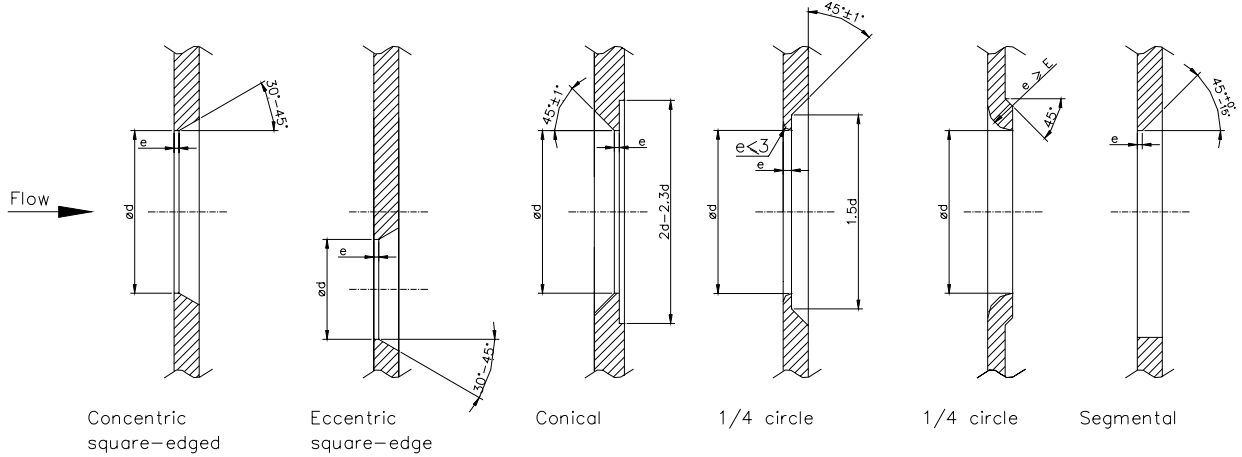


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Orifice plate shapes

: Square edge concentric, square edge eccentric, conical, 1/4 circle, segment.



Handle

: With name plate in AISI 316 with following inscription, TAG no., serial no., pressure, rating, inner pipe diameter, bore, material.

Size	Pressure rating lbs			
	600	900	1500	2500
1"	R16		R16	R18
1½"	R20		R20	R23
2"	R23		R24	R26
2½"	R26		R27	R28 **
3"	R31	R31	R35	R32 **
4"	R37	R37	R39	
6"	R45	R45	R46 *	
8"	R49	R49		
10"	R53	R53		
12"	R57	R57		
14"	R61			
16"	R65 ***			
18"	R69 ***			
20"	R73 ***			

Other size on request

Technical Data

- Accuracy : +/- 0,6 % for $\beta < 0,6$ and equal to β for β values above 0,6
- Pressure loss : Depending on β , for β equal to 0,6 : ca. 60 % of the differential pressure measured
- Limits for Reynolds No : $Re > 1260 \times \beta^2 D$ according to ISO 5167
 $2000 < Re < 10^8$ according to ASME MFC-3M