

SHARP EDGE ORIFICE PLATE

Cost-saving and reliable solution

GENERAL DATA

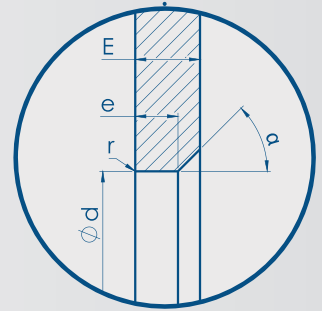
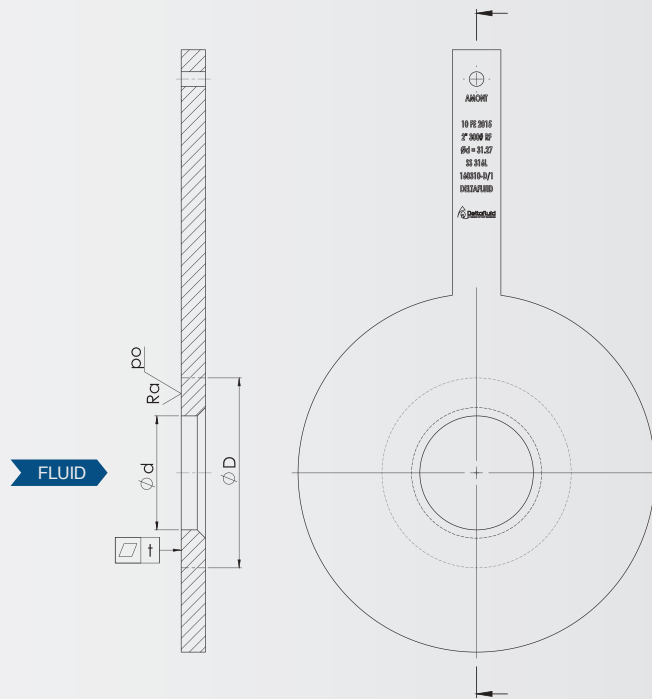
- Standards: ISO 5167-1&2, ASME MFC-3M, ISO/TR 15377
- Flange mounting⁽¹⁾:
 - o ISO PN 2.5 to PN 420
 - o ASME 150# to 2500#
 - o Others: upon request
- Material:
 - o Standard: stainless steel 304L / 316L
 - o Others⁽¹⁾: according to your application
- Fluid: liquid, gas, steam
- Pipes from ϕ 25 to 1 000 mm
- Accuracy: 0.5 % of the max flow rate
- Repeatability of measurement: 0.1 %

ΔP
0/0

ΔP
25/25

ΔP
D-D/2

pressure
taps⁽¹⁾



Optional: stellite coating⁽¹⁾

TECHNICAL CHARACTERISTICS

		ISO/TR 15377	ISO 5167-1&2	ASME MFC-3M
Re_D	Reynolds number in the pipe	$5\,000 \leq Re_D \leq 10^8$		
$D^{(2)}$	Inside pipe diameter	$25\text{ mm} \leq D < 50\text{ mm}$	$50\text{ mm} \leq D \leq 1\,000\text{ mm}$	
d	Orifice diameter	$d \geq 12.5\text{ mm}$		
β	d/D	$0.5 \leq \beta \leq 0.7$	$0.1 \leq \beta \leq 0.75$	
Ra	Upstream face roughness	$Ra < 10^{-4} \cdot d$		
r	Sharp edge radius	$r < 0.000\,4 \cdot d$		
e	Orifice thickness	$0.005 \cdot D \leq e \leq 0.02 \cdot D$		
E	Plate thickness	$e \leq E \leq 0.05 \cdot D$		
α	Angle of the downstream bevel	$\alpha = 45^\circ \pm 15^\circ$		
t	Flatness tolerance	$t < 0.005 \cdot (D - d)/2$		

⁽¹⁾ For more details, see «Technical information» section on page 54.

⁽²⁾ Orifice plates with diameters D from 6 mm are described in the ASME MFC-14M standard - see page 22.