

ROLLED WELDED VENTURI TUBE

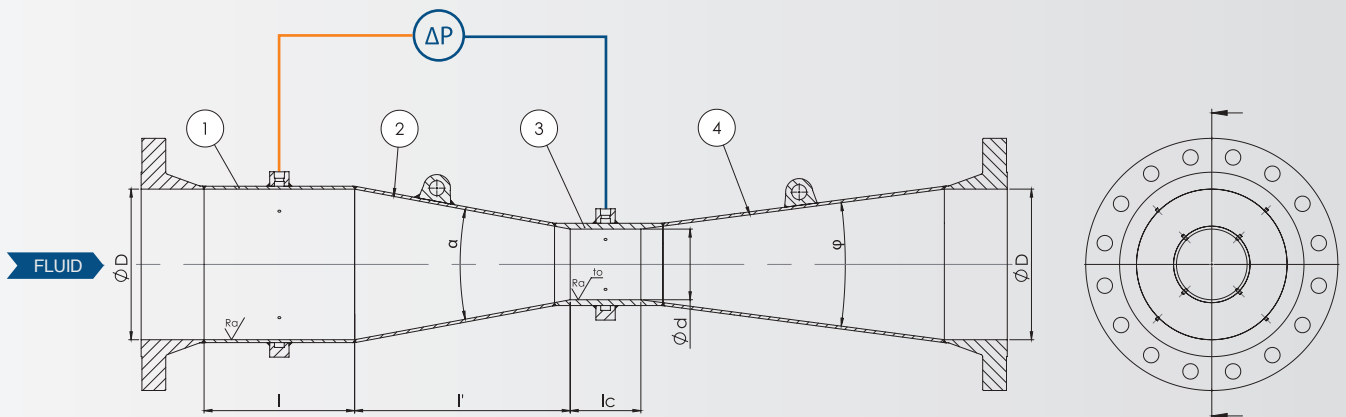
Suitable for large diameters and/or low permanent pressure drop

GENERAL DATA

- Standards: ISO 5167-1&4 or ASME MFC-3M
- Weld-end (BW) or flanged connection⁽¹⁾
- Material:
 - o Standard: carbon steel, stainless steel
 - o Others⁽¹⁾: according to your application
- Fluid: liquid, gas, steam
- Pipes from ϕ 100 to 1 200 mm
- Accuracy: 1.5 % of the max flow rate
- Repeatability of measurement: 0.1 %



MARK	DESIGNATION
1	Entrance cylinder
2	Convergent
3	Throat
4	Divergent



Upstream and throat pressure taps: annular chambers or four tappings with a «triple-T» arrangement

TECHNICAL CHARACTERISTICS

		ISO 5167-1&4	ASME MFC-3M
Re_D	Reynolds number in the pipe	$2 \cdot 10^5 \leq Re_D \leq 2 \cdot 10^6$	$2 \cdot 10^5 \leq Re_D \leq 6 \cdot 10^6$
D	Inside pipe diameter	$200 \text{ mm} \leq D \leq 1\,200 \text{ mm}^{(2)}$	$100 \text{ mm} \leq D \leq 1\,200 \text{ mm}^{(2)}$
β	d/D	$0.40 \leq \beta \leq 0.70$	$0.30 \leq \beta \leq 0.75$
Ra	Throat roughness	$Ra \leq 10^{-4} \cdot d$	
	Entrance cylinder and convergent roughness	$Ra \leq 5 \cdot 10^{-4} \cdot D$	
l	Entrance cylinder minimal length	$l = D$	
l'	Entrance convergent length	$l' = 2.7 \cdot (D - d)$	
α	Entrance convergent angle	$\alpha = 21^\circ \pm 1^\circ$	
lc	Throat length	$lc = d \pm 0.03 \cdot d$	
ϕ	Exit divergent angle	$7^\circ \leq \phi \leq 15^\circ$	

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

⁽²⁾ Diameter > 1 200 mm available on request.