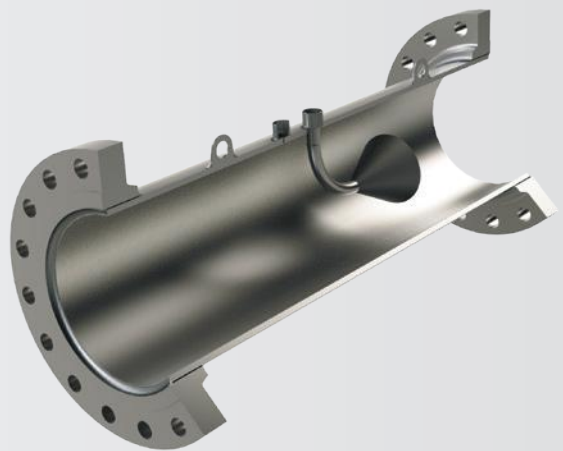


# CONE METER

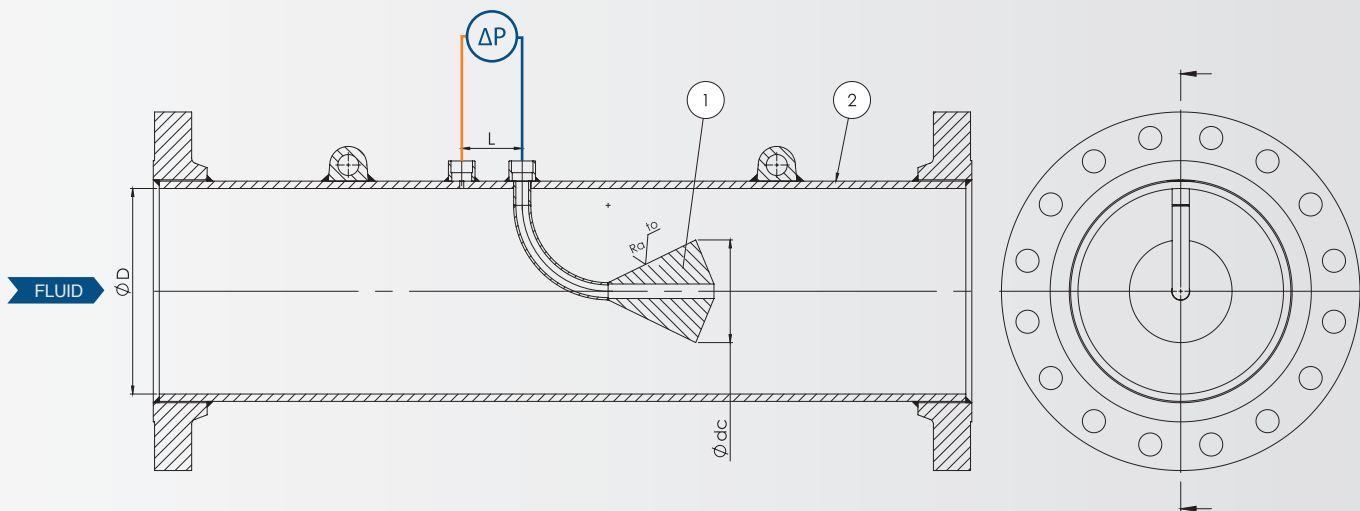
Suitable for short straight lengths and low flow rates

## GENERAL DATA

- Standard: ISO 5167-1&5
- Weld-end (BW) or flanged connection<sup>(1)</sup>
- Material:
  - o Standard: carbon steel, stainless steel
  - o Others<sup>(1)</sup>: according to your application
- Fluid: liquid, gas, steam
- Pipes from  $\phi$  50 to 500 mm
- Accuracy: 5 % of the max flow rate
- Repeatability of measurement: 0.1 %



MARK	DESIGNATION
1	Cone
2	Tube



## TECHNICAL CHARACTERISTICS

TECHNICAL CHARACTERISTICS		ISO 5167-1&5
$Re_D$	Reynolds number in the pipe	$8 \cdot 10^4 \leq Re_D \leq 1.2 \cdot 10^7$
D	Inside pipe diameter	$50 \text{ mm} \leq D \leq 500 \text{ mm}$
$\beta^*$	$d_c$ , diameter of the cone at the point where its circumference is maximum	$0.45 \leq \beta \leq 0.75^{(2)}$
Ra	Cone surface roughness	$Ra < 5 \cdot 10^{-4} \cdot d_c$
$R_1$	Bending radius of the cone at its maximum circumference	$R_1 < 0.0005 \cdot d_c$ ou $< 0.2 \text{ mm}$
L	Distance between upstream and downstream pressure tap	$50 \text{ mm} \leq L \leq 2 \cdot D$

$$\beta^* = \sqrt{1 - \frac{d_c^2}{D^2}}$$

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

<sup>(2)</sup> For  $\beta > 0.75$ , the cone meter needs to be calibrated.