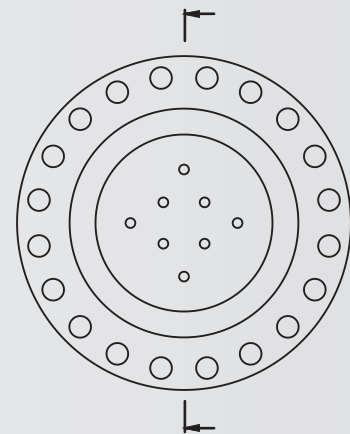
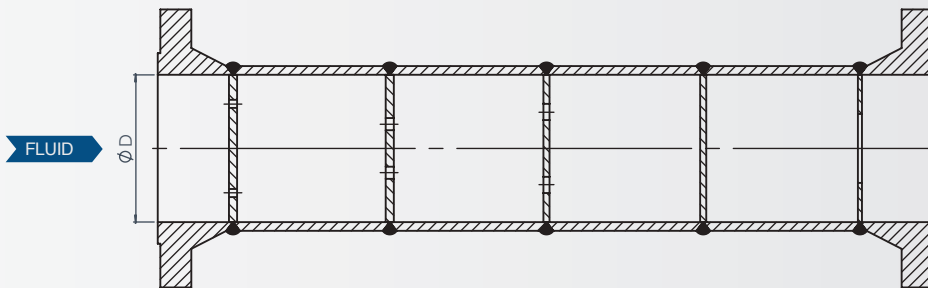
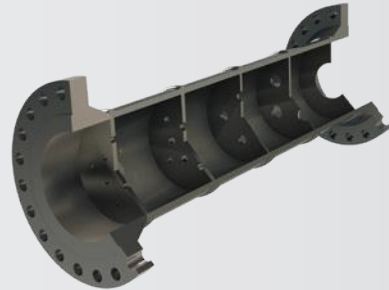


MULTI-STAGE RESTRICTION ORIFICE

Multiple plates in series when the desired pressure drop cannot be achieved with a single plate

GENERAL DATA

- Design based on ISO 5167, ASME MFC-3M or R.W. Miller standards
- Weld-end (BW) or flanged connection⁽¹⁾
- Material:
 - o Standard: stainless steel 304L / 316LL
 - o Others⁽¹⁾: according to your application
- Fluid: liquid, gas, steam
- For all pipe sizes



Optional: stellite coating⁽¹⁾

TECHNICAL DESCRIPTION

Plate mounting	Plates mounted in series – spacing between plates from 1D to 5D optimized for each device (D, inside pipe diameter)
Number of plates	Calculation of the number of stages optimized according to the specifications of the application, each plate enabling to reduce the pressure to the maximum while avoiding the phenomena of cavitation ⁽²⁾ and critical flow ⁽²⁾
Noise	Control of the noise level of the complete device estimated at 1 m. Multi-hole plates reduce the noise level per stage. External enclosure solutions can be added if the noise level remains too high (contact us)
Thermodynamics	Thermodynamic properties of the fluid are taken into account for the calculation of each stage: phase change, temperature, composition and density of the mixture, viscosity, compressibility factor
3D simulation	Possibility of a numerical simulation to complete the analytical calculations – see images on page 36

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

⁽²⁾ For more details, see page 36.