

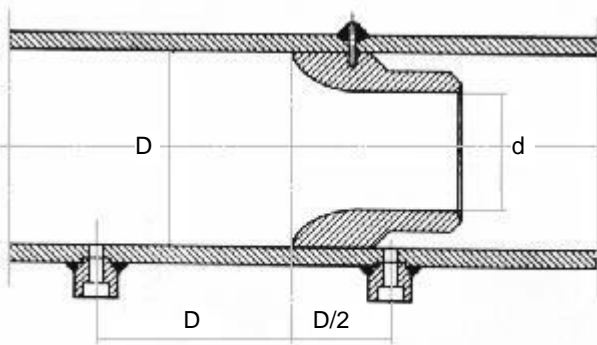
Recommended for heavy duty applications since erosion and cavitations phenomena affect them to a lesser extent than orifice plates.

Recommended Execution

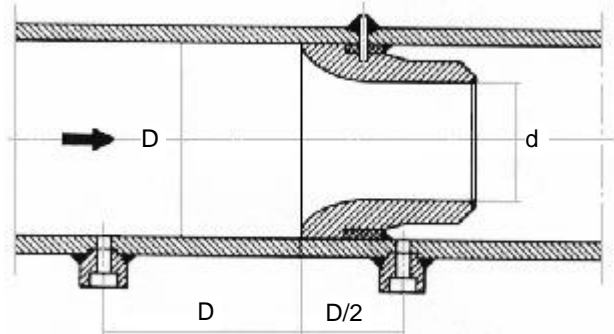
Welding on type with holding ring from DN 100 and up, without from DN 50 to DN 80 completely assembled in a proper hone flow section reamed over the whole length and of the same material of the line. Welding ends bevelled per ANSI B 16.25. The flow nozzle is manufactured from forged steel. The profile surfaces are mirror finished in accordance with grade 1 of RMS scale. Holding ring is supplied in the same material as the pipe. Pressure connections are supplied in the same material as the pipe. The flow nozzles are held with four holding pins located at 90°. All welds are subjected to heat treatment to eliminate the internal stresses.

Nominal size Standard flow section length

Ø1,5"	400 mm
Ø2"	600 mm
Ø2,5"	650 mm
Ø3"	700 mm
Ø4"	800 mm
Ø5"	900 mm
Ø6"	900 mm
Ø8"	1000 mm
Ø10"	1200 mm
Ø12"	1300 mm
Ø14"	1500 mm
Ø16"	1600 mm
Ø18"	1800 mm
Ø20"	2000 mm
Ø24"	2200 mm



Welding-in type without holding ring for sizes from Ø 2" to Ø 3"



Welding-in type without holding ring for sizes from Ø 4" and up

Flow Calculation

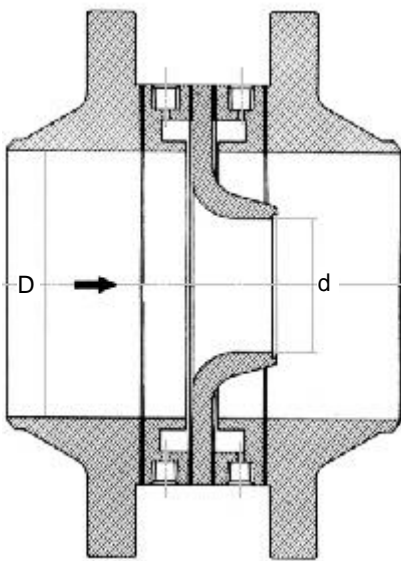
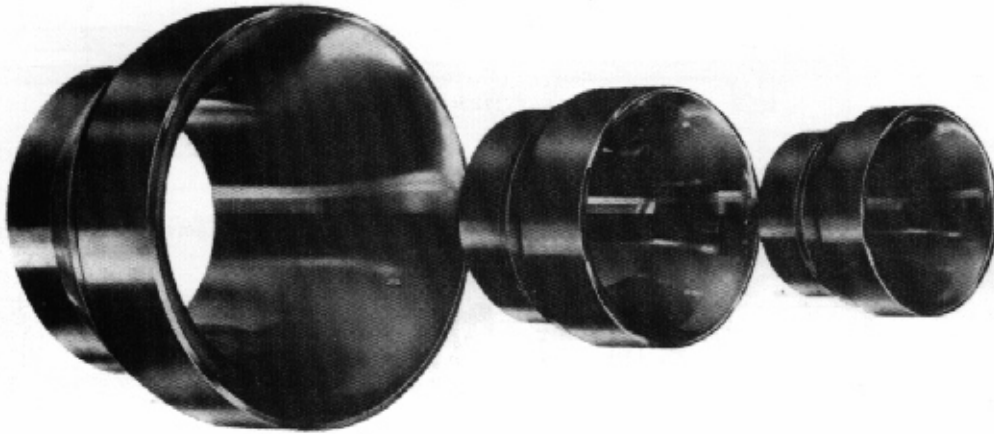
To determine throat diameter and nozzle shape it is necessary to specify:

- Nozzle execution and type
- Flow section length
- Type of chart and differential required
- Pipe diameter
- Installatio (vertical or horizontal)
- Type of pressure taps
- Tyoe of fluid
- Maximum flow
- Average flow
- Operating pressure
- Base pressure
- Operating pressure
- Base temperature
- Specific gravity (at base and operating conditions, gases should be related to air)
- Absolute viscosity in "centipoises" at operating conditions

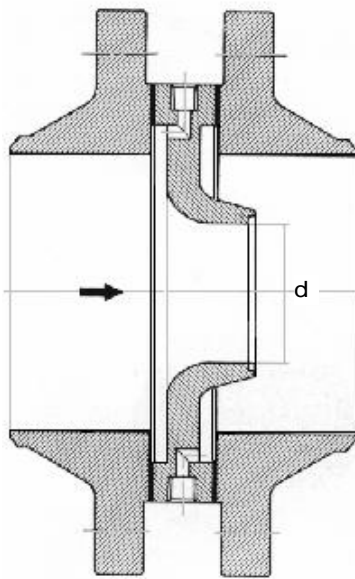
For steam specify water vapor ratio.

Finished pieces are punched with tag, pipe material, nozzle material, nominal size, throat diameter, flow direction.

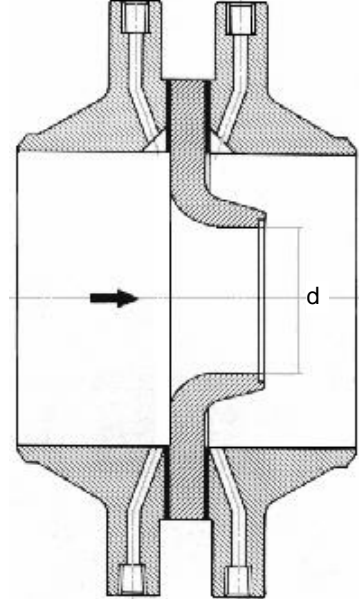
Upon request flow nozzles can be experimentally calibrated with test certificate by an authorized institute.



Flanged type with separate piezometric rings



Flanged type with integral piezometric rings



Flanged type with corner taps

Construction:

According to ASME - Power Test Code PTC 19.5; Flow Measurement (LONG RADIUS TYPE); DIN 1952; BS 1042; ISO-R541; AFNOR X 10-102 (ISA 1932 TYPE); ISO 5167

Options:

Upon request flow nozzles can be supplied complete with seal or condensing pots and instrument stop valve.