

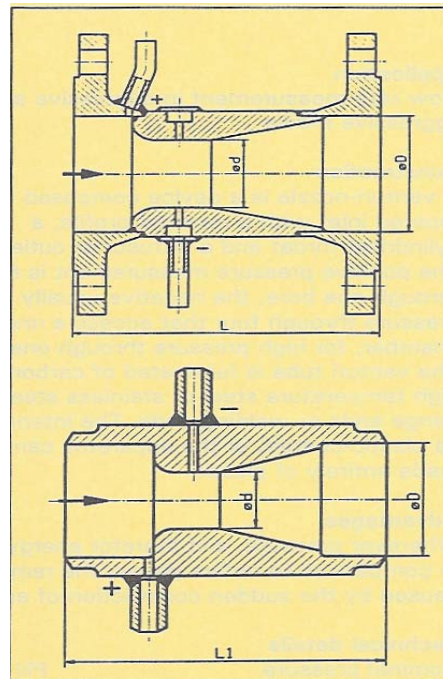
## Venturi Nozzle DV 700 (Flange) Venturi Nozzle EDV800 (Weld in)



### Construction

A venturi-nozzle is a device composed of a tapered drilled inlet with a rounded profile, a cylindrical throat and a diffuser or outlet cone. The positive (high) pressure measurement is taken through one bore, the negative (low) pressure usually by through four that access a ring-chamber, for high pressure through one bore.

The venturi tube is fabricated of carbon steel or high temperature steel or stainless steel, with flange ends or welding ends. The interior can be plastic-coated, or the apparatus can be made entirely of plastic.



### Advantages

Wherever pressure, and therefor energy loss must be avoided, Venturi Nozzles are used. In comparison to orifice plates, the remaining pressure loss is about 80% less than that caused by the sudden constriction of an orifice.

### Technical details

Nominal pressure: PN 6 (150 lbs) up to PN 500 ( 2500 lbs)

Nominal diameter: DN 50 (2..) up to DN 800 (32..)

- Bore diameter: the calculation of this by us from the data supplied, considering the relevant standards and regulations, forms part of the package.
- Pressure loss: The remaining pressure loss, depending upon the diameter ratio of the orifice  $d_2: D_2$ . This can be 10-15% of the dynamic pressure. Shown in data sheet.
- Pressure taps: These are described in sheet A6. If required, the venturi tube can be supplied with more than two pressure taps.

Installation: **DV 700**  
 Between flanges on horizontal, vertical or diagonal pipelines.  
 Bolts and seals are not normally supplied with the venturi tube.  
**EDV 800**  
 Welded in horizontal, vertical or diagonal pipelines

Quality assurance: Manufacture and testing according to the relevant guidelines,  
 i.e. TRD, AD-Merkblatt, ANSI and or customer's specification

## Dimensions

Version DV 700/EDV 800  
 Guidelines for installation length  
 app. length (depending from  $\beta$ -ratio)

DN	Installation Length	
	DV 700	EDV 800
50 (2")	170	150
65 (2,5")	200	200
80 (3")	220	200
100 (4")	270	200
125 (5")	300	250
150 (6")	350	250
200 (8")	400	300
250 (10")	500	350
300 (12")	600	400

## Materials

The most usual materials are:

Mild steel: RSt37-2 (1.0114)  
 Stainless steels: X6CrNm1810 (1.4541)  
 X6CrNiMoTi17122 (1.4571)  
 Carbon steel: C22.8 (1.4060)  
 Heat resistant steels 15Mo3 (1.5415)  
 13CrMo44 (1.7335)  
 10CrMo910 (1.7380)  
 Plastics: PP, PVC

Choice of material depends on the material of the existing pipeline, as well as on the medium, temperature and pressure. Other materials can be used according to customer's specification.

## Accessories

Condense pots and shut-off valves, welded on or separately.