Stainless Steel Orifice Plate

Feature

316 Stainless steel Wafer style flange High & low pressure metering points For ANSI 125 or ANSI 150 flanges Design according to BS7350 Tolerance on nominal Cvs ±5% (test according to BS7350)

600WOG

Working conditions Water: 15°F - 260°F

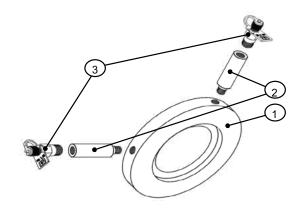
> below 32°F only for water with added antifreezing fluids over 212°F only for water with added anti-boiling fluids



Material

	Part	Material	Specification
1	Body	Stainless steel	AISI 316
2	Extension	Stainless steel	AISI 316
3	Test point	DZR Brass ¹	ASTM C35330

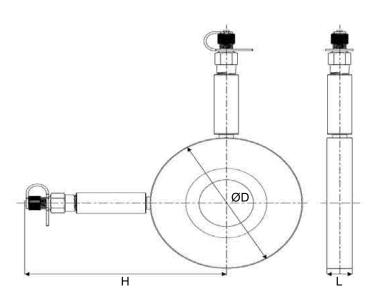
¹ Test points with EPDM Perox gaskets and polypropylene ties



Dimension, Cv, Weight, Flow Rate

Size	ØD	н	L	Cvs	Wt.	Flow Rate
	[in]	[in]	[in]		[lb]	[GPM]
21/2"	4.84	5.9	0.7	102.0	3.2	47.9 - 110.2
3"	5.31	6.2	0.7	142.2	3.9	101.4 - 243.5
4"	6.42	6.7	0.7	249.3	4.3	172.0 - 412.7
5"	7.60	7.3	0.7	389.5	5.6	267.1 - 630.1
6"	8.62	7.8	0.7	530.2	6.5	375.8 - 902.0
8"	10.79	8.9	0.7	929.5	9.1	663.5 - 1592
10"	12.99	10.0	0.7	1444	11.8	1055 - 2485
12"	15.16	11.1	0.7	2122	15.1	1492 - 4057

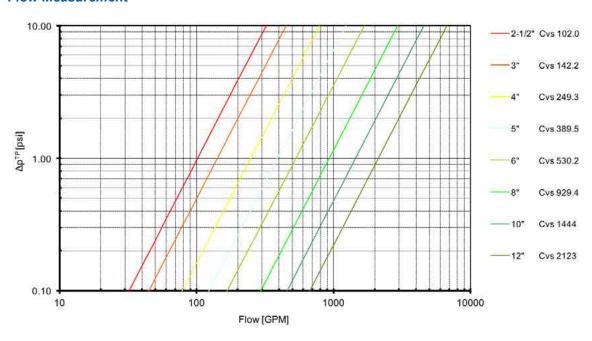
¹ Suggested flow range applicability (BS7350)





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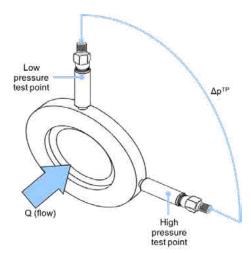
Flow Measurement



$$Q = C_{VS} - \sqrt{\Delta p^{TP}}$$

Formula linking flow Q (in GPM) and Δp^{TP}, differential pressure signal measured at test points (in psi).

Minimum flow that can be measured for each diameter may be calculated by using in the formula minimum Δp that can be measured by used manometer.



Headloss

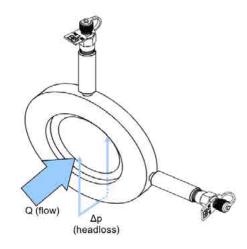
Size	Cv			
21/2"	175.4			
3"	261.6			
4"	426.3			
5"	654.2			
6"	901.4			
8"	1636			
10"	2497			

3694

12"

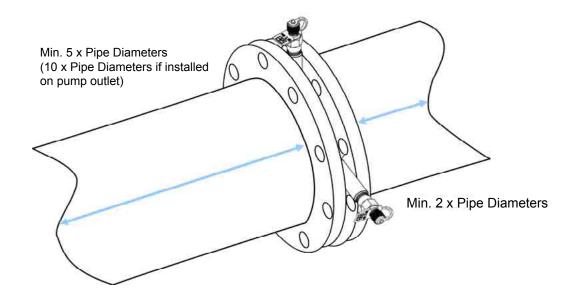
Formula linking flow Q (in GPM) and theoretical valve headloss Δp (in psi).

$$\Delta p = \left(\frac{Q}{C_V}\right)^2$$



Installation

To obtain the best performances valve must be installed on a pipe with its same nominal size preceded and followed by straight pipe lengths as per figure indications.



The orifice plate can be installed together with balancing valve of same nominal size as per the following configuration.

