



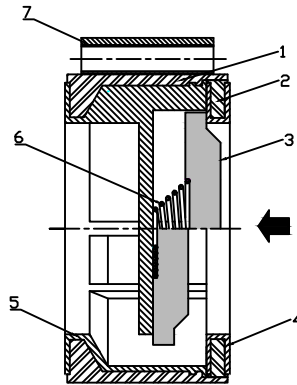
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# PFA Lined Wafer Non-Return Valve To Suit DIN PN 10-40 and ASME B16.5 150-300



F-L-U-O-R-O-P-O-L-Y-M-E-R  
T-E-C H-N-O-L-O-G-Y

A compact, fully engineered robust steel body with a heavy duty PFA moulded lining to ASTM D3307 incorporating a spring loaded poppet seal disc. The design eliminates problems of deformation under load and leakage.



Operation - cryogenic to +250°C

## Material Specification

Item	Description	Material
1	Valve Body	316L Stainless Steel
2	Seal Plate	316L Stainless Steel
3	Seal Disc	PTFE
4	Retainer Lining	PFA to ASTM 3307
5	Body Lining	PFA to ASTM 3307
6	Spring	Hastelloy C
7	Optional earth	316L Threaded

## Dimensions

Pipework Size		L	OD		nb
mm	inches		ANSI	DIN	
15	1/2"	25	44	53	18
20	3/4"	32	54	63	22
25	1"	35	63	73	25
32	1 1/4"	40	73	82	32
40	1 1/2"	45	82	94	40
50	2"	56	102	109	50
65	2 1/2"	71	121	127	65
80	3"	71	133	144	76
100	4"	80	172	164	100
150	6"	117	219	219	150
200	8"	117	276	273	200

Nominal Bore		Opening pressures in mbar v Flow Direction									
		5	5	5	13	13	13	25	25	25	
15	1/2"	2	8	5	4	16	13	11	27	25	23
20	3/4"	2	8	5	3	16	13	11	27	25	23
25	1"	2	8	5	3	16	13	11	27	25	23
32	1 1/4"	2	8	5	3	16	13	11	27	25	23
40	1 1/2"	2	8	5	3	16	13	11	27	25	23
50	2"	2	8	5	3	16	13	11	27	25	23
65	2 1/2"	2	9	5	3	16	13	11	27	25	23
80	3"	3	9	5	2	17	13	11	29	25	23
100	4"	3	9	5	2	18	13	11	29	25	22
150	6"	5	8	5	2	16	13	10	28	25	19
200	8"	5	8	5	2	17	13	9	-	-	-

Opening pressures up to 5 mbar available.

Standard opening pressure is 13 mbar with horizontal flow. 5, 25 mbar and other standards available.

## Pressure Equipment Directive

These valves conform to the 2014/68/EU directive for use as follows:

- Group 1 and 2 Fluids
- Group 1 and 2 Gases

Tight shut-off in accordance with DIN 3230, part 3, leakage rate BO1. MSS SP-72.

At low differential back pressures leakage rate 2 x 3 may occur. Where this is unacceptable soft seats should be specified.

Test Medium: Air

Pressure: 10 & 1 bar (14.5 & 145 psi)

Temperature: 15 to 35°C (60 to 95°F)

Test Period: DN 15 - 25 (1/2" - 1") 15 secs.

DN 40 - 200 (1 1/2" - 8") 60 secs.

## Note

This type of valve should not be used where heavily pulsating flow exists such as that found close to pumps and compressors.

## Pressure drop Chart

The curves are valid for water and based on a valve loss coefficient K=6.6. For other fluids the equivalent water volume flowrate must be calculated and used in the graph.

$$\dot{V}_w = \dot{V} \cdot \sqrt{\frac{\rho}{1000}}$$

$\dot{V}_w$  = Equivalent water volume flow (l/s etc)  
 $\rho$  = Operating fluid density (kg/m<sup>3</sup> etc)  
 $\dot{V}$  = Operating fluid volume (l/s etc)

