Flange Silent Check Valve

www.hiwa.cc

Flange Silent Check Valve

Technical Parameter

Size : DN40-600

Work Pressure : PN10/16

Medium : Circulation water, drinking water or chilled glycolic water up to 50 %

Medium temperature : -20~100°C

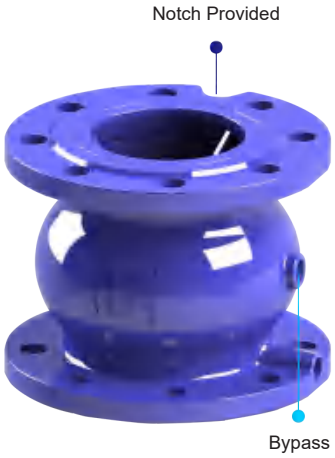
Flange drilling : BS/EN1092-2 PN10/16

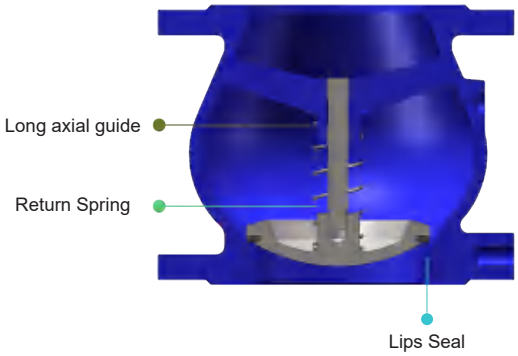
Kvs : 58~7785 m³h

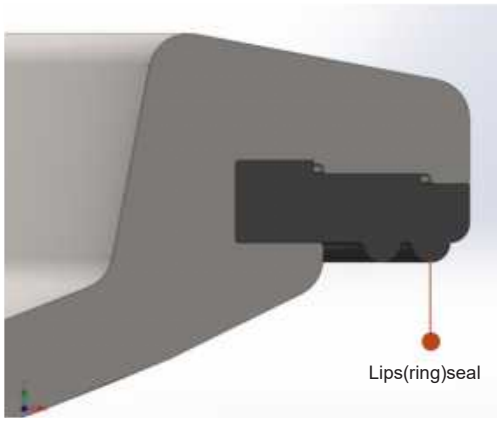
Noise : ≤59dB

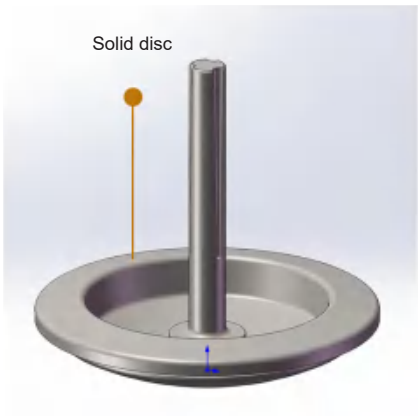
Product Features

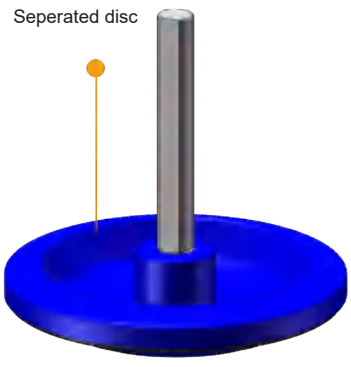
- Long back axial guiding for reduced displacement
- Return spring : Operates in any position
- Sealing ring with sealing lip design for easy replacement and anti detachment design.
- Minimum pressure loss
- Silent , exceptional robustness.
- Bypass port design.











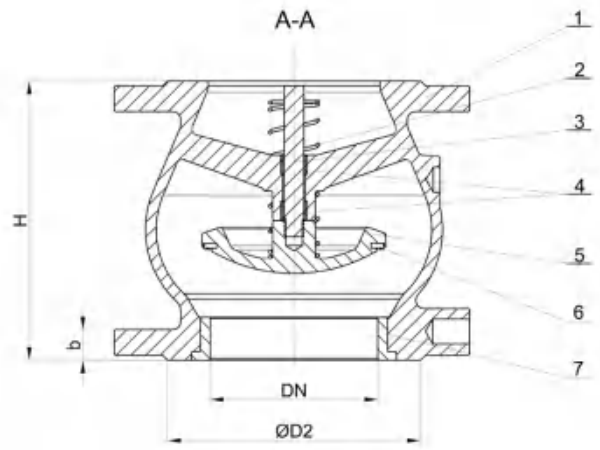
Opening Differential Pressure In Different Installation directions

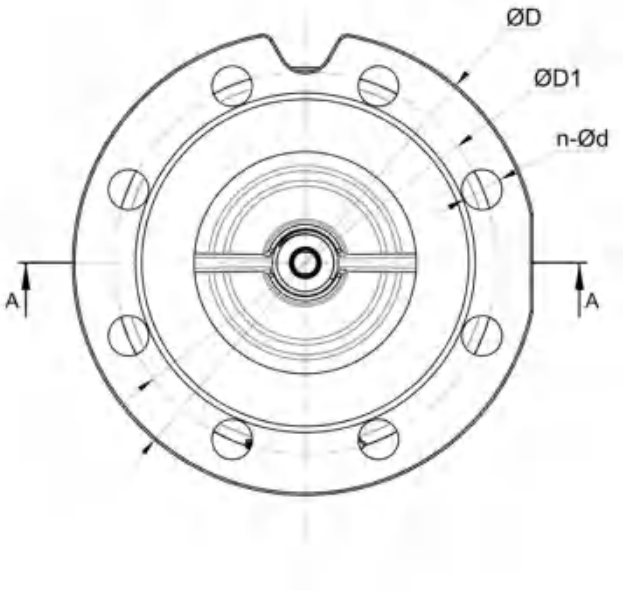
Size	Opening differential pressure kpa				
	With spring				No spring
DN	↑	↓	←	→	↑
40	3.5	1.0	2.27	2.27	1.2
50	2.0	0.1	1.18	1.18	1.1
65	2.3	0.3	1.14	1.14	0.9
80	2.4	0.3	1.38	1.38	1.0
100	2.4	0.2	1.29	1.29	1.1
125	2.5	0.2	1.35	1.35	1.2
150	2.8	0.0	1.40	1.40	1.4
200	3.0	0.4	1.70	1.70	1.3
250	3.8	0.3	1.74	1.74	2.0
300	3.4	0.4	1.91	1.91	1.5
350	4.3	0.4	1.91	1.91	2.4
400	4.6	0.7	1.99	1.99	2.6
450	4.6	0.6	1.99	1.99	2.6
500	4.8	1.0	1.92	1.92	2.9
600	4.1	1.0	1.58	1.58	2.6

Dimensional Data

DN	H	D	D1	D2	b	n-d(PN16)
40	85	150	110	84	19	4-19
50	100	165	125	99	19	4-19
65	120	185	145	118	19	4-19
80	140	200	160	132	19	8-19
100	170	220	180	156	19	8-19
125	200	25	210	184	19	8-19
150	230	285	240	211	119	8-23
200	300	340	295	266	20	12-23
250	354	400	355	319	22	12-28
300	410	455	410	370	24.5	12-28
350	425	520	470	429	26.5	16-28
400	475	580	525	480	28	16-31
450	500	640	585	548	30	20-31
500	550	715	650	609	31.5	20-34
600	600	840	770	720	36	20-37

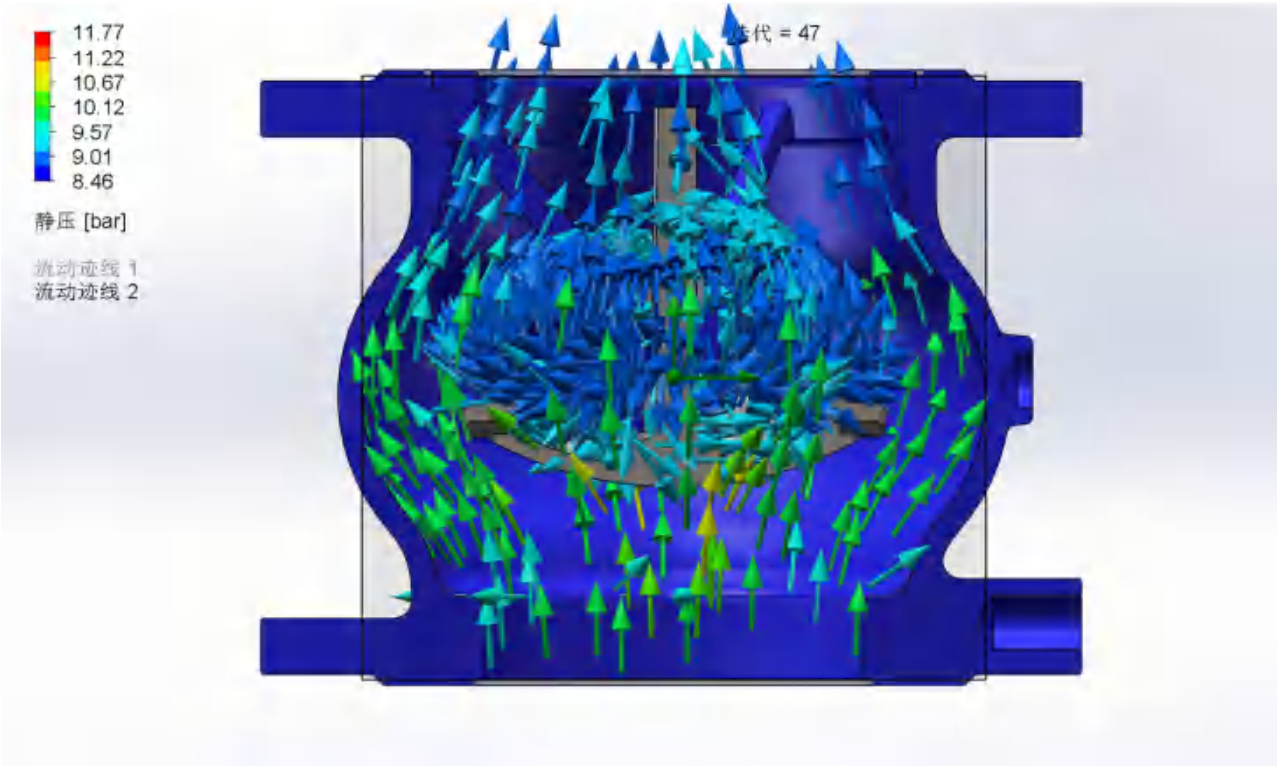
Dimensional Data





NO	Parts Name	Material	EN	ANSI
1	Body	Ductil iron	EN-GJS450-10	ASTM A536 65-45-12
2	Spring	Stainless steel	1.4301	AISI304
3	Stem	Stainless steel	1.4021	SS420
4	Bushing	Nylon	Nylon	Nylon 101
5	Disc	Ductil iron Stainless steel	EN-GJS450-10 1.4301	ASTM A536 65-45-12 SS304
6	Seal	EPDM/NBR	EN681.1	
7	Seat	Ductil iron	EN-GJS450-10	ASTM A536 65-45-12

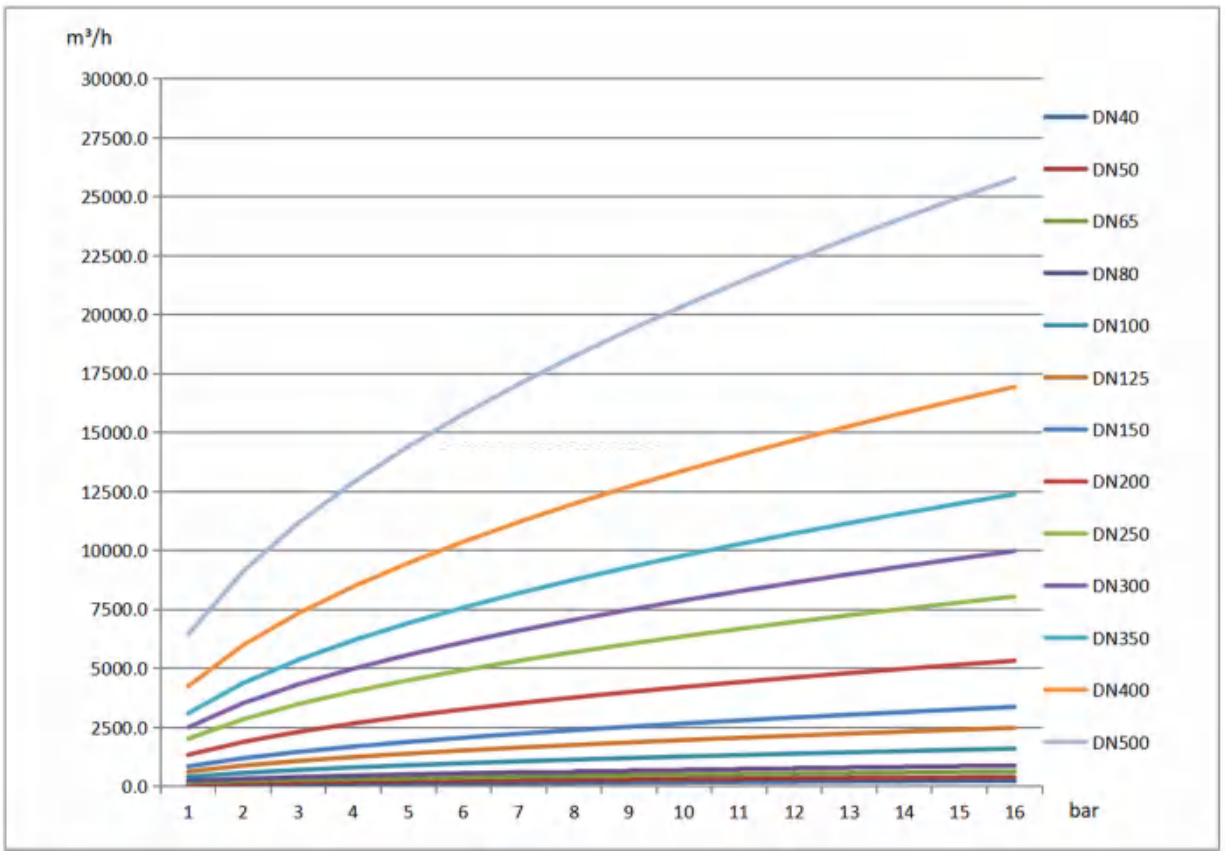
Pressure Loss



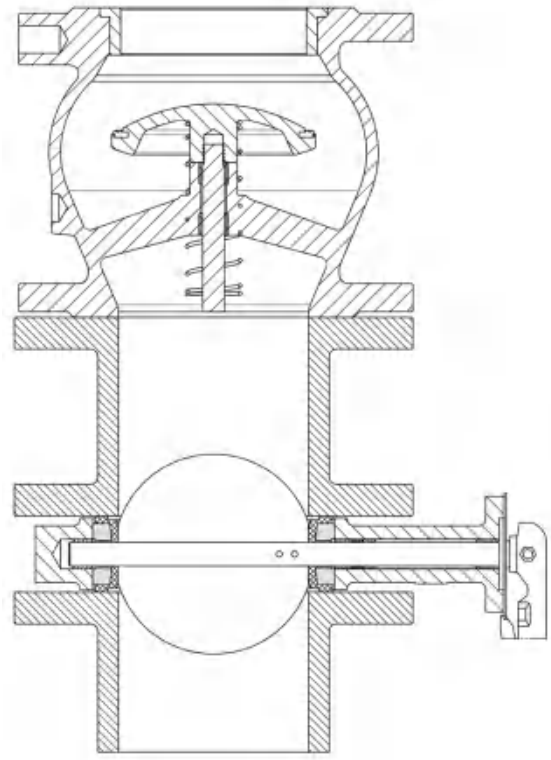
DN	Flow resistance coefficient	Kv	Cv	Acoustic power
40	1.9	58	66.7	51.8
50	1.3	99	114.0	44.0
65	1.2	159	184.0	47.2
80	1.3	224	258.9	42.7
100	1.1	398	460.5	43.7
125	1.0	619	715.5	41.9
150	1.1	841	971.7	75.6
200	1.4	1331	1538.3	24.2
250	1.5	2011	2324.7	35
300	1.9	2493	2881.9	35
350	2.7	3095	3577.9	35
400	2.2	4234	4894.6	35
450	2.3	5314	6143.1	35
500	2.3	6445	7450.6	35
600	2.6	7785	9000.7	35

Pressure Loss

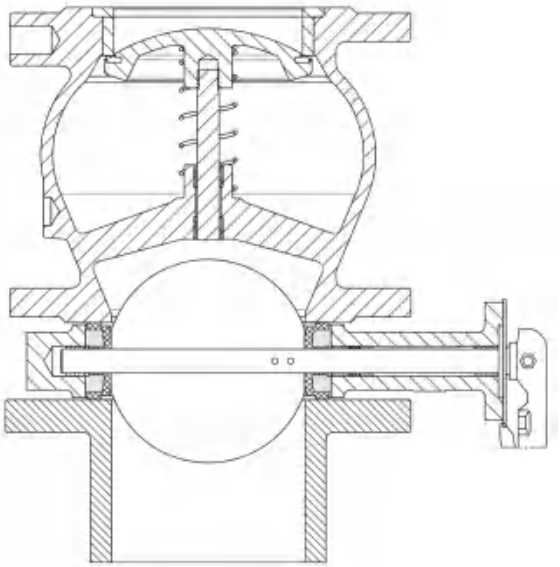
DN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
40	57.7	81.6	99.9	115.4	129.0	141.3	152.6	163.2	173.1	182.4	191.3	199.8	208.0	215.8	223.4	230.7
50	98.6	139.5	170.8	197.2	220.5	241.6	260.9	278.9	295.8	311.8	327.1	341.6	355.6	369.0	381.9	394.5
65	159.2	225.1	275.7	318.4	355.9	389.9	421.2	450.2	477.6	503.4	528.0	511.4	574.0	595.6	616.5	636.7
80	224.0	316.8	387.9	448.0	500.8	548.6	592.6	633.5	671.9	708.3	742.9	775.9	807.6	838.1	867.5	895.9
100	398.3	563.3	689.9	796.6	890.6	975.6	1053.8	1126.6	1194.9	1259.5	1321.0	1379.8	1436.1	1490.3	1542.6	1593.2
125	618.9	875.2	1071.9	1237.7	1383.8	1515.9	1637.4	1750.4	1856.6	1957.0	2052.5	2143.8	2231.3	2315.6	2396.8	2457.5
150	840.5	1188.7	1455.8	1681.0	1879.4	2058.8	2223.8	2377.3	2521.5	2657.9	2787.6	2911.6	3030.5	3144.9	3255.3	3362.0
200	1330.6	1881.7	2304.6	2661.1	2975.2	3259.2	3520.3	3763.4	3991.7	4207.6	4413.0	4609.2	4797.4	4978.5	5153.2	5322.2
250	2010.8	2843.7	3482.8	4021.6	4496.3	4925.4	5320.1	5687.4	6032.4	6358.7	6669.0	6965.6	7250.0	7523.7	7787.8	8043.2
300	2492.7	3525.3	4317.6	4985.5	5573.9	6105.9	6595.2	7050.5	7478.2	7882.7	8267.5	8635.1	8987.7	9327.0	9654.3	9971.0
350	3094.8	4376.8	5360.4	6189.7	6290.3	7580.8	8188.2	8753.5	9284.5	9786.8	10264.4	10720.8	11158.6	11579.8	11986.3	12379.4
400	4233.7	5987.4	7333.0	8467.4	9466.9	10370.4	11201.3	11974.7	12701.1	13388.2	14041.6	14666.0	15264.9	15841.1	16397.1	169.34.8
450	5313.6	7514.6	9203.5	10627.3	11881.7	13015.7	14058.6	15029.3	15940.9	16803.2	17623.4	18407.0	19158.6	19881.9	20579.7	21254.6
500	6444.6	9114.0	11162.3	12889.2	14410.5	15785.9	17050.8	18228.0	19333.7	20379.6	21374.3	22324.7	23236.3	24113.4	24959.8	25778.3
600	7785.4	11010.2	13484.7	15570.7	17409.6	19070.2	20598.2	22020.4	23356.1	24619.5	25821.2	26969.3	28070.6	29130.2	30152.6	31141.5



Installation Instruction



Correct



Wrong

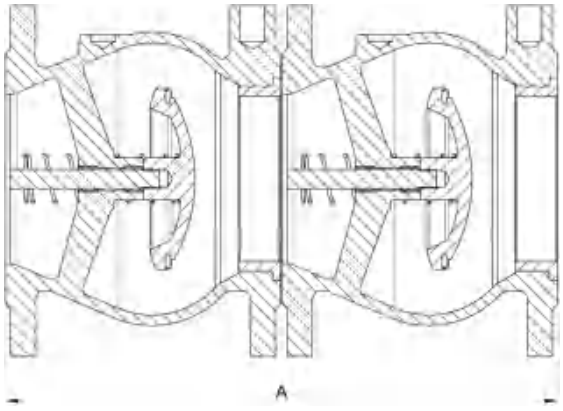
- Place the valve in the middle of the line flange and place a sealing gasket between valve I and the flange. It must be ensured that the distance between the corresponding flanges of the pipeline is equal to the length of the valve structure, and the pipeline flange cannot be pulled closer to the valve with bolts.
- It is not possible to weld the flange to the pipeline after the valve is installed to the flange.
- Water hammer can cause the valve to be damaged or ruptured. Tilting, torsion, misalignment of the valve diameter centerline and the line will force the valve. It is recommended to install elastic joints, etc. to minimize the vibration of the pipeline.
- Some valves actually take up more space than their structure when they are open. Therefore, it is recommended that when installing, it should be separated by a certain distance to prevent damage to the valve and avoid failure.
- Note: This valve is a check valve, please install it in the medium flow direction indicated on the valve stop.

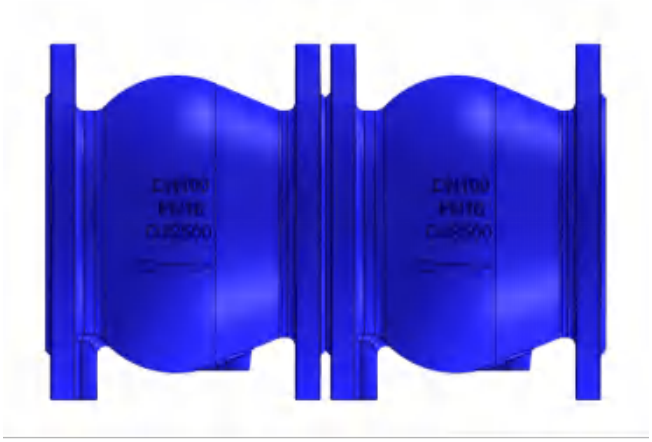
Extended

Connect pressure gage

Connect Screen

Connect by-pass valve





Double check valve manifold can effectively strengthen the pipe seal and reduce the pipeline water hammer.

EXPERT IN FLUID CONTROL

18" Floor, Block B International Trade Center 107 Liuquan Road, Zibo City Shandong China

No.2 Yingye Road, Huangtai Industrial, Park, Xiaozhan, Jinnan District Tianjin City China

North End of Gongye 2 Road, Sangluoshu Industrial Zone, Binzhou City, Shandong China

86-533-6077200/6077206

sales@hiwa.cn