

Structural Features and Applications

This valve is installed on the outlet pipeline of a water system to prevent water hammer impact and reverse flow when the water pump shuts down, thereby protecting the safety of the pipeline. It features a compact size, light weight, easy installation and maintenance, a guiding device, flexible closing, linear sealing, and excellent check performance, effectively eliminating closing noise. It is suitable for water supply and drainage, fire protection, HVAC, and other related water pump outlets to prevent medium backflow and damage to pumps and pipelines caused by water hammer.

Main Technical Parameters

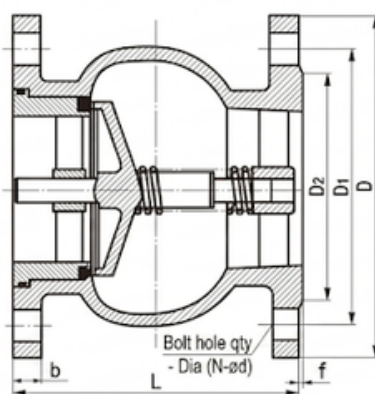
Nominal Pressure PN (MPa)		1.0	1.6	2.5
Test Pressure (MPa)	Shell strength	1.5	2.4	3.75
	Sealing performance	1.1	1.76	2.75
Working temperature (°C)		≤ 80		
Applicable medium		Water, Oil		

Materials of main parts

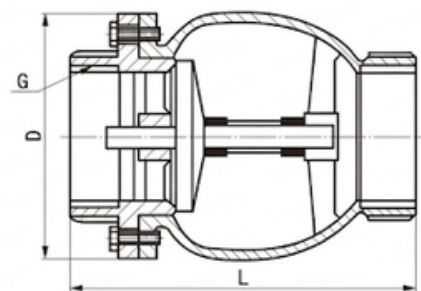
Name of parts	Body, Seat	Disc	Sealing face	Spring
Material	CI (Cast Iron), Steel casting, Stainless steel	Steel casting, Cast copper, Stainless steel	NBR	Stainless steel

Structural Schematic Diagram

Silent Check Valve (DN100)



Silent Check Valve - Flanged Type
(Model HC41X)



Silent Check Valve - Threaded Type
(Model HC11X)

Main External and Connection Dimensions

Nominal Diameter DN(mm)	L	PN10							PN16							PN25						
		b	f	D	D	D ₁	Z-ø d		b	f	D ₂	D	D ₁	Z-ø d		b	f	D ₂	D	D ₁	Z-ø d	
40	100	18	2	85	150	110	4-18		18	2	85	150	110	4-18		18	2	85	150	110	4-18	
50	100	20	3	102	165	125	4-18		20	3	102	165	125	4-18		20	3	99	165	125	4-18	
60	120	20	3	122	185	145	4-18		20	3	122	185	145	4-18		22	3	118	185	145	8-18	
80	140	22	3	133	200	160	4-18		22	3	133	200	160	6-18		24	3	132	200	160	8-18	
100	160	24	3	168	220	160	8-18		24	3	188	220	180	6-18		24	3	156	235	190	8-22	
125	180	26	3	184	250	210	8-16		26	3	184	250	210	8-18		26	3	184	270	250	8-26	
150	200	26	3	212	285	240	8-22		26	3	212	285	240	8-22		28	3	211	300	250	8-26	
200	220	28	3	268	340	295	8-22		30	3	268	340	295	12-22		30	3	274	360	310	12-26	
250	240	28	3	320	390	350	12-22		32	3	320	400	355	12-26		32	3	389	425	430	12-30	
300	280	28	4	370	445	400	12-22		36	4	370	460	410	16-26		34	4	389	450	430	16-33	
350	320	30	4	428	480	460	16-26		36	4	428	520	470	16-26		38	4	450	565	490	16-33	
400	360	32	4	482	565	615	16-26		36	4	482	580	525	18-30		40	4	505	620	550	20-36	
450	400	32	4	532	515	615	20-26		40	4	532	640	585	20-30		42	4	615	730	600	20-36	
500	440	34	4	585	670	620	20-26		42	4	585	715	650	20-33		44	4	615	730	830	20-36	

HC11X (Type)			
Nominal Diameter DN(mm)	L	G	D
15	65	1/2"	45
20	75	3/4"	48
25	90	1"	58
32	105	1 1/4"	66
40	120	1 1/2"	74
50	140	2"	89