

Nozzle (Silent) Check Valve NSCV Series

KV Controls Model NSCV Nozzle (Silent) Check Valves, also known as non-slam check valves to reduce or eliminate water hammer and its effects. It is normally used as protection against reverse flow when power failure in areas where noise pollution or water hammering is a critical issue. It can provide not only quiet performance but also low head loss.

When water hammer occurs, the resulting flow reversal places severe stress on the pipe, endangering its structural integrity, and opening it to potential rupture and damage. So NSCV Check Valves can be avoid water hammer in a good way.



Technical Data	
Size range	DN50-DN1200
Pressure range	PN10-16-25-40 / Class 150
Temperature	EPDM -10°C to +80°C
Design	EN 12334
Face to face	EN558-1 / ISO 5752 Series 14
Flange drilling	EN 1092-2 / ISO 7005-2 / ANSI B16.1
Coating	Thermoplastic Powder Epoxy
Testing	EN 12266-1
Marking	EN 19
Coating Blue Color	RAL 5005
	RAL 5010
	RAL 5015
	Custom made

Application Range
• Pump Stations • Water Supply Systems • Water treatment and distribution systems • Tanks • Power Station Cooling Lines • Firefighting • Cooling and HVAC System

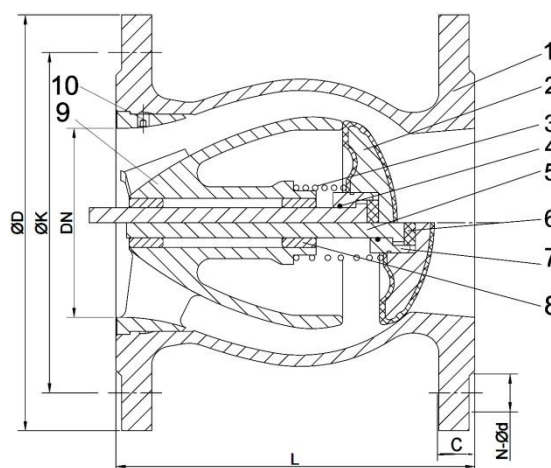
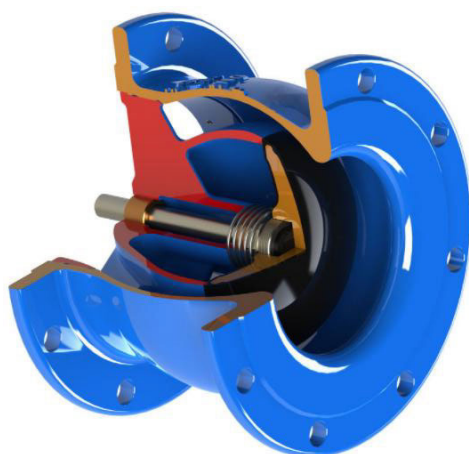
Testing
• Body Strength Test: BS EN 12266-1: 1.5 x PN • Seat Tightness Test: BS EN 12266-1: 1.1 x PN • Low Pressure Testing: 0.5bar

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Features

- High strength GGG50 ductile iron body used for durability and less weight.
- Integral body and diffuser provides streamline flow and assures lower head loss, only 0.2bar
- Saving in pumping power cost, valve disc with shorter stroker
- Full coating on the body and disc internally & externally for corrosion resistance.
- Bronze/Brass bushing reduce wearing problem during operation.
- Shut off Speed is only 0.2s.
- Fully rubber coated disc
- Hydro-static test pressure for seat: PN x 1.1 , for shell: PN x 1.5 according to EN 12266-1

Material Specification (DN50-350)



NO.	Part Name	Material	Standard
1	Body	Ductile Iron	GJS 500-7
2	Disc	Ductile Iron + Rubber	GJS500-7+EPDM
3	Spring	Stainless Steel	AISI 304
4	O-Ring	Rubber	NBR
5	Stem	Stainless Steel	AISI 304
6	Washer	Plastic / Rubber	EPDM
7	Nut	Stainless Steel	AISI 304
8	Bushing	BRASS / BRONZE	C37710 / C61900
9	Diffuser	Ductile Iron	GJS 500-7
10	Set screw	Stainless Steel	AISI 304

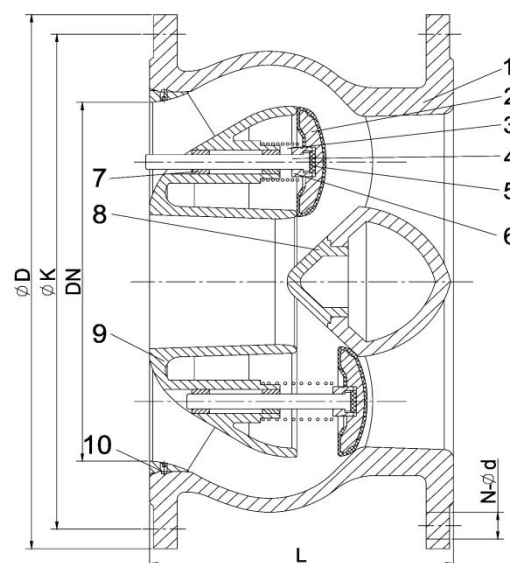
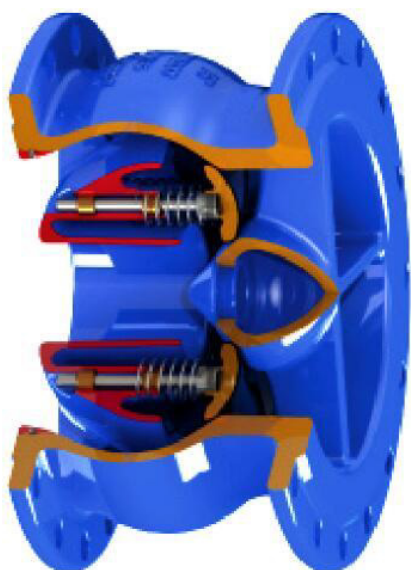
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Dimension PN10/16/25 (mm) (DN50-350)

DN	L (F/F)	ΦD		ΦK		n- Φd		C	
		PN10/PN16	PN25	PN10/PN16	PN25	PN10/PN16	PN25	PN10/PN16	PN25
50	150	165		125		4-19		19	
65	170	185		145		4-19	8-19	19	
80	180	200		160		8-19	8-19	19	
100	190	220	235	180	190	8-19	8-23	19	
125	200	250	270	210	220	8-23	8-28	19	23.5
150	210	285	300	240	250	8-23	8-28	19	26
200	230	340	360	295	310	8-23 / 12-23	12-31	20	30
250	250	395 / 405	425	350 / 355	370	12-23 / 12-28	12-34	22	34.5
300	270	445 / 460	485	400 / 410	430	12-23 / 12-28	16-34	24.5	39.5
350	290	505 / 520	555	460 / 470	490	16-23 / 16-28	16-37	24.5	44

* Please Contact factory for other size / standard.

Material Specification (DN400-1200)



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No.	Part Name	Material	Standard
1	Body	Ductile Iron	GJS 500-7
2	Disc	Ductile iron+rubber	GJS 500-7+EPDM
3	Spring	Stainless Steel	AISI 304/316
4	Stem	Stainless Steel	AISI420/304
5	Washer	Plastic	Nylon
6	Nut	Stainless Steel	AISI 304
7	Bushing	BRASS / BRONZE	C37710 / C61900
8	Plug	Ductile Iron	GJS 500-7
9	Diffuser	Ductile Iron	GJS 500-7
10	Set Screw	Stainless Steel	AISI 304

Dimension PN10/16/25 (mm)

DN	L (F/F)	Φ D			Φ K			n- Φ d			C		
		PN10	PN16	PN25	PN10	PN16	PN25	PN10	PN16	PN25	PN10	PN16	PN25
400	310	565	580	620	515	525	550	16-28	16-31	16-41	24.5	24.5	48
450	330	615	640	670	565	585	600	20-28	20-31	20-41	25.5	25.5	49
500	350	670	715	730	620	650	660	20-28	20-34	20-44	26.5	26.5	52
600	390	780	840	845	725	770	770	20-31	20-37	20-50	30	30	58
700	430	910	910	960	840	840	875	24-31	24-37	24-43	39.5	39.5	46.5
800	470	1025	1025	1085	950	950	990	24-34	24-40	24-49	43	43	51
900	510	1125	1125	1185	1050	1050	1090	28-34	28-40	28-49	46.5	46.5	55.5
1000	550	1230	1255	1320	1160	1170	1210	28-37	28-43	28-56	40	50	60
1200	630	1455	1485	1530	1380	1390	1420	32-40	32-49	32-56	45	57	69

* Please Contact factory for other size / standard.