

**TILTING
TYPE
&
NOZZLE
TYPE**

**NON-SLAM
CHECK
VALVE**



www.duocheck.co.kr
soosung@duocheck.co.kr

NON-SLAM (TILTING TYPE)



Tilting disc check valve offers significant energy and cost savings over the life of the valve due to its large flow area and low head loss characteristics. Short disc travel from full open to full close provides the ability to close very rapidly or very slowly to avoid contributing to slamming and surges.

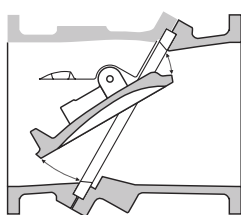
MODEL No. : TCV-1

FEATURES

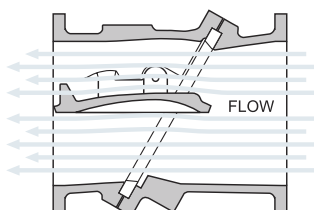
Short disc stroke reduce water hammer
Disc counteraction has self cushioning movement



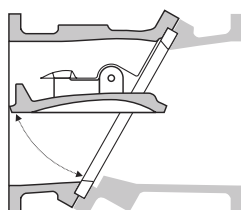
No-Slam Characteristics



Unique disc movement



Laminar flow



**Rapid opening/
quicker closing**

DESCRIPTION OF PARTS

NO.	PARTS NAME	MATERIALS	Q'ty
1	HINGE BODY	ASTM A890 Gr. 4A	1
2	SEAT BODY	ASTM A890 Gr. 4A	1
3	BODY SEAL O-RING	VITON	1
4	BODY FLANGE BOLT	A193-B8M	1set
5	SEAT RING	ASTM A890 Gr. 4A	1
6	SEAT RING O-RING	VITON	1
7	DISC	ASTM A890 Gr. 4A	1
8	INSPECTION HOLE COVER BOLT	ASTM A890 Gr. 4A	2
9	IN.HOLE COVER O-RING	VITON	2
10	IN.HOLE COVER BOLT	A193-B8M	2set
11	HINGE PIN	UNS S31803	2
12	HINGE PIN BUSH	UNS S31803	2
13	HINGE PIN COVER	ASTM A890 Gr. 4A	2
14	HINGE PIN COVER O-RING	VITON	2
15	HINGE PIN COVER BOLT	A193-B8M	2set
16	INDICATOR PIN	A193-B8M	1
17	INDICATOR SHAFT	UNS S31803	1
18	INDICATOR WASHER	A276-316	1
19	INDICATOR	A276-316	1
20	INDICATOR PLATE	A276-316	1
21	INDICATOR NUT	A276-316	1
22	INDICATOR O-RING	VITON	2
23	GREASE FITTING	A276-316	2
24	LOCATING PIN	A276-316	2
25	NAME PLATE	STAINLESS STEEL	1

*Available with various material based on customer's demand.

CHECK VALVE

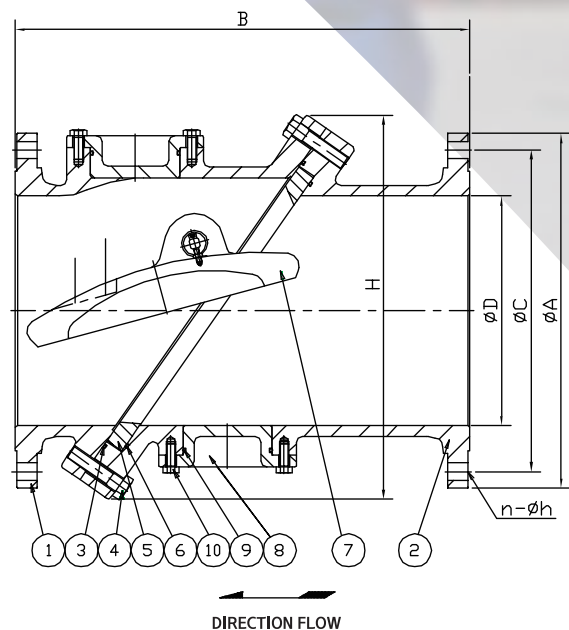
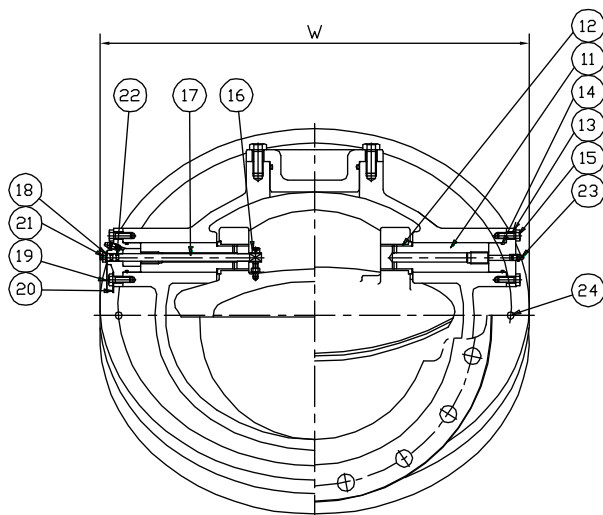
I SPECIFICATION

DESCRIPTION	METERIAL
PRESSURE / SIZE	ANSI 125LB~300LB (4"~60")
BODY, PLATE MATERIAL	A126 CL.B, A536 Gr 65-45-12, A216 WCB CA15, Stainless Steel, DUPLEX, MONEL
SPRING MATERIAL	STS316WPA, INCONEL X-750
VALVE TEST	API 598, ANSI B16.34,
FLANGES	ASME 16.5, B16.47, ANSI B16.1
END CONNECTION	FLANGE TYPE

I APPLICATIONS

- PORTALE WATER
- WASTE WATER TREATMENT SYSTEM
- PRESSURIZED COOLANT SYSTEM
- POWER PLANT
- PUMP STATION

I DRAWING



NON-SLAM (NOZZLE TYPE)



MODEL NO. : NCV-1

APPLICATIONS

- GAS Transmission
(Compressor Suction / Discharge)
- Power Generation
(Cooling Water / Steam)
- Petrochemical Processing
- Water Transmission (Pump Station)

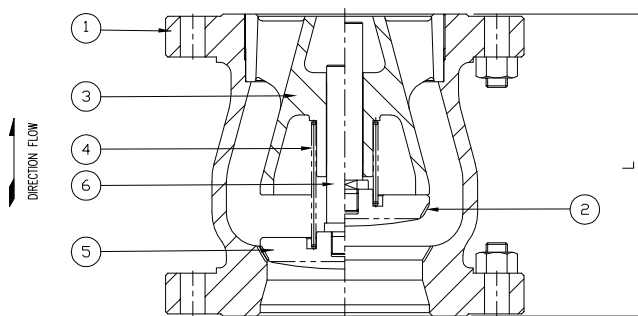
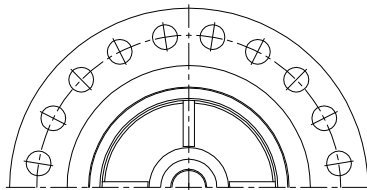
SPECIFICATION

DESCRIPTION	METERIAL
PRESSURE / SIZE	ANSI 125LB~2500LB (4"-60")
BODY, PLATE MATERIAL	A126 CL.B, A536 Gr 65-45-12, A216 WCB CA15, Stainless Steel, DUPLEX, MONEL
SPRING MATERIAL	STS316WPA, INCONEL X-750
VALVE TEST	API 598, ANSI B16.34
FLANGES	ASME 16.5, B16.47, ANSI B16.1
END CONNECTION	FLANGE TYPE

CHECK VALVE

Non-Slam Nozzle Check valves are specifically designed for fast-reversing systems where backflow is a constant concern. In such critical service applications, nozzle check valves offer the following benefits.

- Minimizes the damaging effects of water hammer in fluid systems
- Removal of chatter associated with conventional valves in reciprocating compressor service
- Protects rotating equipment from damage due to flow reversal
- Minimizes pressure loss in piping systems
- Provides quick dynamic response reducing reverse velocity

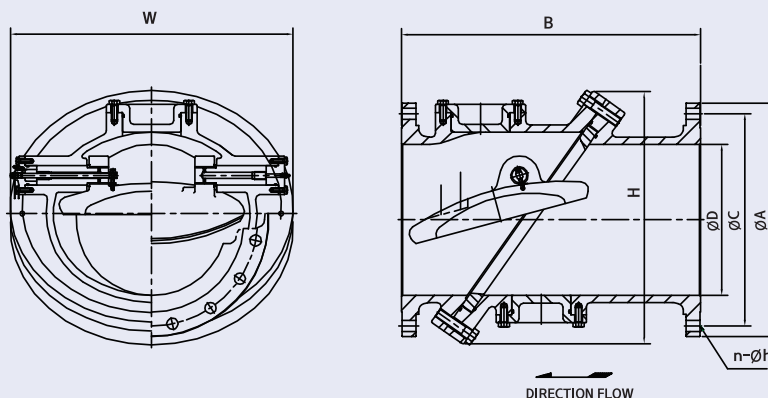


DESCRIPTION OF PARTS

NO.	PARTS NAME	MATERIALS	Q'ty
1	BODY	A126 CL.B, A536 Gr 65-45-12, A216 WCB CA15, Stainless Steel, DUPLEX, MONEL	1
2	DISC		1
3	DIFFUSER		1
4	SPRING	STS316WPA, INCONEL-X750	1
5	SEAT	METAL TO METAL	1
6	DISC STEM	STAINLESS STEEL , DUPLEX, MONEL	1

DIMENSION

NON-SLAM CHECK VALVE (TILTING TYPE)



SIZE	Rating	DIMENSIONS							Weight (Kg)
		ØA	B	ØC	ØD	H	W	n-Øh	
4"	125	230	292	191	100	254	330	8-3/4"	37
	150			190.5				8-3/4"	40
	300	255	317	200.0		273	362	8-7/8"	76
	600	275	432	215.9		327	406	8-1"	101
6"	125	280	381	241	150	330	406	8-7/8"	71
	150			241.3				8-7/8"	77
	300	320		269.9				12-7/8"	
	600	355	559	292.1		406	514	12-1/8"	196
8"	125	345	495	299	200	406	483	8-7/8"	134
	150			298.5				8-7/8"	142
	300	380	533	330.2		432	559	12-1"	207
	600	420	660	349.2		486	597	12-1/4"	329
10"	125	405	622	362	250	457	584	12-1"	196
	150			362.0				12-1"	214
	300	445	622	387.4		514	638	16-1/8"	304
	600	510	787	431.8		562	699	16-1/8"	469
12"	125	485	609	432	300	533	660	12-1"	282
	150			431.8				12-1"	305
	300	520	711	450.8		610	756	16-1/4"	467
	600	560	838	489.0		656	794	20-1/8"	667
14"	125	535	762	476	350	597	737	12-1/8"	404
	150			476.3				12-1/8"	433
	300	585	762	514.4		632	768	20-1/4"	565
	600	605	889	527.0		695	841	20-1/2"	830
16"	125	595	762	540	400	711	813	16-1/8"	526
	150			539.8				16-1/8"	570
	300	650	838	571.5		706	813	20-1/8"	769
	600	685	991	603.2		756	917	20-1/8"	1157

SIZE	Rating	DIMENSIONS							Weight (Kg)
		ØA	B	ØC	ØD	H	W	n-Øh	
18"	125	635	838	578	450	762	914	16-1 1/4"	639
	150			577.9				16-1 1/4"	685
	300	710	914	628.6		781	1003	24-13/8"	989
	600	745	1092	654.0		870	1086	20-13/4"	1619
20"	125	700	813	635	500	813	991	20-1 1/4"	779
	150			635.0				20-1 1/4"	844
	300	775	990	685.8		826	1035	24-13/8"	1201
	600	815	1194	723.9		953	1165	24-13/4"	2180
24"	125	815	965	749	600	940	1169	20-13/8"	1224
	150			749.3				20-13/8"	1327
	300	915	1143	812.8		953	1149	24-15/8"	1846
	600	940	1397	838.2		1111	1353	24-2"	3261
30"	125	985	1321	914	750	1143	1397	28-13/8"	2223
	150			914.4				28-13/8"	2409
	300	1090	1371	997.0		1130	1365	28-17/8"	2812
	600	1130	1499	1022.4		1235	1524	28-21/8"	3141
36"	125	1170	1511	1086	900	1296	1651	32-15/8"	3402
	150			1085.8				32-15/8"	3692
	300	1270	1524	1168.4		1432	1727	32-2 1/8"	5377
	42"	125	1345	1588	1050	1499	1854	36-15/8"	4763
42"	150			1257.3				36-15/8"	5171
48"	125	1510	1651	1422	1200	1753	2083	44-15/8"	6260
	150			1422.4				44-15/8"	6804
54"	125	1685	1981	1594	1350	1905	2311	44-2"	7938
	150			1593.8				44-17/8"	8618
60"	125	1855	2210	1759	1500	2191	2337	52-2"	10433
	150			1759.0				52-17/8"	11340

valve size	4", 6", 8"24"	26", 28",30"60"
Flange Standard	ANSI B16.1 (125LB) ANSI B16.5 (150LB)	ANSI B16.1 (125LB) ASME B16.47 SERIES A (150LB)

DIMENSION

NON-SLAM CHECK VALVE (NOZZLE TYPE)

SIZE	Rating (RF)	L(mm) (short pattern)	Weight (Kg)	SIZE	Rating (RF)	L(mm) (short pattern)	Weight (Kg)	SIZE	Rating (RF)	L(mm) (short pattern)	Weight (Kg)
2"	150	203	10	14"	150	475	347	32"	150	1080	2130
	300	267	13		300	475	445		300	1080	2860
	600	292	17		600	475	538				
	900	368	36		900	473	695				
	1500	368	36		1500	648	1600				
	2500	451	52								
3"	150	241	30	16"	150	545	415	36"	150	1215	2605
	300	318	30		300	545	530		300	1215	3670
	600	356	30		600	545	790		600	1215	4500
	900	381	55		900	750	1220		900	1190	7250
	1500	470	78		1500	750	1840				
	2500	578	119								
4"	150	292	48	18"	150	610	538	42"	150	1415	4100
	300	356	48		300	610	690		300	1415	5620
	600	432	74		600	610	1355		600	1461	6584
	900	457	100		900	775	1440		900	1524	9920
	1500	546	123		1500	813	2700				
	2500	673	168								
6"	150	356	76	20"	150	850	1075	48"	150	1461	5275
	300	254	88		300	810	1090		300	1461	5325
	600	390	169		600	810	1380		600	1615	10250
	900	391	193		900	869	2120		900	1626	14400
	1500	403	270		1500	869	2950				
	2500	403	485								
8"	150	495	194	24"	150	810	1310	54"	150	1850	9450
	300	311	190		300	810	1370		300	1850	10140
	600	311	203		600	810	1935		600	1829	12400
	900	346	290		900	1016	3182				
	1500	346	365		1500	869	5190				
	2500	449	700								
10"	150	365	220	28"	150	945	1560	60"	150	2035	10800
	300	365	248		300	1035	2200		300	2035	11100
	600	365	335		600	870	2660		600	2159	18500
	900	394	483		900	1016	4650				
	1500	394	628								
	2500	562	1227								
12"	150	438	282	30"	150	1010	1965				
	300	438	305		300	1010	2394				
	600	438	426		600	1010	3000				
	900	457	675		900	1026	4750				
	1500	457	900								
	2500	914	2073								
valve size	2", 3", 4"24"					26", 28"60"					
Flange Standard	ANSI B16.5					ASME B16.47 SERIES A (MSS SP44)					



INTERNATIONAL QUALITY CERTIFICATES



SOOSUNG Valve

SOOSUNG VALVE Ind. Co., Ltd.

14B-7L, GEOMDAN INDUSTRIAL COMPLEX, SEO-GU, INCHEON, KOREA

TEL : 82 32 569 4230 FAX: 82 32 569 4234

www.duocheck.co.kr

E-mail: soosung@duocheck.co.kr