API 6D-0718 ISO9001 / ISO14001 LISTED 수도용 KFI

www.duocheck.co.kr

SOOSUNG
CHECK VALVES

Working on the Basis of Quality and Trust

SSV SOOSUNG Valve

WORKING ON THE BASIS OF QUALITY AND TRUST

GREETINGS

Dear valued customers,

Soosung Valve Industry Co., Ltd. (SSV) was founded in 1999 as a manufacturer of specialty valves and has been producing Dual Plate Wafer Check Valve, Nonslam Nozzle Check Valve, Smolensky Check Valve, Tilting Check Valve, Post Indicator Gate Valve and Dual Foot Valve.

SSV has supplied products for applications ranging from oil and gas refinery to chemical plant, power generation, steel industry, ship building, water systems, pulp and paper mill, etc. Over the past two decades, SSV has grown into one of the leading specialty valve manufacturer in Korea, now aiming at leaping to the one of the world's leading valve maker.

SSV is dedicated to producing quality valves and will focus on achieving greater satisfaction for our customers who has chosen our supplies.

SSV will be striving for this goal and remain a valve manufacturer that specializes in specialty valves.

We look forward to having the chance being of service to you.

SOOSUNG VALVE Ind. Co., Ltd.

COMPANY HISTORY

May. 1999	Established "**Soosung Valve Ind. Co., Ltd.**"
July. 2000	**Approved ISO 9001**, KS 9001 Certificate by BVQ
Feb. 2003	**Started to produce Low temp & Cryogenic service valves** Selected as a company to produce facilities for Nuclear Power Generation
Aug. 2004	Nominated as "Clean Factory" by KOREA Occupational Safty & Health Agency
May. 2006	Moved to new factory site (Jiyoung-Dong, ilsandong-Gu, Goyang-City) **Approved to use API 6D** monogram (Cert. No.: 6D-0718)
May. 2007	Started to produce **Cleaning valves (Pickling & Oxygen service)**
Mar. 2008	Obtained **Fire-safety Certificate to API 607 and API 6FA** (by Velosi Became a member of Korea International Trade Association)
Jul. 2010	Moved to new factory in Geomdan Industrial Complex in Incheon
Sep. 2012	Trading Division was separated and established as a subsidiary, named "**SSV Coporation**" in Goyang City, Gyeonggi-do
Jan. 2013	**Approved to KC Certificate** by Korean water and sewage Association (Cert. No.: KCW-2013-0036)
May. 2014	Obtained **UL Certificate**, Registered to **KEPCO** **(Korea Power Engineering Company)** E&C Certificate
Mar. 2016	Obtained a certificate of ISO14001 by **OQS**
Jul. 2016	Vendor registered to **Kuwait Oil Company (KOC)**

CONTENTS

QUALITY CERTIFICATES

- ISO 9001-2008 Certificate of Conformance issued by BUREAU VERITAS
- API 6D Monogram / API 594
- FIRE TEST CERTIFICATE issued by VELOSI INTERNATIONAL
- UL listed issued by UL (Post indicator- File EX26420 / Gate valve - File EX26419)
- KFI Certificate issued by Korea Fire Institute (PIV / PIV16-02, PIV16-02-1)

MAIN CUSTOMERS

SAMSUNG ENGINEERING · GS E&C · HYUNDAI ENGINEERING CO., LTD. · SK E&C · KOGAS · EWP · DAELIM · posco · DOOSAN · Hanwha Engineering&Construction · KOMIPO · HYUNDAI STEEL · K water · TAKREER · PETRONAS · Orpic · N.I.O.C · Weatherford · TOTAL · Sumitomo Heavy · KOBELCO · MA'ADEN · LUKOIL · Petrofac · sabic · Enppi · EXXON Mobil · JFE Steel · 新日鐵住金

EXAMPLE

TYPE	SIZE	PRESSURE RATING	FLANGE FACING	BODY MATERIAL	PLATE MATERIAL	SEAT MATERIAL	SPRING MATERIAL	SPRING TORQUE
SDV-1	6	A3	R	W	S3	N	X	-
WAFER	6"	150LB	R.F	A216 WCB	A351 CF8	NBR	INCONEL -X750	-

VALVE TYPE

Code	Valve Type
SDV-1	WAFER
SDV-1R	WAFER&RETAINERLESS
SDV-2	FLANGE
SDV-2R	FLANGE&RETAINERLESS
SDV-3	LUG
SDV-3R	LUG&RETAINERLESS
SDV-4	BUTTWELD
SDV-5	HUB END
SDV-1L,2L,3L	RUBBER LINING
BDV-1,2,3	BY-PASS
NCV-1	NOZZLE
TCV-1	TILTING
SFV-1	FOOT (LEVER)
DFV-1	FOOT (DUAL)
SMC-1	SMOLENSKY
PIV-1	POST INDICATOR GATE VALVE
PIV-2	POST INDICATOR GATE VALVE (RUBBER LINING)

Code	Valve Type
SSV-1	SINGLE PLATE (SHORT)
SSV-2	SINGLE PLATE (LONG)

SIZE

SIZE (inch - mm)	
Inch(")	ASME, AWWA & API Standards
mm	KS, JIS & DIN Standards

FLANGE FACING

Code	Face Type	Roughness	Designation
F	Flat Face	63AARH	Smooth Finish
R	Raised Face	125~250AARH	Spiral Serrated
R1	Raised Face	63AARH	Smooth Finish
J	Ring Type Joint	63AARH	Smooth Finish
H	Hub End		
BW	Buttwelding		

PRESSURE

Standard	KS	JIN	ASME	ISO DIN	AWWA C207
Code	K	J	A	P	AW
0	5	5	-		C
1	10	10	125	10	D
2	16	16	250	16	E
3	20	20	150	25	
4	30	30	300	40	
5	40	40	400	64	
6	63	63	600	100	
7	-	-	900	150	
8	-	-	1,500	250	
9	-	-	2,500	420	

BODY / PLATE MATERIAL

Code	KS/JIS Standard	ASTM Standard
Cast & Ductile Iron		
C	FC250/FC200	A126 Class B
D	FCD450	A536
D1	FCD-S	A395
Cast Steel		
W	SCPH2	A216 WCB
L		A352 LCC
L1		A352 LCB
L2	SCPL11	A352 LC1
W1	SCPH21	A217 WC6
W2	SCPH32	A217 WC9
W3		A216 WCC
W4	SCPH11	A217 WC1
C5	SCPH61	A217 C5
Stainless & Alloy Steel		
S1	SCS1	A217 CA15
S2		A217 C12
S3	SCS13	A351 CF8
S4	SCS14	A351 CF8M
S7	SCS21	A351 CF8C
S5	SCS19	A351 CF3
S6	SCS16	A351 CF3M
A	ALBC3	B148 C95800
A2		B148 C95200
B	BC6	B584 C83600
M3	MONEL	A494 M35-1
S8	DUPLEX	A890 4A
S9	DUPLEX	A890 5A
S10	DUPLEX	A890 6A
C1	INCONEL825	A494 CU5MCuC
C2	INCONEL625	A494 CW6MC

SEAT MATERIAL

Code	Designation	Applied Temp
N	NBR	0°C~80°C
C	CR	-10°C~80°C
V	VITON	-30°C~150°C
E	EPDM	-10°C~100°C
P	PTFE	0°C~ 260°C
M	METAL	
S3	SUS 304	-268°C ~ 538°C
S4	SUS 316	
SL	SUS316L	-268°C ~ 425°C
M3	MONEL	-196°C ~ 475°C
H6	STELLITE#6 (on Body)	-268°C ~ 538°C
F6	STELLITE#6 (on Body&Plate)	
S1	SUS 410	-29°C ~ 538°C
C1	ALLOY 825	-200°C ~ 538°C
C2	ALLOY 625	
C1L	Internal Alloy 825 Cladding	
C2L	Internal Alloy 625 Cladding	

SPRING MATERIAL

Code	Designation	Limits (Max)
S	STS 316 WPA	121°C
X	INCONEL X-750	538°C
M1	MONEL-K500	230°C

SPRING TORQUE

Code	Torque	Liquid		Pnuematic		
		Up to 0.88MPa	Over 0.88MPa	Up to 0.1MPa	Over 0.1MPa	Up to 0.01MPa
No code	Standard Torque	O	-	-	O	-
L	Low Torque	-	-	O	-	-
M	Mini Torque	-	-	-	-	O
H	High Torque	-	O	-	-	-

MAJOR SUPPLIES OF SSV

WAFER TYPE

MODEL NO **SDV-1**

- DIAMETER : 40A(1½") ~ 1800A(72")
- PRESSURE : 10K ~ 63K, 125LB ~ 2500LB

WAFER & RETAINERLESS TYPE

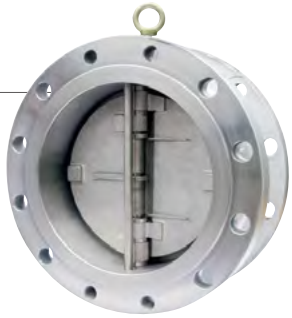
MODEL NO **SDV -1R**

- DIAMETER : 40A(1½") ~ 1800A(72")
- PRESSURE : 10K ~ 63K, 125LB ~ 2500LB

FLANGE TYPE

MODEL NO **SDV-2**

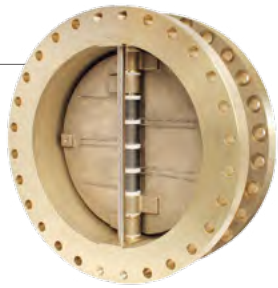
- DIAMETER : 40A(1½") ~ 1800A(72")
- PRESSURE : 10K ~ 63K, 125LB ~ 2500LB



FLANGE & RETAINERLESS TYPE

MODEL NO **SDV-2R**

- DIAMETER : 40A(1½") ~ 1800A(72")
- PRESSURE : 10K ~ 63K, 125LB ~ 2500LB



LUG TYPE

MODEL NO **SDV-3**

- DIAMETER : 40A(1½") ~ 1800A(72")
- PRESSURE : 10K ~ 63K, 125LB ~ 2500LB

LUG & RETAINERLESS TYPE

MODEL NO **SDV-3R**

- DIAMETER : 40A(1½") ~ 1800A(72")
- PRESSURE : 10K ~ 63K, 125LB ~ 2500LB

BUTTWELD TYPE

MODEL NO **SDV-4**

- DIAMETER : 80A(3") ~ 600A(24")
- PRESSURE : 150LB ~ 2500LB

HUB END TYPE

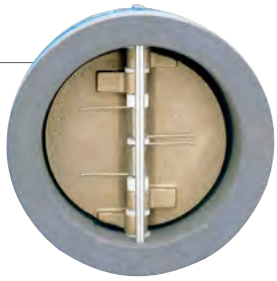
MODEL NO **SDV-5**

- DIAMETER : 50A(2") ~ 450A(18")
- PRESSURE : 900LB ~ 2500LB

RUBBER LINING TYPE

MODEL NO **SDV-1L**

- DIAMETER : 50A(2") ~ 1800A(72")
- PRESSURE : 10K, 125LB, 150LB



BY-PASS TYPE

MODEL NO **BDV-3**

- DIAMETER : 40A(1½") ~ 800A(32")
- PRESSURE : 10K, 20K 150LB ~ 300LB

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SINGLE PLATE CHECK VALVE SHORT TYPE

MODEL NO **SSV-1**

- DIAMETER : 40A(1½") ~ 700A(28")
- PRESSURE : 125LB ~ 150LB

SINGLE PLATE CHECK VALVE LONG TYPE

MODEL NO **SSV-2**

- DIAMETER : 50A(2") ~900A(36")
- PRESSURE : 125LB ~ 300LB

NON SLAM CHECK VALVE NOZZLE TYPE

MODEL NO **NCV-1**

- DIAMETER : 50A(2") ~ 1500A(60")
- PRESSURE : 125LB ~ 2500LB

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NON SLAM CHECK VALVE TILTING TYPE

MODEL NO **TCV-1**

- DIAMETER : 100A(4") ~1500A(60")
- PRESSURE : 125LB ~ 300LB

FOOT VALVE / LEVER TYPE

MODEL NO **SFV-1**

- DIAMETER : 50A(2") ~ 750A(30")
- PRESSURE : 10K, 20K, 150LB, 300LB

FOOT VALVE / DUAL TYPE

MODEL NO **DFV-1**

- DIAMETER : 50A(2") ~ 600A(32")
- PRESSURE : 10K, 20K, 150LB, 300LB

SMOLENSKY CHECK VALVE

MODEL NO **SMC-1**

- DIAMETER : 50A(2") ~ 600A(24")
- PRESSURE : 10K~ 40K, 150LB, 300LB

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POST INDICATOR GATE VALVE

MODEL NO **PIV-1**

GEAR TYPE

KFI

UL LISTED

LEVER TYPE

DUAL PLATE CHECK VALVE

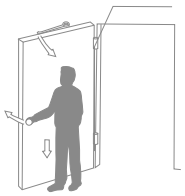
APPLICATION

Dual Plate Check Valves have been used successfully in following plants

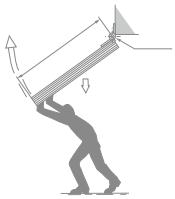
- Oil & Gas
- Petrochemial
- Power Generation
- Retinery
- Oushore / Offshore
- Chemial Plant
- Nuclear
- Waste Incineration
- Water System
- LNG
- Shipbuilding
- Steel Industry
- General industry

ADVANTAGE

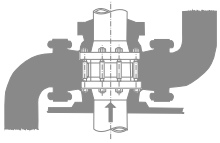
- Face-to-face dimensions for Dual Plate Wafer Check Valves are about one fourth of a Swing Check Valve.
- Weight is as little as about 20% of the corresponding Swing Check Valve due to the compact design.
- Dual Plate Wafer Check Valves have a spring design to close valves more efficiently when the back flow occurs to reduce the water hammer.
- These valves have the lower pressure drop than Swing Check Valves because of little friction resistance.
- Dual Plate Wafer Check Valves are less expensive than Swing Check Valves because of the lightness and compact design. These valves are also easier and less expensive to install and maintain because of fewer piping supports and easy handling for installation.
- Because Dual Plate Wafer Check Valves are flangeless, they are installed between flanges.
- Normal installation method for horizontal flow is with the hinge pin in vertical position.
- Installation is available for both horizontal and vertical piping.



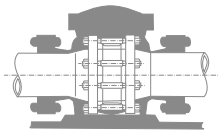
Dual Plate Check Valve



Swing Check Valve



Vertical Piping



Horizontal Piping

SPRING SELECTION GUIDE

- **Standard Spring**
  Suitable for the line pressure of 0.298MPa through 0.89MPa without any pressure loss and the upward flow direction of vertical installation.
- **Low Coil Spring**
  Ideal for gas with the line pressure of 0.1MPa and under.
- **High Coil Spring**
  Suitable for the line pressure of 0.88MPa.

THE SEAT DESIGN OF DUAL PLATE CHECK VALVE

- **No leak, no distortion seals**
  Seat design can be furnished with the resilient seal materials that provide tight seals without leakage and metal seals with minimum leakage.

DUAL PLATE CHECK VALVE

OPENING PRESSURE

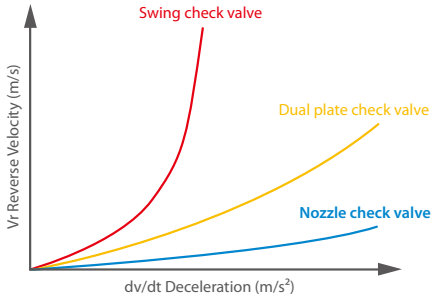
NOMINAL SIZE		STD SPRING	LOW COIL SPRING	WHEN ADD TO PLATE WEIGHT (STD SPRING)
A(mm)	B(inch)			
50	2″	16mbar	9mbar	22mbar
65	2½″	17	8	23
80	3″	21	8	28
100	4″	12	5	19
125	5″	12	5	22
150	6″	13	6	24
200	8″	15	8	27
250	10″	16	6	30
300	12″	19	9	34
350	14″	16	6	33
400	16″	17	8	36
450	18″	17	9	39
500	20″	13	6	36
600	24″	14	4	38

* Minimum pressure of valve opening for Horizontal installation
UP-(When fluid flows from down to up) add to the weight of plate Down-(When fluid flows from up to down)100A(4")&LARGER; need to the spring with more coil numbers.

FLOW COEFFICIENT (Cv)

NOMINAL SIZE		Cv
A(mm)	B(inch)	
50A	2″	53
65A	2½″	83
80A	3″	139
100A	4″	271
125A	5″	483
150A	6″	800
200A	8″	1,509
250A	10″	2,640
300A	12″	4,073
350A	14″	5,303
400A	16″	7,342
450A	18″	9,946
500A	20″	12,960
600A	24″	20,500

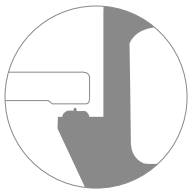
FLOW EFFICIENT



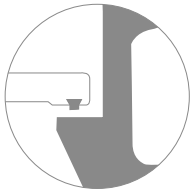
- Due to swing check valve internal design, water hammer and pressure surge problems can easily occur if the valve is not properly sized for the applicaton. Many piping system failure can be attrubuted to the improper installation of check valves.
- Soosung valve's Non-slam Nozzle check valve has a venturi port design that reduces flow resistance and improves flow efficiency. The spring loaded disc gives a tight disc&seat closure seal at all working pressures.
- Soosung valve's dual-plate check valve disc has a slim plate design which offers less restriction to flow at full open position. compared with many of other manufacturers Soosung valve's dual-plate check valve pressure drop is substantially lower.

RESILIENT SEALS

- **Typical Figure**
  Seal is bonded on plate seat for high pressure design.
  Under 2″~ 3″: ANSI 600 Series and under 4″ and
  larger : ANSI 300 series and under.

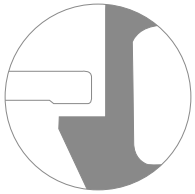


- **Typical Figure**
  Seal is bonded on plate seat for high pressure design.
  2″~ 3″: ANSI 900 series and over 4″ and
  larger : ANSI 400 series and over.

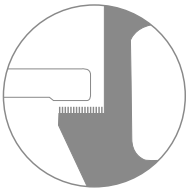


METAL TO METAL SEATS

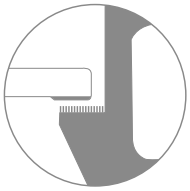
- **Typical Figure**
  Body and plate are same material. (e.g. carbon steel, stainless steel, bronze.)



- **Typical Figure**
  All Material Most ANSI 150 and 300 Series. Overlay material is welded. Body seat only. Plate is same material as overlay.
  (e.g. if body seat is 316ss, plates are 316ss.)



- **Typical Figure**
  Most of ANSI 400 series and higher rating. Overlay material is welded on seat surface of body and plate.

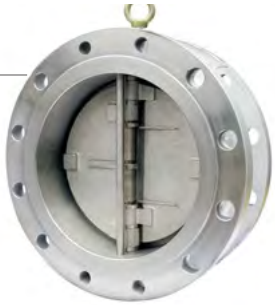


DUAL PLATE CHECK VALVE

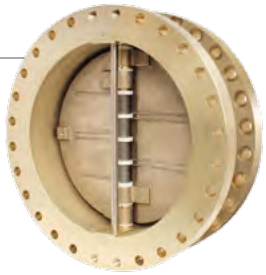
WAFER TYPE
MODEL NO **SDV-1**

WAFER & RETAINERLESS TYPE
MODEL NO **SDV-1R**

FLANGE TYPE
MODEL NO **SDV-2**



FLANGE & RETAINERLESS TYPE
MODEL NO **SDV-2R**

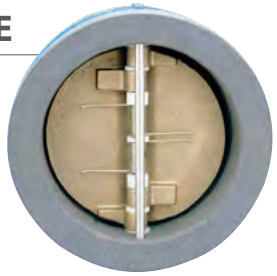


LUG TYPE
MODEL NO **SDV-3**

LUG & RETAINERLESS TYPE
MODEL NO **SDV-3R**

BUTTWELD TYPE
MODEL NO **SDV-4**

RUBBER LINING TYPE
MODEL NO **SDV-1L**



HUB END TYPE
MODEL NO **SDV-5**

BY-PASS TYPE
MODEL NO **BDV-3**

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DUAL PLATE CHECK VALVE

FEATURES

- Wafer type, light weight and suitable for the limited space of piping. Spring is installed inside the valve.
- Shock and noise are reduced by any possible water-hammer.
- Rubber seat ensures the perfect seal.
- Horizontal and vertical installation is applicable.
- Widely used for the basic piping, water, sewerage and various piping.
- By-pass Type valve can be substituted for Smolensky check valve.
- Rubber Lining Type is suitable for sea water application.
- Retainerless Type. No holes through the body wall, so leakage to the outside is implssible, and therefore Fugitive Emission-free.

SPECIFICATION

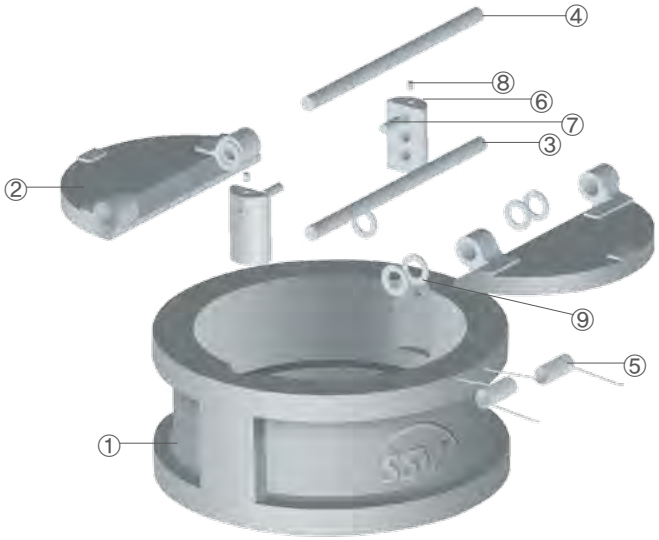
DIAMETER	40A(1½″) ~ 1800A(72″)
APPLICABLE PRESSURE	• 10K ~ 63K • 125LB ~ 2500LB
CONNECTING ENDS	WAFER TYPE, FLANGE TYPE, LUG TYPE, RETAINERLESS TYPE, Buttweld End Type, Hub End Type
TEST Standard	According to KS B2304, API 598
NUMBER OF SPRING	1½″~ 5″(1EA), 6″~ 22″(2EA), 24″~72″(4~8EA)

EXPLODED VIEW DUAL CHECK VALVE [Wafer & Retainerless Type]

COMPONENTS

NO	NAME	Q'ty
1	BODY	1
2	PLATE	2
3	HINGE PIN	1
4	STOP PIN	1
5	SPRING	1~10
6	CARRIER	2
7	KEEPER SCREW	2
8	DOWEL SCREW	2
9	BEARING	4~10

- EYE BOLT Supplied for Valves over 6″.



PRODUCTION MATERIALS

PART NAME	MATERIAL
BODY	Cast Iron, Carbon Steel, Alloy Steel, Special Alloy Steel, Stainless Steel, Al-Bronze, Duplex Stainless
PLATE	Carbon Steel, Alloy Steel, Special Alloy Steel, Stainless Steel, Al-Bronze, Duplex Stainless

- The material can be changed by customer's request.

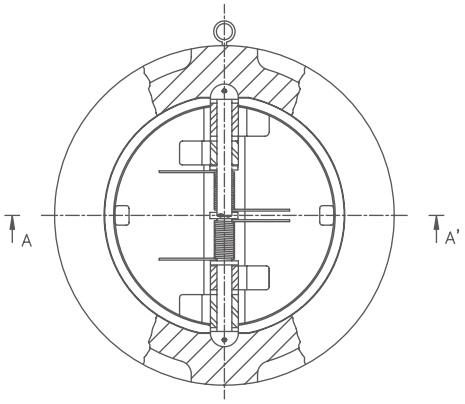
Trim Number Chart (to API 594)

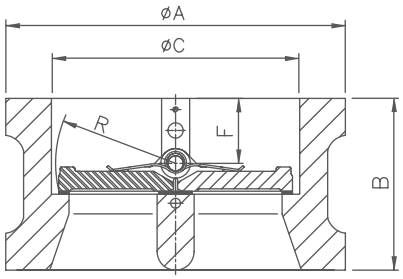
API Trim No.	Norminal Trim	Body Seat Surface	Plate Seat Surface
1	13Cr	13Cr	13Cr
2	Type 304	18Cr-8Ni	18Cr-8Ni
5	HARD FACE(HF)	Stellite No. 6	Stellite No. 6
8	13Cr & HF	Stellite No. 6	13Cr
9	Ni-Cu(MONEL)	Ni-Cu ALLOY	Ni-Cu ALLOY

API Trim No.	Norminal Trim	Body Seat Surface	Plate Seat Surface
10	Type 316	18Cr-8Ni-Mo	18Cr-8Ni-Mo
12	Type 316 & HF	Stellite No. 6	18Cr-8Ni-Mo
13	ALLOY20	19Cr-29Ni	19Cr-29Ni
14	ALLOY20 & HF	Stellite No. 6	19Cr-29Ni

WAFER TYPE (SDV-1, SDV-1R)

ASME B16.5 / JIS B2220 (KS B1511)





SECTION A–A'

Size mm(inch)	Pressure Rating (KS,ANSI)	Type Facing	Dimensions(mm)					Flange Bolt Circle (mm)	No.of Bolts	Bolt Dia.	Bolt Length(mm)		Weight (kg)
			ØA	B	ØC	F	R				FF - RF	RTJ	
50 (2″)	10K	FF	101	54	60	27	32	120	4	M16	125	-	3
	20K	RF.FF	101	60	60	33	27	120	8	M16	140	-	3
	125	FF	105	54	60	27	32	121.0	4	5/8	145	-	3
	250	FF	111	54	60	25	27	127.0	8	5/8	160	-	4
	150	RF.R-22	105	60	60	33	27	120.7	4	5/8	160	170	3
	300	RF.R-23	111	60	60	33	27	127.0	8	5/8	165	185	3
	600	RF.R-23	111	60	60	33	27	127.0	8	5/8	185	190	3
	900	RF.R-24	143	70	60	33	29	165.1	8	7/8	240	245	6
	1500	RF.R-24	143	70	60	33	29	165.1	8	7/8	240	245	7
	2500	RF.R-26	146	70	60	33	29	171.4	8	1	280	280	8
65 (2½″)	10K	FF	121	54	73	27	37	140	4	M16	130	-	4
	20K	RF.FF	121	67	73	32	33	140	8	M16	150	-	5
	125	FF	124	60	73	27	37	140.0	4	5/8	155	-	4
	250	FF	130	60	73	25	33	149.0	8	3/4	180	-	5
	150	RF.R-25	124	67	73	32	33	139.7	4	5/8	175	185	4
	300	RF.R-26	130	67	73	32	33	149.2	8	3/4	185	205	4
	600	RF.R-26	130	67	73	32	33	149.2	8	3/4	205	215	4
	900	RF.R-27	165	83	73	35	35	190.5	8	1	265	275	7
	1500	RF.R-27	165	83	73	35	35	190.5	8	1	270	275	8
	2500	RF.R-28	168	83	73	35	35	196.8	8	1⅛	305	315	10
80 (3″)	10K	FF	131	57	89	30	45	150	8	M16	135	-	5
	20K	RF.FF	137	73	89	36	41	160	8	M20	170	-	7
	125	FF	137	67	89	30	45	152.0	4	5/8	165	-	5
	250	FF	149	67	89	27	41	168.0	8	3/4	195	-	7
	150	RF.R-29	137	73	89	36	41	152.4	4	5/8	180	190	6
	300	RF.R-31	149	73	89	36	41	168.3	8	3/4	200	215	7
	600	RF.R-31	149	73	89	36	41	168.3	8	3/4	220	225	7
	900	RF.R-31	168	83	89	34	42	190.5	8	7/8	255	260	13
	1500	RF.R-35	175	83	89	34	42	203.2	8	1⅛	285	295	14
	2500	RF.R-32	197	86	89	36	42	228.6	8	1¼	335	345	18
100 (4″)	10K	FF	156	64	114	32	53	175	8	M16	145	-	6
	20K	RF.FF	162	73	114	38	55	185	8	M20	175	-	8
	125	FF	175	67	114	32	53	191.0	8	5/8	175	-	6
	250	FF	181	67	114	30	54	200.0	8	3/4	200	-	8
	150	RF.R-36	175	73	114	38	54	190.5	8	5/8	180	190	8
	300	RF.R-37	181	73	114	38	55	200.0	8	3/4	205	225	8
	600	RF.R-37	194	79	114	42	55	215.9	8	7/8	250	255	12
	900	RF.R-37	206	102	114	40	55	235.0	8	1⅛	300	305	18
	1500	RF.R-39	210	102	114	40	55	241.3	8	1¼	325	335	21
	2500	RF.R-38	235	105	114	34	55	273.0	8	1½	385	400	27

Size mm(inch)	Pressure Rating (KS,ANSI)	Type Facing	Dimensions(mm)					Flange Bolt Circle (mm)	No. of Bolts	Bolt Dia.	Bolt Length(mm)		Weight (kg)
			ØA	B	ØC	F	R				FF - RF	RTJ	
125 (5″)	10K	FF	187	70	141	33	67	210	8	M20	165	-	9
	20K	RF.FF	197	86	141	41	65	225	8	M22	195	-	14
	125	FF	197	83	141	33	67	216.0	8	3/4	200	-	9
	250	FF	216	83	141	38	65	235.0	8	3/4	225	-	14
	150	RF.R-41	197	86	141	41	65	215.9	8	3/4	200	215	10
	300	RF.R-41	216	86	141	41	65	235.0	8	3/4	225	240	14
	600	RF.R-41	241	105	141	40	65	266.7	8	1	295	305	23
150 (6″)	10K	FF	217	76	168	35	79	240	8	M20	170	-	10
	20K	RF	235	98	168	44	79	260	12	M22	215	-	19
	125	FF	222	95	168	35	79	241	8	3/4	210	-	10
	250	FF	257	95	168	43	79	270	12	3/4	240	-	19
	150	RF.R-43	222	98	168	44	79	241.3	8	3/4	215	230	16
	300	RF.R-43	251	98	168	44	79	269.9	12	3/4	240	255	19
	600	RF.R-45	267	136	168	46	82	292.1	12	1	335	340	33
	900	RF.R-45	289	159	168	56	82	317.5	12	1⅛	380	385	66
	1500	RF.R-46	283	159	168	56	82	317.5	12	1⅜	445	460	65
	2500	RF.R-47	318	159	168	56	82	368.3	8	2	535	550	72
200 (8″)	10K	FF	267	95	219	42	105	290	12	M20	195	-	19
	20K	RF·FF	279	127	219	48	102	305	12	M22	250	-	36
	125	FF	279	127	219	42	105	299	8	3/4	250	-	19
	250	FF	308	127	219	48	102	330	12	7/8	290	-	36
	150	RF.R-48	279	127	219	48	102	298.5	8	3/4	250	265	32
	300	RF.R-49	308	127	219	48	102	330.2	12	7/8	290	305	40
	600	RF.R-49	321	165	219	54	105	349.2	12	1⅛	385	390	68
	900	RF.R-49	359	206	219	73	107	393.7	12	1⅜	455	465	107
	1500	RF.R-50	352	206	219	73	107	393.7	12	1⅝	530	545	121
	2500	RF.R-51	387	206	219	73	107	438.2	12	2	620	645	140
250 (10″)	10K	FF	330	108	274	42	128	310	12	M22	215	-	31
	20K	RF.FF	353	146	274	52	126	380	12	M24	280	-	51
	125	FF	340	140	274	42	128	362	12	7/8	280	-	31
	250	FF	362	140	274	48	126	387	16	1	325	-	51
	150	RF.R-52	340	146	274	56	126	362	12	7/8	285	300	55
	300	RF.R-53	362	146	274	52	126	387.4	16	1	330	345	67
	600	RF.R-53	400	213	274	70	133	431.8	16	1¼	455	465	121
	900	RF.R-53	435	241	274	87	133	469.9	16	1⅜	505	510	188
	1500	RF.R-54	435	248	274	87	133	482.6	12	1⅞	615	630	195
	2500	RF.R-55	476	254	274	87	133	539.8	12	2½	770	810	230
300 (12″)	10K	FF	375	143	324	58	155	400	16	M22	255	-	56
	20K	RF.FF	403	181	324	70	152	430	16	M24	320	-	88
	125	FF	410	181	324	58	155	432	12	7/8	320	-	56
	250	FF	422	181	324	70	152	451	16	1⅛	380	-	90
	150	RF.R-56	410	181	324	70	152	431.8	12	7/8	325	335	94
	300	RF.R-57	422	181	324	70	152	450.8	16	1⅛	380	395	108
	600	RF.R-57	457	229	324	67	152	489	20	1¼	480	485	178
	900	RF.R-57	498	292	324	100	159	533.4	20	1⅜	575	580	284
	1500	RF.R-58	521	305	324	102	159	571.5	16	2	710	735	380
	2500	RF.R-60	549	305	324	103	159	619.1	12	2¾	875	915	440
350 (14″)	10K	FF	420	184	356	94	170	445	16	M22	300	-	71
	20K	RF.FF	447	222	356	94	170	480	16	M30	370	-	176
	125	FF	451	184	356	94	170	476	12	1	335	-	71
	250	FF	486	222	356	94	170	514	20	1⅛	425	-	176
	150	RF.R-59	451	184	356	90	170	476.3	12	1	340	355	97
	300	RF.R-61	486	222	356	94	170	514.4	20	1⅛	425	440	176
	600	RF.R-61	492	273	356	103	164	527	20	1⅜	535	545	220
	900	RF.R-62	521	356	356	130	181	558.8	20	1½	655	670	365
	1500	RF.R-63	578	356	356	130	181	635	16	2¼	795	825	405

- KS DESIGN FACE TO FACE MAKER STANDARD.

WAFER TYPE (SDV-1, SDV-1R)

Size mm(inch)	Pressure Rating (KS,ANSI)	Type Facing	Dimensions(mm)					Flange Bolt Circle (mm)	No. of Bolts	Bolt Dia.	Bolt Length(mm)		Weight (kg)
			ØA	B	ØC	F	R				FF - RF	RTJ	
400 (16″)	10K	FF	483	191	406	86	195	510	16	M24	315	-	99
	20K	RF.FF	507	232	406	95	195	540	16	M30	405	-	277
	125	FF	514	191	406	89	195	540	16	1	350	-	99
	250	FF	540	232	406	97	195	572	20	1¼	450	-	277
	150	RF.R-64	514	191	406	86	195	539.8	16	1	350	365	159
	300	RF.R-65	540	232	406	95	195	571.5	20	1¼	450	465	227
	600	RF.R-65	565	305	406	92	198	603.2	20	1½	585	595	320
	900	RF.R-66	575	384	406	137	203	616	20	1⅝	700	715	530
	1500	RF.R-67	641	384	406	137	203	704.8	16	2½	865	900	620
450 (18″)	10K	FF	538	203	457	86	219	565	20	M24	325	-	118
	20K	RF.FF	572	264	457	127	219	605	20	M30	440	-	301
	125	FF	549	203	457	86	219	578	16	1⅛	375	-	118
	250	FF	597	264	457	102	219	629	24	1¼	490	-	301
	150	RF.R-68	549	203	457	86	219	577.9	16	1⅛	375	390	185
	300	RF.R-69	597	264	457	127	219	628.6	24	1¼	490	505	270
	600	RF.R-69	613	362	457	121	228	654	20	1⅝	665	675	450
	900	RF.R-70	638	451	457	167	232	685.8	20	1⅞	805	825	620
	1500	RF.R-71	705	468	457	167	216	774.7	16	2¾	995	1,035	800
500 (20″)	10K *	FF	593	213	508	89	244	620	20	M24	345	-	180
	20K	RF.FF	627	292	508	108	244	660	20	M30	475	-	373
	125 *	FF	606	213	508	89	244	635	20	1⅛	390	-	180
	250 *	FF	654	292	508	109	244	686	24	1¼	525	-	373
	150	RF.R-72	606	219	508	89	244	635	20	1⅛	400	410	210
	300	RF.R-73	654	292	508	108	244	685.8	24	1¼	520	545	350
	600	RF.R-73	683	368	508	116	248	723.9	24	1⅝	685	695	551
	900	RF.R-74	699	451	508	116	248	749.3	20	2	825	845	860
	1500	RF.R-75	755	533	508	116	248	831.8	16	3	1,105	1,140	1,300
600 (24″)	10K *	FF	697	222	610	87	292	730	24	M30	370	-	258
	20K	RF.FF	731	318	610	122	292	770	24	M36	525	-	598
	125 *	FF	718	222	610	87	292	749	20	1¼	420	-	258
	250 *	FF	775	318	610	122	292	813	24	1½	575	-	541
	150	RF.R-76	718	222	610	86	292	749.3	20	1¼	420	430	292
	300	RF.R-77	775	318	610	122	292	812.8	24	1½	575	600	540
	600	RF.R-77	791	438	610	133	295	838.2	24	1⅞	795	810	950
	900	RF.R-78	838	495	610	149	300	901.7	20	2½	960	990	1,360
	1500	RF.R-79	901	559	610	149	300	990.6	16	3½	1,205	1,255	2,800
650 (26″)	125 *	FF	775	279	660	110	316	806.4	24	1¼	515	-	450
	150	RF	775	279	660	110	316	806.4	24	1¼	520	-	530
	300	RF.R-93	835	356	660	110	316	876.3	28	1⅝	640	660	590
	600	RF.R-93	867	457	660	122	312	914.4	28	1⅞	820	840	1,110
	900	RF.R-100	883	533	660	122	312	925.5	20	2¾	1,005	1,050	1,180
700 (28″)	10K	FF	807	321	711	132	327	840	24	M30	475	1,120	580
	125 *	FF	832	321	711	132	337	863.6	28	1¼	560	-	634
	150	RF	832	321	711	132	337	863.6	28	1¼	570	-	692
	300	RF.R-94	898	381	711	132	351	939.8	28	1⅝	680	705	750
	600	RF.R-94	914	483	711	165	347	965.2	28	2	890	900	865
	900	RF.R-101	946	572	711	165	347	1,022.4	20	3	1,070	1,105	1,140

Size mm(inch)	Pressure Rating (KS,ANSI)	Type Facing	Dimensions(mm)					Flange Bolt Circle (mm)	No. of Bolts	Bolt Dia.	Bolt Length(mm)		Weight (kg)
			ØA	B	ØC	F	R				FF - RF	RTJ	
750 (30″)	10K	FF	867	305	762	156	365	900	24	M30	530	-	450
	125 *	FF	883	305	762	127	365	914	28	1¼	515	-	450
	150	RF	883	305	762	137	365	914.4	28	1¼	560	-	580
	300	RF RJ95	953	368	762	137	365	997	28	1¾	685	710	820
	600	RF.R-95	971	505	762	165	362	1,022.4	28	2	895	910	1,500
	900	RF.R-102	1,009	635	762	165	362	1,085.8	20	3	1,150	1,185	2,130
800 (32″)	10K	FF	917	356	813	156	397	950	28	M30	535	-	526
	125 *	FF	940	356	813	156	397	977.9	28	1½	630	-	533
	150	RF	940	356	813	156	397	977.9	28	1½	635	-	635
	300	RF.R-96	1,006	406	813	119	389	1,054.4	28	1⅞	745	775	1,600
	600	RF.R-96	1,022	533	813	145	370	1079.5	28	2¼	940	965	1,750
	900	RF.R-103	1,073	660	813	145	370	116,011	20	3¼	1,205	1,240	2,012
900 (36″)	10K *	FF	1,017	368	914	146	440	1,050	28	M30	610	-	656
	125 *	FF	1,048	368	914	146	440	1,086	32	1½	605	-	656
	150	RF	1,048	368	914	146	440	1,085.8	32	1½	665	-	685
	300	RF 98	1,117	483	914	165	440	1,168.4	32	2	840	-	1,609
	600	RF.R-98	1,130	635	914	210	445	1193.8	28	2½	1,075	1,195	2,150
	900	RF.R-105	1,200	718	914	210	445	1,289	20	3½	1,300	1,350	3,250
1000 (40″)	10K	FF	1,121	419	1,016	160	495	1,160	28	M36	610	-	1,010
	125 *	FF	1,162	419	1,016	160	495	1,200.2	36	1½	710	-	1,065
	150	RF	1,162	419	1,016	160	495	1,200.2	36	1½	715	-	1,190
	300	RF	1,114	546	1,016	191	499	1,155.7	32	1⅝	900	-	2,085
	600	RF	1,155	660	1,016	238	492	1,212.8	32	2¼	1,150	-	3,580
	900	RF	1,250	762	1,016	238	492	1,339.8	24	3½	1,395	-	4,571
1050 (42″)	125 *	FF	1,219	432	1,067	168	603	1,257	36	1½	680	-	1,260
	150	RF	1,219	432	1,067	168	603	1,257.3	36	1½	740	-	1,386
	300	RF	1,168	568	1,067	175	591	1,206.5	32	1⅝	930	-	2,630
	600	RF	1,219	701	1,067	240	520	1,282.7	28	2½	1,225	-	3,080
	900	RF	1,302	787	1,067	260	520	1,390.7	24	3½	1,440	-	3,720
1200 (48″)	125 *	FF	1,384	524	1,219	178	603	1,422	44	1½	780	-	2,055
	150	RF	1,384	524	1,219	178	603	1,422.4	44	1½	855	-	2,180
	300	RF	1,324	629	1,219	171	591	1,371.6	32	1⅞	1,035	-	3,300
	600	RF	1,391	787	1,219	270	591	1,460.5	32	2¾	1,365	-	4,432
1350 (54″)	150	RF	1,549	591	1,372	168	669	1,593.8	44	1¾	965	-	2,800
	300	RF	1,492	718	1,372	270	666	1,549.4	28	2¼	1,185	-	4,120
1500 (60″)	150	RF	1,715	660	1,524	279	740	1,759	52	1¾	1,055	-	3,538
1800 (72″)	150	RF	2051	914	1,829	367	891	2,096	60	1¾	1,265	-	6,350
2250 (90″)	150	RF	2,532	1289	2,270	512	1110	2,590.8	68	2¼	-	-	

VALVE SIZE	1 1/2″, 2″, 3″, ...,24″	26″,28″, ..., 60″	72″, 90″
FLANGE STANDARD	ASME B 16.5	ASME B 16.47 SERIES A(MSS SP44)	AWWA C207 CLASS D(175~150PSI)

- If you need above the size of 90", Please contact us.

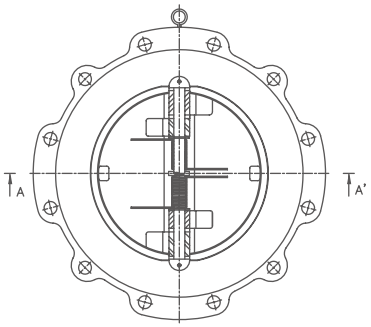
WAFER TYPE (SDV-1, SDV-1R)

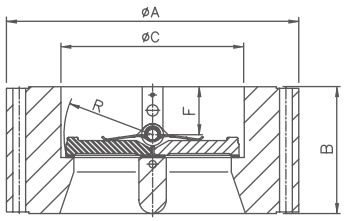
ASME B16.47 SERIES B

Size mm(inch)	Pressure Rating (KS,ANSI)	Type Facing	Dimensions(mm)					Flange Bolt Circle (mm)	No. of Bolts	Bolt Dia.	Bolt Length(mm)		Weight (kg)
			ØA	B	ØC	F	R				FF - RF	RTJ	
650 (26")	150	RF	725	279	629	110	316	744.5	36	3/4	430	-	370
	300	RF.R-93	771	356	629	110	316	803.3	32	1 1/4	640	665	580
	600	RF.R-93	765	457	629	122	312	806.5	28	1 5/8	820	835	870
	900	RF.R-100	838	533	629	122	312	901.7	20	2 1/2	990	1,025	1,050
700 (28")	150	RF	776	321	680	132	337	795.3	40	3/4	480	-	509
	300	RF.R-94	826	381	680	132	351	857.3	36	1 1/4	665	690	725
	600	RF.R-94	819	483	680	165	347	863.6	28	1 3/4	860	875	820
	900	RF.R-101	902	572	680	165	347	971.6	20	3	1,070	1,105	1,080
750 (30")	150	RF	827	305	735	137	365	846.1	44	3/4	460	-	540
	300	RF.R-95	886	368	735	137	365	920.8	36	1 3/8	665	690	790
	600	RF.R-95	880	505	735	165	362	927.1	28	1 7/8	910	925	1,450
	900	RF.R-102	959	635	735	165	362	1035.1	20	3	1,160	1,195	2,015
800 (32")	150	RF	881	356	784	156	397	900.2	48	3/4	520	-	668
	300	RF.R-96	940	406	784	119	389	977.9	32	1 1/2	730	760	1,521
	600	RF.R-96	933	533	784	145	370	984.3	28	2	955	975	1,664
	900	RF.R-103	1,016	660	784	145	370	1,092.2	20	3 1/4	1,195	1,230	2,007
900 (36")	150	RF	987	368	865	143	440	1,009.7	44	7/8	550	-	678
	300	RF.R-98	1,048	483	865	165	440	1089	32	1 5/8	815	850	1,310
	600	RF.R-98	1,048	635	865	210	445	1,104.9	28	2 1/4	1,100	1,125	2,154
	900	RF.R-105	1,124	718	865	210	445	1,200.2	24	3	1,280	1,325	3,184
1000 (40")	150	RF	1,095	419	987	160	495	1,120.6	44	1	620	-	1,182
	300	RF	1,150	546	987	191	499	1,190.8	40	1 5/8	905	-	2,165
1050 (42")	150	RF	1,146	432	1,062	168	508	1,171.4	48	1	640	-	1,095
	300	RF	1,200	568	1,062	168	508	1,244.6	36	1 3/4	940	-	2,954
1200 (48")	150	RF	1,307	524	1,193	178	603	1,335	44	1 1/8	750	-	2,050
	300	RF	1,368	629	1,193	171	591	1,416.1	40	1 7/8	1,025	-	3,500
1350 (54")	150	RF	1,464	591	1,281	168	669	1,492.3	56	1 1/8	830	-	3,124
	300	RF	1,530	718	1,281	270	666	1,577.8	48	1 7/8	1,130	-	5,820

Cryogenic Service

LUG TYPE (SDV-3, SDV-3R)





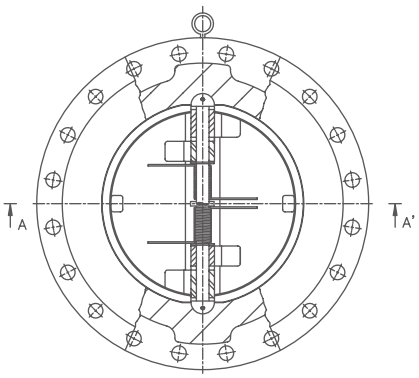
SECTION A–A'

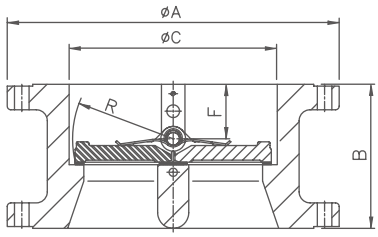
Size mm(inch)	Pressure Rating	Type Facing	Dimensions(mm)					Flange Bolt Circle (mm)	No.of Bolts	Bolt Dia.	Bolt Length(mm)		Weight (kg)
			ØA	B	ØC	F	R				FF - RF	RTJ	
50 (2″)	150	RF.R-22	152	60	60	33	27	120.7	4	5/8	160	170	7
	300	RF.R-23	165	60	60	33	27	127	8	5/8	165	185	8
	600	RF.R-23	165	60	60	33	27	127	8	5/8	185	190	8
	900	RF.R-24	216	70	60	33	29	165.1	8	7/8	240	245	16
	1,500	RF.R-24	216	70	60	33	29	165.1	8	7/8	240	245	16
	2,500	RF.R-26	235	70	60	33	29	171.4	8	1	280	280	29
80 (3″)	150	RF.R-29	190	73	89	36	41	152.4	4	5/8	180	190	12
	300	RF.R-31	210	73	89	36	41	168.3	8	3/4	200	215	14
	600	RF.R-31	210	73	89	36	41	168.3	8	3/4	220	225	14
	900	RF.R-31	241	83	89	34	42	190.5	8	7/8	255	260	25
	1,500	RF.R-35	267	83	89	34	42	203.2	8	1⅛	285	295	29
	2,500	RF.R-32	305	86	89	36	42	228.6	8	1¼	335	345	40
100 (4″)	150	RF.R-36	229	73	114	38	54	190.5	8	5/8	180	190	19
	300	RF.R-37	254	73	114	38	55	200	8	3/4	205	225	23
	600	RF.R-37	273	79	114	42	55	215.9	8	7/8	250	255	30
	900	RF.R-37	292	102	114	40	55	235	8	1⅛	300	305	45
	1,500	RF.R-39	311	102	114	40	55	241.3	8	1¼	325	335	51
	2,500	RF.R-38	355	105	114	34	55	273	8	1½	395	400	82
150 (6″)	150	RF.R-43	279	98	168	44	79	241.3	8	3/4	215	230	32
	300	RF.R-43	318	98	168	44	79	269.9	12	3/4	240	255	45
	600	RF.R-45	356	136	168	46	82	292.1	12	1	335	340	81
	900	RF.R-45	381	159	168	56	82	317.5	12	1⅛	380	385	115
	1,500	RF.R-46	394	159	168	56	82	317.5	12	1⅜	445	460	118
	2,500	RF.R-47	485	159	168	56	82	368.3	8	2	535	550	197
200 (8″)	150	RF.R-48	343	127	219	48	102	298.5	8	3/4	250	265	63
	300	RF.R-49	381	127	219	48	102	330.2	12	7/8	290	305	78
	600	RF.R-49	419	165	219	54	105	349.2	12	1⅛	385	390	134
	900	RF.R-49	470	206	219	73	107	393.7	12	1⅜	455	465	217
	1,500	RF.R-50	483	206	219	73	107	3937	12	1⅝	530	545	283
	2,500	RF.R-51	550	206	219	73	107	438.2	12	2	620	645	300
250 (10″)	150	RF.R-52	406	146	274	56	126	362	12	7/8	285	300	93
	300	RF.R-53	444	146	274	52	126	387.4	16	1	330	345	115
	600	RF.R-53	508	213	274	70	133	431.8	16	1¼	455	465	234
	900	RF.R-53	546	241	274	87	133	469.9	16	1⅜	505	510	330
	1,500	RF.R-54	584	248	274	87	133	482.6	12	1⅞	615	630	361
	2,500	RF.R-55	675	254	273	87	133	539.8	12	2½	770	610	512
300 (12″)	150	RF.R-56	483	181	324	70	152	431.8	12	7/8	325	335	170
	300	RF.R-57	521	181	324	70	152	450.8	16	1⅛	380	395	242
	600	RF.R-57	559	229	324	67	152	489	20	1¼	480	485	304
	900	RF.R-57	610	292	324	100	159	533.4	20	1⅜	575	580	509
	1500	RF.R-58	673	305	324	102	159	571.5	16	2	710	735	637
	2500	RF.R-60	760	305	324	103	159	619.1	12	2¾	875	915	880
350 (14″)	150	RF.R-59	533	184	356	90	170	476.3	12	1	340	355	200
	300	RF.R-61	584	222	356	94	170	514.4	20	1⅛	425	440	310

LUG TYPE (SDV-3, SDV-3R)

Size mm(inch)	Pressure Rating (ANSI)	Type Facing	Dimensions(mm)					Flange Bolt Circle (mm)	No.of Bolts	Bolt Dia.	Bolt Length(mm)		Weight (kg)
			ØA	B	ØC	F	R				FF - RF	RTJ	
350 (14″)	600	RF.R-61	603	273	356	103	164	527	20	1⅜	535	540	571
	900	RF.R-62	641	356	356	130	181	558.8	20	1½	655	670	775
	1500	RF.R-63	749	356	356	130	181	635	16	2 1/4	795	825	896
400 (16″)	150	RF.R-64	597	191	406	86	195	539.8	16	1	350	365	246
	300	RF.R-65	648	232	406	95	195	571.5	20	1¼	450	465	489
	600	RF.R-65	686	305	406	92	198	603.2	20	1½	585	595	548
	900	RF.R-66	705	384	406	137	203	616	20	1⅝	700	715	609
	1500	RF.R-67	826	384	406	137	203	704.8	16	2 1/2	865	900	1,090
450 (18″)	150	RF.R-68	635	203	457	86	219	577.9	16	1⅛	375	390	290
	300	RF.R-69	710	264	457	127	219	628.6	24	1¼	490	505	558
	600	RF.R-69	743	362	457	121	228	654	20	1⅝	665	675	1,078
	900	RF.R-70	787	451	457	167	232	685.8	20	1⅜	805	825	1,450
	1500	RF.R-71	914	468	457	167	216	774.7	16	2 3/4	995	1,035	1.580
500 (20″)	150	RF.R-72	698	219	508	89	244	635	20	1⅛	400	410	348
	300	RF.R-73	775	292	508	108	244	685.8	24	1¼	520	545	766
	600	RF.R-73	813	368	508	116	248	723.9	24	1⅝	685	695	1,297
	900	RF.R-74	857	451	508	116	248	749.3	20	2	825	845	1,960
	1500	RF.R-75	984	533	508	116	248	831.8	16	3	1,105	1,140	2,235
600 (24″)	150	RF.R-76	813	222	610	86	292	749.3	20	1¼	420	430	396
	300	RF.R-77	914	318	610	122	292	812.8	24	1½	575	600	1,190
	600	RF.R-77	940	438	610	133	295	838.2	24	1⅞	795	610	1,554
	900	RF.R-78	1,041	495	610	149	300	901.7	20	2 ½	960	990	2,351
	1500	RF.R-79	1,168	559	610	149	300	990.6	16	3 1/2	1,205	1,255	3,250
650 (26")	150	RF	870	279	660	110	316	806.4	24	1 1/4	520	-	1,180
	300	RF.R-93	972	356	660	110	316	876.3	28	1 5/8	640	665	1,596
	600	RF.R-93	1,016	457	660	122	312	914.4	28	1 7/8	820	840	1,860
	900	RF.R-100	1,086	533	660	122	312	952.5	20	2 3/4	1,005	1,050	2,418
700 (28")	150	RF	927	321	711	132	351	863.6	28	1 1/4	570	-	1,245
	300	RF.R-94	1,035	381	711	132	351	939.8	28	1 5/8	680	705	1,468
	600	RF.R-94	1,073	483	711	165	347	965.2	28	2	890	900	1,930
	900	RF.R-101	1,168	572	711	165	347	1022.4	20	3	1,070	1,105	3,080
750 (30")	150	RF	984	305	762	137	371	914.4	28	1 1/4	560	-	1,029
	300	RF.R-95	1,092	368	762	137	375	997	28	1 3/4	685	710	2,015
	600	RF.R-95	1,130	505	762	165	362	1,022.4	28	2	895	910	3,148
	900	RF.R-102	1,232	635	762	165	362	1,085.8	20	3	1,150	1,185	3,956
800 (32")	150	RF	1,060	356	813	119	389	977.9	28	1 1/2	635	-	3,046
	300	RF.R-96	1,149	406	813	119	389	1,054.1	28	1 7/8	745	775	3,570
	600	RF.R-96	1,194	533	813	145	370	1,079.5	28	2 1/4	940	965	4,035
	900	RF.R-103	1,314	660	813	145	370	1,155.7	20	3 1/4	1,205	1,240	4,381
900 (36")	150	RF	1,168	368	914	143	452	1,085.9	32	1 1/2	665	-	1,470
	300	RF.R-98	1,270	483	914	165	452	1,168.4	32	2	840	-	2,776
	600	RF.R-98	1,314	635	914	210	445	1,193.8	28	2 1/2	1,010	1,095	5,308
	900	RF.R-105	1,461	718	914	210	445	1,289	20	3 1/2	1,300	1,350	6,434
1000 (40")	150	RF	1,289	419	1,016	499	499	1200.2	36	1 1/2	715	-	1,462
	300	RF	1,238	546	1,016	499	499	1,155.7	32	1 5/8	900	-	3,290
	600	RF	1,321	660	1,016	492	492	1,212.8	32	2 1/4	1,150	-	7,862
	900	RF	1,511	762	1,016	492	492	1,339.8	24	3 1/2	1,395	-	8,416
1050 (42")	150	RF	1,346	432	1,067	527	527	1,257.3	36	1 1/2	740	-	2,379
	300	RF	1,289	568	1,067	522	522	1,206.5	32	1 5/8	930	-	5,513
	600	RF	1,403	702	1,067	240	520	1,282.7	28	2 1/2	1,225	-	6,564
	900	RF	1,562	787	1,067	260	520	1,390.7	24	3 1/2	1,440	-	-
1200 (48")	150	RF	1,511	524	1,219	178	603	1,422.4	44	1 1/2	855	-	4,171
	300	RF	1,467	629	1,219	171	591	1,371.6	32	1 7/8	1,035	-	6,236
	600	RF	1,594	787	1,219	270	591	1,460.5	32	2 3/4	1,365	-	-
1350 (54")	150	RF	1,683	591	1,372	180	663	1,593.8	44	1 3/4	965	-	-
	300	RF	1,657	718	1,372	270	666	1,549.4	28	2 1/4	1,185	-	-
1500 (60")	150	RF	1,854	660	1,524	279	740	1,759	52	1 3/4	1055	-	-
	300	RF	1,810	838	1,524	-	-	1,701.8	32	2 1/4	1,330	-	-

FLANGE TYPE (SDV-2, SDV-2R)





SECTION A–A'

Size mm(inch)	Pressure Rating (ANSI)	Type Facing	Dimensions(mm)					Flange Bolt Circle (mm)	No.of Bolts	Bolt Dia.	Bolt Length(mm)		Weight (kg)
			ØA	B	ØC	F	R				FF - RF	RTJ	
200(8")	150	RF.R-48	343	127	219	48	102	298.5	8	3/4	140	140	51
250 (10")	150	RF.R-52	406	146	274	56	126	361.9	12	7/8	150	150	88
	600	RF.R-53	508	213	274	70	133	431.8	16	1 1/4	245	245	214
	900	RF.R-53	546	241	274	87	133	469.9	16	1 3/8	265	265	301
300 (12")	150	RF.R-56	483	181	324	70	152	431.8	12	7/8	150	150	130
	300	RF.R-57	521	181	324	70	152	450.8	16	1 1/8	205	205	155
	600	RF.R-57	559	229	324	67	152	488.9	20	1 1/4	255	255	250
	900	RF.R-57	610	292	324	100	159	533.4	20	1 3/8	285	285	349
350 (14")	150	RF.R-59	533	184	356	90	170	476.2	12	1	165	165	148
	300	RF.R-61	584	222	356	94	170	514.3	20	1 1/8	210	210	210
	600	RF.R-61	603	273	356	103	164	527	20	1 3/8	265	265	389
	900	RF.R-62	641	356	356	130	181	558.8	20	1 1/2	310	310	480
400 (16")	150	RF.R-64	597	191	406	86	195	539.7	16	1	170	170	161
	300	RF.R-65	648	232	406	95	195	571.5	20	1 1/4	220	220	285
	600	RF.R-65	686	305	406	92	198	603.2	20	1 1/2	285	285	447
	900	RF.R-66	705	384	406	137	203	615.9	20	1 5/8	325	325	550
450 (18")	150	RF.R-68	635	203	457	86	219	577.8	16	1 1/8	180	180	205
	300	RF.R-69	710	264	457	127	219	628.6	24	1 1/4	230	230	388
	600	RF.R-69	743	362	457	121	228	654	20	1 5/8	305	305	560
	900	RF.R-70	787	451	457	167	232	685.8	20	1 7/8	365	365	850
500 (20")	150	RF.R-72	698	219	508	89	244	635	20	1 1/8	190	190	282
	300	RF.R-73	775	292	508	108	244	685.8	24	1 1/4	240	240	499
	600	RF.R-73	813	368	508	116	248	723.9	24	1 5/8	325	325	776
	900	RF.R-74	857	451	508	116	248	749.3	20	2	385	385	1,780
600 (24")	150	RF.R-76	813	222	610	86	292	749.3	20	1 1/4	205	205	410
	300	RF.R-77	914	318	610	122	292	812.8	24	1 1/2	265	265	760
	600	RF.R-77	940	438	610	133	295	838.2	24	1 7/8	365	365	1,154
	900	RF.R-78	1,041	495	610	149	300	901.7	20	2 1/2	485	485	1,890
650 (26")	150	RF	869	279	660	110	316	806.5	24	1 1/4	245	245	1,007
	300	RF.R-93	971	356	660	110	316	876.3	28	1 5/8	290	310	1,238
	600	RF.R-93	1,016	457	660	122	312	914.4	28	1 7/8	390	400	1,418
	900	RF.R-100	1,085	533	660	122	312	952.5	20	2 3/4	510	530	1,991
700 (28")	150	RF	927	321	711	132	333	863.6	28	1 1/4	255	255	1,125
	300	RF.R-94	1,035	381	711	132	333	939.8	28	1 5/8	305	325	1,260
	600	RF.R-94	1,073	483	711	165	330	965.2	28	2	405	415	1,610
	900	RF.R-101	1,168	572	711	165	330	1,022.4	20	3	525	545	2,600

FLANGE TYPE (SDV-2, SDV-2R)

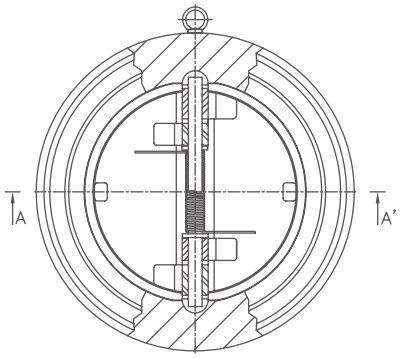
Size mm(inch)	Pressure Rating (KS,ANSI)	Type Facing	Dimensions(mm)					Flange Bolt Circle (mm)	No.of Bolts	Bolt Dia.	Bolt Length(mm)		Weight (kg)
			ØA	B	ØC	F	R				FF - RF	RTJ	
750 (30″)	150	RF	984	305	762	137	371	914.4	28	1 1/4	260	260	810
	300	RF.R-95	1,092	368	762	137	375	997	28	1 3/4	325	325	1,425
	600	RF.R-95	1,130	505	762	165	362	1,022.4	28	2	410	420	1,690
	900	RF.R-102	1,231	635	762	165	362	1,085.9	20	3	540	560	3,268
800 (32″)	150	RF	1,060	356	813	119	389	977.9	28	1 1/2	290	-	1,096
	300	RF.R-96	1,149	406	813	119	389	1,054.1	28	1 7/8	345	370	1,481
	600	RF.R-96	1,193	533	813	145	370	1,079.5	28	2 1/4	430	445	2,133
	900	RF.R-103	1,314	660	813	145	370	1,155.7	20	3 1/4	570	590	3,650
900 (36″)	150	RF	1,168	368	914	143	452	1,085.9	32	1 1/2	305	305	1,142
	300	RF.R-98	1,270	483	914	165	452	1,168.4	32	2	360	385	2,139
	600	RF.R-98	1,314	635	914	210	445	1,193.8	28	2 1/2	455	470	2,865
	900	RF.R-105	1,460	718	914	210	445	1,289.1	20	3 1/2	615	640	-
1000 (40″)	150	RF	1,289	419	1,016	153	499	1,200.2	36	1 1/2	305	-	1590
	300	RF	1,238	546	1,016	191	499	1,155.7	32	1 5/8	360	-	2,733
	600	RF	1,320	660	1,016	238	492	1,212.9	32	2 1/4	490	-	-
	900	RF	1,511	762	1,016	238	492	1,339.9	24	3 1/2	630	-	-
1050 (42″)	150	RF	1,346	432	1,067	173	527	1,257.3	36	1 1/2	320	-	2,160
	300	RF	1,289	568	1,067	148	522	1,206.5	32	1 5/8	370	-	3,965
	600	RF	1,403	702	-	-	-	1,282.7	28	2 1/2	520	-	-
	900	RF	1,562	787	-	-	-	1,390.7	24	3 1/2	650	-	-
1200 (48")	150	RF	1,511	524	1,219	178	603	1,422.4	44	1 1/2	340	-	2,750
	300	RF	1,467	629	1,219	171	591	1,371.6	32	1 7/8	410	-	5,010
	600	RF	1,594	787	1,219	-	-	1,460.5	32	2 3/4	575	-	5,043
1350 (54")	150	RF	1,682	591	1,370	180	663	1,593.9	44	1 3/4	380	-	3,495
	300	RF	1,657	718	1,370	-	-	1,549.4	28	2 1/4	470	-	5,760
1500 (60")	150	RF	1,854	660	1,524	279	740	1,759	52	1 3/4	400	-	-
	300	RF	1,809	838	1,524	-	-	1,701.8	32	2 1/4	490	-	-

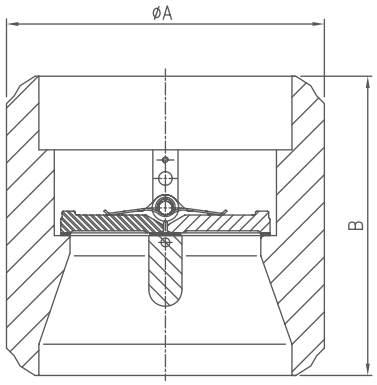
- 2"~6" face to face dimensions to manufacturer's standard.

VALVE SIZE	1 1/2″, 2″, 3″, ...,24″	26″,25″,, ..., 60″	72″, 90″
FLANGE STANDARD	ASME B 16.5	ASME B 16.47 SERIES A(MSS SP44)	AWWA C207 CLASS D

Hydrostatic Pressure Test

BUTTWELD TYPE INSTALLATION DIMENSIONS (ASME B 16.25)





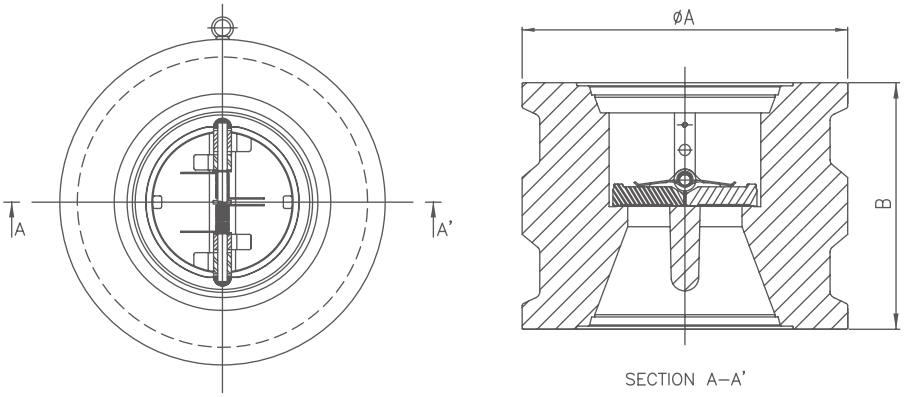
SECTION A–A'

Size mm(inch)	PRESSURE RATING (ASME)	Dimensions(mm)		Weight (kg)
		ØA	B	
80 (3")	150	98	136	6.6
	300	98	136	6.6
	600	113.3	136	7
	900	113.3	136	7
	1500	113.3	136	7
100 (4")	150	129.5	120.7	6.9
	300	129.5	120.7	7.4
	600	135.6	120.7	8.5
	900	146.7	165.1	14
	1500	155.1	165.1	16
	2500	235	165.1	19
150 (6")	150	168.3	136.5	13
	300	168.3	136.5	13
	600	171.9	136.5	15
	900	228.8	206.4	28
	1500	228.8	206.4	37
	2500	228.8	206.4	44
200 (8")	150	226.5	152.4	22
	300	226.5	152.4	25
	600	239.5	215.9	43
	900	252.2	292.1	69
	1500	284.2	292.1	92
	2500	312.6	292.1	113
250 (10")	150	270.6	187.3	43
	300	270.6	187.3	43
	600	289.4	262	78
	900	305.7	262	90
	1500	346.5	346.1	159
	2500	367.3	346.1	179

Size mm(inch)	PRESSURE RATING (ASME)	Dimensions(mm)		Weight (kg)
		ØA	B	
300 (12")	150	329.5	215.9	63
	300	329.5	215.9	69
	600	351.8	292.1	117
	900	372.6	317.5	159
	1500	419.2	349.3	234
	2500	367.3	412.8	344
350 (14")	150	380	260.4	102
	300	380	260.4	113
	600	381.8	355.6	199
	900	381.8	355.6	231
	1500	429.6	355.6	264
400 (16")	150	425.3	304.8	146
	300	425.3	304.8	164
	600	441	400.1	263
	900	469.5	400.1	315
	1500	493.8	438.2	434
450 (18")	150	475.4	330.2	190
	300	475.4	330.2	215
	600	487.5	409.6	306
	900	519.5	447.7	423
	1500	555.4	457.2	568
500 (20")	150	526.7	400.1	273
	300	526.7	400.1	213
	600	539.9	495.3	461
	900	578	546.1	637
	1500	621.7	546.1	855
600 (24")	150	609.6	342.9	361
	300	609.6	419.1	458
	600	635.4	546.1	722
	900	680.1	603.2	1050
	1500	738.5	660.4	1401

- The nominal bore of the valve will be determined by the pipe schedule selected by the customer and be in accordance with ASME B 16.25. Valve size is not specified in the above table, please contact us. Customer must state pipe schedule at time of inquiry.

HUB END TYPE INSTALLATION DIMENSIONS

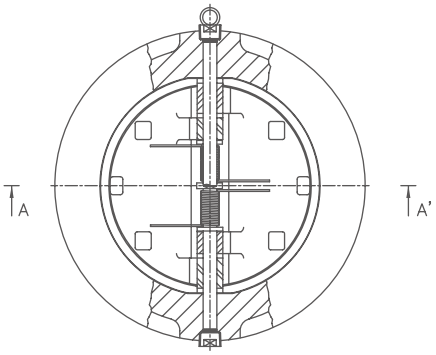


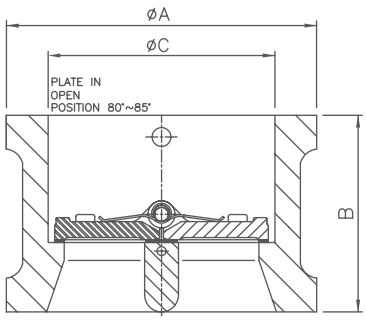
Size mm(inch)	PRESSURE RATING (ASME)	Seal Ring No.	Dimensions(mm)		Weight (kg)
			ØA	B	
50 (2")	900	13~20	92	136	13
	1500		92	136	13
	2500		92	136	13
80 (3")	900	23~27	127	158	28
	1500		127	158	28
	2500		127	158	28
100 (4")	900	31~40	152	220	44
	1500		152	220	44
	2500		152	220	44
150 (6")	900	40~62	235	279	136
	1500		235	279	136
	2500		235	279	136
200 (8")	900	52~82	292	311	242
	1500		292	311	242
	2500		292	311	242
250 (10")	900	72~97	346	381	319
	1500		346	381	319
	2500		346	381	319
300 (12")	900	82~120	406	431	440
	1500		406	431	440
	2500		406	431	440
350 (14")	900	106~130	470	482	645
	1500		470	482	645
400 (16")	900	120~140	533	533	750
	1500		533	533	750
450 (18")	900	152~170	552.5	584	1230
	1500		552.5	584	1230

- Valve size is not specified in the above table. Please contact us. Customer must provide hub drawings with inquiries and oders. Hubs, seal ring and clamp assemblies are not supplied with hub end type valve.

EXTENDED BODY TYPE WAFER CHECK VALVE (SDV-6)

INSTALLATION DIMENSION (ASME B 16.5 & ASME B 16.47 SER. A)





SECTION A–A'

Size (inch)	RATING (ASME)	Dimensions(mm)			Connection Bolt			Weight (kg)
		ØA	B	C	No.	Dia.	Length	
10"	150	340	184	274	12	7/8	320	75
	300	362	184	274	16	1	365	80
	600	400	251	274	16	1 1/4	490	128
	900	435	260	274	16	1 3/8	520	210
	1500	435	292	274	12	1 7/8	660	220
	2500	476	292	274	12	2 1/2	810	230
12"	150	410	229	324	12	7/8	370	110
	300	422	229	324	16	1 1/8	425	120
	600	457	295	324	20	1 1/4	545	165
	900	498	325	324	20	1 3/8	605	275
	1500	521	353	324	16	2	760	365
	2500	549	353	324	12	2 3/4	920	420
14"	150	451	213	356	12	1	370	116
	300	486	260	356	20	1 1/8	460	185
	600	492	324	356	20	1 3/8	585	220
	900	521	371	356	20	1 1/2	670	465
	1500	578	371	356	16	2 1/4	810	490
16"	150	514	241	406	16	1	400	160
	300	540	283	406	20	1 1/4	500	242
	600	565	368	406	20	1 1/2	650	320
	900	575	394	406	20	1 5/8	710	705
	1500	641	419	406	16	2 1/2	900	760
18"	150	549	264	457	16	1 1/8	440	190
	300	597	318	457	24	1 1/4	540	317
	600	613	425	457	20	1 5/8	730	480
	900	638	460	457	20	1 7/8	815	640
	1500	705	514	457	16	2 3/4	1,040	957

Size (inch)	RATING (ASME)	Dimensions(mm)			Connection Bolt			Weight (kg)
		ØA	B	C	No.	Dia.	Length	
20"	150	606	298	508	20	1 1/8	480	250
	300	654	349	508	24	1 1/4	580	410
	600	683	445	508	24	1 5/8	760	700
	900	699	495	508	20	2	870	720
	1500	756	556	508	16	3	1,125	1,065
24"	150	718	349	610	20	1 1/4	550	390
	300	775	406	610	24	1 1/2	660	660
	600	791	540	610	24	1 7/8	895	1,015
	900	838	565	610	20	2 1/2	1,030	1,370
	1500	902	632	610	16	3 1/2	1,275	1,960
26"	150	775	457	660	24	1 1/4	695	790
28"	300	899	514	711	28	1 5/8	810	900
	600	914	584	711	28	2	965	1,490
30"	150	883	457	762	28	1 1/4	710	700
	300	953	524	762	28	1 3/4	840	1,115
	600	972	680	762	28	2	1,065	1,700
	900	1010	734	762	20	3	1,245	2,800
32"	150	940	530	813	28	1 1/2	810	750
36"	150	1048	556	914	32	1 1/2	850	1,230
	300	1118	635	914	32	2	990	1,800
	600	1130	787	914	28	2 1/2	1,220	3,170
42"	150	1219	654	1,067	36	1 1/2	965	1,740
	300	1168	810	1,067	32	1 5/8	1,170	2,900
48"	150	1384	784	1,219	44	1 1/2	1,115	2,700
	300	1324	889	1,219	32	7/8	1,295	3,420
	600	1391	1019	1,219	32	2 3/4	1,595	4,520
54"	150	1549	832	1,372	44	1 3/4	1,200	3,450

- Valve size is not specified in the above table, please contact us.

Extended body design applicable for extremely fast opening condition such as compressor discharge and steam extraction line. Extended type has special plate configuration to allow each plate to strike the stop pin in its center of persussion. To absorb high impacts the stop pin and hinge lugs are oversized.

POST INDICATOR GATE VALVE

MODEL NO **PIV-1**

MODEL NO **PIV-2**
(RUBBER LINING TYPE)

PIV-1GT
GEAR TYPE
(LIMIT SWITCH)

PIV-1LT
LEVER TYPE
(TAMPER SWITCH)

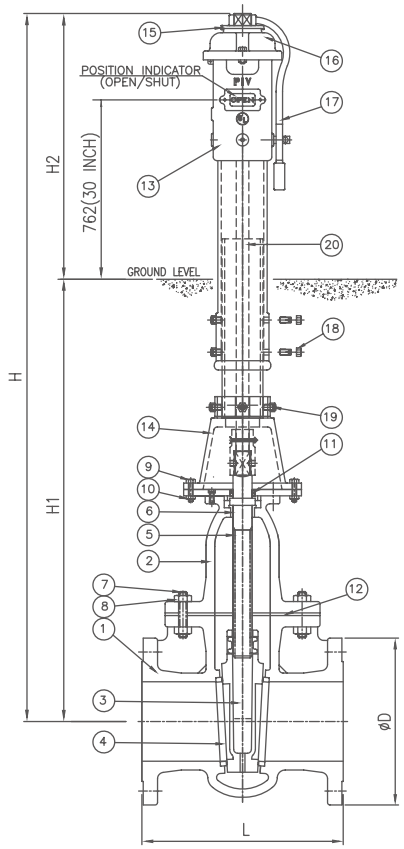
LISTED
Post indicator : File Ex26420
Gate Valve 2"~24" : File Ex26419

KFI
Gear Operated : PIV16-02
Lever Operated : PIV16-02-1

FEATURES

- Post indicator Gate Valve is installed on the pipe lines of the ground-hydrants and it can be opened and closed for fire-hydrants maintenance.
- NRS Gate valve is a structure that stem does not move up and down when opening and closing the disc.
- Post Indicator attached to NRS Gate valve on the fire fighting water pipe and it can control VALVE-OPENING and CLOSING from the ground via LEVER or GEAR TYPE.
- The status of valve opening and closing is checkable via transparent box on the indicator post. As a result, maintenance is much easier. ADJUSTABLE TYPE is a structure that workers can adjust length of the indicator post according to depth of the piping on the spot of burying valve.
- Tamper switch can be attached.

POST INDICATOR GATE VALVE



PIV-1

SPECIFICATION

DIAMETER	100A(4") ~ 600A(24")
APPLICABLE PRESSURE	10K ~ 20K 125LB, 150LB, 300LB
CONNECTING ENDS	FLANGE TYPE
TEST METHOD	According to KS B2304, API 598

DIMENSIONS(150LB)

SIZE	øD	L	H1	H2
4"	229	229	1,000	900
5"	254	254	1,000	900
6"	279	267	1,000	900
8"	343	292	1,000	900
10"	406	330	1,000	900
12"	483	356	1,200	900
14"	533	381	1,300	900
16"	597	406	1,500	900
18"	635	432	1,500	900
20"	698	457	1,500	900
24"	813	508	1,500	900

- PAINTING : H1 - BLACK COLOR
  H2 - RED COLOR

DESCRIPTION OF PARTS (PIV - 1)

NO	PART NAME		Q'TY	MATERIALS (ASTM SPECIFICATION)
1	BODY		1	A216 - WCB
2	BONNET		1	A216 - WCB
3	DISC	6" UNDER	1	A217 - CA15
		8" OVER	1	WCB + 13Cr FACED
4	SEAT RING		2	A105+ 13Cr FACED
5	STEM		1	A276 - 410
6	BONNET BUSH		1	B62
7	BONNET BOLT			A193 - B7
8	BONNET NUT			A194 - 2H
9	HEX. BOLT		4	SS304
10	HEX. NUT		4	SS304
11	PACKING		2	O - RING (NBR)
12	GASKET		1	SS / GRAPHITE (P#1200 - GR or EQV.)
13	TOP SECTION		1	A126 CLASS B
14	BOTTON SECTION		1	A126 CLASS B
15	OPERATION STEM NUT		1	A351 GR. CF8
16	COVER		1	A126 CLASS B
17	LEVER		1	A126 CLASS B
18	TOP SECTION BOLT		1	SS304
19	BOTTON SECTION BOLT		1	SS304
20	STEM		1	SQUARE BAR(A29)

* The material can be changed by customer's request.

DESCRIPTION OF PARTS (PIV - 2)

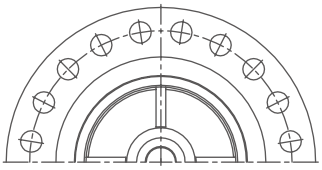
NO	PART NAME	Q'TY	MATERIALS (ASTM SPECIFICATION)
1	BODY	1	A536
2	BONNET	1	A536
3	DISK	1	A536 + EPDM LINING
5	STEM	1	A276 - 410
6	BONNET BUSH	1	B16
7	BONNET BOLT		SS304
8	BONNET NUT		SS304
9	HEX. BOLT	4	SS304
10	HEX. NUT	4	SS304
11	PACKING	2	O - RING (NBR)
12	GASKET	1	NBR
13	TOP SECTION	1	A126 CLASS B
14	BOTTON SECTION	1	A126 CLASS B
15	OPERATION STEM NUT	1	A351 GR. CF8
16	COVER	1	A126 CLASS B
17	LEVER	1	A126 CLASS B
18	TOP SECTION BOLT	1	SS304
19	BOTTON SECTION BOLT	1	SS304
20	TOP STEM	1	SQUARE BAR(A29)

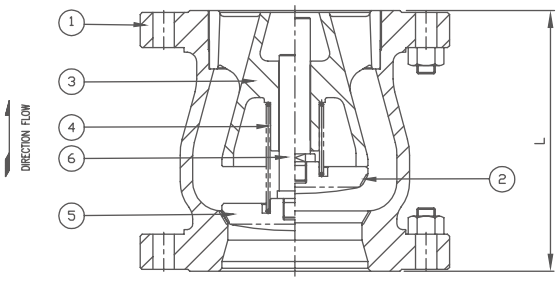
* The material can be changed by customer's request.

NOZZLE TYPE

MODEL NO **NCV-1**

LISTED





FEATURES

- Non-Slam Nozzle Check valves are specifically designed for fastreversing 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.

APPLICATIONS

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

SPECIFICATION

PRESSURE / SIZE	ANSI 125LB ~ 2500LB(2"~ 60")
BODY, PLATE MATERIAL	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 B16.5, B16.47, ANSI B16.1
END CONNECTION	FLANGE TYPE

DESCRIPTION OF PARTS

NO	PART NAME	Q'TY	MATERIALS (ASTM SPECIFICATION)
1	BODY	1	A536 Gr 65-45-12, A216 WCB , CA15, Stainless Steel, DUPLEX, MONEL
2	DISC	1	
3	DIFFUSER	1	
4	SPRING	1	STS316WPA, INCONEL-X750
5	SEAT	1	METAL TO METAL
6	DISC STEM	1	STAINLESS STEEL, DUPLEX, MONEL

NOZZLE CHECK VALVE DIMENSION

Size (inch)	Class (RF)	L(Short Pattern)	L(Long Pattern)	Weight (Kg)	Size (inch)	Class (RF)	L(Short Pattern)	L(Long Pattern)	Weight (Kg)	Size (inch)	Class (RF)	L(Short Pattern)	L(Long Pattern)	Weight (Kg)
2"	150	-	203	- /10	14"	150	475	787	347/428	36"	150	1,215	1,956	2,605/2,714
	300	-	267	- /13		300	475	838	445/538		300	1,215	2,083	3,670/4,358
	600	-	292	- /17		600	475	889	538/652		600	1,215	2,083	4,500/8.779
	900	-	368	- /36		900	473	1,29	695/1,328		900	1,190	-	7,250/ -
	1500	-	368	- /36		1,500	648	1257	1,600/2,237					
	2500	-	451	- /52										
3"	150	-	241	- /30	16"	150	545	864	415/489	42"	150	1,415	-	4,100/ -
	300	-	318	- /30		300	545	864	530/647		300	1,415	-	5,620/ -
	600	218	356	26/30		600	546	991	790/957		600	1,461	-	6,584/ -
	900	-	381	- /55		900	750	1,130	1220/1,463		900	1,524	-	9,920/ -
	1,500	-	470	- /78		1,500	750	1,384	1,840/2,488					
	2,500	-	578	- /119										
4"	150	-	292	- /48	18"	150	610	978	538/814	48"	150	1,461	-	5,275/ -
	300	-	356	- /48		300	610	978	690/820		300	1,461	-	5,325/ -
	600	250	432	50/74		600	810	1,92	1,355/1,547		600	1,615	-	10,250/ -
	900	-	457	- /100		900	775	1,219	1,440/2,021		900	1,626	-	14,400/ -
	1,500	-	546	- /123		1,500	813	1,537	2,700/3,677					
	2,500	-	673	- /168										
6"	150	280	356	65/76	20"	150	850	978	1,075/1,441	54"	150	1,850	-	9,450/ -
	300	268	445	88/95		300	810	1,016	1,090/1,173		300	1,850	-	10,140/ -
	600	300	559	100/193		600	810	1,194	1,380/1,537		600	1,829	-	12,400/ -
	900	391	610	193/257		900	869	1,321	2,120/2,941					
	1,500	403	05	270/365		1,500	869	1,664	2,950/4,176					
	2,500	403	914	485/593										
8"	150	280	495	85/194	24"	150	810	1,295	1,152/1,310	60"	150	2,035	-	10,800/ -
	300	311	533	190/204		300	810	1,346	1,370/1,514		300	2,035	-	11,100/ -
	600	311	660	203/250		600	810	1,397	1,935/2,411		600	2,159	-	18,500/ -
	900	346	737	290/335		900	1,016	1,549	3,182/3,686					
	1,500	346	832	365/457		1,500	869	1,943	5,190/6,046					
	2,500	449	1,022	700/873										
10"	150	365	622	220/243	28"	150	945	1,448	1,560/2,006					
	300	365	622	248/278		300	1,035	1,499	2,200/2,387					
	600	365	787	335/399		600	870	1,600	2,660/3,934					
	900	394	838	483/684		900	1,016	-	4,650/ -					
	1,500	418	991	628/897										
	2,500	562	1,270	1,227/1,650										
12"	150	438	699	282/285	30"	150	1,010	1,524	1,965/2,547					
	300	438	711	305/331		300	1,010	1,524	2,394/2645					
	600	438	838	426/516		600	1,010	1,651	3,000/3,935					
	900	457	965	675/885		900	1,026	-	4,750/ -					
	1,500	545	1,130	900/1,202										
	2,500	914	1,422	2,073/2,542										

VALVE SIZE	2″, 3″, 4″, ...,24″	26″,28″, ...,60″
FLANGE STANDARD	ANSI B16.5	ASME B16.47 SERIES A (MSS SP44)

TILTING TYPE

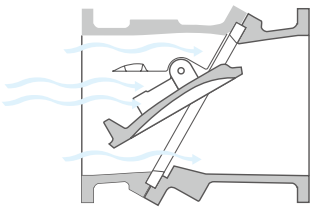
MODEL NO **TCV-1**

FEATURES

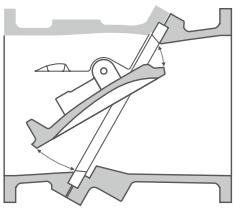
- Short disc stroke reduce water hammer.
  Disc counteraction has self cushioning movement.
- Disc position indicator-Make it possible to determine the opening and closing state of the disc.
- Inspection ports-allow up&down stream Seat access, mounting ports for dashpots.

APPLICATIONS

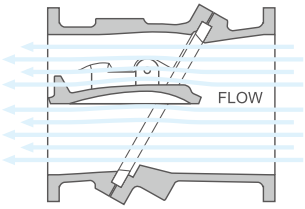
- PORTALE WATER
- WASTE WATER TREATMENT SYSTEM
- PRESSURIZED COOLANT SYSTEM
- POWER PLANT
- PUMP STATION



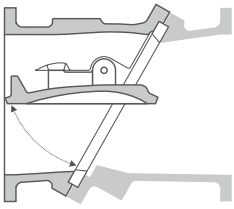
No-Slam Characteristics



Unique disc movement



Laminar flow



Rapid opening/
quicker closing

SPECIFICATION

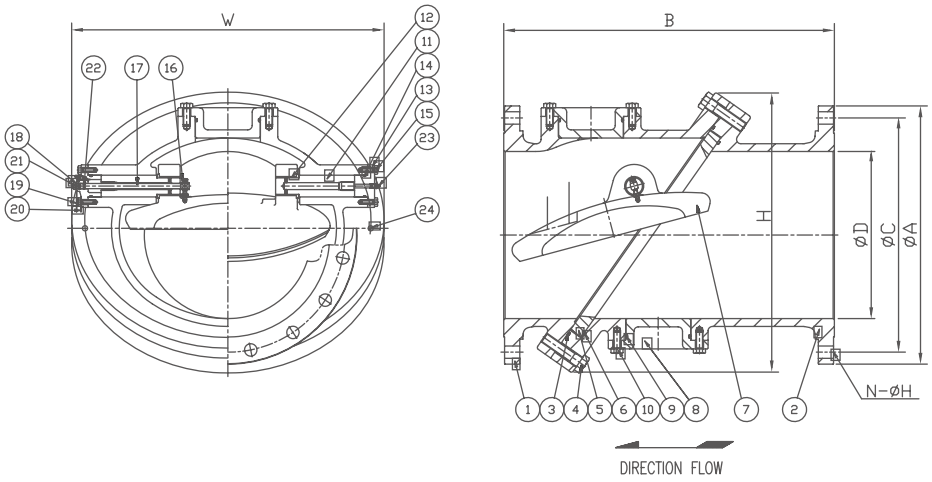
PRESSURE / SIZE	ANSI 125LB ~ 300LB(4"~ 60")
BODY, PLATE MATERIAL	A126 CL.B, A536 Gr 65-45-12, A216 WCB CA15, Stainless Steel, DUPLEX, MONEL
VALVE TEST	API 598, ANSI B16.34
END CONNECTION	FLANGE TYPE

DESCRIPTION OF PARTS

NO	PART NAME	Q'TY	MATERIALS (ASTM SPECIFICATION)
1	HINGE BODY	1	ASTM A890 Gr. 4A
2	SEAT BODY	1	ASTM A890 Gr. 4A
3	BODY SEAL O-RING	1	VITON
4	BODY FLANGE BOLT	1set	316SS
5	SEAT RING	1	ASTM A890 Gr.4A
6	SEAT RING O-RING	1	VITON
7	DISC	1	ASTM A890 Gr. 4A
8	INSPECTION HOLE COVER BOLT	2	ASTM A890 Gr. 4A
9	IN. HOLE COVER O-RING	2	VITON
10	IN. HOLE COVER BOLT	2set	316SS
11	HINGE PIN	2	UNS S31803
12	HINGE PIN BUSH	2	UNS S31893
13	HINGE PIN COVER	2	ASTM A890 Gr.4A
14	HINGE PIN COVER O-RING	2	VITON
15	HINGE PIN COVER BOLT	2set	316SS
16	INDICATOR PIN	1	316SS
17	INDICATOR SHAFT	1	UNS S31803
18	INDICATOR WASHER	1	A276-316
19	INDICATOR	1	A276-316
20	INDICATOR PLATE	1	A276-316
21	INDICATOR NUT	1	A276-316
22	INDICATOR O-RING	2	VITON
23	GREASE FITTING	2	A276-316
24	LOCATING PIN	2	A276-316
	NAME PLATE	1	STAINLESS STEEL

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

TILTING CHECK VALVE DIMENSION



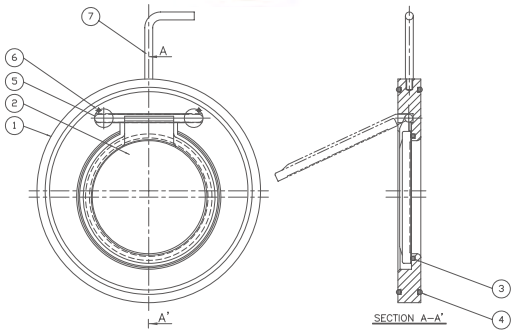
Size (inch)	Series	Dimensions							Weight (kg)
		ØA	B	ØC	ØD	H	W	N-ØH	
4"	125	230	292	191	100	254	330	8-3/4"	37
	150			190.5				8-5/8"	40
6"	125	280	318	241	150	330	406	8-7/8"	71
	150			241.3				8-3/4"	77
8"	125	345	495	299	200	406	483	8-7/8"	134
	150			298.5				8-3/4"	142
10"	125	405	622	362	250	457	584	12-1"	196
	150			362				12-7/8"	214
12"	125	485	609	432	300	535	660	12-1"	282
	150			431.8				12-7/8"	305
14"	125	535	762	476	350	597	737	12-1 1/8"	404
	150			476.3				12-1"	433
16"	125	595	762	540	400	711	813	16-1 1/8"	526
	150			539.8				16-1"	570
18"	125	635	838	578	450	762	914	16-1 1/4"	639
	150			577.9				16-1 1/8"	685
20"	125	700	813	635	500	813	991	20-1 1/4"	779
	150			635				20-1 1/4"	844
24"	125	815	965	749	600	940	1,169	20-1 3/8"	1,224
	150			749.3				20 1 3/8"	1,327
30"	125	985	1,321	914	750	1,143	1,397	20 1 3/8"	2,223
	150			914.4				20 1 3/8"	2,409
36"	125	4,470	1,511	1,086	900	1,296	1,651	32-1 5/8"	3,402
	150			1,085.8				32-1 5/8"	3,692
42"	125	1,345	1,588	1,257	1,050	1,499	1,854	36-1 5/8"	4,763
	150			1,257.3				36-1 5/8"	5,171
48"	125	1,510	1,651	1,422	1,200	1,753	2,083	44-1 5/8"	6,260
	150			1,422.4				44-1 5/8"	6,804
54"	125	1,685	1,981	1,594	1,350	1,905	3,211	44-2"	7,938
	150			1,594.8				44-1 7/8"	8,618
60"	125	1,855	2,210	1,759	1,500	2,191	2,377	52-2"	10,433
	150			1,759				52-1 7/8"	11,340

VALVE SIZE	4″, 6″, 8″, ...,24″	26″,28″, 30″, ..., 60″
FLANGE STANDARD	ANSI B 16.1 (125P) / ANSI B 16.5 (150P)	ASME B 16.1 (125P) / ASME B 16.47 SERIES A (150P)

SINGLE PLATE WAFER CHECK VALVE

SHORT PATTERN DESIGN

MODEL NO **SSV-1**



FEATURES

- The low weight and short FACE-TO-FACE Dimensions provide an economical, space-saving solution. Additionally, Flange gaskets are typically not required due to the built-in, body seal o-rings.
- The replaceable soft seal fitted in the body ensures a tight shut-off to prevent backflow.
- Easy to handle and maintain
- Minimal head loss

SPECIFICATION

DIAMETER	40A(1 1/2")~700A(28")
APPLICABLE PRESSURE	5K, 10K, PN6, PN10, PN16 CLASS 125, 150
CONNECTING ENDS	WAFER – FLAT FACE
TEST METHOD	KS B2304, API598

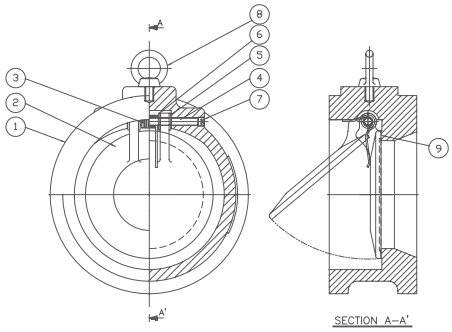
DESCRIPTION OF PARTS

NO	NAME	MATERIAL	Q'TY
1	BODY	A283, A105 A240-304, 316	1
2	CLAPPER PLATE	A351 CF8, CF8M	1
3	SEAT	NBR, VITON, EPDM	-
4	GASKET	NBR, VITON, EPDM	2
5	WASHER	304SS, 316SS	2
6	SCREW	304SS, 316SS	2
7	L-BOLT	304SS	1

- The material can be changed by customer's request.

LONG PATTERN DESIGN

MODEL NO **SSV-2**



FEATURES

- Single disc-spring closure-provides unobstructed flow and reduces damaging water hammer.
- Light weight easier to handle and install.
- Rubber and metal seat is available

SPECIFICATION

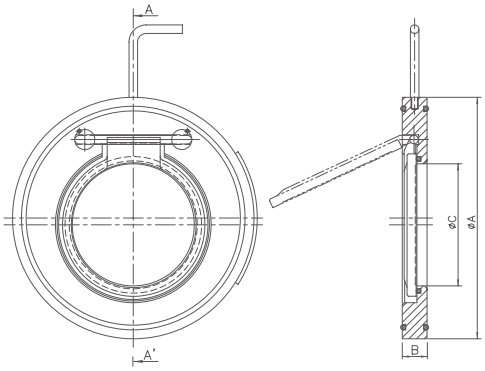
DIAMETER	50A(2")~900A(36")
APPLICABLE PRESSURE	10K, 20K PN10, PN16, PN25 CLASS 125, 150, 300
CONNECTING ENDS	WAFER – FF & RF
TEST METHOD	KS B2304, API598

DESCRIPTION OF PARTS

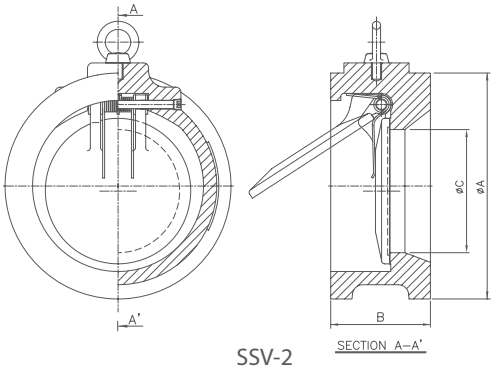
NO	NAME	MATERIAL	Q'TY
1	BODY	A216 WCB, A351 CF8, CF8M	1
2	PLATE	A351 CF8, CF8M	1
3	SPRING	STS316WPA INCONEL X-750	2
4	HINGE PIN	A276-304, 316	1
5	BODY BEARING	STAINLESS STEEL/PTFE	2
6	SPRING BEARING	STAINLESS STEEL/PTFE	2
7	PLUG	A105 304SS, 316SS	1
8	EYE BOLT	A105	1
9	SEAT	METAL, RUBBER	-

- The material can be changed by customer's request.

DIMENSION



SSV-1
(Short type)



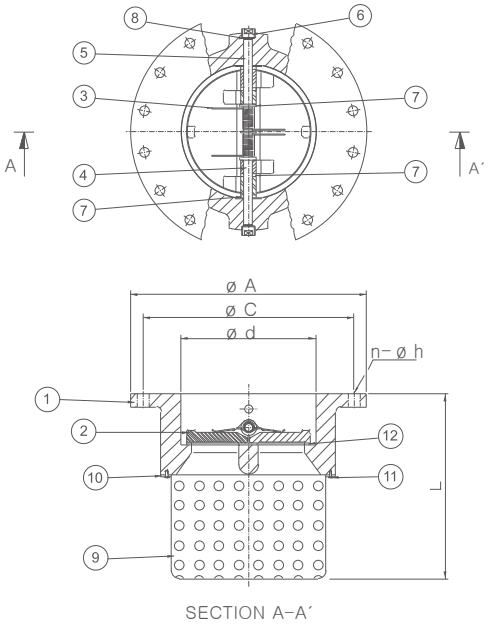
SSV-2
(Long type)

Size	Rating	Dimensions								Weight (Kg)	
		ØA	B		ØC	No of Bolts	Bolt Dia.	Bolt Length (mm)		Short	Long
			Short	Long				SHORT	LONG		
40A (1 1/2")	10K	86	19	-	22	4	M16	105	-	1.5	-
	150	86	19	-		4	1/2	110	-	1.1	-
50A (2")	10K	101	19	60	31	4	M16	110	131	1.2	2.4
	150	105	19	60		4	5/8	115	160	1.3	2.5
65A (2 1/2")	10K	121	19	67	40	4	M16	110	143	1.6	3.2
	150	124	19	67		4	5/8	120	175	1.7	3.4
80A (3")	10K	131	19	73	54	8	M16	120	151	1.9	4
	150	137	19	73		4	5/8	125	180	2	4.5
100A (4")	10K	156	20	73	65	8	M16	120	155	2.5	6
	150	175	19	73		8	5/8	125	180	2.7	7
125A (5")	10K	187	21	86	92	8	M20	130	180	3.1	9
	150	197	19	86		8	3/4	135	200	3.4	10
150A (6")	10K	217	22	98	110	8	M20	140	195	4.9	13
	150	222	19	98		8	3/4	135	215	5.5	14
200A (8")	10K	267	28	127	143	12	M20	140	230	11	20
	150	279	29	127		8	3/4	150	250	13	22
250A (10")	10K	330	30	146	187	12	M22	140	255	15	34
	150	340	29	146		12	7/8	165	285	18	37
300A (12")	10K	375	38	181	215	16	M22	140	295	25	49
	150	410	38	181		12	7/8	180	325	28	56
350A (14")	10K	420	41	184	260	16	M22	150	300	35	54
	150	451	44	184		12	1	200	340	40	80
400A (16")	10K	483	48	191	310	16	M24	170	315	55	86
	150	514	51	191		16	1	210	350	60	100
450A (18")	10K	538	51	203	347	20	M24	180	325	68	104
	150	549	60	203		16	1 1/8	230	375	75	110
500A (20")	10K	593	64	219	387	20	M24	185	350	108	154
	150	606	64	219		20	1 1/8	240	400	120	169
600A (24")	10K	697	75	222	460	24	M30	205	370	165	240
	150	718	75	222		20	1 1/4	270	420	175	265

- Valve sizes not listed above are available on application, please contact us.

FOOT VALVE / DUAL TYPE

MODEL NO **DFV-1**



SECTION A–A´

FEATURES

- Elastic body seat that contacts the plate is formed with body and ensures the perfect sealing even after the prolonged use.
- Simple design and heavy duty stainless steel screening is easy to maintain.
- Body and plate is light weight, and designed to prevent the additional loading when operating the pump.
- The internal epoxy coating on the in/out side of the valve is possible.

DIMENSIONS(150LB)

SIZE	øA	øC	øD	L	N-øH
50A	155	120	60	160	4-19
65A	175	140	73	175	4-19
80A	185	150	89	190	8-19
100A	210	175	114	190	8-19
125A	250	210	141	215	8-23
150A	280	240	168	245	8-23
200A	330	290	219	300	12-23
250A	400	355	274	355	12-25
300A	445	400	324	400	16-25
350A	490	445	356	530	16-25
400A	560	510	406	550	16-27

- Custom-tailored fabrication is available for the size over 450A(18") and the class of ansi 150LB.

SPECIFICATION

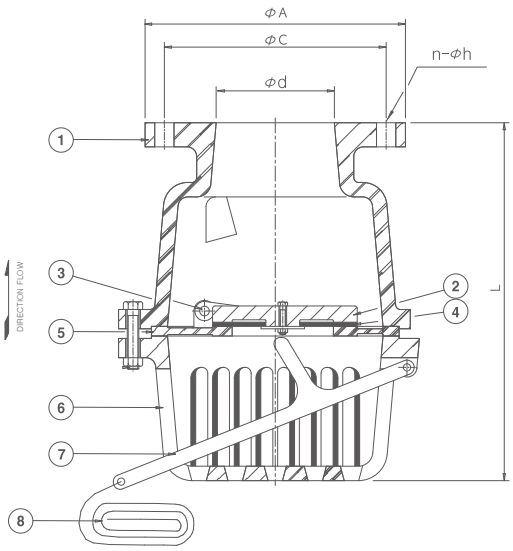
DIAMETER	50A(2″) ~ 1800A(72″)
APPLICABLE PRESSURE	10K ~ 20K 150LB ~ 300LB
CONNECTING ENDS	FLANGE TYPE
TEST METHOD	According to KS B2304, API 598
NUMBER OF SPRING	1-½″~ 5″: (1EA), 6″~ 22″ : (2EA) 24″ and over : (4EA)

DESCRIPTION OF PARTS

NO	NAME	MATERIAL		Q'TY
		10K	150LB	
1	BODY	FC200	A216 Gr, WCB	1
2	PLATE	SCS13, BC6	CF8	2
3	LOW SPRING	STS 316 WPA		1-4
4	HINGE PIN	STS 304	A276-304	1
5	STOP PIN	STS 304	A276-304	1
6	PLUG	SM 25C	A576 1025	4
7	BEARING	PTFE		6-9
8	PIN STABILIZER	RUBBER		4
9	SCREEN	STS 304		1
10	SCREEN PAD	STS 304		1
11	BOLT	STS 304		4-8
12	SEAT	NBR, EPDM		

LEVER TYPE

MODEL NO **SFV-1**



SPECIFICATION

DIAMETER	50A(2") ~ 600A(24")
APPLICABLE PRESSURE	10K ~ 20K 150LB ~ 300LB
CONNECTING ENDS	FLANGE TYPE
TEST METHOD	According to KS B2304, API 598

TABLE OF DIMENSIONS(10K)

SIZE	øA	øC	L	N-øH
50A	155	120	200	4-19
65A	175	140	205	4-19
80A	185	150	210	8-19
100A	210	175	270	8-19
125A	250	210	315	8-23
150A	280	240	360	8-23
200A	330	290	405	12-23
250A	400	355	495	12-25
300A	445	400	570	16-25
350A	490	445	685	16-25
400A	560	510	750	16-27
450A	620	565	850	20-27
500A	675	620	980	20-27
600A	795	730	1,140	24-33

- Valve size is not specified in the above table, please contact us.

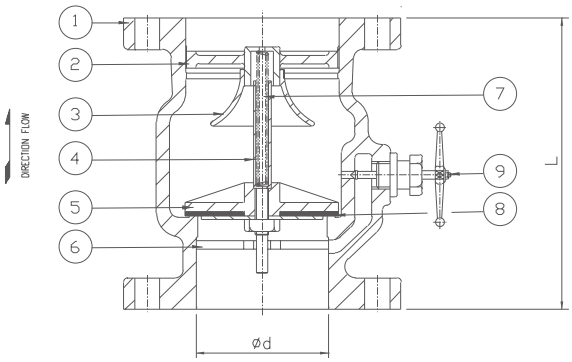
TABLE OF MATERIALS

NO	PART NAME	MATERIAL	
1	BODY	SCS13	SCS14
2	DISC	SCS13	SCS14
3	PIN	STS 304	STS 316
4	PACKING	URETHANE, PTFE, NBR	
5	SEAT	SCS13	SCS14
6	SCREEN	SCS13	SCS14
7	LEVER	STS 304	STS 316
8	WIRE ROPE	STS 304	

SMOLENSKY CHECK VALVE

MODEL NO **SMC-1**

< Patent No : 10-1383676 >



FEATURES

- No water hammer, reaction time of disc is very quick and it is closed with the spring tension before the reverse flow activated.
- Design is simple and easy for repair.
- By-pass valve installed to the body easily drains the water in case of repair/replacement.
- Rubber packing ensures the tight sealing and it is simple to replace.
- Horizontal and vertical installation is applicable. In case of horizontal installation of large diameter valves, it is necessary to use supports.
- Standard flange ends conform to KS but we can meet buyer's flange ends requirement.
- Body material can be Cast Steel, Bronze and SUS, etc. depending on the fluid to be used, temparature and pressure.

DIMENSION

SIZE	ØD	10K(L)	20K(L)
50A	50	182	184
65A	65	194	200
80A	80	210	218
100A	100	218	220
125A	125	263	263
150A	150	288	291
200A	200	407	420
250A	250	460	480
300A	300	600	600

- For over Ø350, it. is going to be done by reguest.
- 1 Piece Body Design : 50A ~ 250A
- 2 Pieces Body Design : 300A and over

SPECIFICATION

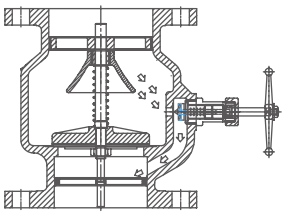
DIAMETER	50A(2") ~ 600A(24")
APPLICABLE PRESSURE	10K ~ 40K 150LB ~ 300LB
CONNECTING ENDS	FLANGE TYPE
TEST METHOD	WATER, AIR, GAS AND OIL
APPLICABLE TEMPERATURE	URETHANE, NBR : Under 100°C PTFE(Teflon) : Under 240°C

DESCRIPTION OF PARTS

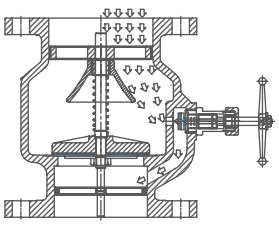
NO	NAME	MATERIAL			Q'TY
1	BODY	SCPH2	SCS13	SCS14	1
2	TOP GUIDE	SCS13	SCS13	SCS14	1
3	BUFFER RING	SCS13	SCS13	SCS14	1
4	STEM	STS304	STS 304	STS 316	1
5	DISC	SCS13	SCS13	SCS14	1
6	BOTTOM GUIDE	SCS13	SCS13	SCS14	1
7	SPRING	STS 316 WPA			1
8	DISC SEAT	EPPM, URETHANE, NBR, PTFE			1
9	BY PASS VALVE	STS 304	STS 304	STS316	1

ANTI PRESSURE SURGE TYPE

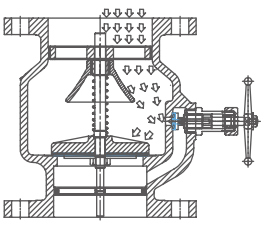
MODEL NO **SMC-1S**



BY PASS VALVE FULL OPEN
Bypass the fluid inside the valve



BY PASS VALVE PARTIAL OPEN
When a water-hammer occurs, relieves rising surge pressure



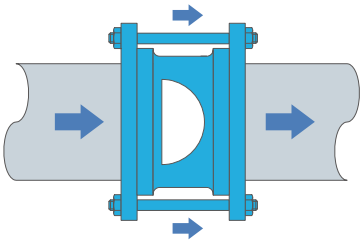
BY PASS VALVE FULL CLOSE
Bypass line is blocked

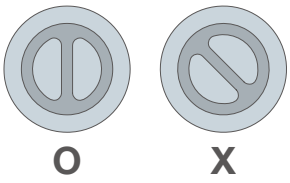
- Please contact us if you would like to know more details.

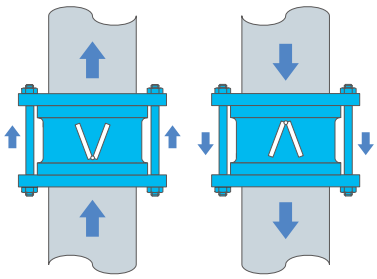
BEST INSTALLATION PRACTICES

**To maximise the lifecycle of a Dual plate check valve,
it should be installed in accordance with following installation practices.**

Check valve should be installed direction arrow to match the flow direction.



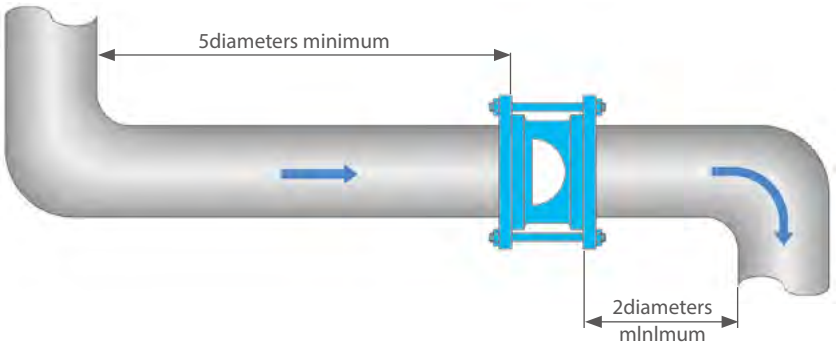




- **Horizontal Installation**
  Pins must be vertical.

- **Vertical Installation**
  For vertical flow down in larger valve size
  (10" and above), please contact "SOOSUNG VALVE".

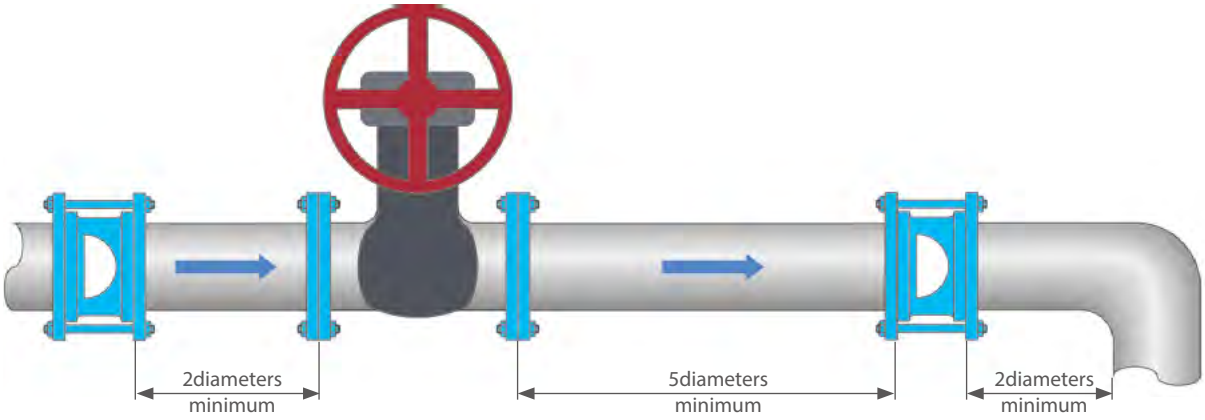
Installed in the bending line



Check valve should be installed a minimum of 5 diameter downstream of a , bend(elbow) to ensure flow at valve is fully developed and turbulence is minimised.

Check valve should be installed a minimum of 2 diameters upstream of a bend(elbow) to aboid choked flow.

Installed with other valve



when installed neal a valve, the check valve should be installed a minimum of 5 diameters downstream and 2 diameters upstream.

ELASTOMER GENERAL TABLE

Elastomer seats have been chosen to satisty every service need. Application suggested derive from recommendation given by the elastomer manufacturers and are purely indicative. Since many factors influence corrosion and abrasion (type of fluid, concentration, temperature, turbulence impurities etc.), the final choice is to be taken by the customer, based on characteristics and specific application.

Name	Composition	General Application	Temperature Limit	Other Limits
EPDM	Ethylene-Propylene Terpolymer	Water steam, Sea water Brine, Esters	-35°C ~ +110°C -30°F ~ +230°F	Not recommended for hydrocarbons-oils-fats
EPDM HIGH/TEMP (HT)	Copolymer	Ketone, Alkalis Caustic Soda	-35°C ~ +150°C -30°F ~ +300°F	Not recommended for hydrocarbons-oils-fats
BUNA N (NBR)	Copolymer of Bu-tadiene and hig Acryloitrile	Hydrocarbons Oils and gas Air, Gasoline	-1°C ~ +100°C 0°C ~ +212°C	Not recommended for Solvents-Ben-zene-Xylol
Neoprene	Chloro butadiene	Fats, Oils Diluted mineral acids, Alkalis	-18°C ~ +90°C 0°F ~ +194°F	Not recommended for Ketones, thin-ners Concentrated acids.
Hypalon	Chlorosulfonated Polyethylend	Mineral acids Organic acids, Fats Oxidising substances	-18°C ~ +100°C 0°C ~ +212°C	Not recommended for Nitric acid- Steam Ketones
Viton	Fluorocarbon Polymer	Acids, Oils Hydrocarbons	-10°C ~ +160°C -14°F ~ +320°F	Not recommended for Steam Freon 22 Solvents-ketones-Esters-Alkalis
Natural rubber	Latex(vegetable)	Abrasive products	-35°C ~ +65°C -30°C ~ +150°C	Not recommended for Steam oils-Hydrocarbons
Silicone	Organic silicone Polymer	Food & Beverage	-30°C ~ +150°C -22°F ~ +300°F	Not recommended for Steam Solvents-Hydrocarbons
Teflon	Polytetrafluoro Ethylene	Solvents Corrosive Prod-ucts	-40°C ~ +180°C -40°C ~ +356°C	Not recommended for Fluid containing powders. Alkaline metals(sodium. potassium) Gaseous Fluorine

NOTES:

The above table is merely indicative. The customer is expected to make the final decision on the suitability of seat materials for their specific applications. Therefore, in any case, we are not responsibie for the elastomers selected by the customers.

CONVERSION TABLE OF KS, JIS AND ASTM MATERIAL STANDARD FOR VALVES

Application	KS Standard and material symbol		JIS Standare and material symbol		ASTM Standare and material symbol	
Steel casting for high Temp and high pressure	D4107	SCPH2	G5151	SCPH2	A216	WCB
	D4107	SCPH11	G5151	SCPH11	A217	WC1
	D4107	SCPH21	G5151	SCPH21	A217	WC6
	D4107	SCPH31	G5151	SCPH31	A217	WC9
	D4107	SCPH61	G5151	SCPH61	A217	C5
	D4107	SCPH23	G5151	SCPH23	A389	C24
Steel casting for Low Temp and high pressure	D4111	SCPL1	G5152	SCPL1	A352	LCB
	D4111	SCPL11	G5152	SCPL11	A352	LC1
	D4111	SCPL21	G5152	SCPL21	A352	LC2
	D4111	SCPL31	G5152	SCPL31	A217	LC3
Stainless steel castings	D4103	SSC1	G5121	SCS1	A217	CA15
	D4103	SSC2	G5121	SCS2	A351	
	D4103	SSC13A	G5121	SCS13A	A351	CF8
	D4103	SSC19	G5121	SCS19	A351	CF3
	D4103	SSC14A	G5121	SCS14A	A351	CF8M
	D4103	SSC16	G5121	SCS16	A351	CF3M
	D4103	SSC21	G5121	SCS21	A351	CF8C
	D4103	SSC18	G5121	SCS18	A351	CK20
Gray cast Iron	D4301	gC200	G5501	FC200	A126	B
Black heart Malleable Iron castings	D4303	BMC28	G5702	FCMB28	A197	
	D4303	BMC35	G5702	FCMB35	A197	32510
Carbon steel Forgings	D3710	SF45	G3201	SF45	A105	
Bronze castings	D6002	BC6	H5111	BC6	B584	C83600
	D6002	BC5	H5111	BC5		
Aluminum Bronze castings	D6015	AlBrC3	H5114	AlBC3	B148	C95800
Copper and Copper Alloy Bars	D5101	C3604BD	H3250	C3604BD	B16	
	D5101	C3771BD	H3250	C3771BD	B142	C37700
	D5101	C6191BD	H3250	C6191BD	B150	N0619
Carbon steel for Mechanical structure	D3752	SM10C	G4051	S10C	A576	1010
	D3752	SM20C	G4051	S20C	A576	1020
	D3752	SM25C	G4051	S25C	A576	1025
	D3752	SM45C	G4051	S45C	A576	1045
Steel for general Structure	D3503	SS400	G3101	SS400	A283	D
High temperature Alloy steel Bolts	D3706	STS304	G4303	SUS304	A193	B8
	D3755	SNB7	G4107	SNB7	A193	B7
	D3755	SNB16	G4107	SNB16	A193	B16
Stainless steel Bars	D3706	STS304-B	G4303	SUS304-B	A479	304
	D3706	STS304L-B	G4303	SUS304L-B	A479	304L
	D3706	STS316-B	G4303	SUS316-B	A479	316
	D3706	STS316L-B	G4303	SUS316L-B	A479	316L
	D3706	STS374-B	G4303	SUS374-B	A479	347
	D3706	STS321-B	G4303	SUS321-B	A479	321
	D3706	STS310S-B	G4303	SUS310S-B		
	D3706	STS630-B	G4303	SUS630-B		
Stainless steel Forgings	D4115	STSF304P	G3214	SUSF304P	A182	F304
	D4115	STSF304L	G3214	SUSF304L	A182	F304L
	D4115	STSF310	G3214	SUSF310	A182	F310
	D4115	STSF316	G3214	SUSF316	A182	F316
	D4115	STSF316L	G3214	SUSF316L	A182	F316L
	D4115	STSF347	G3214	SUSF347	A182	F347
Hot Rolled stainless steel Plates	D3705	STS304HP	G4304	SUS304HP	A240	304
	D3705	STS304LHP	G4304	SUS304LHP	A240	304L
	D3705	STS316HP	G4304	SUS316HP	A240	316
	D3705	STS316LHP	G4304	SUS316LHP	A240	316L
Carbon steel pipes for high temp pipeline	D3570	SPHT38	G3456	STPT38	A106	
	D3570	SPHT42	G3456	STPT42		
	D3570	SPHT49	G3456	STPT49		
Carbon steel pipes for pipeline	D3507	SGP	G3452	SGP	A120	

PRESSURE - TEMPERATURE RATINGS

		WORKING PRESSURE. PSIG								
	TEMP °F	A216 WCB A105	A217 C5 A182 F5a	A217 WC6 A182 F17	A217 WC9 A182 F22	A325 LC3 A350 LF3	A351 CF8M A182 F315	A351 CF3M	A351 CF8 A182 F304	A351 CF3
CLASS 150	-20 to 100°	285	290	290	290	290	275	275	275	275
	200	260	260	260	260	260	240	240	235	235
	300	230	230	230	230	230	215	215	205	205
	400	200	200	200	200	220	195	195	180	180
	500	170	170	170	170	170	170	170	170	170
	600	140	150	140	140	140	140	140	140	140
	650	125	125	125	125	125	125	125	125	125
	700	110	110	110	110	-	110	110	110	110
	750	95	95	95	95	-	95	95	95	95
	800	80	80	80	80	-	80	80	80	80
	850	65	65	65	65	-	65	65	65	-
	900	50	50	50	50	-	50	-	50	-
	950	35	35	35	35	-	35	-	35	-
	1,000	20	20	20	20	-	20	-	20	-
	1,050	-	20	20	20	-	20	-	20	-
	1,100	-	20	20	20	-	20	-	20	-
	1,150	-	20	-	-	-	20	-	20	-
	1,200	-	20	-	-	-	20	-	20	-
	1,250	-	-	-	-	-	20	-	20	-
	1,300	-	-	-	-	-	20	-	20	-
	1,350	-	-	-	-	-	20	-	20	-
	1,400	-	-	-	-	-	20	-	20	-
	1,450	-	-	-	-	-	20	-	15	-
	1,500	-	-	-	-	-	15	-	10	-
CLASS 300	-20 to 100°	740	750	750	750	750	720	720	720	720
	200	675	750	710	715	750	620	620	600	600
	300	655	730	675	675	730	560	560	530	530
	400	635	705	660	650	705	515	515	470	470
	500	600	665	650	640	685	480	480	435	435
	600	550	605	605	605	608	450	450	415	415
	650	656	590	590	590	590	445	445	410	410
	700	656	570	570	570	-	430	430	405	405
	750	505	530	530	530	-	425	425	400	400
	800	410	500	510	510	-	415	415	395	395
	850	270	440	485	485	-	405	405	390	-
	900	170	355	460	450	-	395	-	385	-
	950	105	260	380	380	-	385	-	375	-
	1,000	50	190	225	270	-	365	-	325	-
	1,050	-	140	140	200	-	360	-	310	-
	1,100	-	105	95	115	-	325	-	260	-
	1,150	-	70	-	-	-	275	-	195	-
	1,200	-	45	-	-	-	205	-	155	-
	1,250	-	-	-	-	-	180	-	110	-
	1,300	-	-	-	-	-	140	-	85	-
	1,350	-	-	-	-	-	105	-	60	-
	1,400	-	-	-	-	-	75	-	50	-
	1,450	-	-	-	-	-	60	-	35	-
	1,500	-	-	-	-	-	40	-	25	-
CLASS 600	-20 to 100°	1,450	1,500	1,500	1,500	1,500	1,440	1,440	1,440	1,440
	200	1,350	1,500	1,425	1,430	1,500	1,240	1,240	1,200	1,200
	300	1,315	1,455	1,345	1,355	1,455	1,120	1,120	1,055	1,055
	400	1,270	1,410	1,315	1,295	1,410	1,030	1,030	940	940
	500	1,200	1,300	1,285	1,280	1,330	955	955	875	875
	600	1,095	1,210	1,210	1,210	1,210	905	905	830	830
	650	1,075	1,170	1,175	1,175	1,175	890	890	815	815
	700	1,065	1,135	1,135	1,135	-	885	865	805	805
	750	1,010	1,065	1,065	1,065	-	845	845	795	795
	800	825	995	1,015	1,015	-	830	830	790	790
	850	535	880	975	975	-	810	810	780	-
	900	345	705	900	900	-	790	-	770	-
	950	205	520	755	755	-	775	-	750	-
	1,000	105	385	445	535	-	725	-	645	-
	1,050	-	280	275	400	-	720	-	620	-
	1,100	-	205	190	225	-	645	-	515	-
	1,150	-	150	-	-	-	550	-	390	-
	1,200	-	90	-	-	-	410	-	310	-
	1,250	-	-	-	-	-	365	-	220	-
	1,300	-	-	-	-	-	275	-	165	-
	1,350	-	-	-	-	-	205	-	125	-
	1,400	-	-	-	-	-	150	-	95	-
	1,450	-	-	-	-	-	115	-	70	-
	1,500	-	-	-	-	-	85	-	50	-
		HYDROSTATIC TEST PRESSURES IN POUNDS PER SQUARE INCH GAUGE(psig)								
CLASS 150	SHELL	450	450	450	450	400	375	375	375	375
	SEAT	315	315	315	315	290	260	260	260	260
CLASS 300	SHELL	1,125	1,125	1,125	1,125	1,050	925	925	925	925
	SEAT	815	825	825	825	765	675	675	675	675
CLASS 600	SHELL	2,225	2,250	2,250	2,250	2,100	1,875	1,875	1,875	1,875
	SEAT	1,630	1,650	1,650	1,650	1,530	1,360	1,360	1,360	1,360

PRESSURE - TEMPERATURE RATINGS

WORKING PRESSURE. PSIG										
CLASS	TEMP °F	A216WCB A105	A217 C5 A182 F5a	A217 WC6 A182 F11	A217 WC9 A182 F22	A352 LC3 A350 LF3	A351 CF8M A182 F315	A351 CF3M	A351 CF8 A182 F304	A351 CF3
CLASS 900	-20 to 100°	2,220	2,250	2,250	2,250	2,250	2,160	2,160	2,160	2,160
	200	2,025	2,250	2,135	2,150	2,250	1,860	1,850	1,800	1,800
	300	1,970	2,185	2,020	2,030	2,185	1,540	1,540	1,410	1,410
	400	1,900	2,115	1,975	1,945	2,115	1,540	1,540	1,410	1,410
	500	1,795	1,995	1,925	1,920	1,995	1,435	1,435	1,310	1,310
	600	1,640	1,815	1,815	1,815	1,815	1,355	1,355	1,245	1,245
	650	1,610	1,765	1,765	1,765	1,765	1,330	1,330	1,225	1,225
	700	1,600	1,705	1,705	1,705	-	1,295	1,295	1,210	1,210
	750	1,510	1,595	1,595	1,595	-	1,270	1,270	1,195	1,195
	800	1,235	1,490	1,525	1,525	-	1,245	1,245	1,180	1,180
	850	850	1,315	1,460	1,460	-	1,215	1,215	1,165	-
	900	515	1,060	1,350	1,350	-	1,180	-	1,150	-
	950	310	780	1,130	1,130	-	1,160	-	1,125	-
	1,000	155	575	670	805	-	1,090	-	965	-
	1,050	-	420	410	595	-	1,080	-	925	-
	1,100	-	310	290	340	-	965	-	770	-
	1,150	-	205	-	-	-	825	-	585	-
	1,200	-	135	-	-	-	620	-	465	-
	1,250	-	-	-	-	-	545	-	330	-
	1,300	-	-	-	-	-	410	-	245	-
	1,350	-	-	-	-	-	310	-	185	-
	1,400	-	-	-	-	-	225	-	145	-
	1,450	-	-	-	-	-	175	-	105	-
	1,500	-	-	-	-	-	125	-	70	-
CLASS 1500	-20 to 100°	3,750	3,750	3,750	3,750	3,750	3,600	3,600	3,600	3,600
	200	3,375	3,750	3,560	3,580	3,750	3,095	3,095	3,000	3,000
	300	3,280	3,640	3,365	3,385	3,640	2,795	2,795	2,640	2,640
	400	3,170	3,530	3,290	3,240	3,530	2,570	2,570	2,350	2,350
	500	2,995	3,325	3,210	3,200	3,325	2,390	2,390	2,185	2,185
	600	2,735	3,025	3,025	3,025	3,025	2,255	2,255	2,075	2,075
	650	2,685	2,940	2,940	2,940	2,940	2,220	2,220	2,040	2,040
	700	2,665	2,840	2,840	2,840	-	2,160	2,160	2,015	2,015
	750	2,520	2,660	2,660	2,660	-	2,110	2,110	1,990	1,990
	800	2,060	2,485	2,540	2,540	-	2,075	2,075	1,970	1,970
	850	1,340	2,195	2,435	2,435	-	2,030	2,030	1,945	-
	900	860	1,765	2,245	2,245	-	1,970	-	1,920	-
	950	515	1,305	1,885	1,885	-	1,930	-	1,870	-
	1,000	260	960	1,115	1,340	-	1,820	-	1,610	-
	1,050	-	705	685	995	-	1,800	-	1,545	-
	1,100	-	515	480	565	-	1,610	-	1,285	-
	1,150	-	345	-	-	-	1,370	-	980	-
	1,200	-	225	-	-	-	1,030	-	770	-
	1,250	-	-	-	-	-	910	-	550	-
	1,300	-	-	-	-	-	685	-	410	-
	1,350	-	-	-	-	-	515	-	310	-
	1,400	-	-	-	-	-	380	-	240	-
	1,450	-	-	-	-	-	290	-	170	-
	1,500	-	-	-	-	-	205	-	120	-
CLASS 2500	-20 to 100°	6,170	6,250	6,250	6,250	6,250	6,000	6,000	6,000	6,000
	200	5,625	6,250	5,930	5,965	6,250	5,160	5,160	5,000	5,000
	300	5,470	6,070	5,605	5,640	6,070	4,660	4,660	4,400	4,400
	400	5,280	5,880	5,485	5,400	5,880	4,280	4,280	3,920	3,920
	500	4,990	5,540	5,350	5,330	5,540	3,980	3,980	3,640	3,640
	600	4,560	5,040	5,040	5,040	5,040	3,760	3,760	3,460	3,460
	650	4,475	4,905	4,905	4,905	4,905	3,700	3,700	3,400	3,400
	700	4,440	4,730	4,730	4,730	-	3,600	3,600	3,360	3,360
	750	4,200	4,430	4,430	4,430	-	3,520	3,520	3,320	3,320
	800	3,430	4,145	4,230	4,320	-	3,460	3,450	3,280	3,280
	850	2,230	3,660	4,060	4,060	-	3,320	3,320	3,240	-
	900	1,430	2,945	3,745	3,745	-	3,280	-	3,200	-
	950	860	2,170	3,145	3,145	-	3,220	-	3,120	-
	1,000	430	1,600	1,860	2,230	-	3,030	-	2,685	-
	1,050	-	1,170	1,145	1,660	-	3,000	-	2,570	-
	1,100	-	860	800	945	-	2,685	-	2,145	-
	1,150	-	570	-	-	-	2,285	-	1,630	-
	1,200	-	370	-	-	-	1,715	-	1,285	-
	1,250	-	-	-	-	-	1,515	-	915	-
	1,300	-	-	-	-	-	1,145	-	685	-
	1,350	-	-	-	-	-	860	-	515	-
	1,400	-	-	-	-	-	630	-	400	-
	1,450	-	-	-	-	-	485	-	285	-
	1,500	-	-	-	-	-	345	-	200	-
HYDROSTATIC TEST PRESSURES IN POUNDS PER SQUARE INCH GAUGE(psig)										
CLASS 900	SHELL	3,350	3,375	3,375	3,375	3,375	2,775	2,775	2,775	2,775
	SEAT	2,440	2,475	2,475	2,475	2,475	2,035	2,035	2,035	2,035
CLASS 1500	SHELL	5,575	5,629	5,625	5,625	5,625	4,650	4,650	4,650	4,650
	SEAT	4,075	4,125	4,125	4,125	4,125	3,395	3,395	3,395	3,395
CLASS 2500	SHELL	9,275	9,375	9,375	9,375	9,375	7,725	7,725	7,725	7,725
	SEAT	6,785	6,875	6,875	6,875	6,875	5,660	5,660	5,660	5,660

Specifications and features are subject to change without prior notice.

SOOSUNG Valve

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