# DUAL PLATE CHECK VALVE

## TYPICAL CONSTRUCTIONS

Dual plate check valve are supplied retainerless as standard. Our patented design does not have any threaded plugs in the pressure boundary and totally eliminates the potential leakpath to atmosphere. This design meet fugitive emission control.

## **VALVE FEATURES & ADVANTAGES**

- Dual plate Check Valve is economical on installation and maintenance because installation is required less and light weight.
- Dual plate Check Valve is possible to prevent water hammering due to closing valve disk by operating the spring in valve before back flow. Also Due-Check valve prevents large piping the for big gap water levels.
- Dual plate Check Valve can apply variously in piping line because of less than existing Check Valve on restrictions of instaling direction.
- Life spans is longer than existing Check Valve, And preservation and repair are simple.
- It's possible to reduce maintenance fee due to longer durability than existing check valve, easy maintenance.

RANGE		APPLICATION					
NORMINAL SIZE		1 1/2"(40A) - 84"(2100A)					
FLUID		Water, Air, Steam, Gas, Sea Water					
RATING		JIS 10K, 20K, 30K, ANSI 150#, 300#, 600#, 900#, 1500#, PN 10, 16, 20, 40, AWWA C 207					
END CONNECTION		Wafer, Lugged, Flanged					
TEMP. RANGE		-50 ~ 600℃					
MATERIAL	BODY	A126-CLB, A536 Gr. Carbon Steel (A216-WCB etc.) Stainless Steel (CF8, CF8M, CF3 etc.) B148-C97800, Special Steel (Alloy etc.)					
	DISC	Carbon Steel (A216-WCB etc.) Stainless Steel (CF8, CF8M, CF3 etc.) B148-C95800, Special Steel (Alloy etc.)					
	SEAT	Rubber (EPDM, Buna-N etc.) Metal (Stainless Steel, Stellite #6 etc.)					
	SPRING	Stanless Steel (304, 316 etc) Inconel (625, X750 etc)					

## MATERIAL TEMPERATURE LIMITS

#### UPPER TEMPERATURE LIMITS

#### LOWER TEMPERATURE LIMITS

MATERIAL	UPPER LIMIT F(°C)	MATERIAL	LOWER LIMIT F(°C)		
316SS	250(121)	WCB	-20(-28.9)		
INCONEL X 750	1000(537)	LCC	-50(-45.6)		
MONEL	400(204)	CF8M	-450(-268)		
HASTELLOY	800(426)	BUNA-N(NBR)	-70(-56.7)		
ALLOY20	250(121)	EPDM	-14(-11.4)		
BUNA-N(NBR)	250(121)	VITON	-40(-40)		
EPDM	300(149)	PTFE	-200(-129)		
PTFE	450(232)	METAL TO METAL	AS BODY		
METAL OVELAY	AS BODY				
METAL TO METAL	AS BODY				

### STANDARD DESIGN

#### WAFER TYPE

Retainerless design supplied as standard

- ANSI B16.5
- Flange dims to ANSI B16.5 (MSS-SP44>24")
- Face to face dims to API 594
- API 605
- Flange dims to API 605
- Face to face dims to API 594

#### FLANGED TYPE -

- Flange dims to ANSI B16.5 (MSS-SP44>24")
- Face to face dims to API 594
- API 6A
- Flange dims to API 6A
- Face to face dims to API 6A

#### SOLID LUG TYPE –

- Flange dims to ANSI B16.5 (MSS-SP44>24")
- Face to face dims to API 594
- \* Threaded lug type also available
- JIS 2210 & KS B1511
- EXTENDED BODY
- Flange dims to ANSI B16.5

- API 6D
- Flange dims to ANSI B16.5
- Face to face dims to API 6D

#### PRESSURE CLASSES •ASME 150 TO 1500 LB, PN 10 TO 40. •JIS & KS 5K TO 20K

#### **NOMINAL SIZE RANGE**

ASME 150 lb.2" to 60" ASME 300 lb.2" to 40" ASME 600 lb.2" to 36" ASME 900 lb.2" to 36" ASME 1500 lb.2" to 24"

Larger diameter VALVE for the respective pressure classes can be designed and manufactured on request.

#### **RETAINERLESS DESIGN**

Dual plate check VALVE are supplied retainerless as standard. Our patented design does not have any threaded plugs in the pressure boundary and totally eliminates the potential leakpath to atmosphere. This design meet fugitive emission control.

#### **SEAT**

The seat is designed equal pressure at the plate with the state of stationary hour. The shape of rubber seat could not be changed even in many operation because of having its most hardness satisfaction. The metal to metal seated valve is tested to API 598.

#### **DISC (PLATE)**

The two semicircle plate responsiveness of opening and closing is quick and it is strong against corrosion also has a strong durability.

#### **SPRING**

The springs have been designed to endure stresses and also ensure operating without failure for much cycles.

#### **RUBBER LINED**

Fully Rubber Lined Valve to avoid corrosion Inside are available.

## DUAL PLATE CHECK VALVE TYPES



Wafer Retainerless



Flanged Retainerless



Solid Lug Retainerless



Hub Ended

## STANDARD MATERIAL SPECIFICATIONS

NO.	PART NAME			
1	BODY	A216 - WCB	A351 CF8M	A351 CF3M
2	DISC	A351 CF8M	A351 CF3M	A217 CA15
3	SEAT	SS 316	13 CR	STELLITE \$6
4	HINGE PIN	A276 316	A276 410	A276 304
5	STOP PIN	A276 316	A276 410	A276 304
6	SPRING	INCONEL X-750	SS 316	
7	GUIDE	A276 316	A276 410	A276 304
8	WASHER	A276 316	A276 304	
9	SET SCREW	A193 B7	A193 B8	A193 B8m
10	EYE BOLT	SS400 or SS304	SET SCREW	SS304





## DIMENSION AND WEIGHT

<b>CLASS 150</b>												UNIT : mm
SIZE	2	3	4	6	8	10	12	14	16	18	20	24
ØD	102	133	171	219	276	337	406	448	511	546	603	714
Ød	60	87	113	166	207	260	300	339	387	438	487	580
L	60	73	73	98	127	146	181	184	191	203	219	222
CLASS 300												UNIT : mm
SIZE	2	3	4	6	8	10	12	14	16	18	20	24
ØD	108	146	178	248	305	359	419	483	537	594	651	772
Ød	60	87	113	166	207	260	300	339	387	438	487	580
L	60	73	73	98	127	146	181	222	232	264	292	318
CLASS 600												UNIT · mm
SIZE	2	3	4	6	8	10	12	14	16	18	20	24
ØD	108	146	191	264	317	397	454	489	562	610	679	787
Ød	60	87	113	166	207	260	300	339	387	438	487	580
L	60	73	79	137	165	213	229	273	305	362	368	438
CLASS 900												UNIT : mm
SIZE	2	3	4	6	8	10	12	14	16	18	20	24
ØD	140	165	203	286	356	432	495	518	571	635	695	835
Ød	60	87	113	166	207	260	300	339	387	438	487	580
L	70	83	102	159	206	241	292	356	384	451	451	495
<b>CLASS 1500</b>												UNIT : mm
SIZE	2	3	4	6	8	10	12	14	16	18	20	24
ØD	140	171	206	279	349	432	518	575	638	702	752	899
Ød	60	87	113	166	207	260	300	339	387	438	487	580
L	70	83	102	159	206	248	305	356	384	468	533	559