

# NUTORK<sup>®</sup>

Actuators & Valves



CE SIL3 Ex

## Dual Plate Check Valve

### Retainerless Type Metal Seat

Valve Size: DN40~DN1000 / 150LB

DN40~DN600 / 300LB

DN40~DN300 / 600LB ~ 2500LB

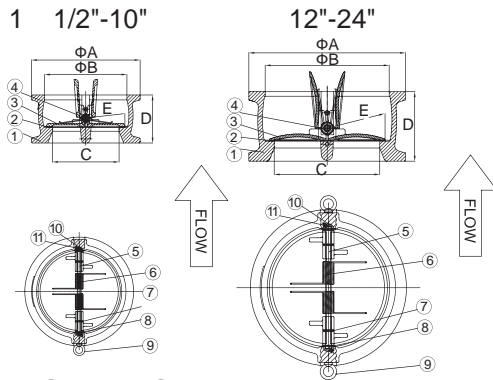


### Full Liner Rubber Seat

Valve Size: DN40~DN2000 / 125~150LB

**NUTORK CORPORATION**

### WAFER TYPE WCB & S.S DUAL PLATE CHECK VALVES OF RETAINERLESS TYPE METAL SEAT



**STANDARD:**

WALL THICKNESS	API594
FACE TO FACE	
INSPECTION STANDARD:API598	
Suit For:ASME B16.1 & MSS-SP44	

**DIMENSION LIST:**

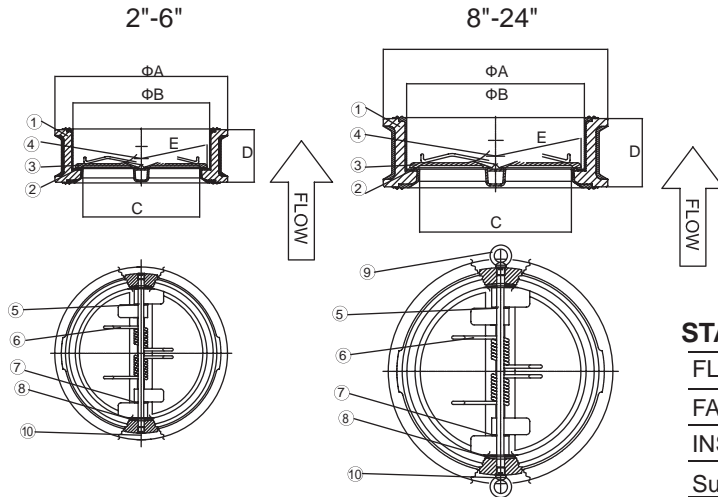
SIZE		ΦA						ΦB	C	D			E
IN	MM	150LB	300LB	K3	PN16	10K	16K			150LB/PN16 /10K	300LB/16K	K3	
1 1/2"	40A	86	95	86				60	47	60	43	30	
2"	50A	105	111	98	105	101		60	47	60	43	30	
2 1/2"	65A	124	130	110	124	121		73	58	67	46	36	
3"	80A	137	149	128	137	131	137	89	70	73	64	42	
4"	100A	175	181	156			162	114	89	73	64	53	
5"	125A	197	216	187			197	141	116	86	70	68.5	
6"	150A	222	251	213	217		228	168	136	98	76	79.5	
8"	200A	279	308	267			280	219	184	127	89	105	
10"	250A	340	362	328	330		337	274	230	146	114	130	
12"	300A	410	422	375			391	324	276	181	114	151.5	
14"	350A	451	486	448	438	420	447	356	300	184	222	169	
16"	400A	514	540	498	495	483	499	406	325	191	232	188	
18"	450A	549	597	562	545	538	572	457	395	203	264	218	
20"	500A	606	654	619	617	592	612	508	435	219	292	243	
24"	600A	718	775	727	731	695	716	610	530	222	318	290	

**PART & MATERIAL LIST:**

ITEM	PART NAME	MATERIAL	DESCRIPTION		Q'TY	REMARK
			JIS	ASTM		
1	BODY	CARBON STEEL	SCPH2	A216 WCB	1	
		STAINLESS STEEL	SCS13	A351 CF8		
			SCS14	A351 CF8M		
2	SEAT	RUBBER	BUNA-N(NBR);EPDM;VITON		1	
		METAL	SAME AS BODY			
3	DISC	CARBON STEEL	SCPH2	A216 WCB	2	
		STAINLESS STEEL	SCS13	A351 CF8		
			SCS14	A351 CF8M		
			BRONZE	ALBC3		
4	STEM	STAINLESS STEEL	SUS304	A812 F304	1	
5	STOP STEM	STAINLESS STEEL	SUS304	A182 F304	1	
6	SPRING	STAINLESS STEEL	INCONEL X750		1	1-1/2"-6"
					2	8"-20"
					4	24" and Large Size
7	PLATE BEARING	STAINLESS STEEL	316 / PTFE		2	
8	BODY BEARING				TEFLON	2
9	EYE BOLT	ALLOY STEELS	S25C	A105	1	6"-20"
					2	24" and Large Size
10	RETAING SCREW	STAINLESS STEEL	SUS316	316	2	
11	CARRIER	CARBON STEEL	SCPH2	A216 WCB	2	For WCB BODY
		STAINLESS STEEL	SCS14	A351 CF8M		FOR CF8 & CF8M BODY

Remark: The other materials of body & plate and sizes are available upon request.

### WAFER TYPE WCB & S.S. BODY DUAL PLATE CHECK VALVES WITH FULL LINER RUBBER SEAT



#### STANDARD:

FLANGED STANDARD	ASME - B16.34
FACE TO FACE	EN 558-1:1995
INSPECTION STANDARD	API- 598
Sult For : ASME B16.1 & MSS-SP44	

#### DIMENSION LIST:

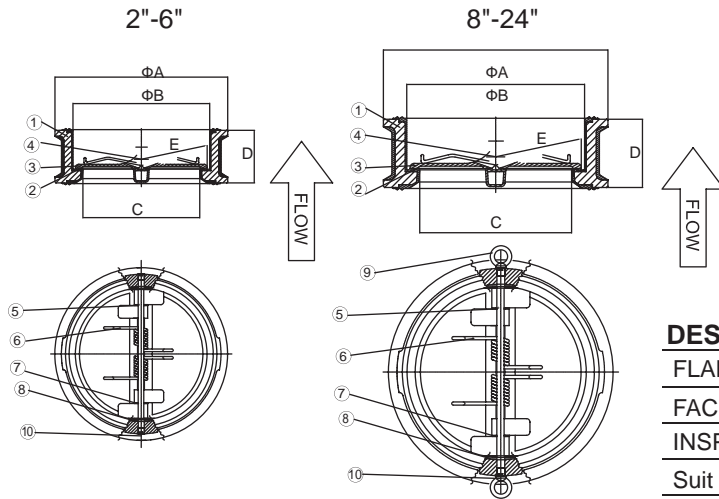
SIZE		ΦA						ΦB	C	D	E
IN	MM	10K	16K	20K	125/150LB	PN10/PN16	PN25/PN40				
2"	50A	101			105			72	45	54	32
2 1/2"	65A	121			124			80	50	54	35
3"	80A	131	137				91	67	57	43	
4"	100A	156	162	175	164	170	119	90	64	53	
5"	125A	187	197		194	196	141	112	70	65	
6"	150A	217	235	222	220	226	171	137	76	80	
8"	200A	267	279		275	-	-	226	188	95	108
10"	250A	330	353	340	331	345	355	281	240	108	132
12"	300A	375	403	410	386	403	420	327	282	143	154
14"	350A	420	447	451	438	-	-	362	310	184	170
16"	400A	483	507	511	491	-	-	420	360	191	200
18"	450A	538	572	549	541	558	-	462	406	203	206
20"	500A	592	627	606	596	620	-	512	457	213	242
24"	600A	697	731	718	698	737	-	612	534	222	290

#### PART & MATERIAL LIST:

ITEM	PART NAME	MATERIAL	DESCRIPTION		Q'TY	REMARK
			JIS	ASTM		
1	BODY	STAINLESS STEEL	SCS13	A351 CF8	1	
			SCS14	A351 CF8M		
		CARBON STEEL	SCPH2	A216 WCB		
2	SEAT	RUBBER	BUNA-N(NBR),EPDM,VITON		1	
3	PLATE	STAINLESS STEEL	SCS13	A351 CF8	2	THE OTHER MATERIALS ARE AVAILABLE UPON REQUEST
			SCS14	A351 CF8M		
4	STEM	STAINLESS STEEL	SUS304	A182 F304	1	
5	STOP STEM	STAINLESS STEEL	SUS304	A182 F304	1	
6	SPRING	STAINLESS STEEL	INCONEL X750		1	2"-6"
					2	8"-20"
					4	24" and Large Size
7	PLATE BEARING	TEFLON	PTFE		2	
8	BODY BEARING				2	
9	EYE BOLT	ALLOY STEEL	S25C	A105	1	6"-20"
					2	24" and Large Size
10	RETAINER SCREW	ALLOY STEEL	S25C	A105	2	

Remark: The other materials of body & plate and sizes are available upon request.

## WAFER TYPE C.I. & D.I. BODY DUAL PLATE CHECK VALVES WITH FULL LINER RUBBER SEAT



### DESIGN DESCRIPTION:

FLANGED STANDARD	ASME - B16.34
FACE TO FACE	EN 558-1:1995
INSPECTION STANDARD:	API - 598
Suit For :ASME B16.1 & MSS - SP44	

### DIMENSION LIST:

SIZE		ΦA						ΦB	C	D	E	
IN	MM	10K	16K	20K	125/150LB	PN10/PN16	PN25/PN40					
2"	50A	101			105			72	45	54	32	
2 1/2"	65A	121			124			80	50	54	35	
3"	80A	131	137						91	67	57	43
4"	100A	156	162	175	164	170		119	90	64	53	
5"	125A	187	197		194	196		141	112	70	65	
6"	150A	217	235	222	220	226		171	137	76	80	
8"	200A	267	279		275	-	-	226	188	95	108	
10"	250A	330	353	340	331	345	355	281	240	108	132	
12"	300A	375	403	410	386	403	420	327	282	143	154	
14"	350A	420	447	451	438	-	-	362	310	184	170	
16"	400A	483	507	511	491	-	-	420	360	191	200	
18"	450A	538	572	549	541	558	-	462	406	203	206	
20"	500A	592	627	606	596	620	-	512	457	213	242	
24"	600A	697	731	718	698	737	-	612	534	222	290	

### PART & MATERIAL LIST:

ITEM	PART NAME	MATERIAL	DESCRIPTION		Q'TY	REMARK
			JIS	ASTM		
1	BODY	CAST IRON	FC200	A126-CLASS-B	1	
		DUCTILE IRON	FCD450	A536-65-45-12		
2	SEAT	RUBBER	BUNA-N(NBR), EPDM, VITON		1	
3	PLATE	STAINLESS STEEL	SCS13	A351 CF8	2	THE OTHER MATERIALS ARE AVAILABLE UPON REQUEST
			SCS14	A351 CF8M		
4	STEM	STAINLESS STEEL	SUS304	A182 F304	1	
5	STOP STEM	STAINLESS STEEL	SUS304	A182 F304	1	
6	SPRING	STAINLESS STEEL	INCONEL X750		1	2"-6"
					2	8"-20"
					4	24" and Large Size
7	PLATE BEARING	TEFLON	PTFE		2	
8	BODY BEARING				2	
9	EYE BOLT	ALLOY STEEL	S25C	A105	1	6"-20"
					2	24" and Large Size
10	RETAINER SCREW	ALLOY STEEL	S25C	A105	4	

Remark: The other materials of body & plate ad sizes are available upon request.

### The product range of dual plate check valve

Valve Size	body material and pressure rating									
	Fully Lined Rubber Seat					Retainerless Type Metal Seat				
	CI-125#	DI-150#	WCB(304,316)-150#	WCB(304,316)-300#	WCB(304,316)-600#	WCB(304,316)-900#	WCB(304,316)-1500#	WCB(304,316)-2500#		
1.5"(DN40)										
2"(DN50)										
2.5"(DN65)										
3"(DN80)										
4"(DN100)										
5"(DN125)										
6"(DN150)										
8"(DN200)										
10"(DN250)										
12"(DN300)										
14"(DN350)										
16"(DN400)										
18"(DN450)										
20"(DN500)										
24"(DN600)										
26"(DN650)										
28"(DN700)										
30"(DN750)										
32"(DN800)										
36"(DN900)										
40"(DN1000)										
48"(DN1200)										
54"(DN1350)										
60"(DN1500)										
64"(DN1600)										
72"(DN1800)										

Remark: 1. The disc material: WCB, 304SS, 316SS, AL-BC3(Aluminum Bronze) is available for above valve size and pressure rating.  
 2. The NBR, EPDM, VITON and metal seat is available for above valve size and pressure rating.

### Cracking Pressure:

Valve Size	S.I. System (Mpa)	Metric System (kg/cm <sup>2</sup> )
1.5" & 2"	6.286x10 <sup>-3</sup>	61.60x10 <sup>-3</sup>
2.5"	5.319x10 <sup>-3</sup>	52.42x10 <sup>-3</sup>
3"	6.122x10 <sup>-3</sup>	60.00x10 <sup>-3</sup>
4"	3.204x10 <sup>-3</sup>	31.40x10 <sup>-3</sup>
5"	2.617x10 <sup>-3</sup>	25.60x10 <sup>-3</sup>
6"	1.628x10 <sup>-3</sup>	15.95x10 <sup>-3</sup>
8"	2.470x10 <sup>-3</sup>	24.21x10 <sup>-3</sup>
10"	1.656x10 <sup>-3</sup>	16.23x10 <sup>-3</sup>
12"	2.206x10 <sup>-3</sup>	21.62x10 <sup>-3</sup>
14"	1.423x10 <sup>-3</sup>	13.95x10 <sup>-3</sup>
16"	1.094x10 <sup>-3</sup>	10.72x10 <sup>-3</sup>
18"	0.690x10 <sup>-3</sup>	6.76x10 <sup>-3</sup>
20"	0.846x10 <sup>-3</sup>	8.29x10 <sup>-3</sup>
22"	0.754x10 <sup>-3</sup>	7.39x10 <sup>-3</sup>
24"	0.664x10 <sup>-3</sup>	6.51x10 <sup>-3</sup>
26"	0.809x10 <sup>-3</sup>	7.93x10 <sup>-3</sup>
28"	0.668x10 <sup>-3</sup>	6.55x10 <sup>-3</sup>
30"	0.571x10 <sup>-3</sup>	5.60x10 <sup>-3</sup>
32"	0.797x10 <sup>-3</sup>	7.81x10 <sup>-3</sup>
36"	0.619x10 <sup>-3</sup>	6.07x10 <sup>-3</sup>
40"	0.707x10 <sup>-3</sup>	6.93x10 <sup>-3</sup>
42"	0.750x10 <sup>-3</sup>	7.35x10 <sup>-3</sup>
44"	0.796x10 <sup>-3</sup>	7.80x10 <sup>-3</sup>
48"	0.610x10 <sup>-3</sup>	5.98x10 <sup>-3</sup>
54"	0.617x10 <sup>-3</sup>	6.05x10 <sup>-3</sup>
60"	0.596x10 <sup>-3</sup>	5.84x10 <sup>-3</sup>

# Full Rubber Liner & Retainerless Type Metal Seat Dual Plate Check Valve

# NUTORK®

## Order Information of Dual Plate Check Valve

Valve Type	---	100	---	A1	---	F2	---	W1	---	O	---	W1	---	O	---	S5
Product Code	---	Size	---	Pressure Rating	---	End Conn.	---	Body	---	Body Seat	---	Plate	---	Plate Seat	---	Spring

### \*Valve Type(Wafer/Lug/Flanged End)

Code	Valve Type(Wafer Type)	Code	Valve Type(Wafer Type)
DDCV-S	Full Liner Rubber Seat	DDCV-M	Metal Seat Retainerless Type
Code	Valve Type(Lug Type)	Code	Valve Type(Flanged Type)
DDCV-L	Metal Seat Retainerless Type	DDCV-F	Metal Seat Retainerless Type

### \*Pressure Rating

Standard	FIG.	0	1	2	3	4	5	6	7	8	9
ASME	A	125LB	150LB	250LB	300LB	400LB	600LB	900LB	1500LB	2500LB	----
ISO	D	PN6	PN10	PN16	PN25	PN40	PN50	PN110	PN150	PN260	PN420
JIS	J	5K	7.5K	10K	16K	20K	30K	40K	63K	----	----
API	P	----	150LB	300LB	----	----	2000LB	3000LB	5000LB	----	----
BS/Table	T	----	A	D	E	F	----	----	----	----	----

### \*Body / Plate Material

FIG	C	D	W1	W2	L1	L2	L3	L4	I	J	S1	S1
ASTM	A126 Class B	A536 65-45-12	A216 WCB	A217 WC6	A352 LCB	A352 LCC	A352 LC1	A350 LF2	A217 C5	A217 C12	A743 CA6NM	A743 CA-15
JIS	G5501 FC250	G5502 FCD450	G5501 FC250	G5151 SCPH21	G5152 SCPL1	----	G5152 SCPL11	----	G5151 SCPH61	----	----	G5121 SCS1
DIN	EN1561 EN-GJL250	EN1563 EN-GJS450-10	EN1561 EN-GJL250	EN10213-2 G17CrMo5-5	----	----	----	----	----	----	----	EN10213-4 GX12 Cr12
FIG	S3	S4	S5	S6	S7	S8	G	H	T	B1	B2	XX
ASTM	A351 CN7M	A351 CF8	A351 CF8M	A351 CF3M	A351 CG8M	A351 CF8C	A182 S31803	B649 N08904	B348 Gr.2	B584 C83600	B148 C95800	Other
JIS	G5121 SCS23	G5121 SCS13A	G5121 SCS14A	G5121 SCS16A	----	G5121 SCS21	G4304 SUS329J3L	G4304 SUS890L	H4650 TB340	H5120 CAC406	H5120 CAC703	Other
DIN	----	EN10213-4 GX5CrNi19-10	EN10213-4 GX5CrNiMo19-11-2	----	----	EN10213-4 GX5CrNiNb19-11	----	----	17862 3.7035	1705 CuSn5ZnPb	1714 CuAl10Ni	Other

### \*Body / Plate Seat Material:

FIG	N	E	K	Z	U	V	O	S2	S4	S5	M	P	X
Material	NBR (Buna-N)	EPDM (EPT)	Neoprene (C.R.)	Silicone	Butyl	Viton (FPM)	Metal	13% Cr Overlay	SUS304 Overlay	SUS316 Overlay	Monel Overlay	6# Stellite Overlay	Other
Temp. Range ( )	0 to 80	-20 to 120	-30 to 120	-30 to 80	-30 to 150	-30 to 200	same as body & plate	-25 to 530	-260 to 810	-260 to 810	-198 to 482	-260 to 810	Other

### \*End Connection

FIG.	Type of Contact Face	
F1	Flate Face	F.F.(63 AARH)
F2	Raised Face	R.F.(125-250 AARH)
F3	Ring Type Joint	----

### \*Spring Material

FIG	S5	M	Q	X
Material	SUS316 WPA	Monel K-500	Inconel X-750	Other

**NUTORK Corp.**

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