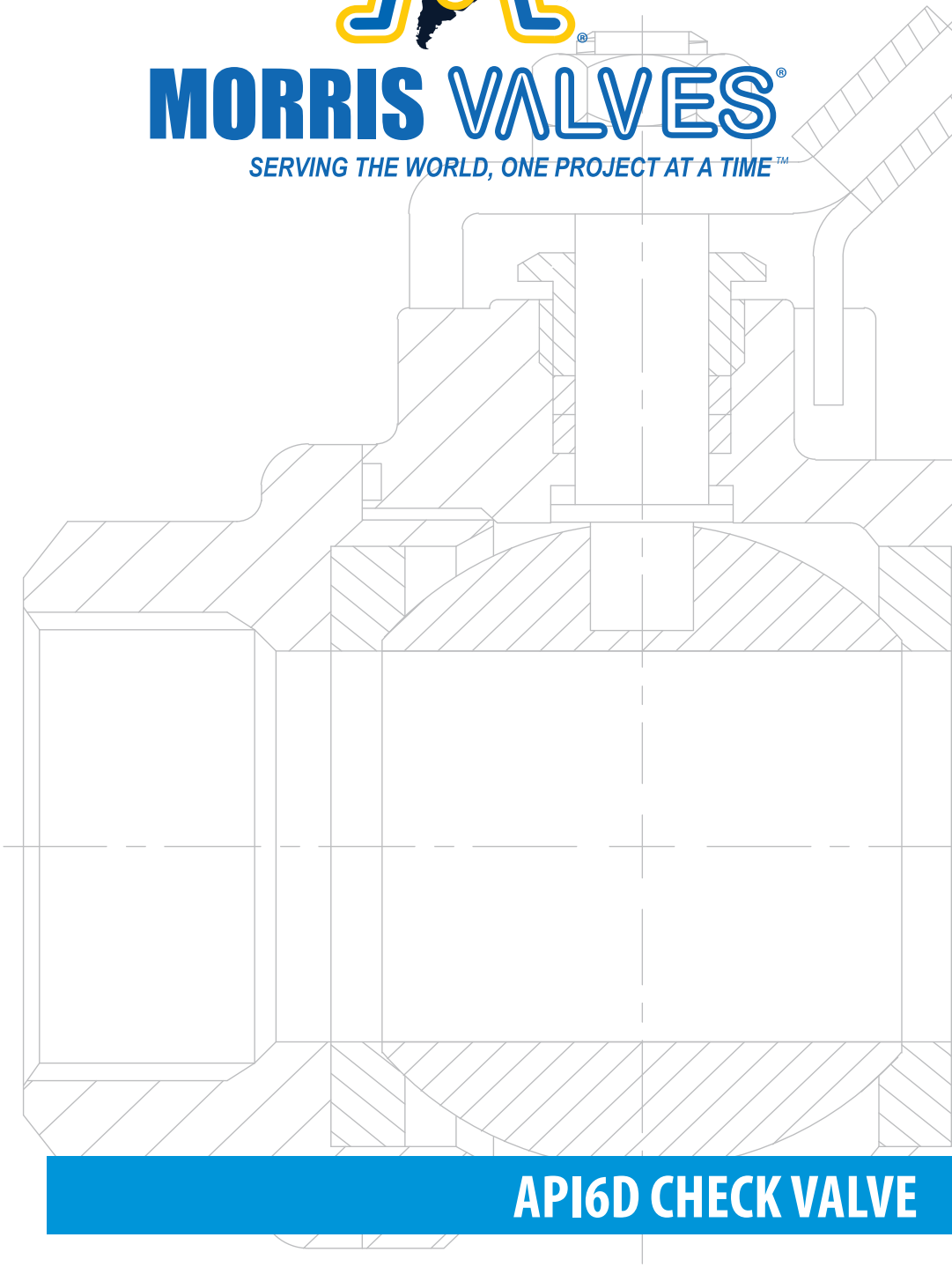
MORRIS VALVES®

SERVING THE WORLD, ONE PROJECT AT A TIME™



API6D CHECK VALVE

www.morrisvalve.com

MORRIS VALVES®

SERVING THE WORLD, ONE PROJECT AT A TIME™

In 1984, our journey into the business of repairing valves and industrial instrumentation began. That journey has led us to represent and service well known American brands and companies. In early 2000, our experience and growing passion for the valve industry encouraged our decision to launch our own brand, Morris Valves. Starting with the highly requested Ball Valves, the brand has been based on the principal of quality and performance to match our customers' needs. Our high standards of production later lead us to incorporate other models such as Gate Valve and Check Valves to our production. These additions were carefully selected to match our Standard of Quality. Our success has been driven by our belief of "Tradition with Quality" in everything we do. Our products are developed with that belief which drives our growth and guides the service we provide to our customers.

Contacts

Address: 6803 Theall Rd Building B, Houston, Tx 77066
Telefhone: +1 (832) 666-5576
Cel: +1 (786) 779-7469
Email: sales@morrisvalve.com

Vision

Our vision is to be amongst the leading corporations in the supply of goods and services related to valves, their components and industrial equipment in general. We want to conquer new markets in conformity with international standards and remain committed to customer satisfaction, the welfare of our company and the sustainability of our planet.

Mision

Our mission is to use our highly trained, highly focused, and extremely motivated staff to work with manufacturers who value quality and have the vision for new development and product applications to ensure the timely provision of goods and services related to valves, their components and industrial equipment in general. We maintain a rigorous standard of customer satisfaction, which will provide for the welfare of the company, the welfare of the countries we serve, and most importantly the sustainability of the planet.

"Serving the world, one project at a time"

United States of America
United States Patent and Trademark Office

MORRIS VALVES

Reg. No. 5,462,890

Registered May 08, 2018

Int. Cl.: 7

Trademark

Principal Register

MORRIS VALVES, INC. (FLORIDA CORPORATION)
5590 N.w. 84th Ave.
Miami, FLORIDA 33166

CLASS 7: Valves being parts of machines; Valves as machine components; Butterfly valves being parts of machines; Gate valves being parts of machines; Plug valves being parts of machines; Globe valves being parts of machines

FIRST USE 00-00-2010; IN COMMERCE 00-00-2010

THE MARK CONSISTS OF STANDARD CHARACTERS WITHOUT CLAIM TO ANY PARTICULAR FONT STYLE, SIZE OR COLOR

OWNER OF U.S. REG. NO. 4840307, 4241184, 4241186

No claim is made to the exclusive right to use the following apart from the mark as shown: "VALVES"

SER. NO. 87-575,517, FILED 08-18-2017

Director of the United States
Patent and Trademark Office

SCV TYPE

FULL PORT SWING CHECK VALVE.
RATING: CLASS (150 - 2500)
END: FLANGED /BUTT WELDING
SIZE: (2 – 36)" /FULL PORT PIGGABLE

CE APPROVED

SPECIFICATIONS:

* Design: API 6D / ANSI B16.34
* Size: 2"-36", FULL PORT, PIGGABLE.
* Pressure Rating: Class (150# – 2500#)
*Face to Face: API6D/ ANSI/ASME B16.10
* End Connection:
- RF/RTJ
* ANSI/ASME B16.5 (2 – 24)".
* ASME B16.47(MSS-SP-44)(24" – UP)
- Butt Welding (ANSI B16.25)
* Test: Hydrostatic Tested 100% to API 6D / API 598.

FEATURES:

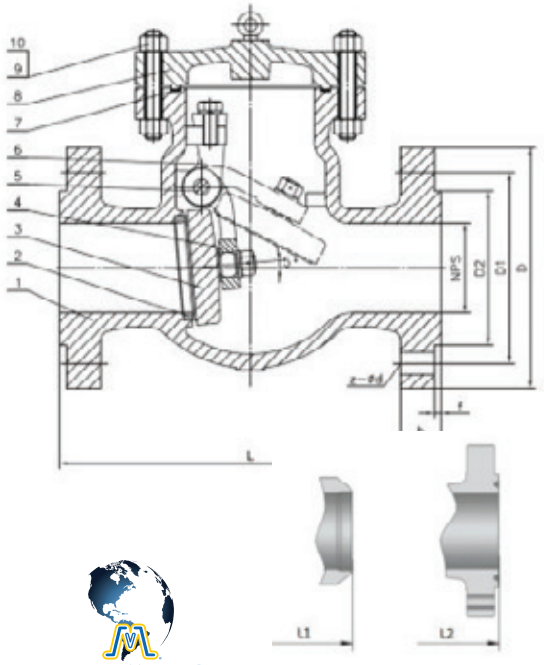
* Full Bore, Piggable
* Seat Rings: Separate heavy duty, full ported rings for easy maintenance available a full range of trim materials to match any service.
* Bonnet Gasket:
- Male & female Joint (MFMJ) or Tongue and groove Joint (TGJ) are used for Class 150 to Class 600 Valves.
- RTJ for Class 900 and Up, Valves.
* API6D Monogrammed.
* Suitable for Horizontal & Vertical Up flow Installation.
* An austenitic stainless steel nameplate securely affixed and so located that it is easily accessible for the Identification.
* Inspection Certificate EN 10204 – 3.1, traceable to the unique valve serial number is provided, containing:
- Physical & Chemical material test report for bonnet, body and end connection.
- Pressure test result in compliance with: API6D – 2008
* NDT or NDE Shall be performed if specified by the customer on the RFQ.

SIZE:

(2 – 36)"	FULL PORT	Class 150
(2 – 36)"	FULL PORT	Class 300
(2 – 24)"	FULL PORT	Class 600
(2 – 20)"	FULL PORT	Class 900
(2 – 16)"	FULL PORT	Class1500
(2 – 12)"	FULL PORT	Class 2500

MATERIALS

BODY & BONNET	
DISC	
SEAT	
GASKET	
HINGE	
HINGE PING	
O-RING	



	PART	PARTS & MATERIALS CARBON STEEL	STAINLESS STEEL	LOW TEMP.STEEL
1	BODY	A216 WCB	A351CF8M/CF8	A352 - LCB
2	SEAT	WCB	A351CF8M/CF8 + STL	A352 - LCB
3	DISC1	ASTM A105 Deposited 13Cr	A351CF8M/CF8+ STL	A352 - LF2
4	HINGE	A216 WCB	A351CF8M/CF8	A352 - LCB
5	HINGE PIN	A 276 420	A276-316/304	A276 420
6	SUPPORT	A216 WCB	A351CF8M/CF8	A352 - LCB
7	BONNET GASKET	FLEXIBLE GRAPHITE + 304 / 316		
8	BONNET	A216 WCB	A351CF8M/CF8	A352 - LCB
9	BONNET BOLT	A193 Gr. B7	A193 B8	A320 Gr.L7
10	BONNET BOLT NUT	A194 Gr.2H	A194 8	A194 Gr.4

NOTES:
1) Cast Steel Disc for NPS 4 and UP
2) Eye Bolt for NPS6 & Larger
3) Disc & Seat Ring may either be solid facing Material or a base Material equal to or better than the Body/Bonnet Material with facing as shown.

HOW TO ORDER

SCV [SIZE] - [RATING] - [END CONNECTION]

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MAIN EXTERNAL DIMENSIONS																		
NPS (INCH)		2	2-1/2	3	4	6	8	10	12	14	16	18	20	24	26	28	30	36
(Class 150)																		
L/ L1 (RF)(BW)		8.00	8.50	9.50	11.50	14.00	19.50	24.50	27.50	31.00	34.00	38.50	38.50	51.00	51.00	57.00	60.00	77.00
L2 (RTJ)		8.50	9.00	10.00	12.00	14.52	20.00	25.00	28.00	31.50	34.52	39.00	39.00	51.50	-	-	-	-
H		6.00	6.50	6.88	8.00	11.50	13.86	15.38	17.00	18.75	20.62	22.88	24.62	34.75	35.88	37.00	38.62	48.00
Wt (Kg)	RF/RTJ	14.00	20.00	25.00	40.00	71.00	118	177	263	353	542	632	855	970	1275	1600	1990	2760
	BW	10.0	12.0	17.0	29	57	96	143	227	295	468	552	755	831	1120	1420	1760	2230

NPS (INCH)		2	2-1/2	3	4	6	8	10	12	14	16	18	20	24	26	28	30	36
(Class 300)																		
L/ L1 (RF)(BW)		10.50	11.50	12.50	14.00	17.50	21.00	24.50	28.00	33.00	34.00	38.50	40.00	53.00	53.00	59.00	62.75	82.00
L2 (RTJ)		11.12	12.12	13.15	14.65	18.15	21.62	25.12	28.62	33.62	34.65	39.12	40.75	53.88	54.00	80.00	63.75	-
H		6.00	6.50	6.88	8.00	11.50	13.88	15.38	17.00	18.75	20.62	22.88	24.62	34.75	35.88	37.00	38.62	48.00
Wt (Kg)	RF/RTJ	16	23	29	46	82	136	204	302	405	625	730	985	1115	1465	1840	2290	3180
	BW	11	13	18	31	61	103	155	245	315	503	593	812	895	1205	1525	1895	2395

NPS (INCH)		2	2-1/2	3	4	6	8	10	12	14	16	18	20	24	26	28	30	36
(Class 600)																		
L/ L1 (RF)(BW)		11.50	13	14	17	22	26	31	33	35	39	43	47	55	-	-	-	-
L2 (RTJ)		11.62	13.12	14.12	17.12	22.12	26.10	31.10	33.12	36.12	39.12	43.12	47.25	55.38	-	-	-	-
H		7.50	8.00	8.75	10.00	14.50	17.50	19.25	21.38	23.38	25.75	28.75	31.00	43.50	-	-	-	-
Wt (Kg)	RF/RTJ	24	35	44	70	125	207	310	460	615	945	1105	1495	1695	-	-	-	-
	BW	16	19	26	44	87	147	220	350	452	720	845	1160	1280	-	-	-	-

NPS (INCH)		2	2-1/2	3	4	6	8	10	12	14	16	18	20	24	26	28	30	36
(Class 900)																		
L/ L1 (RF)(BW)		14.50	16.50	15.00	18.00	24.00	29.00	33.00	38.00	40.50	44.50	48.00	52.00	-	-	-	-	-
L2 (RTJ)		14.62	16.62	15.12	18.12	24.12	29.12	33.12	38.12	40.90	44.88	48.50	52.50	-	-	-	-	-
H		9.50	10.00	11.00	12.50	18.12	22.00	24.00	26.50	29.38	32.00	33.50	38.75	-	-	-	-	-
Wt (Kg)	RF/RTJ	37	54	68	109	195	321	481	711	956	1468	1870	2316	-	-	-	-	-
	BW	21	25	34	58w	115	194	290	461	597	950	1210	1533	-	-	-	-	-

NPS (INCH)		2	2-1/2	3	4	6	8	10	12	14	16	18	20	24	26	28	30	36
(Class 1500)																		
L/ L1 (RF)(BW)		14.50	16.50	18.50	21.50	27.75	32.75	39.00	44.50	49.50	54.50	-	-	-	-	-	-	-
L2 (RTJ)		14.62	16.62	18.62	21.62	28.00	33.15	39.40	45.12	50.25	55.35	-	-	-	-	-	-	-
H		9.50	10.00	13.00	14.76	18.88	23.50	26.00	29.12	30.88	32.88	-	-	-	-	-	-	-
Wt (Kg)	RF/RTJ	40	63	70	115	250	470	740	1100	1410	1600	-	-	-	-	-	-	-
	BW	29	47	49	84	152	310	470	710	910	1100	-	-	-	-	-	-	-

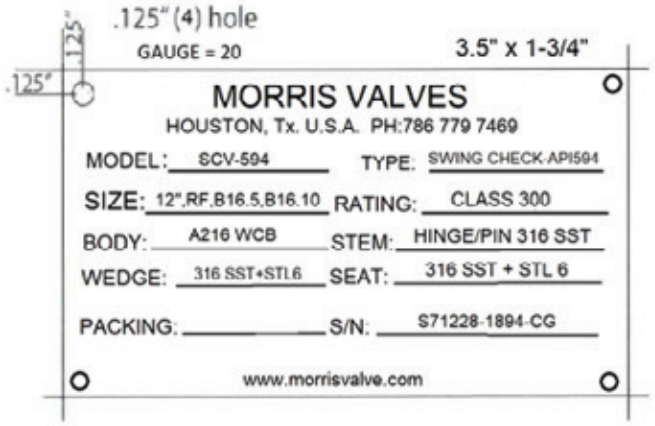
NPS (INCH)		2	2-1/2	3	4	6	8	10	12	14	16	18	20	24	26	28	30	36
(Class 2500)																		
L/ L1 (RF)(BW)		17.75	20	22.75	26.50	36.00	40.25	50.00	56.00	-	-	-	-	-	-	-	-	-
L2 (RTJ)		17.88	20.25	23.00	26.88	36.50	40.88	50.88	56.85	-	-	-	-	-	-	-	-	-
H		10.75	13.25	13.75	15.12	19.50	24.62	28.00	35.62	-	-	-	-	-	-	-	-	-
Wt (Kg)	RF/RTJ	50	76	85	165	460	900	1300	1800	-	-	-	-	-	-	-	-	-
	BW	35	65	68	115	225	580	860	1150	-	-	-	-	-	-	-	-	-

INSTALLATION,OPERATION AND MAINTENANCE INSTRUCTIONS FOR SWING CHECK VALVES BS 1868,API 594,API 6D.

This section covers all necessary maintenance instructions for the self-actuated swing check valves, including disassembly, inspection, lubrication, reassembly and trouble shooting. Your Maintenance function should develop procedures to ensure that the valve is in maintained in a satisfactory and safe operating condition at all times.

Identification.

All MORRIS VALVES® are identified with a metal Tag that is riveted to the valve. This tag is usually found on the body/ bonnet joint area, or on the top plate area near the handwheel.



Routine Maintenance.

One basic advantage of a swing check is its:

- Simplistic design.
- Other than a joint leak, valve fluttering, noisy operation and an occasional binding between the hinge pin and the disc arm little else can go wrong.

To ensure satisfactory valve operation, a routine maintenance check should be performed at regular intervals.
The following actions should be taken:

1. Inspect the valve for noisy or erratic operations. If this condition exist correct flow through the pipe.

NOTE

If correcting the flow fails to correct the condition then the valve will need to be disassembled, the most likely cause of the malfunction is process build-up around the hinge pivot point or galling between the moving parts.

2. If the system permits, depressurize the piping until the valve closes. Then pressurize the piping to assure if the valve opens.

NOTE

If the valve fails to open or close the valve needs to be disassembled and inspected to determine the cause of the malfunction.

CAUTION

Before attempting any disassembly, the line should be depressurized to prevent possibility of personnel injury or equipment damage.

3. Check all the cover stud bolt nuts for proper torque values and tighten the nuts as necessary to meet requirements of Table 1.

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Preparation

Clean all bolts and nuts with solvent, rinse in demineralized water and dry with clean, lint free cloths.
1. Visually inspect all threads to ensure removal of all foreign material, corrosion products, burrs and previous lubrication.
2. Lightly lubricate bolt threads, surfaces under the bolt heads and female threads of nuts with an antiseize compound.
3. Install the bolts and nuts on the flanges and hand tighten the nuts against the flange faces.
4. Using solvent and clean, lint-free wiping cloths, wipe off any excess lubricant than might adhere to the adjacent flange areas.
Table 1

Bolt Size (Dia.)	½ Torque (Ft-lbf)	Full Torque (ft-lbf)
5/16″	4-5	8-12
3/8″	6-8	12-18
½″	15-20	30-45
9/16″	25-30	45-68
5/8″	35-40	60-90
¾″	55-75	110-165
1″	140-180	260-390
1 ¼″	210-310	525-790

5. Tightening Procedure. Hand tighten nuts. Observe the tightening sequence shown in Figure 4
6. and, using a torque wrench with the required range, tighten each bolt to its valve listed in Table 1

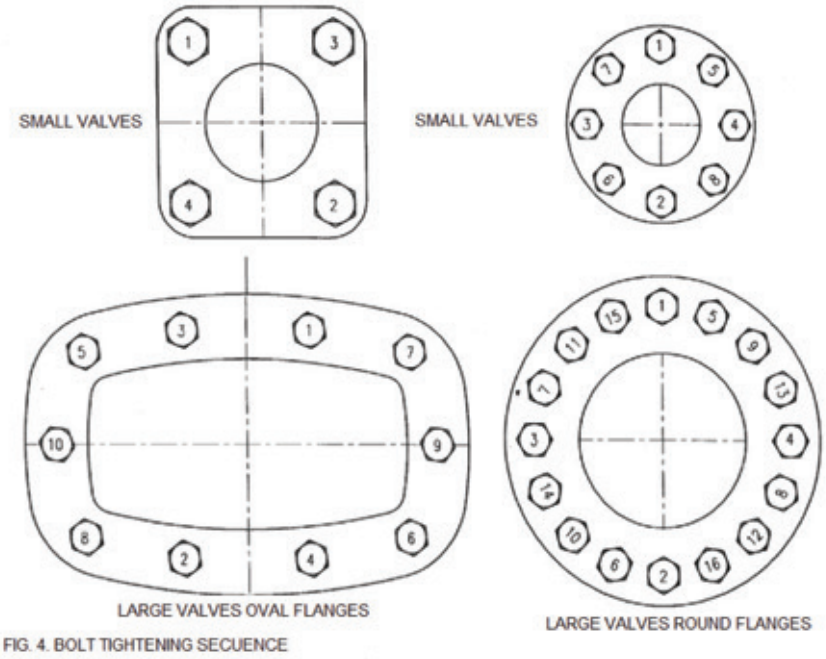

FIG. 4. BOLT TIGHTENING SECUENCE

DISASSEMBLY.

All internal parts are accessible by removal of the bolted cover (10). The hinge (9) and the disc (7) are suspended from the cover and will be lifted out of the valve when the cover is removed.
Disassemble the swing check valve in accordance with the following procedure: (see Figure 3)

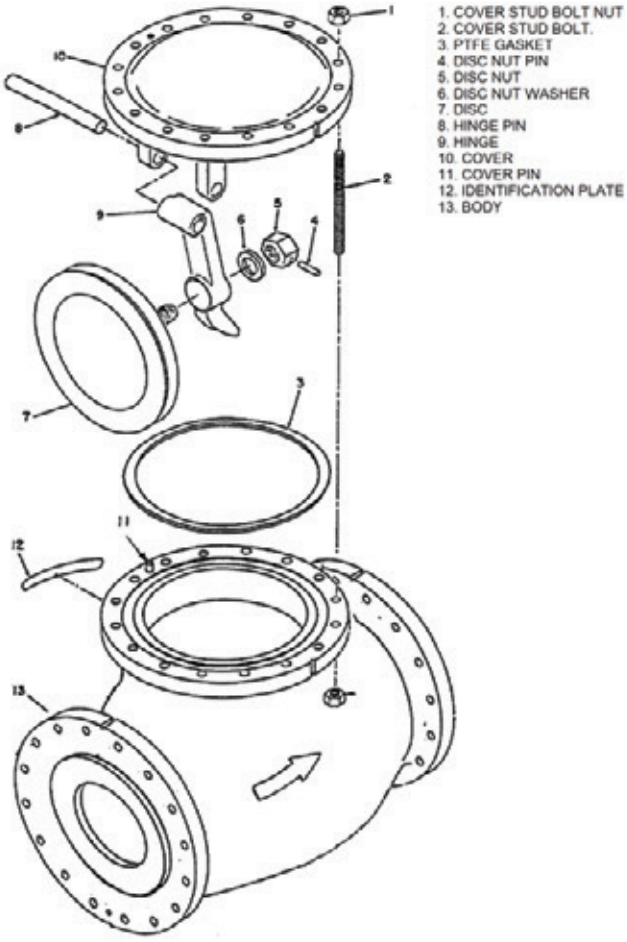

FIG. 3. TYPICAL SWING CHECK VALVE EXPLODED VIEW

1. Remove the cover stud bolt nuts (1) and cover stud bolts (2) and lift cover (10) from the body (13) taking care to prevent any damage to the disc seating surface. Lift cover straight up until cover pin (8) clears its locating hole; then shift cover laterally in the 2 - 12 downstream direction so as to move the disc (7) away from the seat in body (13). Lift cover and attached disc and hinge (9) clear of the valve body.

2. Push out the hinge pin (8) and remove and hinge and disc assembly from cover (10). The hinge pin should slide out easily.

3. If necessary for rework or replacement, remove the disc (7) from the hinge (9). Using hammer and punch, drive out the disc nut pin (4) and unscrew the disc nut (5). Remove the disc nut washer (if applicable) and withdraw the disc from the hinge.

4. Do not remove cover pin (11) unless replacement is necessary. 2.19 Inspection. After disassembly of the swing check valve, all parts should be inspected for evidence of wear or distortion or mechanical damage. Perform the inspection listed in Table 4. to assure satisfactory operation of the affected parts.

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REASSEMBLY

Reassembly of the swing check valve is performed essentially in the reverse order of disassembly, observing the following special procedures: (see Figure3)
1. Assemble the disc (7) to the hinge (9) and install the disc nut washer (if applicable) and disc nut (5).
2. Tighten the disc nut (5) against the disc nuts washer (6) (if applicable) until the pin through holes in the nut and disc are aligned. Install the disc nut pin (4) and peen over the ends of the pin to lock the disc nut in place. Check that the disc is free fitting in the hinge (9) and that adequate movement between the disc and the hinge is present so that the disc can align itself freely against the body seat for closure.
3. Assemble the hinge (9) and the disc (7) to the cover (10) by inserting the hinge pin (8) through the cover hinge holes and the hinge. Check that the movement of the hinge on the hinge pin is free with no binding.
4. Place the PTFE gasket (3) in the gasket recess on the body cover flange.
5. If necessary, install replacement cover pin (11). Approaching the body from the downstream position, place cover (10) with the hinge and disc attached, on the body, in the same manner as removal, taking care to ensure that the cover pin is aligned with its locating hole. Lower cover into place gently to avoid damage to the seating surfaces.
6. Install cover stud bolts (2) and cover stud bolt nuts (1). Follow the procedure specified in Chapter 1 and tighten nuts to the torque values listed in Table 1 in the sequences in Figure 1. 2 - 13

7. Table 4 Swing Check Valve Inspection

Step	Part	Inspect For	Remarks
1	Hinge Pin	Evidence of wear resulting in out-of roundness, galling or roughness	Minor wear can be polished out. Major wear will necessitate hinge pin replacement
2	Hinge	Evidence of wear on hinge pin end resulting in out-of-roundness or roughness in hinge pin bore. Evidence of wear resulting from movement of the disc in the hinge	Minor wear can be polished out. Major wear will necessitate hinge replacement.
3	Cover	Evidence of wear resulting in out-of roundness or roughness in the hinge pin holes on the underside of the cover	Minor wear can be polished out. Major wear will necessitate replacement.
4	Disc	Evidence of wear or damage on seating surface which could prevent tight seating. Evidence of wear on surfaces which mate with hinge	Lap, grind or remachine disc seating surface to assure adequate seating or replace disc. Minor damage can be polished out. Major damage requires replacement of the disc.
5	Body	Evidence of wear or damage on body seat from hammering, sliding, etc. which could prevent tight seating.	Correct minor seating surface damage by lapping seat to obtain a flat surface with the body in line. If damage or wear is extensive, remove the body from the line for remachining of the seat or replacement of the body.

DCKV-TYPE

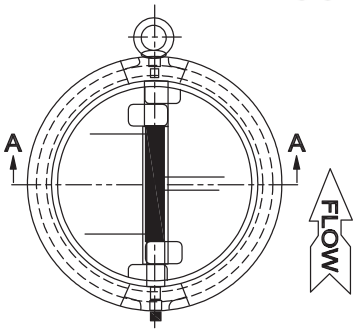
DUAL PLATE CHECK VALVE.
RATING: CLASS (150 - 2500)
END: FLANGED /BUTT WELDING
SIZE: (2 – 36)" /FULL PORT PIGGABLE

CE APPROVED

SPECIFICATIONS:

-DESIGN:
*API 6D / API 594/ANSI B16.34/ ISO 14313
-SIZE:
*1-1/2"- 24", WAFER ENDS/ LUG ENDS/ FLANGED ENDS
-PRESSURE RATING:
*Class (150 – 900)

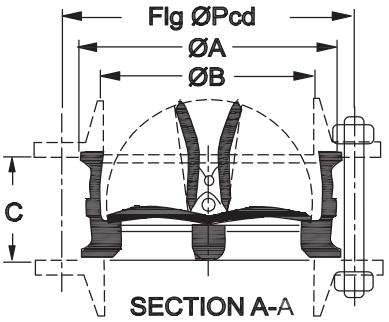
FACE - FACE:
*API6D/ ANSI/ASME B16.10
-END CONNECTION:
*ANSI/ASME B16.5/ ISO 7005-1
-TEST:
*Hydrostatic Tested 100% to API 6D / API 598



FEATURES:

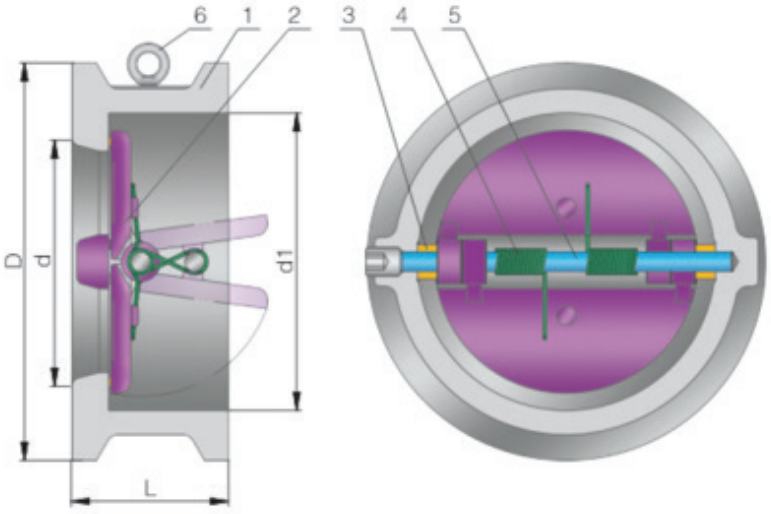
*Dual Plate Disc, Long Pattern.
*One Piece Body.
*Easy Maintenance. renewable Split Disc.
*Available a full range of Trim Materials to match any service.
*Suitable for Horizontal & Vertical Up flow Installation.
*API6D Monogrammed.
*An austenitic stainless steel nameplate securely affixed and so located thatit is easily accessible for the Identification.

*Inspection Certificate EN 10204–3.1, traceable to the Unique Valve Serial Number is provided, containing:
- Physical & Chemical Material Test Report for Bonnet, Body and End Connection.
- Pressure Test Result in Compliance with: API6D – 2008
*NDT or NDE Shall be performed if specified by the Customer on the RFQ.



HOW TO ORDER

	SIZE/RATING		END CONN		BODY MATL		DISC MATL		SPRING MATL
DCKV		-		-		-		-	



PARTS & MATERIALS

	PART	CARBON STEEL	CARBON STEEL	LOW TEMP. STEEL
1	BODY	A216 WCB	A351 CF8M	A351 CF8M
2	PLATE	A216 WCB	A351 CF8M	A351 CF8M
3	STOP PIN	A276 420	A276 304	A276 304
4	BACK SPRING	A313 304	A313 316	A313 316
5	HINGE PIN	A276 420	A276 304	A276 304
6	EYE BOLT1	CARBON STEEL		

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NPS (INCH)	1-1/2″	2″	2-1/2″	3″	4″	6″	8″	10″	12″	14″	16″	18″	20″	24″
(Class 150)														
L	1.69	2.38	2.62	2.88	2.88	3.88	5.00	5.75	7.12	7.25	7.50	8.00	8.62	8.75
D	3.62	4.00	4.88	5.38	6.75	8.62	10.88	13.25	16.00	17.62	20.12	21.50	23.75	28.12
d	2.00	2.00	2.50	3.25	4.00	6.00	8.00	10.00	12.00	13.75	15.75	17.75	19.75	23.62
d1	2.25	2.25	2.88	3.50	4.25	6.25	8.25	10.50	12.12	14.00	16.00	18.00	19.88	23.75
Wt(Kg)	1.5	2	3	4	6	13	25	39	54	80	117	138	163	331

NPS (INCH)	1-1/2″	2″	2-1/2″	3″	4″	6″	8″	10″	12″	14″	16″	18″	20″	24″
(Class 300)														
L	1.69	2.38	2.62	2.88	2.88	3.88	5.00	5.75	7.12	8.75	9.12	10.38	11.50	12.50
D	3.62	4.25	5.00	5.75	7.00	9.88	12.00	14.12	16.50	19.00	21.12	23.38	25.62	30.38
d	2.00	2.00	2.50	3.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	24.00
d1	2.25	2.25	2.88	3.50	4.25	6.38	8.25	10.50	12.25	14.00	16.00	18.00	20.00	24.00
Wt(Kg)	1.5	3	4	6	8	18	31	51	77	117	190	200	265	410

NPS (INCH)	1-1/2″	2″	2-1/2″	3″	4″	6″	8″	10″	12″	14″	16″	18″	20″	24″
(Class 600)														
L	1.69	2.38	2.62	2.88	3.12	5.38	6.50	8.38	9.00	10.75	12.00	14.25	14.49	17.24
D	3.62	4.38	5.00	5.75	7.50	10.38	12.50	15.62	17.88	19.25	22.12	24.00	26.77	30.94
d	2.00	2.00	2.50	3.00	4.00	6.00	7.88	9.88	12.00	13.25	15.25	17.24	19.25	23.26
d1	2.25	2.25	2.88	3.50	4.25	6.38	8.38	10.50	12.25	14.00	15.75	17.71	19.68	23.62
Wt(Kg)	1.5	4	5	8	11	26	55	95	140	223	360	395	518	836

NPS (INCH)	1-1/2″	2″	2-1/2″	3″	4″	6″	8″	10″	12″	14″	16″	18″	20″	24″
(Class 900)														
L	-	2.75	3.25	3.25	4.00	6.25	8.12	9.50	11.50	14.00	15.10	17.75	17.75	19.49
D	-	5.50	6.38	6.50	8.00	11.25	14.00	17.00	19.50	20.39	22.51	25.00	27.36	32.87
d	-	2.00	2.50	3.00	4.00	6.00	7.88	9.88	12.00	13.26	15.23	17.24	19.17	23.26
d1	-	2.25	2.88	3.50	4.25	6.38	8.38	10.50	12.25	13.98	15.75	17.72	19.53	23.62
Wt(Kg)	-	8	11	14	20	42	84	45	220	350	470	605	820	1050

NPS (INCH)	1-1/2″	2″	2-1/2″	3″	4″	6″	8″	10″	12″	14″	16″	18″	20″	24″
(Class 1500)														
L	-	2.75	3.26	3.26	4.00	6.25	8.12	9.50	11.50	14.00	15.10	-	-	-
D	-	5.51	6.38	6.77	8.15	11.02	13.78	17.04	20.39	22.78	25.16	-	-	-
d	-	2.00	2.50	3.00	4.00	6.00	7.88	9.88	12.00	13.26	15.23	-	-	-
d1	-	2.25	2.88	3.50	4.25	6.38	8.38	10.50	12.25	13.98	15.75	-	-	-
Wt(Kg)	-	8	11	19	26	68	130	210	384	550	635	-	-	-

NPS (INCH)	1-1/2″	2″	2-1/2″	3″	4″	6″	8″	10″	12″	14″	16″	18″	20″	24″
(Class 2500)														
L	-	2.75	3.26	3.26	4.00	6.25	8.12	9.50	11.50	-	-	-	-	-
D	-	5.63	6.53	7.64	9.13	12.40	15.16	18.66	21.53	-	-	-	-	-
d	-	1.65	2.04	2.44	3.46	5.90	7.08	8.86	10.47	-	-	-	-	-
d1	-	1.89	2.28	2.68	3.70	6.38	7.32	9.13	10.70	-	-	-	-	-
Wt(Kg)	-	10	18	26	40	90	150	240	440	-	-	-	-	-

FCKV TYPE

CE APPROVED

RATING: CLASS (150 - 2500)/(1.6 Mpa - 42.0 Mpa).
END: THREADED/BUTT WELDING / FLANGED.
SIZE: (1/4" – 2)" /FULL PORT.

SPECIFICATIONS:

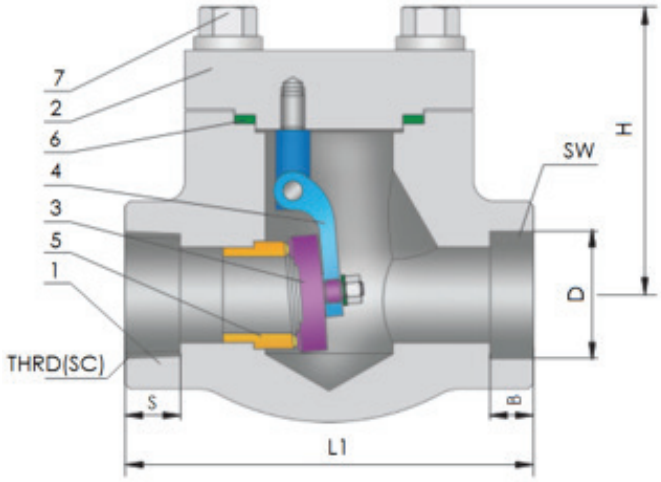
-DESIGN:
*API 602 / ANSI B16.34
-SCREWED ENDS
*ASME B1.20.1
-FLANGED ENDS:
*ANSI/ASME B16.5
-BUTT-WELDING ENDS:
*ASME B16.25.
-SOCKET-WELDING ENDS:
*ASME B16.11
-TEST:
*HYDROSTATIC TESTED 100% TO API 598

HOW TO ORDER

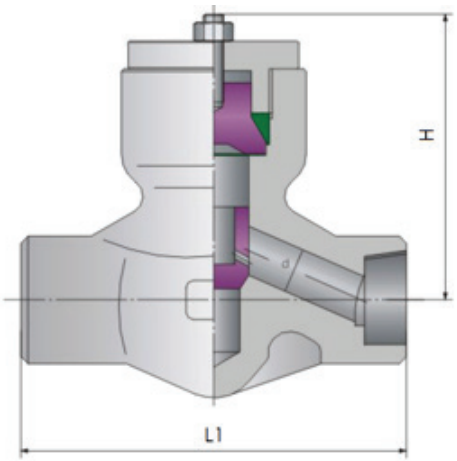
	TYPE		SIZE/RATING		END CONN		BODY MATL		DISC MATL
FCKV		-		-		-		-	

FEATURES:

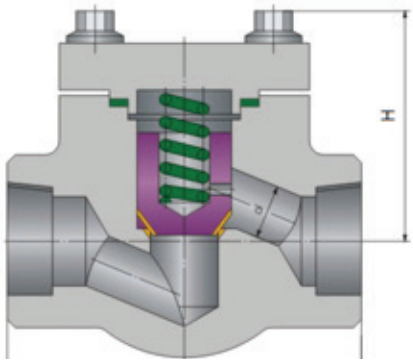
* By choosing different Materials can be suitable for applications like:
- Water, Steam.
-Nitric Acid, Acetic Acid.
-Oxidant Medium
-CO2
* Short Face to Face dimension, 1/4-1/8 of the conventional Check Valve.
* Small Volume and Weight.
* Bolted Bonnet, Choice of Welding Bonnet.
*Available a full range of Trim Materials to match any service.
* Suitable for Horizontal & Vertical Up flow Installation.
* Short disc Travel and quickly open/close response, Minimal water Hammer , low Impact force when close the valve.
* Inspection Certificat EN 10204–3.1, traceable to the Unique Valve Serial Number is provided, containing:
*Physical & Chemical Material Test Report for Bonnet, Body and Trim Materials.
* Pressure Test (SHELL TEST & SEAL TEST) Result in Compliance with: API598
* NDT or NDE Shall be performed if specified by the Customer on the RFQ.



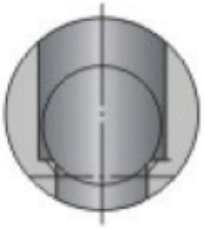
SWING TYPE



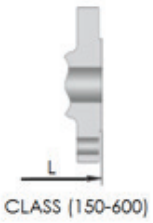
PISTON TYPE
CLASS 900/1500/2500



LIFT TYPE



BALL TYPE



CLASS (150-600)

MORRIS VALVES
6803 Theall Rd Building B, Houston, Texas. 77066 Phone :+1 (832) 666-5576 www.morrisvalve.com

PARTS & MATERIALS								
	PART	A105/ F6a	A105/F6aHFS	LF2/304	F11/F6aHF	304(L)/304(L)	316(L)/316(L)	F51/F51
1	BODY	A105	A105	LF2	F11	304(L)	316(L)	F51
2	BONNET	A105	A105	LF2	F11	304(L)	316(L)	F51
5	SEAT1	A276-410	A276-410HF	304	A276-410HF	304(L)	316(L)	F51
3	DISC	F6a	F6aHFS	304	F6aHF	304(L)	316(L)	F51
6	BONNET GASKET2	Graphite + 304	Graphite + 304	Graphite + 304	Graphite + 304	Graphite + 304(L)	Graphite+316(L)	Graphite + 304
7	BOLT	B7	B7	L7	B16	B8(M)	B8(M)	B8M
	SPRING	304SST/316SST						
4	HINGE	A276-410	A276-410	304	A276-410	304	316	F51
	HINGE PIN	A276-410	A276-410	304	A276-410	304	316	F51

Note.
1)Seat Ring integral with the Body for the Lift Check Valve Type.
2) Spiral Wound Construction.

PARTS & MATERIALS														
NPS	CLASS 150	CLASS 300	CLASS 600											CLASS 800
	FLANGED END									SW		SC (THRD)		
	L			L1		H		d		D	B	NPT	S	Wt(Kg) FLG/SW,SC
	LIFT & SWING TYPE			LIFT TYPE	SWING TYPE	LIFT TYPE	SWING TYPE	LIFT TYPE	SWING TYPE	LIFT & SWING TYPE	LIFT & SWING TYPE	LIFT & SWING TYPE	LIFT & SWING TYPE	
1/4	-	-	-	79	79	61	61	7	8	17.6	9.6	1/4	13.6	3.8 / 2.8
3/8	102	152	165	79	79	61	61	9	10.5	17.6	9.6	3/8	13.6	3.8 / 2.8
1/2	108	152	165	92	92	61	61	13	13.5	21.8	9.6	1/2	13.6	5.6 / 3.4
3/4	117	178	190	111	111	78	78	17.5	18.0	27.1	12.7	3/4	13.9	7.8 / 4.7
1	127	203	216	120	120	84	84	23	24	33.8	12.7	1	17.3	12.5 / 9.2
1-1/4	140	216	229	152	129	84	84	29	30	42.6	12.7	1-1/4	18.0	17.0 / 10.5
1-1/2	165	229	241	172	140	118	120	35	36.5	48.7	12.7	1-1/2	18.4	23.5 / 13.3
2	203	267	292	200	178	132	133	45	46	61.10	15.9	2	19.2	38.8 / 18.9

CLASS 900/1500

NPS		L1		H		d			Wt(Kg)	
		LIFT TYPE	SWING TYPE	LIFT TYPE	SWING TYPE	LIFT TYPE	SWING TYPE		LT	ST
1/4		92	92	61	61	7	8		1.5	1.5
3/8		111	111	78	61	12	10.5		3.4	3.4
1/2		111	111	78	61	15	13.5		3.3	3.3
3/4		120	120	84	78	20	18		4.2	4.2
1		152	120	103	84	28	24		6.3	5.0
1-1/4		172	140	118	84	32	29		10.5	8.5
1-1/2		200	178	132	120	40	45		12.5	10.9
2(RP)		200	178	132	133	40	45		12.5	10.9

CLASS 900/1500

NPS		L1	H	d		Wt(Kg)
		PISTON TYPE				
1/4		-	-	-		-
3/8		140	117	12		7.5
1/2		140	117	15		7.0
3/4		140	117	20		6.8
1		178	152	28		18.5
1-1/4		216	195	32		20.3
1-1/2		216	195	40		22.0
2(RP)		216	195	40		22.0

CLASS 2500

NPS		L1	H	d		Wt(Kg)
		PISTON TYPE				
1/4		-	-	-		-
3/8		-	-	-		-
1/2		186	117	11		11.8
3/4		186	117	14		11
1		186	117	19		10.5
1-1/4		232	152	25		23
1-1/2		232	152	28		26.4
2(RP)		279	195	35		39

SWCV TYPE

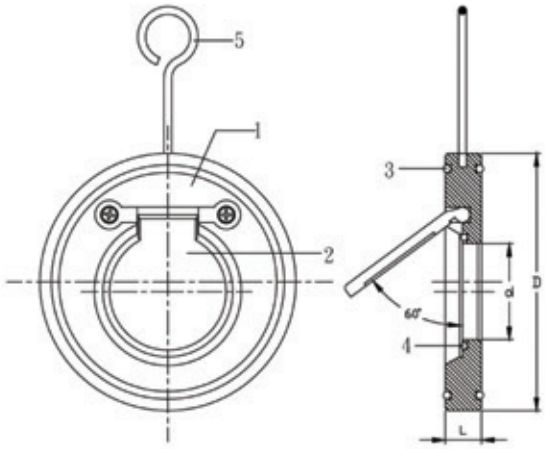
FEATURES:

* INVESTMENT CASTING
* STANDARD: DIN/ANSI
* Rating: ANSI150/PN16
* Size: 2″ – 8″ (DN50-DN200)
* Material: ASTM A 351-CF8M/CF8
* Body/Clapper Seat: NBR/FPM/PTFE/VITON/Metal to Metal
* Face To Face: API-594 / API-6D
* Test Standard: API-598
* Design: ASME-B16.34
* Suit Flanged For: ISO-7005-1

CE APPROVED

SIZE: 2″ – 8″ / WAFER

FLOW COEFICIENT (CV)		
DN	DN	CV
50	2″	42
65	2-1/2″	73
80	3″	107
100	4″	329
125	5″	646
150	6″	747
200	8″	1338



DIMENSIONS					
DN		L	D	d	Wt (Kg)
50	2″	19	105	27	1.2
65	2-1/2″	19	124	38	1.6
80	3″	19	137	46	1.9
100	4″	19	175	69	2.7
125	5″	19	197	90	4.0
150	6″	19	222	110	5.7
200	8″	19	279	140	11.5

HOW TO ORDER

SWCV - [SIZE] - [RATING] - [BODY MATERIAL] - [SEAT MATERIAL]

PART		MATERIAL	
1	BODY	A351 CF8M	CF8
2	CLAPPER	A351 CF8M	CF8
3	BODY SEAT	NBR/FPM/PTFE/VITON/METAL	NBR/FPM/PTFE/VITON/METAL
4	CLAPPER SEAT	NBR/FPM/PTFE/VITON/METAL	NBR/FPM/PTFE/VITON/METAL
5	O-BOLT	304 SST	304 SST

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