

CCNE Model 9001 AWWA Swing Check Valve Air Cushion with Outside Lever and Weight or Spring

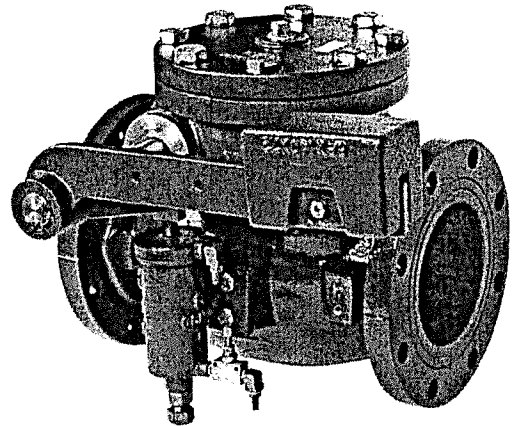
Features:

- Clear waterway
- Enlarged stainless steel hinge pin
- Flanges conform to ANSI B16.1 Class 125
- Lever and weight may be installed on either side
- Valves may be installed in vertical line with flow up
- Body and disc seat rings are field replaceable
- Disc seat standard with Buna-N insert for bubble tight shut off
- Totally enclosed bronze air cushion with stainless steel hardware
- Adjustable speed control
- Meets AWWA standards of dimensional standards of large pin cushion products
- 8 mils NSF 61 epoxy in and out

Sizes: 3" - 72"

Styles: Bronze to Bronze, Bronze to Buna-N, Stainless Steel to Buna-N

Uses: Water, Sludge, Sewer Service



Specification for Model 9001 with Air Cushion

General: Swing check valves are of self-contained, free swinging disc style, allowing a clear waterway. Valve disc swings freely open and is keyed to valve hinge pin without the use of pins. Valves conform to all standards set forth in AWWA C508, Latest Edition. Valve hinge pin are Stainless Steel and conform to the industry standards set forth for cushion valves. Manufacturer should have a minimum of ten years experience supplying air cushion AWWA C508 valves.

Referenced Standards:

- ANSI B16.1: Cast Iron Pipe Flanges and Flanged Fittings Class 125
- AWWA C508: Swing Check Valves for Waterworks Service, 2" through 24" NPS

Rating:

Valves are rated for 200psi on 12" and smaller, and 150psi on 14" and larger water working pressure. Valves are available in ductile iron for high pressure applications. All testing is done in accordance with AWWA C508.

End Configuration:

Valves have integrally cast flat face flanges in accordance with ANSI B16.1 Class 125.

Materials:

- All cast iron used conforms to ASTM A126 CLB
- Disc is of ductile iron conforming to ASTM A536 GR65-45-12
- Hinge Pins conform to ASTM A276 GR304
- Seat Rings are of Low Zinc Bronze conforming to ASTM B62 or of Stainless Steel conforming to ASTM A276 GR316

Coating: Internal and external coatings are two-component epoxy conforming to AWWA C550.

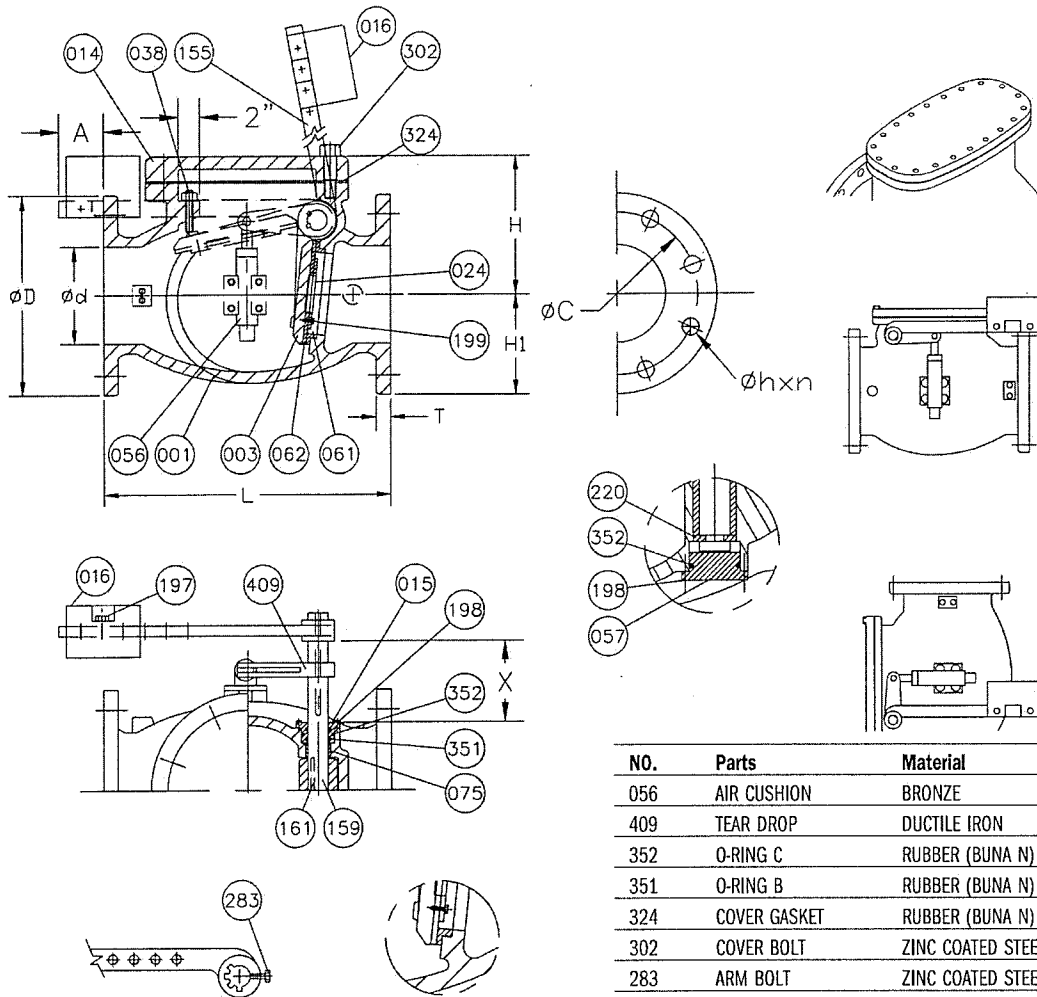
Design: All valves meet the standards of AWWA C508. All valves utilize a single disc mounted to a clevis hinge which prevents the disc from tipping. The valve disc swings open once the pump starts and allows for full flow. When closed the valve offers a tight shut-off. Valve body and cover are of Cast Iron, valve hinge is of Ductile Iron. Disc seating surface is either Bronze, Stainless Steel or of Buna-N depending on application. Valve seat rings are of Bronze or Stainless Steel.

The valve body has a bolted cover design and flanges are integral to body casting -not wafer style. Valve body and disc are designed in such a way as to minimize turbulence. Spring and cushion systems are externally mounted on the side of the body and do not come into contact with main line media.

Cushion systems are one-piece all bronze construction with integral pad mounted directly to the body with stainless steel fasteners. Air cushion shall consist of bronze and stainless steel components, be adjustable by means of a flow control valve and piston sleeve. Air cushion shall be totally enclosed with a metal end cap with an o-ring.

Installation: All valves are built for horizontal installation. However, all valves operate equally well in vertical installations. Prior to valve installation Milliken should be notified of vertical mounting position so lever arm and weight can be properly positioned on valve.

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Size Od	ANSI B16.1 CL.125							
Inches	L	OD	OC	OH	n	T	H	H1
3	11	7-1/2	6	3/4	4	3/4	6-3/8	3-3/4
4	13	9	7-1/2	3/4	8	15/16	7-3/8	4-1/2
6	16	11	9-1/2	7/8	8	1	9-3/16	5-1/2
8	19-1/2	13-1/2	11-3/4	7/8	8	1-1/8	10-7/8	6-3/4
10	22	16	14-1/4	1	12	1-3/16	13-5/16	8
12	26	19	17	1	12	1-1/4	15-9/16	9-1/2
14	30	21	18-3/4	1-1/8	12	1-3/8	21-1/16	12-1/16
16	30-1/2	23-1/2	21-1/4	1-1/8	16	1-7/16	24	13-5/16
18	33-1/2	25	22-3/4	1-1/4	16	1-9/16	27-9/16	14-5/8
20	40	27-1/2	25	1-1/4	20	1-11/16	31-5/16	15-3/8
24	46	32	29-1/2	1-3/8	20	1-7/8	35-1/4	17-7/8
30	60	38-3/4	36	1-3/8	28	2-1/8	36	23-1/16
36	63	46	42-3/4	1-5/8	32	2-3/8	41-15/16	27-11/16
42	70	53	49-1/2	1-5/8	36	2-5/8	46-3/4	32-1/8
48	76	59-1/2	56	1-5/8	44	2-3/4	53-1/8	35-1/2

Dimensions for larger sizes available upon request.

NO.	Parts	Material	ASTM Designation
056	AIR CUSHION	BRONZE	B62
409	TEAR DROP	DUCTILE IRON	A536 GR 65-45-12
352	O-RING C	RUBBER (BUNA N)	D2000 BK 707
351	O-RING B	RUBBER (BUNA N)	D2000 BK 707
324	COVER GASKET	RUBBER (BUNA N)	D2000 BK 807
302	COVER BOLT	ZINC COATED STEEL	A307 GRADE B
283	ARM BOLT	ZINC COATED STEEL	A307 GRADE B
220	SNAP RING	STAINLESS STEEL	A276 GRADE 304
199	SEAT HOLDER BOLT	STAINLESS STEEL	A276 GRADE 304
198	END PLATE BOLT	ZINC COATED STEEL	A307 GRADE B
197	WEIGHT BOLT	ZINC COATED STEEL	A307 GRADE B
161	KEY	STAINLESS STEEL	A276 GRADE 304
159	HINGE PIN	STAINLESS STEEL	A276 GRADE 304
155	WEIGHT ARM	DUCTILE IRON	A536 GR 65-45-12
075	BUSHING	BRONZE	B62
062	DISC SEAT RING	RUBBER (BUNA N)	D2000 BK 807
061	BODY SEAT RING	BRONZE	B62
057	END PLATE B	DUCTILE IRON	A536 GR 65-45-12
038	STOPPER	STAINLESS STEEL	A276 GRADE 304
024	SEAT HOLDER	3"-6" CAST IRON	A126 CLASS B
024	SEAT HOLDER	8"+ DUCTILE IRON	A536 GR 65-45-12
016	WEIGHT	CAST IRON	A126 CLASS B
015	END PLATE A	BRONZE	B62
014	COVER	CAST IRON	A126 CLASS B
003	DISC	DUCTILE IRON	A536 GR 65-45-12
001	BODY	CAST IRON	A126 CLASS B

* For reference ONLY. Contact Milliken for detailed sales drawings.