

SIZE RANGE

PRESSURE RATING

SUGGESTED SPECIFICATIONS

## **M&H VALVE—FLAP VALVES (4”-30”)**

### **STYLE 47-02**

SIZE RANGE	WORKING PRESSURE
4”-30”	Valves unseat and swing open under unseating pressure to release the outfall fluid and close when pressure is relieved.

<u>Available End Connections</u>	<u>Size Range</u>	<u>Style No.</u>
Flanged End	4”-30”	47-02

#### **SUGGESTED SPECIFICATIONS:**

Flap valves shall be of the circular port design with offset single pivoted hinge. They shall be of the iron body bronze mounted type and furnished with a flanged end.

The assembly shall consist of three parts: flap gate, body and hinge pin. The flap gate and body shall be cast iron conforming to ASTM specifications A-126 Class B. The seats and hinge pin shall be furnished of bronze. The flap gate seat ring shall be rolled into a dovetailed groove under pressure to make one inseparable unit. The body seat ring shall be threaded and screwed into place in the body. Both gate and body seat ring faces shall be machined to a smooth finish. The valve shall be constructed with a 10 degree offset from vertical to ensure positive closure. The flange shall be drilled using an ANSI 125 pound template. Valves shall be as furnished by M&H Valve or approved equal.

INSTALLATION  
OPERATION  
MAINTENANCE

**M&H VALVE—FLAP VALVES (4”-30”)  
STYLE 47-02**

**General**

Inspect all assemblies at time of delivery for shipping damage and to confirm compliance with order. The valve should be protected from rough handling. Water and debris should not be allowed to collect in valve.

**I. Installation**

- A. Check that valve end joints are clean
- B. Remove any material used to restrain the gate during shipment and storage.
- C. The gate should be checked to insure freedom of motion and proper operation
- D. When handling the valve, do not use the outside mechanism for lifting.
- E. Prepare pipe end of manhole as required, and install valve as per appropriate instructions for the specified joint. Bolt holes should straddle the vertical centerline.

**II. Operations**

Once properly installed, the valve will operate as pressure conditions dictate. The valve will open under direct pressure to release the outfall fluid and will close to prevent entrance of backwater when the direct pressure is relieved. The flap valve is a 10 degree inclined plane to insure positive seating.

**III. Maintenance**

Frequency of inspection should be at least on an annual basis. Joint should be visually inspected for leakage. Raise and lower the flap so pin can be checked for free operation.

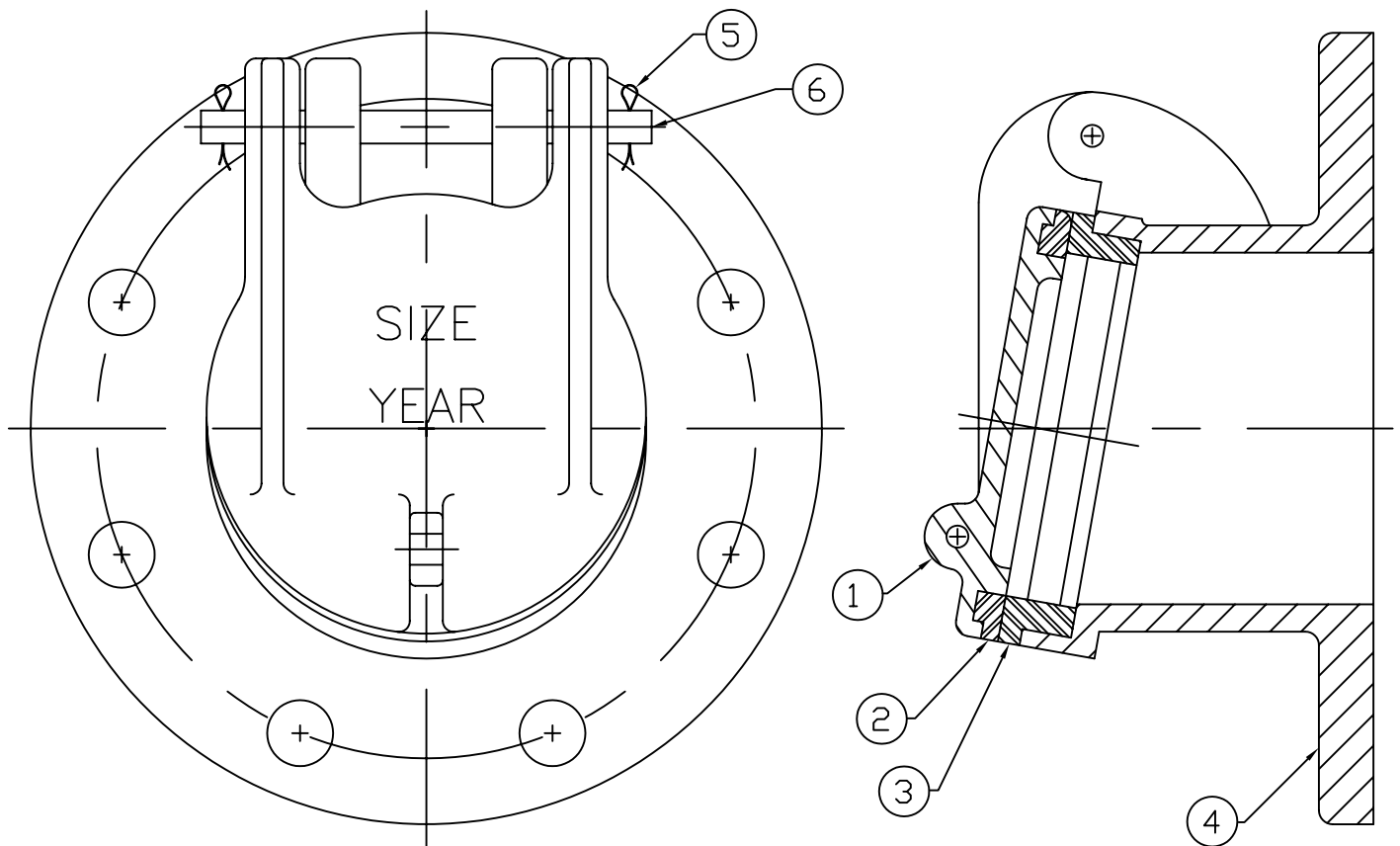
**Troubleshooting:**

**Exercise and lubricate the hinge/shaft pin (\*with suitable lubricant) at least annually to assure free operation.** Check bronze flap ring and seat ring for freedom from damage. Remove any debris found on inside of valve.

**Notes:**

There are no recommended spare parts

\*Recommend food grade grease similar to Chevron FM Grease EP NLGI 2.



# PARTS LIST

ITEM	DESCRIPTION	REQ'D	MATERIAL
1	F/V DISC	1	CAST IRON A126 CL. B
2	DISC RING	1	BRONZE B62
3	SEAT RING	1	BRONZE B62
4	F/V BODY	1	CAST IRON A126 CL. B
5	COTTER PIN	2	BRASS CDA360
6	HINGE PIN	1	BRASS CDA360

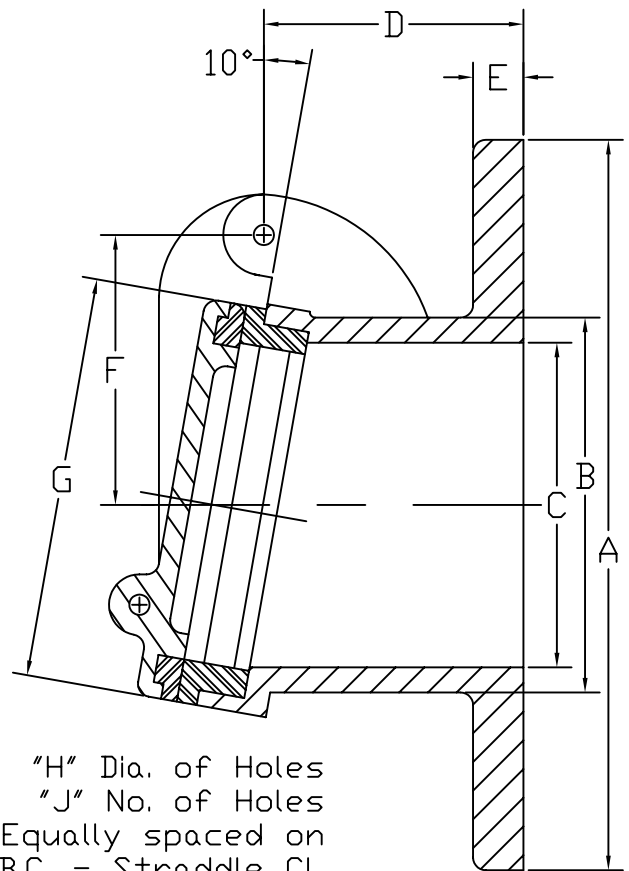
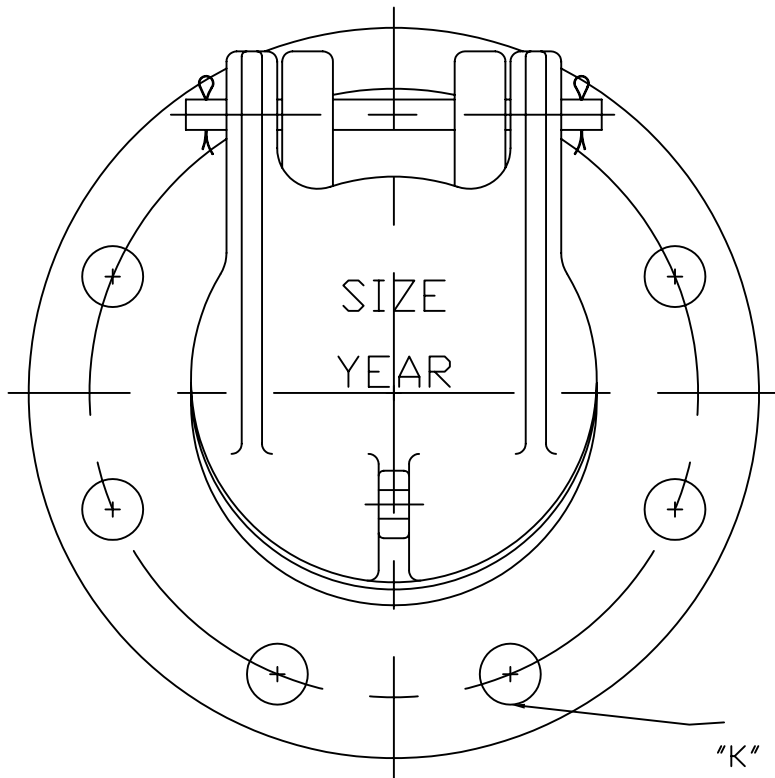
M&H VALVE COMPANY  
ANNISTON, ALABAMA  
A DIVISION OF MCWANE INC.

DWN: TRIJ

DATE: 7/1/05

DWG. NO.  
FV-A1

4" THRU 30" FLAP VALVES  
VALVE ASSEMBLY / MATERIAL LIST  
STYLE 47-02  
FLANGED END



"H" Dia. of Holes  
 "J" No. of Holes  
 Equally spaced on  
 "K" B.C. - Straddle CL

DIMENSIONS										
ITEM	A	B	C	D	E	F	G	H	J	K
4	9.00	4.62	4.00	3.25	.62	3.44	5.00	.75	8	7.50
6	11.00	6.75	6.00	3.50	.69	4.50	7.00	.88	8	9.50
8	13.50	8.75	8.00	4.00	.75	5.62	9.25	.88	8	11.75
10	16.00	10.88	10.00	4.50	.81	6.88	11.50	1.00	12	14.25
12	19.00	13.00	12.00	4.50	.88	7.91	13.50	1.00	12	17.00
14	21.00	15.75	14.50	4.62	1.19	9.12	15.75	1.12	12	18.75
16	23.50	18.06	16.69	4.50	1.25	10.25	18.00	1.12	16	21.25
18	25.00	19.75	18.50	7.50	1.12	11.62	20.00	1.25	16	22.75
20	27.50	22.00	20.62	6.00	1.12	12.69	22.25	1.25	20	25.00
24	32.00	25.75	24.00	6.56	1.38	14.53	26.25	1.38	20	29.50
30	38.75	31.50	30.00	8.50	1.50	17.88	32.75	1.00	28	36.00

M&H VALVE COMPANY  
 ANNISTON, ALABAMA  
 A DIVISION OF MCWANE INC.

DWN: TRIJ  
 DATE: 7/1/05  
 DWG. NO.  
 FV-A2

4" THRU 30" FLAP VALVES  
 GENERAL DIMENSIONS  
 STYLE 47-02  
 FLANGED END