

SPECIFICATIONS STYLE NUMBERS (2"-30")

M&H AWWA C508 STANDARD FLANGED CHECK VALVES

Size Range	Water Working Pressure psi	Seat Test Psi	Hydrostatic Shell Test psi
AWWA 2" – 12"	200	400	400
AWWA 14"-30"	150	300	300

Type / Facing Material / Options	Size Range	Style Number	Drawing Number
2"-12" STANDARD CHECK			
Plain / Swing Check---Rubber Faced	2"-12"	59-02A	CV-A1-PC
Plain / Swing Check---Rubber Faced—With Tapped Cover	2"-12"	59-02AT	CV-A1-PC
Plain / Swing Check---Bronze Faced	2"-12"	59-02	CV-A1-PC
Plain / Swing Check ---Bronze Faced—With Tapped Cover	2"-12"	59-02T	CV-A1-PC
Lever & Weight—Rubber Faced	2"-12"	159-02A	CV-A1-LW
Lever & Weight—Rubber Faced—With Limit Switch	2"-12"	159-02ALS	CV-A1-LW
Lever & Weight—Rubber Faced—With Dual Arm	6"-12"	159-02AD	CV-A1-LW
Lever & Weight—Bronze Faced	2"-12"	159-02	CV-A1-LW
Lever & Weight—Bronze Faced—With Limit Switch	2"-12"	159-02LS	CV-A1-LW
Lever & Weight—Bronze Faced—With Dual Arm	6"-12"	159-02D	CV-A1-LW
Lever & Spring—Rubber Faced	2"-12"	259-02A	CV-A1-LS
Lever & Spring—Rubber Faced—With Limit Switch	2"-12"	259-02ALS	CV-A1-LS
Lever & Spring—Bronze Faced	2"-12"	259-02	CV-A1-LS
Lever & Spring—Bronze Faced—With Limit Switch	2"-12"	259-02LS	CV-A1-LS
14"-30" STANDARD CHECK			
Plain / Swing Check---Rubber Faced	14"-30"	59-02A	LCV-A1
Lever & Weight—Rubber Faced	14"-30"	159-02A	LCV-A1
Lever & Weight—Rubber Faced—With Limit Switch	14"-30"	159-02ALS	LCV-A1
Lever & Weight—Rubber Faced—With Dual Arm	14"-30"	159-02AD	LCV-A1
Lever & Spring—Rubber Faced	14"-30"	259-02A	LCV-A1
Lever & Spring—Rubber Faced—With Limit Switch	14"-30"	259-02ALS	LCV-A1
Lever & Spring—Rubber Faced—With Dual Arm	14"-30"	259-02AD	LCV-A1

NOTE: In addition to Dual Arms, Limit Switches & Tapped Cover, M&H also can provide check valves with special coatings and tapped bosses. See drawing CV-TB for location and sizes of tapped bosses.

July 2005 / C508 Check Valves

SUGGESTED SPECIFICATIONS

M&H AWWA C508 STANDARD FLANGED CHECK VALVES

- ◆ Style 59-02 plain / 159-Lever & Weight / 259-02 Lever & Spring
- ◆ Sizes 2" Through 30"
- ◆ Water / Sewage Service

GENERAL Check Valves shall be all iron body, bronze mounted, full opening swing type. Valve clapper shall swing completely clear of the waterway when valve is full open, permitting a "full flow" thru the valve equal to the nominal pipe diameter. They shall comply with AWWA Standard C-508 latest revision.

RATING Check Valves (2" through 12") shall be rated at 175 psi water working pressure, 350 psi hydrostatic test for structural soundness. Check valves (14" through 30") shall be rated at 150 psi water working pressure, 300 psi hydrostatic test. Seat tightness at rated working pressure shall be in accordance with values shown in AWWA Standard C-500 for gate valve and fully conform to AWWA C508.

END CONFIGURATION Check Valves shall be furnished with 125# ANSI flanged end connections.

MATERIALS All cast iron shall conform to ASTM-A-126 Class B. Casting shall be clean and sound without defects that will impair their service. No plugging or welding of such defects will be allowed.

Clappers shall be all Bronze for sizes through 2"-3" and cast iron, rubber faced for sizes 4" and larger. When specified, neoprene bronze facing shall be furnished in place of rubber facing. 14" and larger shall have rubber faced clapper.

Hinge pins shall be 18-8 stainless steel rotating bronze plugs.

Bolts shall be electro-zinc plated steel with hex heads and hex nuts in accordance with ASTM A-307 and A-563, respectively.

DESIGN Check Valves shall be constructed to permit top entry for complete removal of internal components without removing the valve from the line.

Glands shall be O-ring (2" through 12") and conventional packing (14" through 30").

When specified, for application conditions of rapid flow reversal or vertical installation, check valve shall be equipped with adjustable outside lever & spring or lever & weight to accomplish faster closing and to minimize slamming effect.

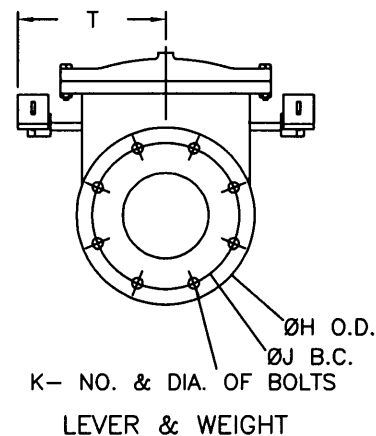
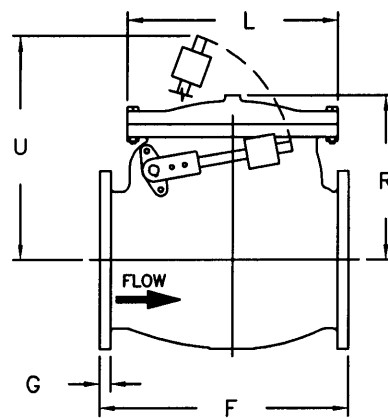
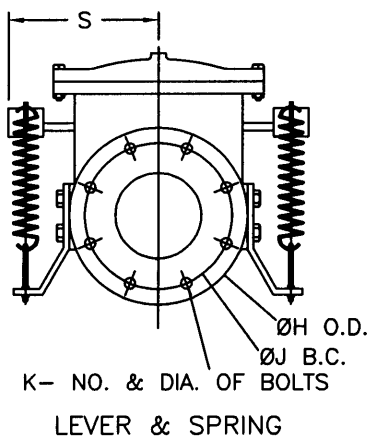
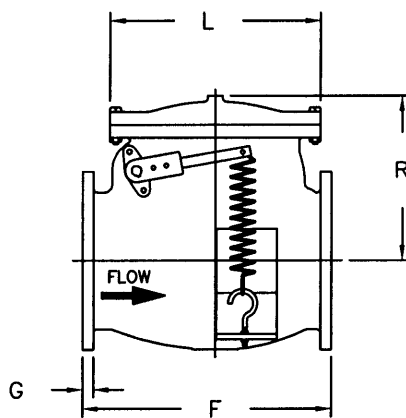
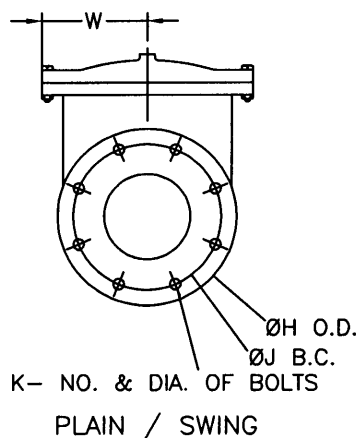
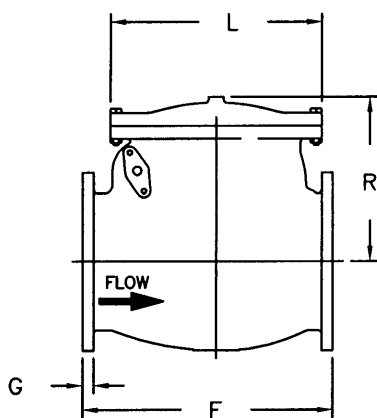
Bosses shall be provided on check valves which may be tapped for draining or used for by-pass. When tapping is required, boss designation and size of tap should be stated.

All valves 14" and larger shall have extended hinge pins for future addition of levers and springs if required. Valves shall be suitable for installation in either horizontal or vertical position. Increasing check valves shall be available in accordance with the provisions of this specification.

COATING The inside and outside of all valves, together with the working parts except bronze and machined surfaces, shall be coated in accordance with AWWA standards.

MARKINGS Markings shall be in accordance with AWWA C-508 and shall include size, working pressure, and cast arrow to indicate direction of flow, name of manufacturer, and year of manufacture.

July 2005 / C508 Check Valves



VALVE SIZE	14	16	18	20	24	30
F	30	35	36 1/2	37 5/8	44	49 1/2
G	1 3/8	1 7/16	1 9/16	1 11/16	1 7/8	2 1/8
H	21	23 1/2	25	27 1/2	32	38 3/4
J	18 3/4	21 1/4	22 3/4	25	29 1/2	36
K	12-1	16-1	16-1 1/8	20-1 1/8	20-1 1/4	28-1 1/4
L	23 1/2	27 1/2	27 1/2	32	38 3/4	43 3/4
R	18 3/4	23	25	24 1/2	28	32 7/8

LEVER & SPRING CHECK VALVES--STYLE 259-02

S	15 1/2	17 3/4	18 5/8	20	22 1/2	25 1/8
WEIGHT	1150	1630	1835	2500	3415	4950

LEVER & WEIGHT CHECK VALVES--STYLE 159-02

T	17	19 1/2	21	22 3/8	28 1/2	30 5/8
U	32 1/2	34 1/2	40	42	54 1/2	57 1/2
WEIGHT	1082	1695	1760	2590	3555	5450

PLAIN / SWING CHECK VALVES--STYLE 59-02

W	11 3/4	14	13 3/4	16	19 3/8	-
WEIGHT	1060	1460	1750	2230	3040	-

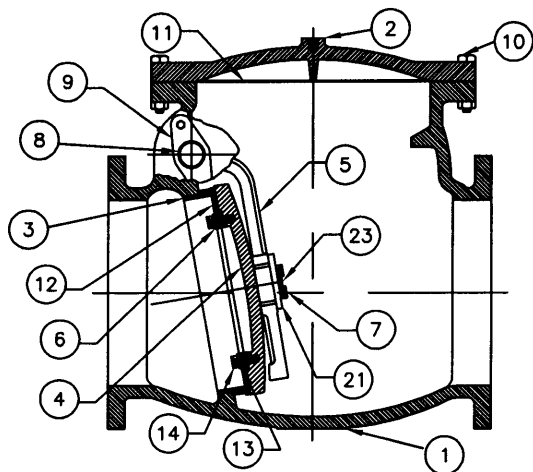
M&H VALVE COMPANY
ANNISTON, ALABAMA
A DIVISION OF MCWANE INC.

DWN: TRIJ

DATE: 7/1/05

DWG. NO.
LCV-A1

14" THRU 30" CHECK VALVES
FLANGED ENDS
ALL STYLES
DIMENSIONS

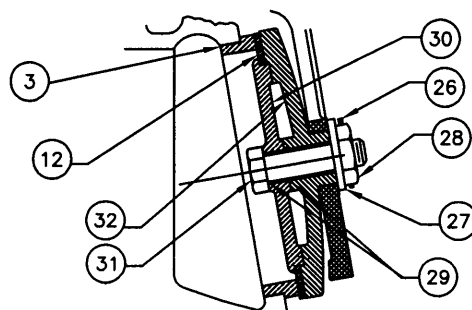


14"-30" CHECK VALVE BODY

PART NO	QTY	DESCRIPTION	MATERIAL & ASTM SPEC
1	1	SPRING ARM LEVER	BRONZE B-62
2	1	SPRING	STEEL
3	1	SPRING BRACKET	STEEL
8	1	SPRING EYEBOLT	STEEL A-307 GRADE B
9	2	SPRING BRACKET CAP SCREW	STEEL A-307 GRADE B
10	*	SPRING ARM BAR	CR STEEL C-1018/1020
11	1	SPRING ARM BAR	CR STEEL C-1018/1020

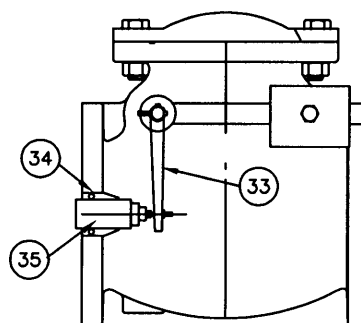
16" - 30" CLAPPER ASSEMBLY

4	1	CLAPPER	CI A-126 CLASS B
5	1	CLAPPER ARM	BRONZE CDA 86400
6	*	LOCK WASHER	STEEL
7	*	CAP SCREW	BRONZE B-21
12	1	CLAPPER RING	NEOPRENE
13	1	RING CLAMP	BRONZE CDA 84400
14	*	RING CLAMP CAP SCREW	BRONZE B-21
21	1	CAP PLATE	CI A-126 CLASS B
23	1	LOCK WIRE	STAINLESS STEEL



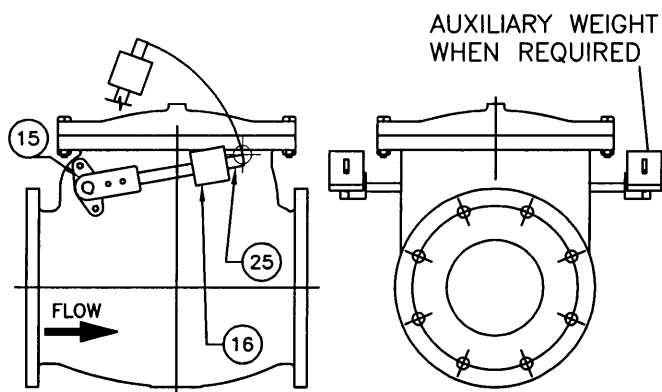
14" CLAPPER ASSEMBLY

5	1	CLAPPER ARM	BRONZE CDA 86400
12	1	CLAPPER RING	NEOPRENE
26	1	COTTER PIN	BRONZE
27	1	LOCKWASHER	STEEL
28	1	CLAPPER NUT	BRONZE
29	2	GASKET	COPPER NON-ASBESTOS
30	1	CLAMPING RING	BRONZE
31	1	CAP SCREW OR BOLT	BRONZE
32	1	CLAPPER	CI A-126 CLASS B



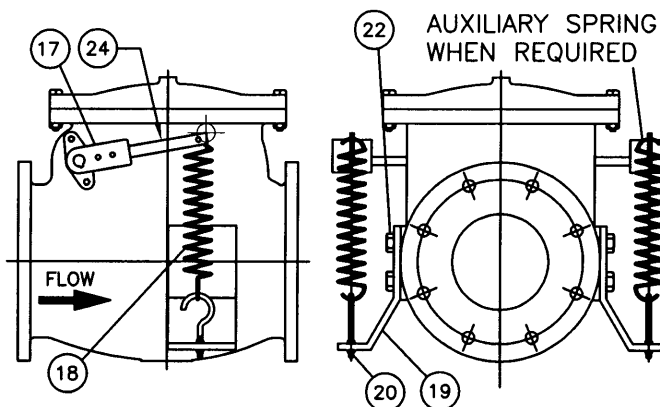
LIMIT SWITCH OPTION

33	1	TRIPPER ARM	STEEL
34	1	MOUNTING BRACKET	STEEL
35	1	LIMIT SWITCH	SD-D-TYPE-CR53E



LEVER & WEIGHT CHECK VALVE

15	1	WEIGHT LEVER ARM (14" ONLY)	CI A-126 CLASS B
16	1	WEIGHT	BRONZE B-62
25	1	WEIGHT ARM BAR	CR STEEL C-1018/1020



LEVER & SPRING CHECK VALVE

17	1	SPRING ARM LEVER (14" ONLY)	CI A-126 CLASS B
18	1	SPRING	BRONZE B-62
19	1	SPRING BRACKET	STEEL
20	1	SPRING EYEBOLT	STEEL A-307 GRADE B
22	*	SPRING BRACKET CAP SCREW	STEEL A-307 GRADE B
24	1	SPRING ARM BAR	CR STEEL C-1018/1020

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

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

14" THRU 30" CHECK VALVES
FLANGED ENDS
ALL STYLES
MATERIAL LIST