

Serving the Water & Waste Water Industry Since 1878

IN-PLANT VALVES



M&H VALVE COMPANY

M&H Valve is a division of McWane, Inc.

www.mh-valve.com



For Generations

AUTOMATION



M&H VALVE COMPANY



MORIN ACTUATOR DESCRIPTION:

The Morin Actuator is a heavy-duty, quarter-turn scotch yoke piston design available in ductile iron/carbon steel, ductile iron/stainless steel and all stainless steel through 238,000 in. lbs. of torque. It is available as double acting (air-to-air) and spring return (fail-safe). Available accessories include:

- solenoid valves, positioners, filter/regulator/lubricators
- partial stroke test device
- lockout device
- jackscrew, hydraulic overrides
- AWWA tested per C504 for water or pneumatic service

WATER INDUSTRY APPLICATIONS

- filter galleries
- pump control/isolation
- submersible
- fail-safe isolation



AUMA SA/GS Quarter-turn Electric Actuator
Application: Used to operate larger quarter-turn valves



AUMA SG Quarter-turn Electric Actuator
Application: Used to operate smaller quarter-turn valves

Electric motor actuators can be furnished when required. Quarter-turn actuators are available for butterfly and eccentric plug valves. Multi-turn actuators are available for resilient wedges and double disc gate valves.

All actuators contain the following standard accessories: a handwheel for manual operation, open and close position limit switches to assure motor shut-off at the ends of travel, open and close torque limit switches to protect the valve from excessive actuator torque and a separate drive nut or coupling. The motors have been designed for high starting torque and long service life. Quarter-turn actuators are furnished with adjustable end of position mechanical stops.

Optional accessories include intermediate position limit switches, position feedback devices and integral motor controls. Generally, motor controls consist of reversing starters, control transformer, push buttons, selector switches and indicating lights. For these applications requiring control by an analog signal (usually 4-20 mA DC), a positioner can be furnished with motor controls.

M&H ECCENTRIC PLUG VALVES



AVAILABLE END CONNECTIONS & SIZE RANGE

Flanged End	3" – 24"
M.J.	3" – 24"
Grooved	3" – 16"

ACCESSORIES

Floorstands	Electric Motor Actuators
Extension Stems	Cylinder Actuators
2" sq. Operating Nuts	Limit Switches
Handwheels	Stem Guides
Lever Wrench Head	Floor Boxes
Chainwheels	"T" Handles
Worm Gear Actuators	Chain levers
	Extended Bonnet

SIZE RANGE	3" – 24"	
	Water Working Pressure PSI	Hydrostatic Test PSI
3" – 12"	175	265
14" – 24"	150	225

M&H BUTTERFLY VALVES



AVAILABLE END CONNECTIONS & SIZE RANGE

Flanged End	3" – 54"
M.J.	4" – 48"
Flanged X MJ	6", 8", 12", 16"
Wafer	4" – 20"

ACCESSORIES

Floorstands	Solenoid Valves
Extension Stems	Positioners
Stem Guides	Speed Controls
Traveling Nut & Screw Actuator	Chainwheels
Worm Gear Actuators	2" sq. Operating Nuts
Hand Lever Actuators	Handwheels
Electric Motor Actuators	Cranks
Limit Switches	"T" Handles
Cylinder Actuators	Floor Boxes
	Extended Bonnet

SIZE RANGE	CLASS 150B		
	Water Working Pressure PSI	Bubble-Tight Test PSI	Hydrostatic Test PSI
3" – 54"	150	150	300

SIZE RANGE	CLASS 250B		
	Water Working Pressure PSI	Bubble-Tight Test PSI	Hydrostatic Test PSI
3" – 48"	250	250	500

Contact your local representative for sizes up to 120".

M&H RESILIENT WEDGE (R/W) AND DOUBLE DISC GATE VALVES



AVAILABLE END CONNECTIONS & SIZE RANGE

End Connection	R/W®	Double Disc
Flanged End	2" – 54"	4" – 48"
M.J.	2" – 48"	4" – 48"
Flanged End (OS&Y)	2" – 24"	14" – 48"

For additional end connections, please contact your local representative.

ACCESSORIES

Floorstands	Stem Guides
Indicator Posts	Floor Boxes
Electric Actuators	Chainwheels
Manual Operators	2" Operating Nuts
Extension Stems	Handwheels
	"T" Handles

For additional accessories please contact your local representative.

RESILIENT WEDGE

SIZE RANGE	Water Working Pressure PSI	Bubble-Tight Test PSI	Hydrostatic Shell Test PSI
2" – 12" AWWA	250	250	500
14" – 54" AWWA	250	250	500
2" – 16" ULFM	200	200	400

DOUBLE DISC GATE VALVE

SIZE RANGE	Water Working Pressure PSI	Hydrostatic Test PSI
2" – 12"	200	400
14" – 48"	150	300

Also available: High pressure double disc gate valve.

M&H MUD VALVES



AVAILABLE END CONNECTIONS & SIZE RANGE

Flanged End, Non-Rising Stem	4" – 24"
Flanged End, Rising Stem	4" – 24"

NOTE:

Flanged ends are faced and drilled to ANSI 125 pound template except holes under yoke/flange connection.

ACCESSORIES

Handwheels
2" Square Operating Nut
Floorstands
Extension Stems
Electric Motor with Extension Stem
Manual Actuator
"T" Handles
Stem Guides
Floor Boxes

M&H SWING CHECK VALVES



AVAILABLE END CONNECTIONS & SIZE RANGE

Flanged	2" – 30" (Plain)
Flanged	2" – 30" Outside Weight & Lever
Flanged	2" – 30" Outside Spring & Lever

ACCESSORIES

Outside Weight and Lever
Outside Spring and Lever
Limit Switches
Iron Rubber Faced Gates

SIZE RANGE	Water Working Pressure PSI	Hydrostatic Shell Pressure PSI
2" – 12"	200	400
14" – 30"	150	300

M&H KENFLEX RESILIENT SEATED CHECK VALVES



SIZE RANGE	Water Working Pressure PSI	Hydrostatic Shell Pressure PSI
4" – 12"	250	500

M&H CUSHIONED SWING CHECK VALVE



AVAILABLE END CONNECTIONS & SIZE RANGE

Flanged 4" – 30" Outside Weight and Lever

ACCESSORIES

Outside Weight and Lever
Iron Rubber Faced Gates

SIZE RANGE	Water Working Pressure PSI	Hydrostatic Shell Pressure PSI
3" – 12"	200	400
14" – 30"	150	300

M&H INCREASING SWING CHECK VALVES



AVAILABLE END CONNECTIONS

Flanged–(Plain)
Flanged–Outside Spring & Lever
Flanged–Outside Weight & Lever

ACCESSORIES

Outside Weight and Leve Limit Switches
Outside Spring and Lever Iron Rubber Faced Gates

SIZE RANGE	SIZE RANGE
3" X 4"	8" X 10"
4" X 6"	8" X 12"
4" X 8"	10" X 12"
6" X 8"	6" X 10"

Water Working Pressure 175 PSI
Hydrostatic Shell Pressure 350 PSI

SIZE RANGE	Working Pressure
4" – 24"	Recommended for use in lines of low seating or unseating pressures only

M&H SHEAR GATE VALVES



F3000-T

AVAILABLE END CONNECTIONS & SIZE RANGE

Flanged End Frame 4" – 30"

NOTE:

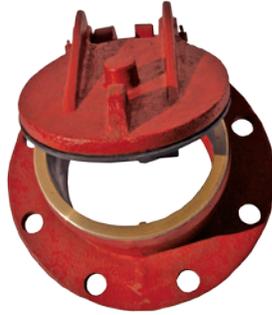
Flanged End Frame is faced and drilled to ANSI 125 pound template.

ACCESSORIES

Lifting Handle and Hooks

SIZE RANGE	Working Pressure
4" – 30"	Recommended for use in lines of low seating and unseating pressures only

M&H WALL TYPE PRESSURE RELIEF VALVE



AVAILABLE END CONNECTIONS & SIZE RANGE

Flange 4" & 6"

ACCESSORIES

4" & 6" F-1496T Wall Pipe with Grate

M&H FLOOR TYPE PRESSURE RELIEF VALVES



PRESSURE:

The cover for the Pressure Relief Valve weighs approximately 6 lbs. and starts to open at a head of approximately 9" of water.

INSTALLATION:

In order for the F-1493T Floor Type Valve to operate correctly, it must be installed in a vertical position.

Length can be increased to desired dimension by adding PVC or Ductile pipe into bell.

SIZE

4" & 6"

Standard Body Length (inches)	8"
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M&H FLAP VALVES



F3012-T

AVAILABLE END CONNECTIONS & SIZE RANGE

Flanged End 4" – 30"

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.

ACCESSORIES



FLOOR STANDS

F-5500-T Standard Pattern N.R.S.
F-5505-T Standard Pattern N.R.S.
Indicating



FLOOR BOX

F-5695-T Bushed
Max. Length 12"
Min. Length 8"
Max. Stem Dia. 1 3/4"



STEM GUIDES F-5660-T

SIZE	MIN. LENGTH	MAX. LENGTH
#3	2 1/2"	17"
#5	15"	24"
#6	24"	35"



T-HANDLE VALVE WRENCHES

F-2520-T Rigid Wrench



EXTENSION STEMS

Diameters up to 2 1/2"
Any Length



COMMITTED TO ENVIRONMENTAL RESPONSIBILITY

M&H VALVE COMPANY IS COMMITTED TO PROTECTING OUR NATURAL RESOURCES THROUGH ENVIRONMENTALLY RESPONSIBLE MANUFACTURING PRACTICES, INCLUDING THE USE OF 80+% RECYCLED CONTENT IN OUR HYDRANTS AND VALVES.

To learn more about our commitment to the environment, call 256-237-3521.



www.mh-valve.com



M&H VALVE COMPANY

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For Generations

SIZE RANGE

PRESSURE RATING

ACCESSORIES / OPTIONS

SUGGESTED SPECIFICATIONS

M&H VALVE—SHEAR GATES (4”-30”) STYLE 44-02

SIZE RANGE	WORKING PRESSURE
4”-30”	Recommended for use in lines of low seating pressure only.

Note: Seating pressure is tending to push gate to seat.

<u>Available End Connections</u>	<u>Size Range</u>	<u>Style No.</u>
Flanged End Frame	4”-30”	44-02

Note: Flanged End Frame are faced and drilled to ANSI 125lb. template.

Accessories / Options:

Lifting Handle & Hooks

SUGGESTED SPECIFICATIONS:

Shear gate shall be full opening; circular port, iron body bronze mounted design and furnished with flanged ends.

The body (frame), gate and wedges shall be of cast iron conforming to ASTM specification A-126 Class B.

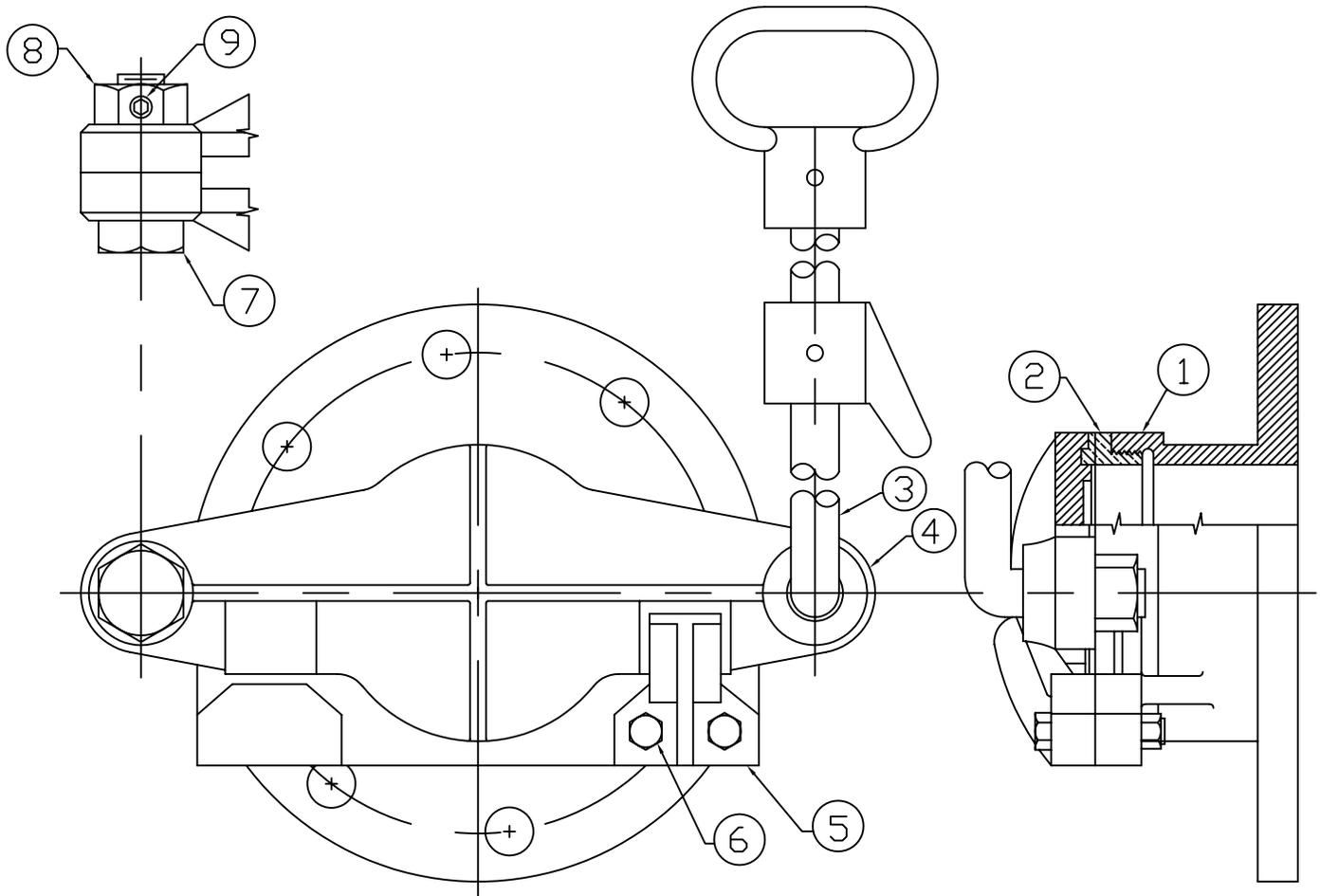
The valve shall be furnished with a wedge bolted to the body so they can easily be removed and replaced due to wear.

The gate shall be sturdily proportioned and pivot on a solid bronze hinge bolt.

The bronze gate (seat ring shall be rolled into a dovetailed groove under pressure to make one inseparable unit. The bronze gate ring face shall be machined to a smooth finish. The body seat ring shall be bronze, threaded and screwed into place and the face machined to a smooth finish.

Lift rods are used to manually raise and lower the Shear Gate disc from a position above the gate. A cast iron catch hook may be adjusted on the lift rod to allow the rod to be hung on a hanger placed in the wall. Lift rod material is 3/4” dia. Carbon steel. Catch and loop handle are cast iron. Lift rods may be made to specified length in 6” increments.

July 2005 / M&H Shear Gates



PARTS LIST					
ITEM	DESCRIPTION	REQ'D	MATERIAL	ASTM	
1	BODY	1	CAST IRON	A126	CL. B
2	SEAT RING	1	BRONZE	B62	
3	LIFT HANDLE DISC W/BR	1	STEEL	A107	GR. 1115
4	DISC RING	1	CAST IRON	A126	CL. B
5	RIGHT HAND WEDGE	1	CAST IRON	A126	CL. B
6	WEDGE BOLT	2	STEEL		ASA B18.2
7	HINGE BOLT	1	BRONZE	B62	
8	HINGE BOLT NUT	1	BRONZE	B62	
9	SET SCREW	1	STEEL		PLATED

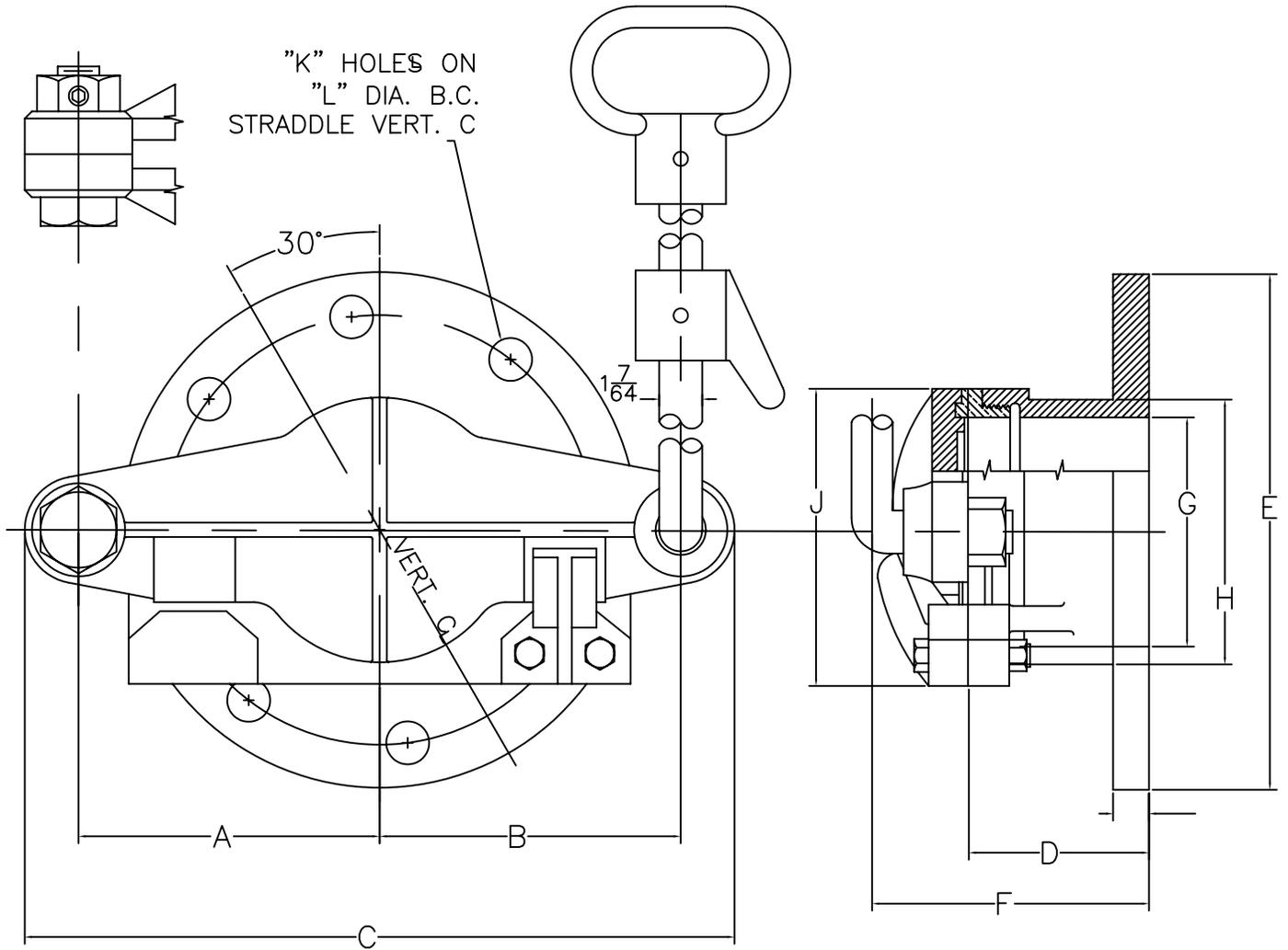
FURNISHED WITH TWO FOOT LIFT HANDLE AND CATCH

LONGER LIFT HANDLE FURNISHED WHEN SPECIFIED

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

DWN: TRIJ
DATE: 7/1/05
DWG. NO.
SGV-A1

4" THRU 30" SHEAR GATES
VALVE ASSEMBLY / MATERIAL LIST
STYLE 44-02
FLANGED END



VALVE SIZE	4	6	8	10	12	14	16	18	20	24	30
A	5 1/4	6 1/2	8	9 3/8	11	13 1/2	14 1/2	15 1/2	18	21	24
B	5 1/4	6 1/2	8	9 3/8	11	13 1/2	14 1/2	15 1/2	18	21	24
C	12 3/8	15 1/8	18 3/8	21 3/8	24 3/4	31	33 1/2	36	41	47	53 1/2
D	3 1/4	3 3/8	3 5/8	4	4 3/8	4 3/4	5 1/2	6	6	6 1/2	6 1/2
E	9	11	13 1/2	16	19	21	23 1/2	25	27 1/2	32	38 3/4
F	5	5 1/4	5 3/8	6	6 5/8	7 1/4	8 9/16	9 3/8	9 1/2	10 1/2	10 3/4
G	4	6	8	10	12	14	16	18	20	24	30
H	4 5/8	6 3/4	8 3/4	10 7/8	13	15 1/4	17 1/4	19 1/4	21 1/2	25 3/4	32
I	5/8	11/16	3/4	13/16	7/8	1	1 1/8	1 1/4	1 1/4	1 3/8	1 1/2
J	5	7	9 1/4	11 1/2	13 1/2	15 3/4	18	20	22 1/4	26 1/4	32 3/4
K	8-3/4	8-7/8	8-7/8	12-1	12-1	12-1 1/8	16-1 1/8	16-1 1/4	20-1 1/4	20-1 3/8	28-1 3/8
L	7 1/2	9 1/2	11 3/4	14 1/4	17	18 3/4	21 1/4	22 3/4	25	29 1/2	36
WEIGHT	37	61	90	138	174	246	320	362	500	672	980

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

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

4" THRU 30" SHEAR GATES
GENERAL DIMENSIONS
STYLE 44-02
FLANGED END

INSTALLATION
OPERATION
MAINTENANCE

M&H VALVE—SHEAR GATES (4”-30”) STYLE 44-02

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 mechanisms for lifting.
- E. Prepare pipe end as required, and install valve as per appropriate instructions for the specified joint. The valve is mounted 30 degrees offset from the vertical centerline to allow for proper closure.

II. Operations

Once installed, operation of the shear gate is simple and straight forward, using the lift handle to open and close the gate. The valve may be held in various open positions by using the adjustable catch hook on the lift handle.

III. Maintenance

Inspection should be conducted at least once a year. Joint should be visually inspected for leakage. Raise and lower the gate to check for free operation. Check bronze gate ring and seat ring for freedom from damage. The seating may be adjusted by tightening or loosening the hinge bolt nut to change the relationship between the hinge about and wedge. Use a feeler gauge of .004 to adjust gate disc to the proper seat gap around the total seating circumference. Remove any debris found on the inside of valve.

Periodic visual inspection of the coating is recommend with field cleaning and painting as required.

There are no recommended spare parts.

There are no lubrication requirements.