

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

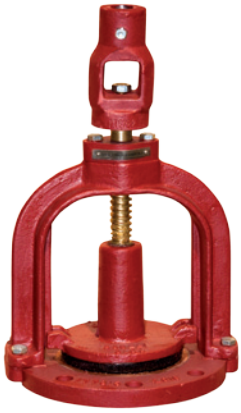
SIZE RANGE	Water Working Pressure PSI	Bubble-Tight Test PSI	Hydrostatic Shell Test PSI
2" – 12" AWWA	250	250	500
14" – 54" AWWA	250	250	500
2" – 16" ULFM	200	200	400

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

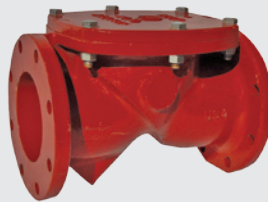
Flanged	2" – 30" (Plain)
Flanged	2" – 30" Outside Weight & Lever
Flanged	2" – 30" Outside Spring & Lever

ACCESSORIES

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

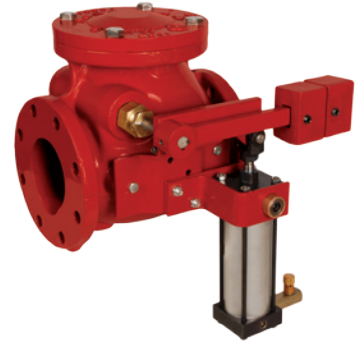
SIZE RANGE	Water Working Pressure PSI	Hydrostatic Shell Pressure PSI
2" – 12"	200	400
14" – 30"	150	300

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:

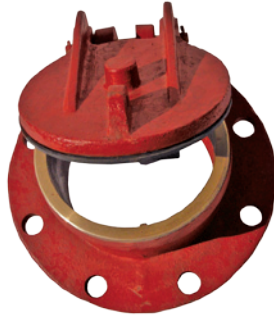
Flanged End Frame is faced and drilled to ANSI 125 pound template.

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"
-------------------------------	----

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

605 West 23rd Street • Anniston, Alabama 36201
PHONE 256-237-3521 FAX 256-741-6253



For Generations

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

SIZE RANGE

PRESSURE RATING

ACCESSORIES / OPTIONS

SUGGESTED SPECIFICATIONS

M&H VALVE—MUD VALVES (4”-24”) STYLE 140-02

SIZE RANGE	WORKING PRESSURE
4”-24”	Mud valves are recommended for use in lines of low seating or unseating pressures only.

<u>Available End Connections</u>	<u>Size Range</u>	<u>Style No.</u>
Flanged End, (Non-Rising Stem)	4”-24”	140-02
Flanged End, (Rising Stem)	4”-12”, 16”, 18”	1040-02

Accessories / Options:

Hand wheels

“T” Handles

2” Square Operating Nuts

Stem Guides

Floor stands (Non-rising (NRS) / Rising Stem (RS))

Floor boxes

Extension Stems---(Consult Factory Rep or Distributor for material other than cold rolled steel.)

NOTE: Consult Factory for special applications or sliding stems.

SUGGESTED SPECIFICATIONS:

The Mud valve shall be of the heavy duty flanged type designed to provide a positive seal under both seating and unseating head conditions. The Valve shall be (non-rising) stem style as detailed on the schedule or the plans.

The frame, yoke and gate shall be sturdily proportioned for strength and rigidity and be of cast iron conforming to ASTM specifications A126 Class B.

The stem, and stem nut shall be bronze. The stem shall be machined with accurately cut modified acme threads.

The seat ring shall be bronze with a tapered, accurately machined seating face. The plug seat shall be a seamless molded ring of BUNA-N tapered to accurately mate with the seat ring to form a positive seal.

Mud valves shall be F-3075-T non-rising stem design or F-3085-T rising stem design as furnished by M&H Valve or approved equal.

July 2005 / M&H Mud Valves

INSTALLATION / OPERATION / MAINTENANCE

M&H VALVE—MUD VALVES (4”-24”) STYLE 140-02

General M&H Mud Valves are designed for settling basin drain line, sump blow-offs, swimming pool drains, waterworks, sewage and filtration plant, irrigation systems, and industrial installations. They are recommended for use in lines of low seating or unseating pressures only.

M&H Mud Valves are rising stem, non-rising stem or sliding stem type. Bodies are cast iron. The stem, stem nut, and seat ring are bronze. The plug seat is seamless molded Buna-n tapered to mate with bronze seat ring. Bolts and nuts are rust proof steel.

M&H Mud Valves can be furnished with handwheel or operating nut as required. They can also be furnished with extension stem, with plain or indicating floorstand.

Installation

- A. Valve should be mounted to a standard 125# flange. Flange should be flush with the floor, level and free of debris.
- B. Check that valve end joints are clean.
- C. Remove packing material, if any.
- D. Operate valve before installation. Check that seat is free of defects.
- E. Do not lift or sling on sealing or operating surfaces.
- F. Install valve to flange using a full face soft rubber flange gasket and proper sized bolts/studs and nuts for valve size.
- G. Tighten all bolts evenly using a star tightening pattern. Do not overtighten. Uneven tightening, jacking or overtightening may result in excessive leakage.
- H. Before filling tanks, operate valve and insure that there is no binding or warping of the seat due to uneven torque on mounting bolts or studs.
- I. Specific valve installation, in relation to container base, varies per application and should be the responsibility of the design engineer.

Operation The operation of the M&H Mud Valve is straight forward, the gate is seated and unseated by rotating operating nut or handwheel in proper direction (unless sliding stem). The valve seats with the pressure in normal installations. Excess torque is not required.

Maintenance/Troubleshooting

At least once per year or whenever the tank or pool is drained, the valve should be inspected. Valve should be rinsed clean and seats inspected for damage. All bolts and nuts should be tightened as necessary. Operate valve to insure proper operation. Record all inspections with comments on work performed.

Lubrication Requirements

Periodic lubrication of the bronze valve operating stem is recommended using a *suitable lubricant.

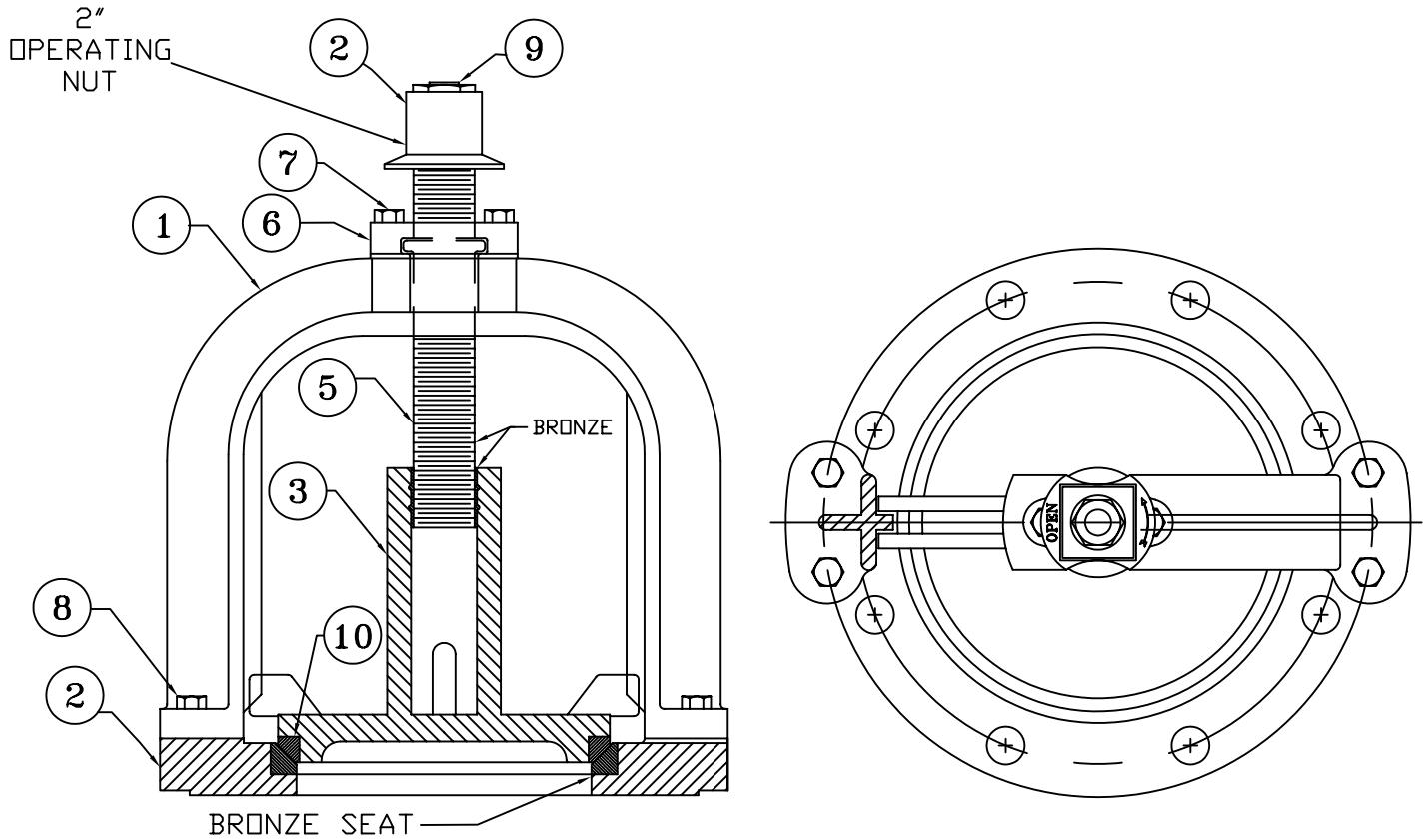
Recommended Spare Parts

None required

Field disassembly is not required or recommended by factory.

**Food grade grease similar to Chevron FM Grease EP NLGI 2.*

July 2005 / M&H Mud Valves



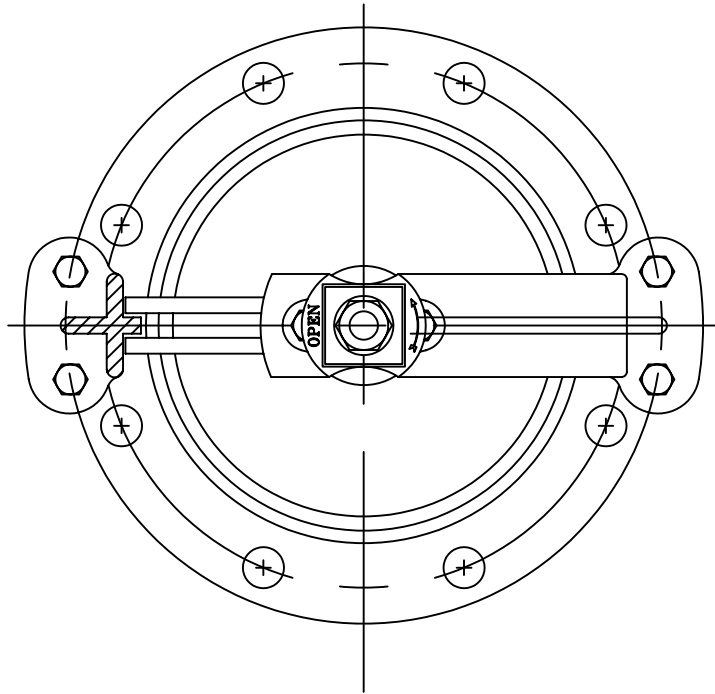
PARTS LIST					
ITEM	DESCRIPTION	REQ'D	MATERIAL	ASTM	
1	YOKE	1	CAST IRON	A126	CL. B
2	FRAME W/BRZ RING	1	CAST IRON	A126	CL. B
3	PLUG	1	CAST IRON	A126	CL. B
4	WRENCH NUT	1	CAST IRON	A126	CL. B
5	STEM	1	BRONZE	B136	ALLOY 675
6	STEM CAP	1	CAST IRON	A126	CL .B
7	CAP SCREW	2	STEEL		ASA B18.6.2
8	CAP SCREW	4	STEEL		ASA B18.6.2
9	CAP NUT	1	STEEL	A307	GR. B PLT'D
10	PLUG SEAT	1	BUNA-N		50 DURD

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

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

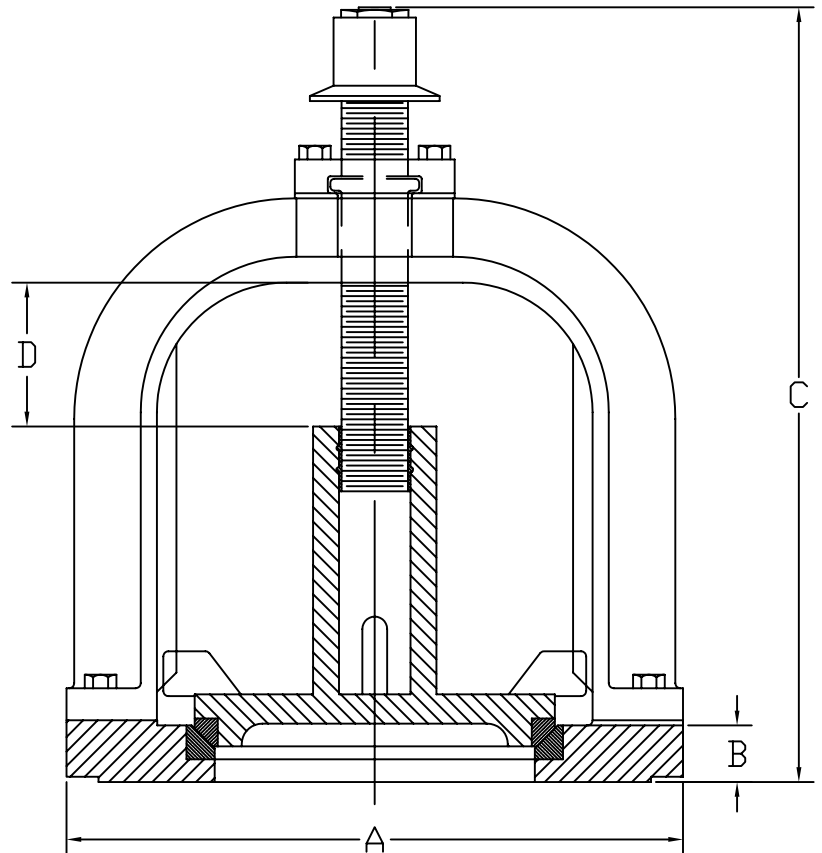
4" THRU 24" MUD VALVES
VALVE ASSEMBLY / MATERIAL LIST
STYLE 140-02
FLANGED CONNECTION

NON-RISING STEM MUD VALVE				
SIZE	A	B	C	D
3"	7 1/2	3/4	11 3/8	1 3/4
4"	9	15/16	14 3/4	1 7/8
6"	11	1	16 3/8	3 1/8
8"	13 1/2	1 1/8	19 3/8	4 5/16
10"	16	1 3/16	22 7/8	5 3/8
12"	19	1 1/4	24 3/4	6 9/16
14"	21	1 3/8	27 1/4	7 5/8
16"	23 1/2	1 7/16	29 7/8	8 7/16
18"	25	1 9/16	32 3/4	8 7/8
20"	27 1/2	1 11/16	37	9 7/8
24"	32	1 7/8	41 7/8	12 1/4



RISING STEM MUD VALVE				
SIZE	A	B	C	D
4"	9	15/16	10 3/4	1 7/8
6"	11	1	12 7/16	3 1/8
8"	13 1/2	1 1/8	14 1/4	4 5/16
10"	16	1 3/16	16 1/4	5 3/8
12"	19	1 1/4	18 3/16	6 9/16
14"				
16"	23 1/2	1 7/16	21 1/4	8 7/16
18"	25	1 9/16	23 1/16	8 7/8

14" Currently unavailable



M&H VALVE COMPANY
 A DIVISION OF McWane, Inc.
 P.O. BOX 2088
 ANNISTON, ALABAMA 36202

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

4" THRU 24" MUD VALVES
 GENERAL DIMENSIONS
 STYLE 140-02
 FLANGED CONNECTION