



M&H VALVE COMPANY

605 West 23rd Street, Anniston, Alabama 36201 (P) 256-237-3521 (F) 256-741-6253

September 25, 2018

Jefferson Parish, Department of Engineering
1221 Elmwood Park Blvd. Suite 801
Jefferson, LA 70123

Reference: Domestic Made Products

To Whom It May Concern;

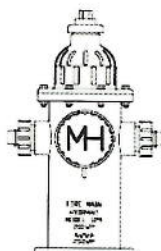
This letter is to certify that for M&H products marked as "100% Domestic" all components of these products have been manufactured (cast, wrought or molded), machined, coated and assembled in the U.S.A. This includes all iron and steel components (including all fasteners), all brass components and all non-metal components (including O-rings and seals).

100% Domestic products are available in Resilient Seated Gate Valves (sizes 2" thru 14"), Butterfly Valves (sizes 3" thru 48"), and Double Disc Gate Valves (sizes 3" thru 16").

If you have any other questions or concerns about this, please let me know.

Thanks,


Griffin Herb
Inside Sales Manager
M&H Valve Co.



M&H Valve Co.

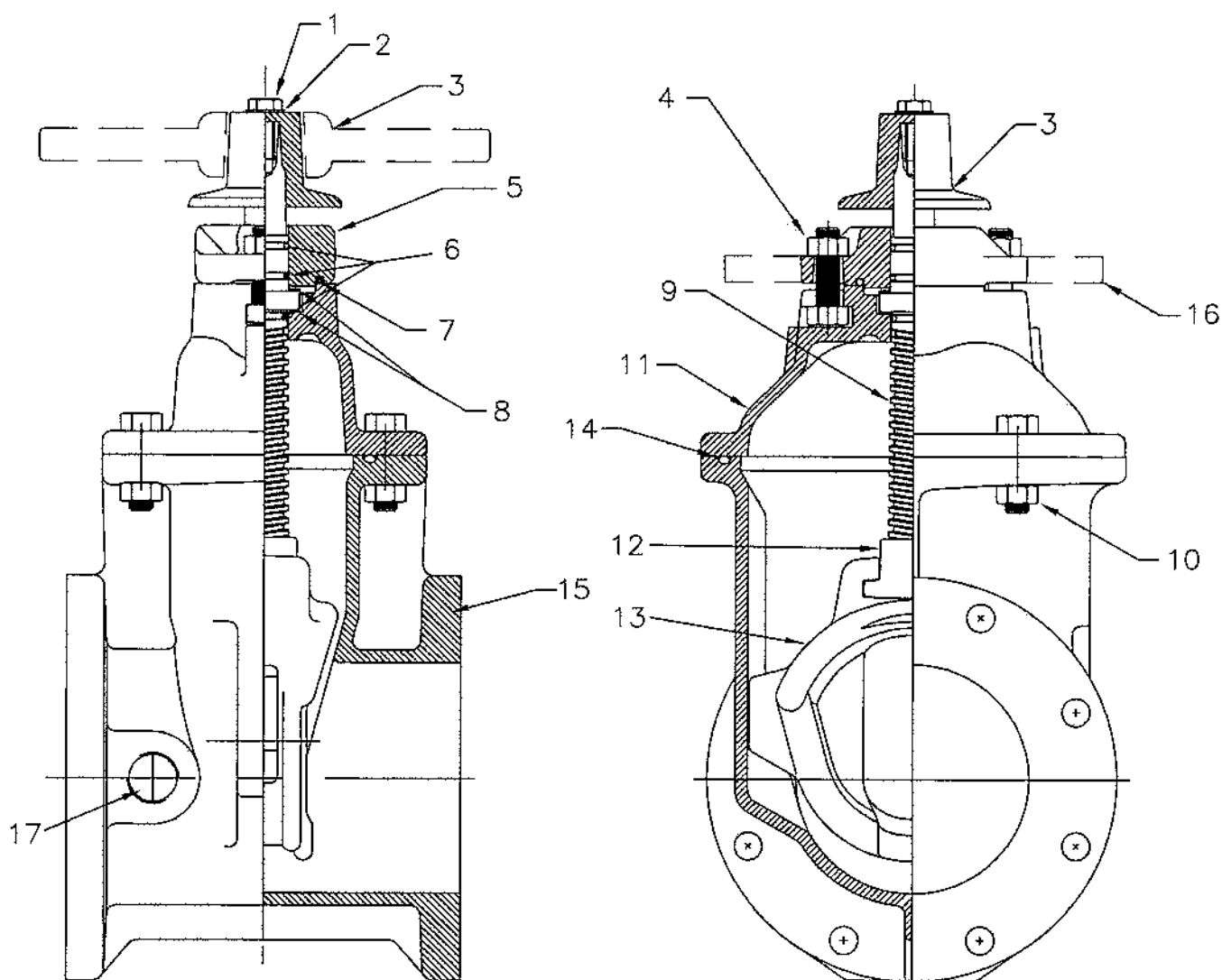
September 25th 2018

Jefferson Parish Valve Bid 2018-2019

100% Domestic Lead Times

Resilient-Seated Gate Valves.....8-12 Weeks
Butterfly Valves.....10-12 Weeks
Double Disc Gate Valves.....12-13 Weeks

ITEM	DESCRIPTION	MATERIAL	ASTM SPEC.
1	HOLD DOWN HEX BOLT	316 STAINLESS STEEL	ASTM F593C
2	HOLD DOWN BOLT FLAT WASHER	316 STAINLESS STEEL	ASTM F593C
3	OPERATING NUT OR HANDWHEEL	CAST IRON	ASTM A126 CLASS B
4	BOLTS/NUTS (STUFFING BOX)	316 STAINLESS STEEL	ASTM F593C / F594
5	STUFFING BOX/FOLLOWER PLATE	DUCTILE IRON	ASTM A536 70-50-05
6	O-RING (STEM) QTY=3	BUNA N	-----
7	O-RING (STUFFING BOX)	NBR	-----
8	THRUST WASHER BEARING	DELTRIN	-----
9	STEM (AWWA GRADE C)	BRONZE	ASTM B763 C99500
10	HEX HEAD BOLTS & NUTS	316 STAINLESS STEEL	ASTM F593C / F594
11	COVER/BONNET	DUCTILE IRON	ASTM A536 70-50-05
12	STEM NUT (AWWA GRADE A)	BRONZE	ASTM C87850
13	WEDGE/DISC/GATE	DUCTILE IRON (EPDM COATED)	ASTM A536 70-50-05
14	O-RING (COVER)	NBR	-----
15	BODY (ALL TYPES)	DUCTILE IRON	ASTM A536 70-50-05
16	OPTIONAL POST PLATE (3"-12")	DUCTILE IRON	ASTM A536 70-50-05
17	PIPE PLUG (OPTIONAL)	GALVANIZED STEEL	-----



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

DWN: ZF

DATE: 9/28/16

DWG. NO.

Q16-90005

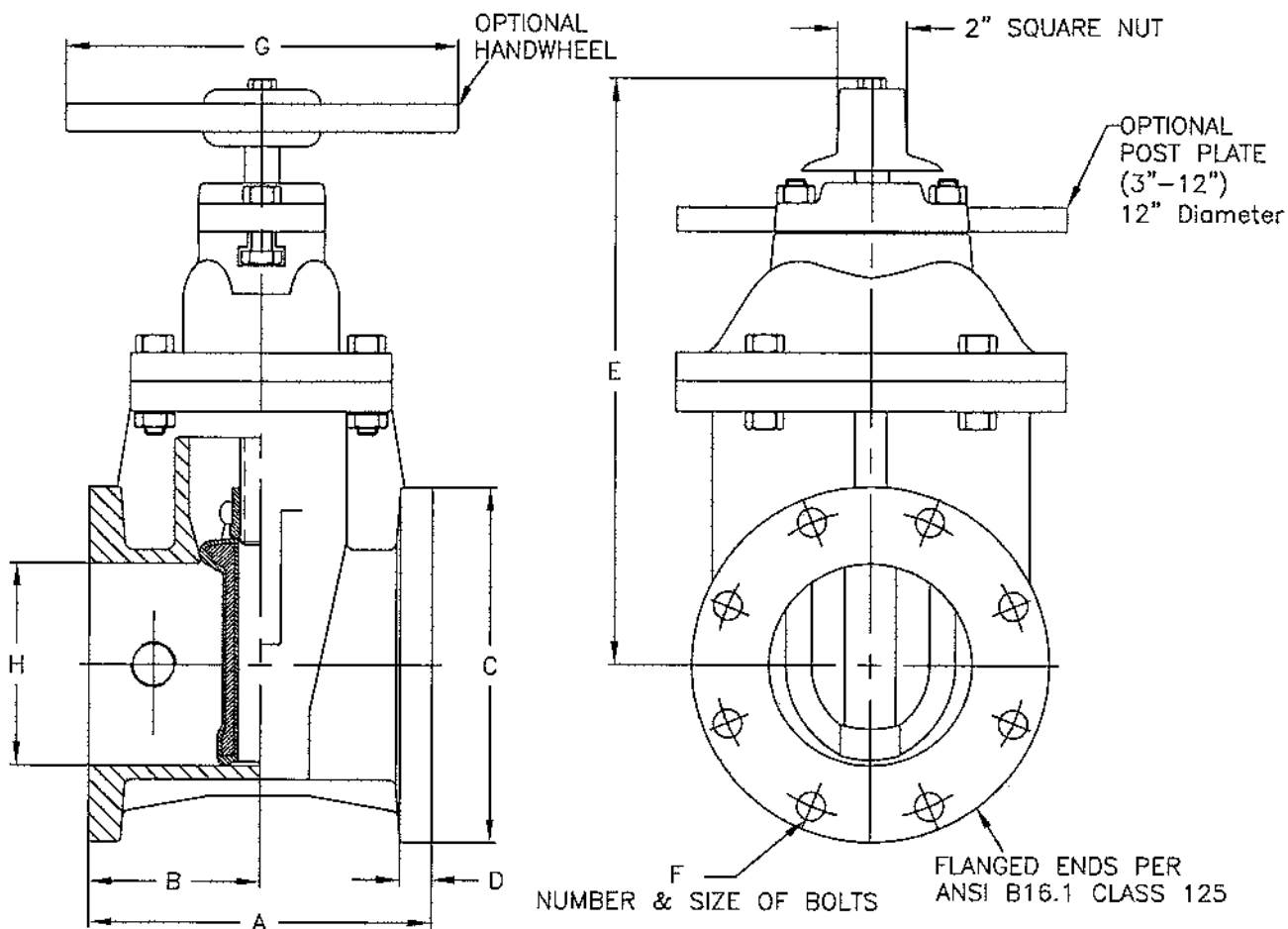
3" THRU 12"
RESILIENT SEAT GATE VALVE, C515
2" OP NUT, DOMESTIC, 316 FSTNRS
VALVE ASSEMBLY/MATERIAL LIST



COMPLIES WITH
APPLICABLE
REQUIREMENTS OF
AWWA C515

7561
7561-HW
7561-P

WITH 2" SQUARE NUT
WITH HANDWHEEL
WITH POST PLATE (3"-12")



VALVE SIZE	A	B	C	D	E	F	G	H	WEIGHT 2" NUT
**3	8	4	7 1/2	3/4	12 3/8	4-5/8	10	3	68
4	9	4 1/2	9	15/16	14 3/4	8-5/8	10	4 1/4	75
6	10 1/2	5 1/4	11	1	19	8-3/4	12	6 1/4	119
8	11 1/2	5 3/4	13 1/2	1 1/8	22 1/2	8-3/4	14	8 1/4	178
10	13	6 1/2	16	1 3/16	26 1/2	12-7/8	18	10 1/4	298
12	14	7	19	1 1/4	30	12-7/8	18	12 1/4	399

HANDWHEEL--ADD 1# (2" - 2 1/2"), 6.5# (3"-4"), 7#(6"), 10#(8"), 15#(10" & 12")

INDICATOR POST PLATE ADD 16# (3"-12") ONLY

PALLET QUANTITIES 2" NUT: 46(2 1/2"), 36(3"), 30(4"), 24(6"), 10(8"), 6(10"), 6(12")

PALLET QUANTITIES HANDWHEEL: 36(2" & 2 1/2"), 30(3"), 40(4"), 18(6"), 8(8"), 6(10"), 4(12")

TURNS TO OPEN: 7 3/4(2"), 8(2 1/2"), 10(3"), 13 1/2(4"), 19 1/2(6"),

25 1/2(8"), 31 1/2(10"), 37 3/4(12")

**2" to 3" SIZES FULL WALL DUCTILE (PER AWWA C509 DIMENSIONS)

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

DWN: ZF

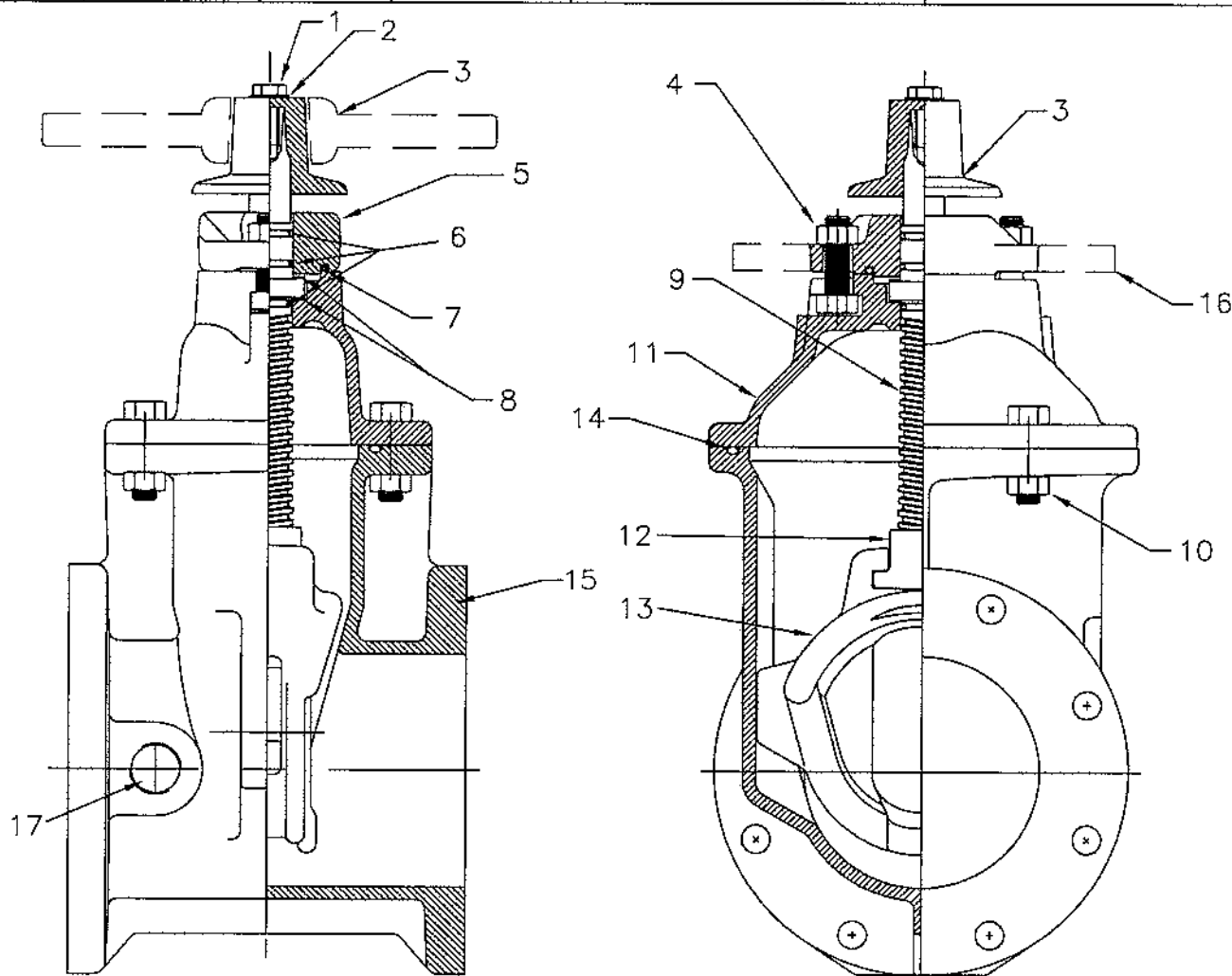
DATE: 9/28/16

DWG. NO.

Q16-90005

3" THRU 12"
RESILIENT SEAT GATE VALVE
C515-STYLE 7561
2" OP NUT, FLANGED ENDS

ITEM	DESCRIPTION	MATERIAL	ASTM SPEC.
1	HOLD DOWN HEX BOLT	316 STAINLESS STEEL	ASTM F593C
2	HOLD DOWN BOLT FLAT WASHER	316 STAINLESS STEEL	ASTM F593C
3	OPERATING NUT OR HANDWHEEL	CAST IRON	ASTM A126 CLASS B
4	BOLTS/NUTS (STUFFING BOX)	316 STAINLESS STEEL	ASTM F593C / F594
5	STUFFING BOX/FOLLOWER PLATE	DUCTILE IRON	ASTM A536 70-50-05
6	O-RING (STEM) QTY=3	BUNA N	-----
7	O-RING (STUFFING BOX)	NBR	-----
8	THRUST WASHER BEARING	DELRIN	-----
9	STEM (AWWA GRADE C)	BRONZE	ASTM B763 C99500
10	HEX HEAD BOLTS & NUTS	316 STAINLESS STEEL	ASTM F593C / F594
11	COVER/BONNET	DUCTILE IRON	ASTM A536 70-50-05
12	STEM NUT (AWWA GRADE A)	BRONZE	ASTM C87850
13	WEDGE/DISC/GATE	DUCTILE IRON (EPDM COATED)	ASTM A536 70-50-05
14	O-RING (COVER)	NBR	-----
15	BODY (ALL TYPES)	DUCTILE IRON	ASTM A536 70-50-05
16	OPTIONAL POST PLATE (3"-12")	DUCTILE IRON	ASTM A536 70-50-05
17	PIPE PLUG (OPTIONAL)	GALVANIZED STEEL	-----



ALL VALVE COMPONENTS ARE MADE IN USA

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

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Q16-90005

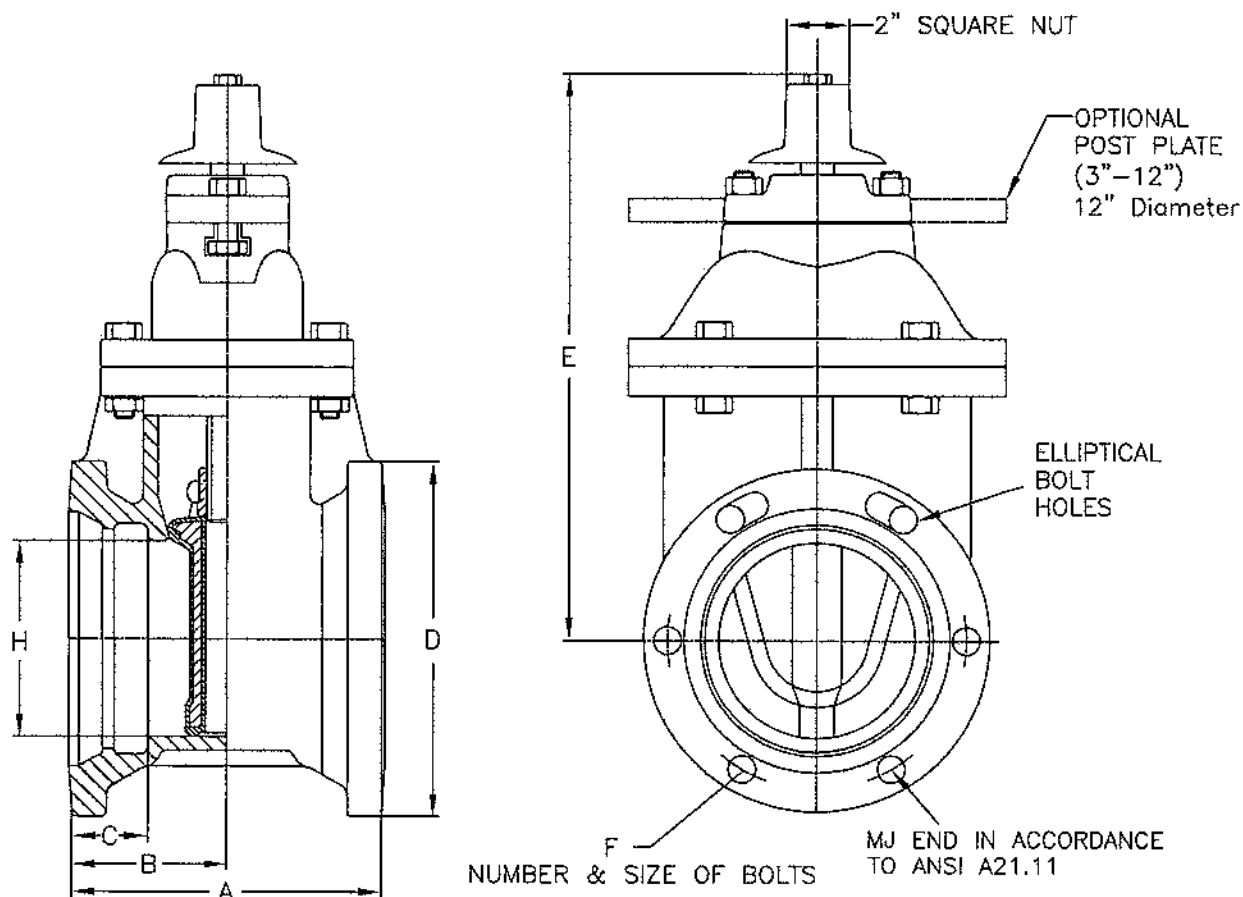
3" THRU 12" C515, STYLE 7561
RESILIENT SEAT GATE VALVE,
2" OP NUT, 100% DOMESTIC, 316 FSTNRS
VALVE ASSEMBLY/MATERIAL LIST



COMPLIES WITH
APPLICABLE
REQUIREMENTS OF
AWWA C515

7571
7571-HW
7571-P

WITH 2" SQUARE NUT
WITH HANDWHEEL
WITH POST PLATE (3"-12")



ELLIPTICAL BOLT HOLE DESIGN ALLEVIATES THE NEED FOR ANTI-ROTATIONAL BOLTS

VALVE SIZE	A	B	C	D	E	F	G	H	WEIGHT 2" NUT
**3	8 1/2	4 3/4	2 1/2	7 3/4	12 3/8	4-5/8	10	3	40
4	9 1/2	4 3/4	2 1/2	9 1/8	14 3/4	4-3/4	10	4 1/4	66
6	10 1/2	5 1/4	2 1/2	11 1/8	19	6-3/4	12	6 1/4	107
8	13 1/8	6 9/16	2 1/2	13 3/4	22 1/2	6-3/4	14	8 1/4	159
10	15 1/2	7 3/4	2 1/2	15 3/4	26 1/2	8-3/4	18	10 1/4	281
12	16	8	2 5/8	18	30	8-3/4	18	12 1/4	353

HANDWHEEL--ADD 1# (2" - 2 1/2"), 6.5# (3"-4"), 7#(6"), 10#(8"), 16#(10" & 12")

INDICATOR POST PLATE ADD 16# (3"-12") ONLY

TURNS TO OPEN: 7 3/4(2"), 8(2 1/2"), 10(3"), 13 1/2(4"), 19 1/2(6"), 25 1/2(8"), 31 1/2(10"), 37 3/4(12")

**2" to 3" SIZES FULL WALL DUCTILE (PER AWWA C509 DIMENSIONS)

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

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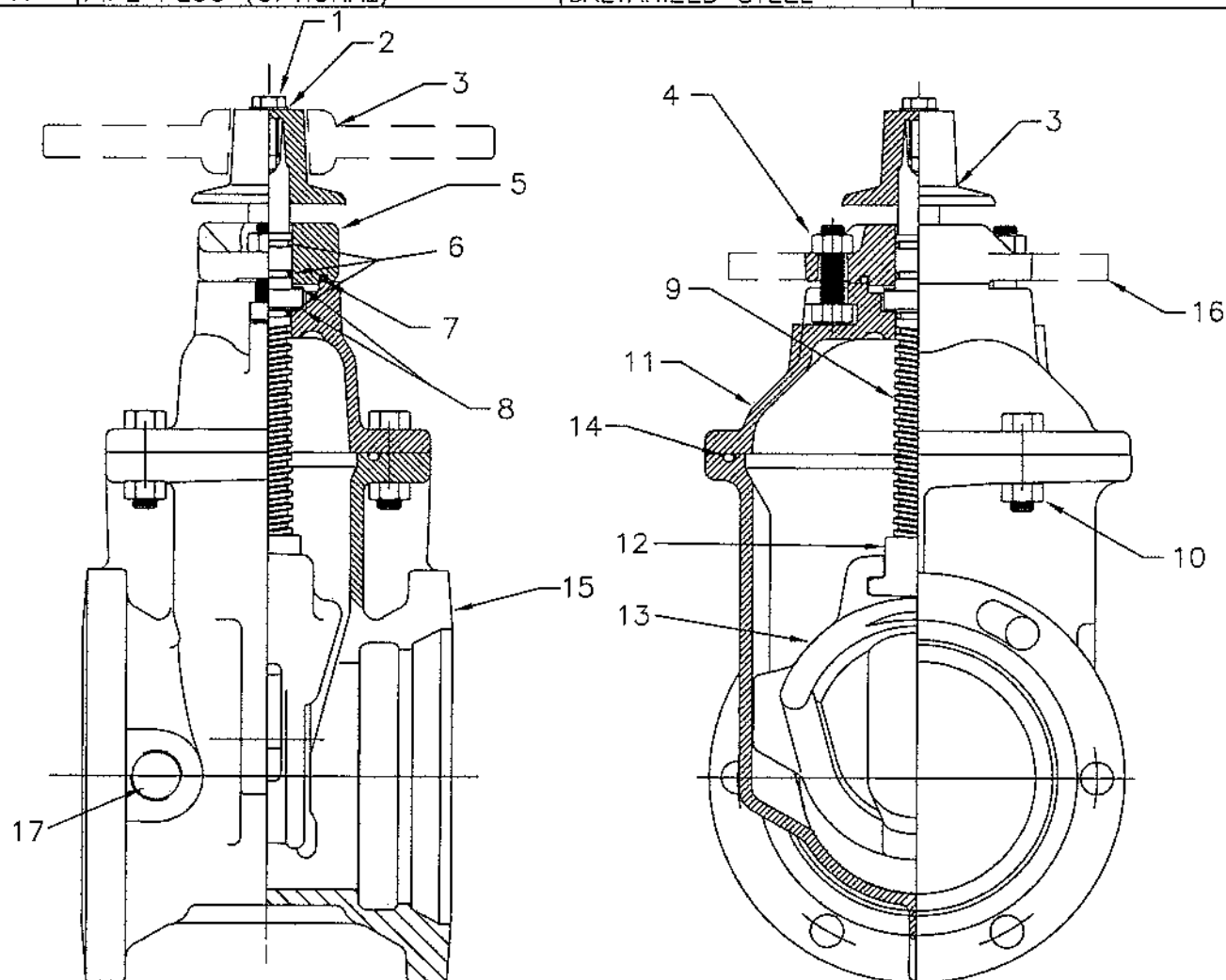
DATE: 9/28/16

DWG. NO.

Q16-90005

3" THRU 12"
RESILIENT SEAT GATE VALVE
C515-STLYE 7571
MJ X MJ 2" OP NUT

ITEM	DESCRIPTION	MATERIAL	ASTM SPEC.
1	HOLD DOWN HEX BOLT	316 STAINLESS STEEL	ASTM F593C
2	HOLD DOWN BOLT FLAT WASHER	316 STAINLESS STEEL	ASTM F593C
3	OPERATING NUT OR HANDWHEEL	CAST IRON	ASTM A126 CLASS B
4	BOLTS/NUTS (STUFFING BOX)	316 STAINLESS STEEL	ASTM F593C / F594
5	STUFFING BOX/FOLLOWER PLATE	DUCTILE IRON	ASTM A536 70-50-05
6	O-RING (STEM) QTY=3	BUNA N	-----
7	O-RING (STUFFING BOX)	NBR	-----
8	THRUST WASHER BEARING	DELRIN	-----
9	STEM (AWWA GRADE C)	BRONZE	ASTM B763 C99500
10	HEX HEAD BOLTS & NUTS	316 STAINLESS STEEL	ASTM F593C / F594
11	COVER/BONNET	DUCTILE IRON	ASTM A536 70-50-05
12	STEM NUT (AWWA GRADE A)	BRONZE	ASTM C87850
13	WEDGE/DISC/GATE	DUCTILE IRON (EPDM COATED)	ASTM A536 70-50-05
14	O-RING (COVER)	NBR	-----
15	BODY (ALL TYPES)	DUCTILE IRON	ASTM A536 70-50-05
16	OPTIONAL POST PLATE (3"-12")	DUCTILE IRON	ASTM A536 70-50-05
17	PIPE PLUG (OPTIONAL)	GALVANIZED STEEL	-----

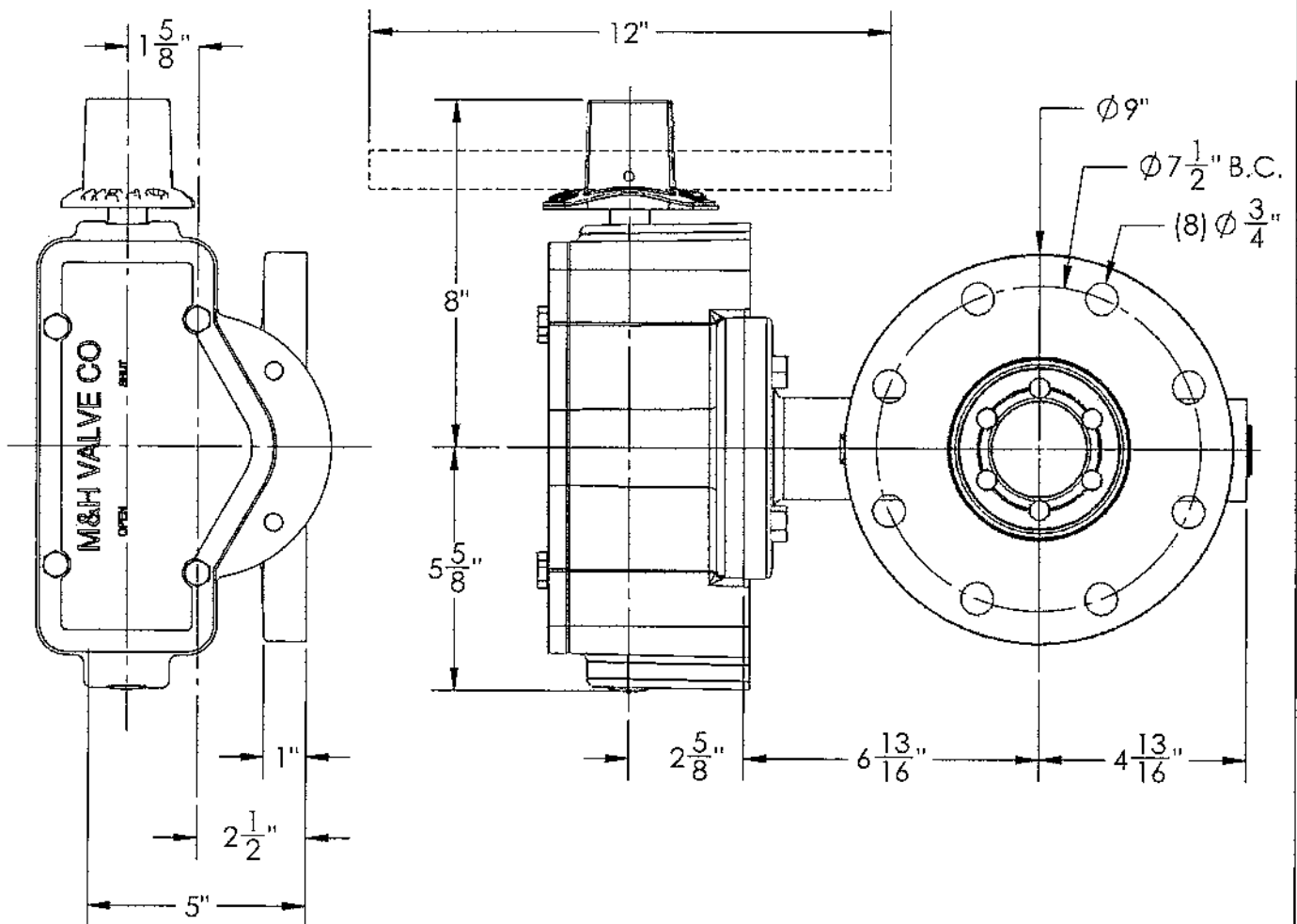


ALL COMPONENTS ARE MADE IN USA

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ANNISTON, ALABAMA
A DIVISION OF MCWANE INC.

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DWG. NO.
Q16-90005

3" THRU 12", C515 STYLE 7571
RESILIENT SEAT GATE VALVE,
2" OP NUT, 100% DOMESTIC, 316 FSTNRS
VALVE ASSEMBLY/MATERIAL LIST



1. FLOW MAY BE IN EITHER DIRECTION
2. VALVE SHAFT WILL MEET OR EXCEED AWWA C504 REQUIREMENTS
3. REFERENCE AWWA C504 FOR FLANGES AND DRILLING (ANSI 125)
4. 29 TURNS TO CLOSE
5. 8 BOLTS ON EACH FLANGE
6. 3/4" DIAMETER OF BOLTS
7. OPERATED BY 2" AWWA OPERATING NUT/WRENCH NUT
8. RATED AND TESTED FOR 150psi WORKING PRESSURE

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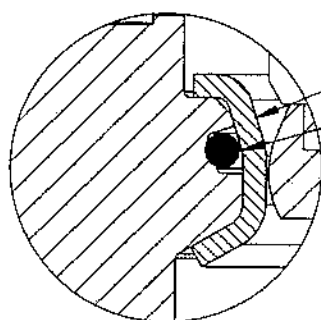
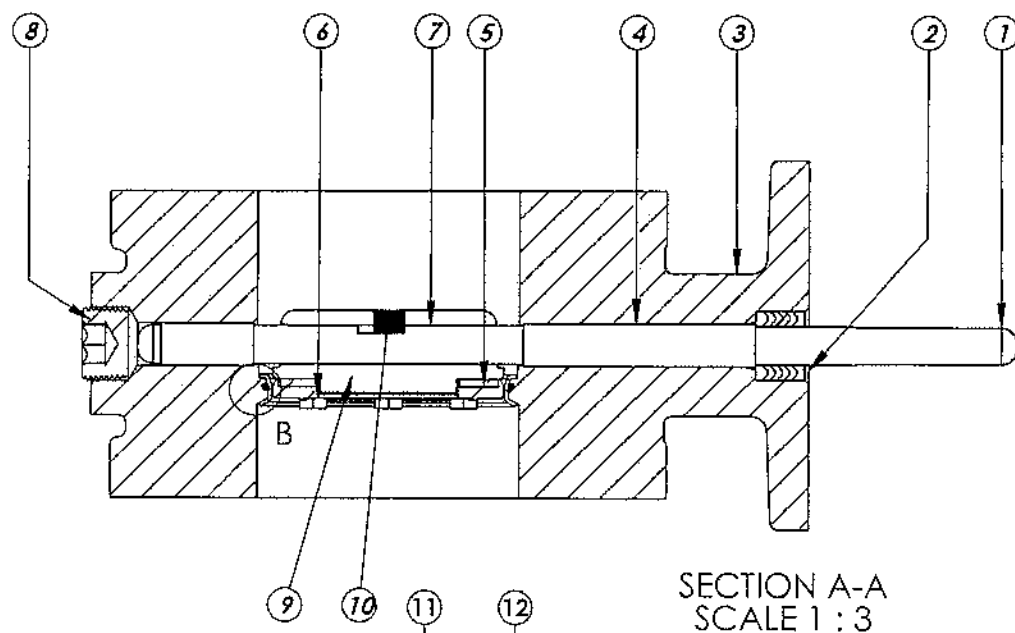


M&H VALVE COMPANY

A DIVISION OF McWANE INC.
P.O. BOX 2088
ANNISTON, ALABAMA 36202

DRAWN: CTJ
DATE: 9/26/18
DWG. NO. Q18-90010

4" - Style 4500 - CL150
BFV with F/A 12 MSS/ISO Connection-
FLANGED ENDS - Buried Operator
100% DOMESTIC



ITEM NO.	DESCRIPTION	MATERIAL
1	VANE SHAFT	316 STAINLESS STEEL, ASTM A-276
2	V-RING PACKING SET	EPDM, BUNA-N
3	BFV BODY	DUCTILE IRON ASTM A-536
4	UPPER JOURNAL BEARING	NYLATRON
5	VANE SEAT RING	EPT with SS INSERT
6	HEX HEAD CAPSCREW	316 STAINLESS STEEL with NYLOC PATCH
7	LOWER JOURNAL BEARING	NYLATRON
8	BFV BODY END PLUG	STEEL
9	BFV VANE	DUCTILE IRON ASTM A-536
10	VANE SHAFT TORQUE PLUG	316 STAINLESS STEEL
11	BODY SEAT RING	316 STAINLESS STEEL
12	BODY SEAT O-RING	BUNA-N

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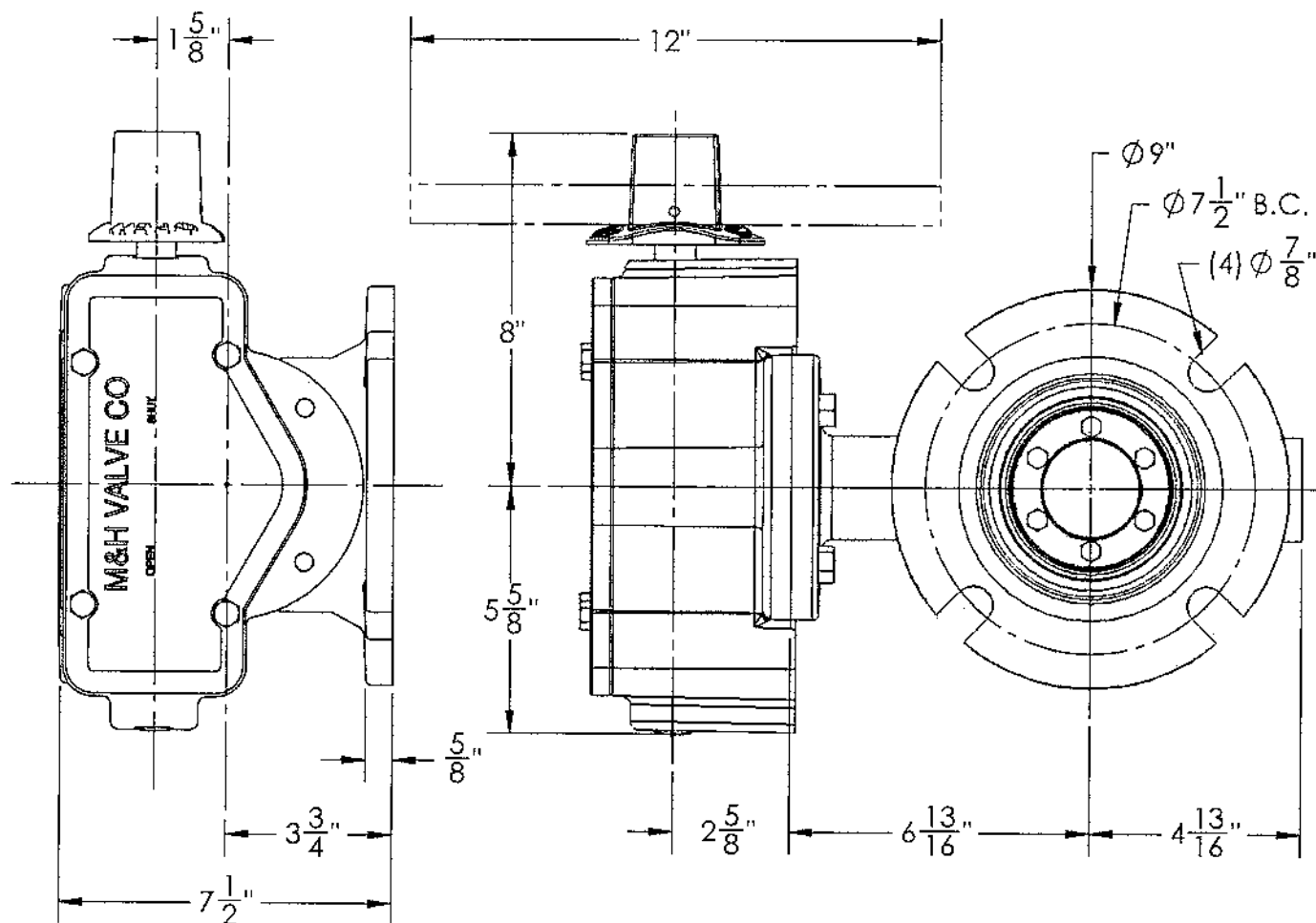


M&H VALVE COMPANY

A DIVISION OF McHANE INC.
P.O. BOX 2088
ANNISTON, ALABAMA 36202

DRAWN: CTJ
DATE: 9/26/18
DWG. NO. Q18-90010

**4" AWWA C504 - Style 4500 - CL150
BFV with F/A 12 MSS/ISO Connection
Sub-Assembly - Material List
FLANGED END - 100% DOMESTIC**



1. FLOW MAY BE IN EITHER DIRECTION
2. VALVE SHAFT WILL MEET OR EXCEED AWWA C504 REQUIREMENTS
3. REFERENCE AWWA C504 FOR FLANGES AND DRILLING (ANSI 125)
4. 29 TURNS TO CLOSE
5. 4 BOLTS ON EACH FLANGE
6. 7/8" DIAMETER OF BOLTS
7. OPERATED BY 2" AWWA OPERATING NUT/WRENCH NUT
8. RATED AND TESTED FOR 150psi WORKING PRESSURE

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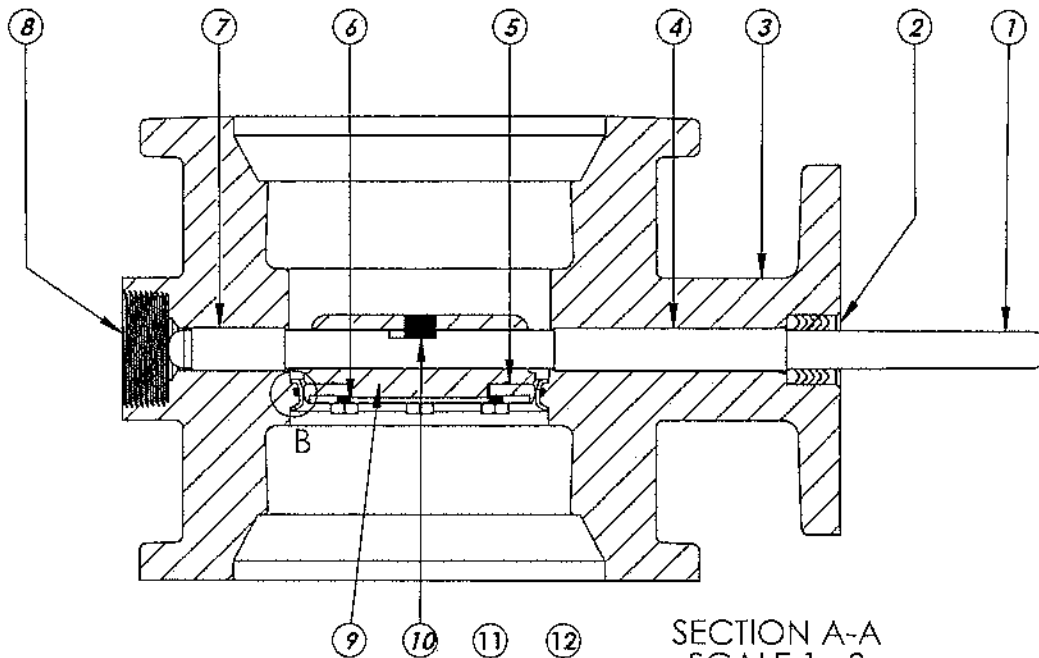


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P.O. BOX 2088
ANNISTON, ALABAMA 36202

DRAWN: CTJ
DATE: 9/26/18
DWG. NO. Q18-90010

4" - Style 4500 - CL150
BFV with F/A 12 MSS/ISO Connection-
MECHANICAL JOINT ENDS - BURIED OPERATOR
100% DOMESTIC



ITEM NO.	DESCRIPTION	MATERIAL
1	VANE SHAFT	316 STAINLESS STEEL, ASTM A-276
2	V-RING PACKING SET	EPDM, BUTA-N
3	BFV BODY	DUCTILE IRON ASTM A-536
4	UPPER JOURNAL BEARING	NYLATRON
5	VANE SEAT RING	EPT with SS INSERT
6	HEX HEAD CAPSCREW	316 STAINLESS STEEL with NYLOC PATCH
7	LOWER JOURNAL BEARING	NYLATRON
8	BFV BODY END PLUG	STEEL
9	BFV VANE	DUCTILE IRON ASTM A-536
10	VANE SHAFT TORQUE PLUG	316 STAINLESS STEEL
11	BODY SEAT RING	316 STAINLESS STEEL
12	BODY SEAT O-RING	BUNA-N

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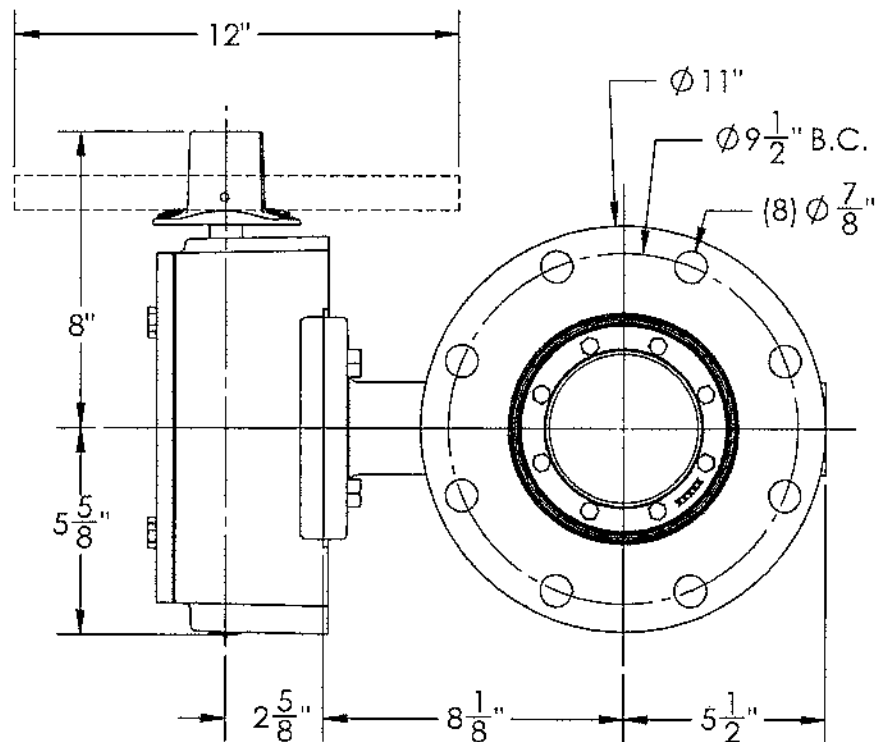
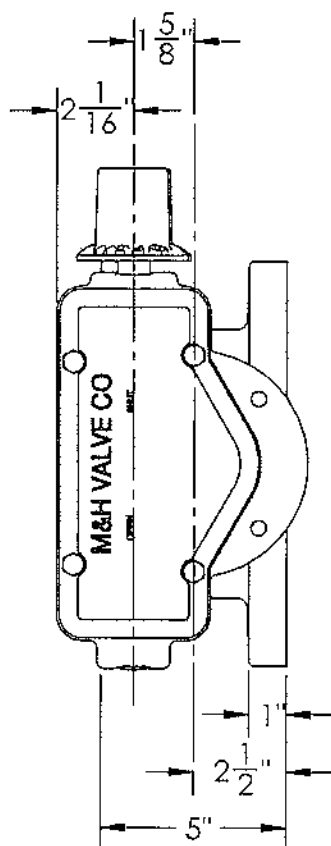
A DIVISION OF McWANE INC
P.O. BOX 2088
ANNISTON, ALABAMA 36202

DRAWN: CTJ

DATE: 9/26/18

DWG.
NO. Q18-90010

**4" AWWA C504 - Style 4500 - CL150
BFV with F/A 12 MSS/ISO Connection
Sub-Assembly - Material List
MECHANICAL JOINT END - 100% DOMESTIC**



1. FLOW MAY BE IN EITHER DIRECTION
2. VALVE SHAFT WILL MEET OR EXCEED AWWA C504 REQUIREMENTS
3. REFERENCE AWWA C504 FOR FLANGES AND DRILLING (ANSI 125)
4. 29 NUMBER OF TURNS TO CLOSE
5. 8 BOLTS ON EACH FLANGE
6. $\frac{7}{8}$ " DIAMETER OF BOLTS
7. OPERATED BY 2" AWWA OPERATING NUT/WRENCH NUT
8. RATED AND TESTED FOR 150psi WORKING PRESSURE

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M&H VALVE COMPANY

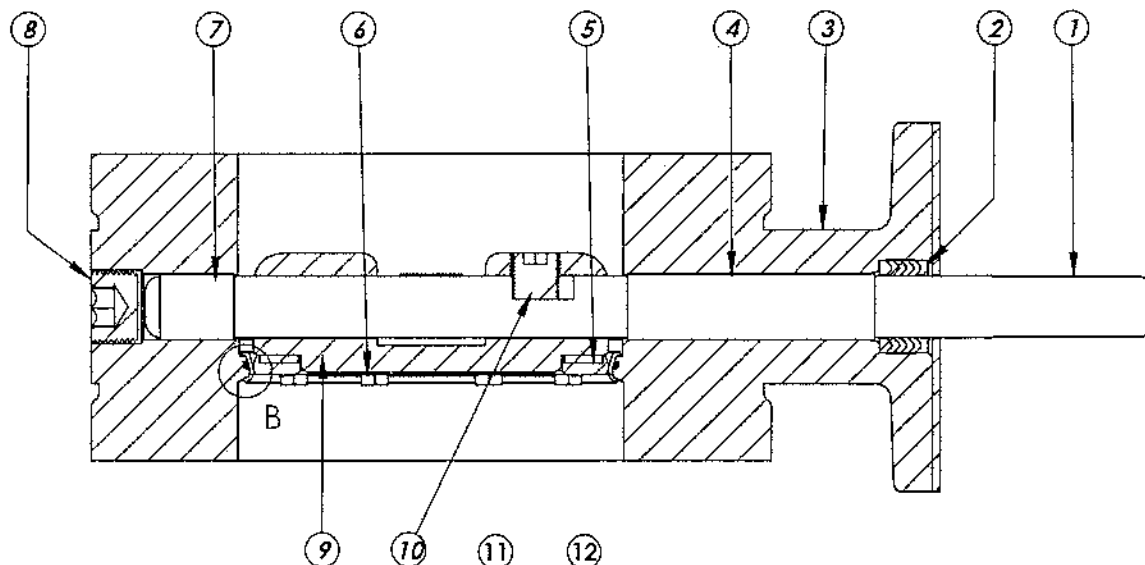
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P.O. BOX 2888
ANNISTON, ALABAMA 36202

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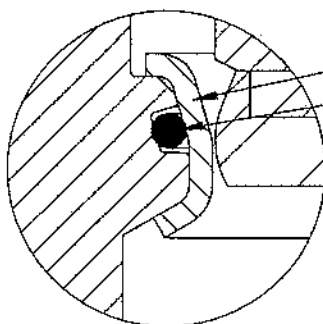
DATE: 9/26/18

DWG. NO. Q18-90010

6" - Style 4500 - CL150
BFV with F/A 12 MSS/ISO Connection-
FLANGED ENDS - Buried Operator
100% DOMESTIC



SECTION A-A
SCALE 1 : 3



DETAIL B
SCALE 2 : 1

ITEM NO.	DESCRIPTION	MATERIAL
1	VANE SHAFT	316 STAINLESS STEEL, ASTM A-276
2	V-RING PACKING SET	EPDM, BUNA-N
3	BFV BODY	DUCTILE IRON ASTM A-536
4	UPPER JOURNAL BEARING	NYLATRON
5	VANE SEAT RING	EPT with SS INSERT
6	HEX HEAD CAPSCREW	316 STAINLESS STEEL with NYLOC PATCH
7	LOWER JOURNAL BEARING	NYLATRON
8	BFV BODY END PLUG	STEEL
9	BFV VANE	DUCTILE IRON ASTM A-536
10	VANE SHAFT TORQUE PLUG	316 STAINLESS STEEL
11	BODY SEAT RING	316 STAINLESS STEEL
12	BODY SEAT O-RING	BUNA-N

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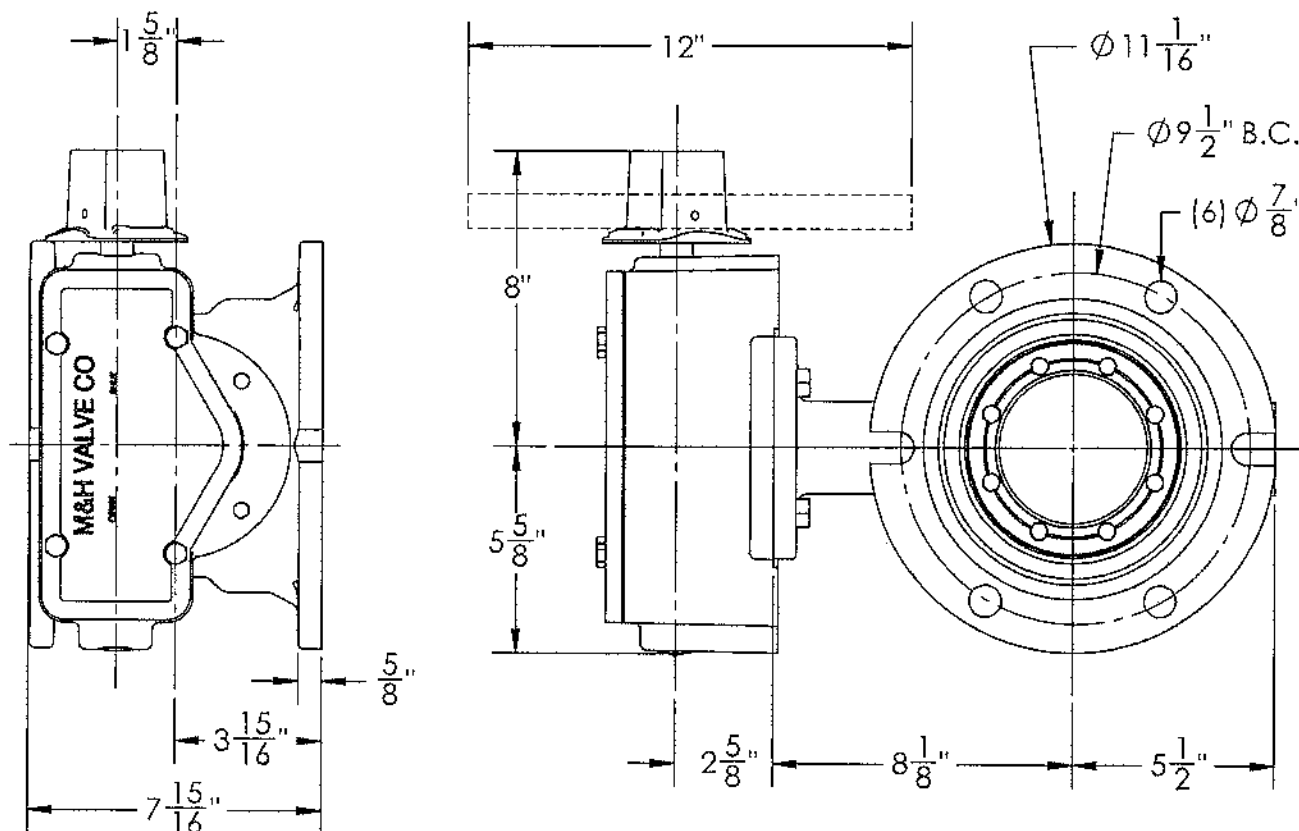


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P.O. BOX 2088
ANNISTON, ALABAMA 36202

DRAWN: CTJ
DATE: 9/26/18
DWG. NO. Q18-90010

**6" AWWA C504 - Style 4500 - CL150
BFV with F/A 12 MSS/ISO Connection
Sub-Assembly - Material List
FLANGED END - 100% DOMESTIC**



1. FLOW MAY BE IN EITHER DIRECTION
2. VALVE SHAFT WILL MEET OR EXCEED AWWA C504 REQUIREMENTS
3. REFERENCE AWWA C504 FOR FLANGES AND DRILLING (ANSI 125)
4. 29 NUMBER OF TURNS TO CLOSE
5. 6 BOLTS ON EACH FLANGE
6. 7/8" DIAMETER OF BOLTS
7. OPERATED BY 2" AWWA OPERATING NUT/WRENCH NUT
8. RATED AND TESTED FOR 150psi WORKING PRESSURE

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M&H VALVE COMPANY

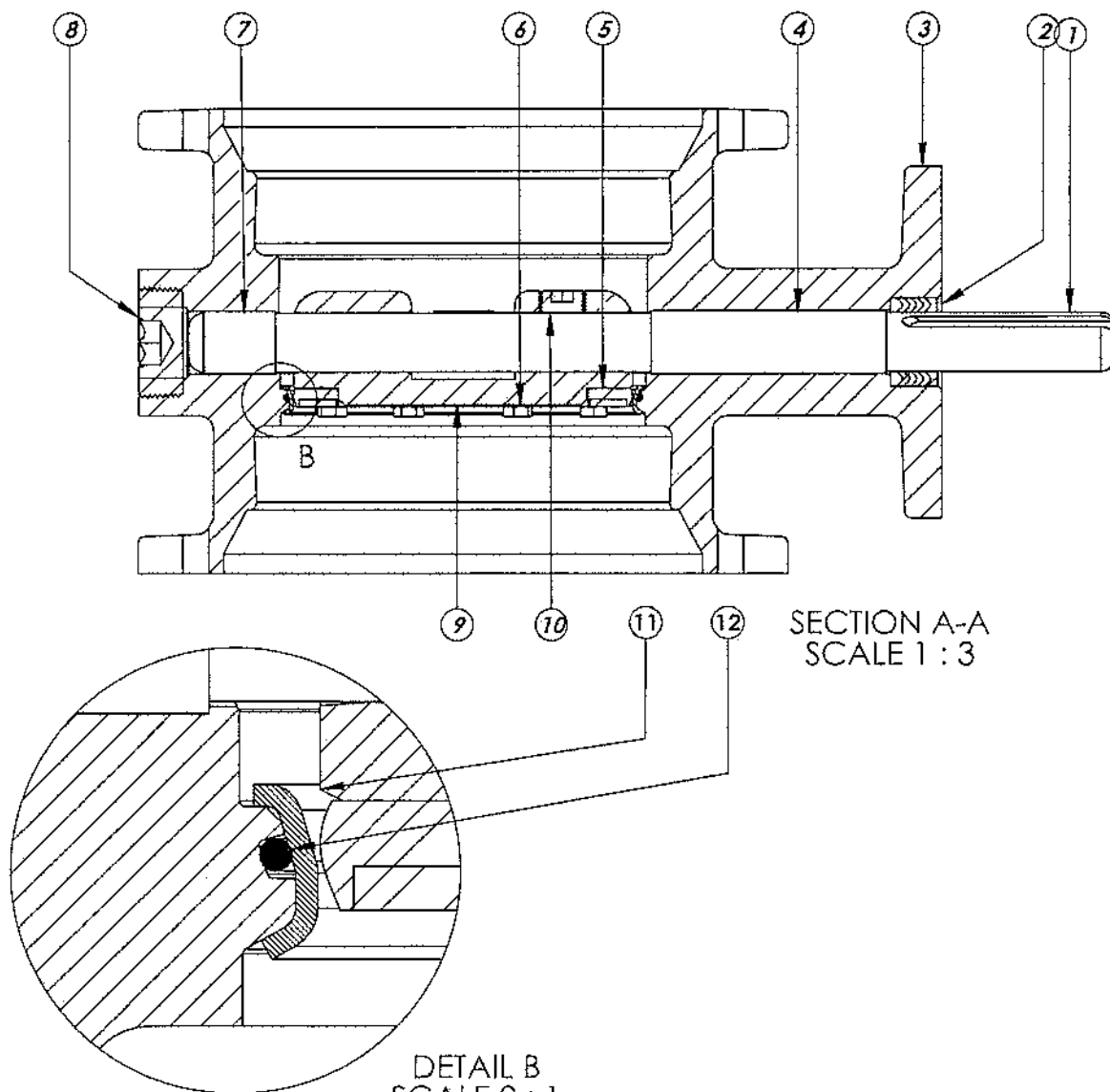
A DIVISION OF McWANE INC
P.O. BOX 2088
ANNISTON, ALABAMA 36402

DRAWN: ZF

DATE: 1/6/17

DWG. NO. 6in ISO

6" - Style 4500 - CL150
BFV with F/A 12 MSS/ISO Connection-
MJ ENDS - Buried Operator



ITEM NO.

DESCRIPTION

MATERIAL

1	VANE SHAFT	316 STAINLESS STEEL, ASTM A-276
2	V-RING PACKING SET	EPDM, BUNA-N
3	BFV BODY	DUCTILE IRON ASTM A-536
4	UPPER JOURNAL BEARING	NYLATRON
5	VANE SEAT RING	EPT with SS INSERT
6	HEX HEAD CAPSCREW	316 STAINLESS STEEL with NYLOC PATCH
7	LOWER JOURNAL BEARING	NYLATRON
8	BFV BODY END PLUG	STEEL
9	BFV VANE	DUCTILE IRON ASTM A-536
10	VANE SHAFT TORQUE PLUG	316 STAINLESS STEEL
11	BODY SEAT RING	316 STAINLESS STEEL
12	BODY SEAT O-RING	BUNA-N

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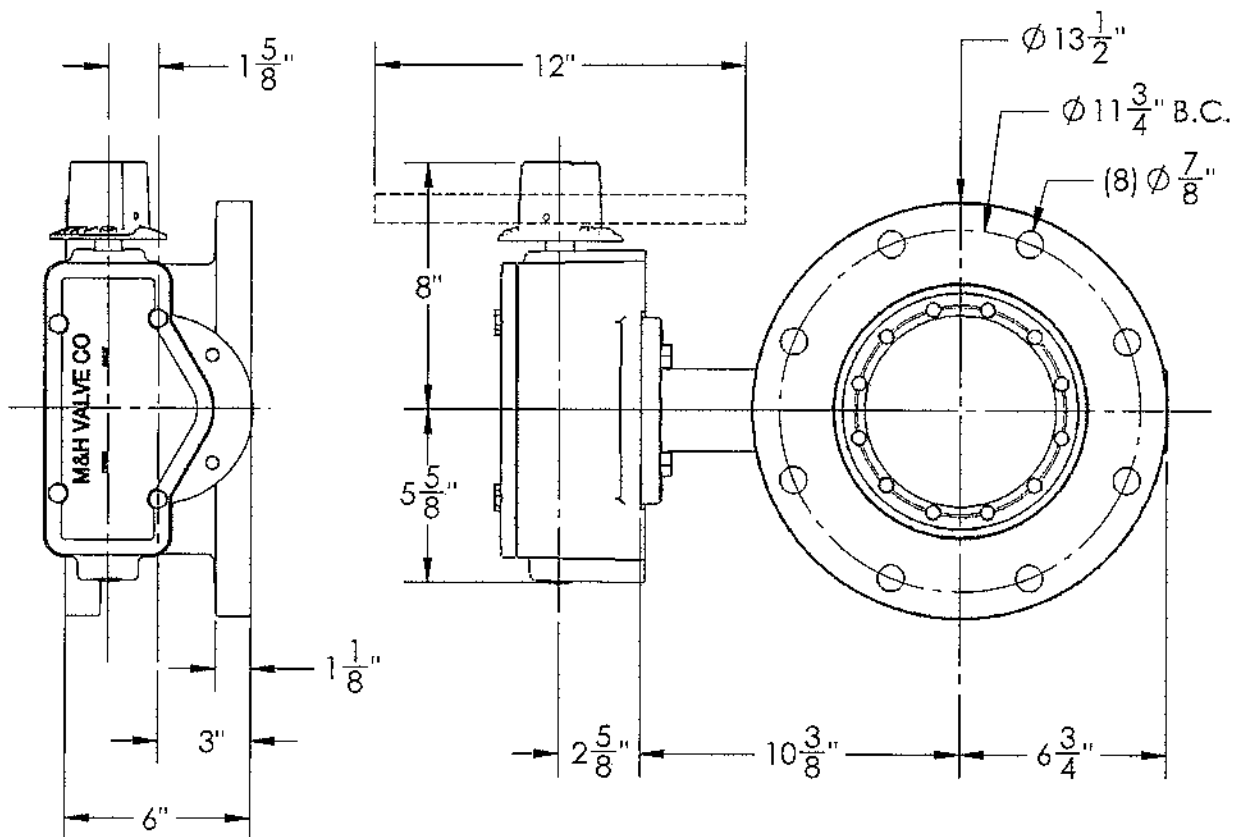


M&H VALVE COMPANY

A DIVISION OF McWANE INC.
P.O. BOX 2098
ANNISTON, ALABAMA 36202

DRAWN: CTJ
DATE: 6/26/18
DWG. NO. Q18-90010

**6" AWWA C504 - Style 4500 - CL150
BFV with F/A 12 MSS/ISO Connection
Sub-Assembly - Material List
MJ ENDS - 100% DOMESTIC**



1. FLOW MAY BE IN EITHER DIRECTION
2. VALVE SHAFT WILL MEET OR EXCEED AWWA C504 REQUIREMENTS
3. REFERENCE AWWA C504 FOR FLANGES AND DRILLING (ANSI 125)
4. 29 TURNS TO CLOSE
5. 8 BOLTS ON EACH FLANGE
6. 7/8" DIAMETER OF BOLTS
7. OPERATED BY 2" AWWA OPERATING NUT/WRENCH NUT
8. RATED AND TESTED FOR 150psi WORKING PRESSURE

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M&H VALVE COMPANY

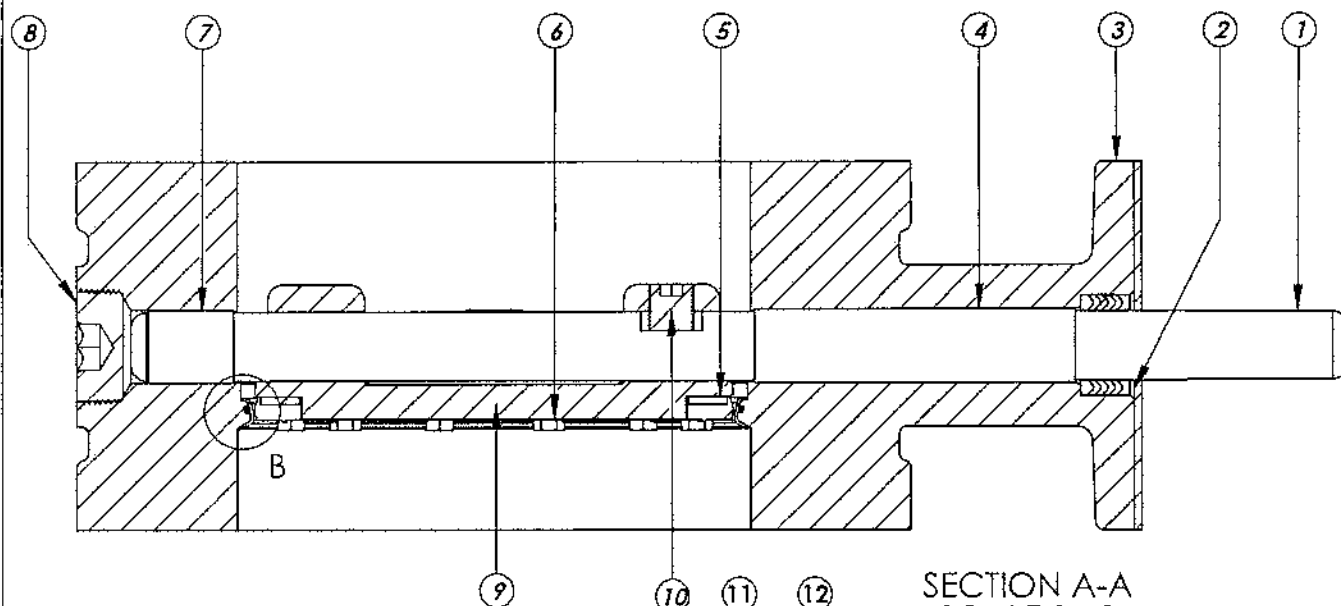
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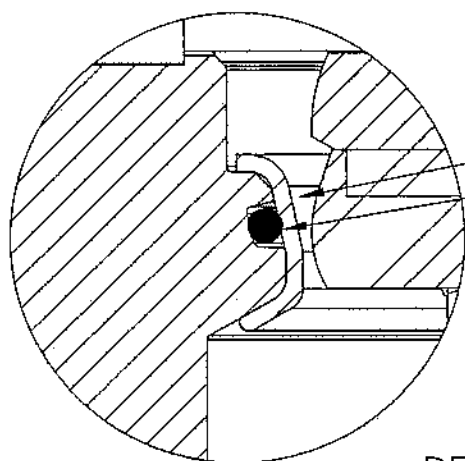
DATE: 9/26/18

DWG.
NO. Q18-90010

8" - Style 4500 - CL150
BFV with F/A 12 MSS/ISO Connection-
FLANGED ENDS - Buried Operator
100% DOMESTIC



SECTION A-A
SCALE 1 : 3



DETAIL B
SCALE 2 : 1

ITEM NO.	DESCRIPTION	MATERIAL
1	VANE SHAFT	316 STAINLESS STEEL, ASTM A-276
2	V-RING PACKING SET	EPDM, BUNA-N
3	BFV BODY	DUCTILE IRON ASTM A-536
4	UPPER JOURNAL BEARING	NYLATRON
5	VANE SEAT RING	EPT with SS INSERT
6	HEX HEAD CAPSCREW	316 STAINLESS STEEL with NYLOC PATCH
7	LOWER JOURNAL BEARING	NYLATRON
8	BFV BODY END PLUG	STEEL
9	BFV VANE	DUCTILE IRON ASTM A-536
10	VANE SHAFT TORQUE PLUG	316 STAINLESS STEEL
11	BODY SEAT RING	316 STAINLESS STEEL
12	BODY SEAT O-RING	BUNA-N

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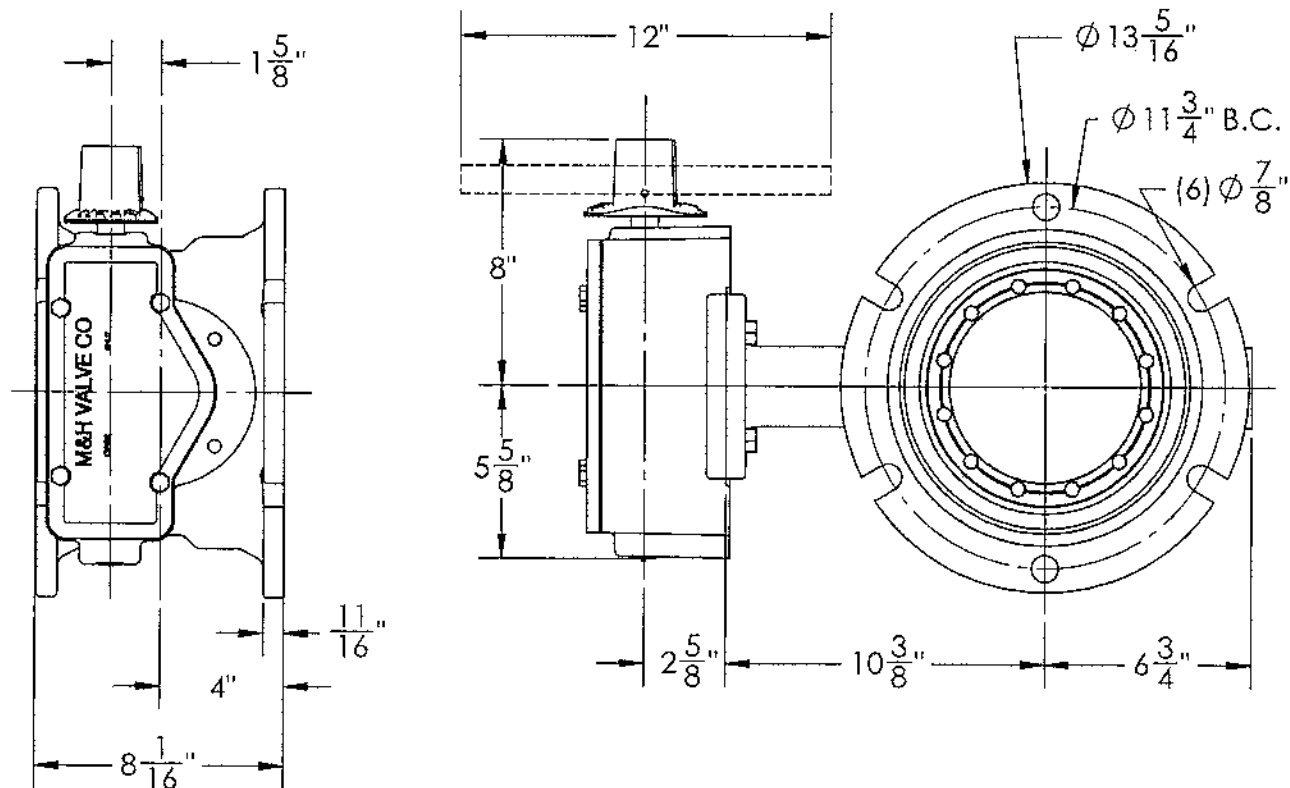


M&H VALVE COMPANY

A DIVISION OF McWANE INC.
P.O. BOX 2088
ANNISTON, ALABAMA 36202

DRAWN: CTJ
DATE: 9/26/18
DWG. NO. Q18-90010

**8" AWWA C504 - Style 4500 - CL150
BFV with F/A 12 MSS/ISO Connection
Sub-Assembly - Material List
FLANGED END - 100% DOMESTIC**



1. FLOW MAY BE IN EITHER DIRECTION
2. VALVE SHAFT WILL MEET OR EXCEED AWWA C504 REQUIREMENTS
3. REFERENCE AWWA C504 FOR FLANGES AND DRILLING (ANSI 125)
4. 29 TURNS TO CLOSE
5. 6 BOLTS ON EACH FLANGE
6. $\frac{7}{8}$ " DIAMETER OF BOLTS
7. OPERATED BY 2" AWWA OPERATING NUT/WRENCH NUT
8. RATED AND TESTED FOR 150psi WORKING PRESSURE

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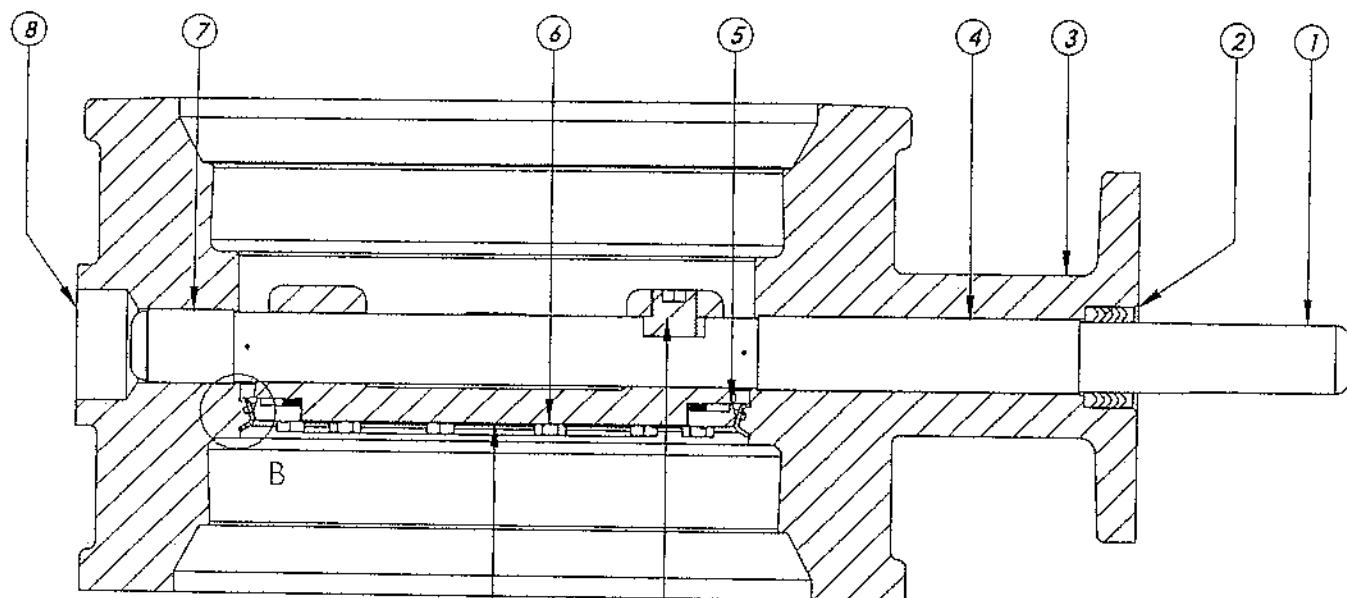


M&H VALVE COMPANY

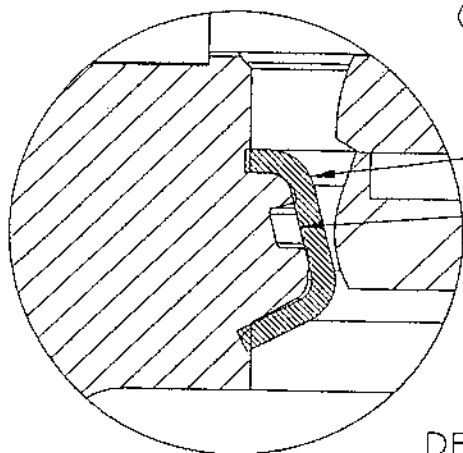
A DIVISION OF ARCADIAN INC.
P.O. BOX 2088
ANNISTON, ALABAMA 36202

DRAWN: CTJ
DATE: 9/26/18
DWG. NO. Q18-90010

8" - Style 4500 - CL150
BFV with F/A 12 MSS/ISO Connection-
MJ ENDS - Buried Operator
100% DOMESTIC



SECTION A-A
SCALE 1 : 3



DETAIL B
SCALE 2 : 1

ITEM NO.	DESCRIPTION	MATERIAL
1	VANE SHAFT	316 STAINLESS STEEL, ASTM A-276
2	V-RING PACKING SET	EPDM, BUNA-N
3	BFV BODY	DUCTILE IRON ASTM A-536
4	UPPER JOURNAL BEARING	NYLATRON
5	VANE SEAT RING	EPT with SS INSERT
6	HEX HEAD CAPSCREW	316 STAINLESS STEEL with NYLOC PATCH
7	LOWER JOURNAL BEARING	NYLATRON
8	BFV BODY END PLUG	STEEL
9	BFV VANE	DUCTILE IRON ASTM A-536
10	VANE SHAFT TORQUE PLUG	316 STAINLESS STEEL
11	BODY SEAT RING	316 STAINLESS STEEL
12	BODY SEAT O-RING	BUNA-N

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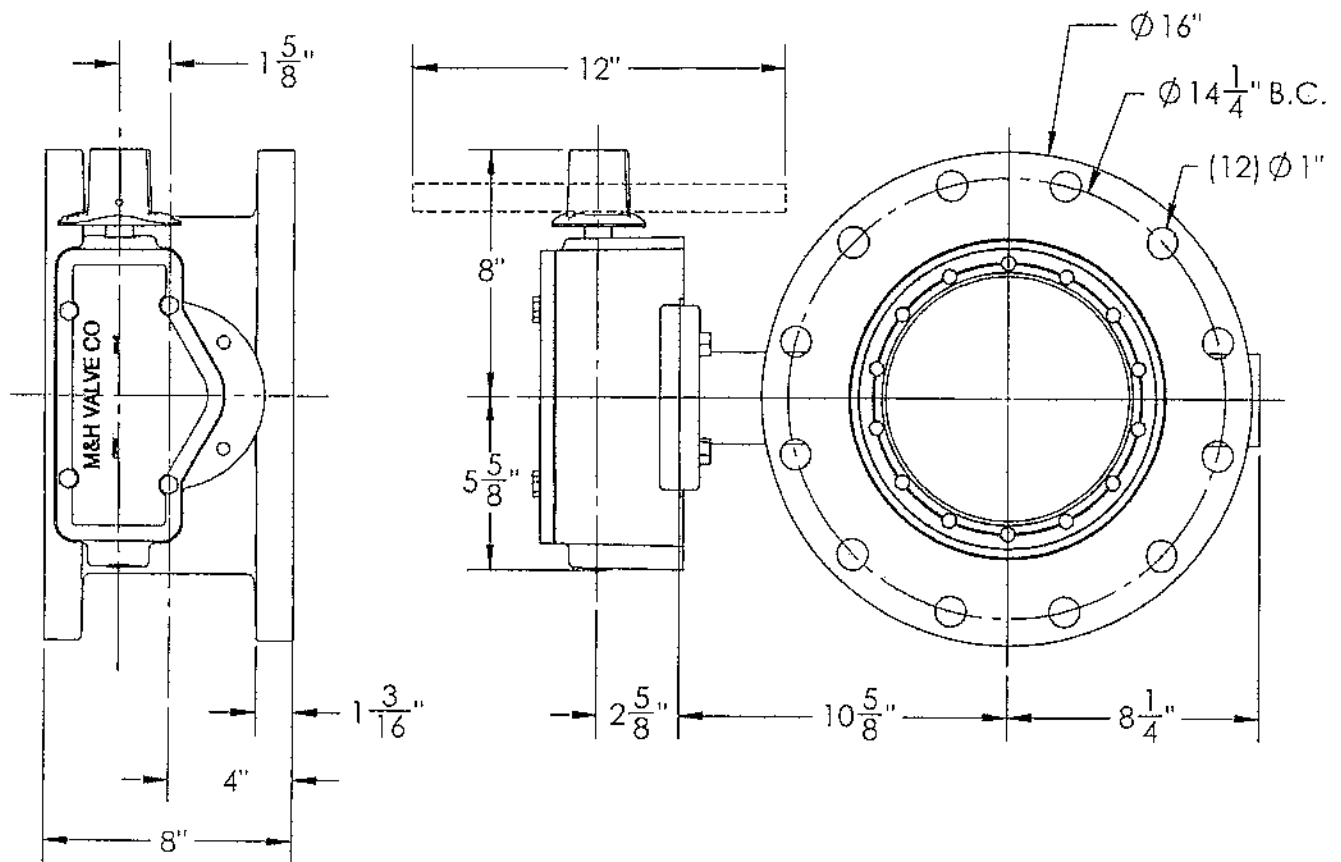


M&H VALVE COMPANY

A DIVISION OF McWANE INC.
P.O. BOX 2088
ANNISTON, ALABAMA 36202

DRAWN: CTJ
DATE: 9/26/18
DWG. NO. Q18-90010

**8" AWWA C504 - Style 4500 - CL150
BFV with F/A 12 MSS/ISO Connection
Sub-Assembly - Material List
MJ ENDS - 100% DOMESTIC**



1. FLOW MAY BE IN EITHER DIRECTION
2. VALVE SHAFT WILL MEET OR EXCEED AWWA C504 REQUIREMENTS
3. REFERENCE AWWA C504 FOR FLANGES AND DRILLING (ANSI 125)
4. 29 TURNS TO CLOSE
5. 12 BOLTS ON EACH FLANGE
6. 1" DIAMETER OF BOLTS
7. OPERATED BY 2" AWWA OPERATING NUT/WRENCH NUT
8. RATED AND TESTED FOR 150psi WORKING PRESSURE

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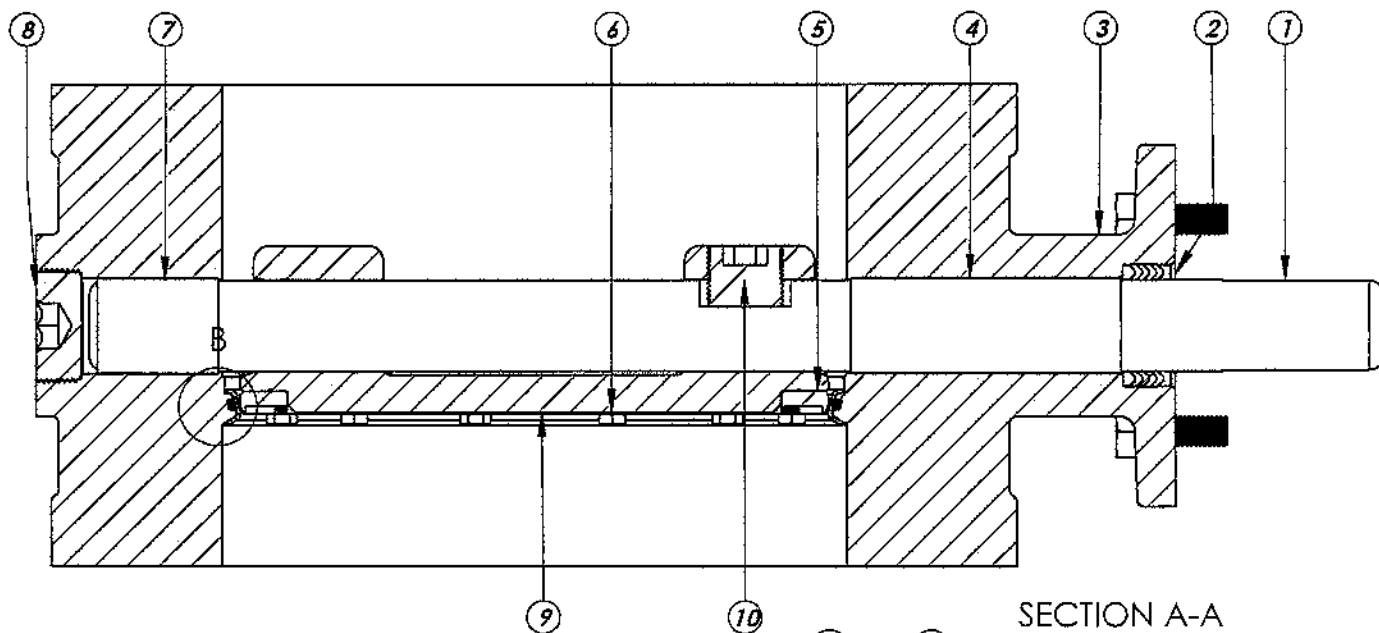


M&H VALVE COMPANY

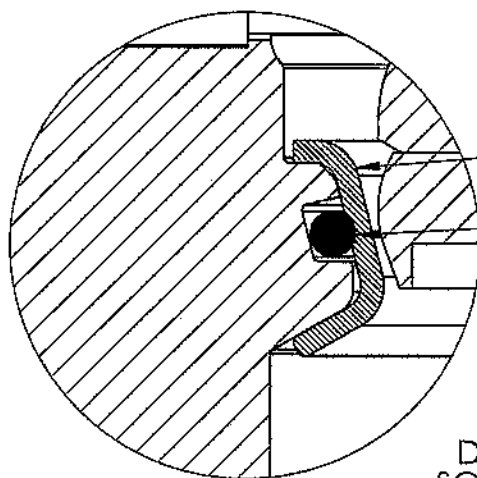
A DIVISION OF McWANE INC
P.O. BOX 2038
ARTHUR, ALABAMA 36202

DRAWN: CTJ
DATE: 9/26/18
DWG.
NO. Q18-90010

10" - Style 4500 - CL150
BFV with F/A 12 MSS/ISO Connection-
FLANGED ENDS - Buried Operator
100% DOMESTIC



SECTION A-A
SCALE 1 : 3



DETAIL B
SCALE 2 : 1

ITEM NO.	DESCRIPTION	MATERIAL
1	VANE SHAFT	316 STAINLESS STEEL, ASTM A-276
2	V-RING PACKING SET	EPDM, BUNA-N
3	BFV BODY	DUCTILE IRON ASTM A-536
4	UPPER JOURNAL BEARING	NYLATRON
5	VANE SEAT RING	EPT with SS INSERT
6	HEX HEAD CAPSCREW	316 STAINLESS STEEL with NYLOC PATCH
7	LOWER JOURNAL BEARING	NYLATRON
8	BFV BODY END PLUG	STEEL
9	BFV VANE	DUCTILE IRON ASTM A-536
10	VANE SHAFT TORQUE PLUG	316 STAINLESS STEEL
11	BODY SEAT RING	316 STAINLESS STEEL
12	BODY SEAT O-RING	BUNA-N

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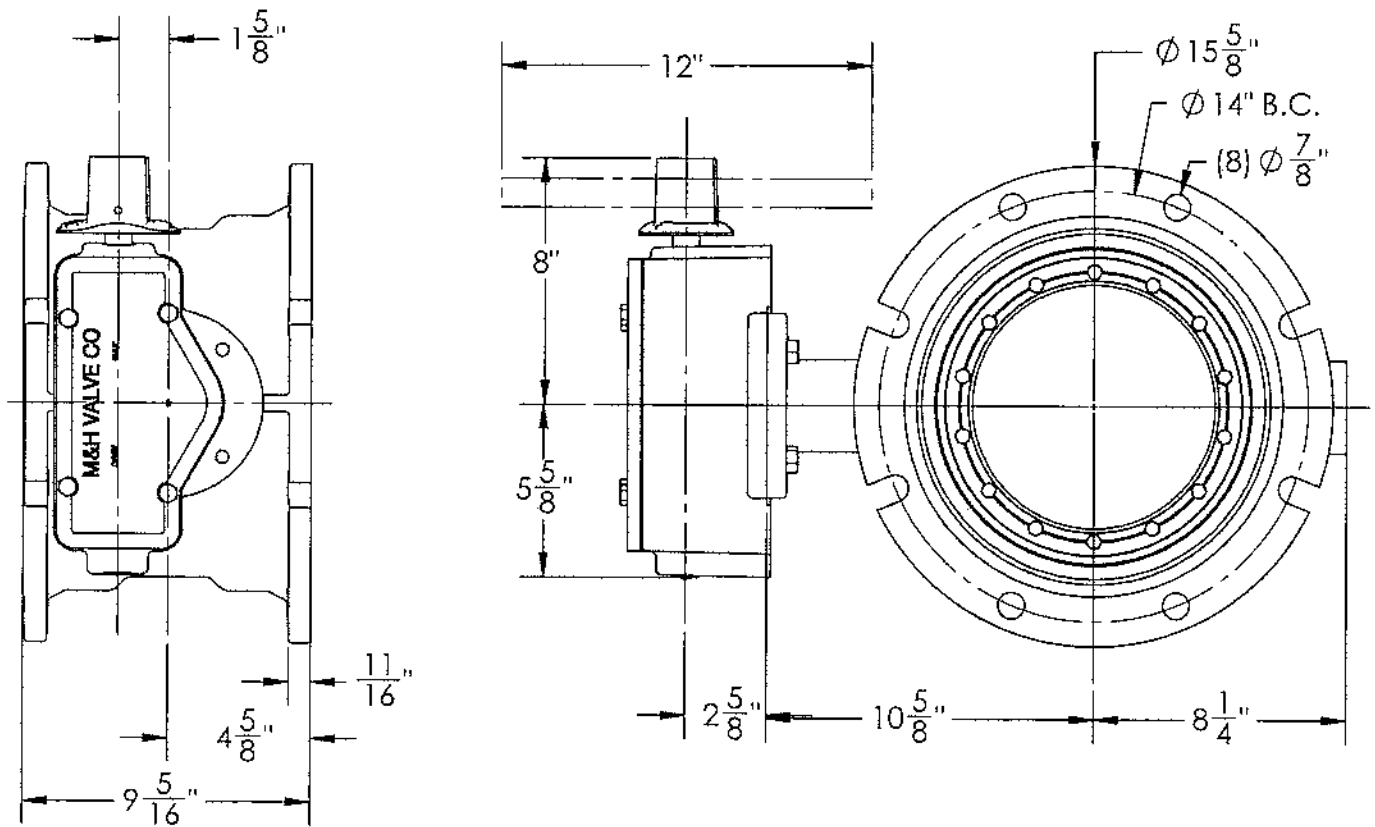


M&H VALVE COMPANY

A DIVISION OF McWANE INC.
P.O. BOX 2088
ANNISTON, ALABAMA 36202

DRAWN: CTJ
DATE: 9/26/18
DWG. NO. Q18-90010

**10" AWWA C504 - Style 4500 - CL150
BFV with F/A 12 MSS/ISO Connection
Sub-Assembly - Material List
FLANGED END - 100% DOMESTIC**



1. FLOW MAY BE IN EITHER DIRECTION
2. VALVE SHAFT WILL MEET OR EXCEED AWWA C504 REQUIREMENTS
3. REFERENCE AWWA C504 FOR FLANGES AND DRILLING (ANSI 125)
4. 29 TURNS TO CLOSE
5. 8 BOLTS ON EACH FLANGE
6. $\frac{7}{8}$ " DIAMETER OF BOLTS
7. OPERATED BY 2" AWWA OPERATING NUT/WRENCH NUT
8. RATED AND TESTED FOR 150psi WORKING PRESSURE

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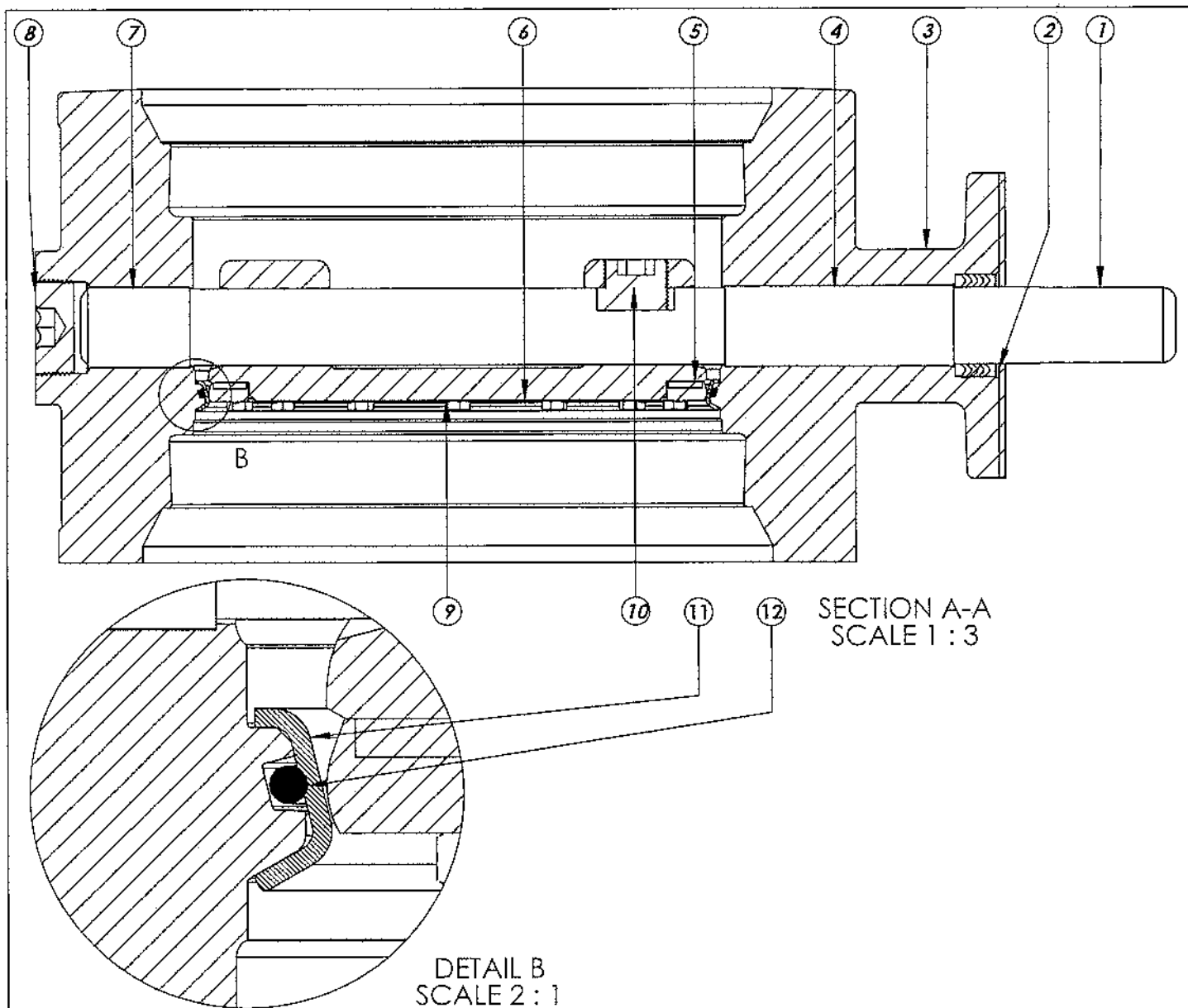


M&H VALVE COMPANY

A DIVISION OF McWANE INC
P.O. BOX 2085
ANNISTON, ALABAMA 36202

DRAWN: CTJ
DATE: 9/26/18
DWG. NO. Q18-90010

10" - Style 4500 - CL150
BFV with F/A 12 MSS/ISO Connection-
MJ ENDS - Buried Operator
100% DOMESTIC



ITEM NO.	DESCRIPTION	MATERIAL
1	VANE SHAFT	316 STAINLESS STEEL, ASTM A-276
2	V-RING PACKING SET	EPDM, BUNA-N
3	BFV BODY	DUCTILE IRON ASTM A-536
4	UPPER JOURNAL BEARING	NYLATRON
5	VANE SEAT RING	EPT with SS INSERT
6	HEX HEAD CAPSCREW	316 STAINLESS STEEL with NYLOC PATCH
7	LOWER JOURNAL BEARING	NYLATRON
8	BFV BODY END PLUG	STEEL
9	BFV VANE	DUCTILE IRON ASTM A-536
10	VANE SHAFT TORQUE PLUG	316 STAINLESS STEEL
11	BODY SEAT RING	316 STAINLESS STEEL
12	BODY SEAT O RING	BUNA-N

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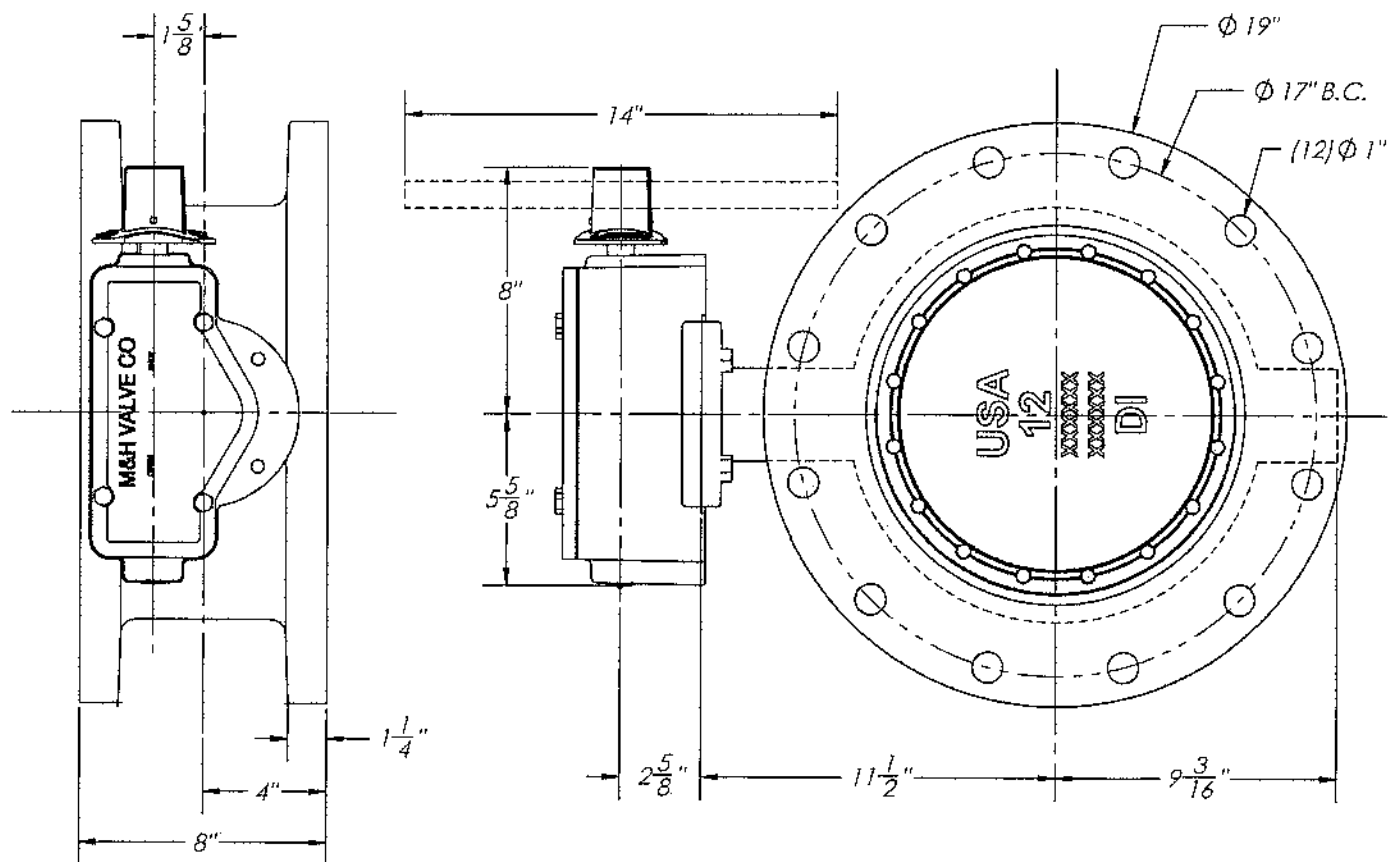


M&H VALVE COMPANY

A DIVISION OF McWANE INC.
P.O. BOX 2088
ANNISTON, ALABAMA 36202

DRAWN: CTJ
DATE: 9/26/18
DWG. NO. Q18-90010

**10" AWWA C504 - Style 4500 - CL150
BFV with F/A 12 MSS/ISO Connection
Sub-Assembly - Material List
MJ ENDS - 100% DOMESTIC**



1. FLOW MAY BE IN EITHER DIRECTION
2. VALVE SHAFT WILL MEET OR EXCEED AWWA C504 REQUIREMENTS
3. REFERENCE AWWA C504 FOR FLANGES AND DRILLING (ANSI 125)
4. 29 TURNS TO CLOSE
5. 12 BOLTS ON EACH FLANGE
6. 1" DIAMETER OF BOLTS
7. OPERATED BY 2" AWWA OPERATING NUT/WRENCH NUT
8. RATED AND TESTED FOR 150psi WORKING PRESSURE

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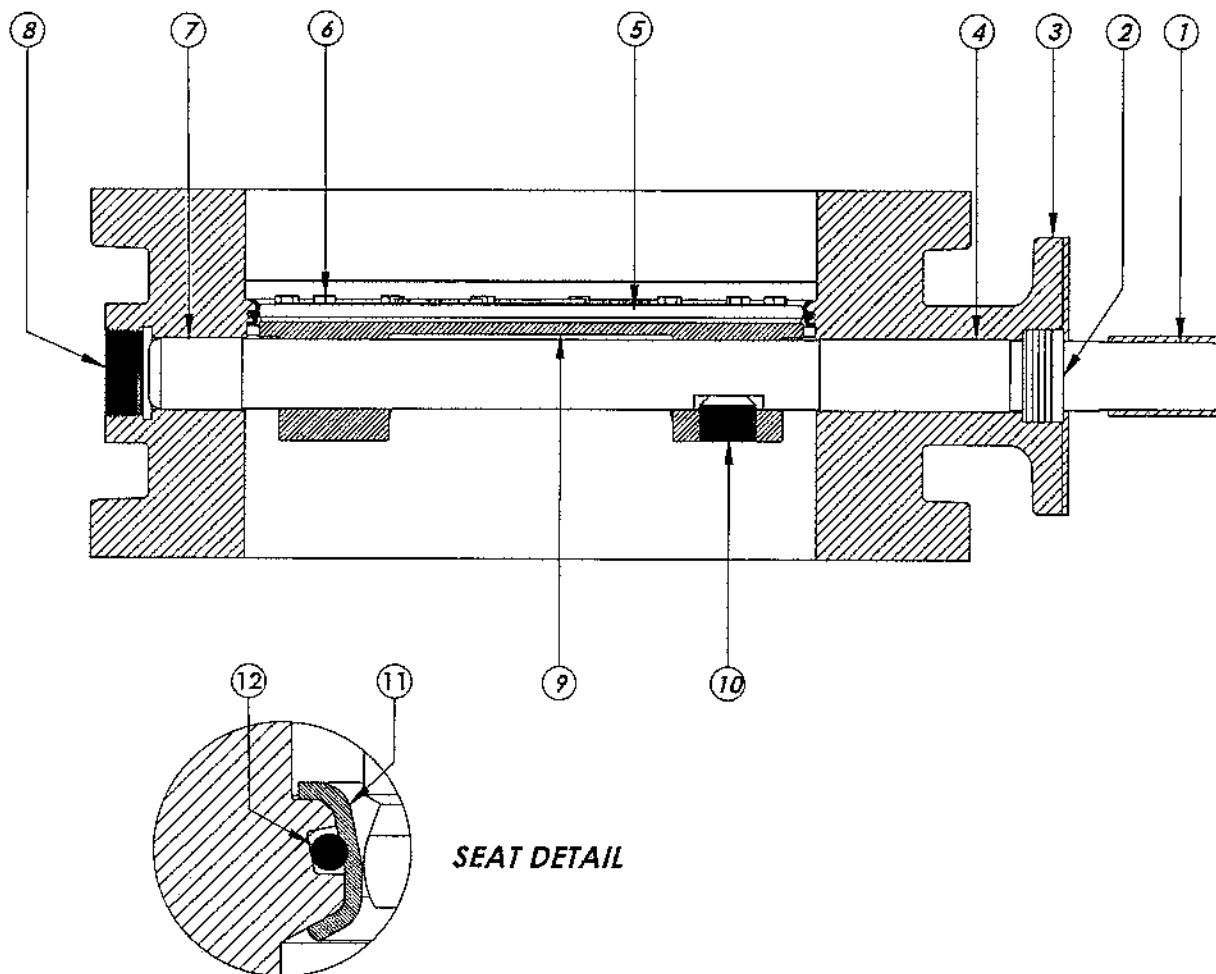


M&H VALVE COMPANY

A DIVISION OF MCWANE INC.
P.O. BOX 2088
ANNISTON, ALABAMA 36202

DRAWN: CTJ
DATE: 9/26/18
DWG. NO. Q18-90010

12" - Style 4500 - CL150
BFV with F/A 12 MSS/ISO Connection-
FLANGED ENDS - Buried Operator
100% DOMESTIC



ITEM NO.

DESCRIPTION

MATERIAL

1	VANE SHAFT	316 STAINLESS STEEL, ASTM A-276
2	V-RING PACKING SET	EPDM, BUNA-N
3	BFV BODY	DUCTILE IRON ASTM A-536
4	UPPER JOURNAL BEARING	NYLATRON
5	VANE SEAT RING	EPT with SS INSERT
6	HEX HEAD CAPSCREW	316 STAINLESS STEEL with NYLOC PATCH
7	LOWER JOURNAL BEARING	NYLATRON
8	BFV BODY END PLUG	STEEL
9	BFV VANE	DUCTILE IRON ASTM A-536
10	VANE SHAFT TORQUE PLUG	316 STAINLESS STEEL
11	BODY SEAT RING	316 STAINLESS STEEL
12	BODY SEAT O-RING	BUNA-N

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M&H VALVE COMPANY

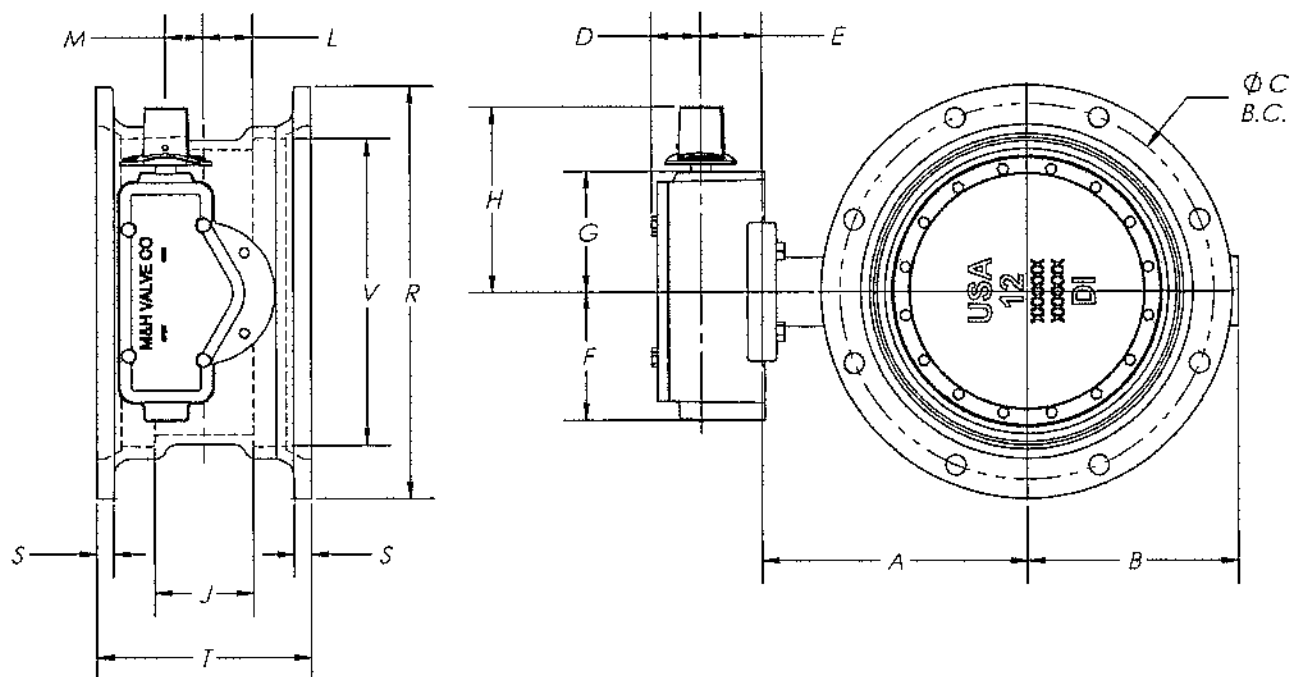
A DIVISION OF McWANE INC.
P.O. BOX 2088
ANNISTON, ALABAMA 36202

DRAWN: CTJ

DATE: 9/26/18

DWG. NO. Q18-90010

**12" AWWA C504 - Style 4500 - CL150
BFV with F/A 12 MSS/ISO Connection
Sub-Assembly - Material List
FLANGED END - 100% DOMESTIC**



1. FLOW MAY BE IN EITHER DIRECTION
2. VALVE SHAFT WILL MEET OR EXCEED AWWA C504 REQUIREMENTS
3. 'N' - NUMBER OF TURNS TO CLOSE
4. 'P' - NUMBER OF BOLTS ON EACH FLANGE
5. 'Q' - DIAMETER OF BOLTS
6. 'V' - INSIDE DIAMETER OF VALVE HUB
7. OPERATED BY 2" AWWA OPERATING NUT/WRENCH NUT
8. RATED AND TESTED FOR 150psi WORKING PRESSURE
9. GASKETS, GLANDS, AND BOLTS FOR MECHANICAL JOINT FURNISHED WITH VALVE WHEN SPECIFIED ON ORDER

VALVE SIZE	OPERATOR MODEL	A	B	C	D	E	F	G	H	J	L	M	N	P	Q	R	S	T	V	WEIGHT
12"	450	11.50"	9.19"	16.25"	2.05"	2.63"	5.63"	5.25"	7.93"	4.25"	2.13"	1.63"	29	8	3/4"	17.88"	.75"	9.25"	13.30"	175 LB

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M&H VALVE COMPANY

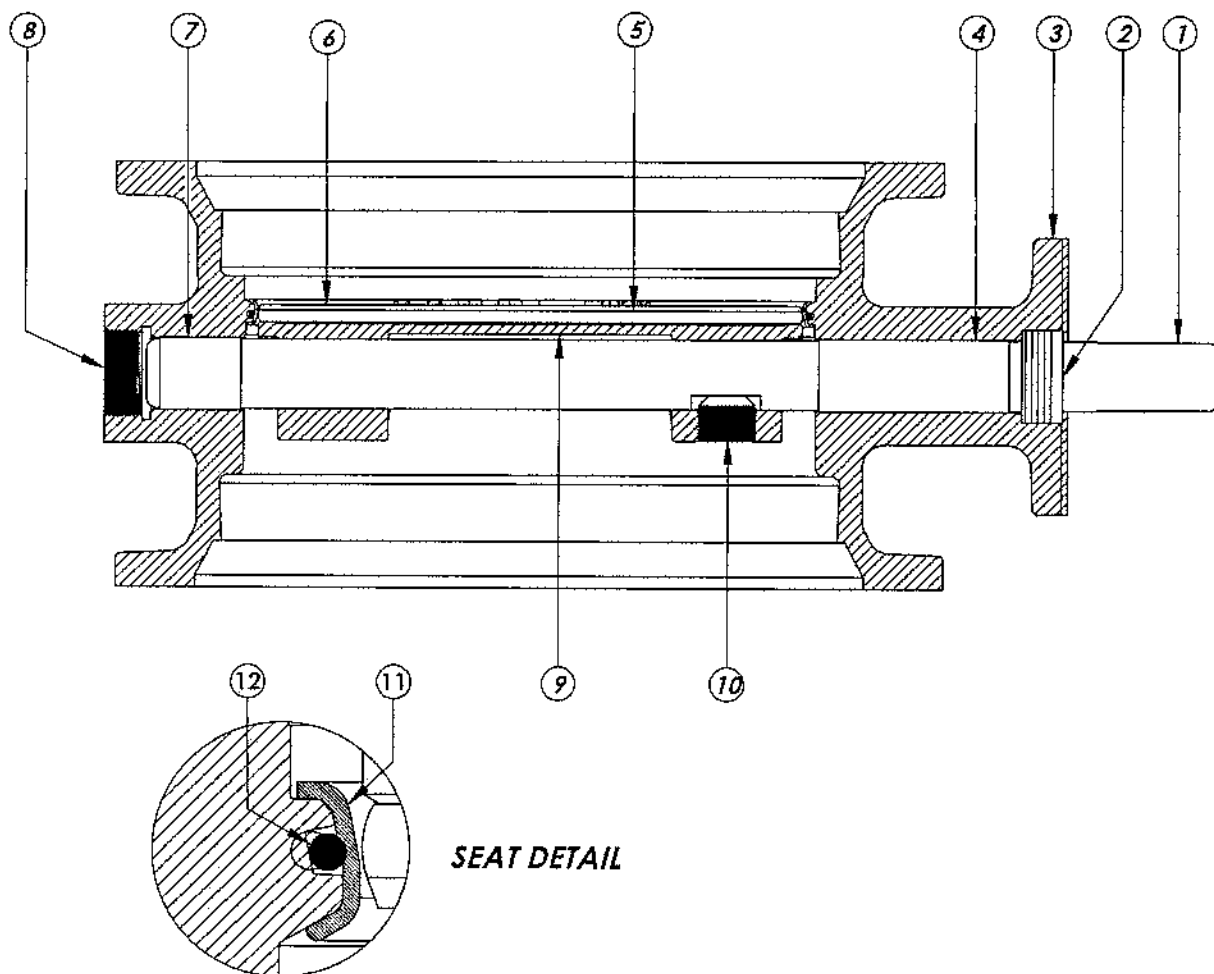
A DIVISION OF McWANE INC
P.O. BOX 2088
ANNISTON, ALABAMA 36802

DRAWN: CTJ

DATE: 9/26/18

DWG. NO. Q18-90010

12" - Style 4500 - CL150
BFV with F/A 12 MSS/ISO Connection-
MECHANICAL JOINT - Buried Operator
100% DOMESTIC



ITEM NO.	DESCRIPTION	MATERIAL
1	VANE SHAFT	316 STAINLESS STEEL, ASTM A-276
2	V-RING PACKING SET	EPDM, BUNA-N
3	BFV BODY	DUCTILE IRON ASTM A-536
4	UPPER JOURNAL BEARING	NYLATRON
5	VANE SEAT RING	EPT with SS INSERT
6	HEX HEAD CAPSCREW	316 STAINLESS STEEL with NYLOC PATCH
7	LOWER JOURNAL BEARING	NYLATRON
8	BFV BODY END PLUG	STEEL
9	BFV VANE	DUCTILE IRON ASTM A-536
10	VANE SHAFT TORQUE PLUG	316 STAINLESS STEEL
11	BODY SEAT RING	316 STAINLESS STEEL
12	BODY SEAT O-RING	BUNA-N

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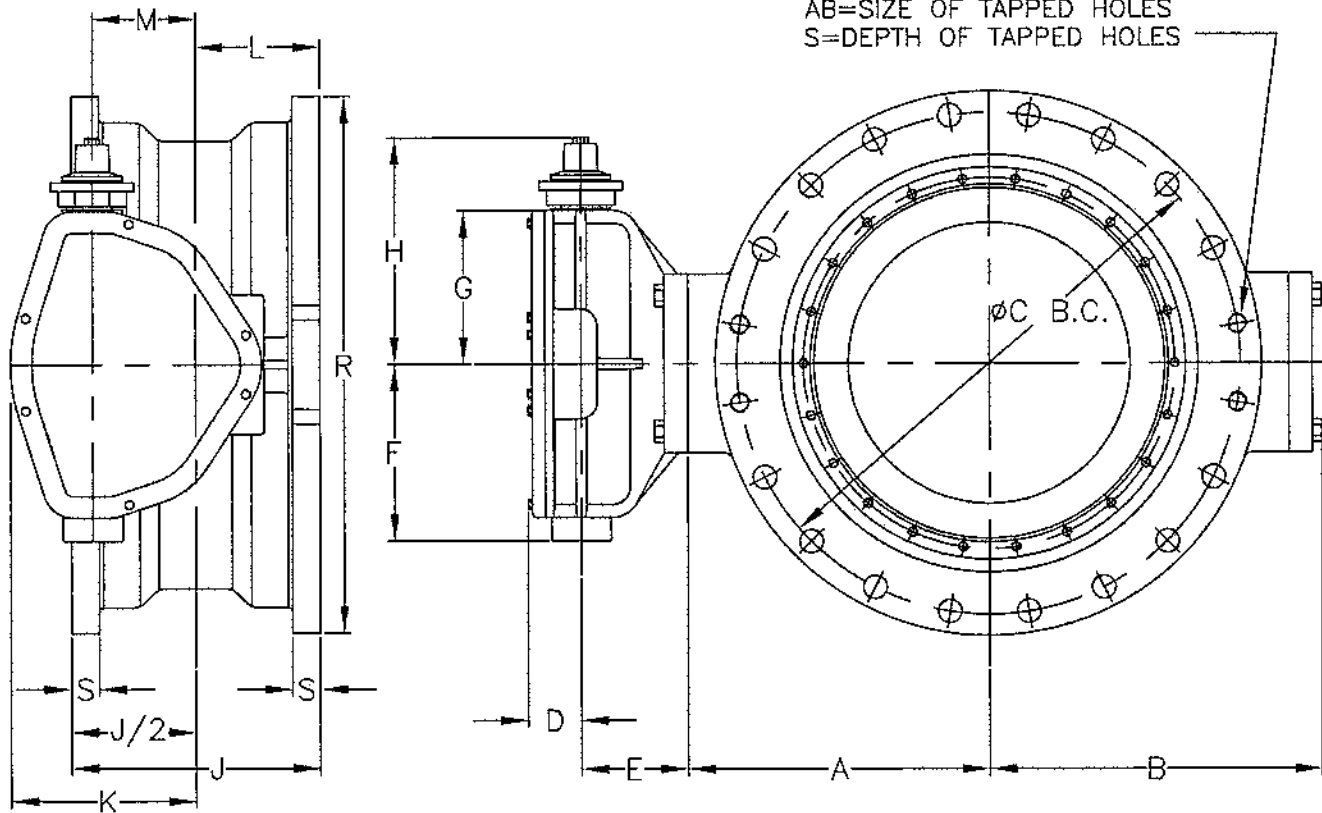
M&H VALVE COMPANY

A DIVISION OF McWANE INC
P.O. BOX 2088
ANNISTON, ALABAMA 36202

DRAWN: CTJ
DATE: 9/26/18
DWG. NO. Q18-90010

**12" AWWA C504 - Style 4500 - CL150
BFV with F/A 12 MSS/ISO Connection
Sub-Assembly - Material List
MECHANICAL JOINT - 100% DOMESTIC**

AA=NO. OF TAPPED HOLES EACH FLANGE
 AB=SIZE OF TAPPED HOLES
 S=DEPTH OF TAPPED HOLES



VALVE SIZE	OPERATOR MODEL	D	E	F	G	H	K	L	M	N
4"	65	2	3 9/16	3 5/8	3	7 3/4	3 7/16	3 3/4	1 3/8	16 1/2
6"	150	2	3 9/16	3 5/8	3	7 3/4	3 7/16	3 15/16	1 3/8	16 1/2
8"	250	2 1/8	3 11/16	4 1/4	3 7/8	8 3/4	4 1/2	4	2	24
10" & 12"	510	2 3/8	4 1/2	5 9/16	5 3/16	10 1/2	6 1/8	4 5/8	3 1/8	36
14", 16", 18" & 20"	1250	3 3/16	5 3/4	8 3/8	7	12 5/16	7 7/8	6 1/8	4	48
24"	2200	3 3/16	6 1/4	10 3/8	9	14 5/16	10 3/4	7 1/4	6	72

VALVE SIZE	A	B	C	J	P	Q	R	S	AA	AB	WEIGHT
4"	4	5 1/8	7 1/2	7.5	8	5/8	9 1/8	1	4	5/8-11	75
6"	5	6 1/8	9 1/2	7 7/8	8	3/4	11 1/8	1 1/16	4	3/4-10	95
8"	6	7 3/8	11 3/4	8	8	3/4	13 3/8	1 1/8	4	3/4-10	140
10"	7 3/4	9 1/2	14 1/4	9 1/4	12	7/8	15 11/16	1 3/16	-	-	232
12"	9 1/2	10 7/8	17	9 1/4	12	7/8	19 15/16	1 1/4	-	-	300
14"	10 7/16	12 3/16	18 3/4	12 3/8	12	1	20 5/16	1 5/16	4	1-8	485
16"	12 3/16	13 15/16	21 1/4	12 1/4	16	1	21 9/16	1 7/16	4	1-8	570
18"	13 5/16	15 1/16	22 3/4	13 1/8	16	1 1/8	24 13/16	1 7/16	4	1 1/8-7	735
20"	14 7/8	16 5/8	25	13 1/8	20	1 1/8	27 1/16	1 1/2	4	1 1/8-7	860
24"	17 19/32	19 5/16	29 1/2	14 1/2	20	1 1/4	31 9/16	1 5/8	4	1 1/4-7	1165

NOTE 1: FLOW MAY BE IN EITHER DIRECTION

NOTE 2: VALVE SHAFT WILL MEET OR EXCEED REQUIREMENTS OF SHAFT TABLE PER AWWA STANDARD C-504 FOR APPLICABLE CLASS.

NOTE 3: REFERENCE AWWA C-504 FLANGES & DRILLING (A.N.S.I. 125)

NOTE 4: "N" = NUMBER OF TURNS TO CLOSE

NOTE 5: "P" = NUMBER OF BOLTS ON EACH FLANGE

NOTE 6: "Q" = DIAMETER OF BOLTS

NOTE 7: OPERATED BY 2" AWWA OPERATING / WRENCH NUT

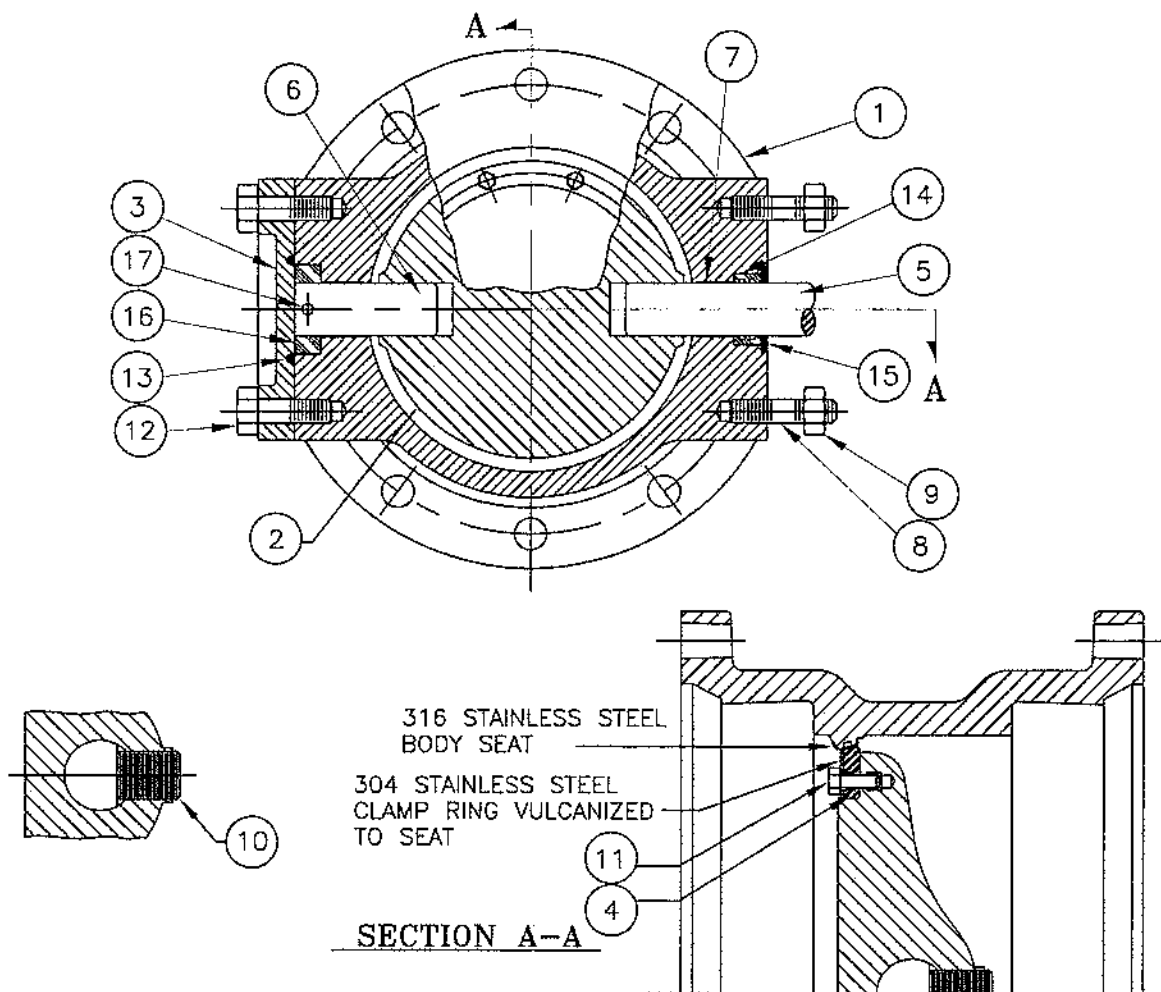
NOTE 8: RATED AND TESTED FOR 250 PSI WORKING PRESSURE

NOTE 9: "Z" = (1/16 or .0625 RAISED FACE ON EACH FLANGE)

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

DWN: KJ
 DATE: 11/24/14
 DWG. NO.
 Q16-90005

4" THRU 24"
 AWWA C504-STYLE 4500
 CLASS 150 BUTTERFLY VALVE WITH
 MJ ENDS AND 2" MANUAL OP NUT
 100% DOMESTIC



ITEM #	DESCRIPTION	MATERIAL
*1	BODY, VALVE	CAST IRON, A-126, CLASS B WITH 316 STAINLESS STEEL SEAT
*2	VANE	CAST IRON, A-126, CLASS B
3	COVER, END	CAST IRON, A-126, CLASS B
4	SEAT RING, VANE	EPDM WITH 304 STAINLESS STEEL INSERT
5	SHAFT, OPERATOR	304 STAINLESS STEEL, ASTM A-276
6	SHAFT, THRUST	304 STAINLESS STEEL, ASTM A-276
7	BUSHING	REINFORCED TEFLON
8	STUD	316 STAINLESS STEEL
9	NUT, HEX	STEEL, ASTM A-307, GRADE A, ELECTRO ZINC PLATED
10	TORQUE PLUG, SHAFT	316 STAINLESS STEEL, ASTM A-276
11	CAPSCREW, HEX	316 STAINLESS STEEL WITH NYLOK INSERT
12	BOLT, HEX HEAD	316 STAINLESS STEEL
13	O-RING, END COVER	BUNA-N
14	SHAFT SEAL	BUNA-S
15	SEAL RING	STEEL, C-1018
16	THRUST COLLAR	BRONZE
17	ROLL PIN	STAINLESS STEEL, A.I.S.I. 420

*NOTE: 18" THRU 24" DUCTILE IRON

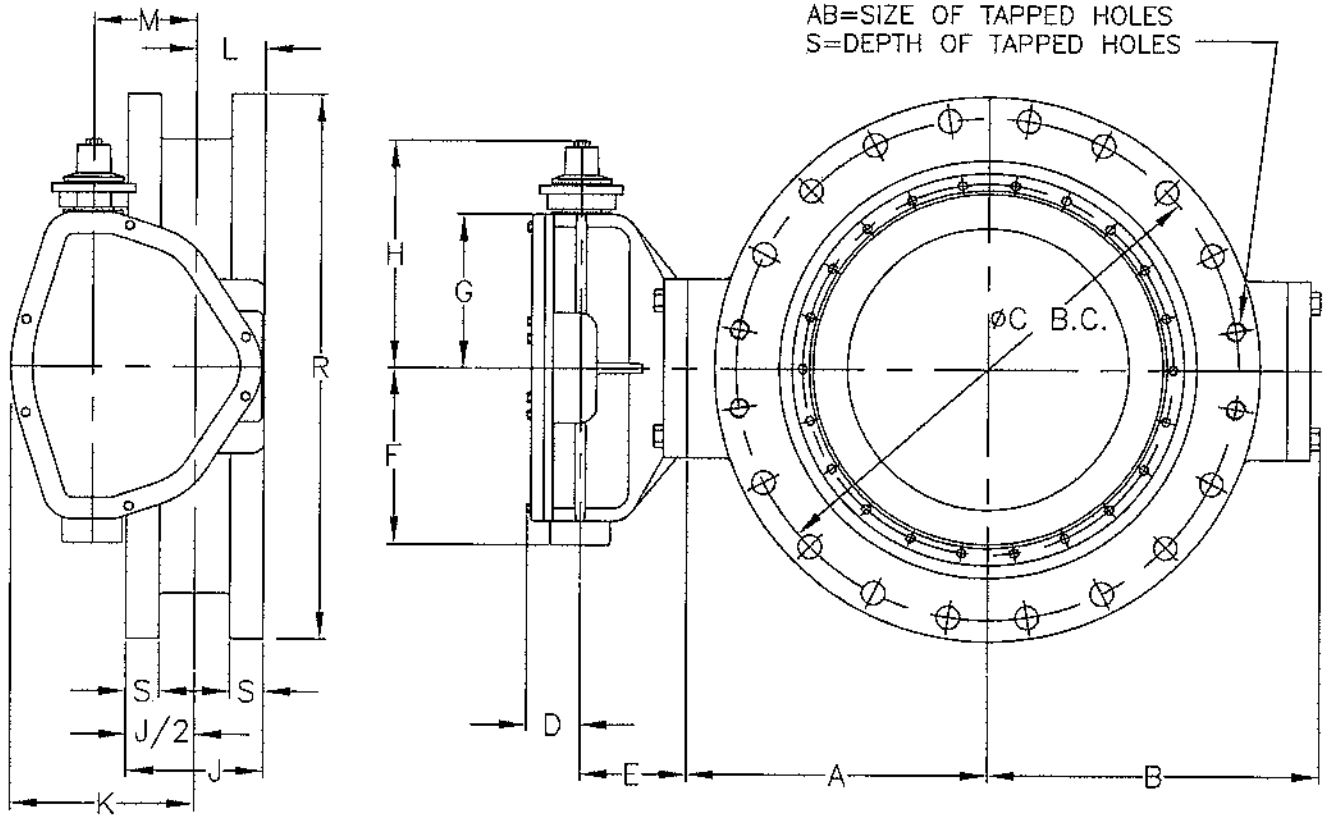
ALL COMPONENTS ARE MADE IN USA

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

DWN: ZF
DATE: 9/27/16
DWG. NO.
Q16-90005

14"-24" STYLE 4500 BFV MJ x MJ
CL150, 304 SHAFT, 316 FSTNRS
SUB-ASSEMBLY / MATERIAL LIST
100% DOMESTIC

AA=NO. OF TAPPED HOLES EACH FLANGE
AB=SIZE OF TAPPED HOLES
S=DEPTH OF TAPPED HOLES



VALVE SIZE	OPERATOR MODEL	D	E	F	G	H	K	L	M	N
4"	65	2	3 9/16	3 5/8	3	7 3/4	3 7/16	2 1/4	1 3/8	16 1/2
6"	150	2	3 9/16	3 5/8	3	7 3/4	3 7/16	2 1/4	1 3/8	16 1/2
8"	250	2 1/8	3 11/16	4 1/4	3 7/8	8 3/4	4 1/2	2 3/8	2	24
10" & 12"	510	2 3/8	4 1/2	5 9/16	5 3/16	10 1/2	6 1/8	2 3/4	3 1/8	36
14", 16", 18" & 20"	1250	3 3/16	5 3/4	8 3/8	7	12 5/16	7 7/8	3 1/4	4	48
24"	2200	3 3/16	6 1/4	10 3/8	9	14 5/16	10 3/4	3 7/8	6	72

VALVE SIZE	A	B	C	J	P	Q	R	S	AA	AB	WEIGHT
3"	4	5 1/8	6	5	4	5/8	9	15 1/16	4	5/8-11	75
4"	4	5 1/8	7 1/2	5	8	5/8	9	15 1/16	4	5/8-11	75
6"	5	6 1/8	9 1/2	5	8	3/4	11	1	4	3/4-10	95
8"	6	7 3/8	11 3/4	6	8	3/4	13 1/2	1 1/8	4	3/4-10	140
10"	7 3/4	9 1/2	14 1/4	8	12	7/8	16	1 3/16	-	-	232
12"	9 1/2	10 7/8	17	8	12	7/8	19	1 1/4	-	-	300
14"	10 7/16	12 3/16	18 3/4	8	12	1	21	1 3/8	4	1-8	485
16"	12 3/16	13 15/16	21 1/4	8	16	1	23 1/2	1 7/16	4	1-8	570
18"	13 5/16	15 1/16	22 3/4	8	16	1 1/8	25	1 9/16	4	1 1/8-7	735
20"	14 7/8	16 5/8	25	8	20	1 1/8	27 1/2	1 11/16	4	1 1/8-7	860
24"	17 19/32	19 5/16	29 1/2	8	20	1 1/4	32	1 7/8	4	1 1/4-7	1165

NOTE 1: FLOW MAY BE IN EITHER DIRECTION

NOTE 2: VALVE SHAFT WILL MEET OR EXCEED REQUIREMENTS OF SHAFT TABLE PER AWWA STANDARD C-504 FOR APPLICABLE CLASS.

NOTE 3: REFERENCE AWWA C-504 FLANGES & DRILLING (A.N.S.I. 125)

NOTE 4: "N" = NUMBER OF TURNS TO CLOSE

NOTE 5: "P" = NUMBER OF BOLTS ON EACH FLANGE

NOTE 6: "Q" = DIAMETER OF BOLTS

NOTE 7: OPERATED BY 2" AWWA OPERATING / WRENCH NUT

NOTE 8: RATED AND TESTED FOR 250 PSI WORKING PRESSURE

NOTE 9: "Z" = (1/16 or .0625 RAISED FACE ON EACH FLANGE)

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

DWN: KJ

DATE: 11/24/14

DWG. NO.
Q16-90005

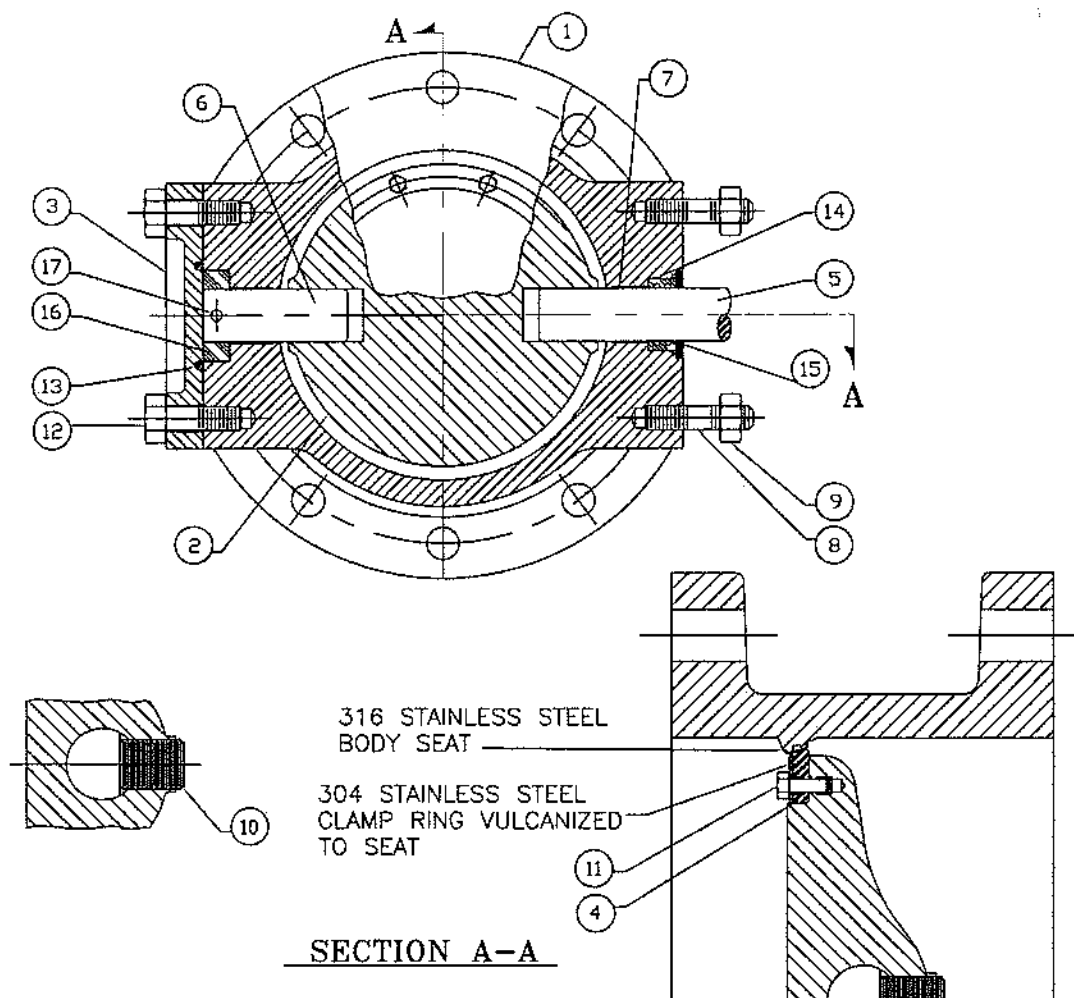
3" THRU 24"

AWWA C504-STYLE 4500

CLASS 150 BUTTERFLY VALVE WITH

FLANGED ENDS AND 2" MANUAL OP NUT

100% DOMESTIC



ITEM #	DESCRIPTION	MATERIAL
*1	BODY, VALVE	CAST IRON, A-126, CLASS B WITH 316 STAINLESS STEEL SEAT
*2	VANE	CAST IRON, A-126, CLASS B
3	COVER, END	CAST IRON, A-126, CLASS B
4	SEAT RING, VANE	EPDM WITH 304 STAINLESS STEEL INSERT
5	SHAFT, OPERATOR	304 STAINLESS STEEL, ASTM A-276
6	SHAFT, THRUST	304 STAINLESS STEEL, ASTM A-276
7	BUSHING	REINFORCED TEFLON
8	STUD	316 STAINLESS STEEL
9	NUT, HEX	STEEL, ASTM A-307, GRADE A, ELCTRO ZINC PLATED
10	TORQUE PLUG, SHAFT	316 STAINLESS STEEL, ASTM A-276
11	CAPSCREW, HEX	316 STAINLESS STEEL WITH NYLOK INSERT
12	BOLT, HEX HEAD	316 STAINLESS STEEL
13	O-RING, END COVER	BUNA-N
14	SHAFT SEAL	BUNA-S
15	SEAL RING	STEEL, C-1018
16	THRUST COLLAR	BRONZE
17	ROLL PIN	STAINLESS STEEL, A.I.S.I. 420

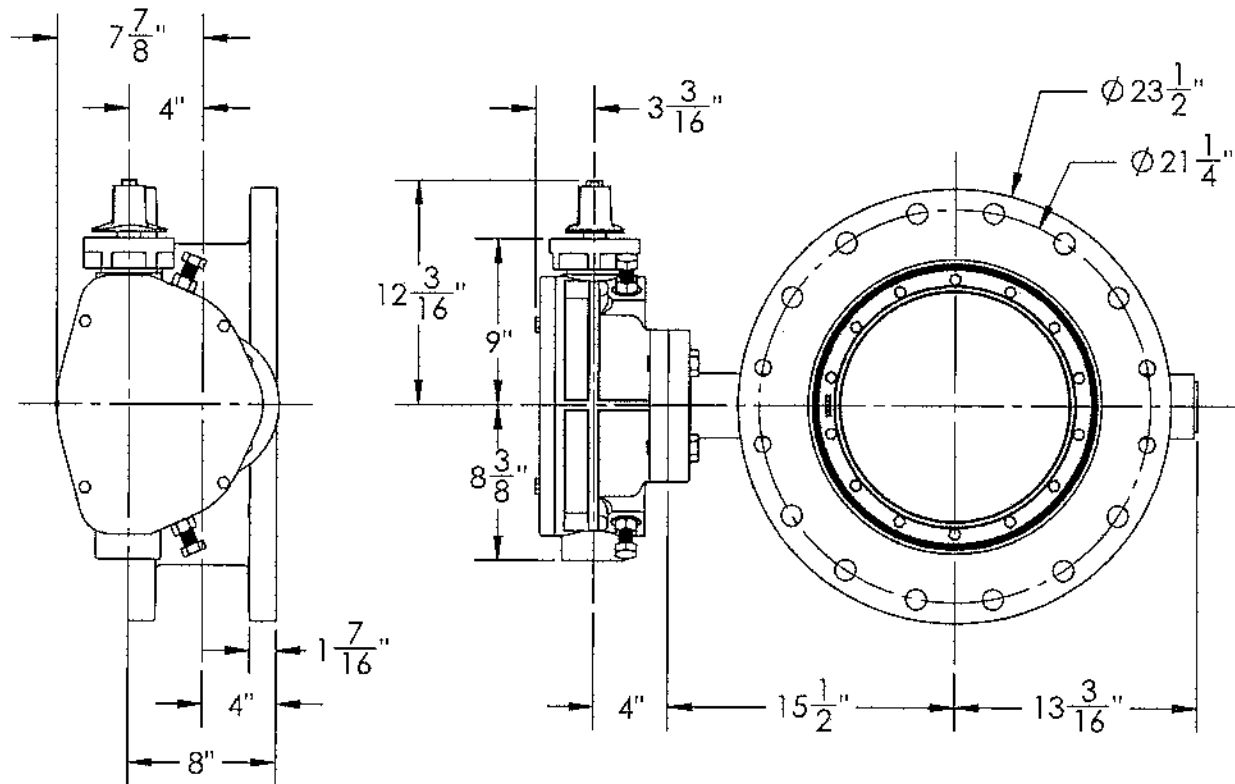
*18" THRU 24" DUCTILE IRON

ALL COMPONENTS ARE MADE IN USA

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

DWN: ZF
DATE: 9/27/16
DWG. NO.
Q16-90005

14"-24" STYLE 4500 BFV FL x FL
CL150, 304 SHAFT, 316 FSTNRS
SUB-ASSEMBLY / MATERIAL LIST
100% DOMESTIC



1. FLOW MAY BE IN EITHER DIRECTION
2. VALVE SHAFT WILL MEET OR EXCEED AWWA C504 STANDARDS
3. 48 TURNS TO CLOSE
4. 16 BOLTS ON EACH FLANGE
5. 1" DIA. OF BOLTS
6. OPERATED BY 2" AWWA OPERATING NUT/WRENCH NUT
7. RATED AND TESTED FOR 150psi WORKING PRESSURE
8. GASKETS, GLANDS, AND BOLTS FOR MECHANICAL JOINT FURNISHED WITH VALVE WHEN SPECIFIED ON ORDER
9. WEIGHT OF VALVE IS 450 LBS.

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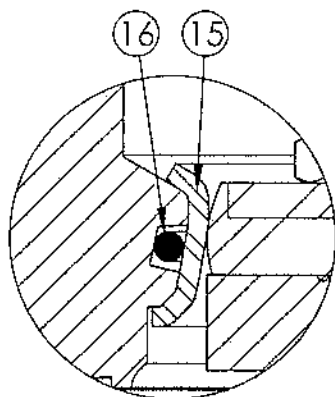
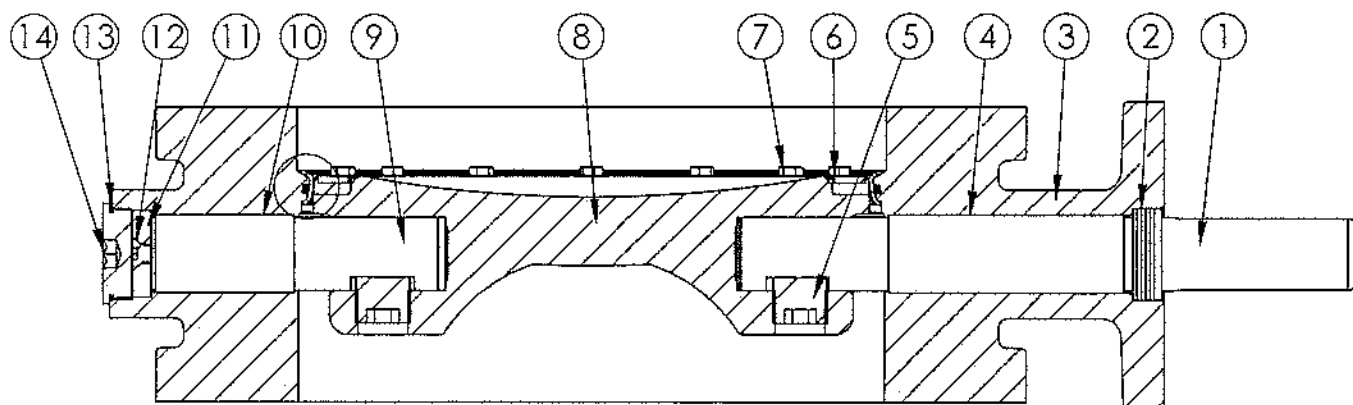
A DIVISION OF MCHANE INC.
P.O. BOX 2088
ANNISTON, ALABAMA 36202

DRAWN: CTJ

DATE: 9/26/18

DWG. NO. Q18-90010

16" - Style 4500 - CL150
BFV with F/A16 MSS/ISO Connection-
FE x FE ENDS - Buried Operator
100% DOMESTIC



SEAT DETAIL

ITEM NO.	DESCRIPTION	MATERIAL
1	OPERATOR SHAFT	316 STAINLESS STEEL, ASTM A-276
2	V-RING PACKING SET	EPDM, BUNA-N
3	BFV BODY	DUCTILE IRON ASTM A-536
4	UPPER JOURNAL BEARING	FIBER & REINFORCED TEFLON
5	TORQUE PLUG	316 STAINLESS STEEL, ASTM A-276
6	VANE SEAT RING	EPT W/ STAINLESS STEEL INSERT
7	HEX HEAD CAP SCREW	316 STAINLESS STEEL W/ NYLOC PATCH
8	BFV VANE	DUCTILE IRON ASTM A-276
9	THRUST SHAFT	316 STAINLESS STEEL, ASTM A-276
10	LOWER JOURNAL BEARING	FIBER & REINFORCED TEFLON
11	THRUST BEARING	BRONZE ALLOY
12	THRUST BEARING CAP SCREW	316 STAINLESS STEEL
13	BODY END PLUG O-RING	BUNA-N
14	BODY END PLUG	STEEL
15	BODY SEAT RING	316 STAINLESS STEEL
16	BODY SEAT O-RING	BUNA-N

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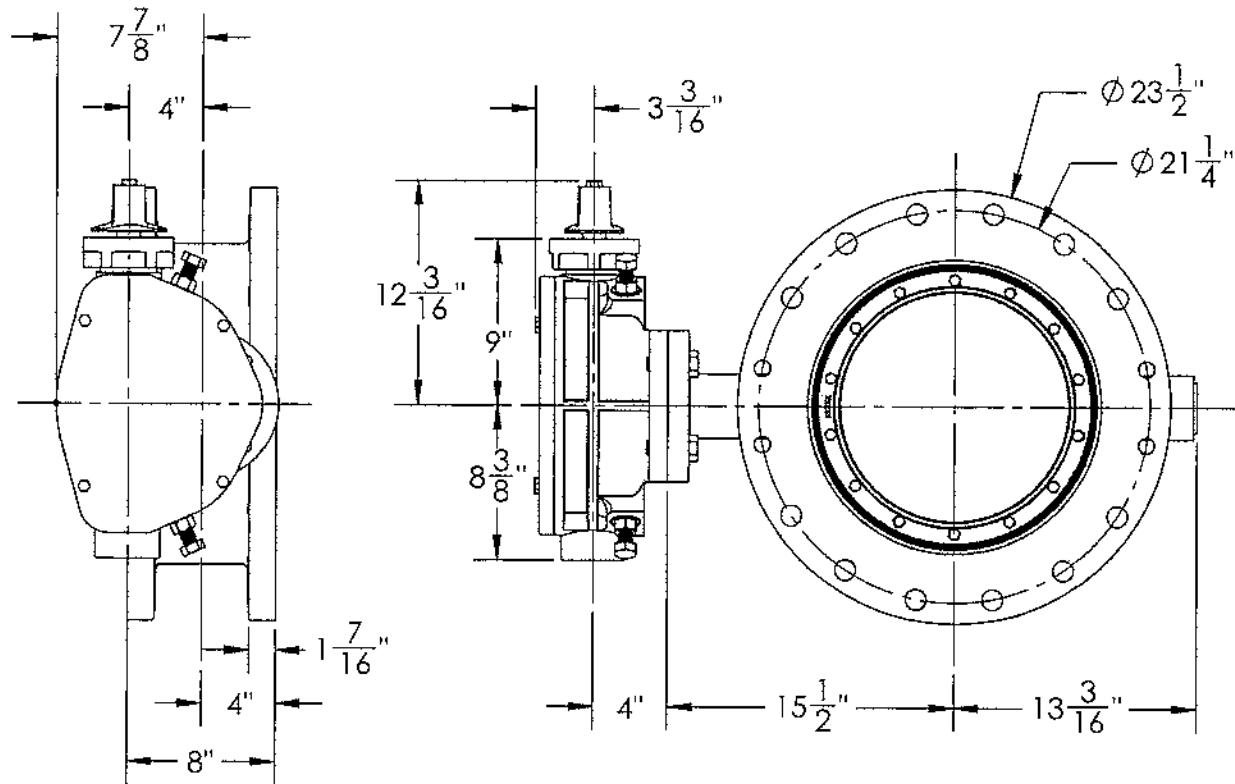
A DIVISION OF McWANE INC.
P.O. BOX 2088
ANNISTON, ALABAMA 36202

DRAWN: CTJ

DATE: 9/26/18

DWG. NO. Q18-90010

16" AWWA C504 - STYLE 4500 - CL150
BFV w/ F/A16 MSS/ISO CONNECTION
SUB-ASSEMBLY - MATERIAL LIST
FLANGED ENDS - 100% DOMESTIC



1. FLOW MAY BE IN EITHER DIRECTION
2. VALVE SHAFT WILL MEET OR EXCEED AWWA C504 STANDARDS
3. 48 TURNS TO CLOSE
4. 16 BOLTS ON EACH FLANGE
5. 1" DIA. OF BOLTS
6. OPERATED BY 2" AWWA OPERATING NUT/WRENCH NUT
7. RATED AND TESTED FOR 150psi WORKING PRESSURE
8. GASKETS, GLANDS, AND BOLTS FOR MECHANICAL JOINT FURNISHED WITH VALVE WHEN SPECIFIED ON ORDER
9. WEIGHT OF VALVE IS 450 LBS.

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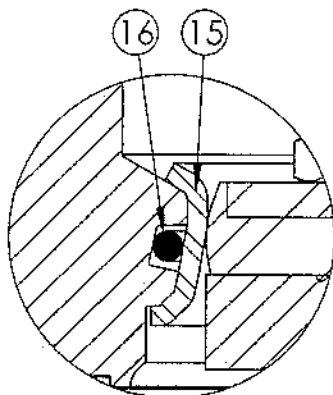
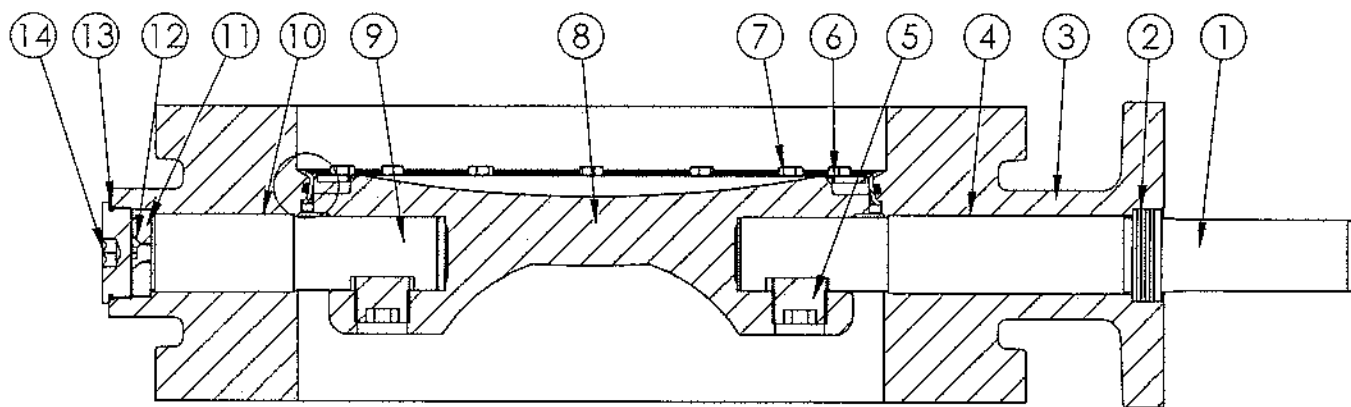
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P.O. BOX 2088
ANNISTON, ALABAMA 36202

DRAWN: CTJ

DATE: 9/26/18

DWG. NO. Q18-90010

16" - Style 4500 - CL150
BFV with F/A16 MSS/ISO Connection-
FE x FE ENDS - Buried Operator
100% DOMESTIC



SEAT DETAIL

ITEM NO.	DESCRIPTION	MATERIAL
1	OPERATOR SHAFT	316 STAINLESS STEEL, ASTM A-276
2	V-RING PACKING SET	EPDM, BUNA-N
3	BFV BODY	DUCTILE IRON ASTM A-536
4	UPPER JOURNAL BEARING	FIBER & REINFORCED TEFLON
5	TORQUE PLUG	316 STAINLESS STEEL, ASTM A-276
6	VANE SEAT RING	EPT W/ STAINLESS STEEL INSERT
7	HEX HEAD CAP SCREW	316 STAINLESS STEEL W/ NYLOC PATCH
8	BFV VANE	DUCTILE IRON ASTM A-276
9	THRUST SHAFT	316 STAINLESS STEEL, ASTM A-276
10	LOWER JOURNAL BEARING	FIBER & REINFORCED TEFLON
11	THRUST BEARING	BRONZE ALLOY
12	THRUST BEARING CAP SCREW	316 STAINLESS STEEL
13	BODY END PLUG O-RING	BUNA-N
14	BODY END PLUG	STEEL
15	BODY SEAT RING	316 STAINLESS STEEL
16	BODY SEAT O-RING	BUNA-N

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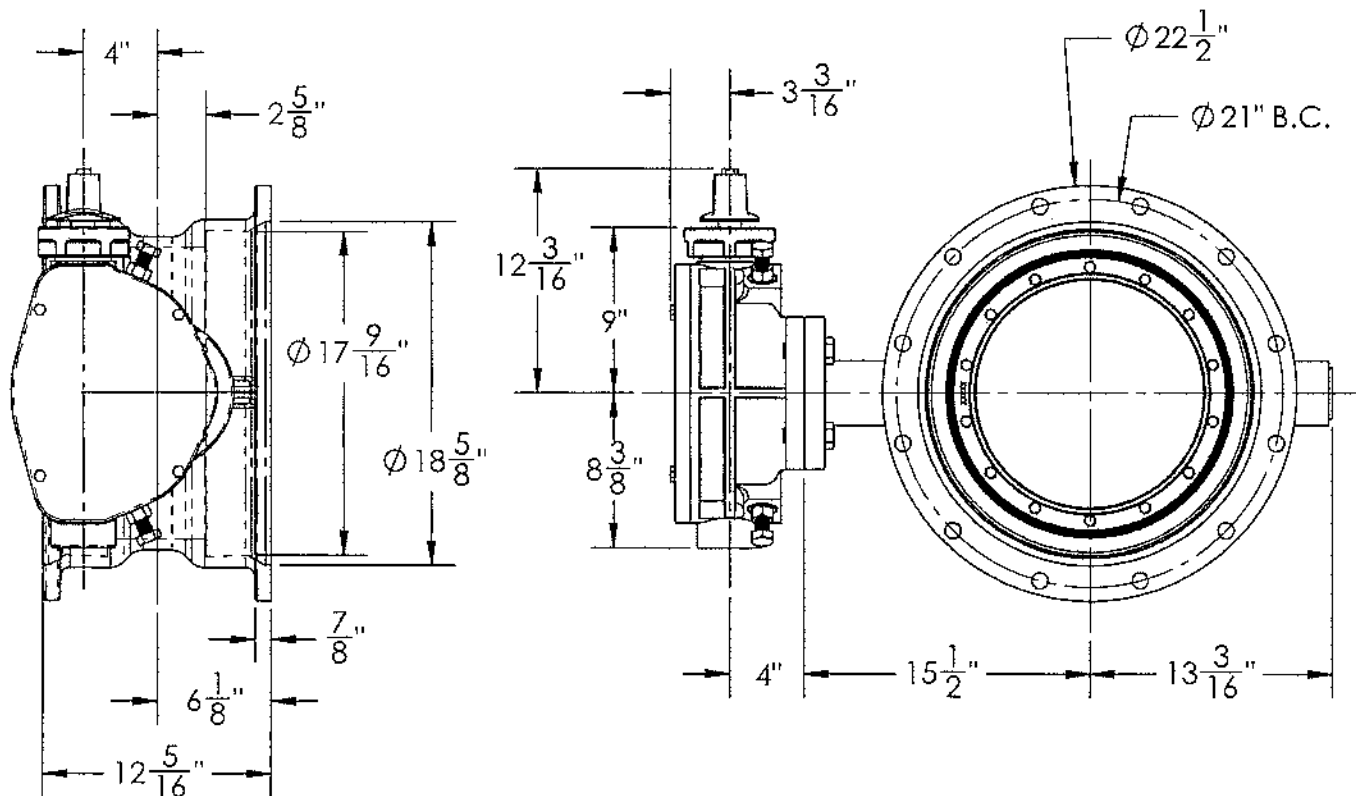
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DRAWN: CTJ

DATE: 9/26/18

DWG. NO. Q18-90010

16" AWWA C504 - STYLE 4500 - CL150
BFV w/ F/A16 MSS/ISO CONNECTION
SUB-ASSEMBLY - MATERIAL LIST
FLANGED ENDS - 100% DOMESTIC



1. FLOW MAY BE IN EITHER DIRECTION
2. VALVE SHAFT WILL MEET OR EXCEED AWWA C504 STANDARDS
3. 48 TURNS TO CLOSE
4. 12 BOLTS ON EACH FLANGE
5. 7/8D DIA. OF BOLTS
6. OPERATED BY 2" AWWA OPERATING NUT/WRENCH NUT
7. RATED AND TESTED FOR 150psi WORKING PRESSURE
8. GASKETS, GLANDS, AND BOLTS FOR MECHANICAL JOINT FURNISHED WITH VALVE WHEN SPECIFIED ON ORDER
9. WEIGHT OF VALVE IS 450 LBS.

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M&H VALVE COMPANY

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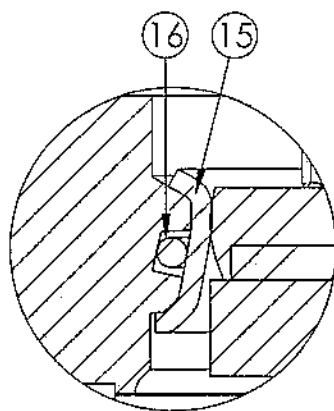
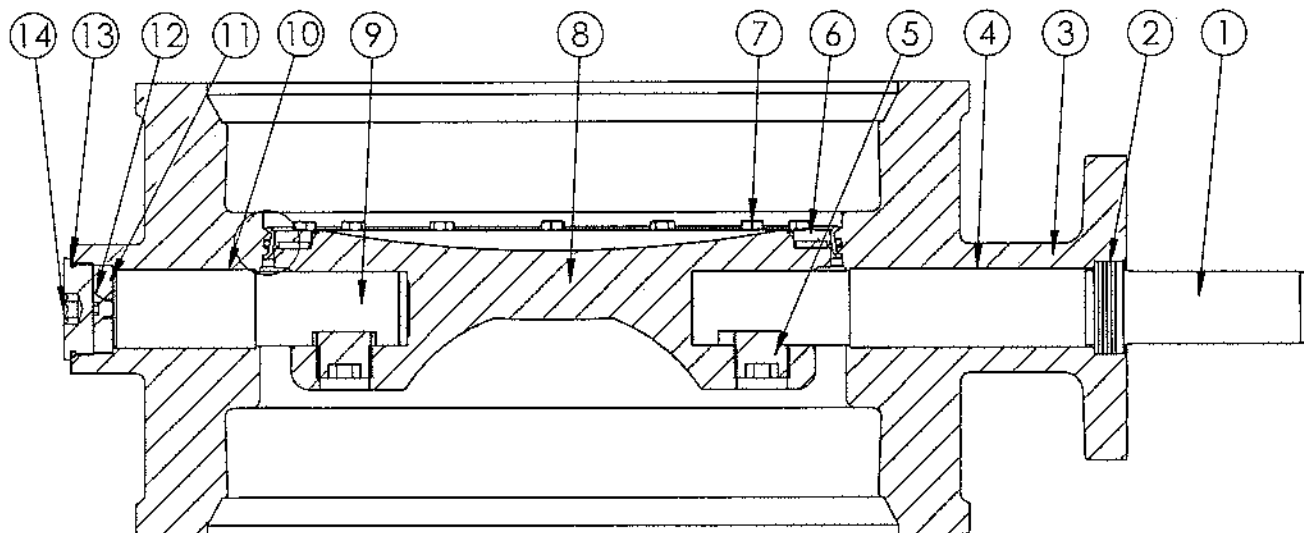
DRAWN: CTJ

DATE: 9/26/18

DWG.
NO.

Q18-90010

16" - Style 4500 - CL150
BFV with F/A 14 MSS/ISO Connection-
MECHANICAL JOINT - Buried Operator
100% DOMESTIC



SEAT DETAIL

ITEM NO.	DESCRIPTION	MATERIAL
1	OPERATOR SHAFT	316 STAINLESS STEEL, ASTM A-276
2	V-RING PACKING SET	EPDM, BUNA-N
3	BFV BODY	DUCTILE IRON ASTM A-536
4	UPPER JOURNAL BEARING	FIBER & REINFORCED TEFLON
5	TORQUE PLUG	316 STAINLESS STEEL, ASTM A-276
6	VANE SEAT RING	EPT W/ STAINLESS STEEL INSERT
7	HEX HEAD CAP SCREW	316 STAINLESS STEEL W/ NYLOC PATCH
8	BFV VANE	DUCTILE IRON ASTM A-276
9	THRUST SHAFT	316 STAINLESS STEEL, ASTM A-276
10	LOWER JOURNAL BEARING	FIBER & REINFORCED TEFLON
11	THRUST BEARING	BRONZE ALLOY
12	THRUST BEARING CAP SCREW	316 STAINLESS STEEL
13	BODY END PLUG O-RING	BUNA-N
14	BODY END PLUG	STEEL
15	BODY SEAT RING	316 STAINLESS STEEL
16	BODY SEAT O-RING	BUNA-N

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M&H VALVE COMPANY

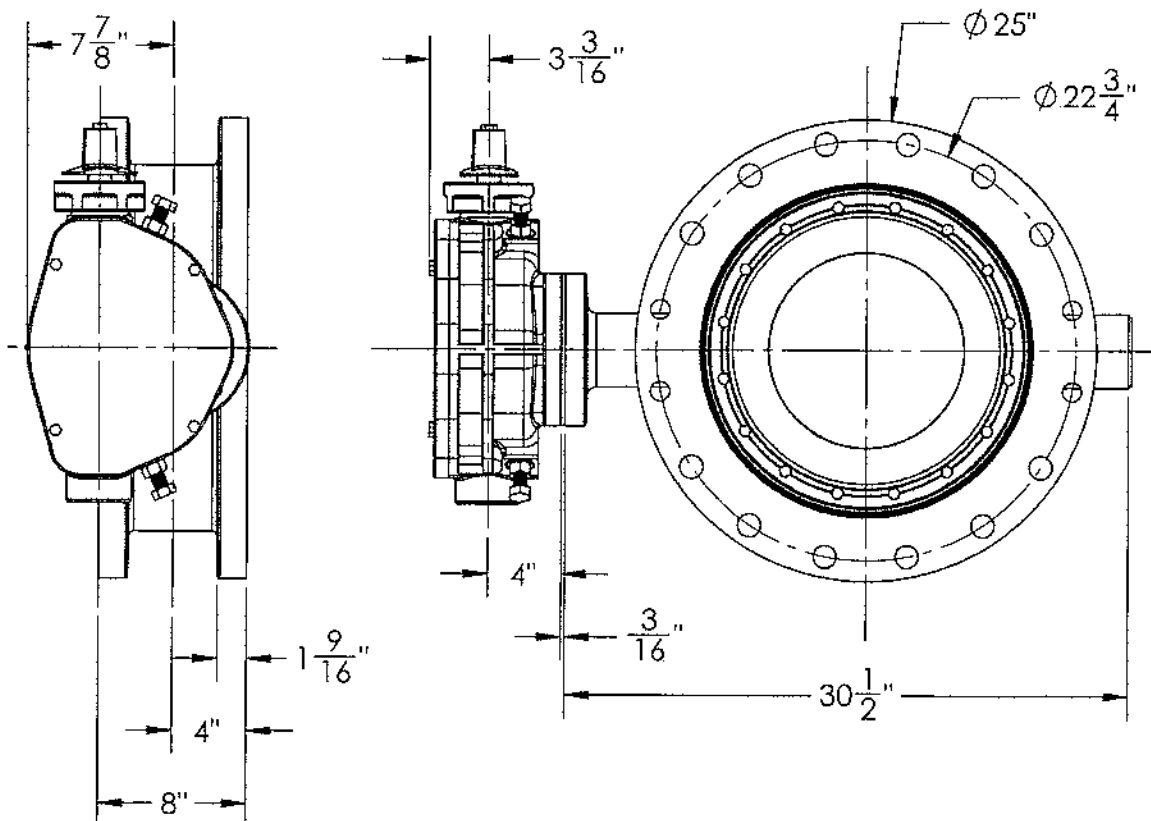
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P.O. BOX 2088
ANNISTON, ALABAMA 36202

DRAWN: CTJ

DATE: 9/26/18

DWG. NO. Q18-90010

16" AWWA C504 - STYLE 4500 - CL150
BFV w/ F/A16 MSS/ISO CONNECTION
SUB-ASSEMBLY - MATERIAL LIST
MECHANICAL JOINT ENDS - 100% DOMESTIC



1. FLOW MAY BE IN EITHER DIRECTION
2. VALVE SHAFT WILL MEET OR EXCEED AWWA C504 STANDARDS
3. 48 TURNS TO CLOSE
4. 16 BOLTS ON EACH FLANGE
5. 1 1/4" D DIA. OF BOLTS
6. OPERATED BY 2" AWWA OPERATING NUT/WRENCH NUT
7. RATED AND TESTED FOR 150psi WORKING PRESSURE
8. GASKETS, GLANDS, AND BOLTS FOR MECHANICAL JOINT FURNISHED WITH VALVE WHEN SPECIFIED ON ORDER
9. WEIGHT OF VALVE IS 450 LBS.

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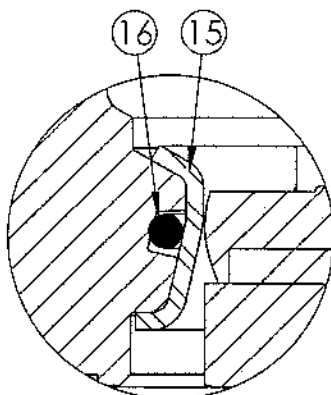
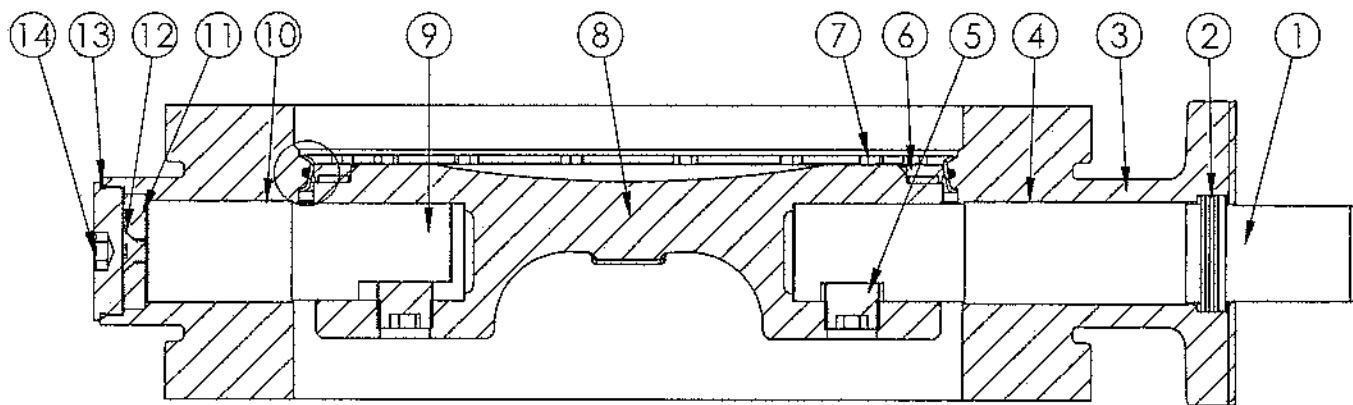
DRAWN: CTJ

DATE: 9/27/18

DWG.
NO.

Q18-90010

18" AWWA C504 - STYLE 4500 - CL150
BFV w/ F/A 14 MSS/ISO CONNECTION
FLANGED ENDS - BURIED OPERATOR
100% DOMESTIC



SEAT DETAIL

ITEM NO.	DESCRIPTION	MATERIAL
1	OPERATOR SHAFT	316 STAINLESS STEEL
2	V-RING PACKING SET	EPDM, BUNA-N
3	BFV BODY	DUCTILE IRON ASTM A-536
4	UPPER JOURNAL BEARING	FIBER & REINFORCED TEFLON
5	TORQUE PLUG	316 STAINLESS STEEL
6	VANE SEAT RING	EPT W/ STAINLESS STEEL INSERT
7	HEX HEAD CAP SCREW	316 STAINLESS STEEL W/ NYLOC PATCH
8	BFV VANE	DUCTILE IRON ASTM A-276
9	THRUST SHAFT	316 STAINLESS STEEL
10	LOWER JOURNAL BEARING	FIBER & REINFORCED TEFLON
11	THRUST BEARING	BRONZE ALLOY
12	THRUST BEARING CAP SCREW	316 STAINLESS STEEL
13	BODY END PLUG O-RING	BUNA-N
14	BODY END PLUG	STEEL
15	BODY SEAT RING	316 STAINLESS STEEL
16	BODY SEAT O-RING	BUNA-N

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ANNISTON, ALABAMA 36202

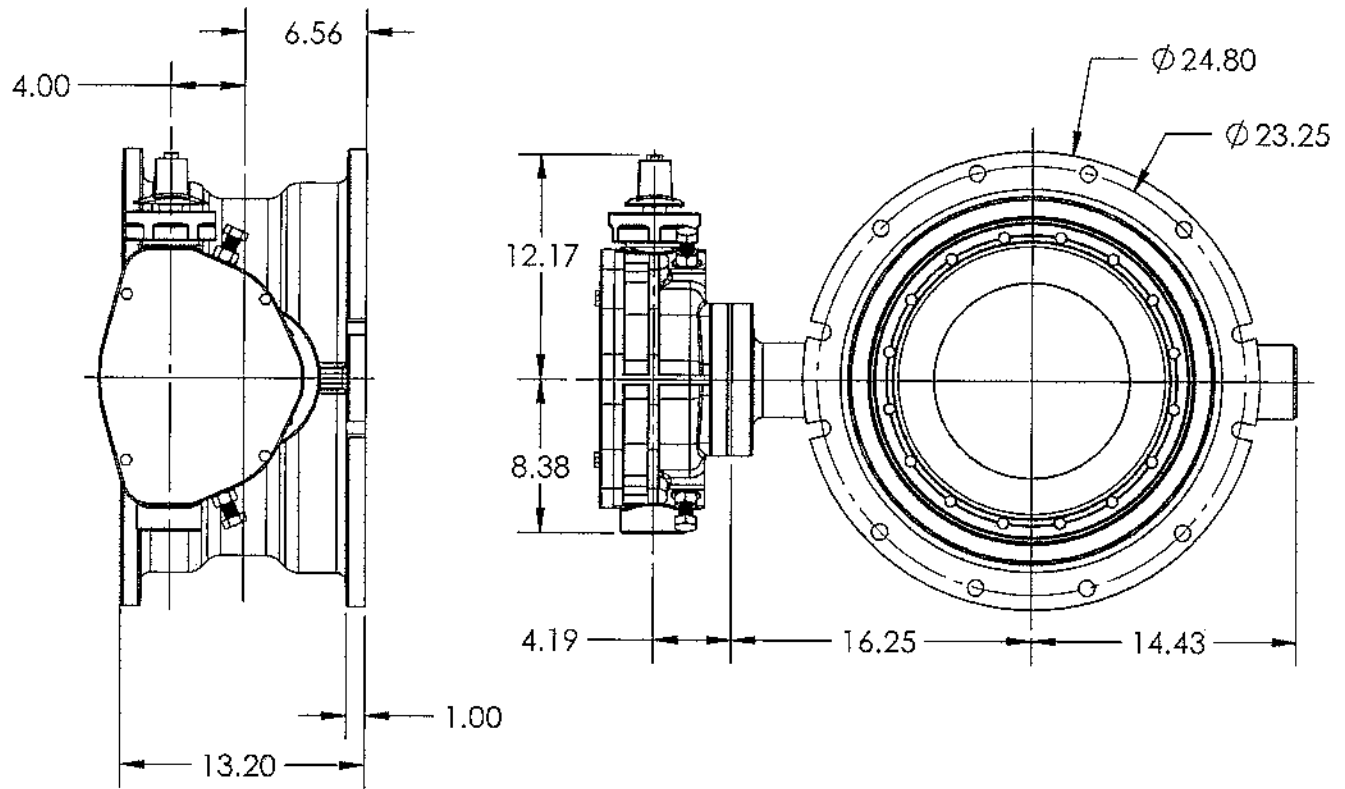
DRAWN: CTJ

DATE: 9/27/18

DWG.
NO.

Q18-90010

18" AWWA C504 - STYLE 4500 - CL150
BFV w/ F/A16 MSS/ISO CONNECTION
SUB-ASSEMBLY - MATERIAL LIST
FLANGED ENDS - 100% DOMESTIC



1. FLOW MAY BE IN EITHER DIRECTION
2. VALVE SHAFT WILL MEET OR EXCEED AWWA C504 STANDARDS
3. 48 TURNS TO CLOSE
4. 12 BOLTS ON EACH FLANGE
5. 7/8D DIA. OF BOLTS
6. OPERATED BY 2" AWWA OPERATING NUT/WRENCH NUT
7. RATED AND TESTED FOR 150psi WORKING PRESSURE
8. GASKETS, GLANDS, AND BOLTS FOR MECHANICAL JOINT FURNISHED WITH VALVE WHEN SPECIFIED ON ORDER
9. WEIGHT OF VALVE IS 450 LBS.

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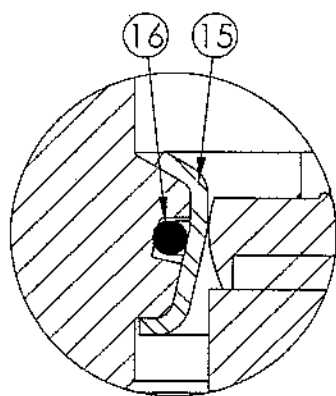
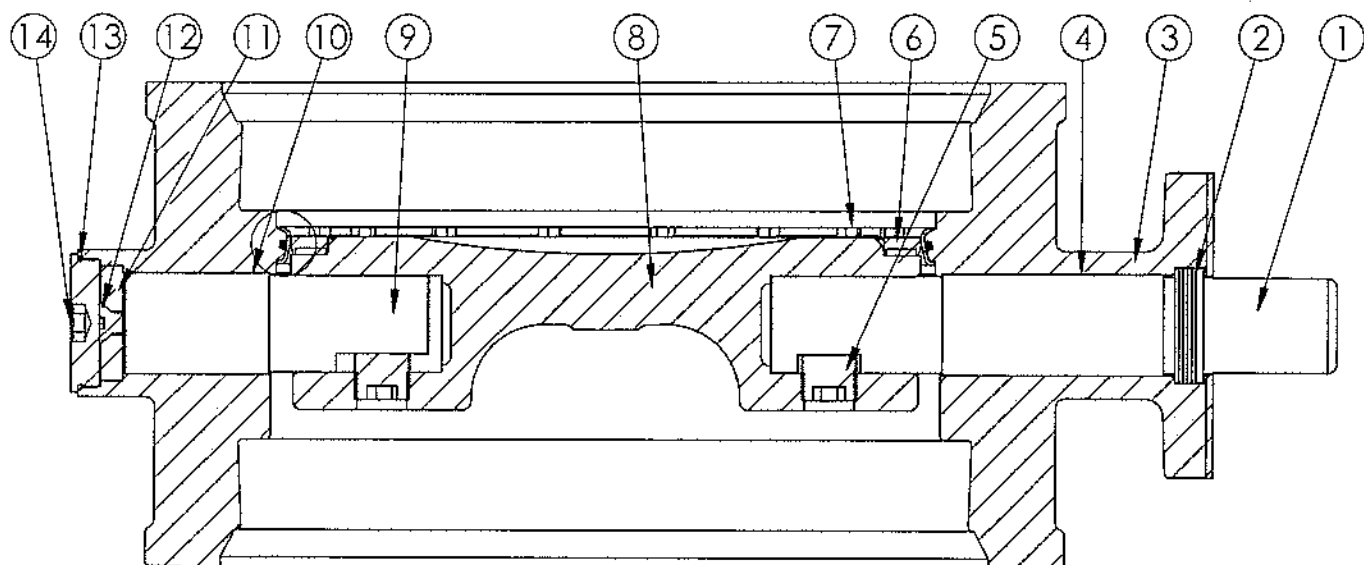
DRAWN: CTJ

DATE: 9/27/18

DWG. NO.

Q18-90010

18" - Style 4500 - CL150
BFV with F/A 14 MSS/ISO Connection-
MECHANICAL JOINT - Buried Operator
100% DOMESTIC



SEAT DETAIL

ITEM NO.	DESCRIPTION	MATERIAL
1	OPERATOR SHAFT	316 STAINLESS STEEL
2	V-RING PACKING SET	EPDM, BUNA-N
3	BFV BODY	DUCTILE IRON ASTM A-536
4	UPPER JOURNAL BEARING	FIBER & REINFORCED TEFLON
5	TORQUE PLUG	316 STAINLESS STEEL
6	VANE SEAT RING	EPT W/ STAINLESS STEEL INSERT
7	HEX HEAD CAP SCREW	316 STAINLESS STEEL W/ NYLOC PATCH
8	BFV VANE	DUCTILE IRON ASTM A-276
9	THRUST SHAFT	316 STAINLESS STEEL
10	LOWER JOURNAL BEARING	FIBER & REINFORCED TEFLON
11	THRUST BEARING	BRONZE ALLOY
12	THRUST BEARING CAP SCREW	316 STAINLESS STEEL
13	BODY END PLUG O-RING	BUNA-N
14	BODY END PLUG	STEEL
15	BODY SEAT RING	316 STAINLESS STEEL
16	BODY SEAT O-RING	BUNA-N

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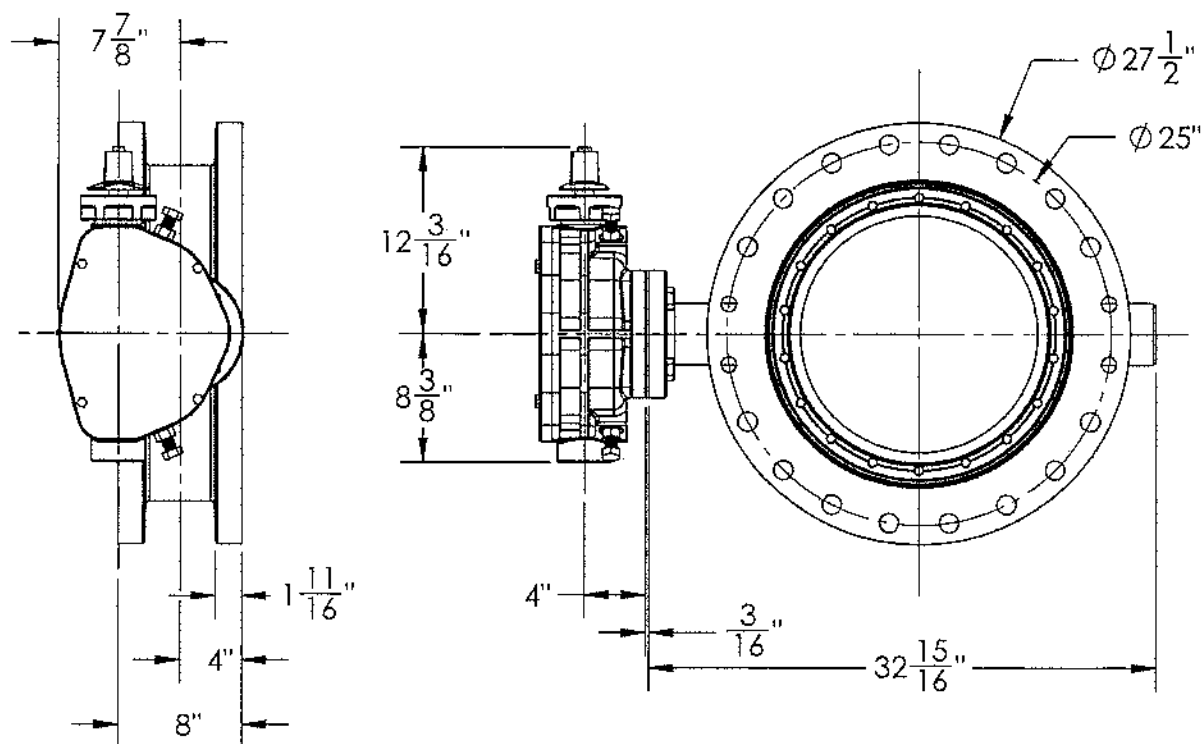
DATE: 9/27/18

DWG.

NO.

Q18-90010

18" AWWA C504 - STYLE 4500 - CL150
BFV w/ F/A16 MSS/ISO CONNECTION
SUB-ASSEMBLY - MATERIAL LIST
MJ ENDS - 100% DOMESTIC



1. FLOW MAY BE IN EITHER DIRECTION
2. VALVE SHAFT WILL MEET OR EXCEED AWWA C504 REQUIREMENTS
3. NUMBER OF TURNS TO CLOSE: 48
4. NUMBER OF BOLTS ON EACH FLANGE: 20
5. DIAMETER OF BOLTS: 1 1/4"
6. OPERATED BY 2" AWWA OPERATING NUT/WRENCH NUT
7. RATED AND TESTED FOR 150psi WORKING PRESSURE
8. GASKETS, GLANDS, AND BOLTS FOR MECHANICAL JOINT FURNISHED WITH VALVE SPECIFIED ON ORDER

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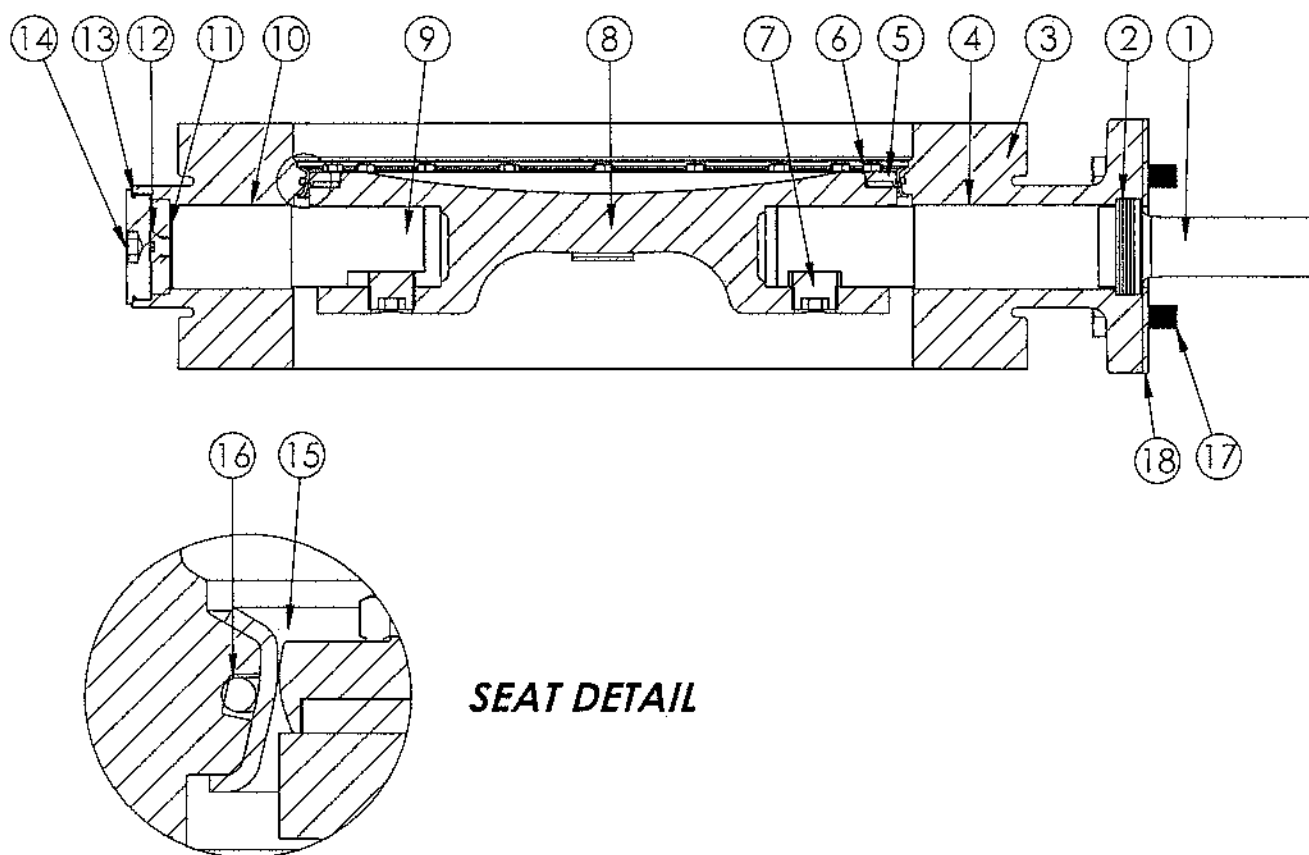
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P.O. BOX 2088
ANNISTON, ALABAMA 36202

DRAWN: ZF

DATE: 9/27/2018

DWG. NO. Q18-90010

**20" AWWA C504 - STYLE 4500 - CL150
BFV w/ 1250 F/A16 MSS/ISO CONNECTION
SUB-ASSEMBLY - DIMENSIONS
FLANGED END - %100 DOMESTIC**



ITEM NO.	DESCRIPTION	MATERIAL
1	OPERATOR SHAFT	316 STAINLESS STEEL, ASTM A-276
2	V-RING PACKING SET	EPDM, BUNA-N
3	BFV BODY	DUCTILE IRON ASTM A-536
4	UPPER JOURNAL BEARING	FIBER & REINFORCED TEFLON
5	VANE SEAT RING	EPT W/ STAINLESS STEEL INSERT
6	HEX HEAD CAP SCREW	316 STAINLESS STEEL W/ NYLOC PATCH
7	TORQUE PLUG	316 STAINLESS STEEL, ASTM A-276
8	BFV VANE	DUCTILE IRON ASTM A-536
9	THRUST SHAFT	316 STAINLESS STEEL, ASTM A-276
10	LOWER JOURNAL BEARING	FIBER & REINFORCED TEFLON
11	THRUST BEARING	BRONZE ALLOY
12	THRUST BEARING CAP SCREW	316 STAINLESS STEEL
13	BODY END PLUG O-RING	BUNA-N
14	BODY END PLUG	STEEL
15	BODY SEAT RING	316 STAINLESS STEEL
16	BODY SEAT O-RING	BUNA-N
17	OPERATOR MOUNTING BOLTS	316 STAINLESS STEEL
18	OSP F/A16 SEAL PLATE	COMMERCIAL STEEL

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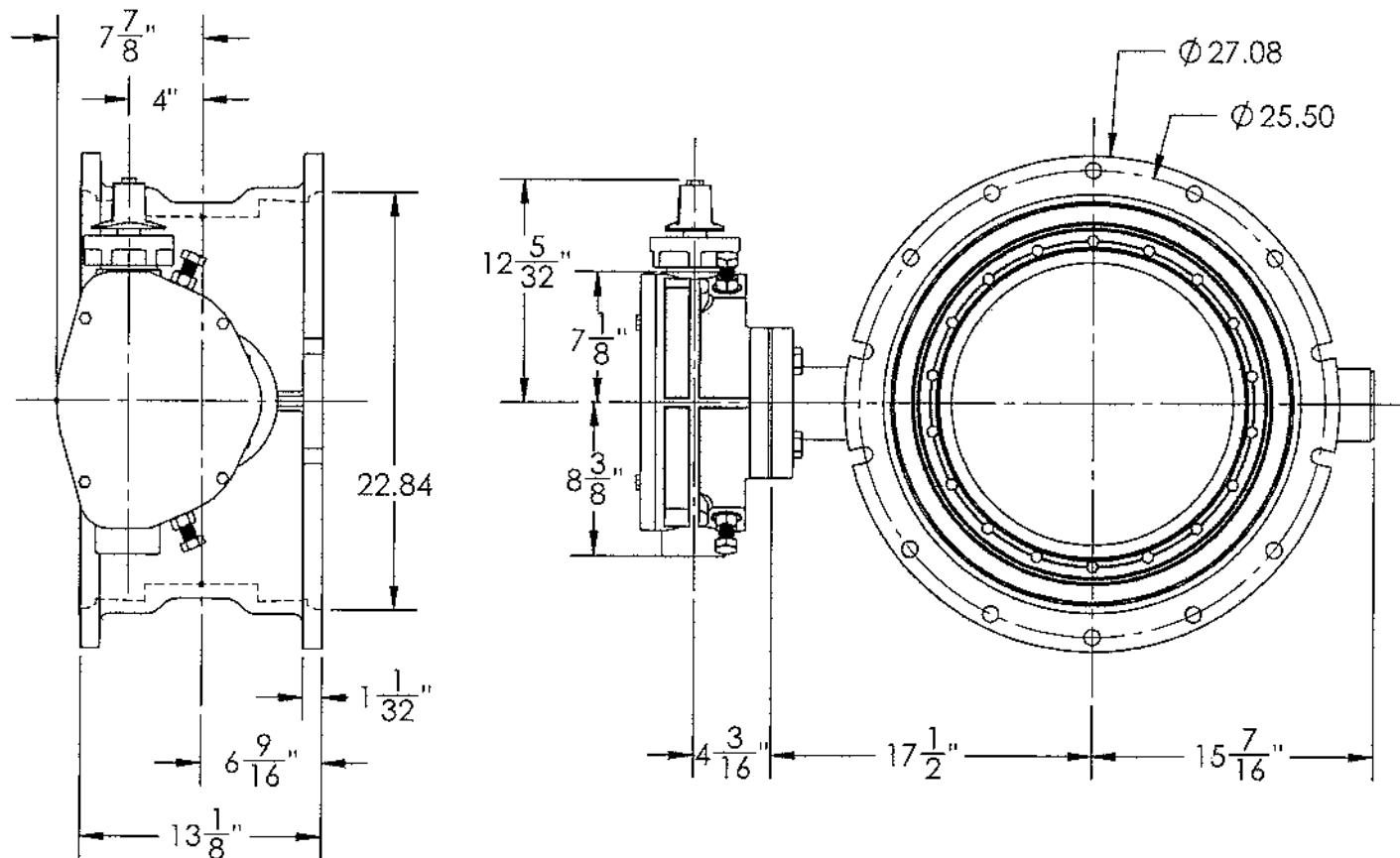
DATE: 9/27/2018

DWG.

NO.

Q18-90010

20" AWWA C504 - STYLE 4500 - CL150
BFV w/ F/A16 MSS/ISO CONNECTION
SUB-ASSEMBLY - MATERIAL LIST
FLANGED ENDS - %100 DOMESTIC



1. FLOW MAY BE IN EITHER DIRECTION
2. VALVE SHAFT WILL MEET OR EXCEED AWWA C504 REQUIREMENTS
3. NUMBER OF TURNS TO CLOSE: 48
4. NUMBER OF BOLTS ON EACH FLANGE: 14
5. DIAMETER OF BOLTS: 3/4
6. INSIDE DIAMETER OF VALVE HUB: 22.84
7. OPERATED BY 2" AWWA OPERATING NUT/WRENCH NUT
8. RATED AND TESTED FOR 150psi WORKING PRESSURE
9. GASKETS, GLANDS, AND BOLTS FOR MECHANICAL JOINT FURNISHED WITH VALVE SPECIFIED ON ORDER

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M&H VALVE COMPANY

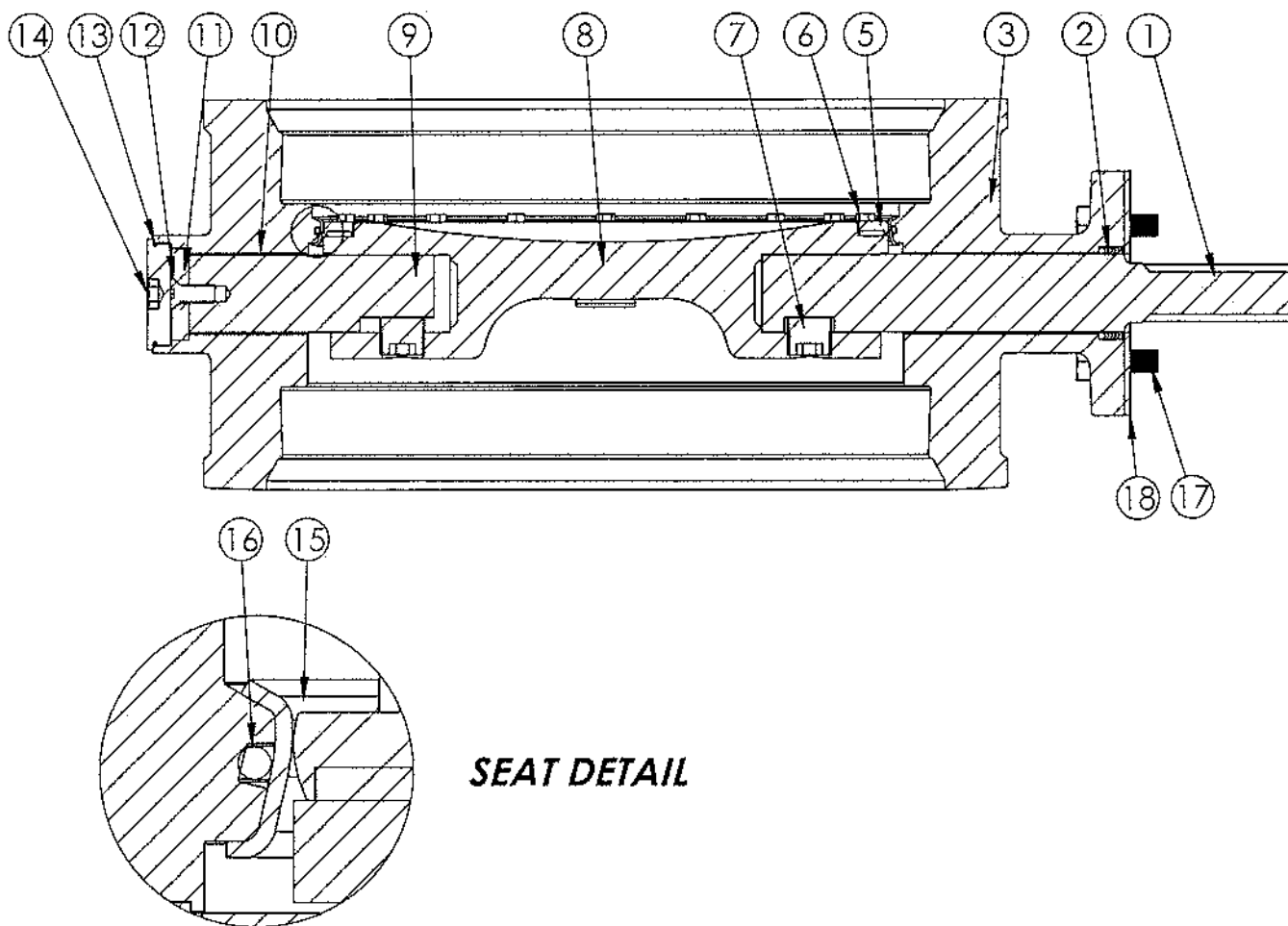
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P.O. BOX 2088
ANNHISSE, ALABAMA 36202

DRAWN: ZF

DATE: 9/27/2018

DWG. NO. Q18-90010

**20" AWWA C504 - STYLE 4500 - CL150
BFV w/ 1250 F/A16 MSS/ISO CONNECTION
SUB-ASSEMBLY - DIMENSIONS
MECHANICAL JOINT ENDS - %100 DOMESTIC**



ITEM NO.	DESCRIPTION	MATERIAL
1	OPERATOR SHAFT	304 STAINLESS STEEL, ASTM A-276
2	V-RING PACKING SET	EPDM, BUNA-N
3	BFV BODY	DUCTILE IRON ASTM A-536
4	UPPER JOURNAL BEARING	FIBER & REINFORCED TEFLON
5	VANE SEAT RING	EPT W/ STAINLESS STEEL INSERT
6	HEX HEAD CAP SCREW	18-8 STAINLESS STEEL W/ NYLOC PATCH
7	TORQUE PLUG	304 STAINLESS STEEL, ASTM A-276
8	BFV VANE	DUCTILE IRON ASTM A-536
9	THRUST SHAFT	304 STAINLESS STEEL, ASTM A-276
10	LOWER JOURNAL BEARING	FIBER & REINFORCED TEFLON
11	THRUST BEARING	BRONZE ALLOY
12	THRUST BEARING CAP SCREW	18-8 STAINLESS STEEL
13	BODY END PLUG O-RING	BUNA-N
14	BODY END PLUG	STEEL
15	BODY SEAT RING	316 STAINLESS STEEL
16	BODY SEAT O-RING	BUNA-N

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M&H VALVE COMPANY

A DIVISION OF MCWANE INC.
P.O. BOX 1088
ANNISTON, ALABAMA 36202

DRAWN: ZF

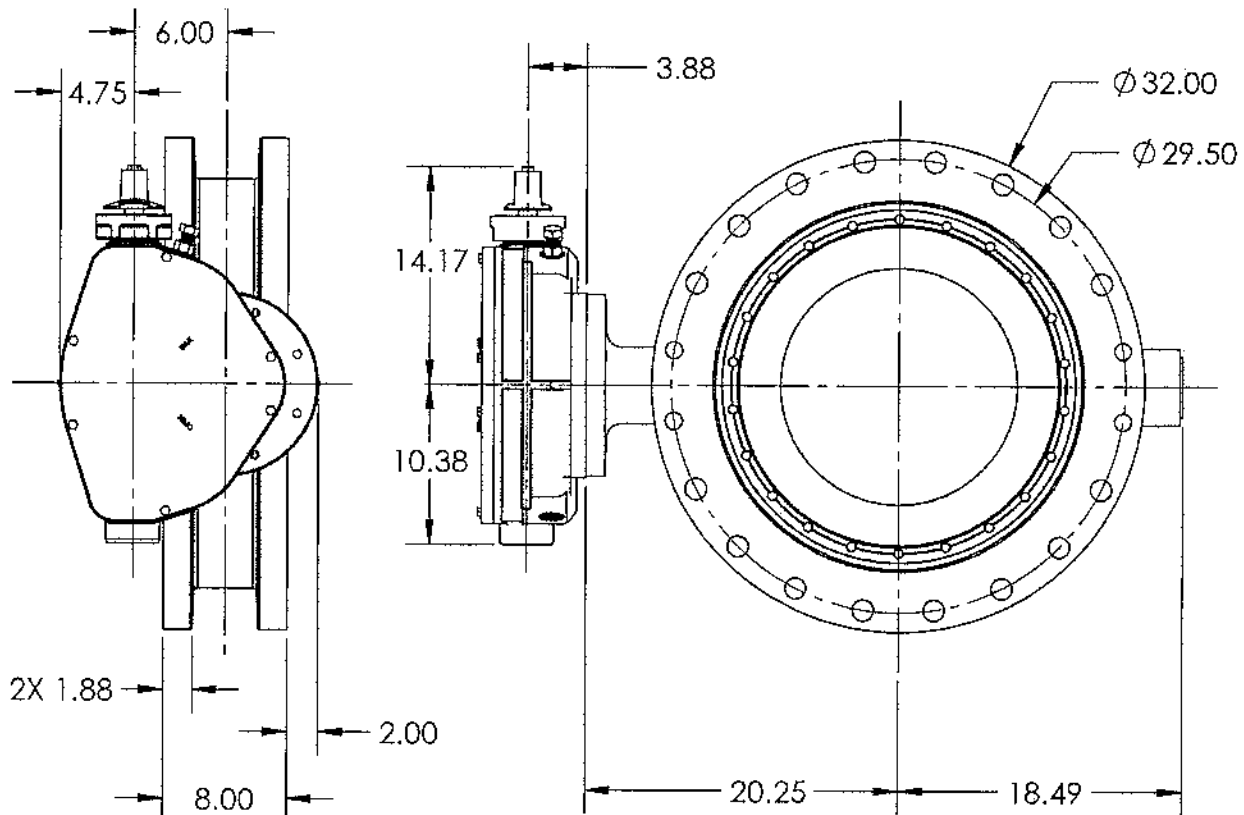
DATE: 9/27/2018

DWG.

NO.

Q18-90010

20" AWWA C504 - STYLE 4500 - CL150
BFV w/ F/A16 MSS/ISO CONNECTION
SUB-ASSEMBLY - MATERIAL LIST
MECHANICAL JOINT ENDS- %100 DOMESTIC



1. FLOW MAY BE IN EITHER DIRECTION
2. VALVE SHAFT WILL MEET OR EXCEED AWWA C504 REQUIREMENTS
3. NUMBER OF TURNS TO CLOSE
4. 16 BOLTS ON EACH FLANGE
5. 4 THREADED HOLES ON EACH FLANGE
6. 7/8" DIAMETER BOLTS
7. OPERATED BY 2" AWWA OPERATING NUT / WRENCH NUT
8. RATED AND TESTED FOR 150psi WORKING PRESSURE
9. GASKETS, GLANDS, AND BOLTS FOR MECHANICAL JOINT FURNISHED WITH VALVE WHEN SPECIFIED ON ORDERS
9. VALVE WEIGHT IS 800 LBS.

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M&H VALVE COMPANY

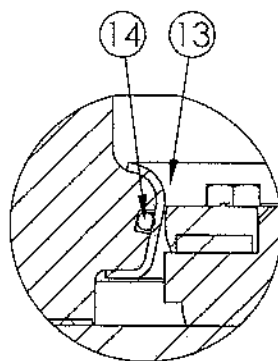
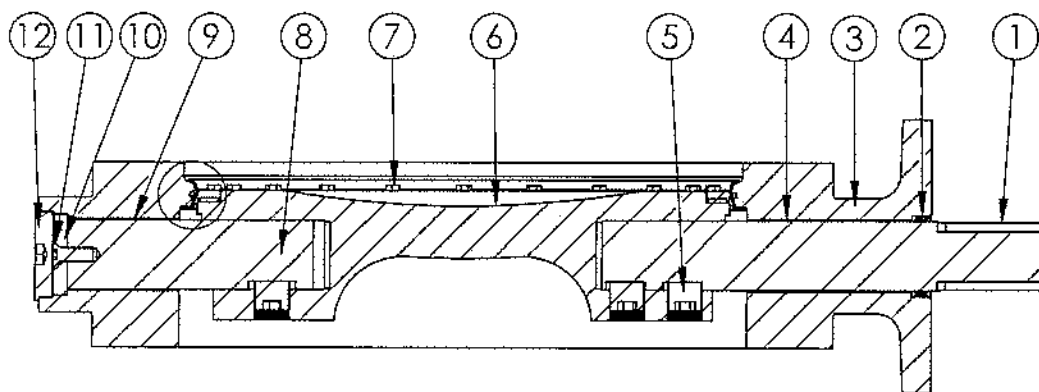
A DIVISION OF McWANE INC.
P.O. BOX 2888
ANNISTON, ALABAMA 36202

DRAWN: CTJ

DATE: 9/26/18

DWG. NO. Q18-90010

24" AWWA C504 - STYLE 4500 - CL150
BFV w/ F/A25 MSS/ISO CONNECTION
SUB-ASSEMBLY - DIMENSIONS
FLANGED END - 100% DOMESTIC



SEAT DETAIL

ITEM NO.	DESCRIPTION	MATERIAL
1	OPERATOR SHAFT	316 STAINLESS STEEL, ASTM A-276
2	V-RING PACKING SET	EPDM, BUNA-N
3	BFV BODY	DUCTILE IRON ASTM A-536
4	UPPER JOURNAL BEARING	FIBER & REINFORCED TEFLON
5	TORQUE PLUG	316 STAINLESS STEEL, ASTM A-276
6	VANE SEAT RING	EPT W/ STAINLESS STEEL INSERT
7	HEX HEAD CAP SCREW	316 STAINLESS STEEL W/ NYLOC PATCH
8	THRUST SHAFT	316 STAINLESS STEEL, ASTM A-276
9	LOWER JOURNAL BEARING	FIBER & REINFORCED TEFLON
10	THRUST BEARING	BRONZE ALLOY
11	THRUST BEARING CAP SCREW	316 STAINLESS STEEL
12	BODY END PLUG	STEEL
13	BODY SEAT RING	316 STAINLESS STEEL
14	BODY SEAT O-RING	BUNA-N

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M&H VALVE COMPANY

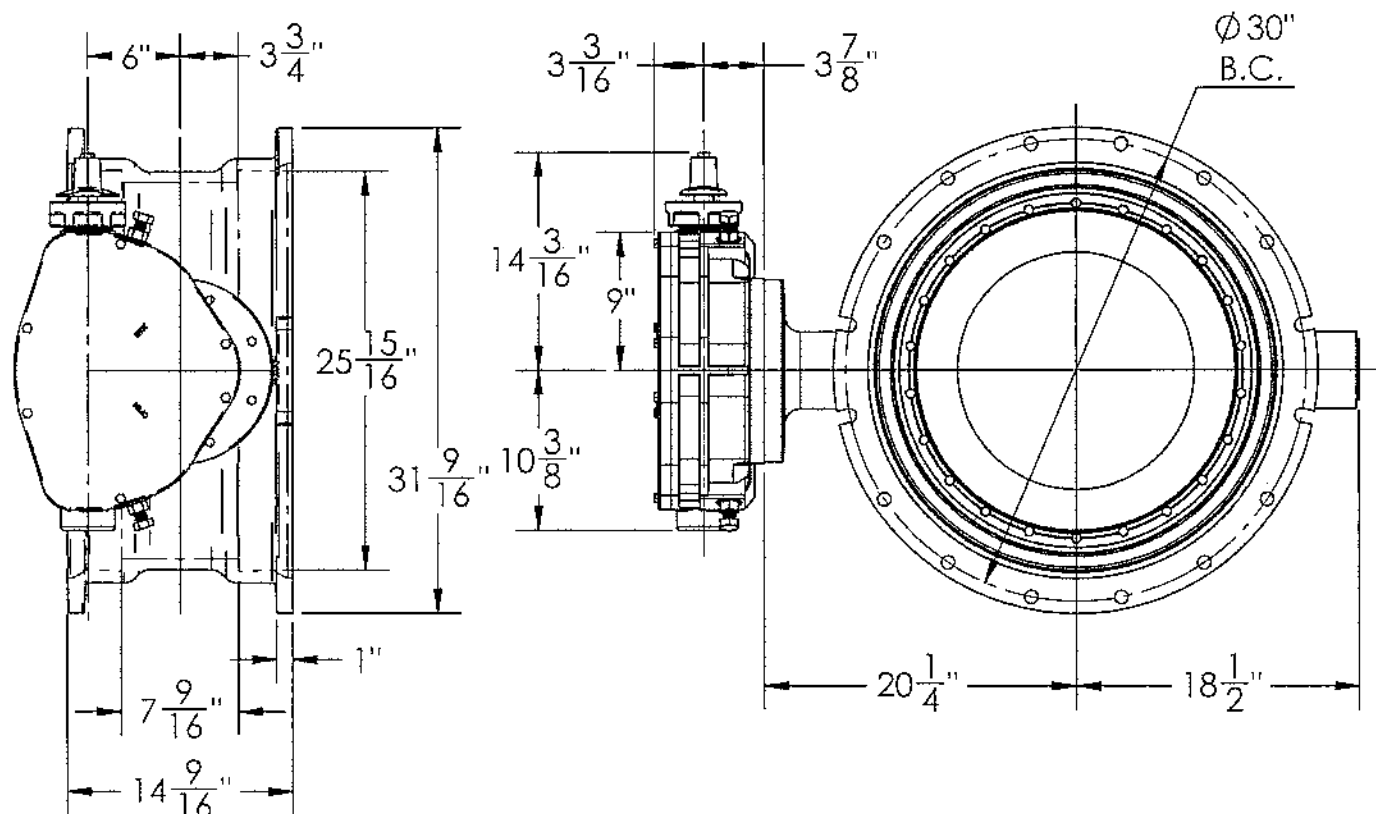
A DIVISION OF MCWANE INC.
P.O. BOX 2088
ANNISTON, ALABAMA 36202

DRAWN: CTJ

DATE: 9/26/18

DWG. NO. Q18-90010

24" AWWA C504 - STYLE 4500 - CL150
BFV w/ F/A25 MSS/ISO CONNECTION
SUB-ASSEMBLY - MATERIAL LIST
FLANGED ENDS - 100% DOMESTIC



1. FLOW MAY BE IN EITHER DIRECTION
2. VALVE SHAFT WILL MEET OR EXCEED AWWA C504 REQUIREMENTS
3. NUMBER OF TURNS TO CLOSE
4. 16 BOLTS ON EACH FLANGE
5. 7/8" DIAMETER BOLTS
6. OPERATED BY 2" AWWA OPERATING NUT / WRENCH NUT
7. RATED AND TESTED FOR 150psi WORKING PRESSURE
8. GASKETS, GLANDS, AND BOLTS FOR MECHANICAL JOINT FURNISHED WITH VALVE WHEN SPECIFIED ON ORDERS
9. VALVE WEIGHT IS 800 LBS.

THIS DWG. AND ALL INFORMATION IS OUR PROPERTY AND SHALL NOT BE USED, COPIED, OR REPRODUCED WITHOUT WRITTEN CONSENT. DESIGN AND INVENTION RIGHTS RESERVED.



M&H VALVE COMPANY

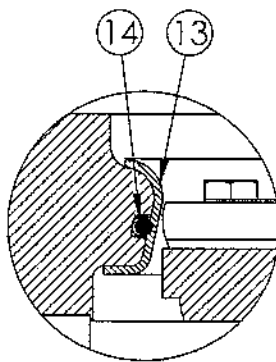
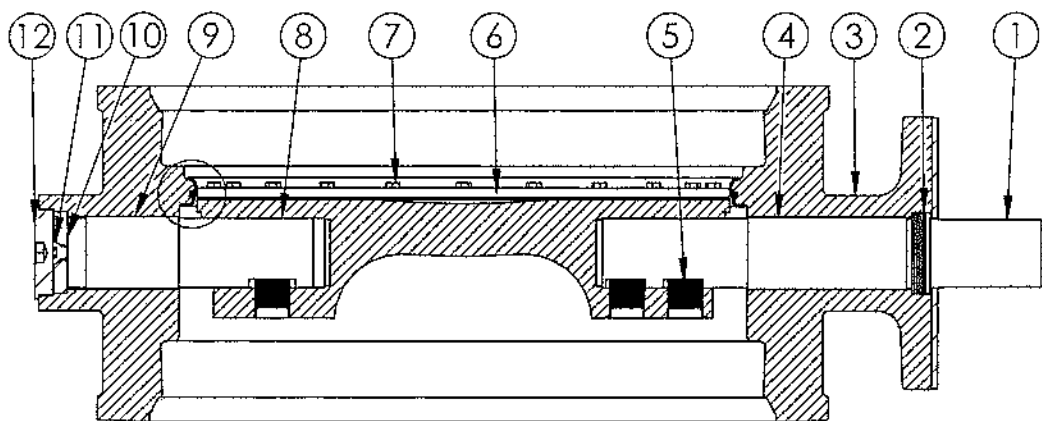
A DIVISION OF McWANE INC.
P.O. BOX 2088
ANNISTON, ALABAMA 36202

DRAWN: CTJ

DATE: 9/26/18

DWG. NO. Q18-90010

24" AWWA C504 - STYLE 4500 - CL150
BFV w/ F/A25 MSS/ISO CONNECTION
SUB-ASSEMBLY - DIMENSIONS
MECHANICAL JOINT - 100% DOMESTIC



SEAT DETAIL

ITEM NO.	DESCRIPTION	MATERIAL
1	OPERATOR SHAFT	316 STAINLESS STEEL, ASTM A-276
2	V-RING PACKING SET	EPDM, BUNA-N
3	BFV BODY	DUCTILE IRON ASTM A-536
4	UPPER JOURNAL BEARING	FIBER & REINFORCED TEFLON
5	TORQUE PLUG	316 STAINLESS STEEL, ASTM A-276
6	VANE SEAT RING	EPT W/ STAINLESS STEEL INSERT
7	HEX HEAD CAP SCREW	316 STAINLESS STEEL W/ NYLOC PATCH
8	THRUST SHAFT	316 STAINLESS STEEL, ASTM A-276
9	LOWER JOURNAL BEARING	FIBER & REINFORCED TEFLON
10	THRUST BEARING	BRONZE ALLOY
11	THRUST BEARING CAP SCREW	316 STAINLESS STEEL
12	BODY END PLUG	STEEL
13	BODY SEAT RING	316 STAINLESS STEEL
14	BODY SEAT O-RING	BUNA-N

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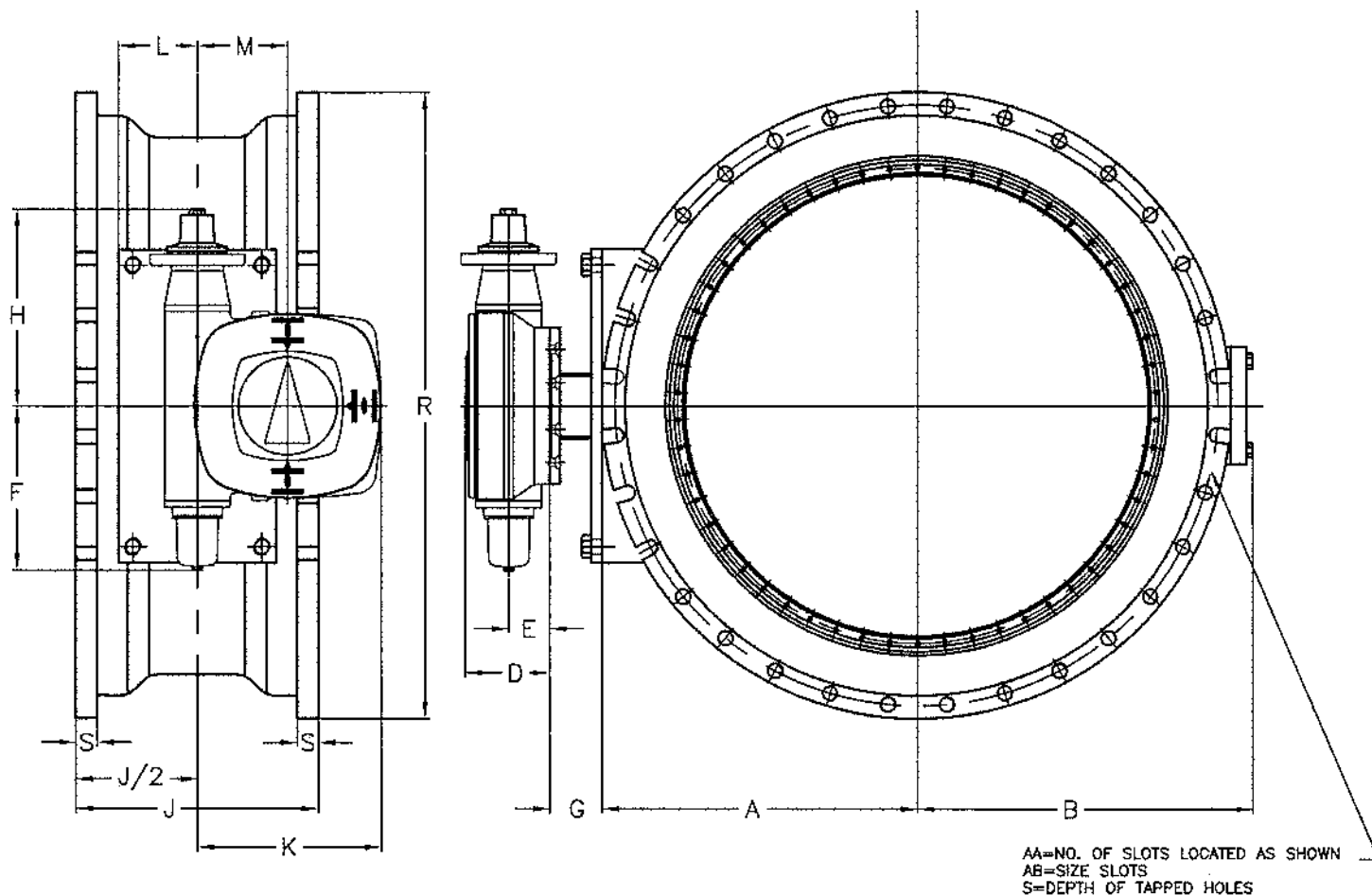


M&H VALVE COMPANY

A DIVISION OF McWANE INC.
P.O. BOX 2098
ANNISTON, ALABAMA 36202

DRAWN: CTJ
DATE: 9/26/18
DWG. NO. Q18-90010

24" AWWA C504 - STYLE 4500 - CL150
BFV w/ F/A25 MSS/ISO CONNECTION
SUB-ASSEMBLY - MATERIAL LIST
MECHANICAL JOINT - 100% DOMESTIC



	OPERATOR MODEL	D	E	F	H	K	L	M	N
48"	GS200.3	7.32	3.54	14.45	15.75	18.17	7.5	7.87	-

VALVE SIZE	A	B	C	G	J	P	Q	R	S	AA	AB	WEIGHT
48"	30	31 5/16	56	5	23	36	1.500	60	-	8	1 3/8	4800

NOTE 1: FLOW MAY BE IN EITHER DIRECTION

NOTE 2: VALVE SHAFT WILL MEET OR EXCEED REQUIREMENTS OF SHAFT TABLE PER AWWA STANDARD C-504 FOR APPLICABLE CLASS.

NOTE 3: REFERENCE AWWA C-504 FLANGES & DRILLING (A.N.S.I. 125)

NOTE 4: "N" = NUMBER OF TURNS TO CLOSE

NOTE 5: "P" = NUMBER OF BOLTS ON EACH FLANGE

NOTE 6: "Q" = DIAMETER OF BOLTS

NOTE 7: OPERATED BY 2" AWWA OPERATING / WRENCH NUT

NOTE 8: ALL COMPONENTS MANUFACTURED IN USA EXCLUDING OPERATOR

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

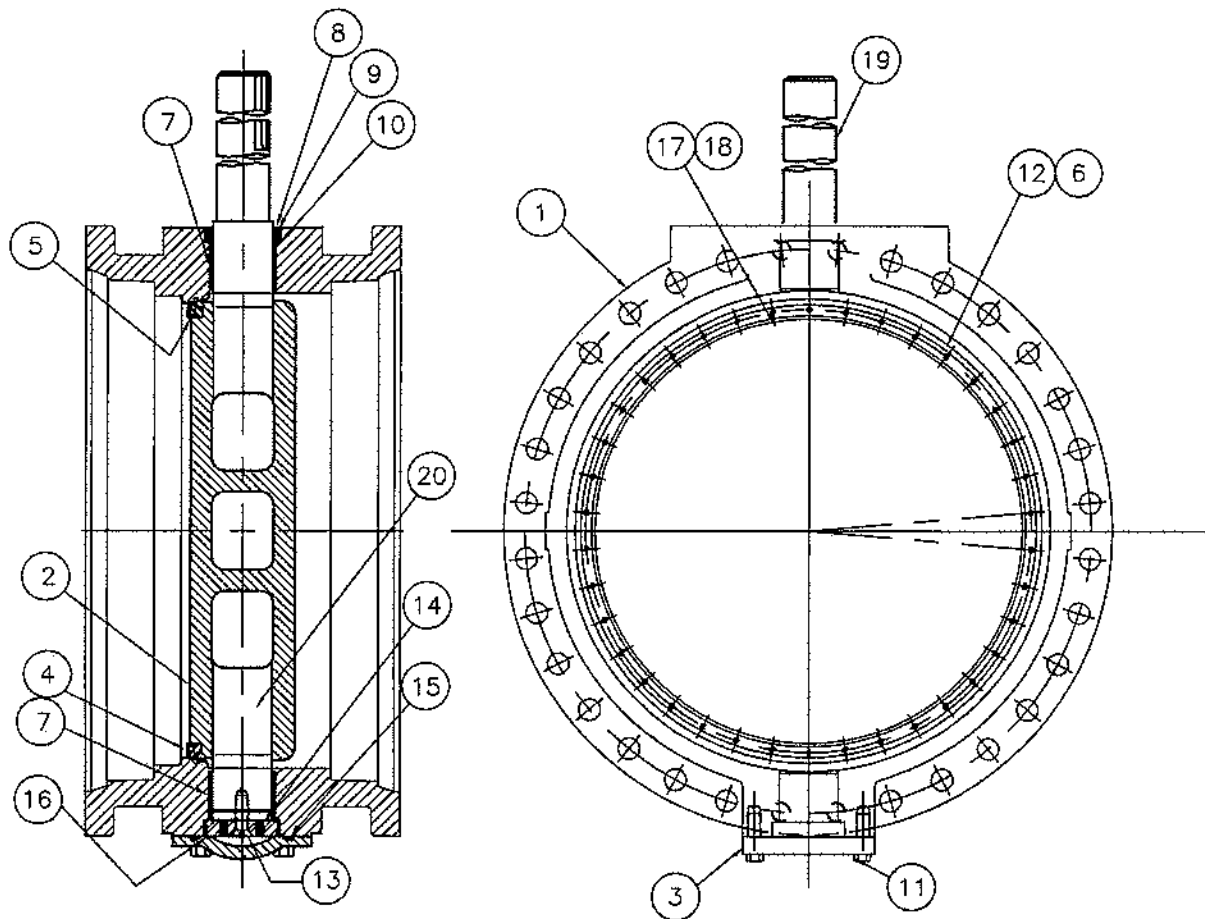
DWN: ZF

DATE: 9/30/16

DWG. NO.

Q16-90005

48" AWWA C504-STYLE 4500
 CLASS 150 BUTTERFLY VALVE WITH
 MJ ENDS AND 2" MANUAL OP NUT,
 AUMA GS200.3 WORM GEAR
 100% DOMESTIC



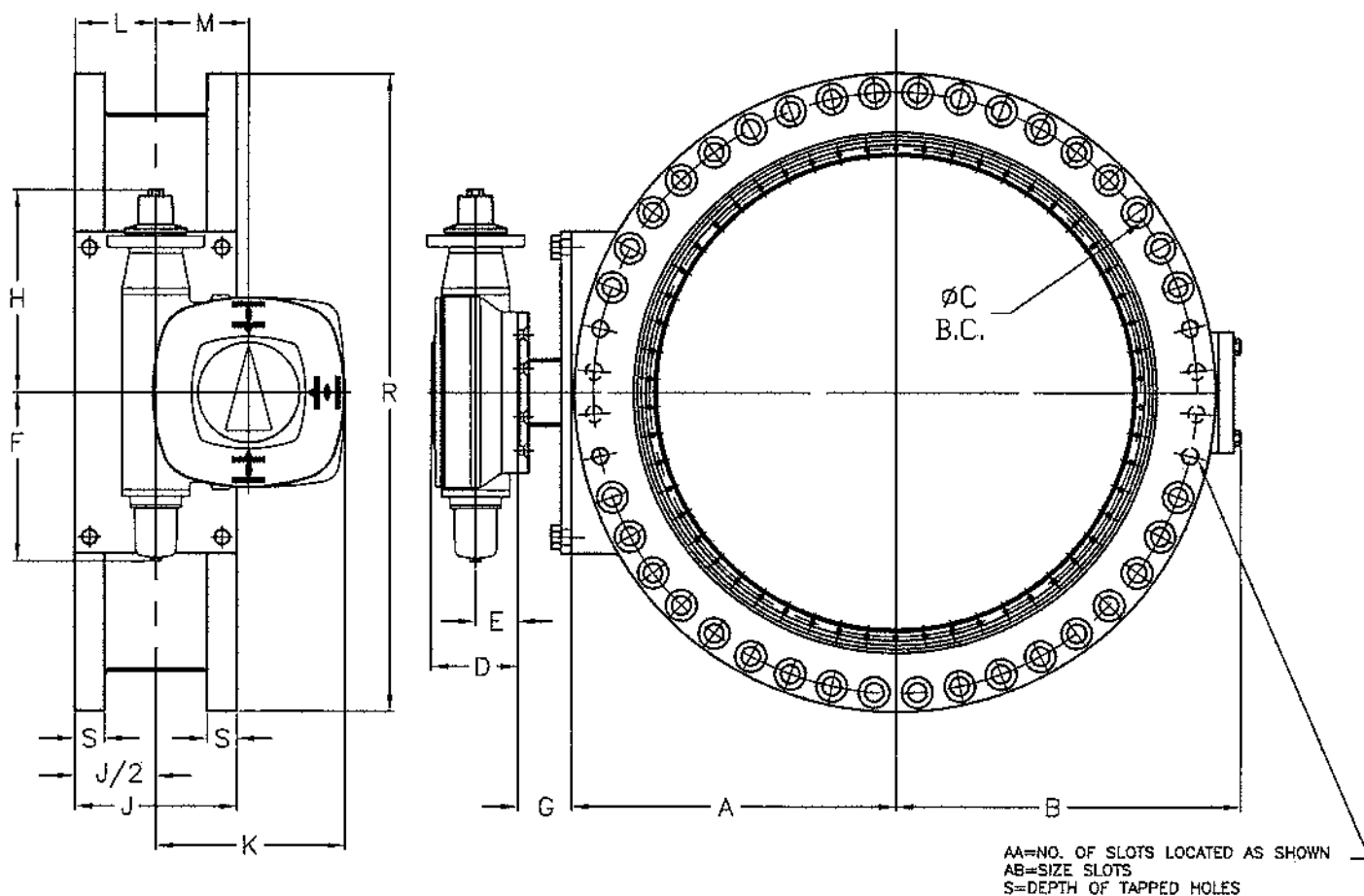
ITEM NO.	DESCRIPTION	MATERIAL
1	BODY, VALVE	CAST IRON, A-126, CLASS B WITH 316 STAINLESS STEEL SEAT
2	VANE	CAST IRON, A-126, CLASS B
3	END COVER	CAST IRON, A-126, CLASS B
4	SEAT RING, VANE	EPDM
5	CLAMP RING, SEAT	304 STAINLESS STEEL
6	SEALING WASHER	NYLON
7	BUSHING, BODY	FIBERGLIDE
8	CARTRIDGE, SHAFT	BRONZE
9	SEAL, SHAFT	BUNA-N
10	SEAL, CARTRIDGE	BUNA-N
11	BOLT, END COVER	COMMERCIAL STEEL
12	SOCKET SCREW ~ FLAT HEAD	316 STAINLESS STEEL W/NYLOK INSERT
13	SOCKET SCREW ~ FLAT HEAD	316 STAINLESS STEEL W/NYLOK INSERT
14	SET SCREW ~ FLAT POINT	316 STAINLESS STEEL W/NYLOK INSERT
15	END COVER SEAL	BUNA-N
16	THRUST BEARING PLATE	BRONZE
17	TAPER PIN	416 STAINLESS STEEL
18	TAPER PIN BOLT	316 STAINLESS STEEL
19	SHAFT (OPERATOR)	304 STAINLESS STEEL
20	SHAFT (THRUST)	304 STAINLESS STEEL

ALL COMPONENTS ARE MADE IN USA

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

DWN: ZF
DATE: 9/28/2016
DWG. NO.
Q16-90005

36"-48" STYLE 1450 - CL150 BFV
w/ 316 HDWR & 304 SHAFTS
SUB-ASSEMBLY / MATERIAL LIST
(NON-ADJUSTABLE PACKING)
MJ x MJ 100% DOMESTIC



	OPERATOR MODEL	D	E	F	H	K	L	M	N
48"	GS200.3	7.32	3.54	14.45	15.75	18.17	7.5	7.87	—

VALVE SIZE	A	B	C	G	J	P	Q	R	S	AA	AB	WEIGHT
48"	30	31 5/16	56	5	15	36	1.500	59.5	—	8	1 3/8	4800

NOTE 1: FLOW MAY BE IN EITHER DIRECTION

NOTE 2: VALVE SHAFT WILL MEET OR EXCEED REQUIREMENTS OF SHAFT TABLE PER AWWA STANDARD C-504 FOR APPLICABLE CLASS.

NOTE 3: REFERENCE AWWA C-504 FLANGES & DRILLING (A.N.S.I. 125)

NOTE 4: "N" = NUMBER OF TURNS TO CLOSE

NOTE 5: "P" = NUMBER OF BOLTS ON EACH FLANGE

NOTE 6: "Q" = DIAMETER OF BOLTS

NOTE 7: OPERATED BY 2" AWWA OPERATING / WRENCH NUT

NOTE 8: ALL COMPONENTS MANUFACTURED IN USA EXCLUDING OPERATOR

M&H VALVE COMPANY
 ANNISTON, ALABAMA
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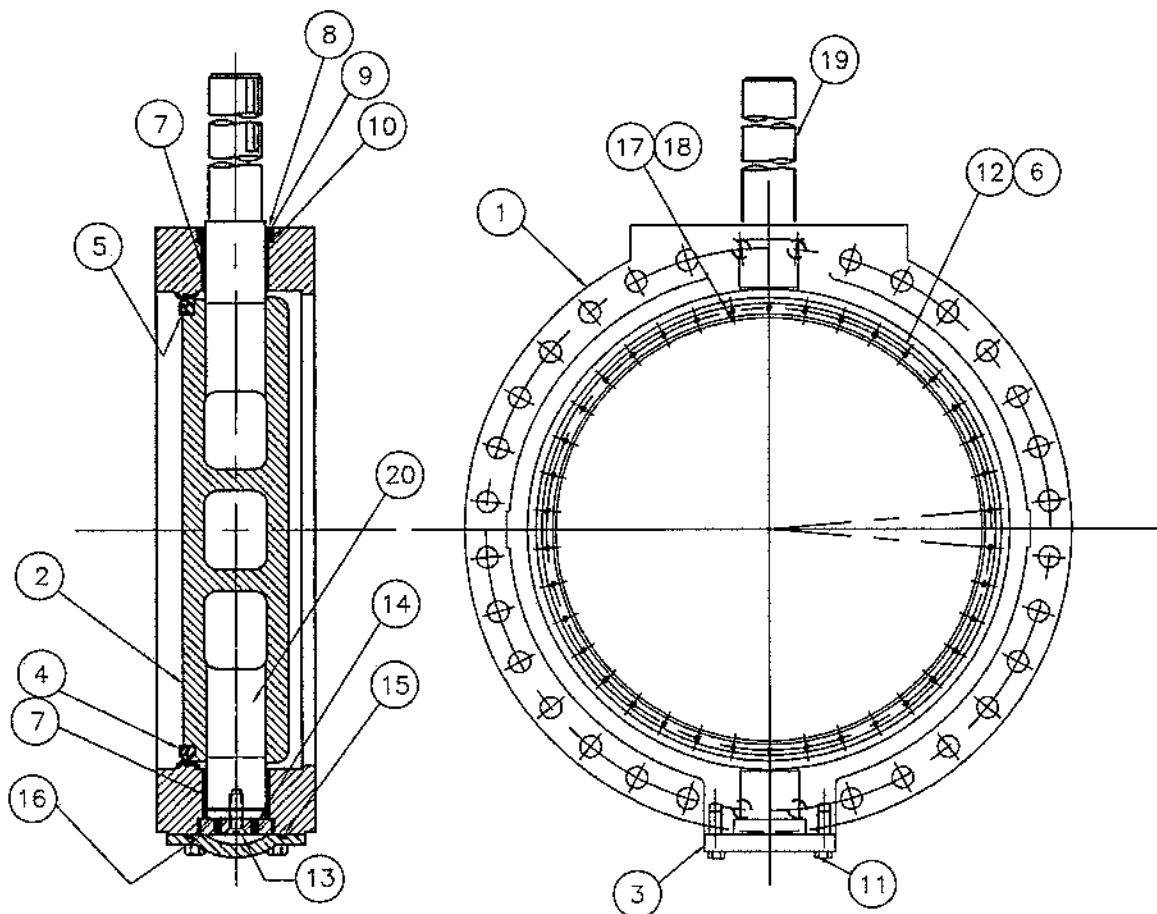
DWN: ZF

DATE: 9/30/16

DWG. NO.

Q16-90005

48" AWWA C504—STYLE 4500
 CLASS 150 BUTTERFLY VALVE WITH
 FLANGED ENDS AND 2" MANUAL OP NUT,
 AUMA GS200.3 WORM GEAR
 100% DOMESTIC



ITEM NO.	DESCRIPTION	MATERIAL
1	BODY, VALVE	CAST IRON, A-126, CLASS B WITH 316 STAINLESS STEEL SEAT
2	VANE	CAST IRON, A-126, CLASS B
3	END COVER	CAST IRON, A-126, CLASS B
4	SEAT RING, VANE	EPDM
5	CLAMP RING, SEAT	304 STAINLESS STEEL
6	SEALING WASHER	NYLON
7	BUSHING, BODY	FIBERGLIDE
8	CARTRIDGE, SHAFT	BRONZE
9	SEAL, SHAFT	BUNA-N
10	SEAL, CARTRIDGE	BUNA-N
11	BOLT, END COVER	COMMERCIAL STEEL
12	SOCKET SCREW ~ FLAT HEAD	316 STAINLESS STEEL W/NYLOK INSERT
13	SOCKET SCREW ~ FLAT HEAD	316 STAINLESS STEEL W/NYLOK INSERT
14	SET SCREW ~ FLAT POINT	316 STAINLESS STEEL W/NYLOK INSERT
15	END COVER SEAL	BUNA-N
16	THRUST BEARING PLATE	BRONZE
17	TAPER PIN	416 STAINLESS STEEL
18	TAPER PIN BOLT	316 STAINLESS STEEL
19	SHAFT (OPERATOR)	304 STAINLESS STEEL
20	SHAFT (THRUST)	304 STAINLESS STEEL

ALL COMPONENTS ARE MADE IN USA

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

DWN: ZF

DATE: 9/28/2016

DWG. NO.
Q16-90005

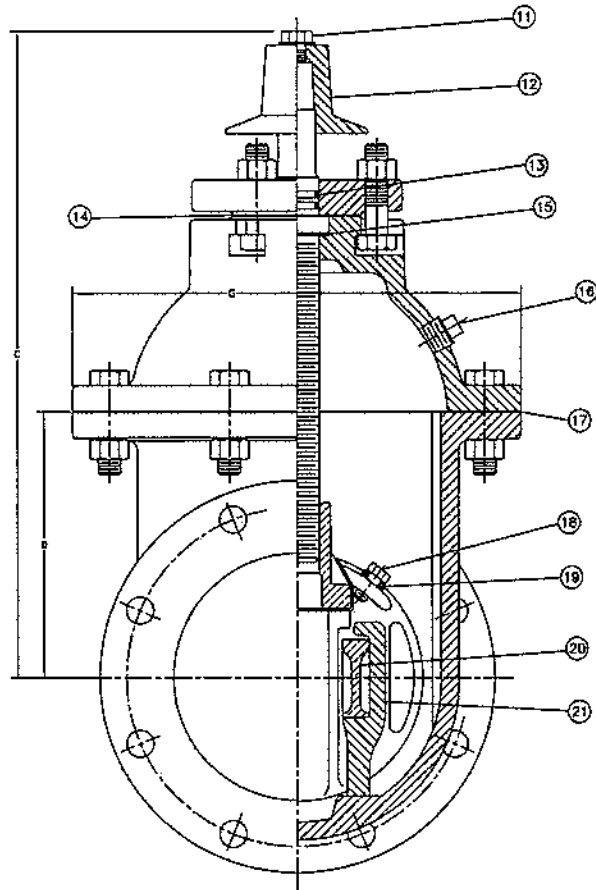
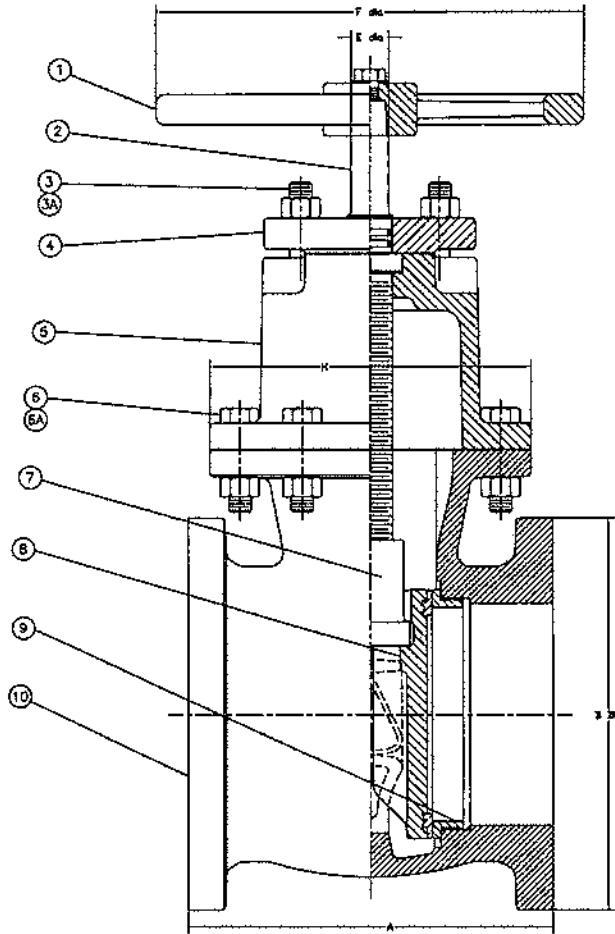
36"-48" STYLE 1450 - CL150 BFV
w/ 316 HDWR & 304 SHAFTS
SUB-ASSEMBLY / MATERIAL LIST
(NON-ADJUSTABLE PACKING)
FE x FE 100% DOMESTIC

2613-36
A 9/29/16

NOTES:
DELFIN BEARING, PART 16, USED ON 4"-12" ONLY
2"-3" HAS ALL BRONZE GATES, WITHOUT RINGS, HOOK AND WEDGE, ONE PIECE CAST BRONZE.
CAPSCREW, STRAP, PARTS 19,20, USED ON 10"-12" ONLY.
FLANGES ARE FACED AND DRILLED TO ANSI CL125
Valves shall be 100% Domestic

2"-12" L14 FLANGE GATE VALVE

CLOW VALVE COMPANY



Valve Size	A	B	C	D	E	F	G	H	Turns to Open
2	7	6	11-3/4	3-1/2	7/8	7-1/4	5-7/8	5	5
2 1/2	7-1/2	7	13	4-1/8	7/8	7-1/4	6-3/8	5-1/8	6
3	8	7-1/2	14	4-1/2	7/8	7-1/4	7-1/8	5-1/2	7
4	9	9	15-1/4	5-13/16	1-1/8	10	9	7	15
6	10-1/2	11	18-1/2	7-1/2	1-1/4	12	12-5/8	9	21
8	11-1/2	13-1/2	21-1/2	9-1/4	1-3/8	14	15-1/4	9-7/8	27
10	13	16	28-1/4	11-9/16	1-1/2	18	18-1/4	10-5/8	33
12	14	19	20-3/4	13-1/2	1-1/2	18	20-1/4	11-1/4	39

SEQ	QTY	DESCRIPTION	MATERIAL
1	1	Handwheel	Cast Iron
2	1	Stem	Copper Alloy
3		Bolts	Stainless Steel
3A		Nuts	Stainless Steel
4	1	O-ring Plate	Cast Iron
5	1	Cover	Cast Iron
6		Bolts	Stainless Steel
6A		Nuts	Stainless Steel
7	1	Stem Nut	Copper Alloy
8	2	Gate	Cast Iron
9	2	Case Ring	Copper Alloy
10	1	Body, FLG	Cast Iron
11	1	Capcrew	Stainless Steel
12	1	Operating Nut	Cast Iron
13	2	O-rings	Rubber
14	1	Gasket, O-ring Plate	Accopac CS-301
15	1	Low Torque Bearing	Delfin
16	1	Sq. Hd. Pipe Plug	Stainless Steel w/Teflon
17	1	Neck Flange O-Ring	Rubber
18	4	Capcrew	Stainless Steel
19	2	Strap	Stainless Steel
20	2	Wedge	Copper Alloy
21	1	Hook	Cast Iron

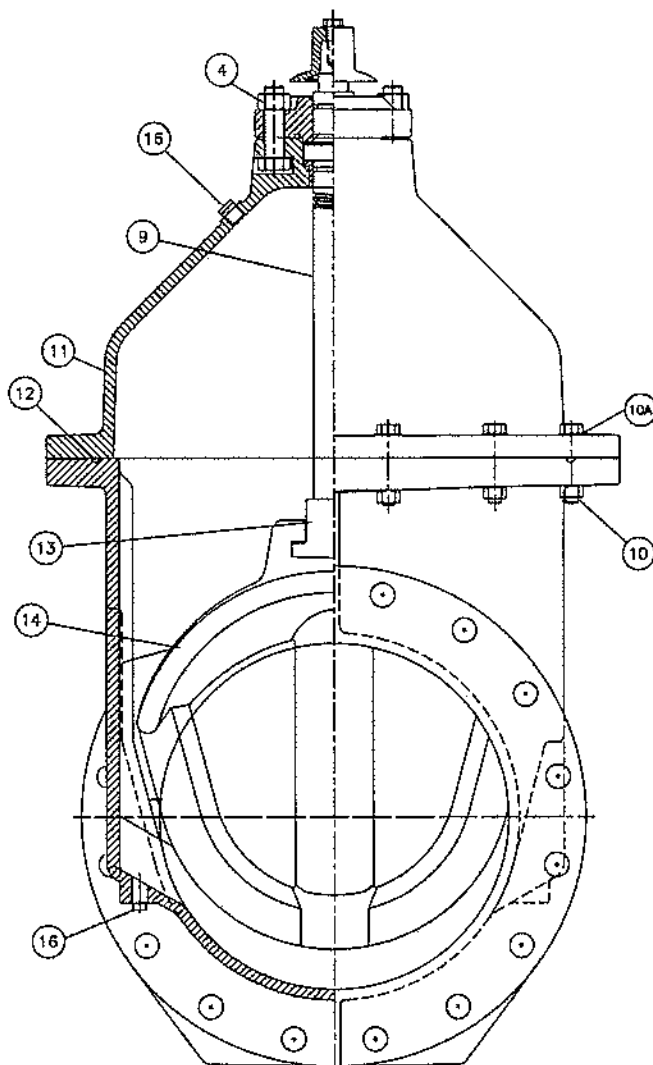
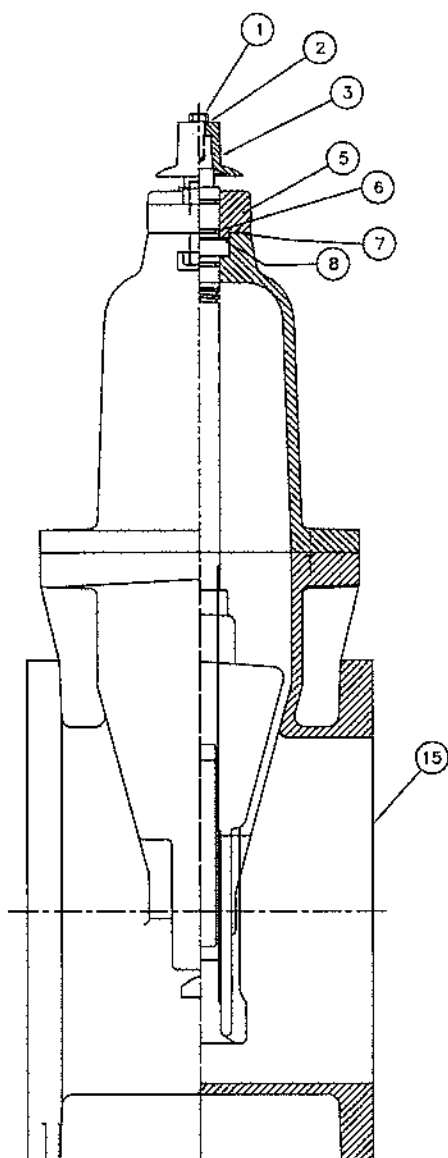
Valves shall be 100% Domestic

14"-16" R/S VALVE FLANGED ENDS

Bill of Materials

CLOW VALVE COMPANY

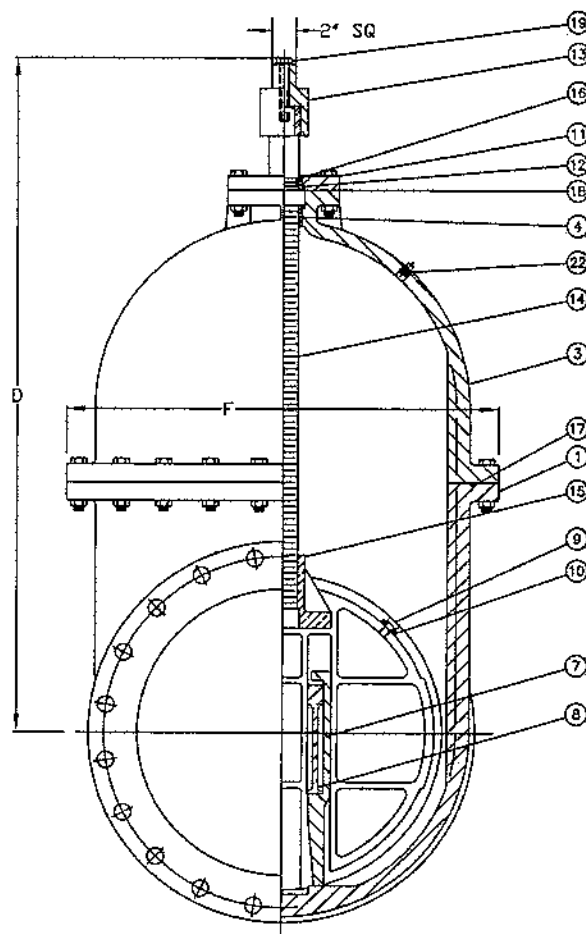
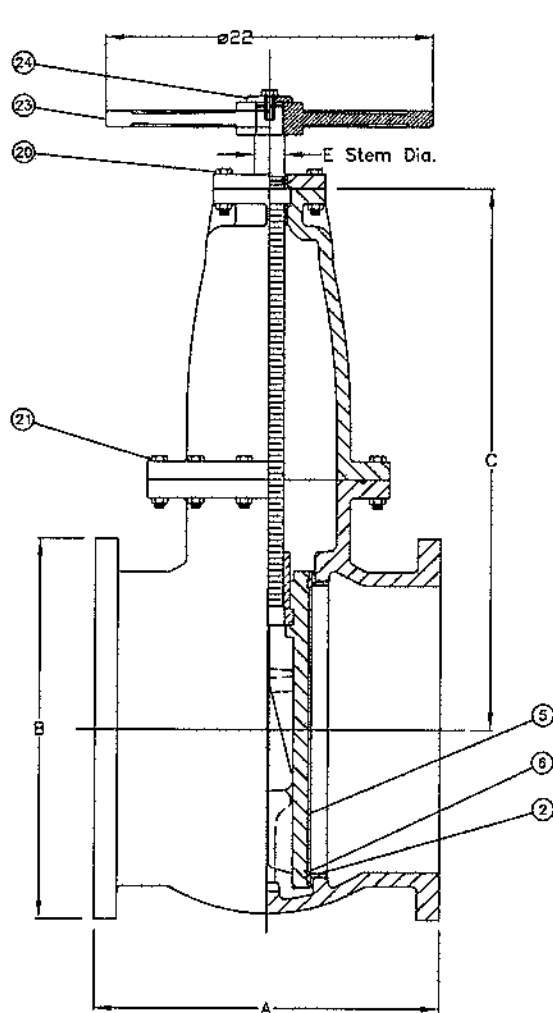
MODEL 2638



ITEM	DESCRIPTION	MATERIAL
1	Hex Head Bolts	Stainless Steel
2	Flat Washer	Stainless Steel
3	Operating Nut	Gray Iron
4	Hex Head Bolts & Nuts	Stainless Steel
5	Follower Plate	Ductile Iron
6	Stem O-Ring	Rubber
7	Follower Plate O-Ring/gasket	Rubber
8	Thrust Washer Bearing	Delrin
9	Stem	Copper Alloy
10	Hex Head Bolts & Nuts	Stainless Steel
10A	Flat Washer	Stainless Steel
11	Cover	Ductile Iron
12	Cover O-Ring	Rubber
13	Stem Nut	Copper Alloy
14	Wedge	Ductile Iron & EPDM
15	Body - all types	Ductile Iron
16	Pipe Plug	Stainless Steel

14"-16" FLANGED END
F-5070 GATE VALVE
CLOW VALVE COMPANY

100% Domestic



VALVE SIZE	A	B	C	D	E	F	Turns to Open
14	15 3/4	21	28 1/4	35 1/4	1 7/8	23 5/8	45
16	17	23 1/2	32 1/4	39 1/4	1 7/8	25 3/4	52

ITEM	QTY	DESCRIPTION	MATERIAL
1	1	Body	Cast Iron
2	2	Case Ring	Copper Alloy
3	1	Cover	Cast Iron
4	1	Cover Bushing	Copper Alloy
5	2	Gate	Cast Iron
6	2	Gate Ring	Copper Alloy
7	2	Hook	Cast Iron
8	2	Wedge	Copper Alloy
9	4	Capscrew	Stainless Steel
10	2	Strap	Copper Alloy
11	1	Plate	Cast Iron
12	1	Bushing	Copper Alloy
13	2	Operating Nut	Cast Iron
14	2	Stem	Copper Alloy
15	1	Stem Nut	Copper Alloy
16	2	Stem O-Ring	Rubber
17	1	Cover O-Ring	Rubber
18	1	Gasket	Accupac
19	1	Capscrew	Stainless Steel
20	4	Plate Bolts/Nuts	Stainless Steel
21	20	Cover Bolts/Nuts	Stainless Steel
22	1	Plug	Stainless Steel
23	1	Handwheel (Optional)	Cast Iron
24	1	Washer	Cast Iron