

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. 5/8"- DIAMETER OF BOLTS
7. OPERATED BY 2" AWWA OPERATING NUT/WRENCH NUT
8. RATED AND TESTED FOR 150psi WORKING PRESSURE

THIS DWG. AND ALL INFORMATION THEREON IS PROPERTY OF CLOW VALVE COMPANY AND SHALL NOT BE USED.
 COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT. DESIGN & INVENTION RIGHTS RESERVED.

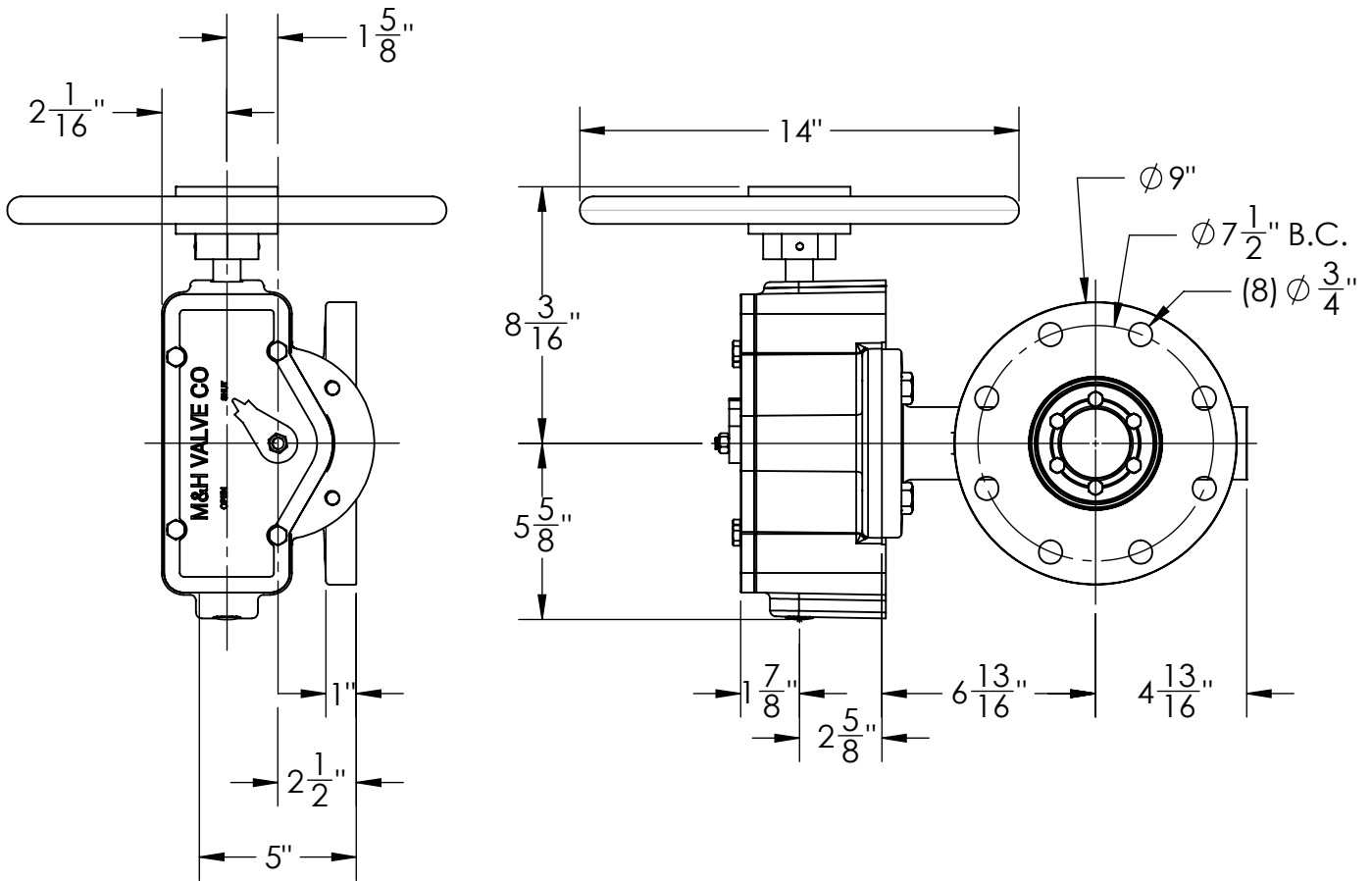
CLOW
VALVE CO.

CLOW VALVE COMPANY

A DIVISION OF McWANE INC.
902 SOUTH 2ND ST
OSKALOOSA, IA 52577

DRAWN: CTJ
DATE: 11/26/2018
DWG. NO. B04FAM11

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



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. 5/8"- DIAMETER OF BOLTS
7. OPERATED BY 2" AWWA OPERATING NUT/WRENCH NUT
8. RATED AND TESTED FOR 150psi WORKING PRESSURE

THIS DWG. AND ALL INFORMATION THEREON IS PROPERTY OF CLOW VALVE COMPANY AND SHALL NOT BE USED.
 COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT. DESIGN & INVENTION RIGHTS RESERVED.

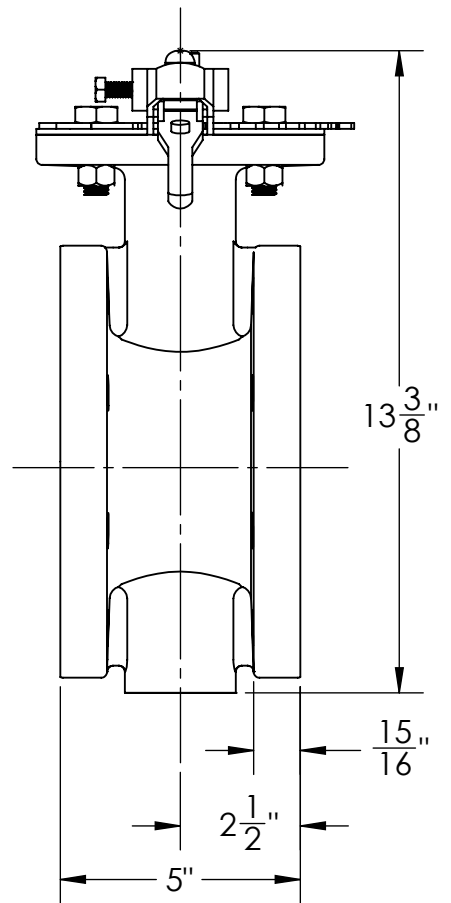
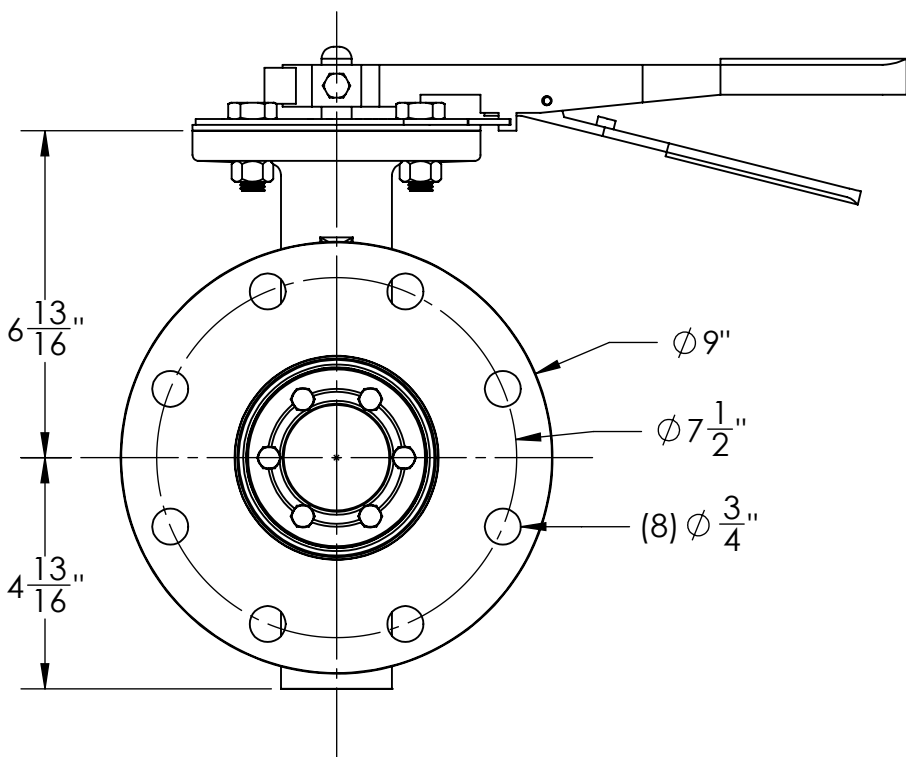
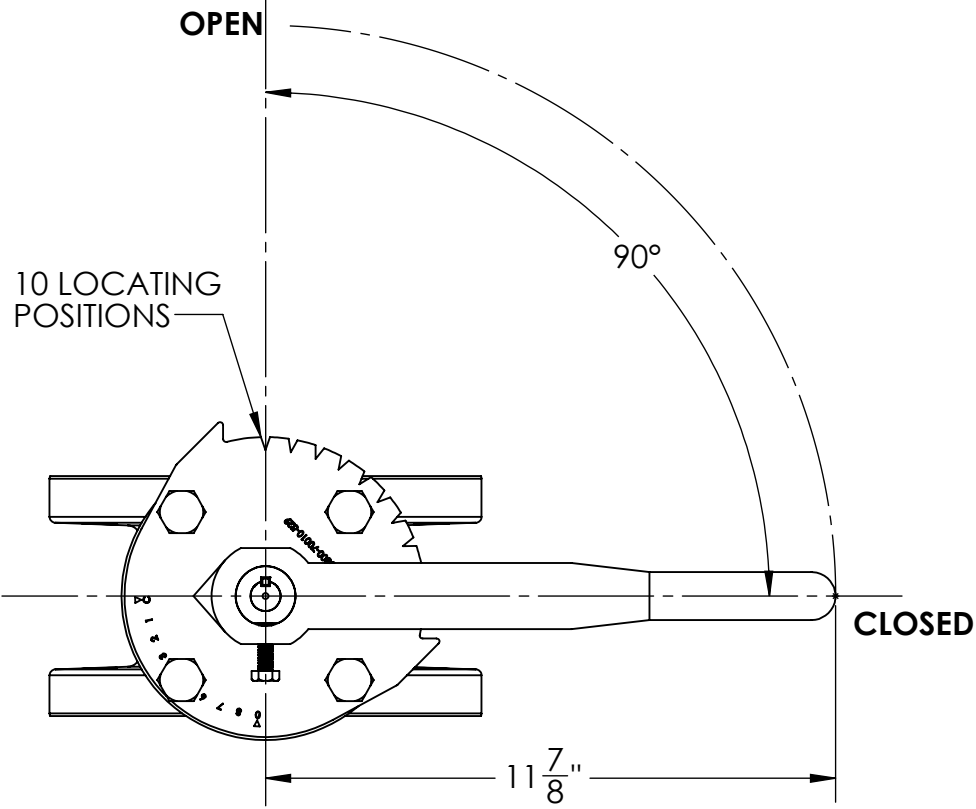
CLOW
VALVE CO.

CLOW VALVE COMPANY

A DIVISION OF McWANE INC.
902 SOUTH 2ND ST
OSKALOOSA, IA 52577

DRAWN: ZF
DATE: 12/7/2018
DWG. NO. B04FAM1101

**4" - Style 4500 - CL150 BFV
 W/ F/A 12 MSS/ISO Connection-
 HANDWHEEL OPERATOR - FLANGED ENDS**



THIS DWG. AND ALL INFORMATION THEREON IS PROPERTY OF CLOW VALVE COMPANY AND SHALL NOT BE USED.
COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT. DESIGN & INVENTION RIGHTS RESERVED.

CLOW
VALVE CO.

CLOW VALVE COMPANY

A DIVISION OF McWANE INC.
902 SOUTH 2ND ST
OSKALOOSA, IA 52577

DRAWN: ZF

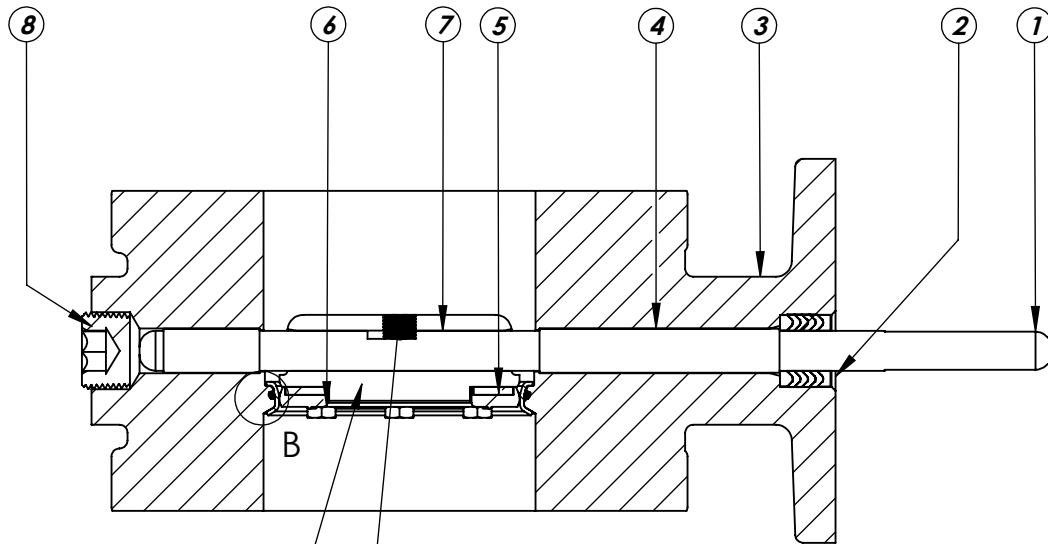
DATE: 11/30/2018

DWG.

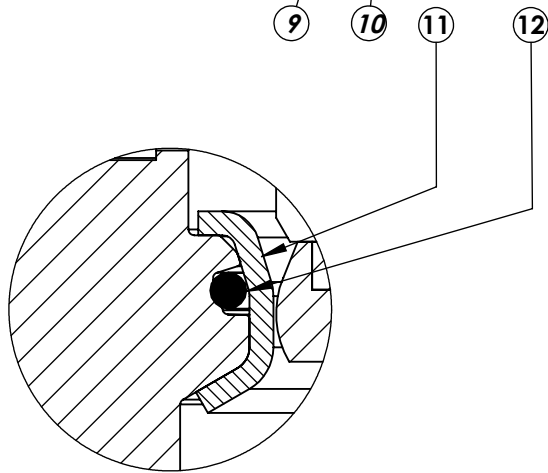
NO.

B04FAL1100

4" ISO BFV FLANGED END
W/ FA12 MOUNTING
LEVER OPERATOR



SECTION A-A
SCALE 1 : 3



DETAIL B
SCALE 2 : 1

ITEM NO.	DESCRIPTION	MATERIAL
1	VANE 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	NYLATRON
5	VANE SEAT RING	EPT with SS INSERT
6	HEX HEAD CAPSCREW	18-8 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	18-8 STAINLESS STEEL
11	BODY SEAT RING	316 STAINLESS STEEL
12	BODY SEAT O-RING	BUNA-N

THIS DWG. AND ALL INFORMATION THEREON IS PROPERTY OF CLOW VALVE COMPANY AND SHALL NOT BE USED.
COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT. DESIGN & INVENTION RIGHTS RESERVED.

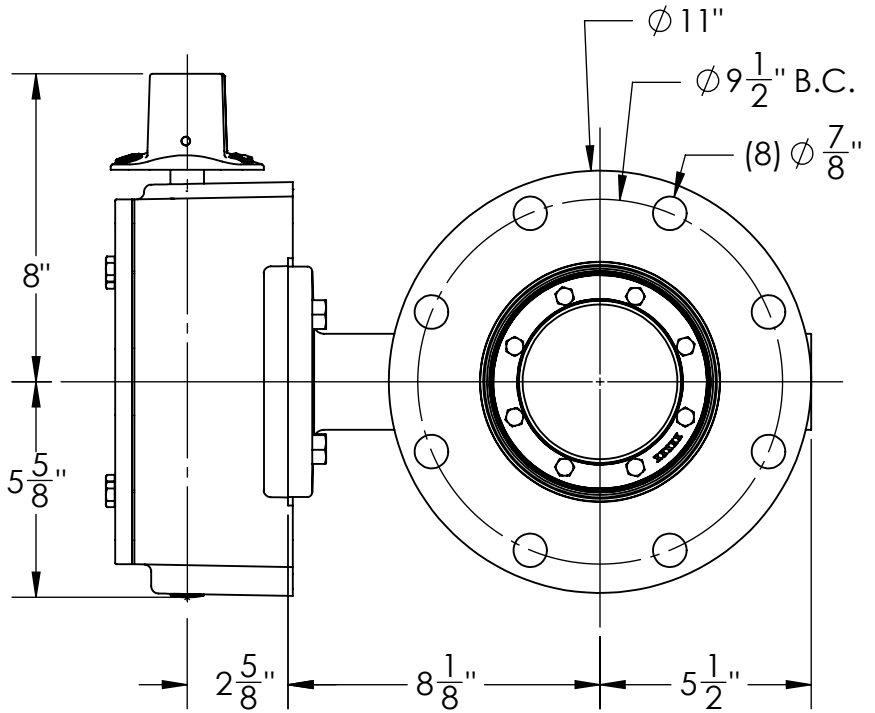
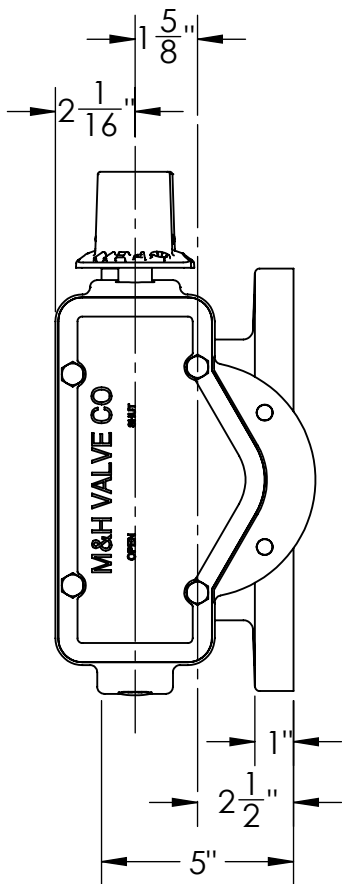
CLOW
VALVE CO.

CLOW VALVE COMPANY

A DIVISION OF McWANE INC.
902 SOUTH 2ND ST
OSKALOOSA, IA 52577

DRAWN: ZF
DATE: 1/4/17
DWG.
NO. B04FBB11

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



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. 3/4" DIAMETER OF BOLTS
7. OPERATED BY 2" AWWA OPERATING NUT/WRENCH NUT
8. RATED AND TESTED FOR 150psi WORKING PRESSURE

THIS DWG. AND ALL INFORMATION THEREON IS PROPERTY OF CLOW VALVE COMPANY AND SHALL NOT BE USED.
 COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT. DESIGN & INVENTION RIGHTS RESERVED.

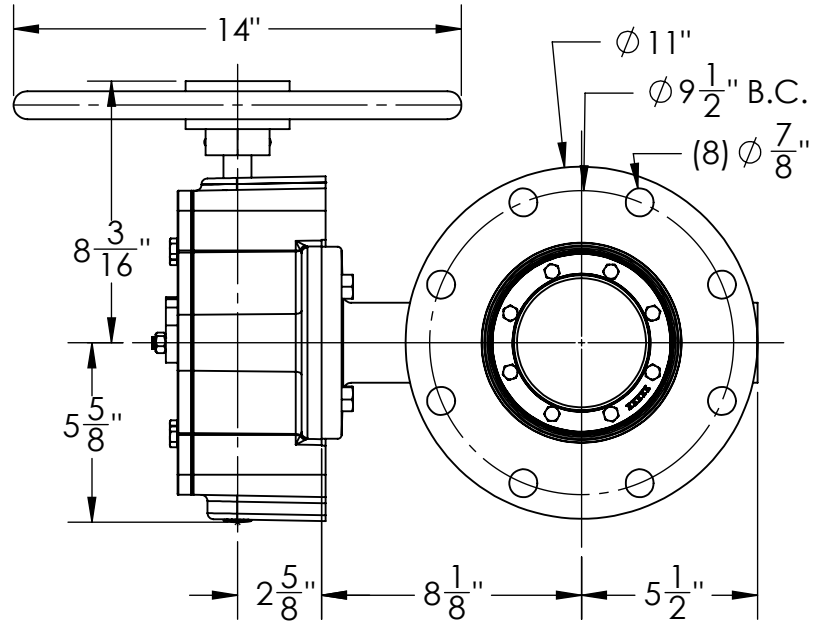
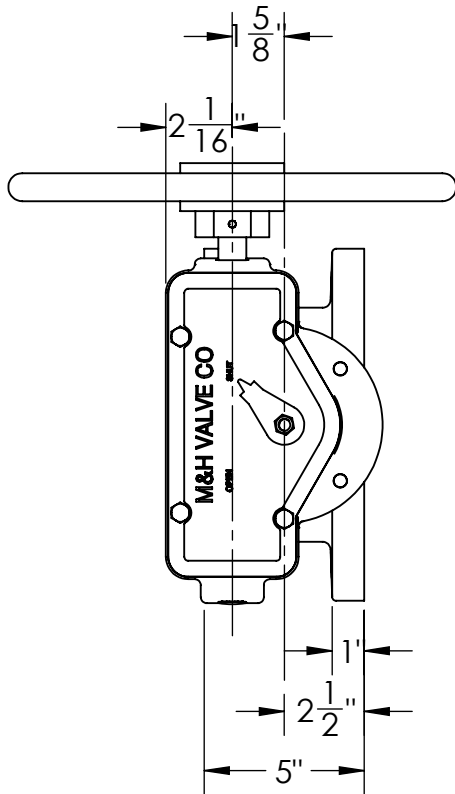
CLOW
VALVE CO.

CLOW VALVE COMPANY

A DIVISION OF McWANE INC.
902 SOUTH 2ND ST
OSKALOOSA, IA 52577

DRAWN: CTJ
DATE: 11/26/2018
DWG. NO.: B06FAM11

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



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. 3/4" DIAMETER OF BOLTS
7. OPERATED BY 2" AWWA OPERATING NUT/WRENCH NUT
8. RATED AND TESTED FOR 150psi WORKING PRESSURE

THIS DWG. AND ALL INFORMATION THEREON IS PROPERTY OF CLOW VALVE COMPANY AND SHALL NOT BE USED.
COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT. DESIGN & INVENTION RIGHTS RESERVED.

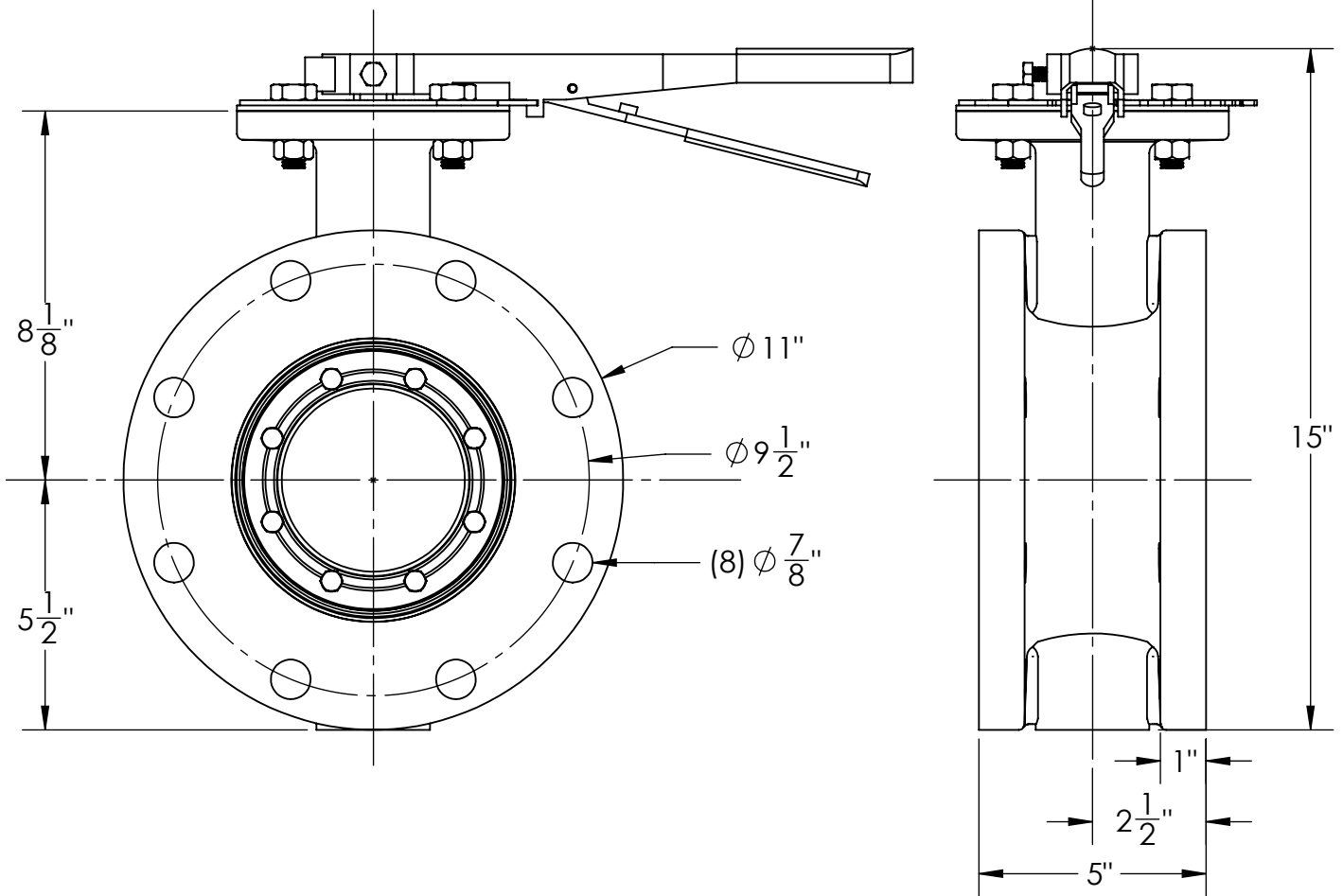
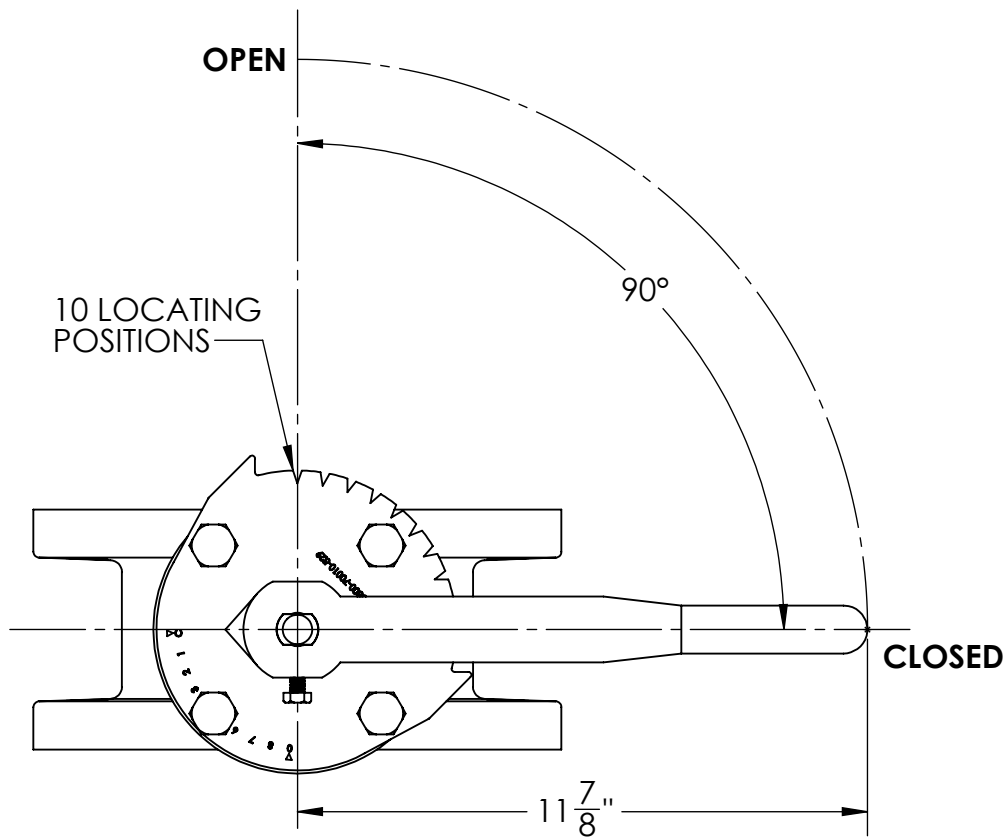
CLOW
VALVE CO.

CLOW VALVE COMPANY

A DIVISION OF McWANE INC.
902 SOUTH 2ND ST
OSKALOOSA, IA 52577

DRAWN: CTJ
DATE: 11/26/2018
DWG. NO.: B06FAM11

6" - Style 4500 - CL150
BFV with F/A 12 MSS/ISO Connection-
FLANGED ENDS - Operator w/
POS. INDICATOR & HAND WHEEL



THIS DWG. AND ALL INFORMATION THEREON IS PROPERTY OF CLOW VALVE COMPANY AND SHALL NOT BE USED.
COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT. DESIGN & INVENTION RIGHTS RESERVED.

CLOW
VALVE CO.

CLOW VALVE COMPANY

A DIVISION OF McWANE INC.
902 SOUTH 2ND ST
OSKALOOSA, IA 52577

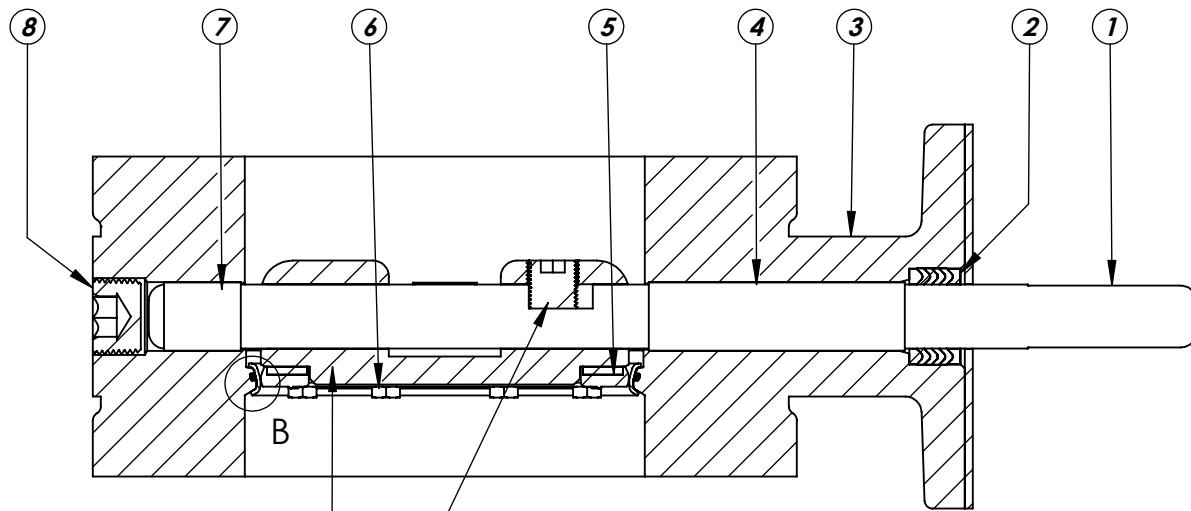
DRAWN: ZF

DATE: 11/30/2018

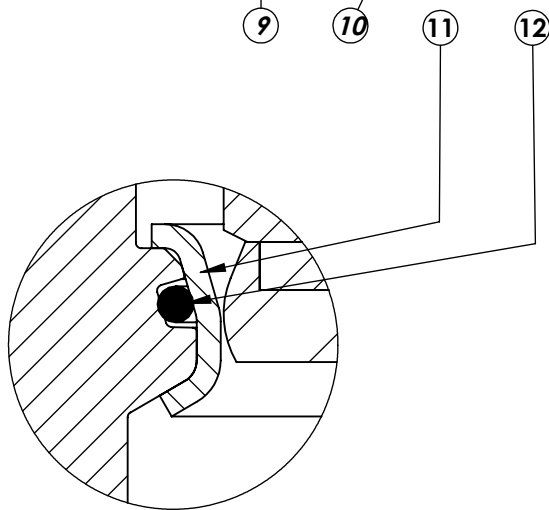
DWG.

NO. B06FAL1100

6" ISO BFV FLANGED END
W/ FA12 MOUNTING
LEVER OPERATOR



SECTION A-A
SCALE 1 : 3



DETAIL B
SCALE 2 : 1

ITEM NO.	DESCRIPTION	MATERIAL
1	VANE 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	NYLATRON
5	VANE SEAT RING	EPT with SS INSERT
6	HEX HEAD CAPSCREW	18-8 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	18-8 STAINLESS STEEL
11	BODY SEAT RING	316 STAINLESS STEEL
12	BODY SEAT O-RING	BUNA-N

THIS DWG. AND ALL INFORMATION THEREON IS PROPERTY OF CLOW VALVE COMPANY AND SHALL NOT BE USED.
COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT. DESIGN & INVENTION RIGHTS RESERVED.

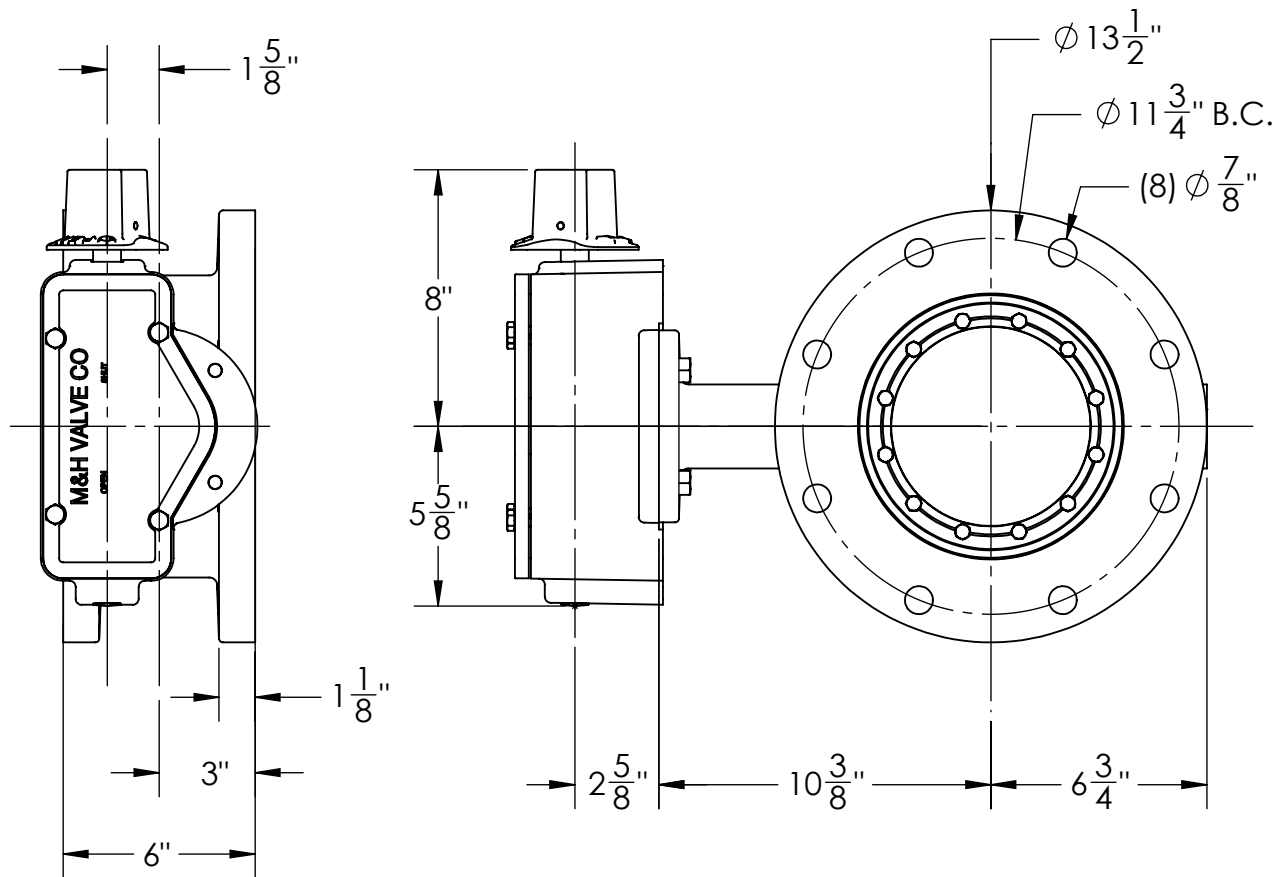
CLOW
VALVE CO.

CLOW VALVE COMPANY

A DIVISION OF McWANE INC.
902 SOUTH 2ND ST
OSKALOOSA, IA 52577

DRAWN: ZF
DATE: 1/6/17
DWG.
NO. B06FBB11

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



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

THIS DWG. AND ALL INFORMATION THEREON IS PROPERTY OF CLOW VALVE COMPANY AND SHALL NOT BE USED.
 COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT. DESIGN & INVENTION RIGHTS RESERVED.

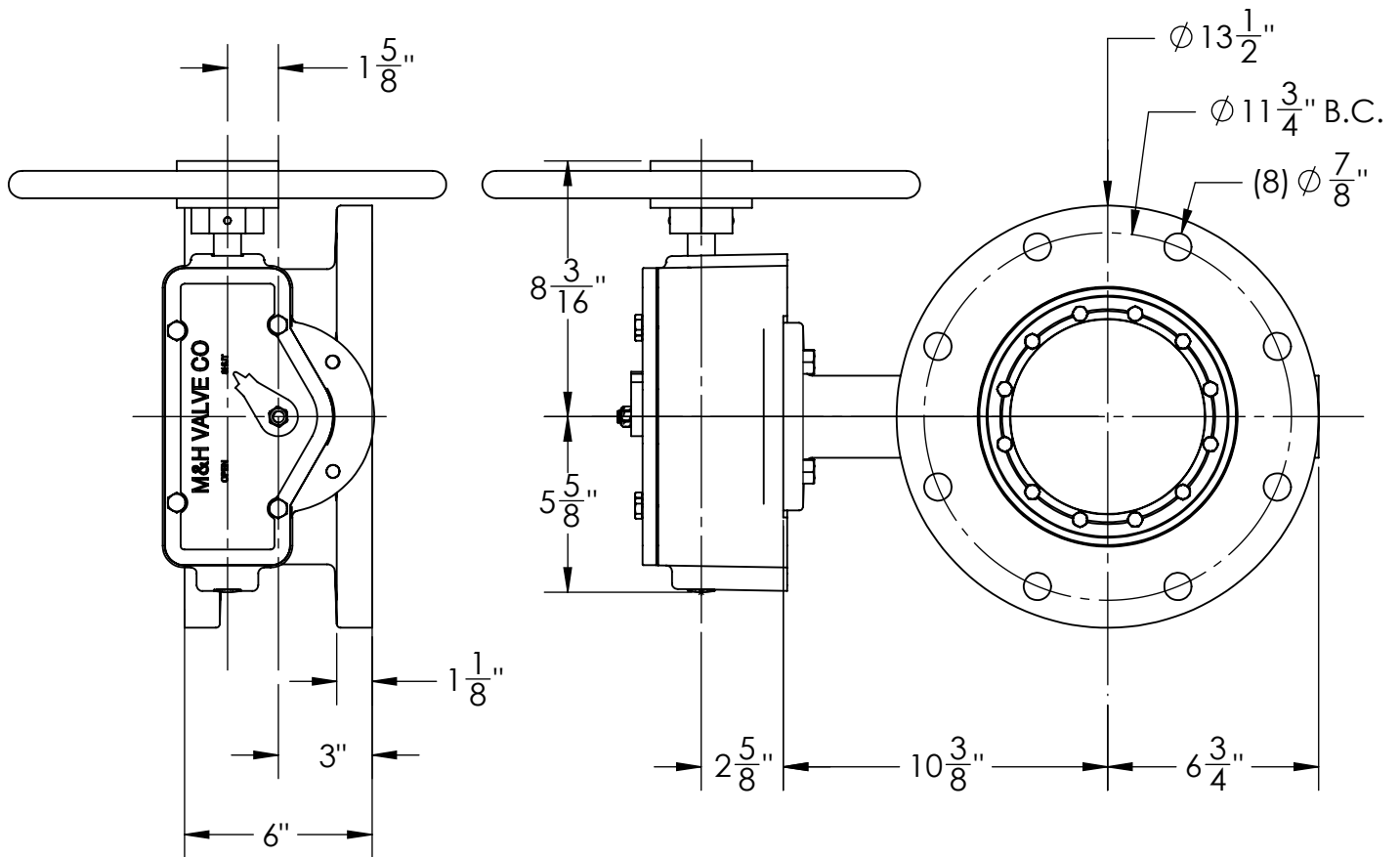
CLOW
VALVE CO.

CLOW VALVE COMPANY

A DIVISION OF McWANE INC.
902 SOUTH 2ND ST
OSKALOOSA, IA 52577

DRAWN: CTJ
DATE: 11/26/2018
DWG. NO. B08FAM11

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



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

THIS DWG. AND ALL INFORMATION THEREON IS PROPERTY OF CLOW VALVE COMPANY AND SHALL NOT BE USED.
COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT. DESIGN & INVENTION RIGHTS RESERVED.

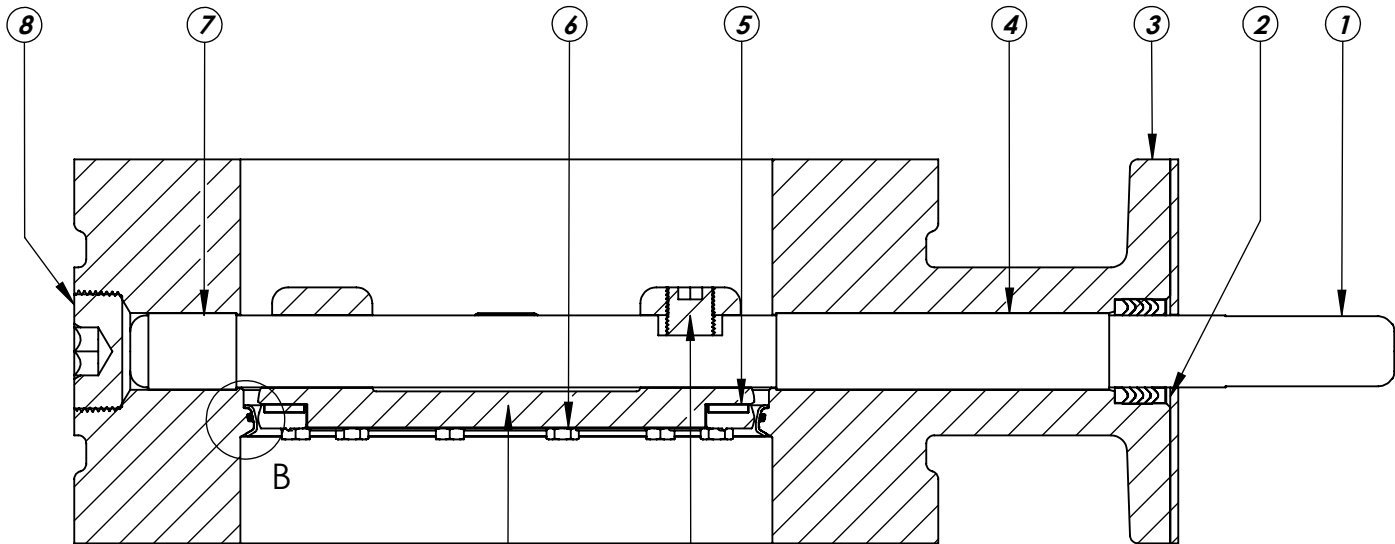
CLOW
VALVE CO.

CLOW VALVE COMPANY

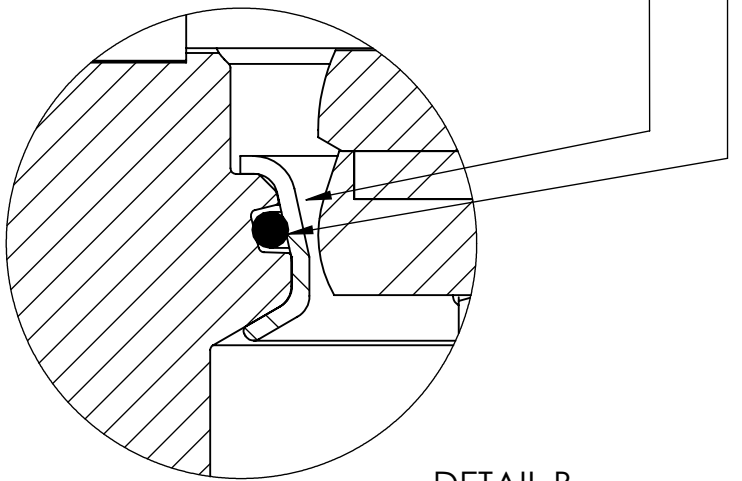
A DIVISION OF McWANE INC.
902 SOUTH 2ND ST
OSKALOOSA, IA 52577

DRAWN: CTJ
DATE: 11/26/2018
DWG. NO. B08FAM11

8" - Style 4500 - CL150
BFV with F/A 12 MSS/ISO Connection-
FLANGED ENDS - OP w/ HANDWHEEL
& POSITION INDICATOR



SECTION A-A
SCALE 1 : 3



DETAIL B
SCALE 2 : 1

ITEM NO.	DESCRIPTION	MATERIAL
1	VANE 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	NYLATRON
5	VANE SEAT RING	EPT with SS INSERT
6	HEX HEAD CAPSCREW	18-8 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	18-8 STAINLESS STEEL
11	BODY SEAT RING	316 STAINLESS STEEL
12	BODY SEAT O-RING	BUNA-N

THIS DWG. AND ALL INFORMATION THEREON IS PROPERTY OF CLOW VALVE COMPANY AND SHALL NOT BE USED.
COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT. DESIGN & INVENTION RIGHTS RESERVED.

CLOW
VALVE CO.

CLOW VALVE COMPANY

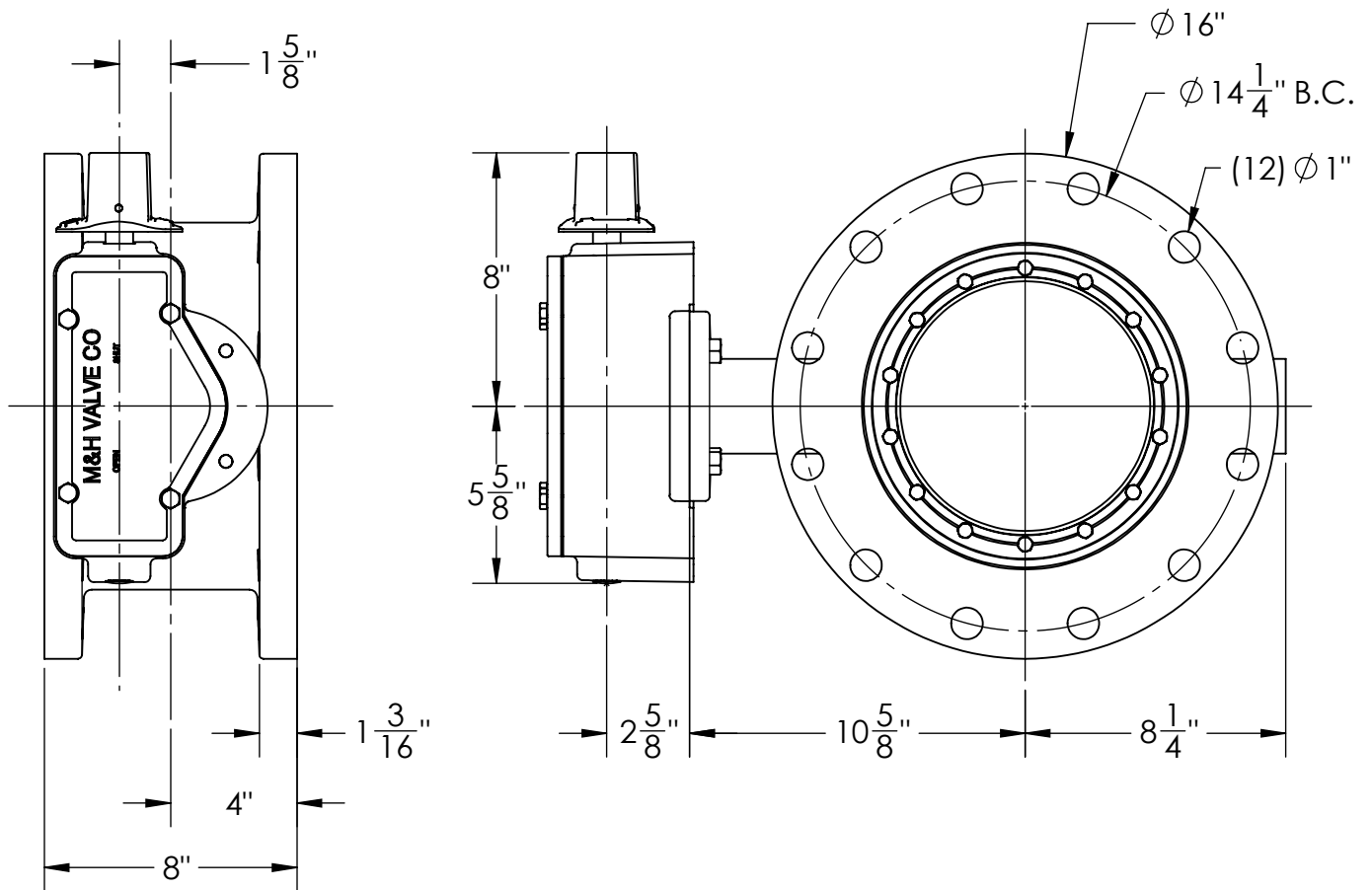
A DIVISION OF McWANE INC.
902 SOUTH 2ND ST
OSKALOOSA, IA 52577

DRAWN: ZF

DATE: 1/9/17

DWG.
NO. B08FBB11

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



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

THIS DWG. AND ALL INFORMATION THEREON IS PROPERTY OF CLOW VALVE COMPANY AND SHALL NOT BE USED.
 COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT. DESIGN & INVENTION RIGHTS RESERVED.

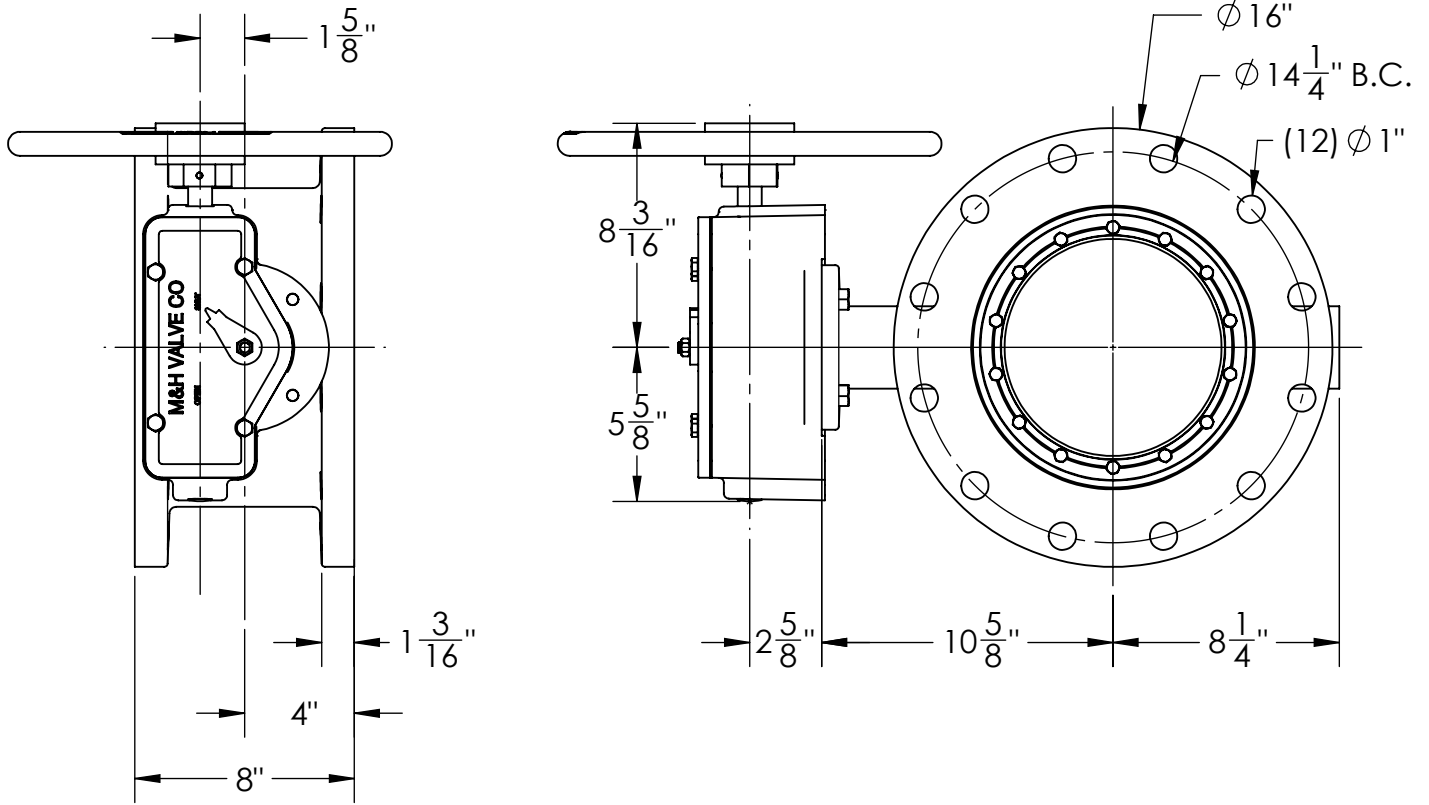
CLOW
VALVE CO.

CLOW VALVE COMPANY

A DIVISION OF McWANE INC.
902 SOUTH 2ND ST
OSKALOOSA, IA 52577

DRAWN: CTJ
DATE: 11/26/2018
DWG. NO.: B10FAM11

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



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. $7/8$ " DIAMETER OF BOLTS
7. OPERATED BY 2" AWWA OPERATING NUT/WRENCH NUT
8. RATED AND TESTED FOR 150psi WORKING PRESSURE

THIS DWG. AND ALL INFORMATION THEREON IS PROPERTY OF CLOW VALVE COMPANY AND SHALL NOT BE USED.
 COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT. DESIGN & INVENTION RIGHTS RESERVED.

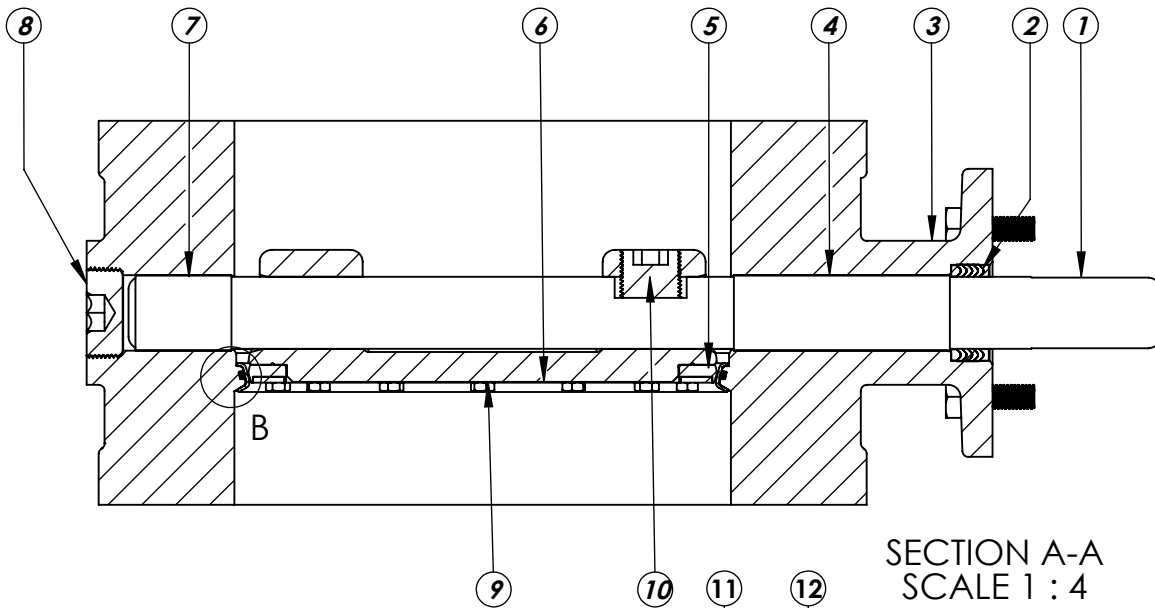
CLOW
VALVE CO.

CLOW VALVE COMPANY

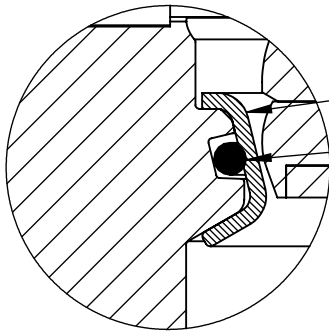
A DIVISION OF McWANE INC.
902 SOUTH 2ND ST
OSKALOOSA, IA 52577

DRAWN: CTJ
DATE: 1/23/2019
DWG. NO. B10FAM1101

10" - Style 4500 - CL150
BFV with F/A 12 MSS/ISO Connection-
HANDWHEEL OPERATOR - FLANGED ENDS



SECTION A-A
SCALE 1 : 4



DETAIL B
SCALE 2 : 1.5

ITEM NO.	DESCRIPTION	MATERIAL
1	VANE 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	NYLATRON
5	VANE SEAT RING	EPT with SS INSERT
6	HEX HEAD CAPSCREW	18-8 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	18-8 STAINLESS STEEL
11	BODY SEAT RING	316 STAINLESS STEEL
12	BODY SEAT O-RING	BUNA-N

THIS DWG. AND ALL INFORMATION THEREON IS PROPERTY OF CLOW VALVE COMPANY AND SHALL NOT BE USED.
COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT. DESIGN & INVENTION RIGHTS RESERVED.

CLOW
VALVE CO.

CLOW VALVE COMPANY

A DIVISION OF McWANE INC.
902 SOUTH 2ND ST
OSKALOOSA, IA 52577

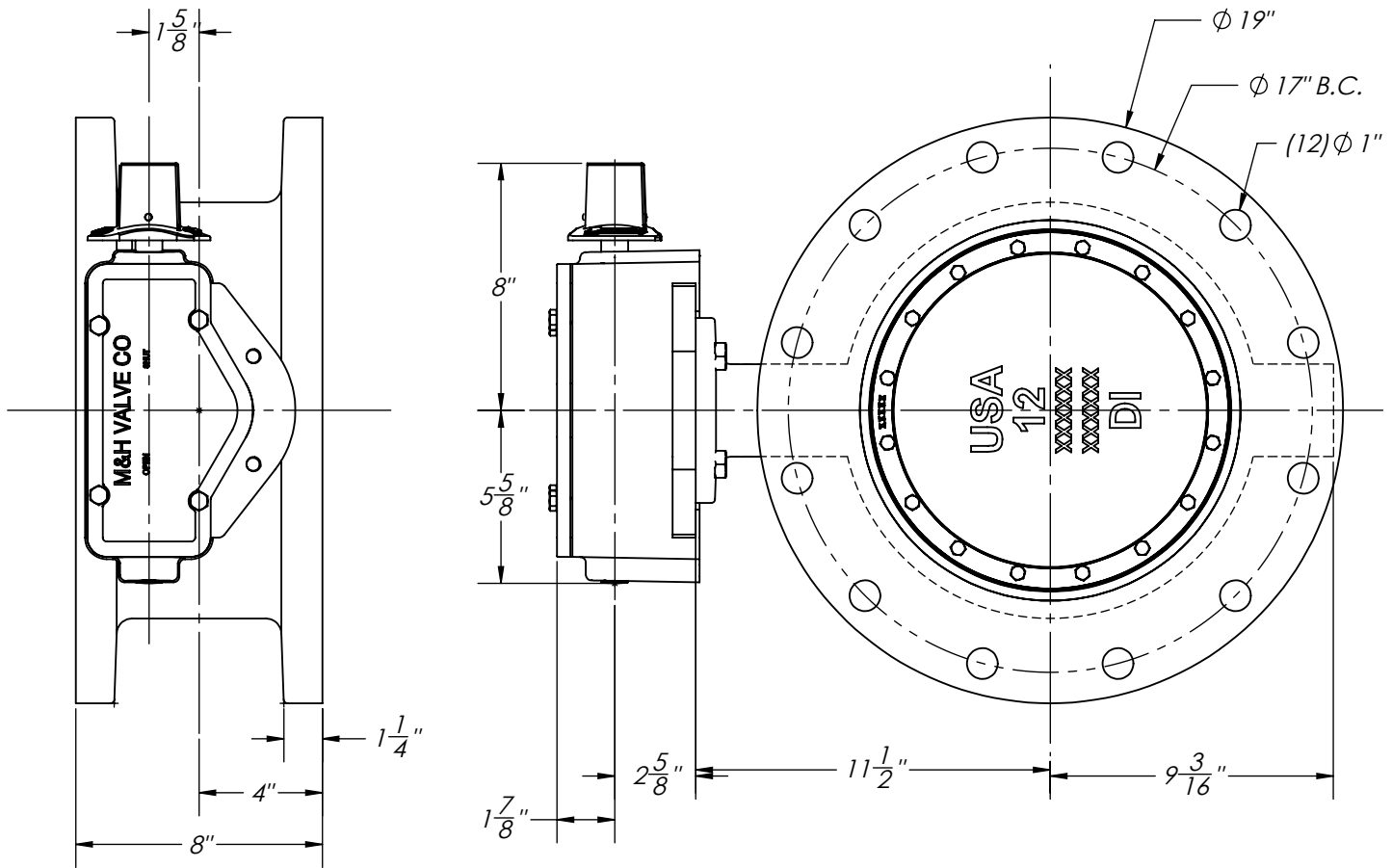
DRAWN: ZF

DATE: 1/9/17

DWG.

NO. B10FBB11

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



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. 7/8" DIAMETER OF BOLTS
7. OPERATED BY 2" AWWA OPERATING NUT/WRENCH NUT
8. RATED AND TESTED FOR 150psi WORKING PRESSURE

THIS DWG. AND ALL INFORMATION THEREON IS PROPERTY OF CLOW VALVE COMPANY AND SHALL NOT BE USED, COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT. DESIGN & INVENTION RIGHTS RESERVED.

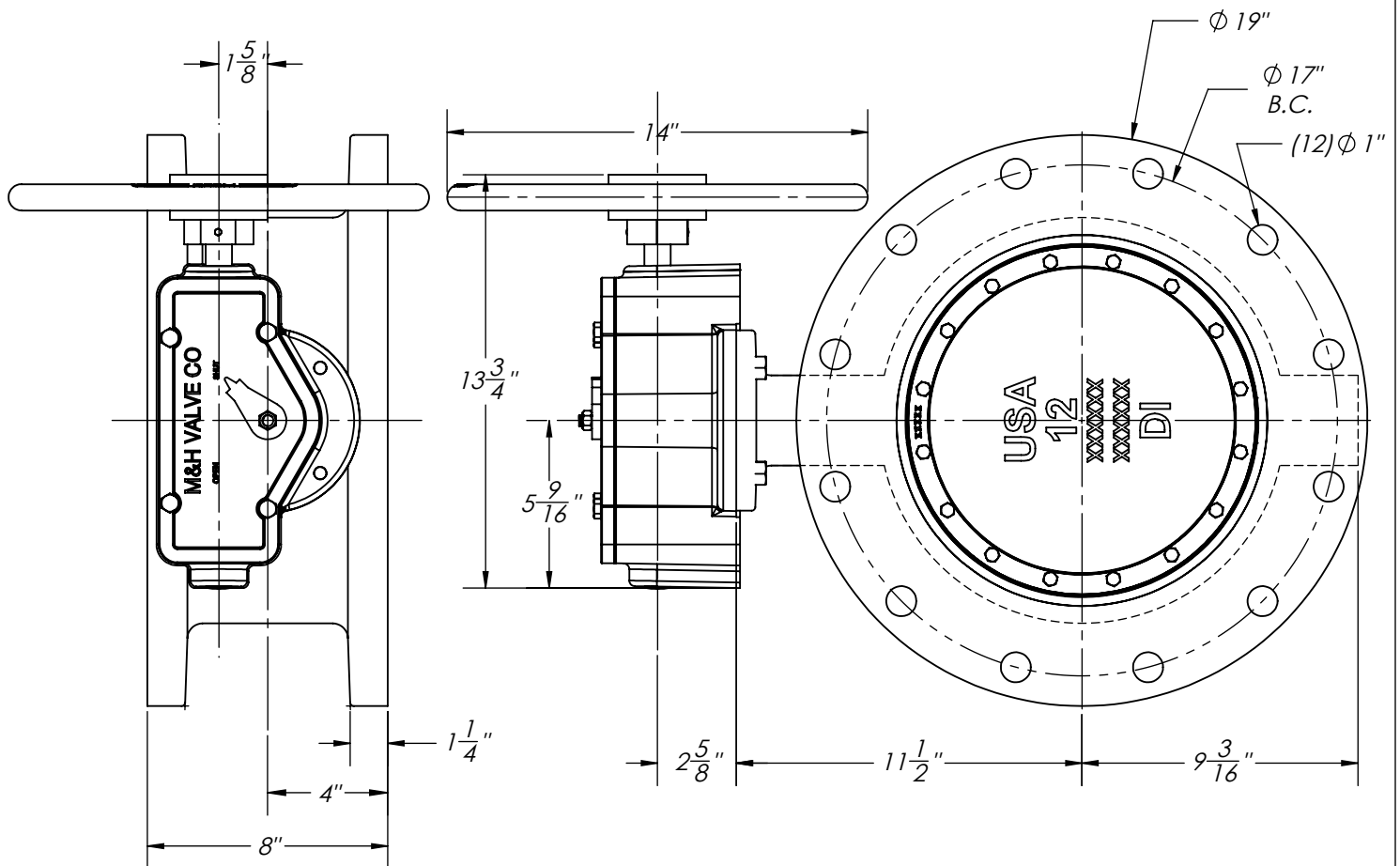
CLOW
VALVE CO.

CLOW VALVE COMPANY

A DIVISION OF McWANE INC.
902 SOUTH 2ND ST
OSKALOOSA, IA 52577

DRAWN: CTJ
DATE: 11/26/2018
DWG. NO.
B12FAM11

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



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. 7/8" DIAMETER OF BOLTS
7. OPERATED BY HANDWHEEL
8. RATED AND TESTED FOR 150psi WORKING PRESSURE

THIS DWG. AND ALL INFORMATION THEREON IS PROPERTY OF CLOW VALVE COMPANY AND SHALL NOT BE USED, COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT. DESIGN & INVENTION RIGHTS RESERVED.

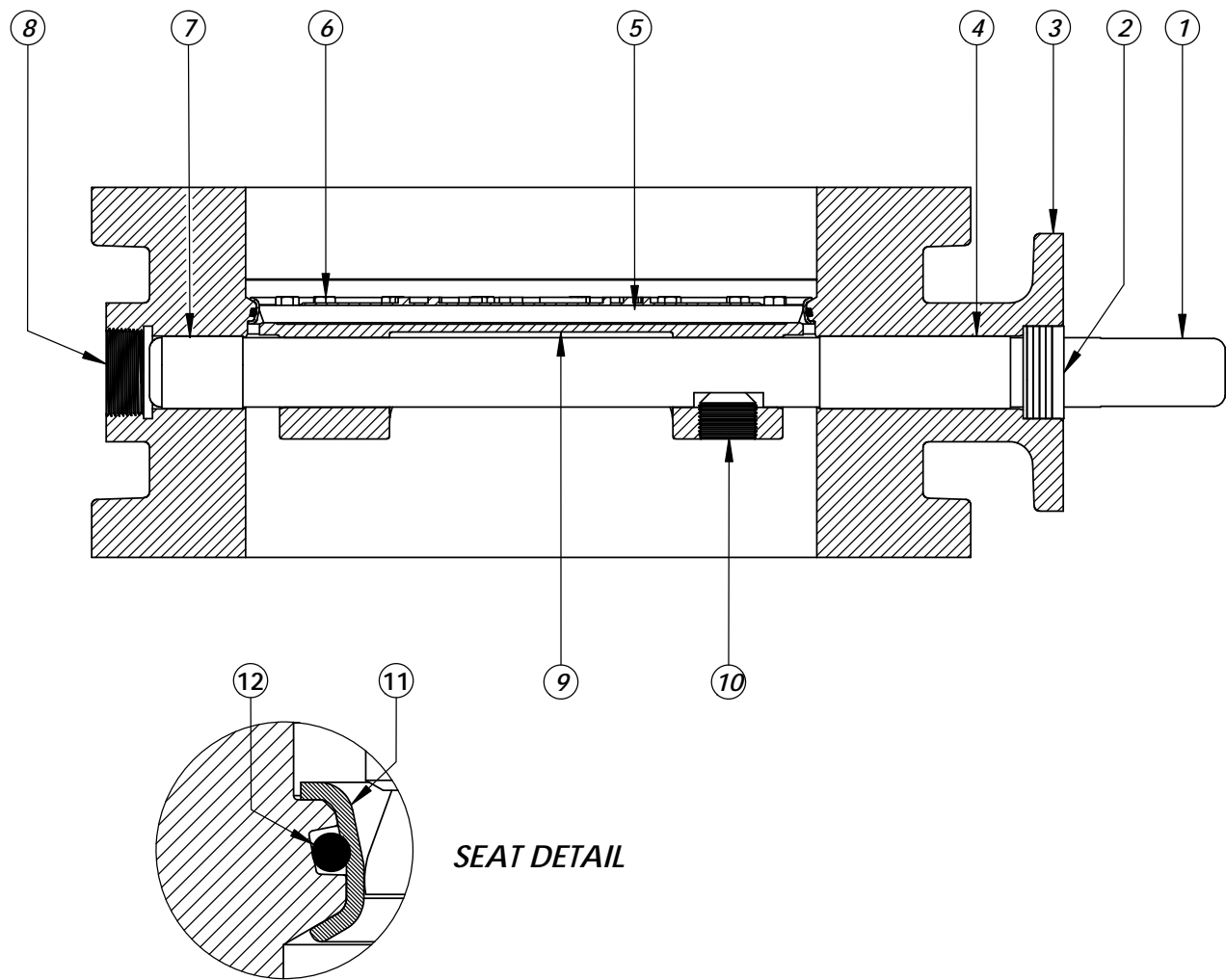
CLOW
VALVE CO.

CLOW VALVE COMPANY

A DIVISION OF McWANE INC.
902 SOUTH 2ND ST
OSKALOOSA, IA 52577

DRAWN: ZF
DATE: 1/23/2019
DWG. NO.
B12FAM1101

12" - Style 4500 - CL150
BFV with F/A 12 MSS/ISO Connection-
HANDWHEEL OPERATOR - FLANGED ENDS



SEAT DETAIL

ITEM NO.	DESCRIPTION	MATERIAL
1	VANE 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	NYLATRON
5	VANE SEAT RING	EPT with SS INSERT
6	HEX HEAD CAPSCREW	18-8 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	18-8 STAINLESS STEEL
11	BODY SEAT RING	316 STAINLESS STEEL
12	BODY SEAT O-RING	BUNA-N

THIS DWG. AND ALL INFORMATION THEREON IS PROPERTY OF CLOW VALVE COMPANY AND SHALL NOT BE USED, COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT. DESIGN & INVENTION RIGHTS RESERVED.

CLOW
VALVE CO.

CLOW VALVE COMPANY

A DIVISION OF McWANE INC.
902 SOUTH 2ND ST
OSKALOOSA, IA 52577

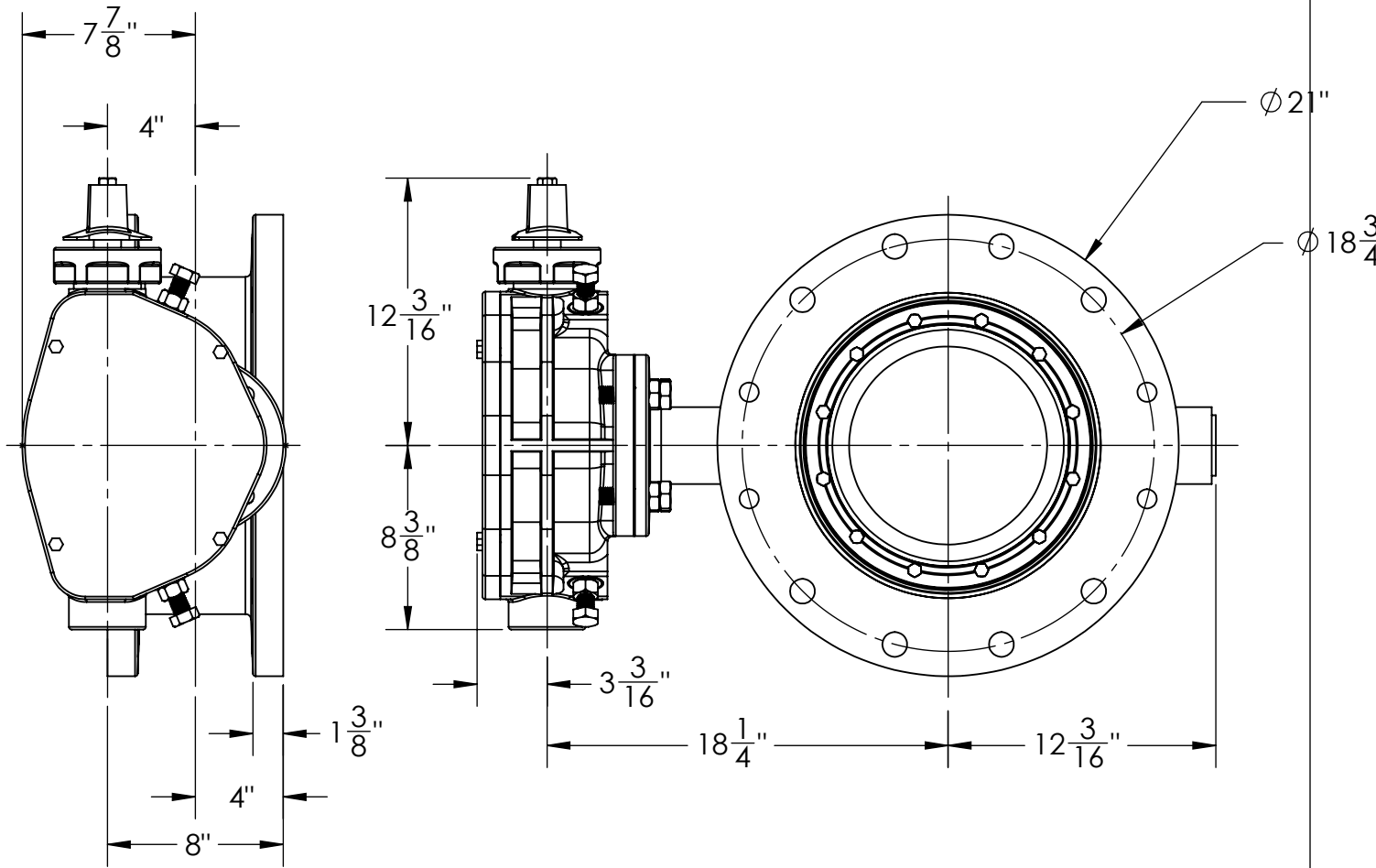
DRAWN: KLM

DATE: 10/2016

DWG. NO.

BFV-15-45-312-ISO

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



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. 1" DIA. OF BOLTS
6. OPERATED BY 2" AWWA OPERATING NUT/WRENCH NUT
7. RATED AND TESTED FOR 150psi WORKING PRESSURE
8. WEIGHT OF VALVE IS 450 LBS.

THIS DWG. AND ALL INFORMATION THEREON IS PROPERTY OF CLOW VALVE COMPANY AND SHALL NOT BE USED.
 COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT. DESIGN & INVENTION RIGHTS RESERVED.

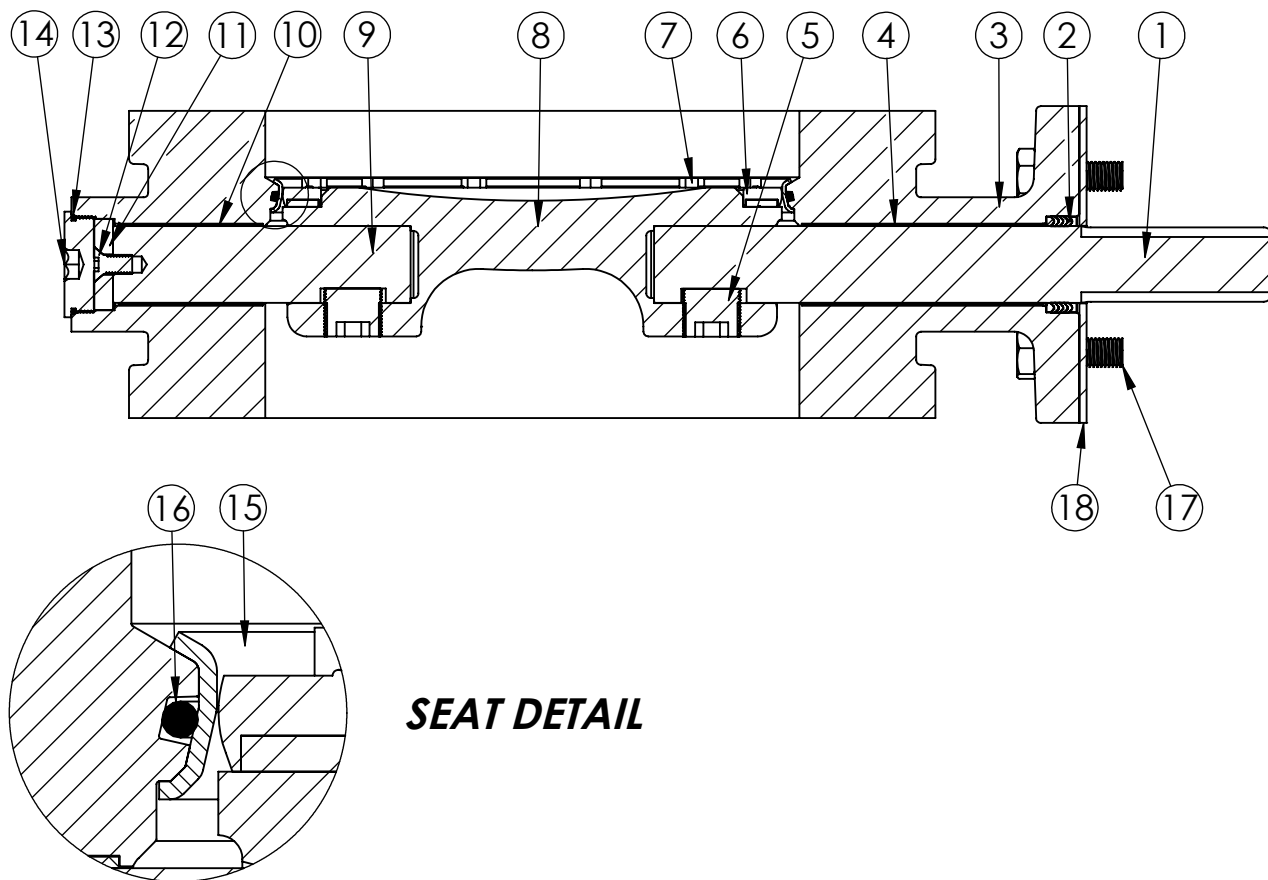
CLOW
VALVE CO.

CLOW VALVE COMPANY

A DIVISION OF McWANE INC.
902 SOUTH 2ND ST
OSKALOOSA, IA 52577

DRAWN: CTJ
DATE: 11/26/2018
DWG. NO.
 B14FAM11

14" - Style 4500 - CL150
 BFV with F/A16 MSS/ISO Connection-
 FE x FE ENDS - Buried Operator



SEAT DETAIL

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	TORQUE PLUG	304 STAINLESS STEEL, ASTM A-276
6	VANE SEAT RING	EPT W/ STAINLESS STEEL INSERT
7	HEX HEAD CAP SCREW	18-8 STAINLESS STEEL W/ NYLOC PATCH
8	BFV VANE	DUCTILE IRON ASTM A-276
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
17	OPERATOR MOUNTING BOLTS	18-8 STAINLESS STEEL
18	ISO F/A16 SEAL PLATE	COMMERCIAL STEEL

THIS DWG. AND ALL INFORMATION THEREON IS PROPERTY OF CLOW VALVE COMPANY AND SHALL NOT BE USED. COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT. DESIGN & INVENTION RIGHTS RESERVED.

CLOW
VALVE CO.

CLOW VALVE COMPANY

A DIVISION OF McWANE INC.
902 SOUTH 2ND ST
OSKALOOSA, IA 52577

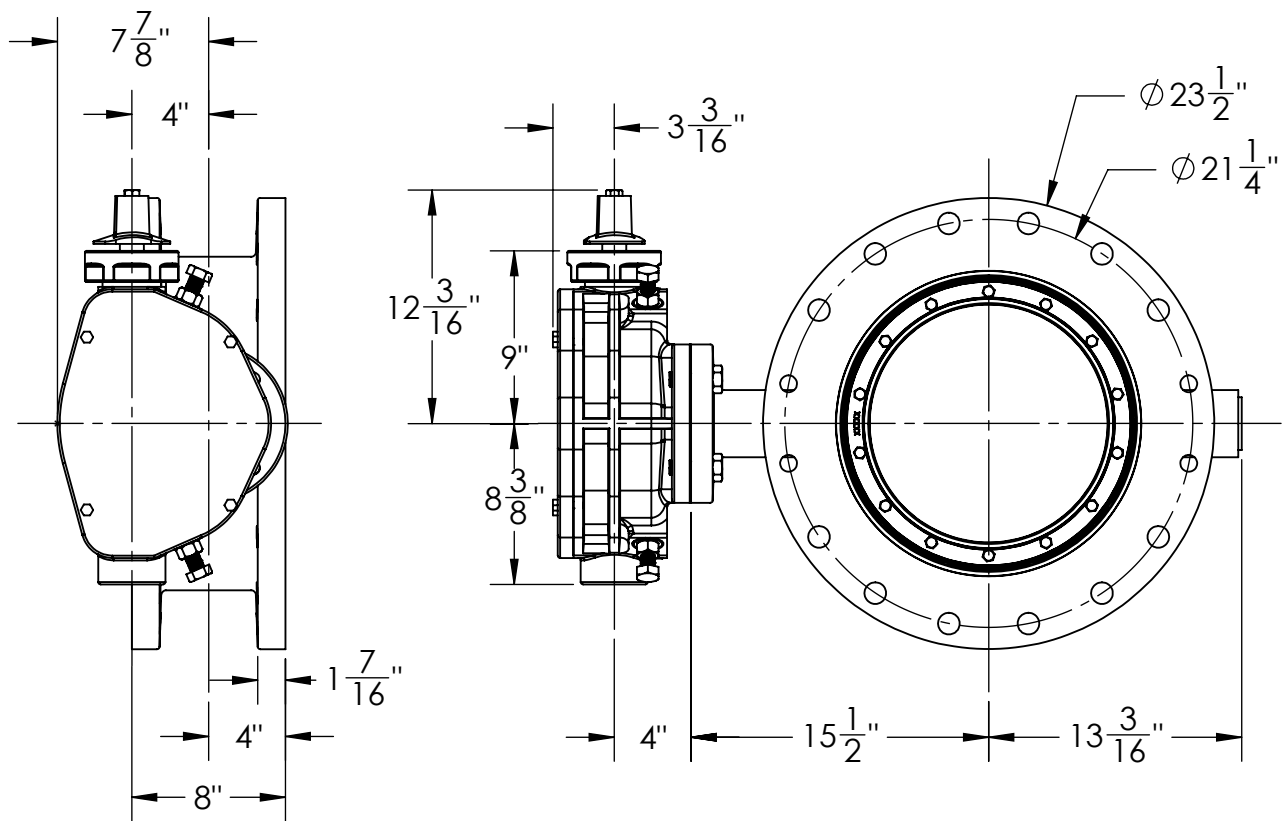
DRAWN: ZF

DATE: 8/31/2018

DWG.
NO.

B14FBB11

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



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. WEIGHT OF VALVE IS 450 LBS.

THIS DWG. AND ALL INFORMATION THEREON IS PROPERTY OF CLOW VALVE COMPANY AND SHALL NOT BE USED.
COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT. DESIGN & INVENTION RIGHTS RESERVED.

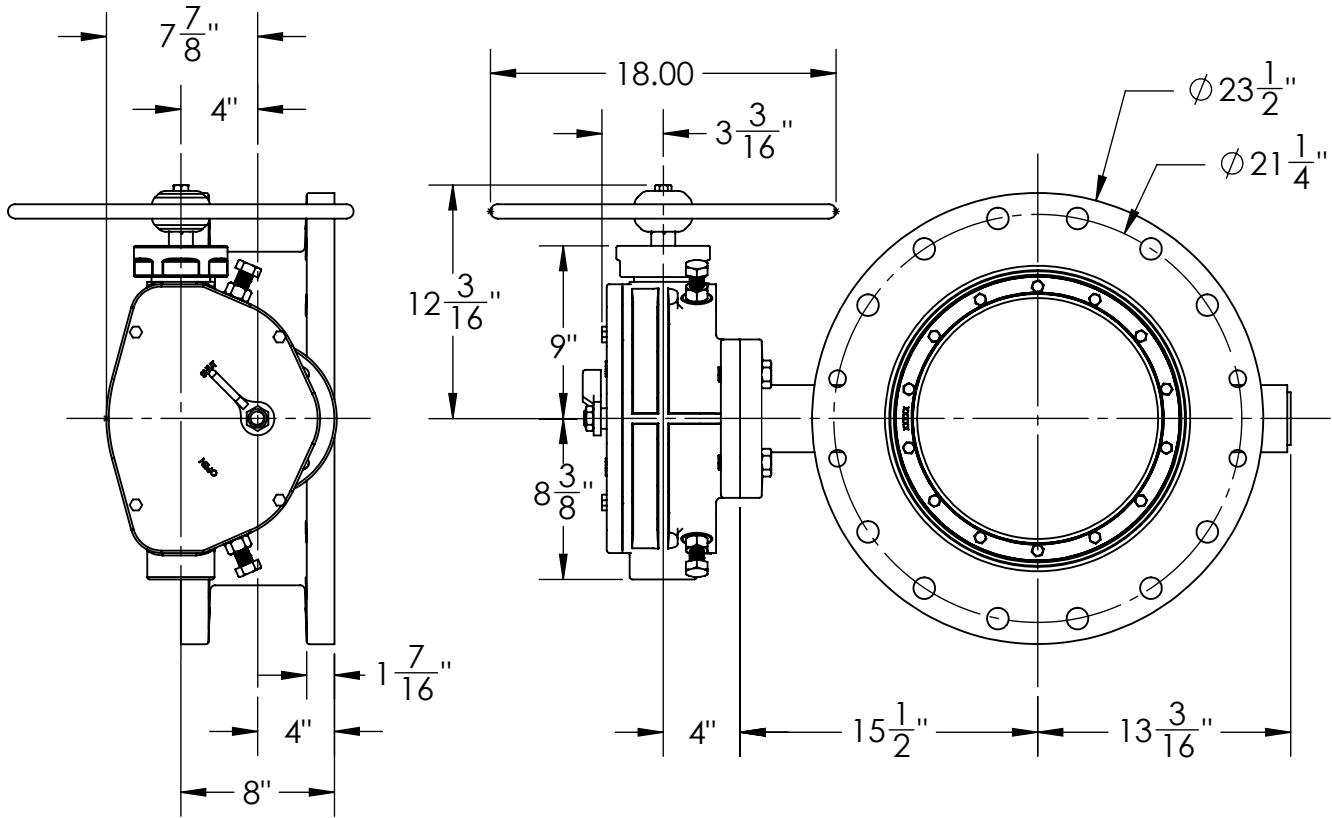
CLOW
VALVE CO.

CLOW VALVE COMPANY

A DIVISION OF McWANE INC.
902 SOUTH 2ND ST
OSKALOOSA, IA 52577

DRAWN: CTJ
DATE: 11/26/2018
DWG. NO. B16FAM11

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



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. WEIGHT OF VALVE IS 450 LBS.

THIS DWG. AND ALL INFORMATION THEREON IS PROPERTY OF CLOW VALVE COMPANY AND SHALL NOT BE USED.
COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT. DESIGN & INVENTION RIGHTS RESERVED.

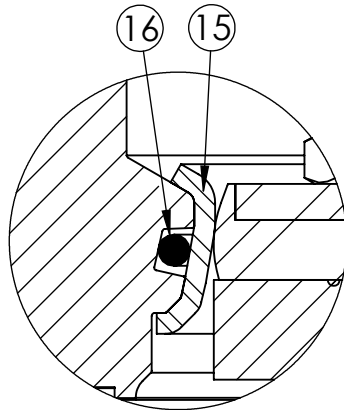
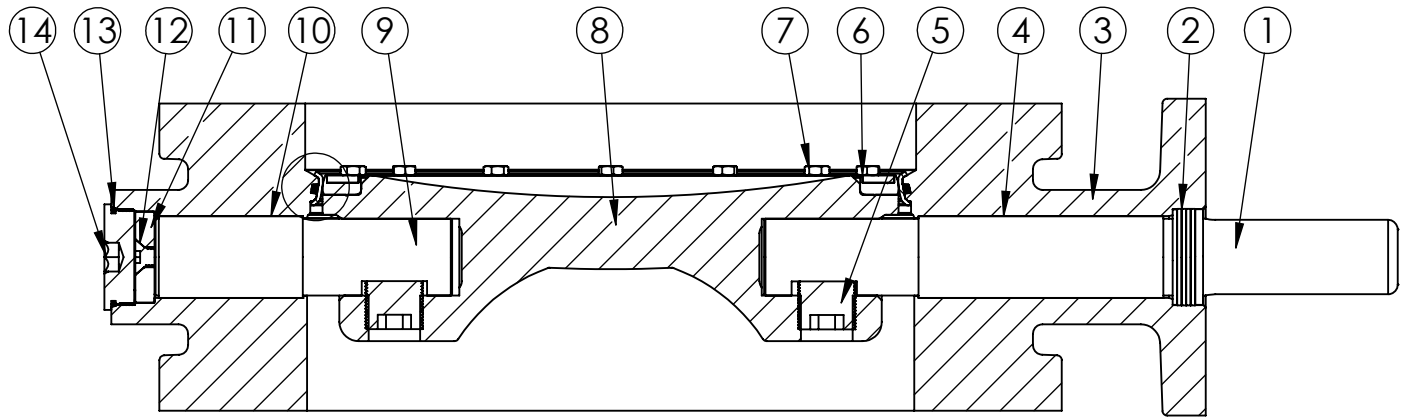
CLOW
VALVE CO.

CLOW VALVE COMPANY

A DIVISION OF McWANE INC.
902 SOUTH 2ND ST
OSKALOOSA, IA 52577

DRAWN: CTJ
DATE: 2/8/2019
DWG. NO.
B16FAM1101

16" - Style 4500 - CL150
BFV with F/A16 MSS/ISO Connection-
FE x FE ENDS - Handwheel Operator



SEAT DETAIL

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	TORQUE PLUG	304 STAINLESS STEEL, ASTM A-276
6	VANE SEAT RING	EPT W/ STAINLESS STEEL INSERT
7	HEX HEAD CAP SCREW	18-8 STAINLESS STEEL W/ NYLOC PATCH
8	BFV VANE	DUCTILE IRON ASTM A-276
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

THIS DWG. AND ALL INFORMATION THEREON IS PROPERTY OF CLOW VALVE COMPANY AND SHALL NOT BE USED. COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT. DESIGN & INVENTION RIGHTS RESERVED.

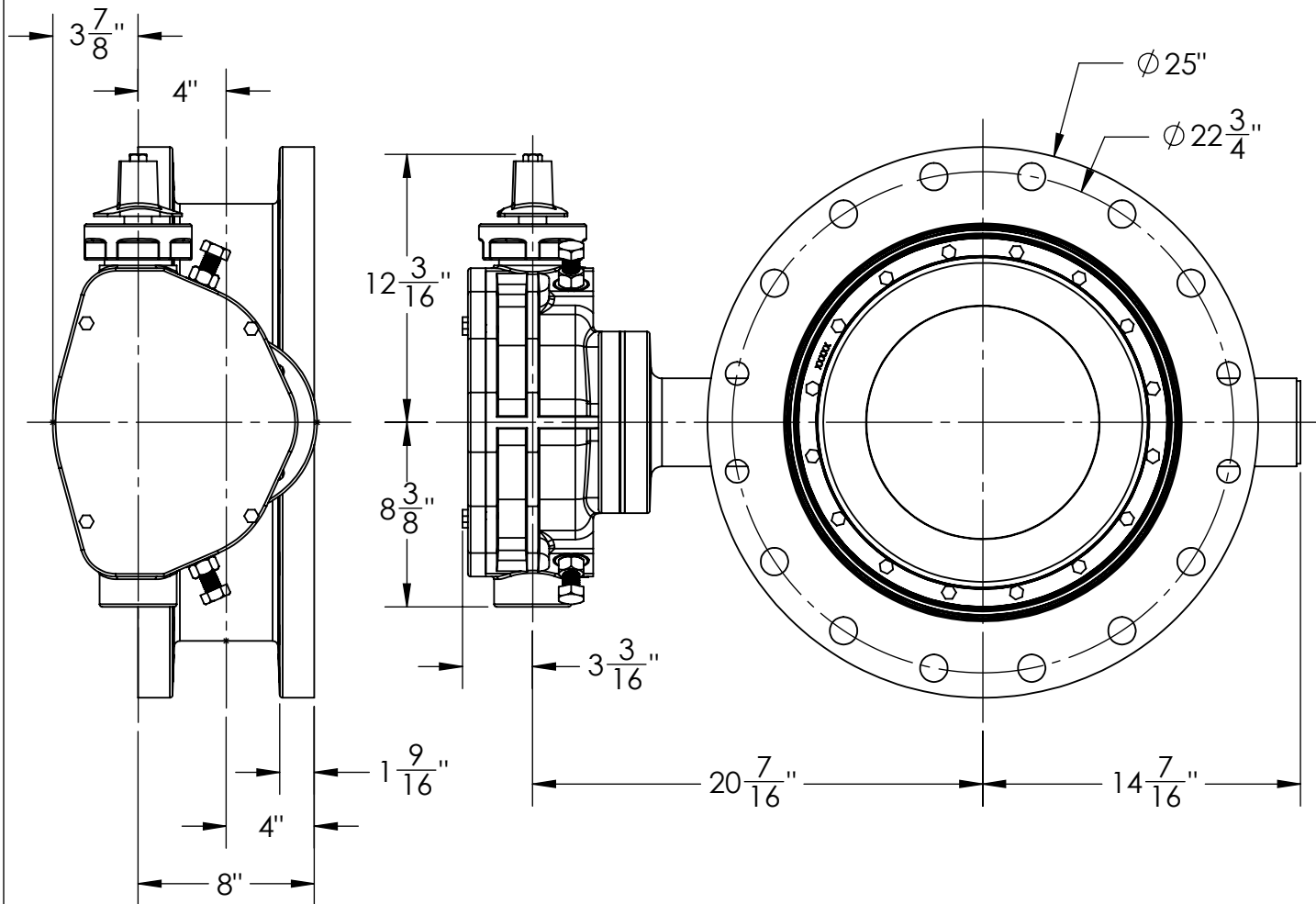


CLOW VALVE COMPANY

A DIVISION OF McWANE INC.
902 SOUTH 2ND ST
OSKALOOSA, IA 52577

DRAWN: ZF
DATE: 9/19/2018
DWG. NO. B16FBB11

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



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 1/8" DIA. OF BOLTS
6. OPERATED BY 2" AWWA OPERATING NUT/WRENCH NUT
7. RATED AND TESTED FOR 150psi WORKING PRESSURE
9. WEIGHT OF VALVE IS 450 LBS.

THIS DWG. AND ALL INFORMATION THEREON IS PROPERTY OF CLOW VALVE COMPANY AND SHALL NOT BE USED.
COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT. DESIGN & INVENTION RIGHTS RESERVED.

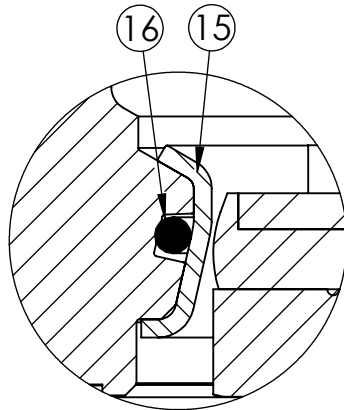
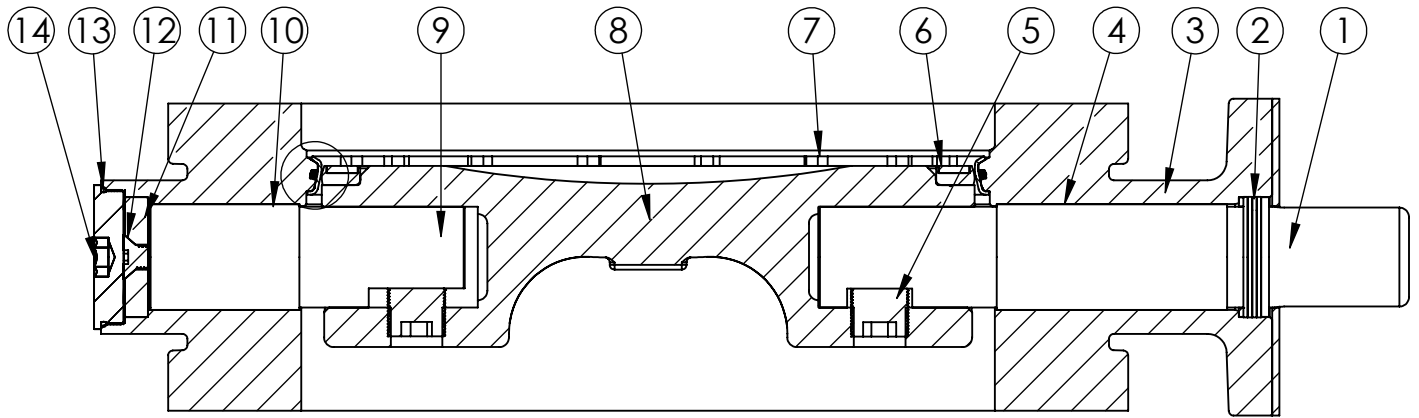
CLOW
VALVE CO.

CLOW VALVE COMPANY

A DIVISION OF McWANE INC.
902 SOUTH 2ND ST
OSKALOOSA, IA 52577

DRAWN: CTJ
DATE: 11/26/2018
DWG. NO.
B18FAM11

18" - Style 4500 - CL150
BFV with F/A16 MSS/ISO Connection-
FE x FE ENDS - Buried Operator



SEAT DETAIL

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	TORQUE PLUG	304 STAINLESS STEEL, ASTM A-276
6	VANE SEAT RING	EPT W/ STAINLESS STEEL INSERT
7	HEX HEAD CAP SCREW	18-8 STAINLESS STEEL W/ NYLOC PATCH
8	BFV VANE	DUCTILE IRON ASTM A-276
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

THIS DWG. AND ALL INFORMATION THEREON IS PROPERTY OF CLOW VALVE COMPANY AND SHALL NOT BE USED. COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT. DESIGN & INVENTION RIGHTS RESERVED.

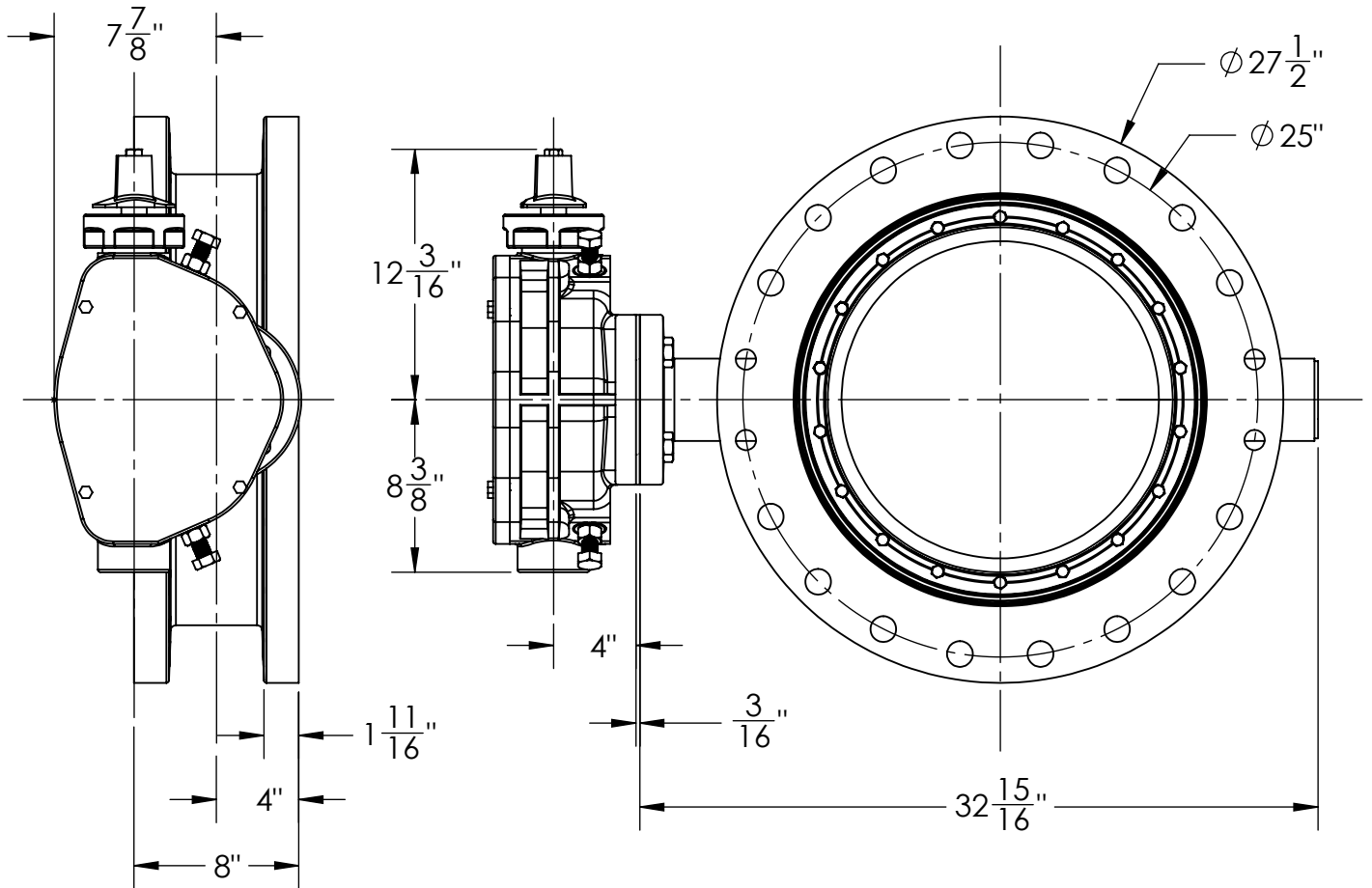
CLOW
VALVE CO.

CLOW VALVE COMPANY

A DIVISION OF McWANE INC.
902 SOUTH 2ND ST
OSKALOOSA, IA 52577

DRAWN: CTJ
DATE: 10/4/2018
DWG. NO.
B18FBB11

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



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. OPERATED BY 2" AWWA OPERATING NUT/WRENCH NUT
5. (20) 1 1/8"-7 BOLTS FOR EACH FLANGE
6. RATED AND TESTED FOR 150psi WORKING PRESSURE
7. VALVE WEIGHT IS 625 LBS.

THIS DWG. AND ALL INFORMATION THEREON IS PROPERTY OF CLOW VALVE COMPANY AND SHALL NOT BE USED.
 COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT. DESIGN & INVENTION RIGHTS RESERVED.

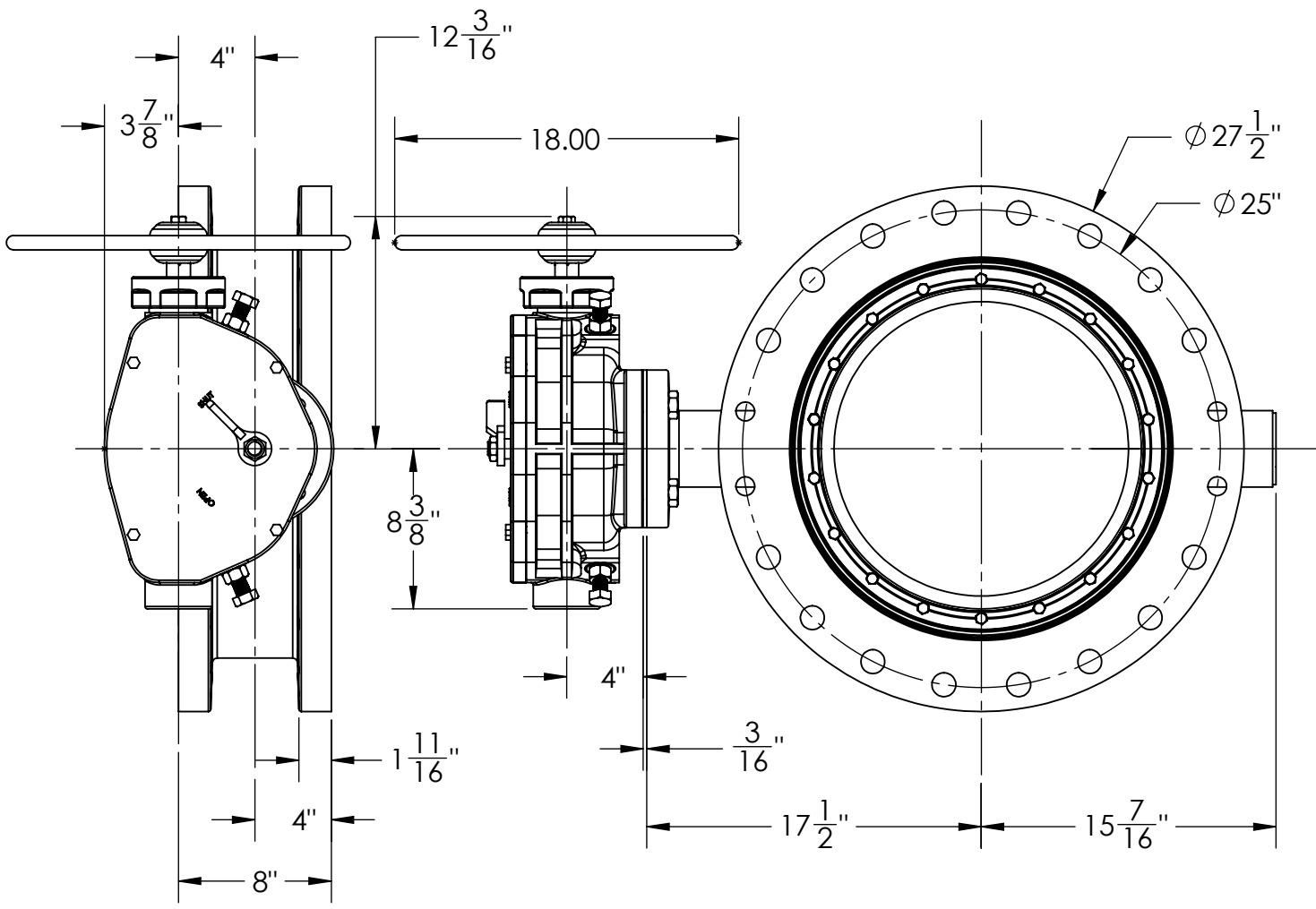
CLOW
VALVE CO.

CLOW VALVE COMPANY

A DIVISION OF McWANE INC.
902 SOUTH 2ND ST
OSKALOOSA, IA 52577

DRAWN: CTJ
DATE: 11/26/2018
DWG. NO. B20FAM11

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



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. OPERATED BY 2" AWWA OPERATING NUT/WRENCH NUT
5. (20) 1 1/8"-7 BOLTS FOR EACH FLANGE
6. RATED AND TESTED FOR 150psi WORKING PRESSURE
7. VALVE WEIGHT IS 625 LBS.

THIS DWG. AND ALL INFORMATION THEREON IS PROPERTY OF CLOW VALVE COMPANY AND SHALL NOT BE USED.
 COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT. DESIGN & INVENTION RIGHTS RESERVED.

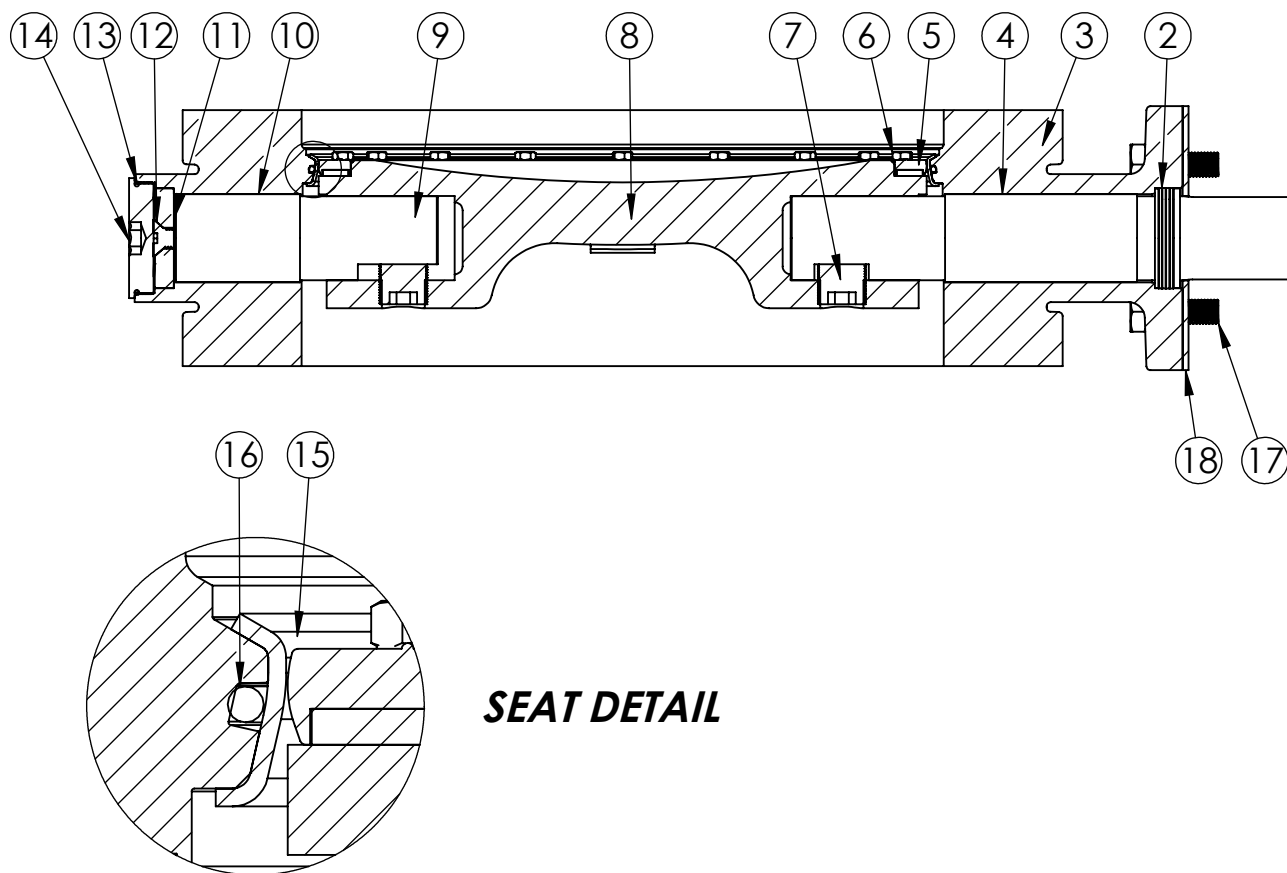


CLOW VALVE COMPANY

A DIVISION OF McWANE INC.
 902 SOUTH 2ND ST
 OSKALOOSA, IA 52577

DRAWN: CTJ
DATE: 2/8/2019
DWG. NO.
 B20FAM1101

**20" AWWA C504 - STYLE 4500 - CL150
 BFV w/ 1250 HANDWHEEL OPERATOR
 F/A16 MSS/ISO CONNECTION
 SUB-ASSEMBLY - DIMESNIONS
 FLANGED END**



SEAT DETAIL

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
17	OPERATOR MOUNTING BOLTS	18-8 STAINLESS STEEL
18	ISO FA16 SEAL PLATE	COMMERCIAL STEEL

THIS DWG. AND ALL INFORMATION THEREON IS PROPERTY OF CLOW VALVE COMPANY AND SHALL NOT BE USED. COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT. DESIGN & INVENTION RIGHTS RESERVED.

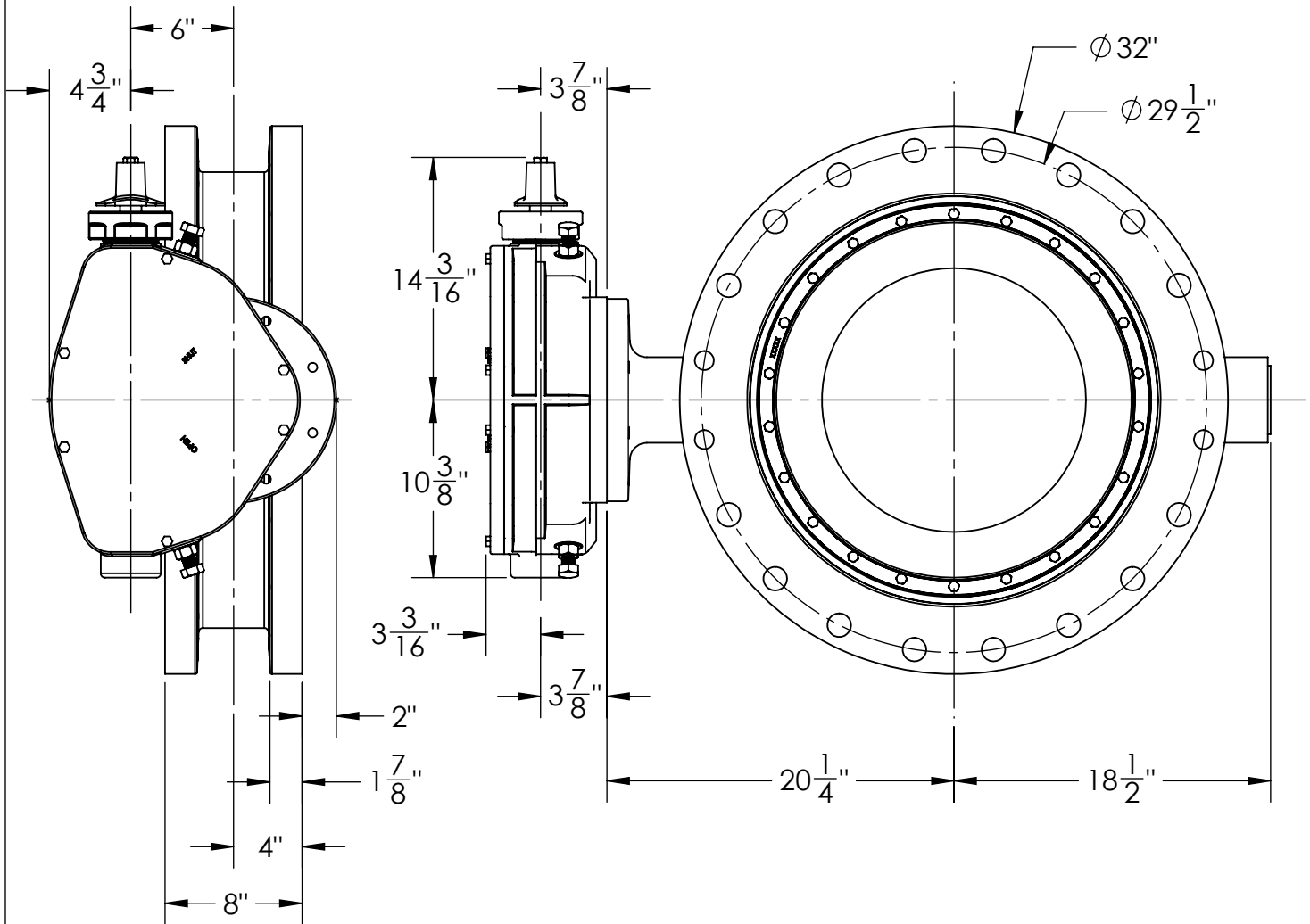
CLOW
VALVE CO.

CLOW VALVE COMPANY

A DIVISION OF McWANE INC.
902 SOUTH 2ND ST
OSKALOOSA, IA 52577

DRAWN: ZF
DATE: 8/31/2018
DWG. NO. B20FBB11

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



1. FLOW MAY BE IN EITHER DIRECTION
2. VALVE SHAFT WILL MEET OR EXCEED AWWA C504 REQUIREMENTS
3. 72 TURNS TO CLOSE
4. OPERATED BY 2" AWWA OPERATING NUT / WRENCH NUT
5. (20) 1 1/4"-7 BOLTS ON EACH FLANGE, 4 THREADED
6. RATED AND TESTED FOR 150psi WORKING PRESSURE
7. VALVE WEIGHT IS 800 LBS.

THIS DWG. AND ALL INFORMATION THEREON IS PROPERTY OF CLOW VALVE COMPANY AND SHALL NOT BE USED.
 COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT. DESIGN & INVENTION RIGHTS RESERVED.

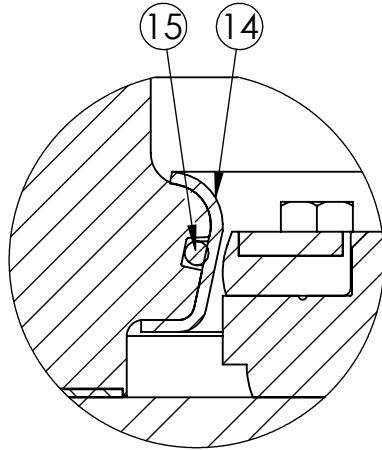
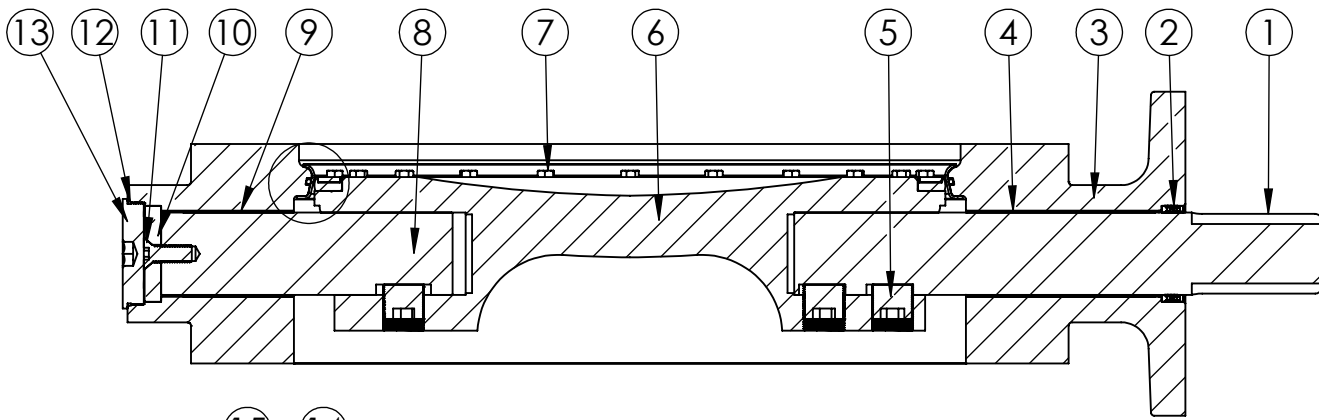
CLOW
VALVE CO.

CLOW VALVE COMPANY

A DIVISION OF McWANE INC.
902 SOUTH 2ND ST
OSKALOOSA, IA 52577

DRAWN: CTJ
DATE: 11/26/2018
DWG. NO. B24FAM11

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



SEAT DETAIL

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	TORQUE PLUG	304 STAINLESS STEEL, ASTM A-276
6	VANE SEAT RING	EPT W/ STAINLESS STEEL INSERT
7	HEX HEAD CAP SCREW	18-8 STAINLESS STEEL W/ NYLOC PATCH
8	THRUST SHAFT	304 STAINLESS STEEL, ASTM A-276
9	LOWER JOURNAL BEARING	FIBER & REINFORCED TEFLON
10	THRUST BEARING	BRONZE ALLOY
11	THRUST BEARING CAP SCREW	18-8 STAINLESS STEEL
12	BODY END PLUG	STEEL
13	BODY END PLUG O-RING	EPDM
14	BODY SEAT RING	316 STAINLESS STEEL
15	BODY SEAT O-RING	BUNA-N

THIS DWG. AND ALL INFORMATION THEREON IS PROPERTY OF CLOW VALVE COMPANY AND SHALL NOT BE USED. COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT. DESIGN & INVENTION RIGHTS RESERVED.

CLOW
VALVE CO.

CLOW VALVE COMPANY

A DIVISION OF McWANE INC.
902 SOUTH 2ND ST
OSKALOOSA, IA 52577

DRAWN: ZF
DATE: 8/13/2018
DWG. NO. B24FBB11

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