

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 FLANGE, 6 BOLTS ON MJ
6. 3/4" DIAMETER OF BOLTS
7. OPERATED BY 2" AWWA OPERATING NUT/WRENCH NUT
8. RATED AND TESTED FOR 150psi WORKING PRESSURE

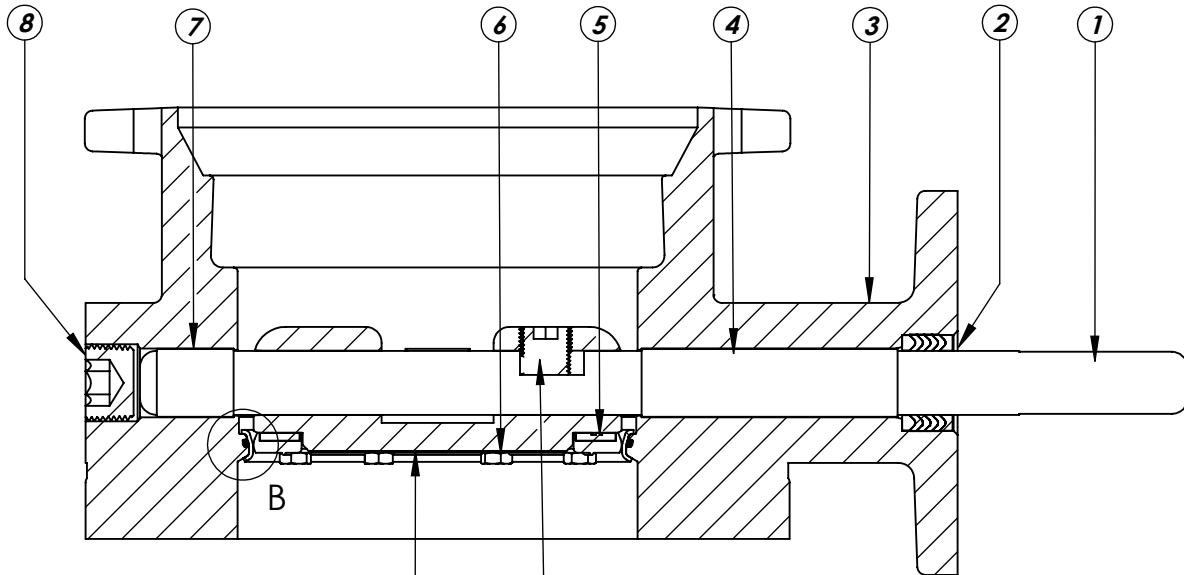
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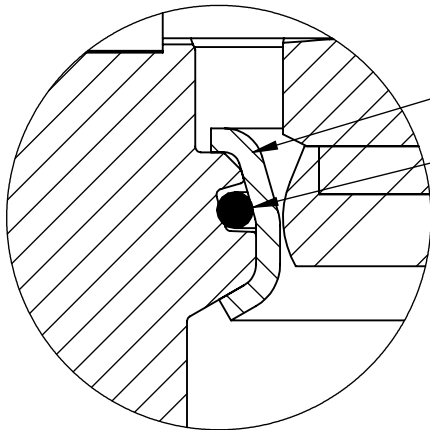
KENNEDY VALVE
Division of McWane, Inc.
1021 EAST WATER STREET ELMIRA, NEW YORK 14901

DRAWN: CTJ
DATE: 11/26/2018
DWG. NO. B06XAM11

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

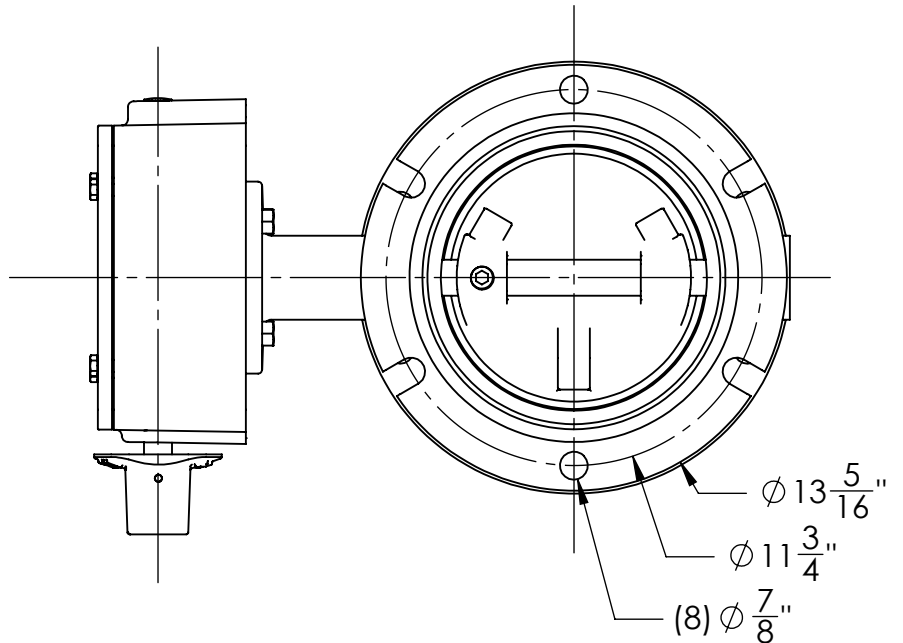
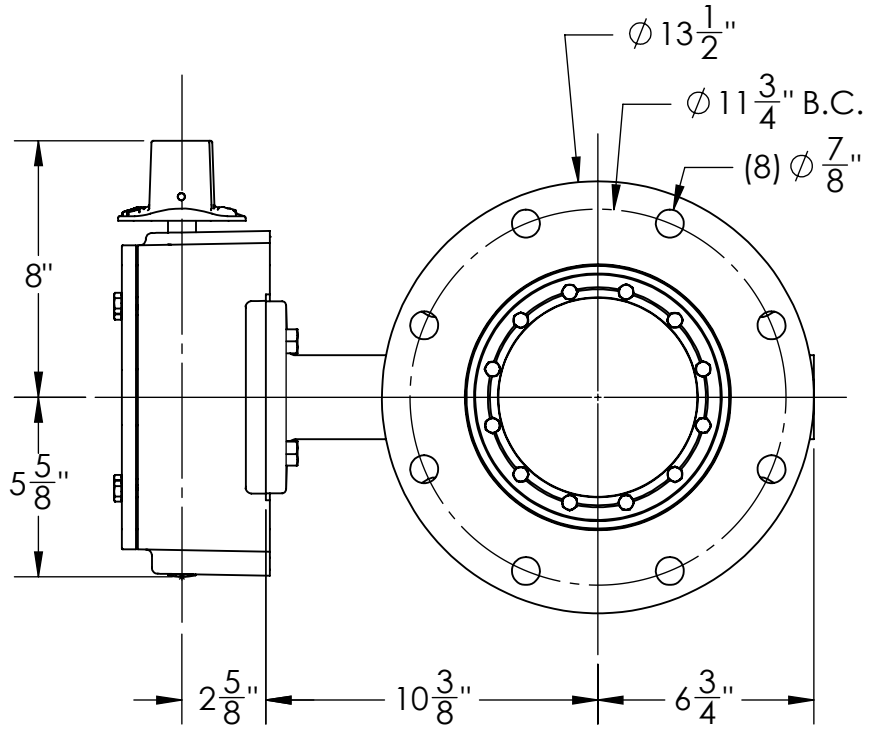
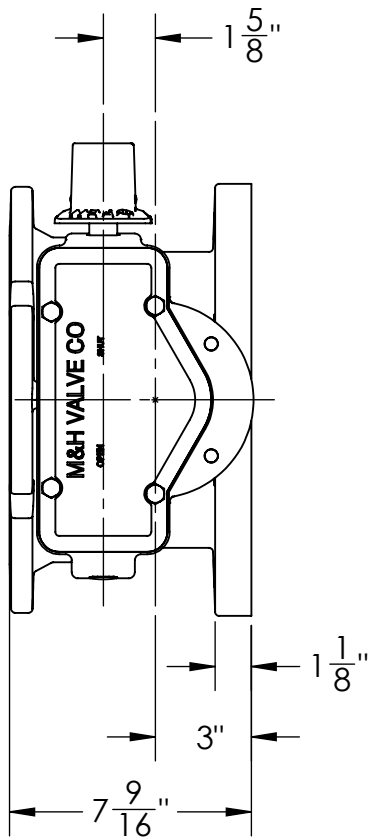
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KENNEDY VALVE
Division of McWane, Inc.
1021 EAST WATER STREET ELMIRA, NEW YORK 14901

DRAWN: ZF
DATE: 1/6/17
DWG. NO. B06XBB11

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



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 FLANGE SIDE, 6 ON MJ SIDE
6. 3/4" DIAMETER OF BOLTS
7. OPERATED BY 2" AWWA OPERATING NUT/WRENCH NUT
8. RATED AND TESTED FOR 150psi WORKING PRESSURE

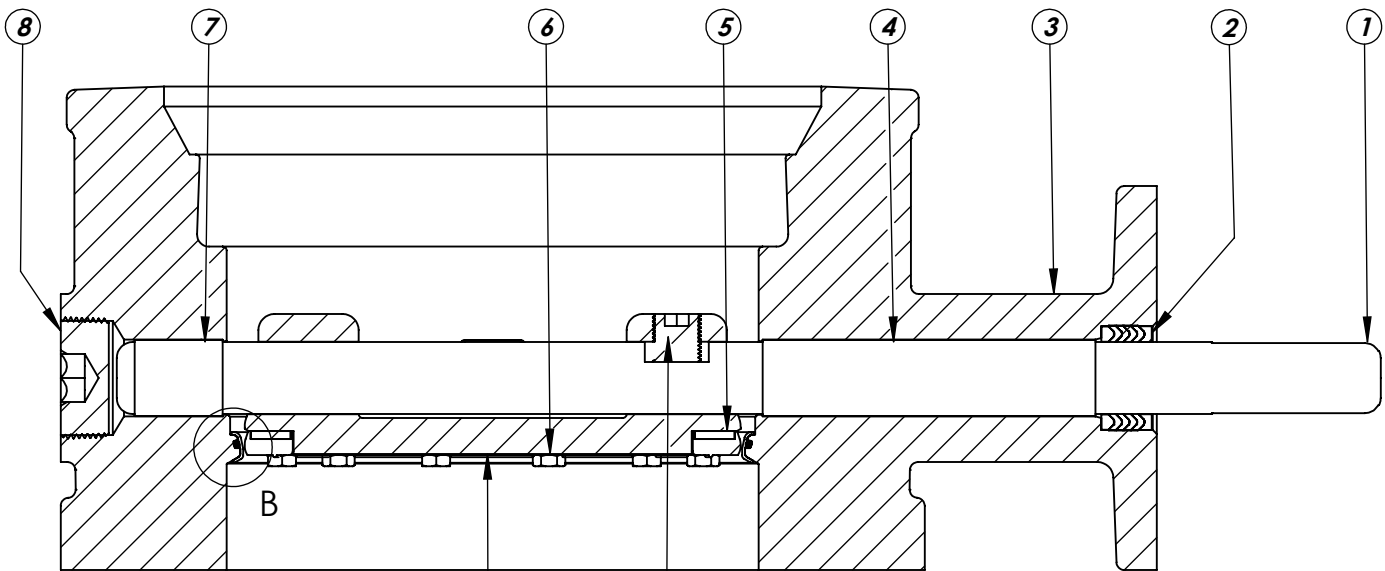
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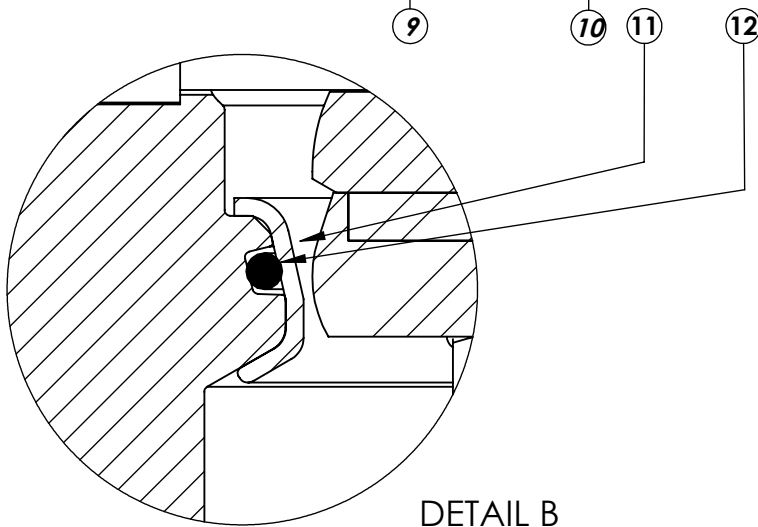
KENNEDY VALVE
Division of McWane, Inc.
1021 EAST WATER STREET ELMIRA, NEW YORK 14901

DRAWN: CTJ
DATE: 11/26/2018
DWG. NO.: B08XAM11

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

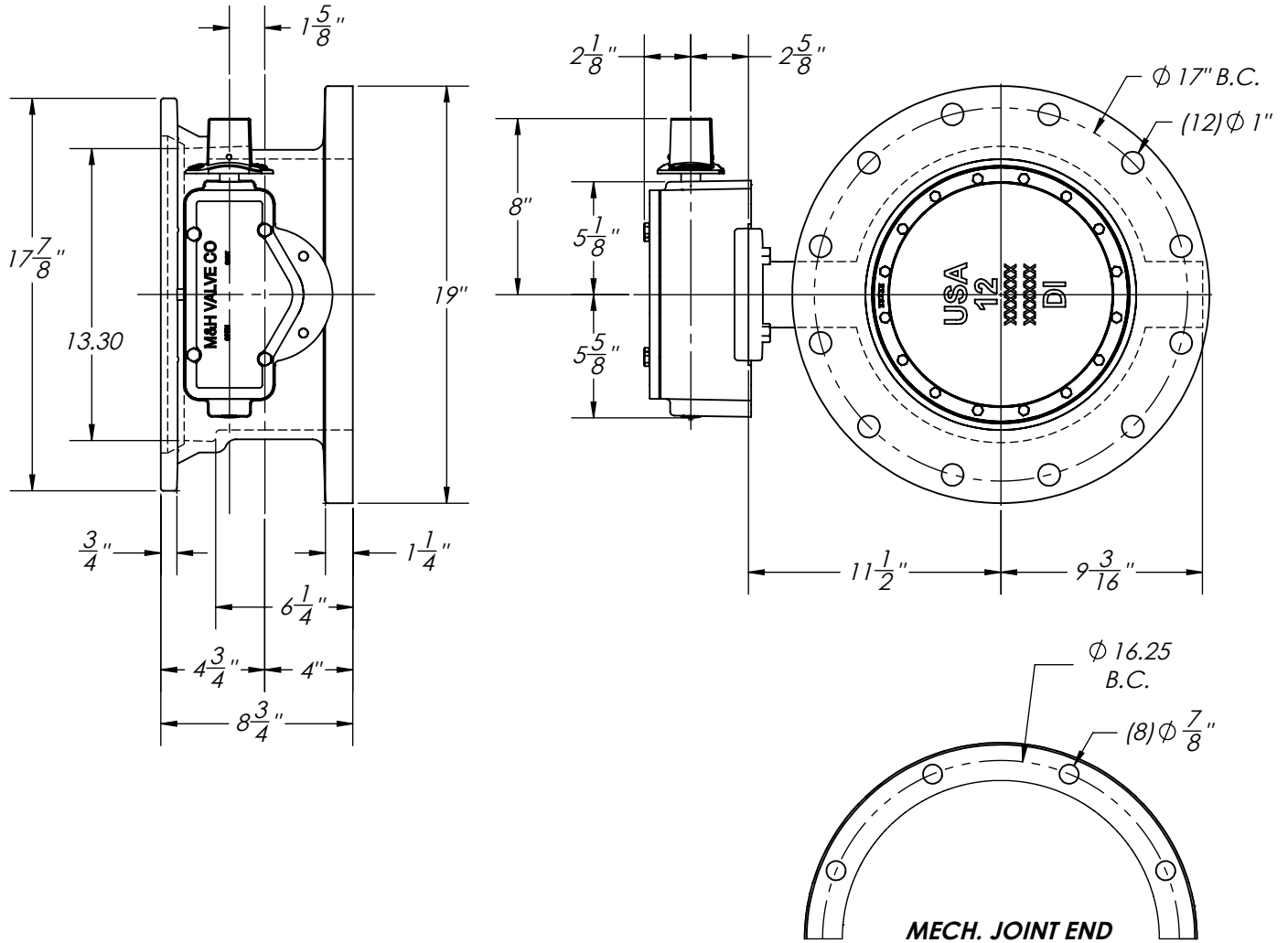
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KENNEDY VALVE
Division of McWane, Inc.
1021 EAST WATER STREET ELMIRA, NEW YORK 14901

DRAWN: ZF
DATE: 1/9/17
DWG. NO. B08XBB11

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



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. OPERATED BY 2" AWWA OPERATING NUT/WRENCH NUT
6. RATED AND TESTED FOR 150psi WORKING PRESSURE
7. 7/8" DIA. BOLTS FOR FLANGED SIDE, 3/4" DIA. BOLTS FOR MJ SIDE
8. GASKET, GLANDS, AND BOLTS FOR MECHANICAL JOINT FURNISHED WITH VALVE WHEN SPECIFIED ON ORDER

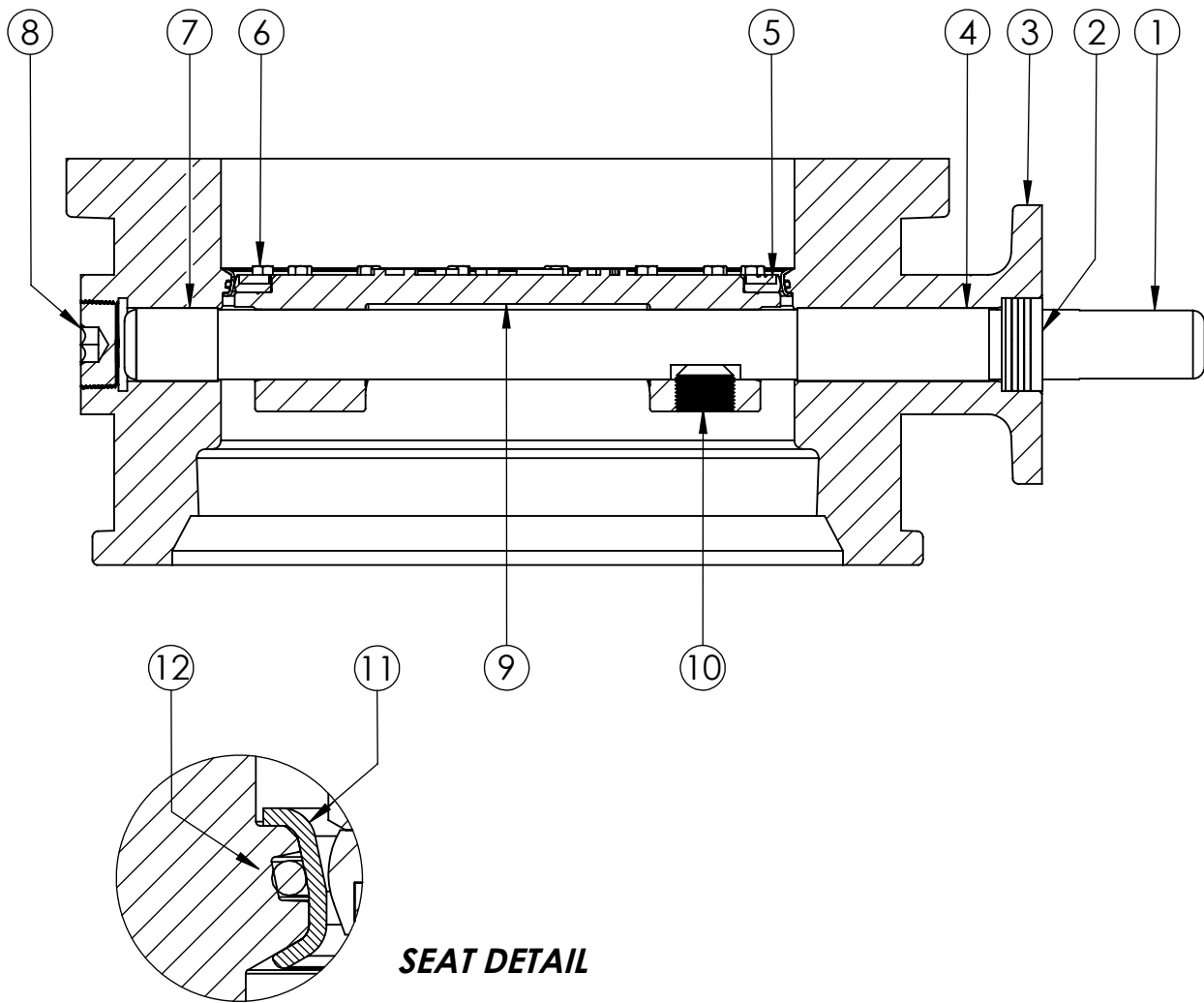
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KENNEDY VALVE
Division of McWane, Inc.
1021 EAST WATER STREET ELMIRA, NEW YORK 14901

DRAWN: CTJ
DATE: 11/26/2018
DWG. NO.
B12XAM11

12" - Style 4500 - CL150
BFV with F/A 12 MSS/ISO Connection-
FLANGED x MECH. JOINT - Buried Operator



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

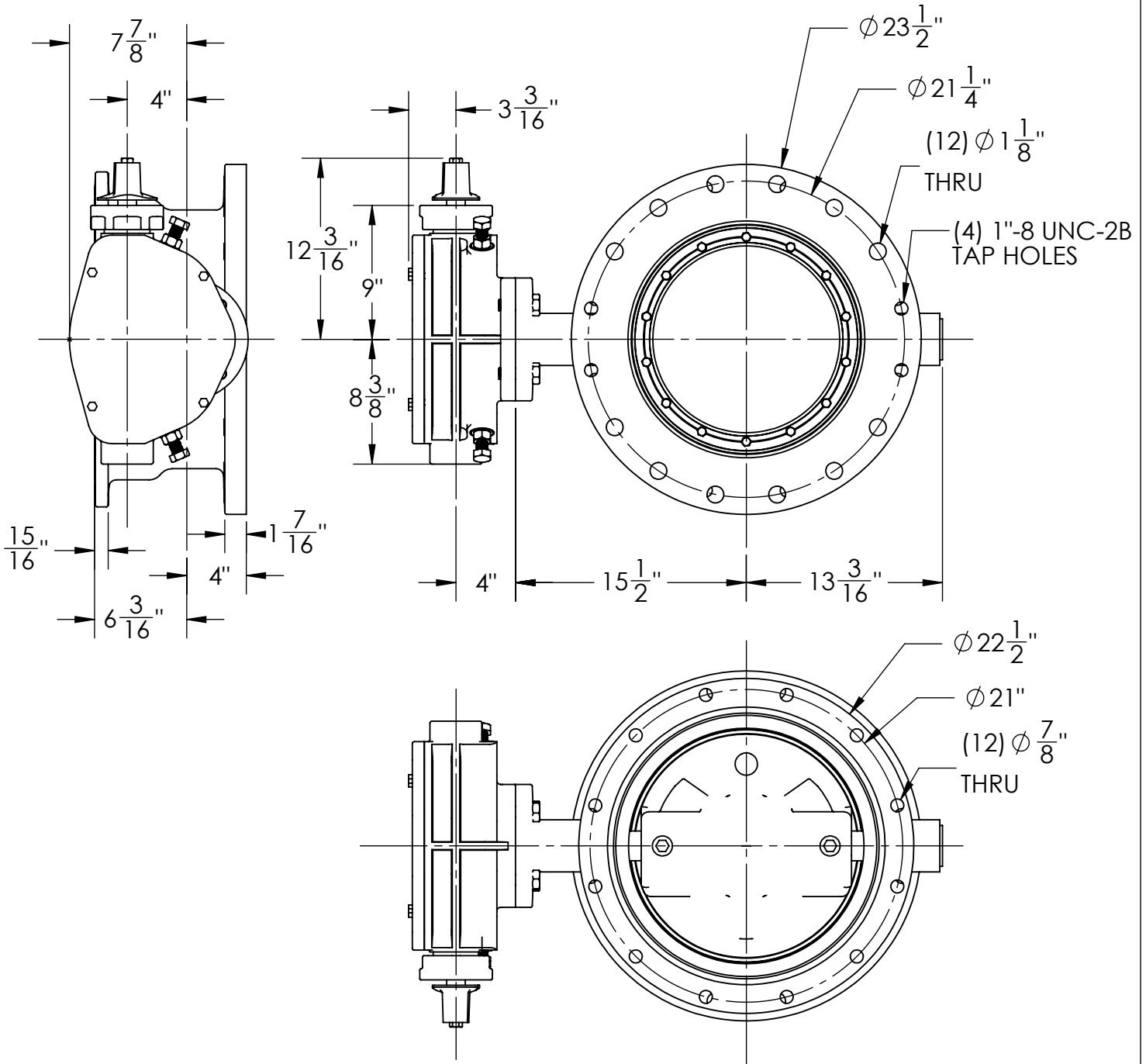
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KENNEDY VALVE
 Division of McWane, Inc.
 1021 EAST WATER STREET ELMIRA, NEW YORK 14901

DRAWN: CTJ
DATE: 8/10/2018
DWG. NO. B12XBB11

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



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 FLANGE SIDE, 12 ON MJ SIDE
5. 1" DIA. BOLTS FOR FLANGED SIDE, 3/4" DIA. BOLTS FOR MJ SIDE
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.

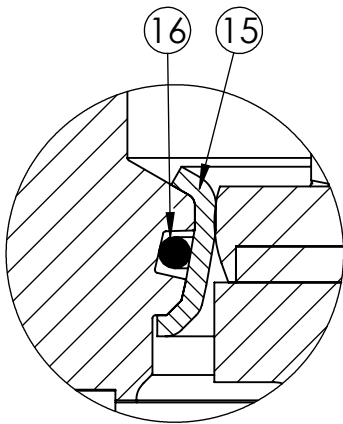
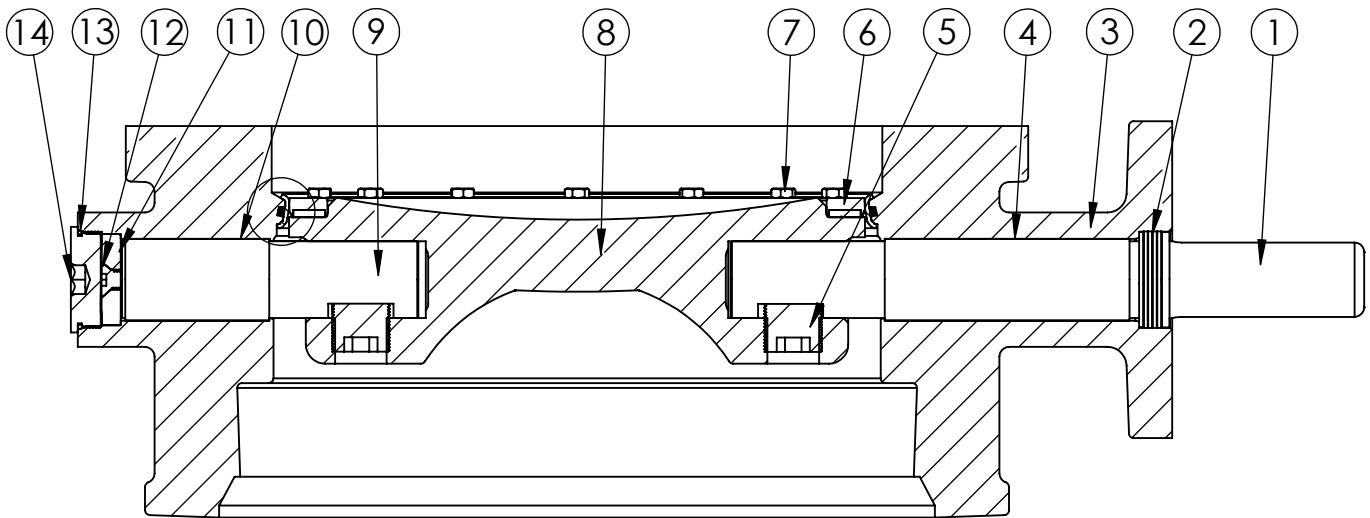
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KENNEDY VALVE
Division of McWane, Inc.
1021 EAST WATER STREET ELMIRA, NEW YORK 14901

DRAWN: CTJ
DATE: 11/26/2018
DWG. NO.: B16XAM11

16" - 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

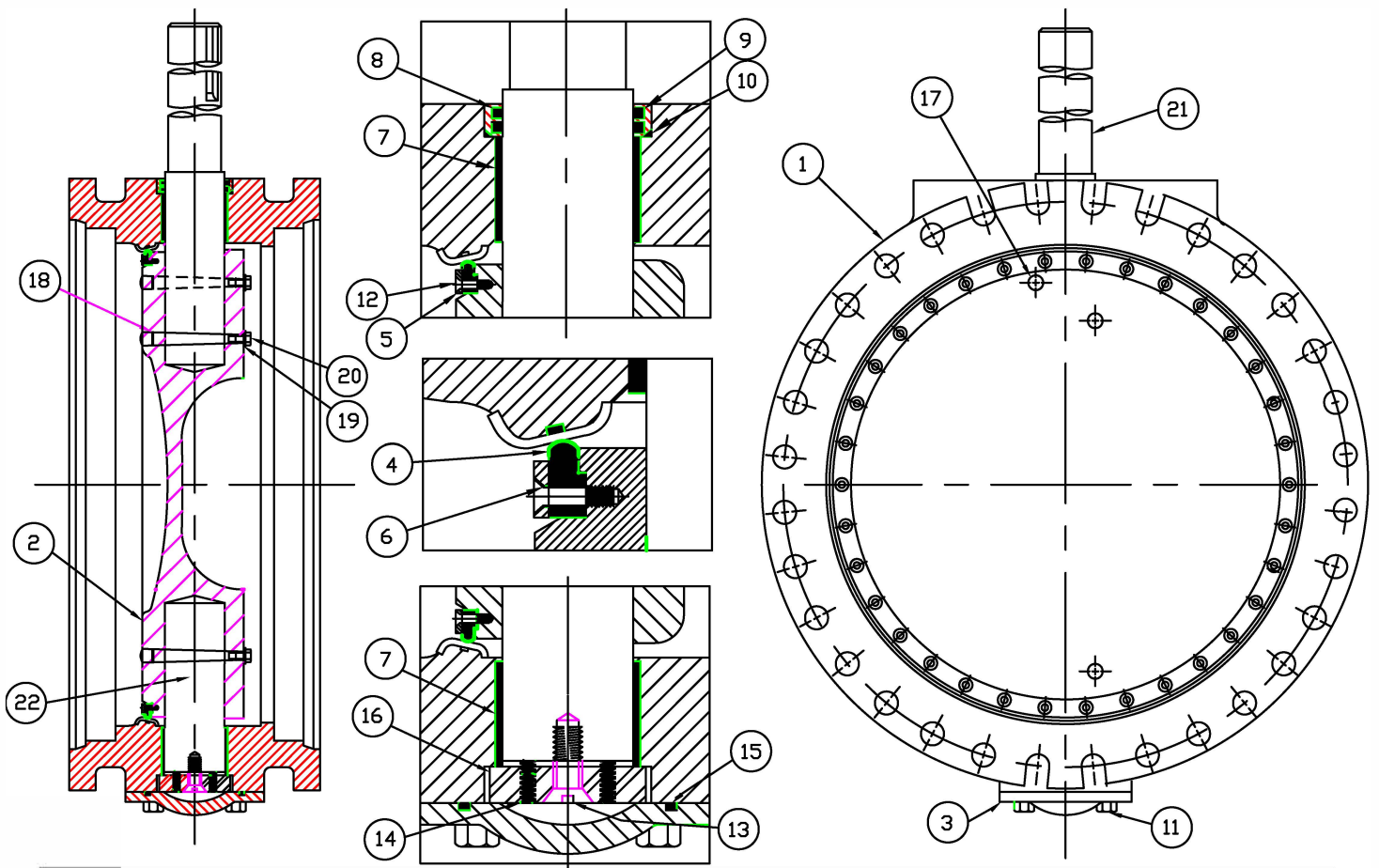
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KENNEDY VALVE
Division of McWane, Inc.
1021 EAST WATER STREET ELMIRA, NEW YORK 14901

DRAWN: ZF
DATE: 8/31/2018
DWG. NO.
B16XBB11

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



ITEM #	DESCRIPTION	MATERIAL
1A	VALVE BODY	DUCTILE IRON, ASTM A-536, Grade 70-50-05
1B	BODY RING (Permanently Attached)	304 STAINLESS STEEL
1C	BODY O-RING (Permanently Attached)	BUNA-N
2	VANE	DUCTILE IRON, ASTM A-536, Grade 70-50-05
3	END COVER PLATE	DUCTILE IRON, ASTM A-536, Grade 70-50-05
4	RUBBER VANE SEAT RING	EPDM
5	SEGMENTED CLAMP RING (4)	304 STAINLESS STEEL, ASTM A-276
6	SEALING WASHER	NYLON
7	SHAFT SLEEVE BEARING	FIBERGLIDE BACKED WITH STAINLESS STEEL
8	SHAFT O-RING CARTRIDGE	BRONZE
9	O-RING SHAFT SEALS (2)	BUNA-N
10	OUTSIDE O-RING CARTRIDGE SEAL	BUNA-N
11	END COVER PLATE HEX BOLTS	STEEL, ASTM A-307, ELECTRO ZINC PLATED
12	FLAT HEAD SOCKET SCREW (For Rubber Vane Seat Ring)	18-8 STAINLESS STEEL (WITH LOCTITE)
13	FLAT HEAD SOCKET SCREW (For Thrust Bearing)	18-8 STAINLESS STEEL (WITH NYLON INSERT)
14	ALLEN HEAD SET SCREW (For Thrust Bearing)	18-8 STAINLESS STEEL (WITH NYLON INSERT)
15	END COVER PLATE O-RING	BUNA-N
16	THRUST BEARING	BRONZE
17	TAPER PIN (3)	416 STAINLESS STEEL
18	TAPER PIN O-RING (3)	BUNA-N
19	TAPER PIN WASHER (3)	416 STAINLESS STEEL
20	TAPER PIN BOLT (3)	304 STAINLESS STEEL
21	SHAFT (OPERATOR)	304 STAINLESS STEEL
22	SHAFT (THRUST SIDE)	304 STAINLESS STEEL

CONSULT MH-VALVE.COM OR LOCAL REPRESENTATIVE FOR DETAILS ON OPTIONAL MATERIALS



KENNEDY VALVE

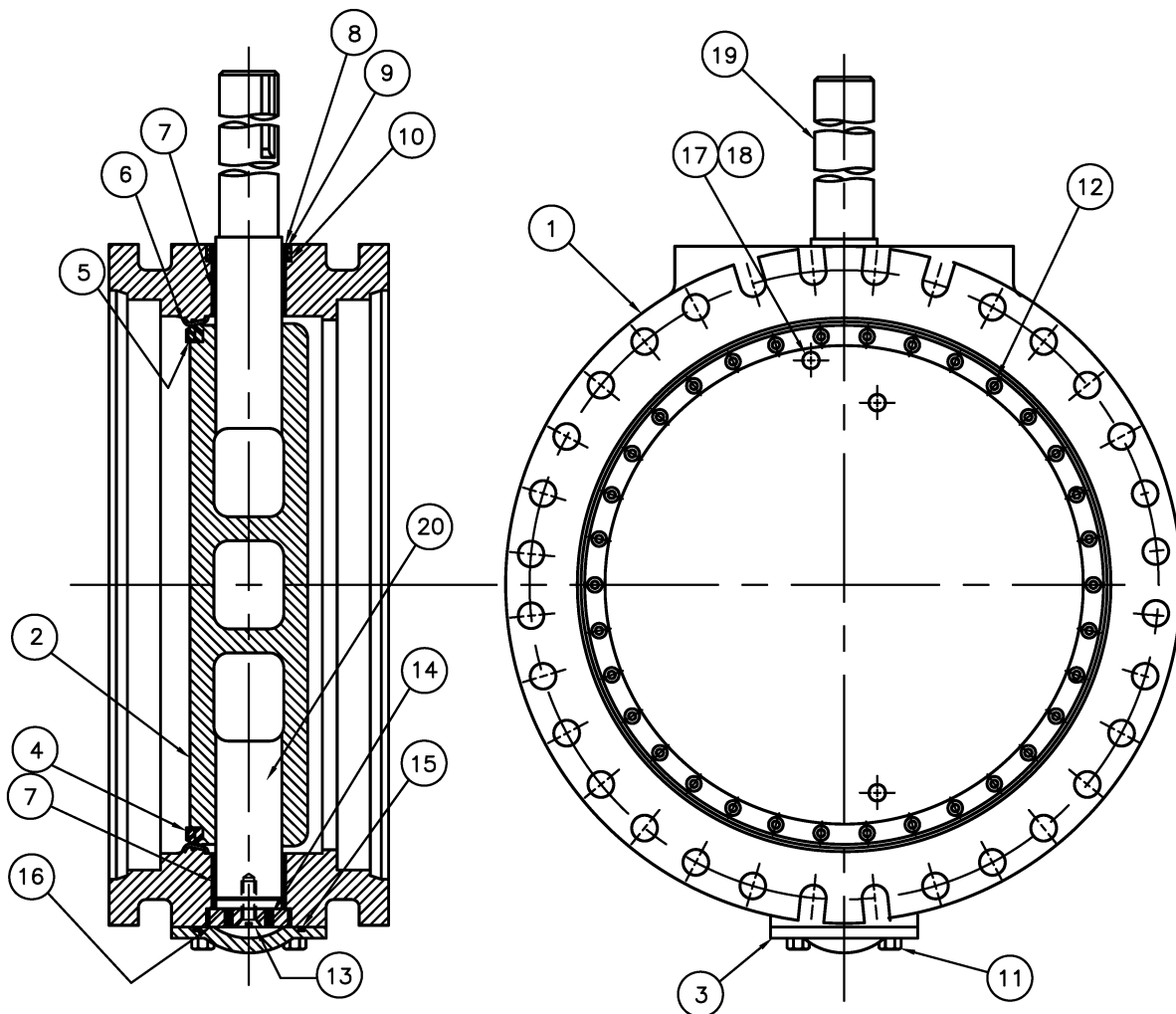
Division of McWane, Inc.
1021 EAST WATER STREET ELMIRA, NEW YORK 14901

DWN: TRIJ

DATE: 9/1/12

DWG. NO.
BMJ-15-14AA

30" & 36"
AWWA C504-STYLE 1450
CLASS 150 BUTTERFLY VALVE
SUB-ASSEMBLY / MATERIAL LIST
MJ X MJ



ITEM NO.	DESCRIPTION	MATERIAL
1	BODY, VALVE	DUCTILE IRON, ASTM A-536, GR. 70-50-05 W/304 STN. STL. SEAT
2	VANE	DUCTILE IRON, ASTM A-536 GR. 70-50-05
3	END COVER	DUCTILE IRON, ASTM A-536 GR. 70-50-05
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	18-8 STAINLESS STEEL W/NYLOK INSERT
13	SOCKET SCREW ~ FLAT HEAD	18-8 STAINLESS STEEL W/NYLOK INSERT
14	SET SCREW ~ FLAT POINT	18-8 STAINLESS STEEL W/NYLOK INSERT
15	END COVER SEAL	BUNA-N
16	THRUST BEARING R	BRONZE
17	TAPER PIN	STAINLESS STEEL
18	TAPER PIN BOLT	18-8 STAINLESS STEEL
19	SHAFT (OPERATOR)	304 STAINLESS STEEL
20	SHAFT (THRUST)	304 STAINLESS STEEL

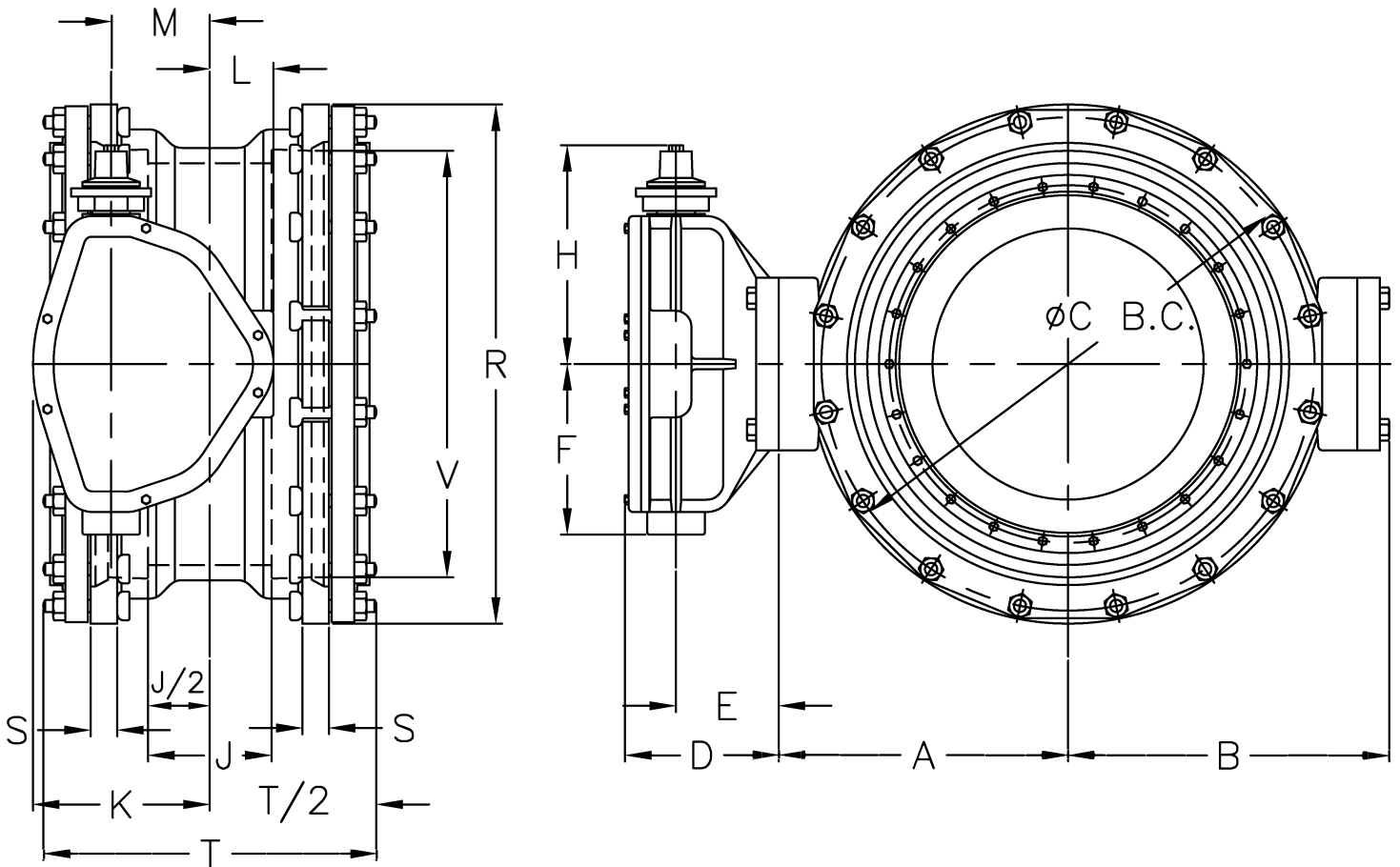


KENNEDY VALVE

Division of McWane, Inc.
1021 EAST WATER STREET ELMIRA, NEW YORK 14901

DWN: MMR
DATE: 7/8/11
DWG. NO.
BMJ-15-14AB

42" & 48" STYLE 1450
CLASS 150 BUTTERFLY VALVE
SUB-ASSEMBLY / MATERIAL LIST
(NON-ADJUSTABLE PACKING)
MJ X MJ



	OPERATOR MODEL	D	E	F	H	K	L	M	N
30" & 36"	2200	9 7/16	6 1/4	10 3/8	14 5/16	10 3/4	3 7/8	6	72
42"	4350	10 3/16	6 1/16	14 5/16	18	13 5/16	4 3/16	7 1/2	90

VALVE SIZE	A	B	C	J	P	Q	R	S	T	V	WEIGHT
30"	20 5/8	21 1/2	36 7/8	12	20	1	39 1/8	1 13/16	28 3/8	32.22	2300
36"	24 1/8	25 1/16	43 3/4	12	24	1	46	2	28 3/8	38.47	2840
42"	28	28 7/8	50 5/8	12	28	1 1/4	53 1/8	2	28 3/8	44.67	4405

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-111 (A.N.S.I. A21-11)

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: GASKET, GLANDS, BOLTS, FOR MECHANICAL JOINT FURNISHED WITH VALVE WHEN SPECIFIED ON ORDER

NOTE 9: 2200 OPERATOR ON 30" & 36"—4350 OPERATOR ON 42"



KENNEDY VALVE

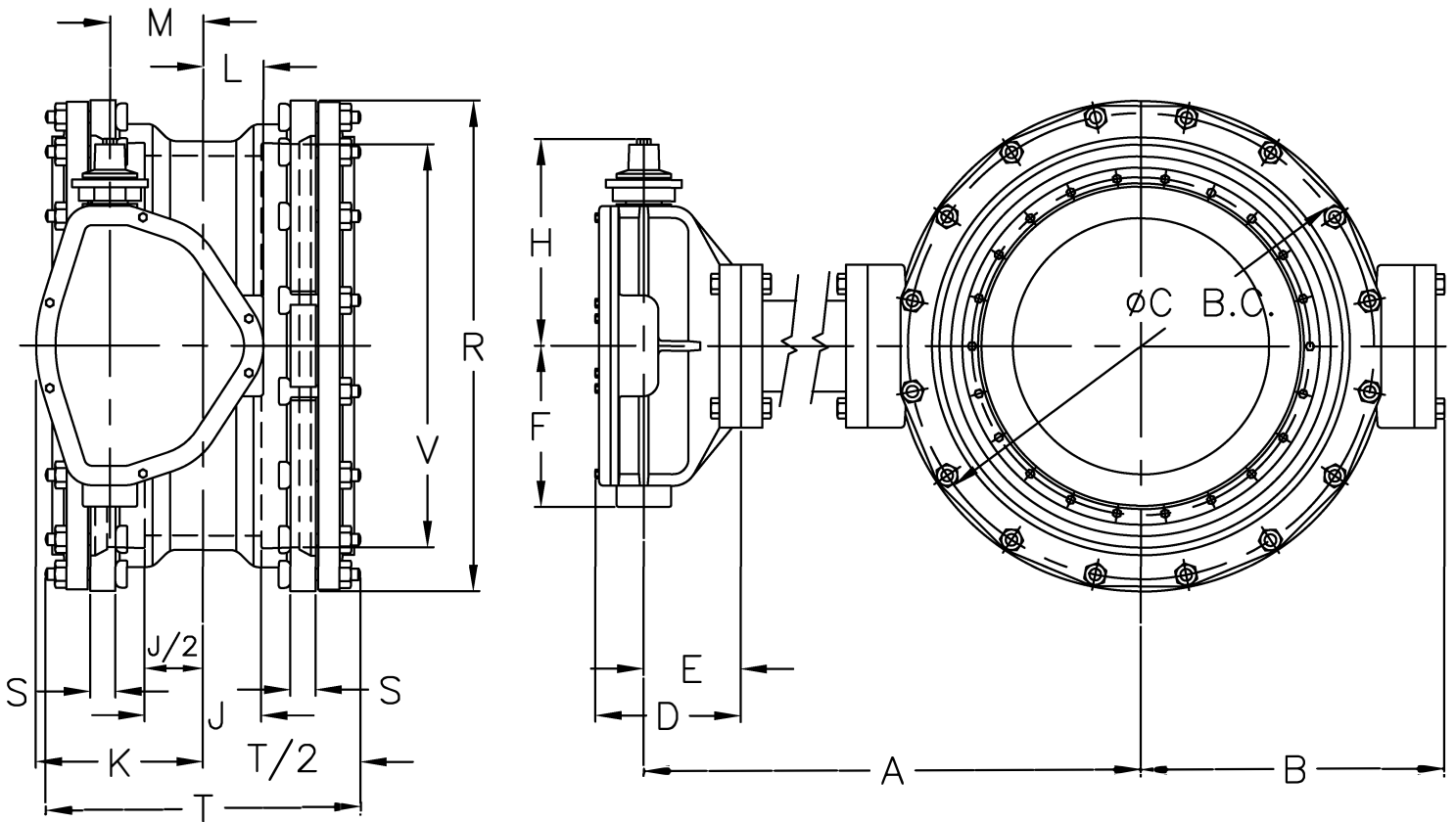
Division of McWane, Inc.
1021 EAST WATER STREET ELMIRA, NEW YORK 14901

DWN: TRIJ

DATE: 8/9/11

DWG. NO.
BMJ-15-14B

30" THRU 42" STYLE 1450
CLASS 150 BUTTERFLY VALVE
BURIED OPERATOR
MJ X MJ



	OPERATOR MODEL	D	E	F	H	K	L	M	N
30" & 36"	2200	9 7/16	6 1/4	10 3/8	14 5/16	10 3/4	3 7/8	6	72
42"	4350	10 3/16	6 1/16	14 5/16	18	13 5/16	4 3/16	7 1/2	90

VALVE SIZE	A	B	C	J	P	Q	R	S	T	V	WEIGHT
30"	NOTE AA	21 1/2	36 7/8	12	20	1	39 1/8	1 13/16	28 3/8	32.22	2300
36"	NOTE AA	25 1/16	43 3/4	12	24	1	46	2	28 3/8	38.47	2840
42"	NOTE AA	28 7/8	50 5/8	12	28	1 1/4	53 1/8	2	28 3/8	44.67	4405

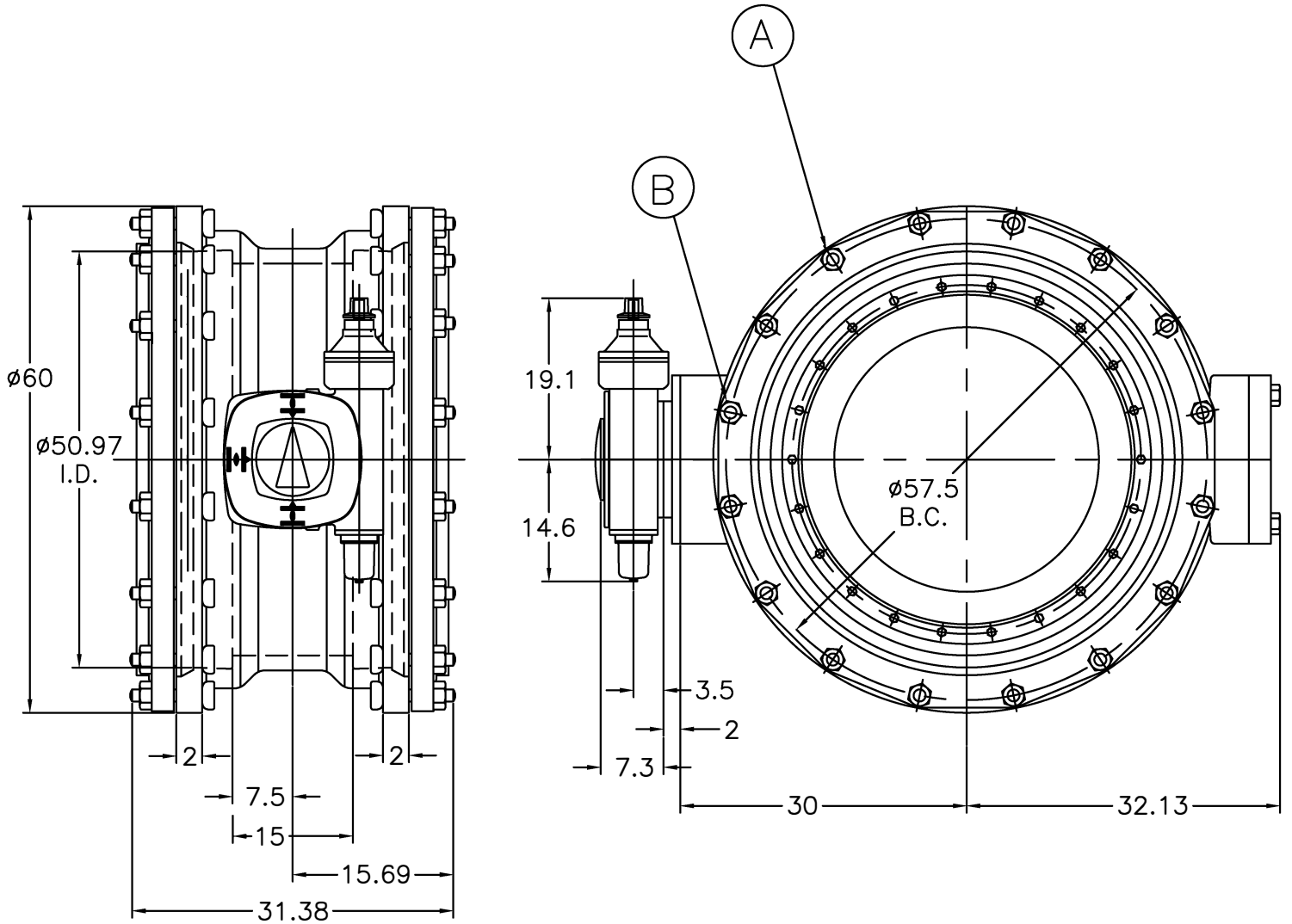
- NOTE 1: FLOW MAY BE IN EITHER DIRECTION
 NOTE 2: VALVE SHAFT WILL MEET OR EXCEED REQUIREMENTS OF SHAFT TABLE PER AWWA STANDARD C-504 FOR APPLICABLE CLASS.
 NOTE 3: REFERENCE AWWA C-111 (A.N.S.I. A21-11)
 NOTE 4: "N" = NUMBER OF TURNS TO CLOSE
 NOTE 5: "P" = NUMBER OF BOLTS ON EACH FLANGE
 NOTE 6: "Q" = DIAMETER OF BOLTS
 NOTE 7: OPERATED BY 2" AWWA OPERATING / WRENCH NUT
 NOTE 8: GASKET, GLANDS, BOLTS, FOR MECHANICAL JOINT FURNISHED WITH VALVE WHEN SPECIFIED ON ORDER
 NOTE 9: 2200 OPERATOR ON 30" & 36"---4350 OPERATOR ON 42"
 NOTE 10: MAXIMUM LENGTH OF TORQUE TUBE (15 FEET)---BONNET SUPPORTS SHOULD BE USED ON ALL BONNETS EXCEEDING 6 FEET CENTERLINE OF VALVE TO CENTERLINE OF OPERATOR. ALL BONNET SUPPORTS SHALL BE SUPPLIED BY CUSTOMER
 NOTE AA: "A" VARIES TO ENGINEER SPECIFICATIONS
 *NOTE AB: APPROXIMATE WEIGHT PER EACH FOOT OF EXTENDED BONNET 150lbs (30"-42")



KENNEDY VALVE
 Division of McWane, Inc.
 1021 EAST WATER STREET ELMIRA, NEW YORK 14901

DWN: TRIJ
 DATE: 8/9/11
 DWG. NO.
 BMJ-15-14C

30" THRU 42" STYLE 1450
 CLASS 150 BUTTERFLY VALVE
 WITH EXTENDED BONNET
 BURIED OPERATOR
 MJ X MJ



- 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-B
- NOTE 4: NUMBER OF TURNS TO CLOSE = 108
- NOTE 5: OPERATED BY 2" AWWA OPERATING / WRENCH NUT
- NOTE 6: A = (32) ϕ 1.25" BOLTS PER FLANGE
- NOTE 7: B = (8) 1.38 SLOTTED HOLES EACH FLANGE
- NOTE 8: APPROXIMATE WEIGHT = 6300lbs.

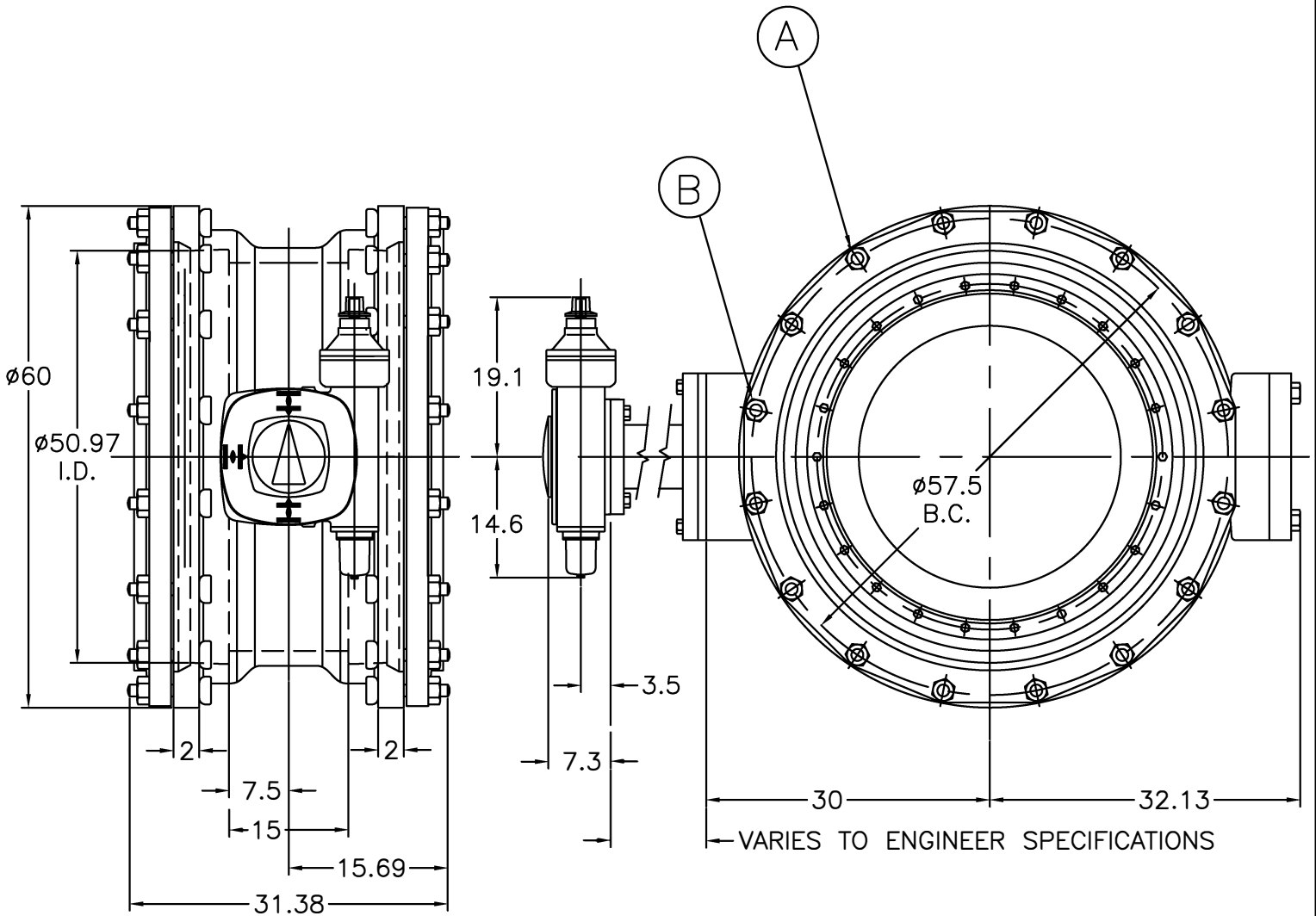


KENNEDY VALVE

Division of McWane, Inc.
1021 EAST WATER STREET ELMIRA, NEW YORK 14901

DWN: TRIJ
DATE: 8/25/11
DWG. NO.
BMJ-15-AA

48" STYLE 1450
CLASS 150 BUTTERFLY VALVE
(AUMA GS200.3/GZ200.3:8 GEAR BOX)
BURIED OPERATOR
MJ X MJ ENDS



- 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-B
 NOTE 4: NUMBER OF TURNS TO CLOSE = 108
 NOTE 5: OPERATED BY 2" AWWA OPERATING / WRENCH NUT
 NOTE 6: A = (32) ϕ 1.25" BOLTS PER FLANGE
 NOTE 7: B = (8) 1.38 SLOTTED HOLES EACH FLANGE
 NOTE 8: RATED AND TESTED TO 250 PSI WORKING PRESSURE
 NOTE 9: APPROXIMATE WEIGHT = 6300lbs.



KENNEDY VALVE

Division of McWane, Inc.
 1021 EAST WATER STREET ELMIRA, NEW YORK 14901

DWN: TRIJ
 DATE: 8/25/11
 DWG. NO.
 BMJ-15-AA2

48" STYLE 1450
 CLASS 150 BUTTERFLY VALVE
 (AUMA GS200.3/GZ200.3:8 GEAR BOX)
 BURIED OPERATOR & EXTENDED BONNET
 MJ X MJ ENDS