

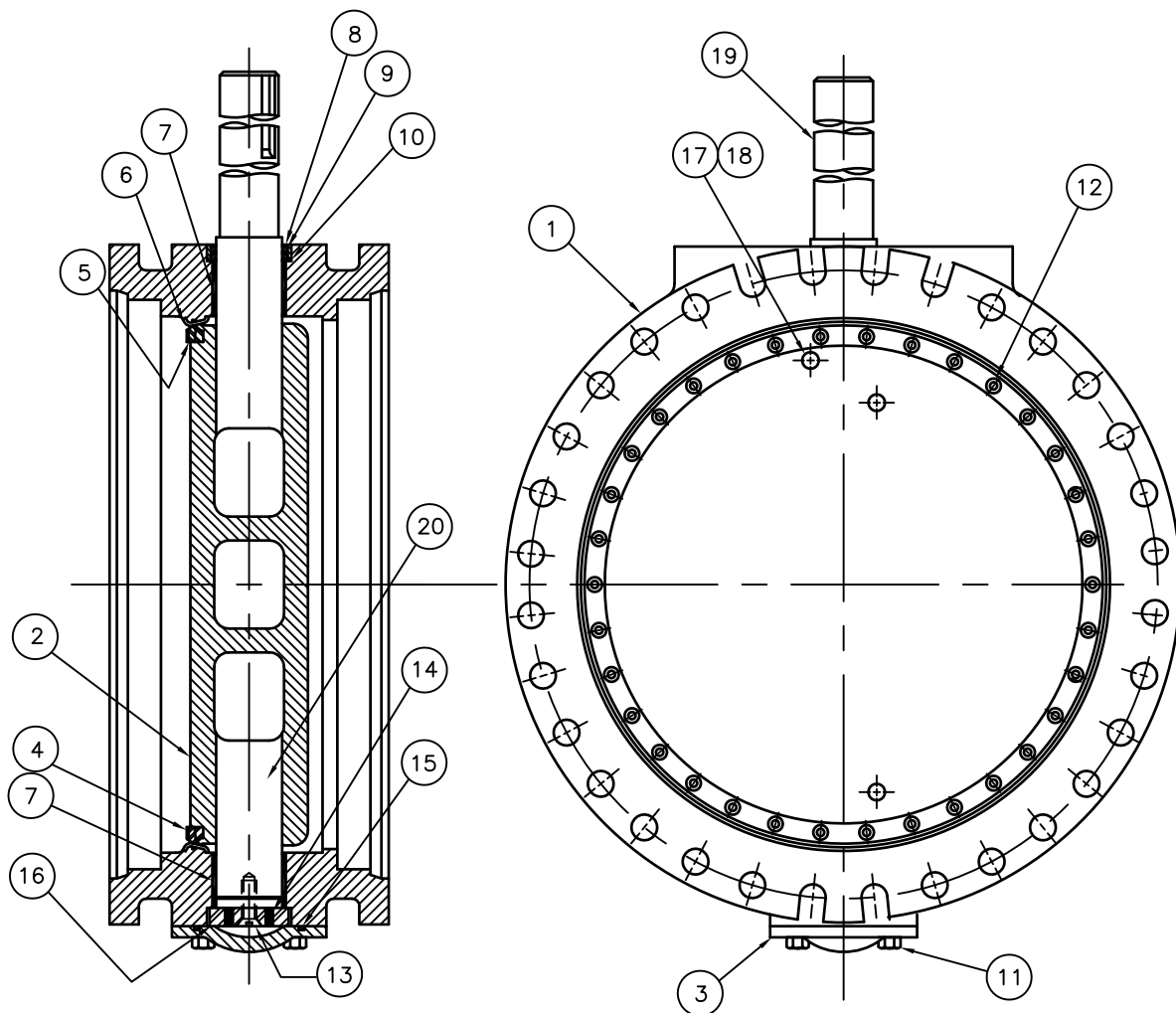
ITEM #	DESCRIPTION	MATERIAL
1A	VALVE BODY	DUCTILE IRON, ASTM A-536, Grade 70-50-05
1B	BODY RING (Permanently Attached)	304 STAINLESS STEEL
1C	BODY O-RING (Permanently Attached)	BUNA-N
2	VANE	DUCTILE IRON, ASTM A-536, Grade 70-50-05
3	END COVER PLATE	DUCTILE IRON, ASTM A-536, Grade 70-50-05
4	RUBBER VANE 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 NYLOK INSERT)
14	ALLEN HEAD SET SCREW (For Thrust Bearing)	18-8 STAINLESS STEEL (WITH NYLOK 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

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

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

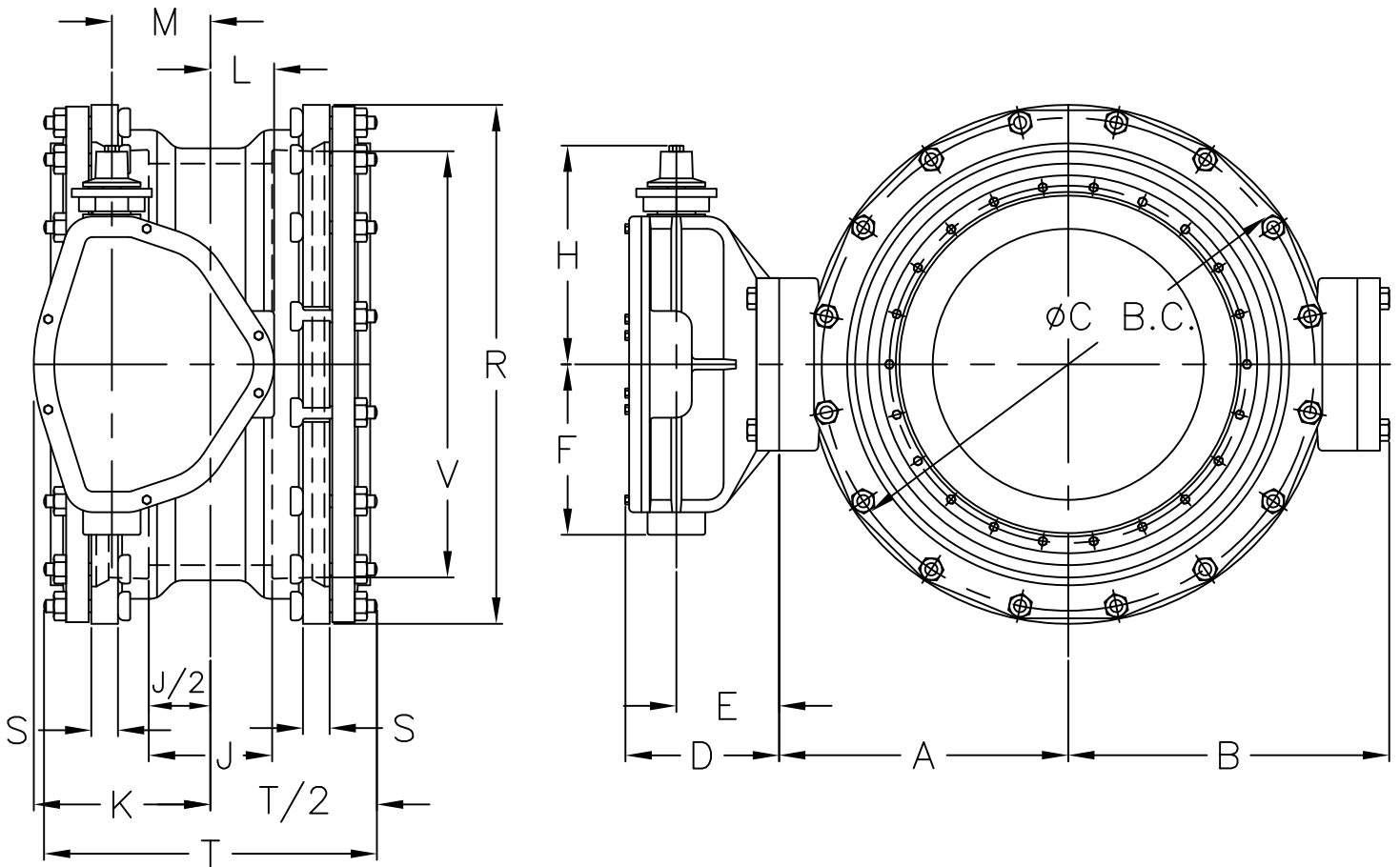


ITEM NO.	DESCRIPTION	MATERIAL
1	BODY, VALVE	DUCTILE IRON, ASTM A-536, GR. 70-50-05 W/304 STN. STL. SEAT
2	VANE	DUCTILE IRON, ASTM A-536 GR. 70-50-05
3	END COVER	DUCTILE IRON, ASTM A-536 GR. 70-50-05
4	SEAT RING, VANE	EPDM
5	CLAMP RING, SEAT	304 STAINLESS STEEL
6	SEALING WASHER	NYLON
7	BUSHING, BODY	FIBERGLIDE
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

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

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

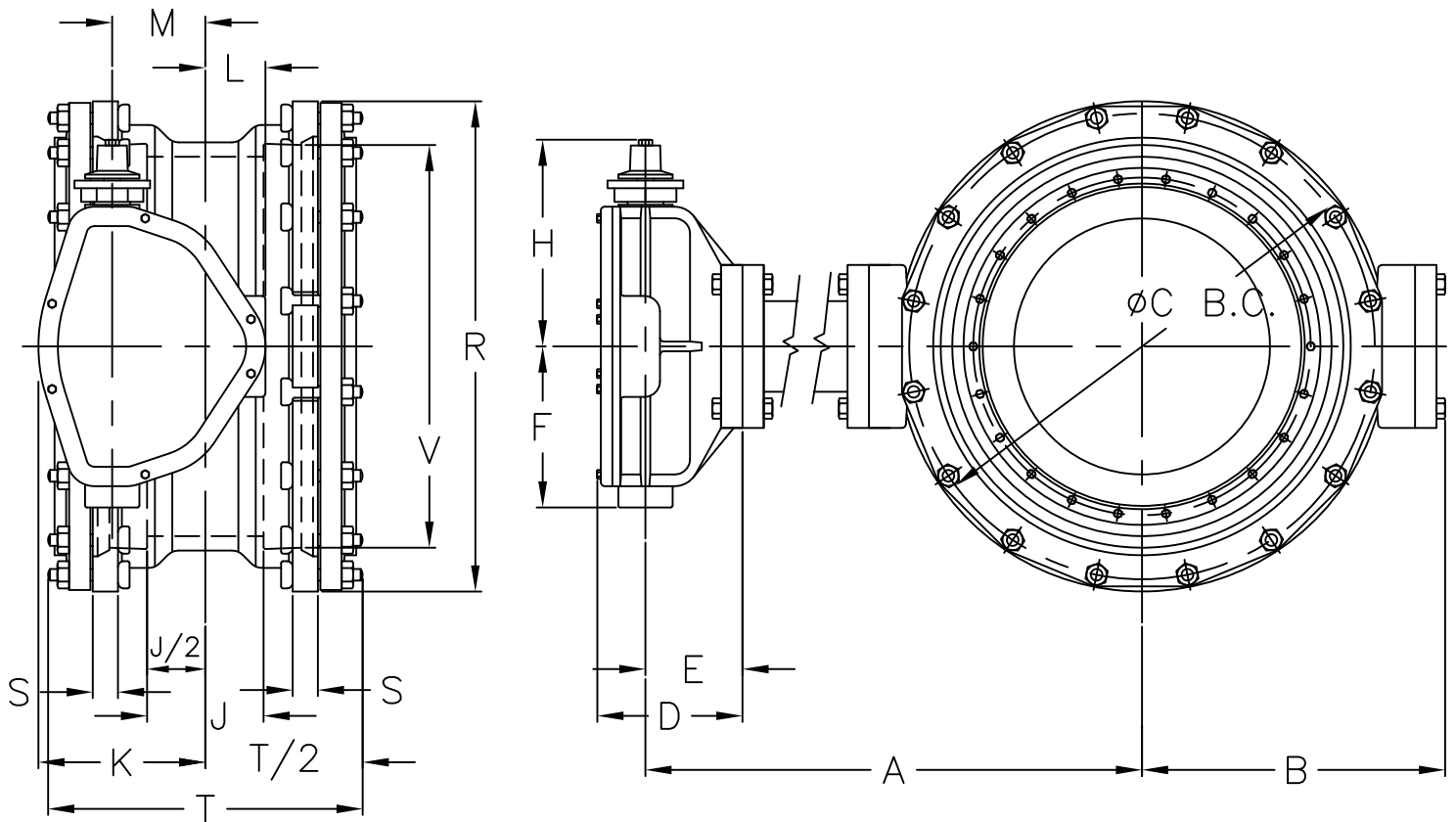
VALVE SIZE	A	B	C	J	P	Q	R	S	T	V	WEIGHT
30"	20 5/8	21 1/2	36 7/8	12	20	1	39 1/8	1 13/16	28 3/8	32.22	2300
36"	24 1/8	25 1/16	43 3/4	12	24	1	46	2	28 3/8	38.47	2840
42"	28	28 7/8	50 5/8	12	28	1 1/4	53 1/8	2	28 3/8	44.67	4405

- 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"

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

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

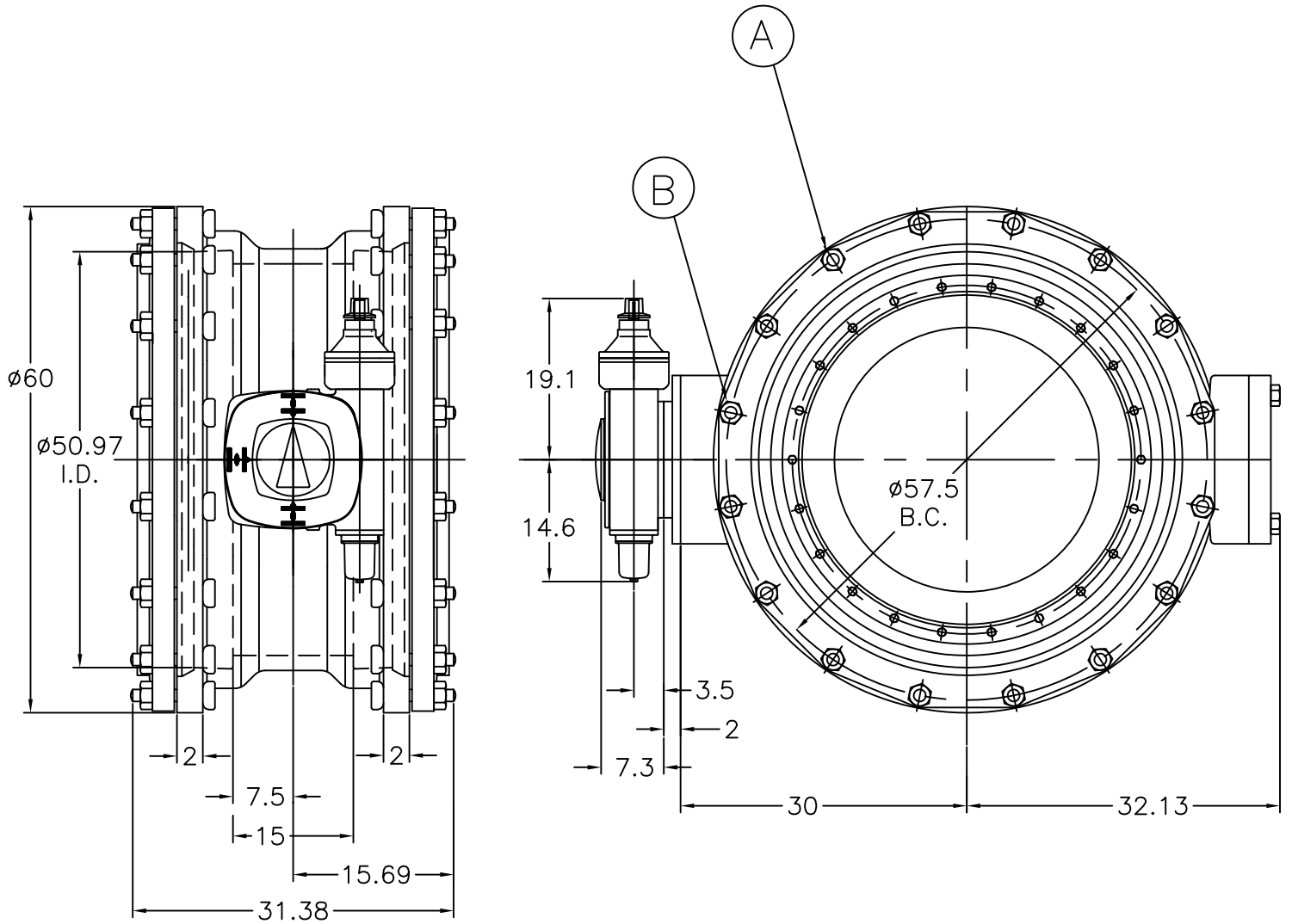
VALVE SIZE	A	B	C	J	P	Q	R	S	T	V	WEIGHT
30"	NOTE AA	21 1/2	36 7/8	12	20	1	39 1/8	1 13/16	28 3/8	32.22	2300
36"	NOTE AA	25 1/16	43 3/4	12	24	1	46	2	28 3/8	38.47	2840
42"	NOTE AA	28 7/8	50 5/8	12	28	1 1/4	53 1/8	2	28 3/8	44.67	4405

- 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")

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

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

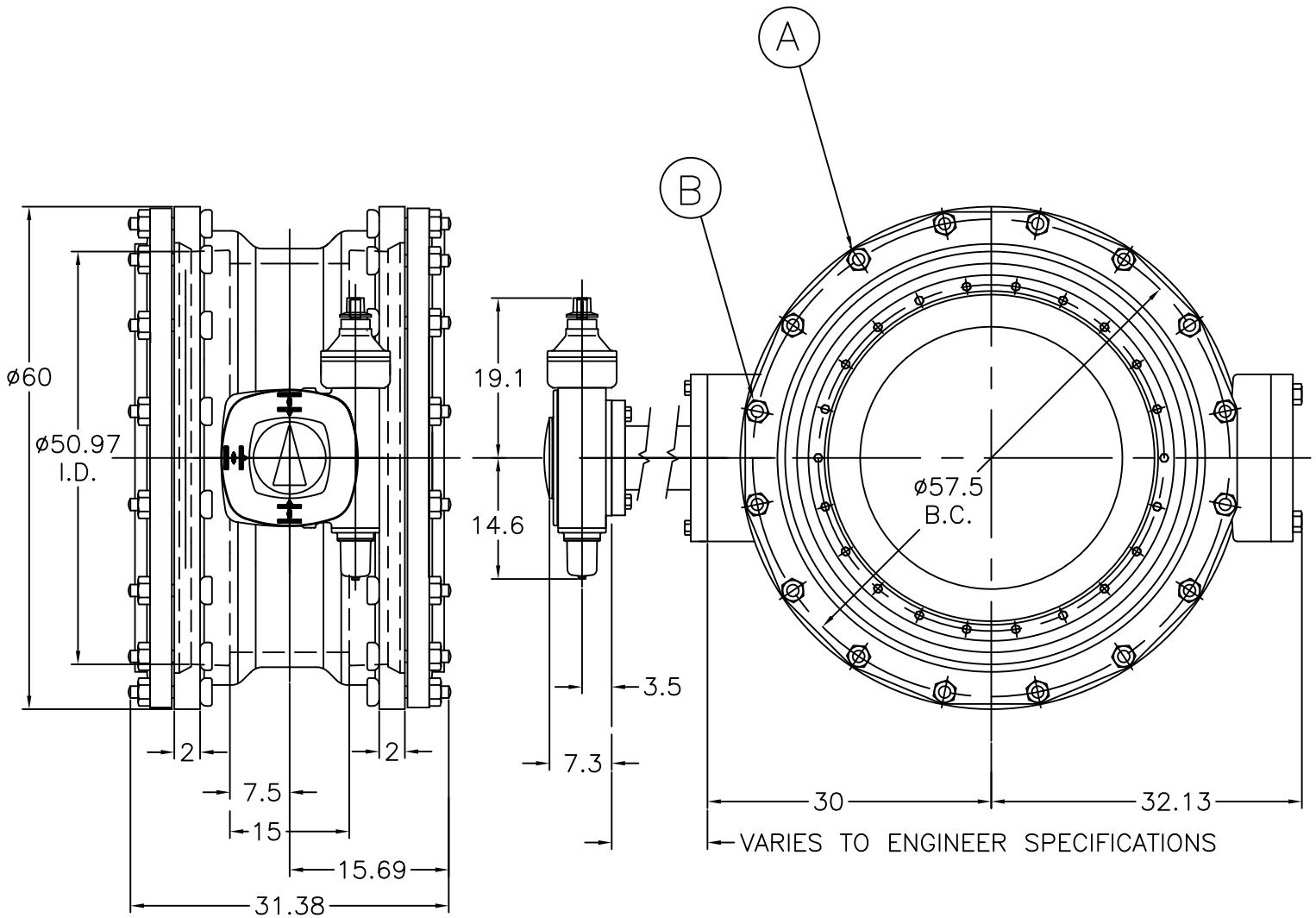
NOTE 7: B = (8) 1.38 SLOTTED HOLES EACH FLANGE

NOTE 8: APPROXIMATE WEIGHT = 6300lbs.

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

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 150 PSI WORKING PRESSURE
 NOTE 9: APPROXIMATE WEIGHT = 6300lbs.

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

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