

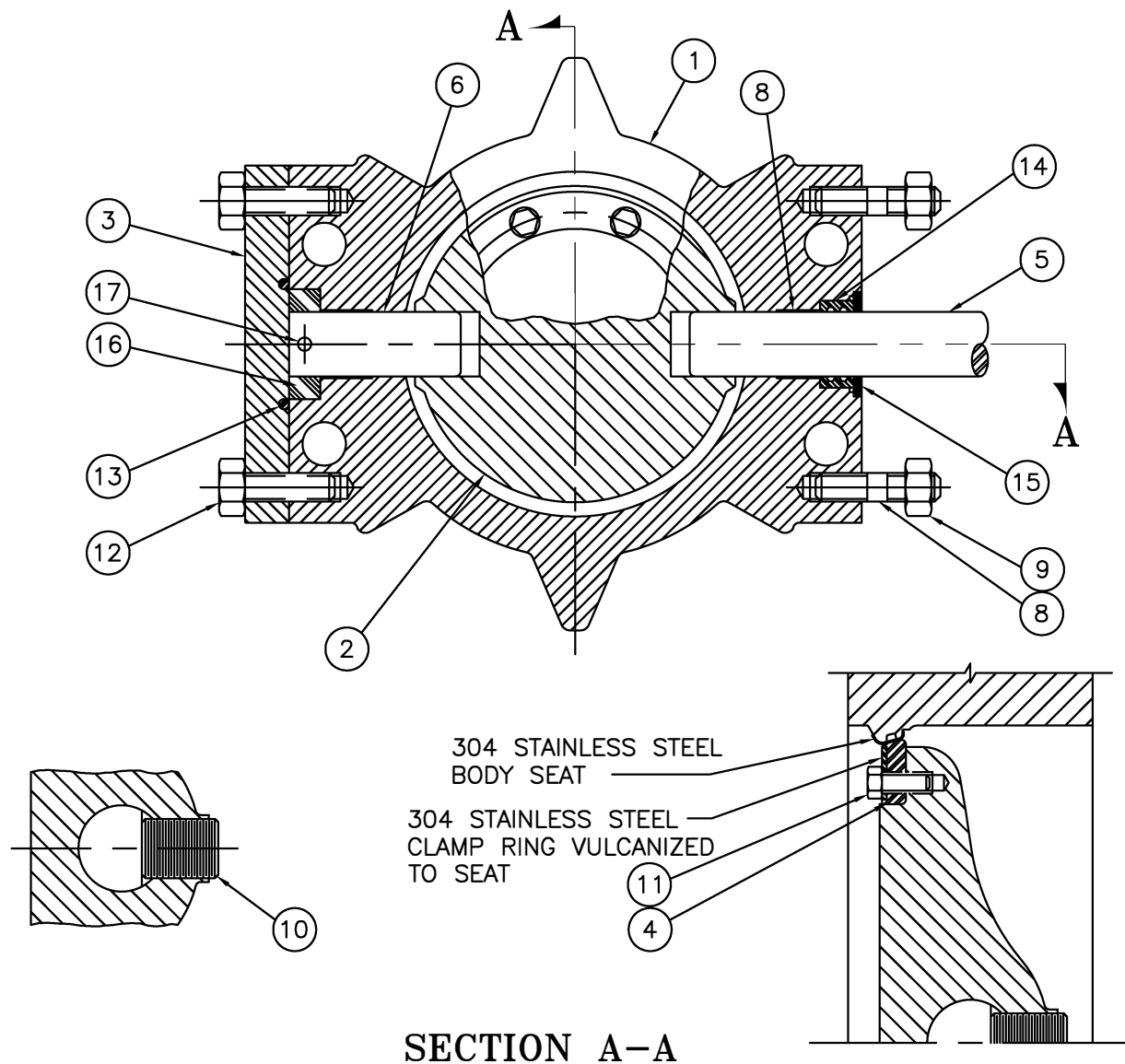
SECTION A-A

ITEM #	DESCRIPTION	MATERIAL
1	BODY, VALVE	CAST IRON, A-126, CLASS B WITH 304 STAINLESS STEEL SEAT
2	VANE	CAST IRON, A-48, CLASS 40
3	COVER, END	CAST IRON, A-126, CLASS B
4	SEAT RING, VANE	EPDM WITH 304 STAINLESS STEEL INSERT
5	SHAFT	304 STAINLESS STEEL, ASTM A-276
6	O-RING, BODY	BUNA-N
7	BEARING, BODY	NYLATRON GS NYLON
8	STUD	STEEL, ASTM A-307, ELCTRO ZINC PLATED
9	NUT, HEAVY HEX	STEEL, ASTM A-563, GRADE A, ELCTRO ZINC PLATED
10	SOCKET SCREW, FLAT HEAD HEX	STAINLESS STEEL, 18-8
11	CAPSCREW, HEX	STAINLESS STEEL, 18-8 WITH NYLOK INSERT
12	CAPSCREW, HEX	STEEL, ASTM A-307, ELCTRO ZINC PLATED
13	CARTRIDGE SEAL	ACETAL
14	THRUST DISK	ACETAL
15	"O" RING CARTRIDGE, INSIDE	BUNA-N
16	"O" RING CARTRIDGE, OUTSIDE	BUNA-N
17	GROOVED PIN	303 STAINLESS STEEL
18	O-RING, GROOVED PIN	BUNA-N

CLOW VALVE COMPANY
ANNISTON, ALABAMA
A DIVISION OF MCWANE INC.

DWN: MMR
DATE: 8/22/11
DWG. NO.
BW-15-K1

4" THRU 12" STYLE 4500
CLASS 150 BUTTERFLY VALVE
SUB-ASSEMBLY / MATERIAL LIST
WAFER ENDS



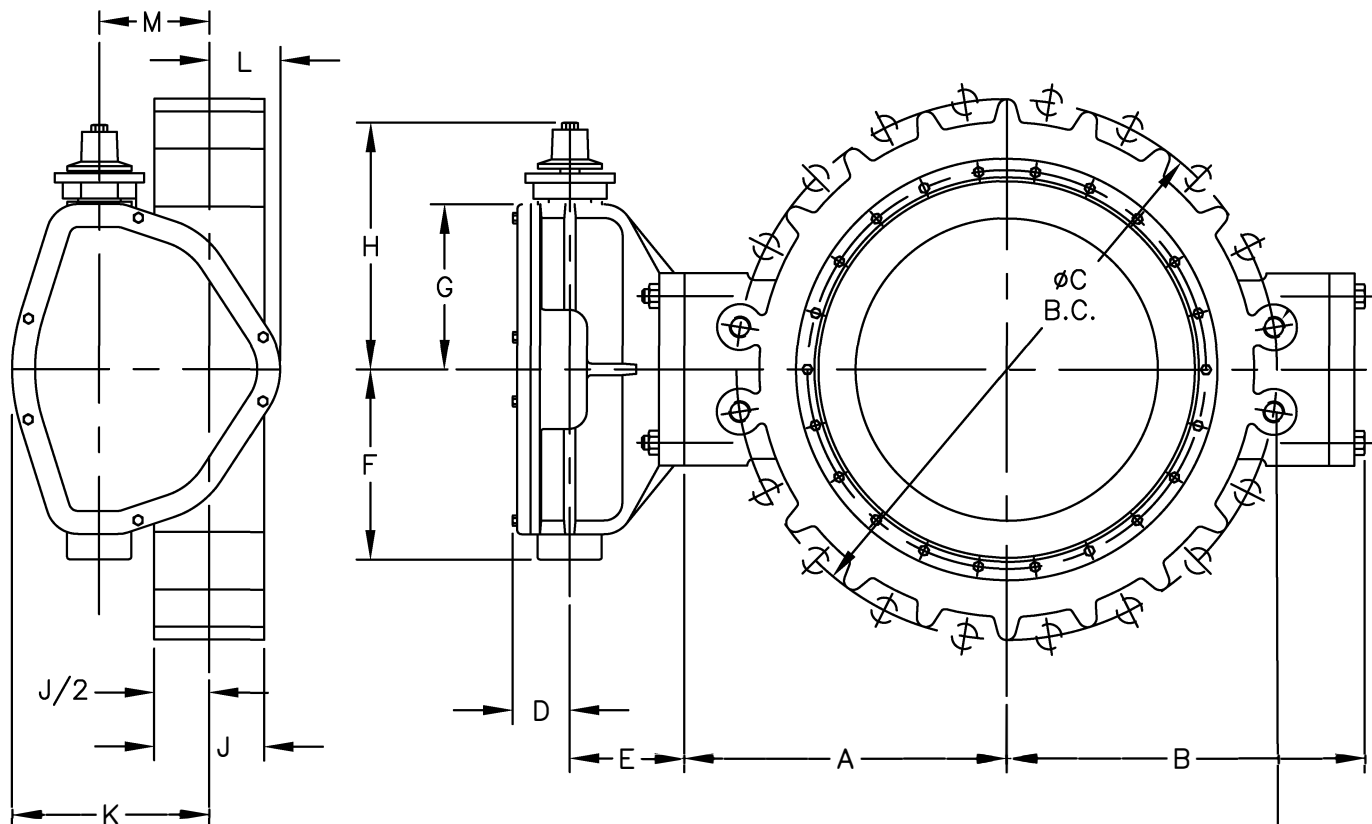
SECTION A-A

ITEM #	DESCRIPTION	MATERIAL
*1	BODY, VALVE	CAST IRON, A-126, CLASS B WITH 304 STAINLESS STEEL SEAT
*2	VANE	CAST IRON, A-48, CLASS 40
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	STEEL, ASTM A-307, ELCTRO ZINC PLATED
9	NUT, HEX	STEEL, ASTM A-307, GRADE A, ELCTRO ZINC PLATED
10	TORQUE PLUG, SHAFT	304 STAINLESS STEEL, ASTM A-276
11	CAPSCREW, HEX	STAINLESS STEEL, 18-8 WITH NYLOK INSERT
12	BOLT, HEX HEAD	STEEL, ASTM A-307, GRADE A, ELCTRO ZINC PLATED
13	O-RING, END COVER	BUNA-N
14	SHAFT SEAL	BUNA-S
15	SEAL RING	STEEL, C-1018
16	THRUST COLLAR	BEARING BRONZE, UNS C93200
17	ROLL PIN	STAINLESS STEEL, A.I.S.I. 420

CLOW VALVE COMPANY
 OSKALOOSA, IOWA
 A DIVISION OF MCWANE INC.

DWN: MMR
 DATE: 8/23/11
 DWG. NO.
 BW-15-K2

14" THRU 20" STYLE 4500
 CLASS 150 BUTTERFLY VALVE
 SUB-ASSEMBLY / MATERIAL LIST
 WAFER ENDS



FOR INSTALLATION BETWEEN
125# OR 150# ASA FLANGES

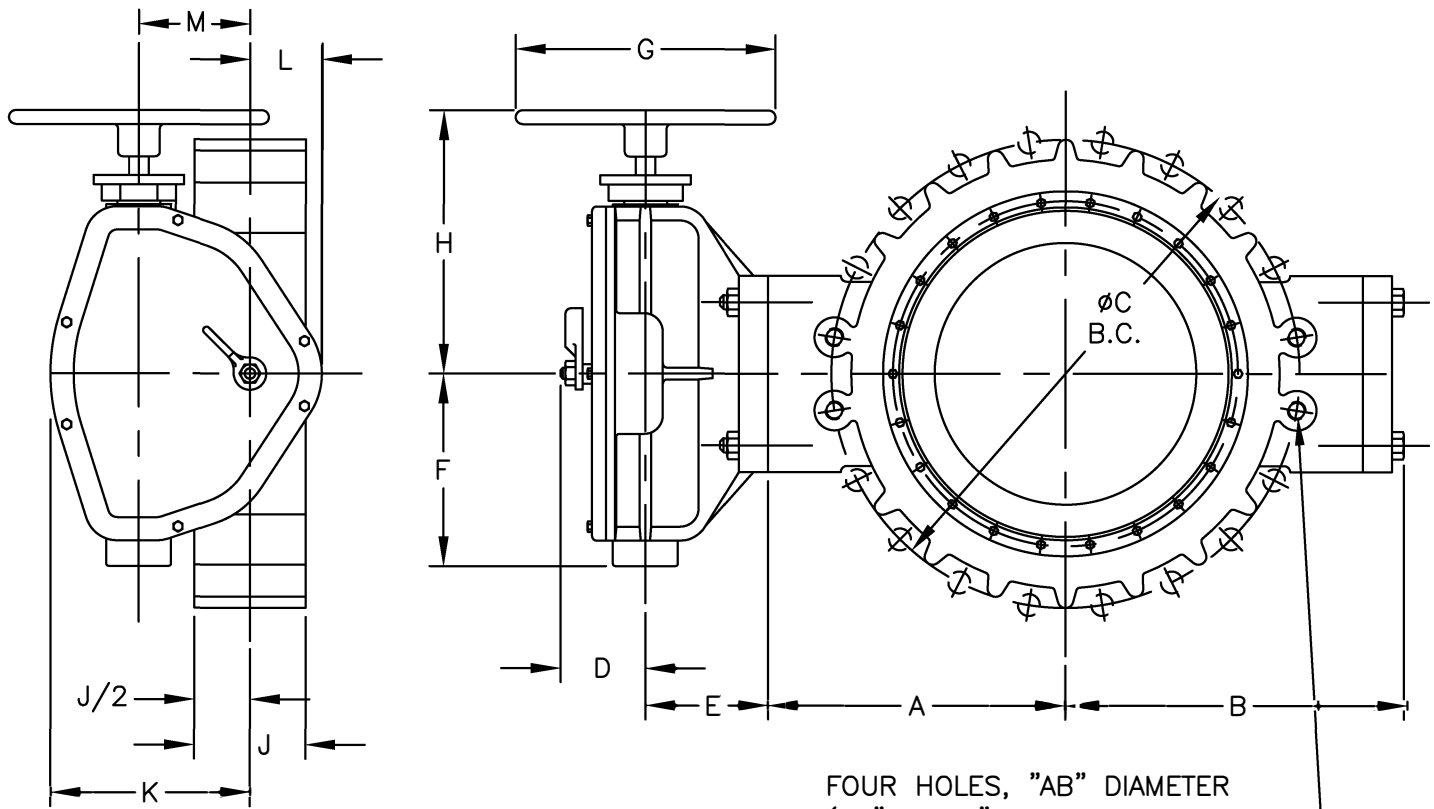
FOUR HOLES, "AB" DIAMETER
(18" & 20" ONLY, THESE FOUR
HOLES ARE TAPPED "AB" X
"AD" DEEP EACH FACE)

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

VALVE SIZE	A	B	C	J	P	Q	AB	AD	WEIGHT
4"	4	5 1/8	7 1/2	2 1/2	8	5/8	-	-	60
6"	5	6 1/8	9 1/2	2 17/32	8	3/4	-	-	70
8"	6	7 3/8	11 3/4	2 25/32	8	3/4	-	-	100
10"	7 3/4	9 1/2	14 1/4	3 1/4	12	7/8	-	-	155
12"	9 1/2	10 7/8	17	3 9/32	12	7/8	-	-	190
14"	10 7/16	12 3/16	18 3/4	4 1/2	12	1	-	-	405
16"	12 3/16	13 15/16	21 1/4	4 1/2	16	1	-	-	465
18"	13 5/16	15 1/16	22 3/4	5 3/4	16	1 1/8	1 1/8-7	1 3/8	595
20"	14 7/8	16 5/8	25	5 3/4	20	1 1/8	1 1/8-7	1 1/4	675

- 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

<p>CLOW VALVE COMPANY OSKALOOSA, IOWA A DIVISION OF MCWANE INC.</p>	DWN: TRIJ	<p>4" THRU 20" STYLE 4500 CLASS 150 BUTTERFLY VALVE BURIED OPERATOR WAFER ENDS</p>
	DATE: 8/23/11	
	DWG. NO. BW-15-K3	



FOR INSTALLATION BETWEEN
125# OR 150# ASA FLANGES

FOUR HOLES, "AB" DIAMETER
(18" & 20" ONLY, THESE FOUR
HOLES ARE TAPPED "AB" X
"AD" DEEP EACH FACE)

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

VALVE SIZE	A	B	C	J	P	Q	AB	AD	WEIGHT
4"	4	5 1/8	7 1/2	2 1/2	8	5/8	-	-	60
6"	5	6 1/8	9 1/2	2 17/32	8	3/4	-	-	70
8"	6	7 3/8	11 3/4	2 25/32	8	3/4	-	-	100
10"	7 3/4	9 1/2	14 1/4	3 1/4	12	7/8	-	-	155
12"	9 1/2	10 7/8	17	3 9/32	12	7/8	-	-	190
14"	10 7/16	12 3/16	18 3/4	4 1/2	12	1	-	-	405
16"	12 3/16	13 15/16	21 1/4	4 1/2	16	1	-	-	465
18"	13 5/16	15 1/16	22 3/4	5 3/4	16	1 1/8	1 1/8-7	1 3/8	595
20"	14 7/8	16 5/8	25	5 3/4	20	1 1/8	1 1/8-7	1 1/4	675

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

CLOW VALVE COMPANY

OSKALOOSA, IOWA

A DIVISION OF MCWANE INC.

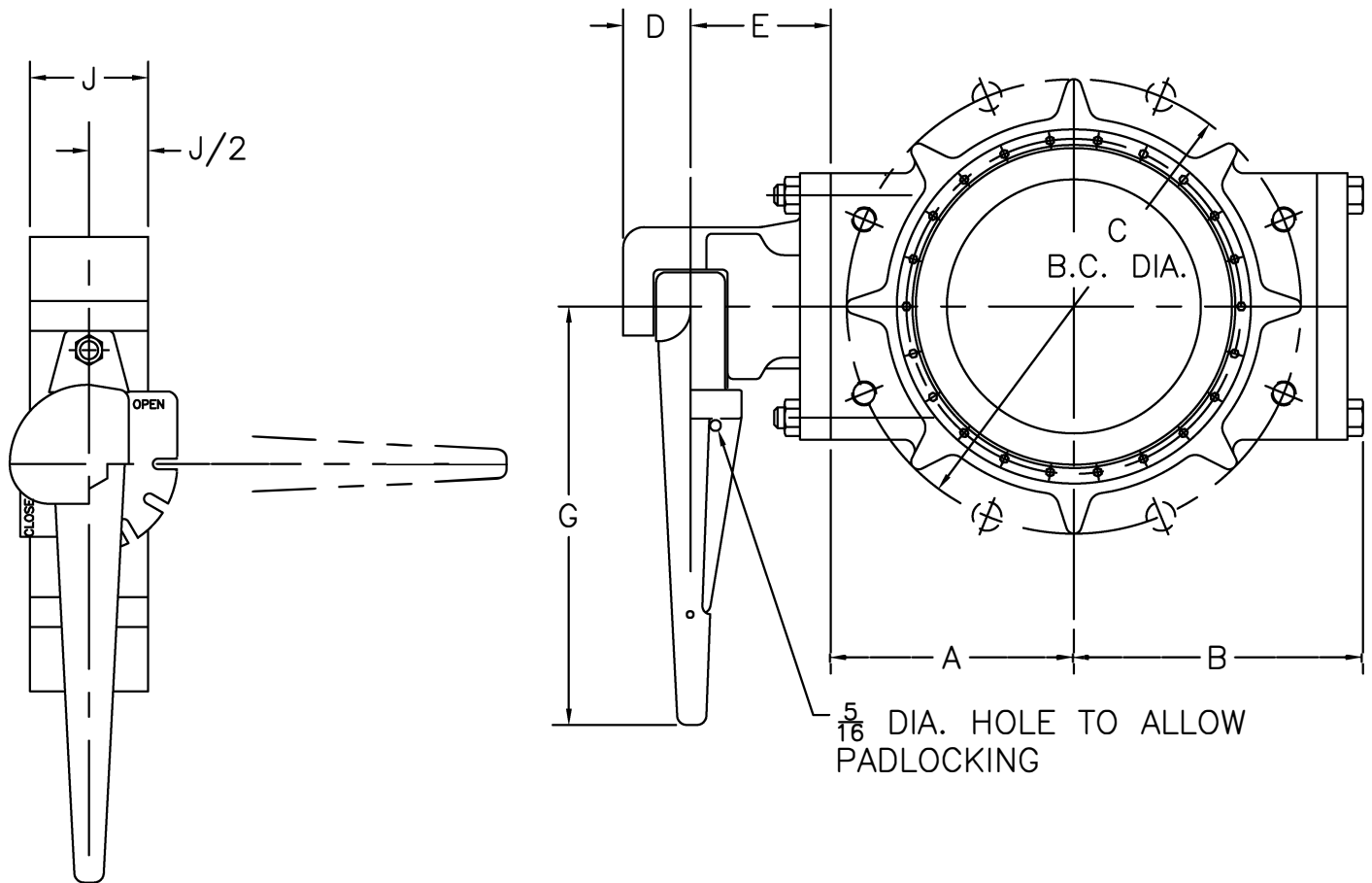
DWN: TRIJ

DATE: 8/23/11

DWG. NO.

BW-15-K4

4" THRU 20" STYLE 4500
CLASS 150 BUTTERFLY VALVE
HANDWHEEL OPERATOR
WITH POSITION INDICATOR
WAFER ENDS



VALVE SIZE	OPERATOR MODEL	D	E	G
4"	150	1 1/2	3 13/16	11
6"	150	1 1/2	3 13/16	11
8"	150	1 1/2	3 13/16	11

VALVE SIZE	A	B	C	D	E	G	J	P	Q	WEIGHT
4"	4	5 1/8	7 1/2	1 1/2	3 13/16	11	2 1/2	8	5/8	40
6"	5	6 1/8	9 1/2	1 1/2	3 13/16	11	2 17/32	8	3/4	55
8"	6	7 3/8	11 3/4	1 1/2	4 1/16	11	2 25/32	8	3/4	65

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: "P" = NUMBER OF BOLTS ON EACH FLANGE

NOTE 5: "Q" = DIAMETER OF BOLTS

CLOW VALVE COMPANY
OSKALOOSA, IOWA
A DIVISION OF MCWANE INC.

DWN: TRIJ
DATE: 8/23/11
DWG. NO.
BW-15-K5

4" THRU 8" STYLE 4500
CLASS 150 BUTTERFLY VALVE
LEVER OPERATOR
WAVER ENDS