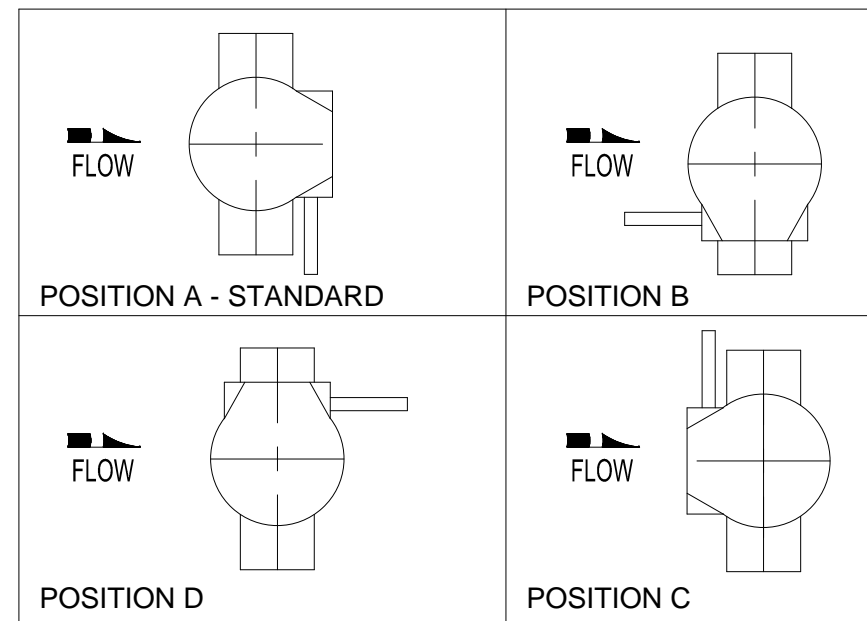


PARTS LIST	
NO.	NAME
1	BODY
2	DISC
3	SEAT
4	SHAFT
5	DISC PINS
6	DISC NUTS
7	DISC WASHERS
8	DISC SEALS
9	UPPER BEARING
10	UPPER SHAFT PACKING
11	UPPER PACKING WASHER
12	RETAINER
13	KEY
14	LOWER BEARING
15	LOWER SHAFT PACKING
16	LOWER PACKING WASHER
17	GASKET
18	BOTTOM COVER
19	BOTTOM COVER SCREWS
20	ADJUSTABLE THRUST BEARING
21	BEARING NUT
22	TRAVELING NUT ACTUATOR
23	ACTUATOR SCREWS
24	ACTUATOR WASHERS

- TECHNICAL REQUIREMENTS:**
- DESIGN STANDARD, AWWA C504
  - FLANGE DRILLING PER ANSI B16.1 CLASS 125 FOR BOTH CLASS 150B AND 250B VALVES.
  - DIMENSIONS IN INCHES, WEIGHT IN POUNDS. DOES NOT INCLUDE ACTUATOR.
  - WORKING PRESSURE 150 PSI OR 250 PSI BASED ON CLASS.
  - SHAFT DIAMETER AND BODY WALL THICKNESS PER AWWA C504.

24"	8	17.12	22.50	8.00	29.50	16-φ1 3/8	1 1/4-7 UNC	26.46	22.52	20.00	FA16	816
20"	8	14.62	18.00	6.00	25.00	16-φ1 1/4	1 1/8-7 UNC	22.00	18.07	20.00	FA16	602
18"	8	13.00	16.50	5.00	22.75	12-φ1 1/4	1 1/8-7 UNC	20.48	16.54	20.00	FA16	509
16"	8	12.31	15.00	4.00	21.25	12-φ1 1/8	1-8 UNC	18.98	15.04	20.00	FA16	452
14"	8	10.56	14.00	3.00	18.75	12-φ1 1/8	—	16.91	14.02	12.00	FA12	287
12"	8	9.50	12.31	2.00	17.00	12-φ1	—	15.21	12.32	12.00	FA12	225
10"	8	8.06	10.75	1.00	14.25	12-φ1	—	13.45	10.79	12.00	FA12	159
8"	6	6.75	9.50	1.00	11.75	8-Ø7/8	—	12.19	9.53	12.00	FA12	110
6"	5	5.88	8.00	0.50	9.50	8-Ø7/8	—	10.65	8.00	12.00	FA12	79
4"	5	4.50	7.00	—	7.50	8-Ø3/4	—	9.67	7.00	12.00	FA07	62
3"	5	3.75	6.25	—	6.00	4-Ø3/4	—	8.92	6.26	12.00	FA07	53
SIZE	A	B	C	F (TYP.)	ØG	#-ØH	J	K	M	φN	MTG.	WGT.

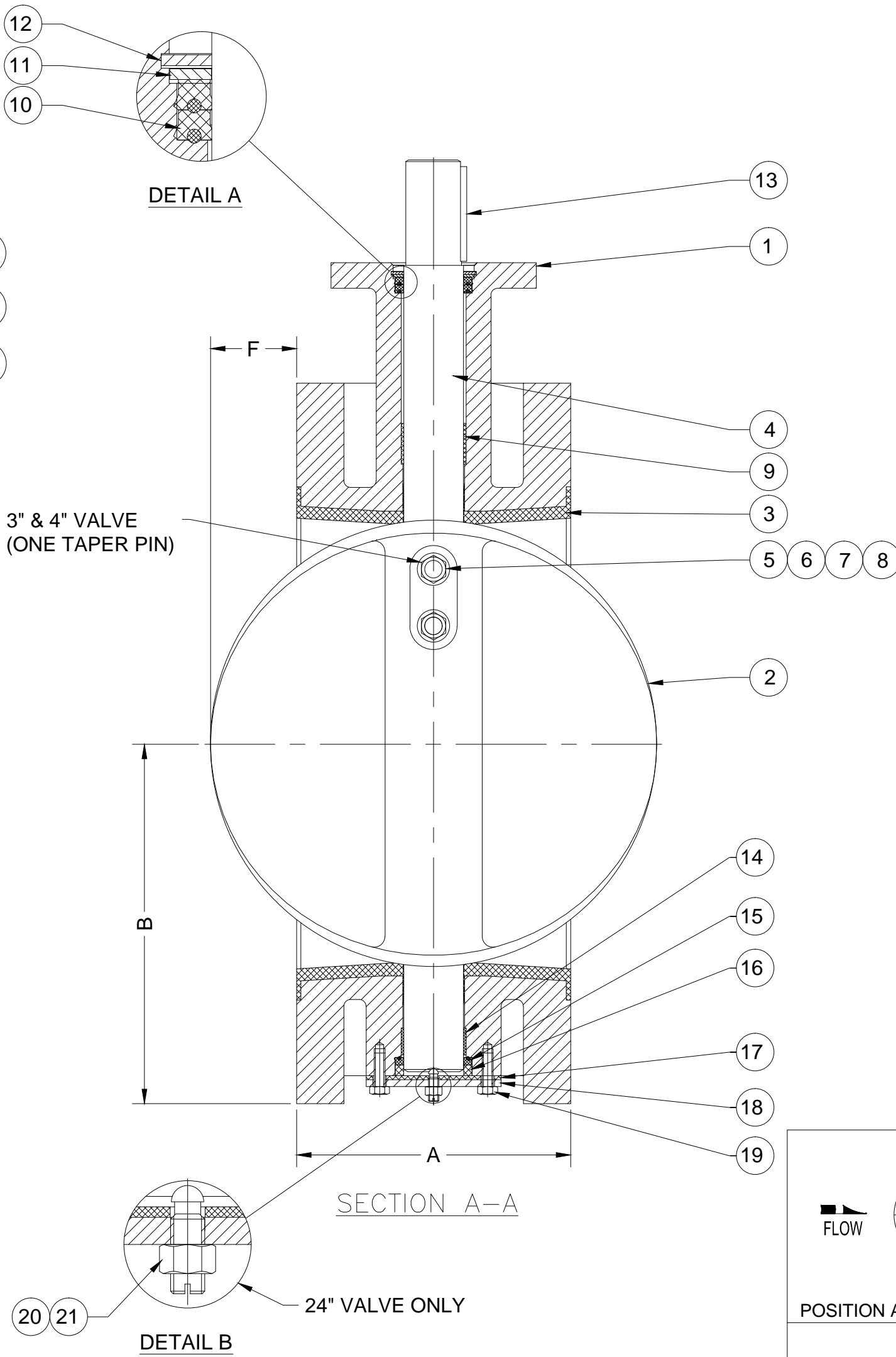
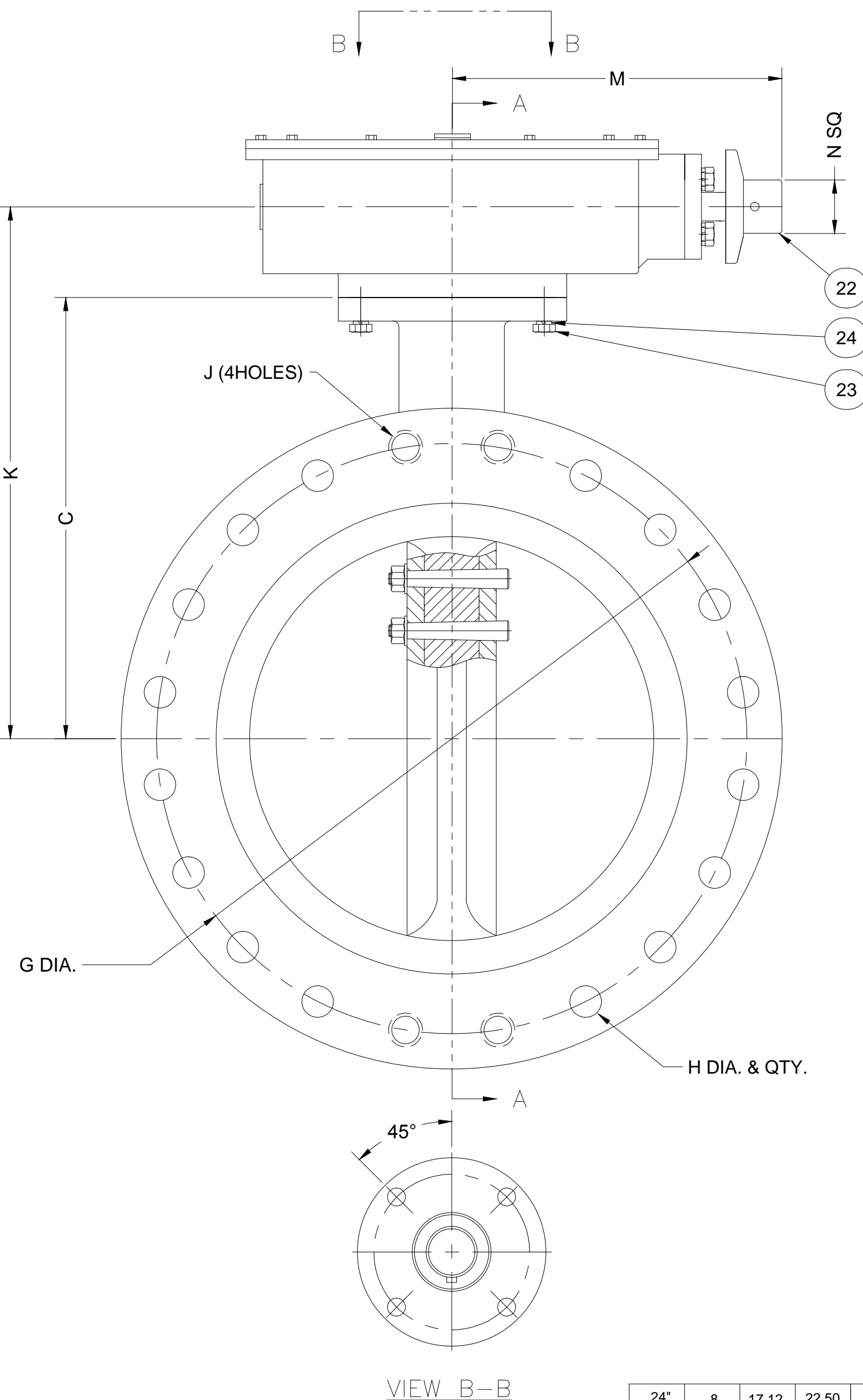


**GA INDUSTRIES, LLC.**  
 3"-24" ANSI FLANGED BUTTERFLY VALVE  
 W/TRAVELING NUT ACTUATOR

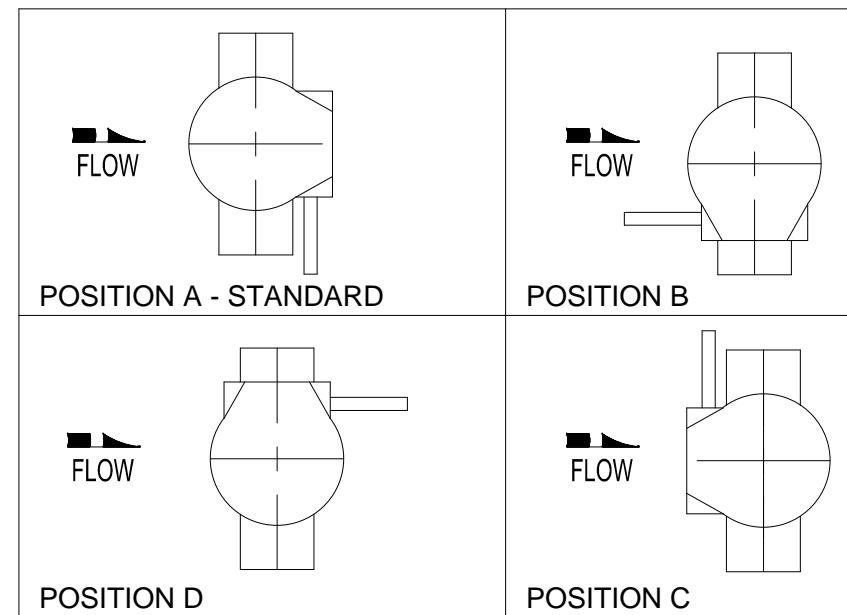
STANDARD TOLERANCES (UNLESS OTHERWISE NOTED) FINISHED SURFACES ONLY DIMENSIONS SHOWN IN INCHES XX = ±.01 XXX = ±.002 FRACTIONS ±1/64" ANGLES ±1' FINISH -XX RMS	SERIAL NO.	SCALE	DRAWN BY HGM	
	REFERENCES	N.T.S.	APPR. BY JT	
	EFFECTIVE DATE	02-10-2010	TO	
	FIG. NUMBER	804	FILE	DRAWING NO. BF-1018
			REV. A	

REV.	DESCRIPTION	DATE	BY
A	REVISED PARTS LIST	06-23-2014	BRF

J:\AUTOCAD\BUTTERFLY\BF-SHOWBF-1018-A.DWG



PARTS LIST	
NO.	NAME
1	BODY
2	DISC
3	SEAT
4	SHAFT
5	DISC PINS
6	DISC NUTS
7	DISC WASHERS
8	DISC SEALS
9	UPPER BEARING
10	UPPER SHAFT PACKING
11	UPPER PACKING WASHER
12	RETAINER
13	KEY
14	LOWER BEARING
15	LOWER SHAFT PACKING
16	LOWER PACKING WASHER
17	GASKET
18	BOTTOM COVER
19	BOTTOM COVER SCREWS
20	ADJUSTABLE THRUST BEARING
21	BEARING NUT
22	TRAVELING NUT ACTUATOR
23	ACTUATOR SCREWS
24	ACTUATOR WASHERS



**TECHNICAL REQUIREMENTS:**

- DESIGN STANDARD, AWWA C504
- FLANGE DRILLING PER ANSI B16.1 CLASS 125 FOR BOTH CLASS 150B AND 250B VALVES.
- DIMENSIONS IN INCHES, WEIGHT IN POUNDS. DOES NOT INCLUDE ACTUATOR.
- WORKING PRESSURE 150 PSI OR 250 PSI BASED ON CLASS.
- SHAFT DIAMETER AND BODY WALL THICKNESS PER AWWA C504.

24"	8	17.12	22.50	8.00	29.50	16-φ1 3/8	1 1/4-7 UNC	26.46	14.41	2.00	FA16	726
20"	8	14.62	18.00	6.00	25.00	16-φ1 1/4	1 1/8-7 UNC	22.01	14.41	2.00	FA16	496
18"	8	13.00	16.50	5.00	22.75	12-φ1 1/4	1 1/8-7 UNC	20.48	14.41	2.00	FA16	403
16"	8	12.31	15.00	4.00	21.25	12-φ1 1/8	1-8 UNC	18.98	14.41	2.00	FA16	321
14"	8	10.56	14.00	3.00	18.75	12-φ1 1/8	---	16.91	14.25	2.00	FA12	259
12"	8	9.50	12.31	2.00	17.00	12-φ1	---	15.21	14.25	2.00	FA12	201
10"	8	8.06	10.75	1.00	14.25	12-φ1	---	13.45	8.86	2.00	FA12	148
8"	6	6.75	9.50	1.00	11.75	8-Ø7/8	---	12.19	8.86	2.00	FA12	108
6"	5	5.88	8.00	0.50	9.50	8-Ø7/8	---	10.65	8.86	2.00	FA12	64
4"	5	4.50	7.00	---	7.50	8-Ø3/4	---	9.67	8.86	2.00	FA07	39
3"	5	3.75	6.25	---	6.00	4-Ø3/4	---	8.92	8.86	2.00	FA07	26
SIZE	A	B	C	F (TYP.)	ØG	#ØH	J	K	M	N SQ	MTG.	WGT.

STANDARD TOLERANCES (UNLESS OTHERWISE NOTED)  
 FINISHED SURFACES ONLY  
 DIMENSIONS SHOWN IN INCHES  
 X = ±.02  
 XX = ±.01  
 XXX = ±.002  
 FRACTIONS 1/16"  
 ANGLES ±1'  
 FINISH -XX RMS

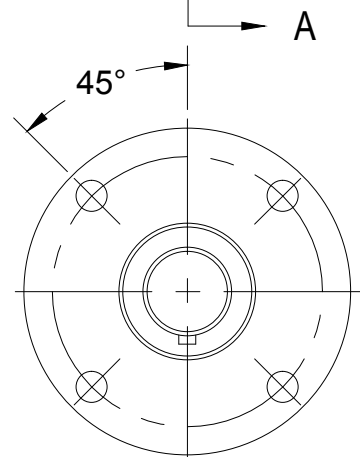
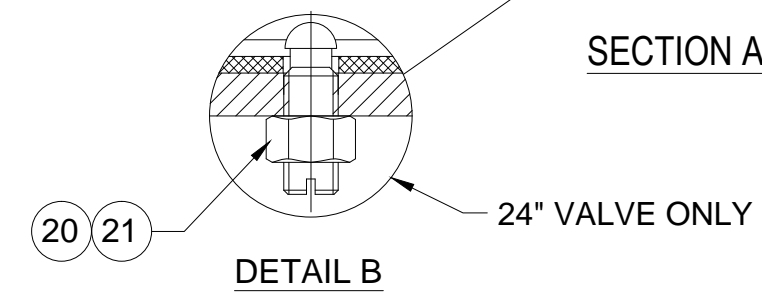
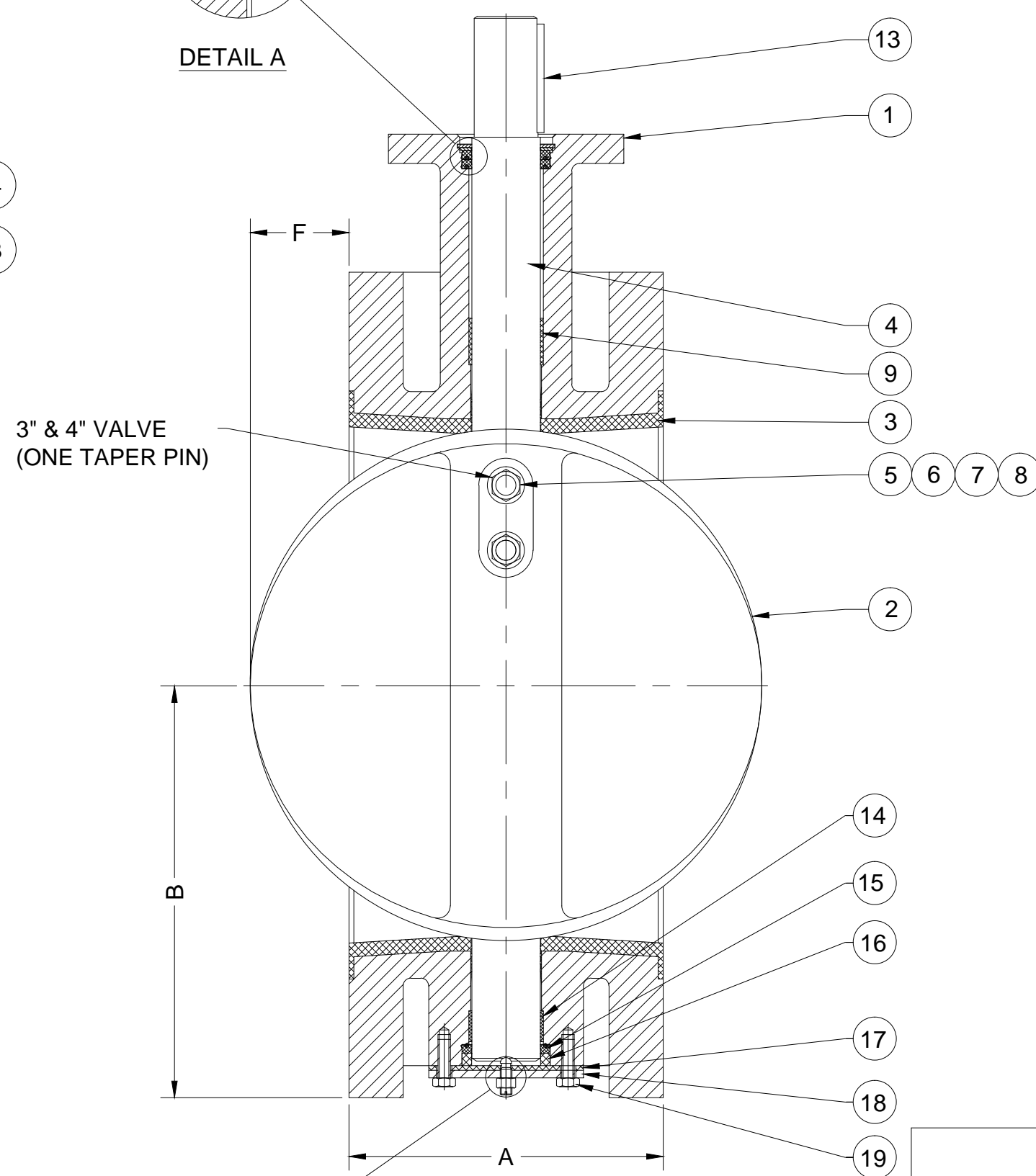
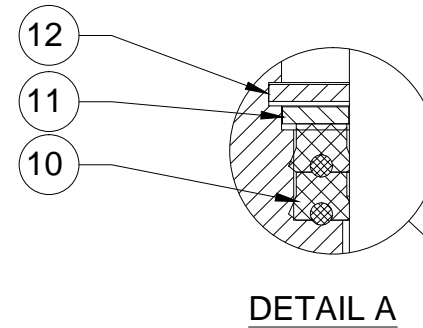
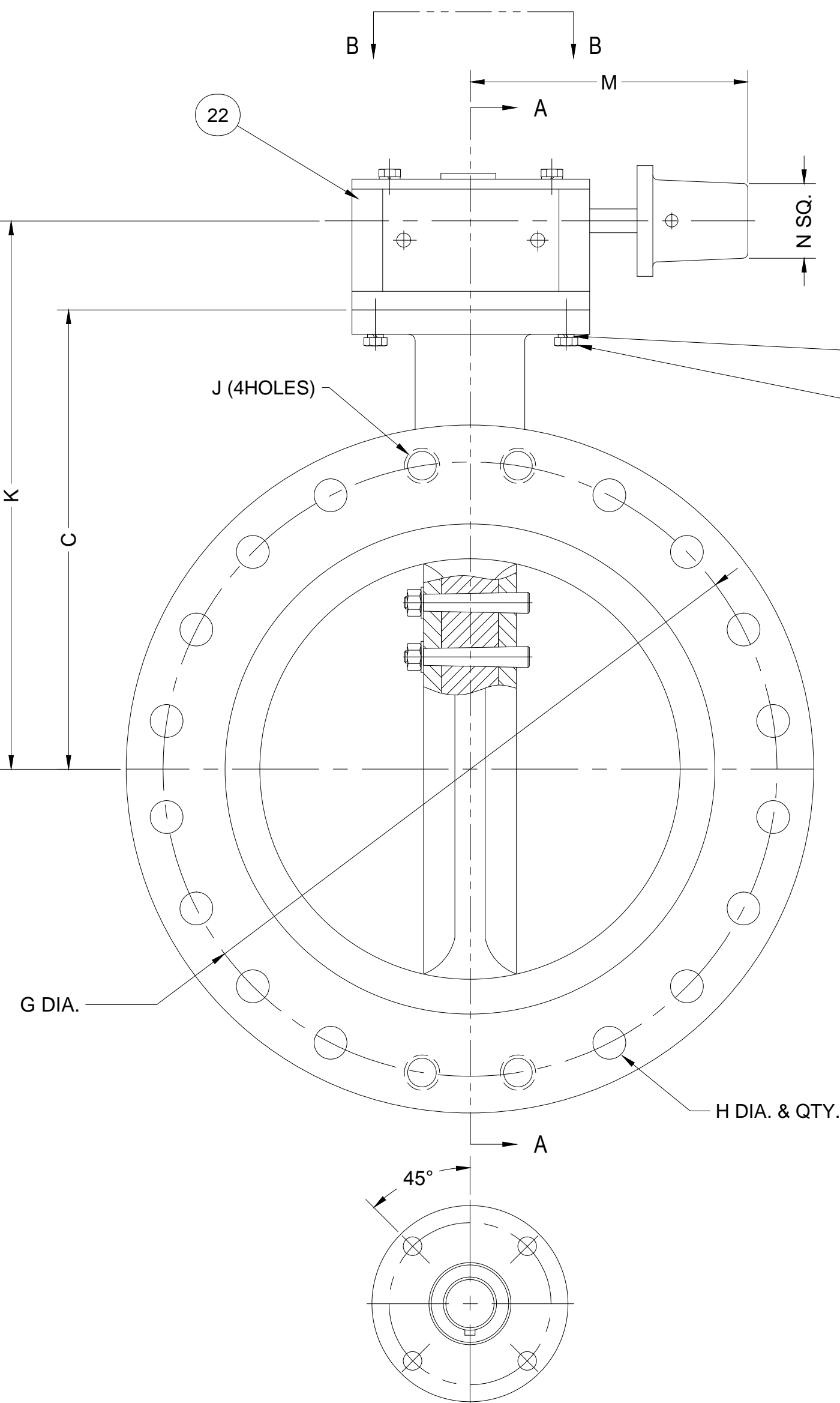
SERIAL NO.	SCALE	DRAWN BY	
	N.T.S.	HGM	
REFERENCES	EFFECTIVE DATE	APPR. BY	
	10-02-2009	JT	
FIG. NUMBER	FILE	DRAWING NO.	REV.
804	BF	BF-1017	A

REV.	DESCRIPTION	DATE	BY
A	REVISED PARTS LIST	06-23-2014	BRF

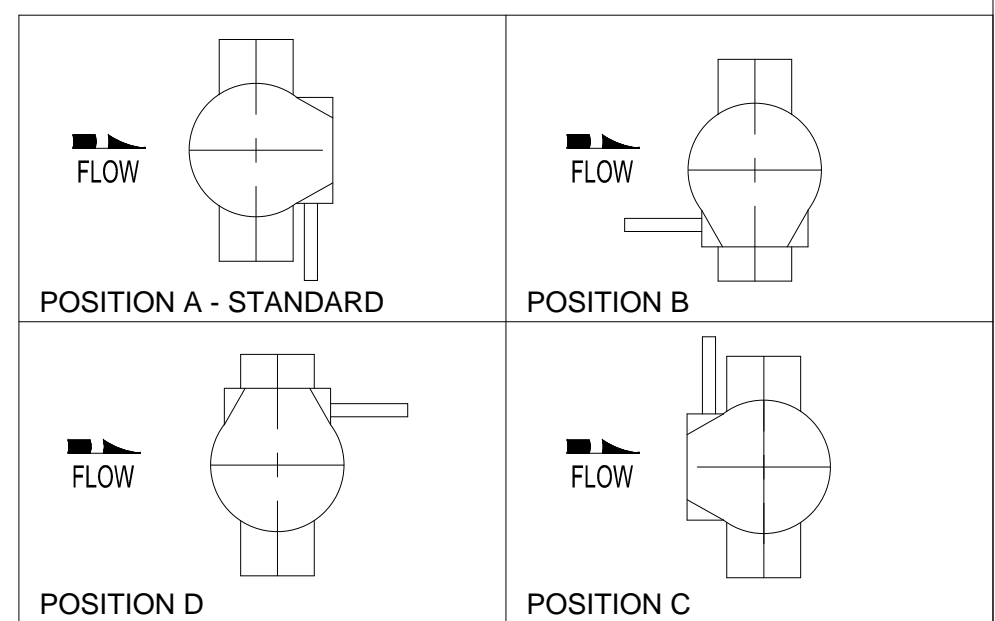
J: BUTTERFLYBF-SHOWBF-1017-A.DWG

**GA INDUSTRIES, LLC.**

3"-24" ANSI FLANGED BUTTERFLY VALVE  
 W/BURIED SERVICE TRAVELING NUT ACTUATOR



PARTS LIST	
NO.	NAME
1	BODY
2	DISC
3	SEAT
4	SHAFT
5	DISC PINS
6	DISC NUTS
7	DISC WASHERS
8	DISC SEALS
9	UPPER BEARING
10	UPPER SHAFT PACKING
11	UPPER PACKING WASHER
12	RETAINER
13	KEY
14	LOWER BEARING
15	LOWER SHAFT PACKING
16	LOWER PACKING WASHER
17	GASKET
18	BOTTOM COVER
19	BOTTOM COVER SCREWS
20	ADJUSTABLE THRUST BEARING
21	BEARING NUT
22	WORM GEAR ACTUATOR
23	ACTUATOR SCREWS
24	ACTUATOR WASHERS



**TECHNICAL REQUIREMENTS:**  
 1. DESIGN STANDARD, AWWA C504  
 2. FLANGE DRILLING PER ANSI B16.1 CLASS 125 FOR BOTH CLASS 150B AND 250B VALVES.  
 3. DIMENSIONS IN INCHES, WEIGHT IN POUNDS. DOES NOT INCLUDE ACTUATOR.  
 4. WORKING PRESSURE 150 PSI OR 250 PSI BASED ON CLASS.  
 5. SHAFT DIAMETER AND BODY WALL THICKNESS PER AWWA C504.

SIZE	A	B	C	F (TYP.)	ØG	#ØH	J	K	M	N SQ	MTG.	WGT.
24"	8	17.12	22.50	8.00	29.50	16-Ø1 3/8	1 1/4-7 UNC	24.71	6.89	2.00	FA16	726
20"	8	14.62	18.00	6.00	25.00	16-Ø1 1/4	1 1/8-7 UNC	20.21	6.89	2.00	FA16	496
18"	8	13.00	16.50	5.00	22.75	12-Ø1 1/4	1 1/8-7 UNC	18.71	6.89	2.00	FA16	403
16"	8	12.31	15.00	4.00	21.25	12-Ø1 1/8	1-8 UNC	17.21	6.89	2.00	FA16	321
14"	8	10.56	14.00	3.00	18.75	12-Ø1 1/8		16.21	6.89	2.00	FA12	259
12"	8	9.50	12.31	2.00	17.00	12-Ø1		14.52	6.89	2.00	FA12	201
10"	8	8.06	10.75	1.00	14.25	12-Ø1		12.96	6.89	2.00	FA12	148
8"	5	6.75	9.50	1.00	11.75	8-Ø7/8		11.71	6.89	2.00	FA12	108
6"	5	5.88	8.00	0.50	9.50	8-Ø7/8		10.21	6.89	2.00	FA12	64
4"	5	4.50	7.00		7.50	8-Ø3/4		9.21	6.89	2.00	FA07	39
3"	5	3.75	6.25		6.00	4-Ø3/4		8.46	6.89	2.00	FA07	26

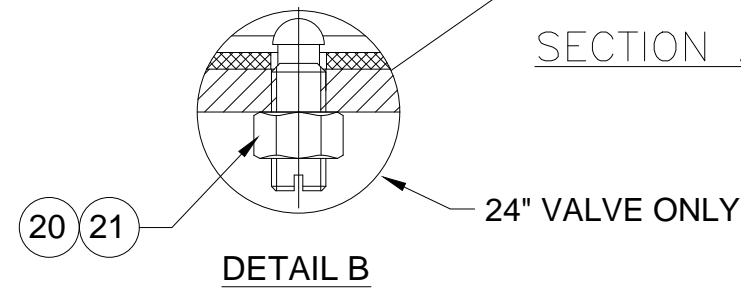
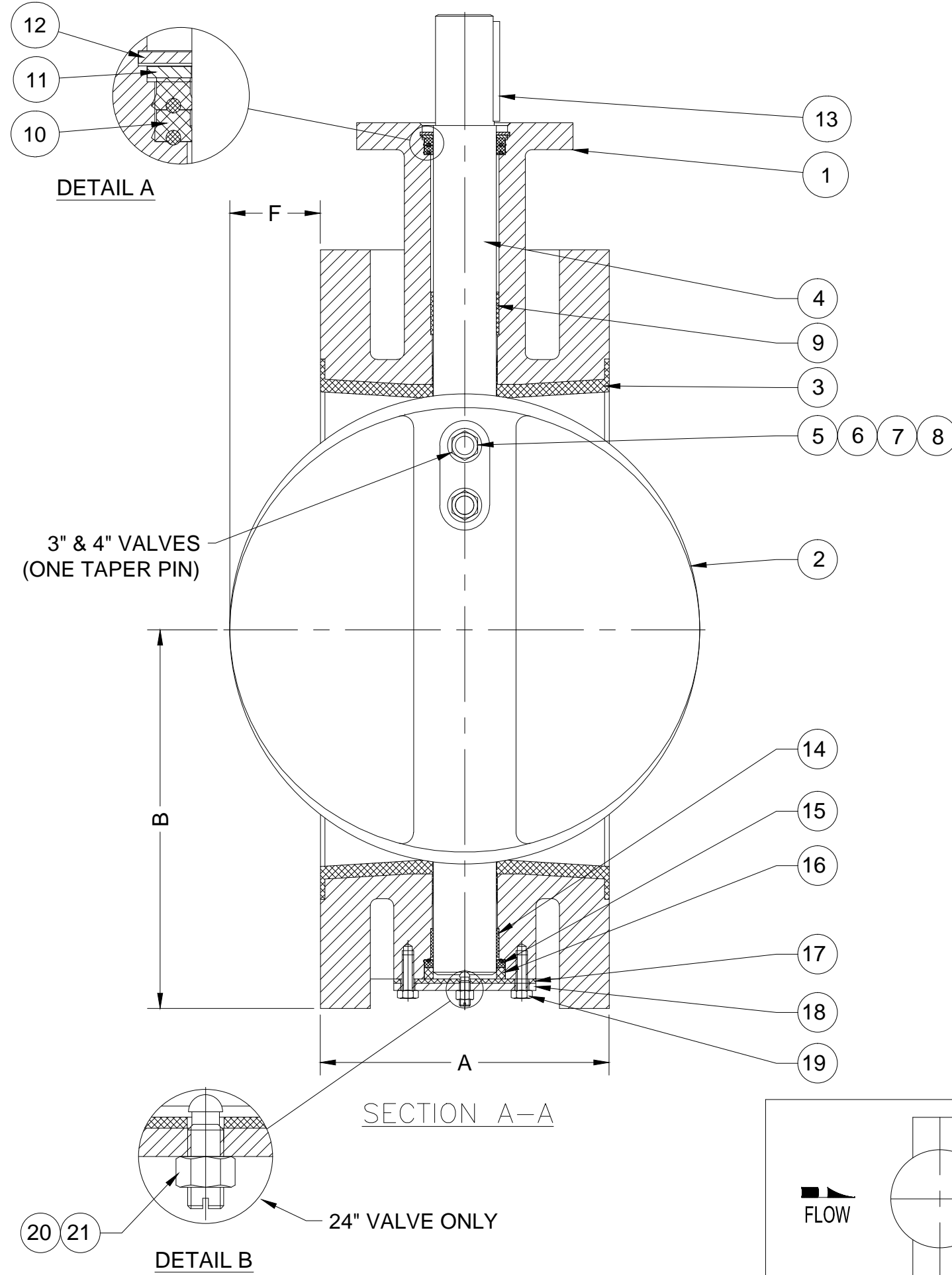
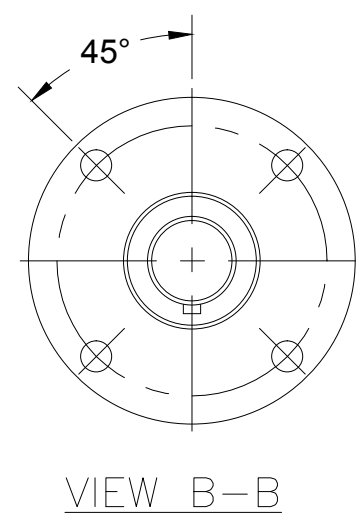
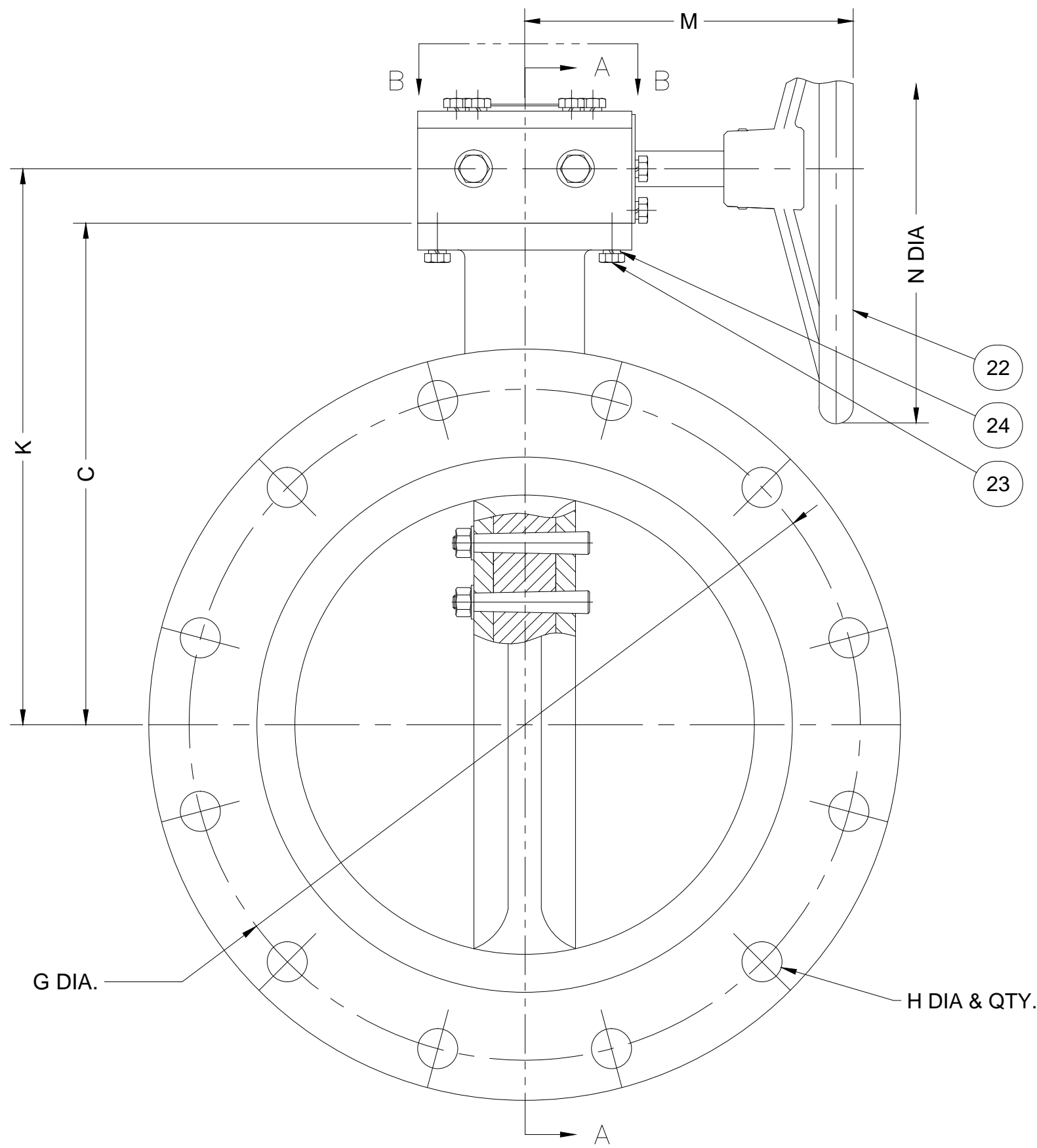
STANDARD TOLERANCES (UNLESS OTHERWISE NOTED)  
 FINISHED SURFACES ONLY  
 DIMENSIONS SHOWN IN INCHES  
 .x = ±.02  
 .xx = ±.01  
 .xxx = ±.002  
 FRACTIONS 1/16"  
 ANGLES ±1'  
 FINISH -XX RMS

**GA INDUSTRIES, LLC.**  
 3"-24" ANSI FLANGED BUTTERFLY VALVE  
 W/BURIED SERVICE WORM GEAR ACTUATOR

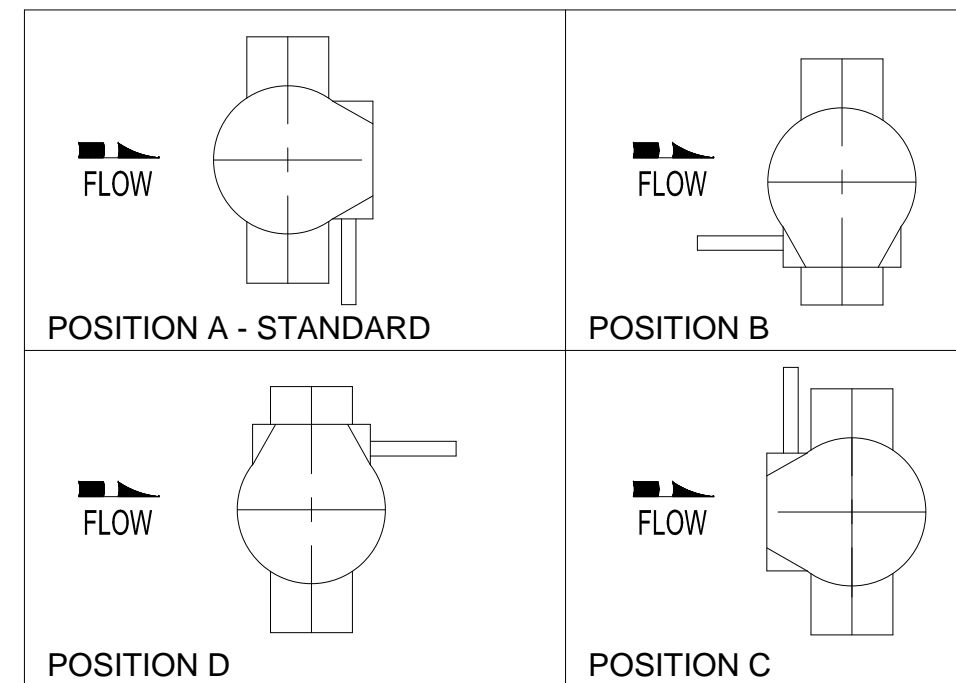
<b>SERIAL NO.</b>	<b>SCALE</b>	<b>DRAWN BY</b>	<b>SWR</b>
	N.T.S.	<b>APPR. BY</b>	<b>JT</b>
<b>REFERENCES</b>	<b>EFFECTIVE DATE</b>	<b>TO</b>	
	05-03-2011	<b>FIG. NUMBER</b>	<b>DRAWING NO.</b>
	804	<b>FILE</b>	<b>BF-1057</b>
	BF	<b>REV.</b>	<b>A</b>

REV.	DESCRIPTION	DATE	BY
A	REVISED PARTS LIST	06-24-2014	BRF

J:\AUTOCAD\BUTTERFLY\BF-SHOWBF-1057-A.DWG



PARTS LIST	
NO.	NAME
1	BODY
2	DISC
3	SEAT
4	SHAFT
5	DISC PINS
6	DISC NUTS
7	DISC WASHERS
8	DISC SEALS
9	UPPER BEARING
10	UPPER SHAFT PACKING
11	UPPER PACKING WASHER
12	RETAINER
13	KEY
14	LOWER BEARING
15	LOWER SHAFT PACKING
16	LOWER PACKING WASHER
17	GASKET
18	BOTTOM COVER
19	BOTTOM COVER SCREWS
20	ADJUSTABLE THRUST BEARING
21	BEARING NUT
22	WORM GEAR ACTUATOR
23	ACTUATOR SCREWS
24	ACTUATOR WASHERS



- TECHNICAL REQUIREMENTS:**
- DESIGN STANDARD, AWWA C504
  - FLANGE DRILLING PER ANSI B16.1 CLASS 125 FOR BOTH CLASS 150B AND 250B VALVES.
  - DIMENSIONS IN INCHES, WEIGHT IN POUNDS. DOES NOT INCLUDE ACTUATOR.
  - WORKING PRESSURE 150 PSI OR 250 PSI BASED ON CLASS.
  - SHAFT DIAMETER AND BODY WALL THICKNESS PER AWWA C504.

SIZE	A	B	C	F (TYP.)	ØG	#-ØH	K	M	φN	MTG.	WGT.
14"	8	10.56	14.00	3.00	18.75	12-φ1 1/8	15.28	9.21	12.00	FA12	352
12"	8	9.50	12.31	2.00	17.00	12-φ1	13.59	9.21	12.00	FA12	223
10"	8	8.06	10.75	1.00	14.25	12-φ1	12.03	9.21	12.00	FA12	157
8"	6	6.75	9.50	1.00	11.75	8-Ø7/8	10.81	9.09	12.00	FA12	108
6"	5	5.88	8.00	0.50	9.50	8-Ø7/8	9.31	9.09	12.00	FA12	68
4"	5	4.50	7.00	—	7.50	8-Ø3/4	8.34	9.09	12.00	FA07	51
3"	5	3.75	6.25	—	6.00	4-Ø3/4	7.59	9.09	12.00	FA07	42

**GA INDUSTRIES, LLC.**

**3"-14" ANSI FLANGED BUTTERFLY VALVE W/ WORM GEAR ACTUATOR**

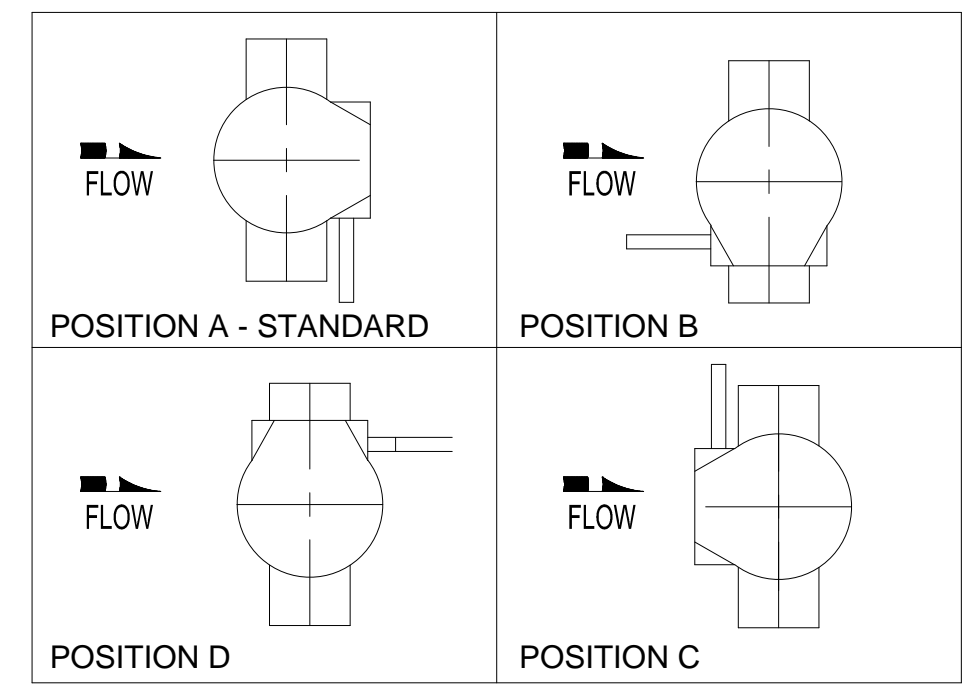
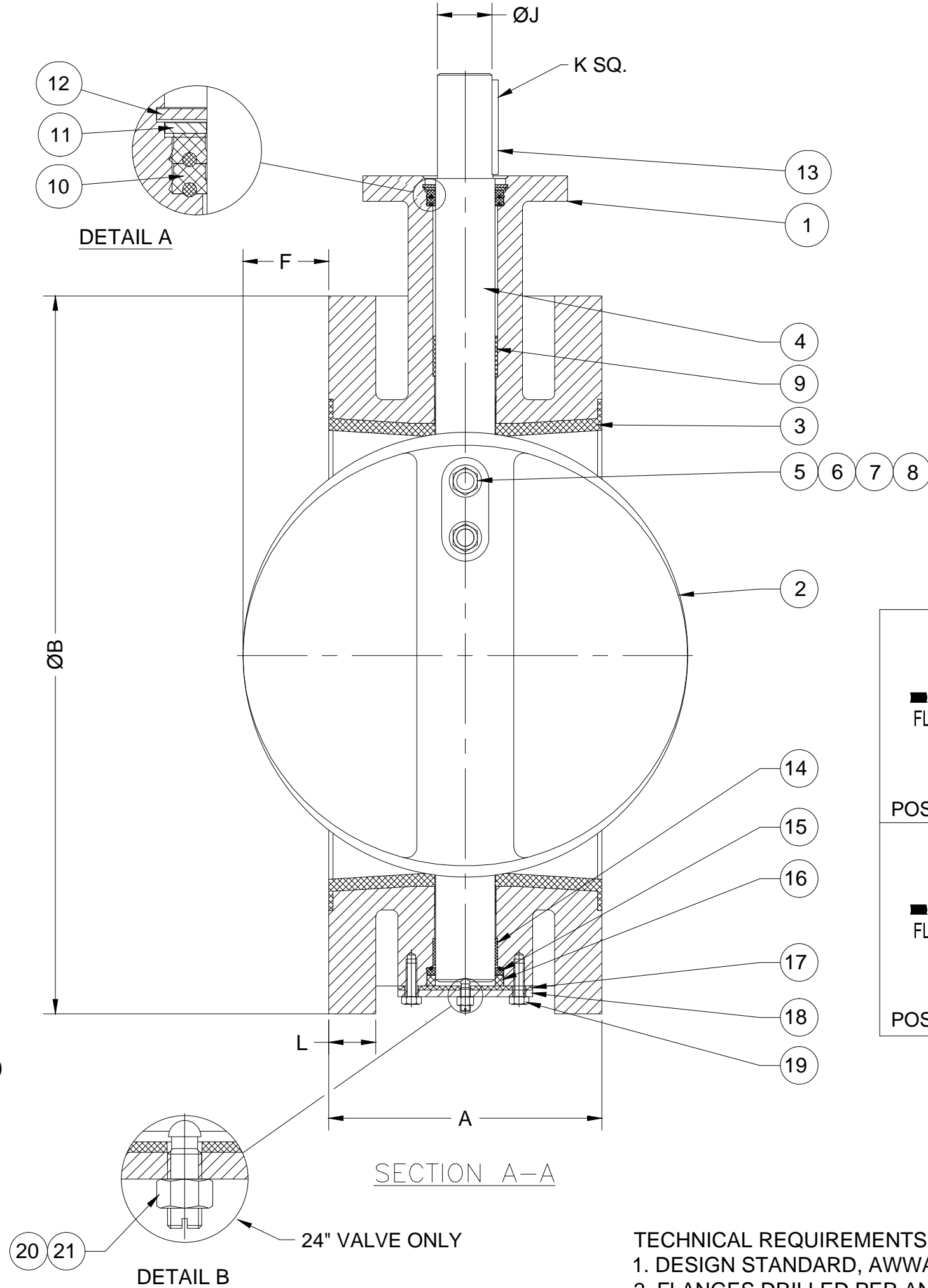
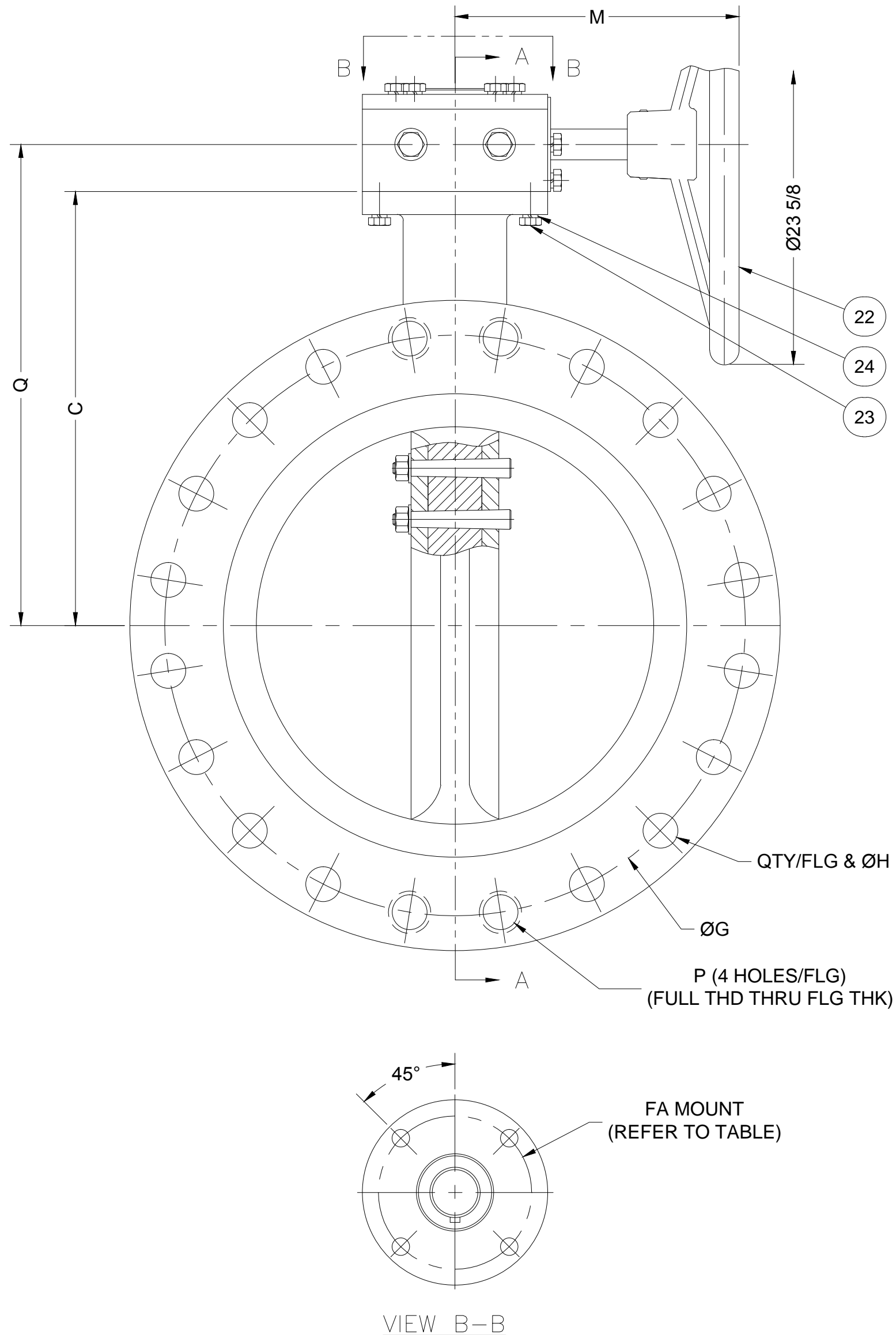
STANDARD TOLERANCES (UNLESS OTHERWISE NOTED): FINISHED SURFACES ONLY DIMENSIONS SHOWN IN INCHES x = ±.02 xx = ±.01 xxx = ±.002 FRACTIONS ±1/64" ANGLES ±1° FINISH -XX RMS	<b>SERIAL NO.</b>	<b>SCALE</b> N.T.S.	<b>DRAWN BY</b> HGM	
	<b>REFERENCES</b>	<b>EFFECTIVE DATE</b> 10-02-2009	<b>TO</b>	
	<b>FIG. NUMBER</b> 804	<b>FILE</b> BF	<b>DRAWING NO.</b> BF-1015	<b>REV.</b> A
			<b>APPR. BY</b> JT	

REV.	DESCRIPTION	DATE	BY
A	REVISED PARTS LIST	06-23-2014	BRF

J:\BUTTERFLY\BF-SHOWBF-1015-A.DWG

VALVE DIMENSIONS														
SIZE	A	ØB	C	Q	M	F(TYP)	L	ØG	ØJ	K SQ.	P (4 HOLES per FLANGE)	QTY/FLANGE & ØH	MTG	APPROX. WEIGHT
16"	8.00	23.50	15.00	17.69	10.63	4.00	1.438	21.25	1.875	0.500	1-8UNC	(12) - Ø1.125	FA16	321
18"	8.00	25.00	16.50	19.19	10.63	5.00	1.563	22.75	2.250	0.500	1 1/8-7UNC	(12) - Ø1.250	FA16	403
20"	8.00	27.50	18.00	20.69	10.63	6.00	1.688	25.00	2.250	0.500	1 1/8-7UNC	(16) - Ø1.250	FA16	496
24"	8.00	32.00	22.50	25.19	12.60	8.00	1.875	29.50	2.250	0.500	1 1/4-7UNC	(16) - Ø1.375	FA16	726

PARTS LIST	
NO.	NAME
1	BODY
2	DISC
3	SEAT
4	SHAFT
5	DISC PINS
6	DISC NUTS
7	DISC WASHERS
8	DISC SEALS
9	UPPER BEARING
10	UPPER SHAFT PACKING
11	UPPER PACKING WASHER
12	RETAINER
13	KEY
14	LOWER BEARING
15	LOWER SHAFT PACKING
16	LOWER PACKING WASHER
17	GASKET
18	BOTTOM COVER
19	BOTTOM COVER SCREWS
20	ADJUSTABLE THRUST BEARING
21	BEARING NUT
22	WORM GEAR ACTUATOR
23	ACTUATOR SCREWS
24	ACTUATOR WASHERS



- TECHNICAL REQUIREMENTS:**
1. DESIGN STANDARD, AWWA C504.
  2. FLANGES DRILLED PER ANSI B16.1 CLASS 125 FOR BOTH CLASS 150B AND 250B VALVES.
  3. DIMENSIONS IN INCHES; WEIGHT IN POUNDS, DOES NOT INCLUDE ACTUATOR
  4. WORKING PRESSURE 150 PSI OR 250 PSI BASED ON CLASS.
  5. SHAFT DIAMETER AND BODY WALL THICKNESS PER AWWA C504.

REV.	DESCRIPTION	DATE	BY
A	REPLACED TWO STAGE WG ACTUATOR w/ SINGLE STAGE/ REVISE PARTS LIST	01-23-2014	BRF

**GA INDUSTRIES, LLC**

16" - 24" BUTTERFLY VALVE  
w/ ABOVE GROUND WORM GEAR ACTUATOR  
ANSI 125 LB FLANGES

DIMENSIONS IN INCHES STANDARD TOLERANCES (UNLESS OTHERWISE NOTED) X = ±1 XX = ±0.01 XXX = ±0.005 FRACTIONS = ±1/64 ANGLES = ±1° DRAFTS: 3° MAX PER ANSI Y14.5M GD&T-3/32 FLATNESS, ROUNDNESS, POSITION	CASTING STOCK MINIMUM (SMALLEST DIM. TO SURFACE) Ø TO < 1 = 1/8 1 TO < 6 = 3/16 6 TO < 12 = 1/4 12 AND > = 3/8	SERIAL NO. FIG. NUMBER X804 DATE 10-02-2009 PROPERTY OF GA INDUSTRIES, LLC	DRAWN BY HGM APPR. BY JT SCALE NTS PROPERTY OF GA INDUSTRIES, LLC
REFERENCES	FILE BF	DRAWING NO. BF-1020	REV. A

J:\Autocad\Butterfly\BF-Show\BF-1020-A.dwg