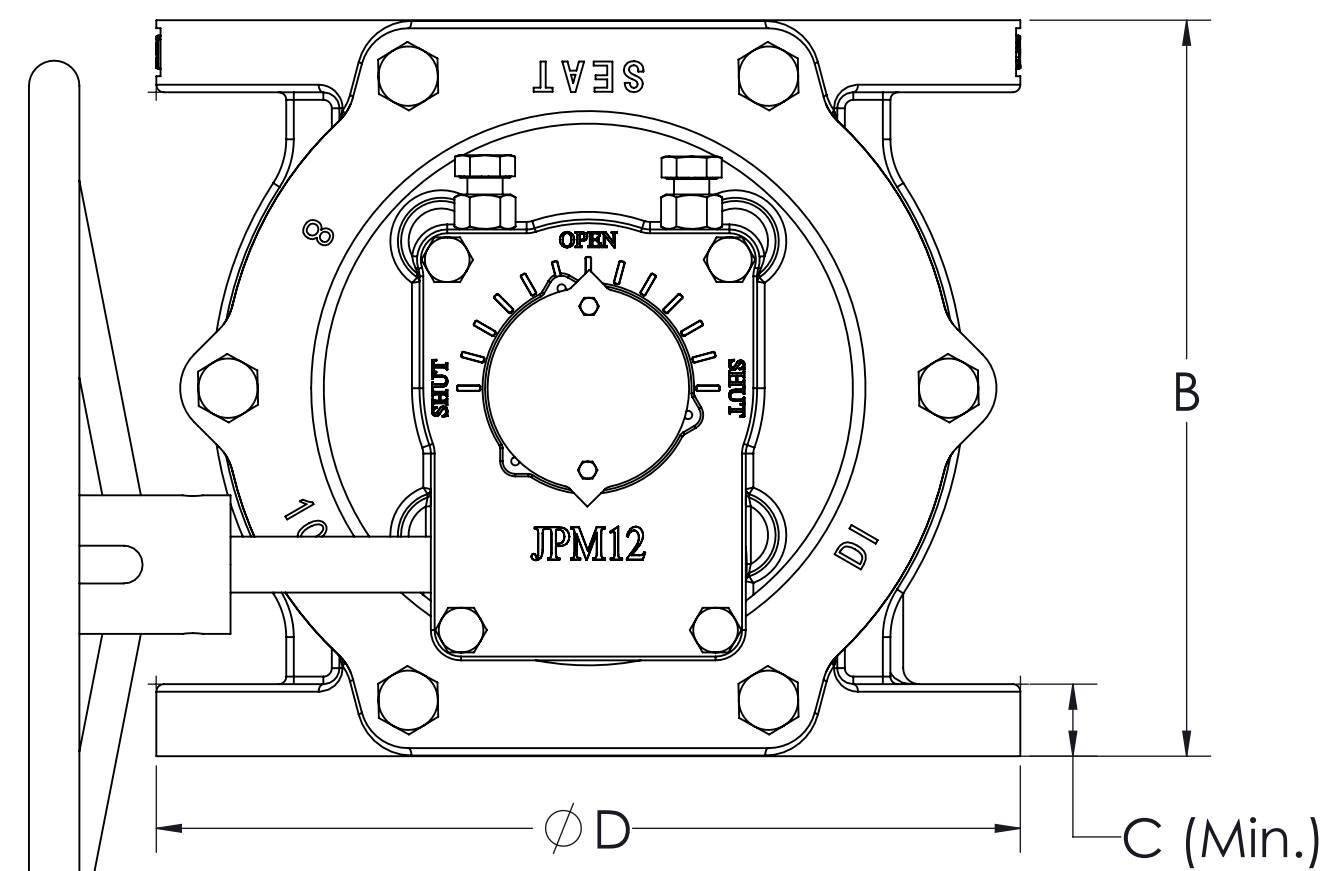


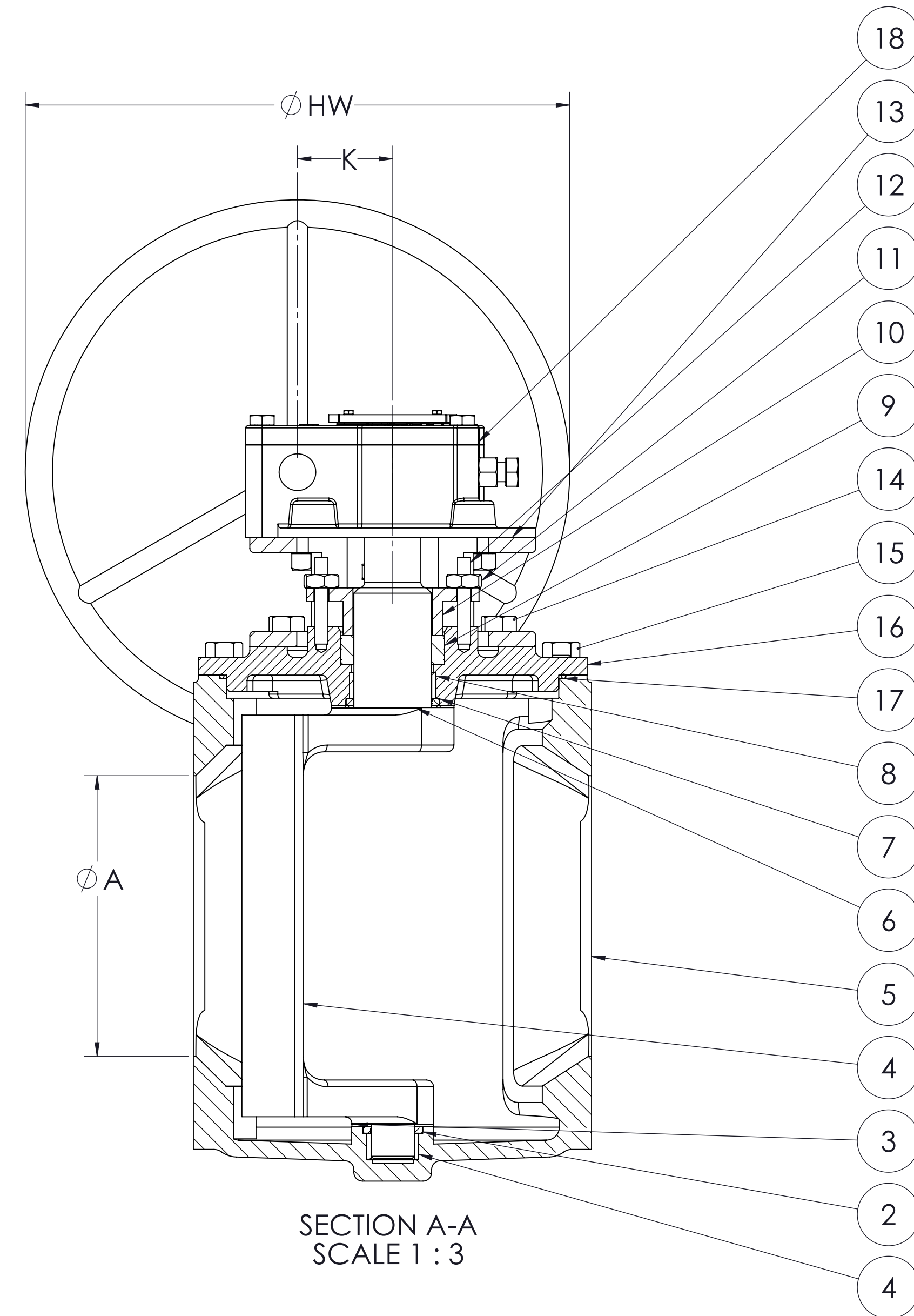
REVISIONS				
ECN	REV.	DESCRIPTION	BY	DATE
	1	RELEASED	J CAPPER	3/28/2017
	2	EDITED DRAWING NOTES, HW COLOR	J CAPPER	8/16/2017
	3	CORRECTED MODEL COLOR	J CAPPER	9/20/2017
	4	CORRECTED MODEL COLOR	J CAPPER	9/25/2017
	5	CORRECTED COVER SEAT LETTERING	J CAPPER	9/27/2017
	6	MADE FASTENERS 316 SS STANDARD, CORRECTED 14" VALVE HW, EDITED MARKINGS NOTE	DPB, J CAPPER	2/19/2019
	7	ADDED GEAR RATIO & # OF TURNS TO TABLE, UPDATED WITH CORRECT BODY MARKINGS	CAW	3/22/2019



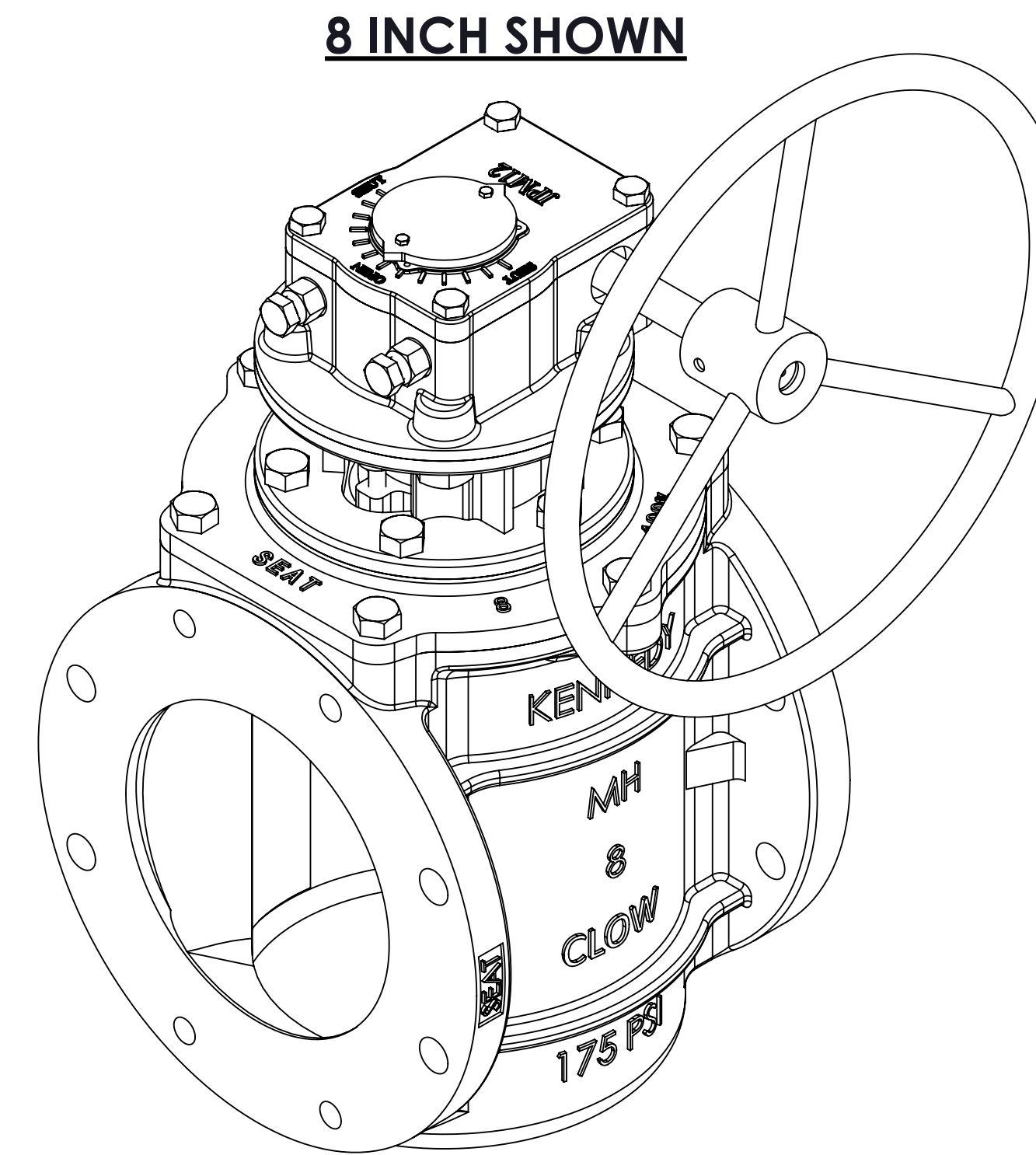
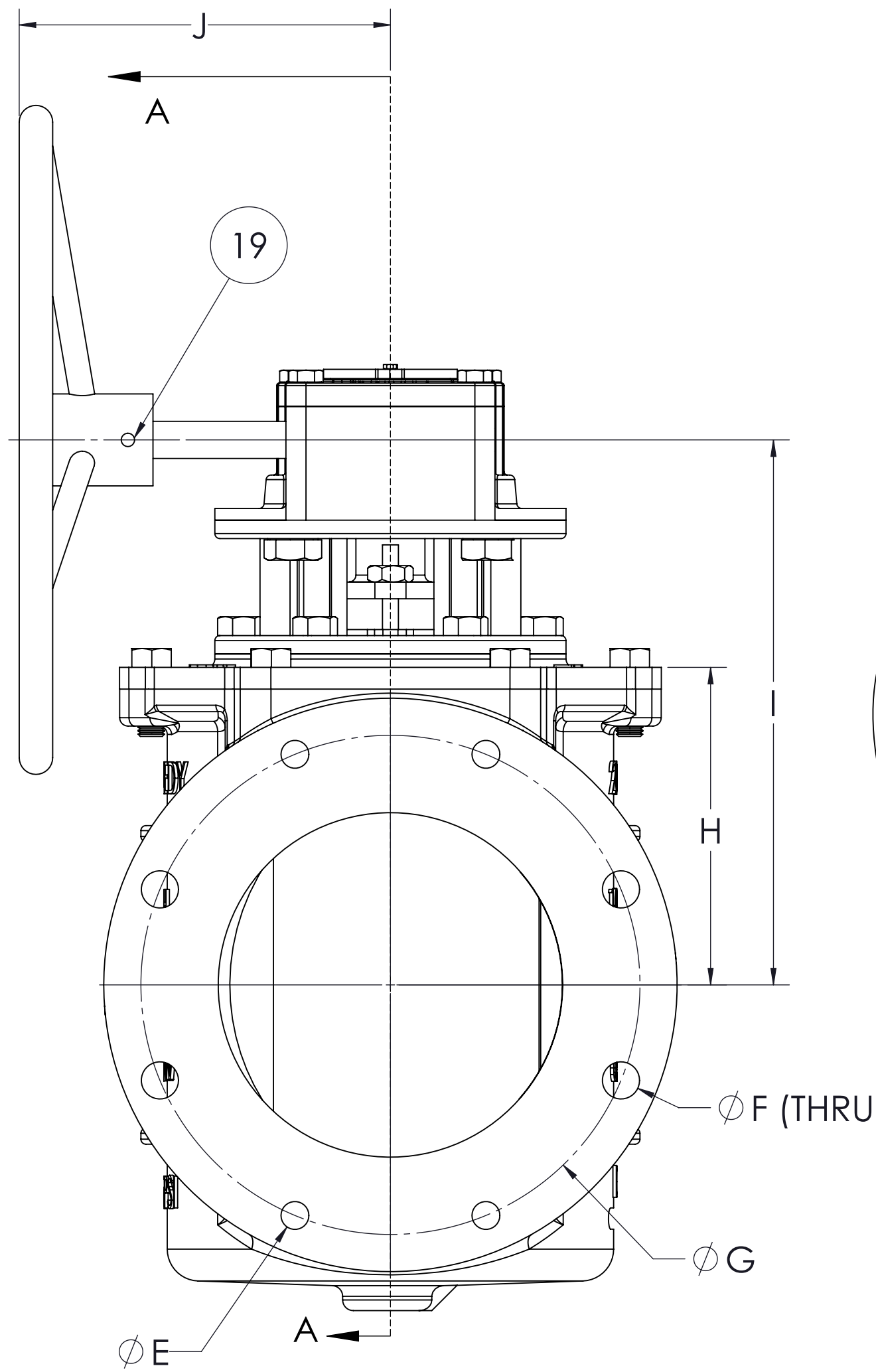
SIZE RANGE	WATER WORKING PRESSURE PSI	HYDROSTATIC TEST PSI
3-12	175 PSI	350 PSI
14-16	150 PSI	300 PSI

- NOTE:**
- FOR SERVICES WITH 3"- 8" PLUG VALVES IN EXCESS OF 25 PSI, USE OF A GEAR IS RECOMMENDED.
 - GEAR MODEL AND BRAND ARE SUBJECT TO CHANGE WITHOUT NOTICE.

ITEM#	PART NAME	ASTM/ DESIGNATION	QTY.
1	LOWER SLEEVE BEARING	SINTERED ALLOY SS316	11
2	LOWER GRIT SEAL	NBR	1
3	LOWER THRUST WASHER	PTFE	1
4	PLUG	ASTM A536 65-45-12 OR 70-50-05 +NBR	1
5	BODY	ASTM A536 65-45-12 OR 70-50-05	1
6	UPPER THRUST WASHER	PTFE	1
7	UPPER GRIT SEAL	NBR	1
8	UPPER SLEEVE BEARING	SINTERED ALLOY SS316	1
9	V-PACKING	NBR	1
10	FOLLOWER GLAND	ASTM A536 65-45-12 OR 70-50-05	1
11	HEX NUTS	STAINLESS STEEL ASTM A276.T316	2
12	STUDS	STAINLESS STEEL ASTM A276.T316	2
13	ADAPTER	ASTM A536 65-45-12 OR 70-50-05	1
14	ADAPTER BOLTS	STAINLESS STEEL ASTM A276.T316	6
15	COVER BOLTS	STAINLESS STEEL ASTM A276.T316	4
16	COVER	ASTM A536 65-45-12 OR 70-50-05	1
17	COVER O-RING	NBR	1
18	JPM GEAR w/ HW	-----	1
19	SLOT TYPE SPRING PIN	ASTM A29 1566	1



SECTION A-A
SCALE 1 : 3

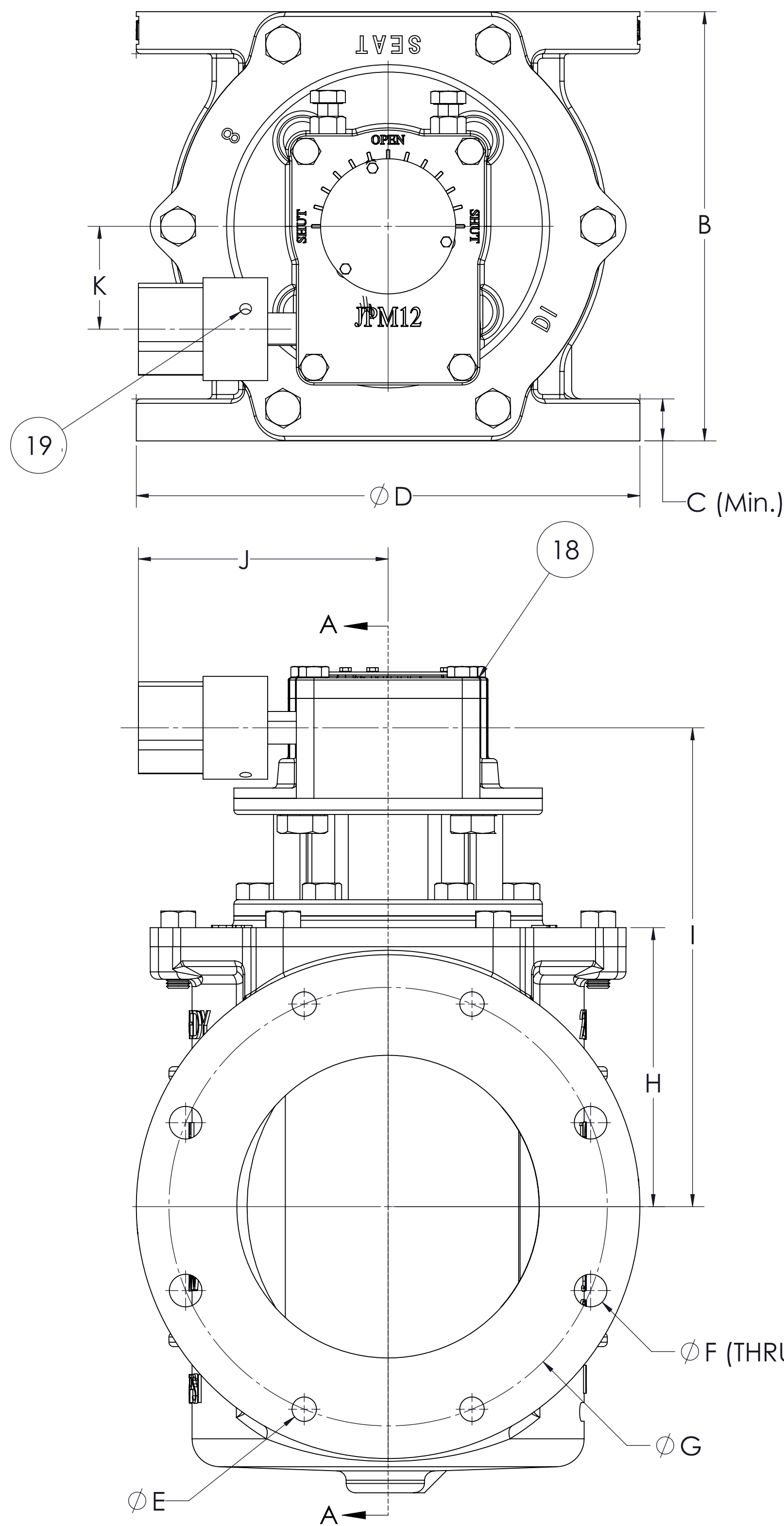


- NOTE:**
- BODY CASTINGS ARE TRI-MARKED WITH "CLOW," "KENNEDY," AND "M&H" ⁶

A [VALVE SIZE]	B	C	D	E	F	G	H	I	J	K	WEIGHT [LBS.]	JPM GEAR	GEAR RATIO	# OF TURNS TO OPEN (APPROX.)	Ø HW (in)
3	8.00	.75	7.50	4 x 5/8-11 ∇ .79	-	6.00	3.76	7.50	8.8	2.8	75 LBS	JPM12A	40	10	8
4	9.00	.94	9.00	4 x 5/8-11 ∇ .79	4 x .75	7.50	4.65	8.28	8.8	2.8	100 LBS	JPM12A	40	10	8
6	10.50	1.02	11.00	4 x 3/4-10 ∇ .79	4 x .81	9.50	5.78	10.30	8.8	2.8	165 LBS	JPM12FA	40	10	12
8	11.50	1.13	13.50	4 x 3/4-10 ∇ .79	4 x .88	11.75	7.48	12.54	8.8	2.8	230 LBS	JPM12FA	40	10	16
10	13.00	1.19	16.00	8 x 7/8-9 ∇ .79	4 x 1.00	14.25	8.88	14.02	11.3	3.9	340 LBS	JPM14A	53	13	20
12	14.00	1.26	19.00	8 x 7/8-9 ∇ .79	4 x 1.00	17.00	11.00	16.38	12.1	3.9	480 LBS	JPM14A	53	13	24
14	17.00	1.38	21.00	8 x 1-8 UNS ∇ 1.54	4 x 1.13	18.75	12.88	18.00	14.9	4.9	720 LBS	JPM15A	68	17	30
16	17.17	1.44	23.50	8 x 1-8 UNS ∇ 1.06	8 x 1.13	21.25	14.69	22.50	14.9	4.9	850 LBS	JPM15A	68	17	30

DRAWN	J CAPPER	DATE	3/28/2017
CHECKED	DB	DATE	3/29/2017
APPROVED			
DO NOT SCALE DRAWING			
MATERIAL: SEE TABLE			
Weight: SEE TABLE			
			KENNEDY VALVE Division of McWane, Inc. 1021 EAST WATSE STREET ELMIRA, NEW YORK 14901
TITLE:			3"-16" FULL FLOW FLG EPV 6412-FF w/ JPM GEAR - HW
SIZE	D	DWG. NO.	SUB910399T
REV	7		
<small>THE INFORMATION CONTAINED IS THE SOLE PROPERTY OF KENNEDY VALVE CO. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF KENNEDY VALVE CO. IS PROHIBITED. DESIGN & INVENTION RIGHTS RESERVED.</small>			

REVISIONS			
REV.	DESCRIPTION	BY	DATE
1	RELEASED	J CAPPER	3/28/2017
2	EDITED DRAWING NOTES	J CAPPER	8/16/2017
3	CHANGED MODEL COLOR	J CAPPER	9/20/2017
4	CHANGED MODEL COLOR	J CAPPER	9/25/2017
5	CORRECTED COVER "SEAT" LETTERING	J CAPPER	9/27/2017
6	ADDED BURIED GEAR NOTE	J CAPPER	10/5/2017
7	REMOVED ADAPTER WINDOWS	J CAPPER	8/1/2018
8	UPDATED J DIM, MADE FASTENERS 316 SS STANDARD, EDITED MARKINGS NOTE	J CAPPER	2/22/2019
9	ADDED GEAR RATIO & # OF TURNS TO OPEN COLUMNS, UPDATED WITH CORRECT BODY MARKINGS	CAW	3/25/2019

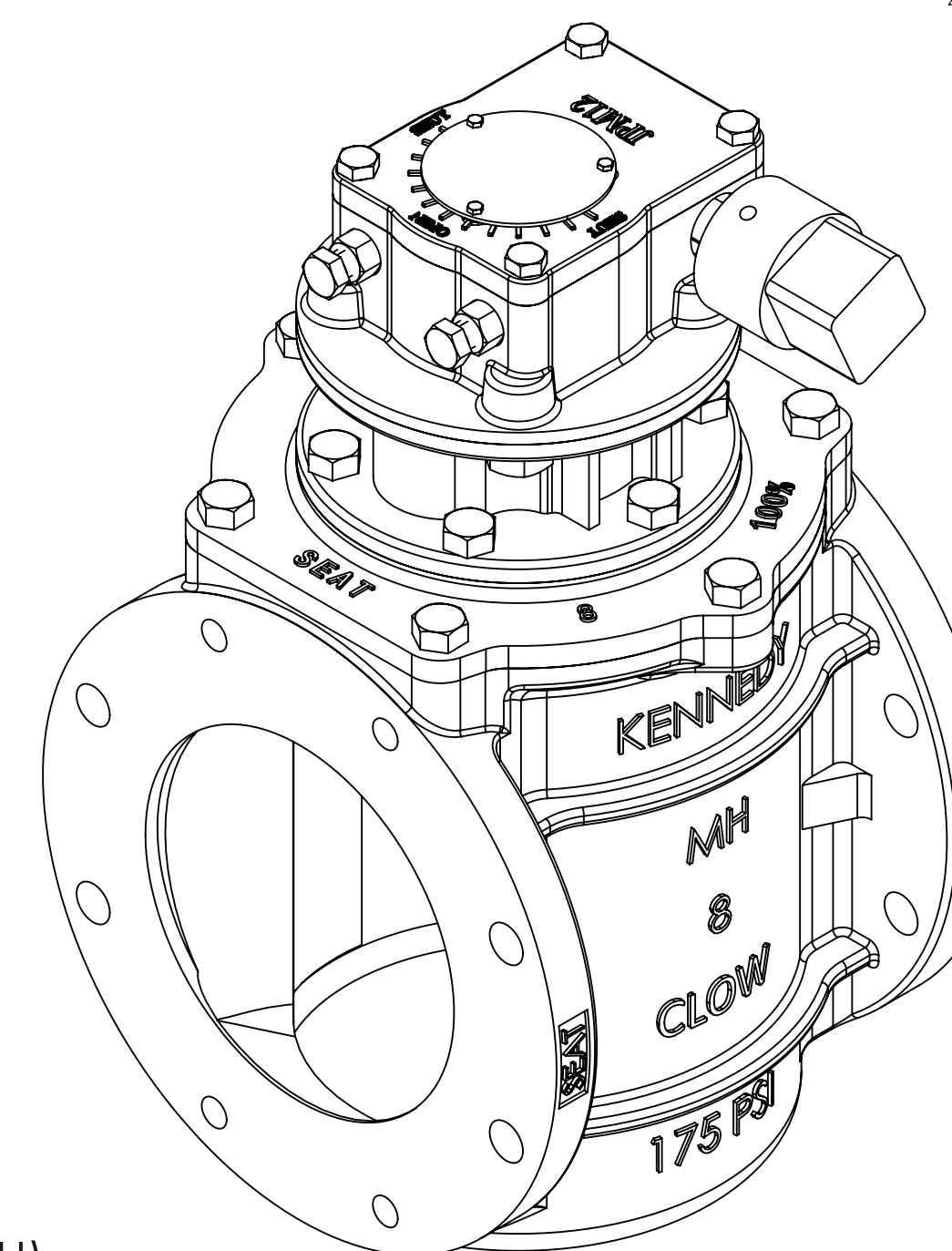


VALVE SIZE RANGE	WATER WORKING PRESSURE (PSI)	HYDROSTATIC TEST (PSI)
3-12"	175	350
14-16"	150	300

NOTE:

- FOR SERVICES WITH 3"- 8" PLUG VALVES IN EXCESS OF 25 PSI, USE OF A GEAR IS RECOMMENDED.
- GEAR MODEL AND BRAND ARE SUBJECT TO CHANGE WITHOUT NOTICE.

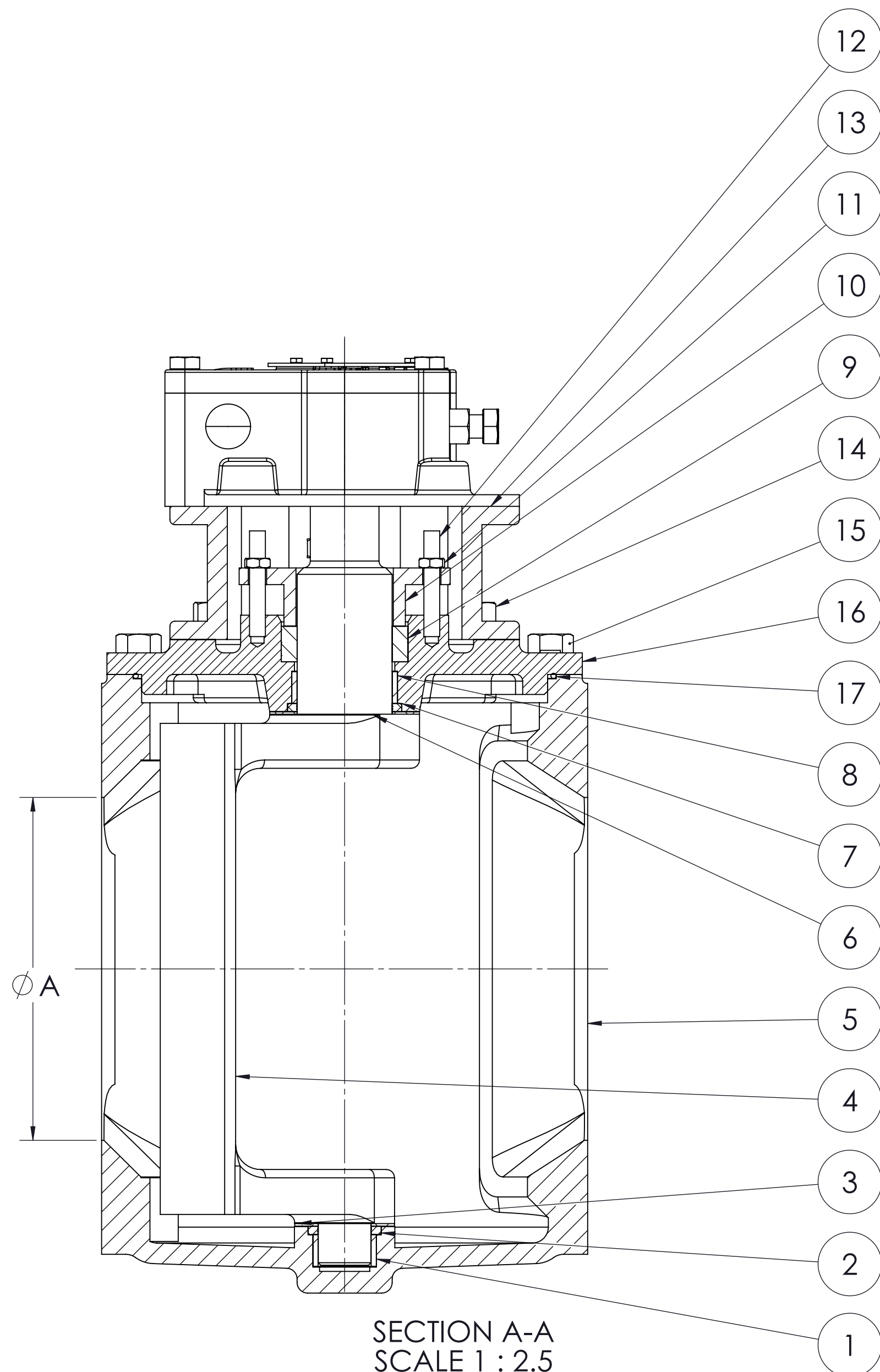
8 INCH SHOWN, BURIED GEAR



ITEM#	PART NAME	ASTM/ DESIGNATION	QTY.
1	LOWER SLEEVE BEARING	SINTERED ALLOY SS316	11
2	LOWER GRIT SEAL	NBR	1
3	LOWER THRUST WASHER	PTFE	1
4	PLUG	ASTM A536 GR.65-45-12 or GR.75-50-05 +NBR	1
5	BODY	ASTM A536 GR. 65-45-12 or 70-50-05	1
6	UPPER THRUST WASHER	PTFE	1
7	UPPER GRIT SEAL	NBR	1
8	UPPER SLEEVE BEARING	SINTERED ALLOY SS316	1
9	V-PACKING	NBR	1
10	FOLLOWER GLAND	ASTM A536 GR. 65-45-12 or 70-50-05	1
11	HEX NUTS	STAINLESS STEEL ASTM A276.T316	2
12	STUDS	STAINLESS STEEL ASTM A276.T316	2
13	ADAPTER	ASTM A536 GR. 65-45-12 or 70-50-05	1
14	ADAPTER BOLTS	STAINLESS STEEL ASTM A276.T316	6
15	COVER BOLTS	STAINLESS STEEL ASTM A276.T316	4
16	COVER	ASTM A536 GR. 65-45-12 or 70-50-05	1
17	COVER O-RING	NBR	1
18	JPM GEAR w/ OP NUT	-----	1
19	SLOT TYPE SPRING PIN	ASTM A29 1566	1

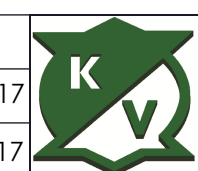
NOTE:

- BODY CASTINGS ARE TRI-MARKED WITH "CLOW," "KENNEDY," AND "M&H"

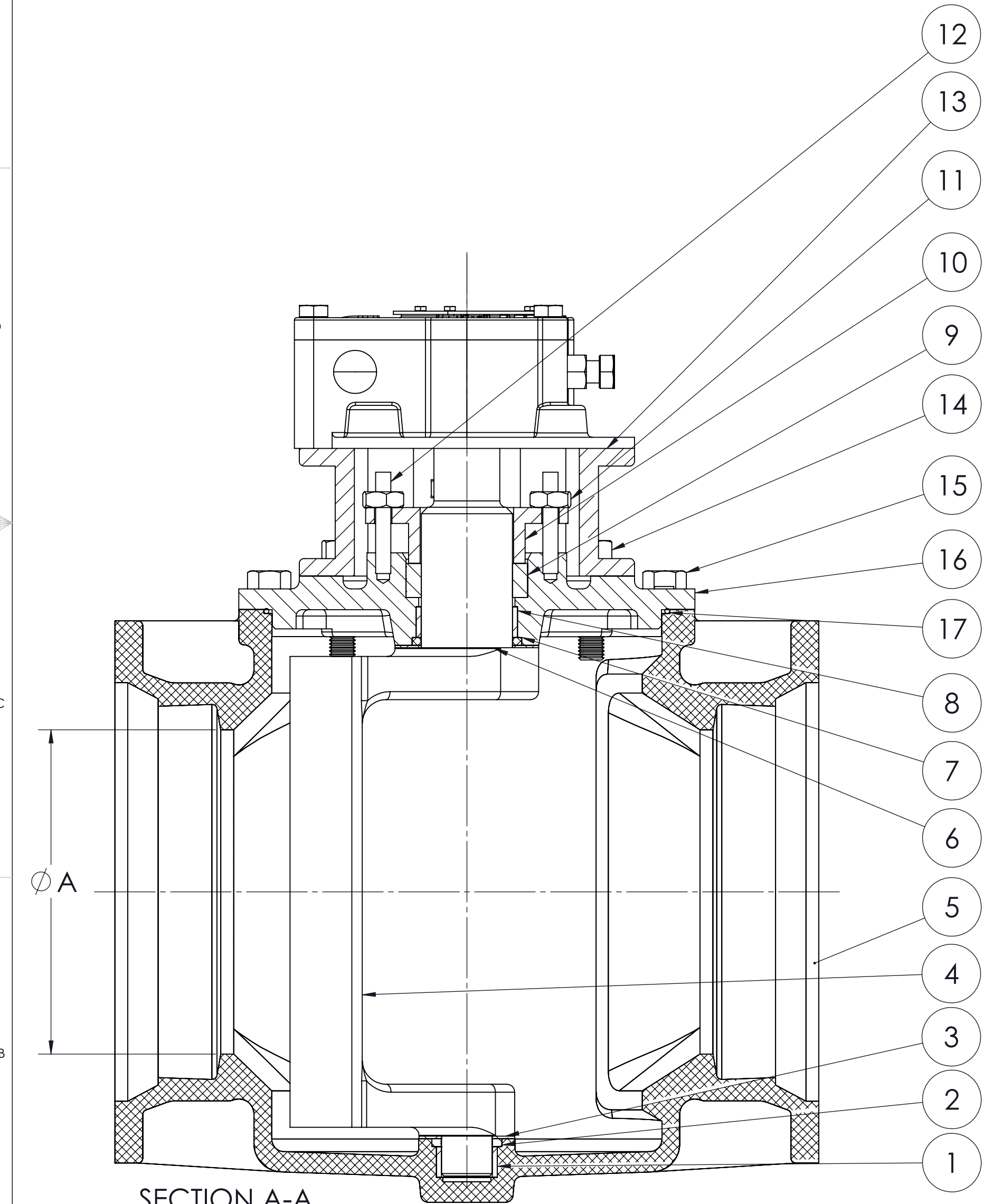
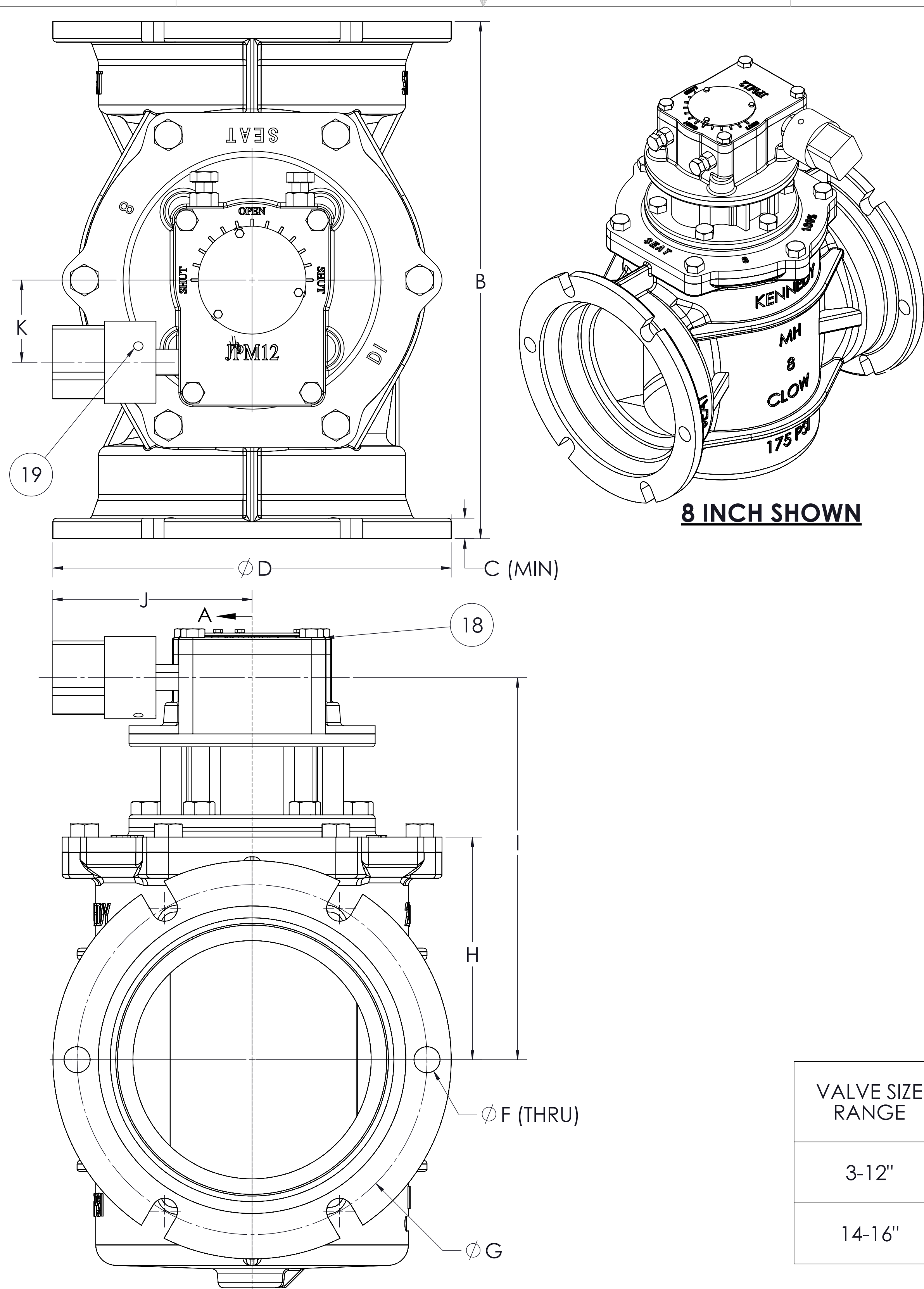


SECTION A-A
SCALE 1 : 2.5

A [VALVE SIZE]	B	C	D	E	F	G	H	I	J	K	WEIGHT [LBS.]	JPM GEAR	GEAR RATIO	# OF TURNS TO OPEN (APPROX.)
3	8.00	.75	7.50	4 x 5/8-11 ∇ .79	-	6.00	3.76	7.50	9.01	2.8	75 LBS	JPM12B	40	10
4	9.00	.94	9.00	4 x 5/8-11 ∇ .79	4 x .75	7.50	4.65	8.28	9.01	2.8	100 LBS	JPM12B	40	10
6	10.50	1.02	11.00	4 x 3/4-10 ∇ .79	4 x .81	9.50	5.78	10.30	9.41	2.8	165 LBS	JPM12FB	40	10
8	11.50	1.13	13.50	4 x 3/4-10 ∇ .79	4 x .88	11.75	7.48	12.54	9.41	2.8	230 LBS	JPM12FB	40	10
10	13.00	1.19	16.00	8 x 7/8-9 ∇ .79	4 x 1.00	14.25	8.88	14.02	10.08	3.9	340 LBS	JPM14B	53	13
12	14.00	1.26	19.00	8 x 7/8-9 ∇ .79	4 x 1.00	17.00	11.00	16.38	10.08	3.9	480 LBS	JPM14B	53	13
14	17.00	1.38	21.00	8 x 1-8 UNS ∇ 1.54	4 x 1.13	18.75	12.88	18.00	10.71	4.9	720 LBS	JPM15B	68	17
16	17.75	1.44	23.50	8 x 1-8 UNS ∇ 1.06	8 x 1.13	21.25	14.69	22.50	10.71	4.9	850 LBS	JPM15B	68	17

DRAWN	J CAPPER	3/28/2017	 KENNEDY VALVE Division of McWane, Inc. 1021 EAST WATKINS STREET ELMIRA, NEW YORK 14901
CHECKED	DB	3/29/2017	
APPROVED			TITLE:
DO NOT SCALE DRAWING			3"-16" "FULL FLOW" FLG EPV
MATERIAL: SEE TABLE			6412-FF w/ JPM Gear - OP NUT
Weight: SEE TABLE			SIZE DWG. NO. REV
			D SUB910401T 9
<small>PROPRIETARY AND CONFIDENTIAL</small> <small>THE INFORMATION CONTAINED IS THE SOLE PROPERTY OF KENNEDY VALVE CO. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF KENNEDY VALVE CO. IS PROHIBITED. DESIGN & INVENTION RIGHTS RESERVED.</small>			

REVISIONS			
REV.	DESCRIPTION	BY	DATE
1	RELEASED	J CAPPER	9/26/17
2	CORRECTED COVER "SEAT" LETTERING	J CAPPER	9/27/2017
3	ADDED 304 SS OPTION TO FASTENER MATERIAL	J CAPPER	8/13/2018
4	UPDATED J DIM, MADE FASTENERS 316 SS STANDARD, EDITED MARKINGS NOTE	J CAPPER	2/25/2019
5	ADDED GEAR RATIO & # OF TURNS TO TABLE, ALSO UPDATED WITH CORRECT BODY BODY MARKINGS	CAW	3/26/2019
6	REMOVED NON-DOM NOTE FROM TITLE BLOCK	J CAPPER	6/16/2019



SECTION A-A
SCALE 1 : 2.5

ITEM#	PART NAME	ASTM/ DESIGNATION	QTY.
1	LOWER SLEEVE BEARING	SINTERED ALLOY SS316	11
2	LOWER GRIT SEAL	NBR	1
3	LOWER THRUST WASHER	PTFE	1
4	PLUG	ASTM A536 GR.65-45-12 or GR.75-50-05 +NBR	1
5	BODY	ASTM A536 GR. 65-45-12 or 70-50-05	1
6	UPPER THRUST WASHER	PTFE	1
7	UPPER GRIT SEAL	NBR	1
8	UPPER SLEEVE BEARING	SINTERED ALLOY SS316	1
9	V-PACKING	NBR	1
10	FOLLOWER GLAND	ASTM A536 GR. 65-45-12 or 70-50-05	1
11	HEX NUTS	STAINLESS STEEL ASTM A276. T316	2
12	STUDS	STAINLESS STEEL ASTM A276.T316	2
13	ADAPTER	ASTM A536 GR. 65-45-12 or 70-50-05	1
14	ADAPTER BOLTS	STAINLESS STEEL ASTM A276.T316	6
15	COVER BOLTS	STAINLESS STEEL ASTM A276.T316	4
16	COVER	ASTM A536 GR. 65-45-12 or 70-50-05	1
17	COVER O-RING	NBR	1
18	JPM GEAR w/ OP NUT	-----	1
19	SLOT TYPE SPRING PIN	ASTM A29 1566	1

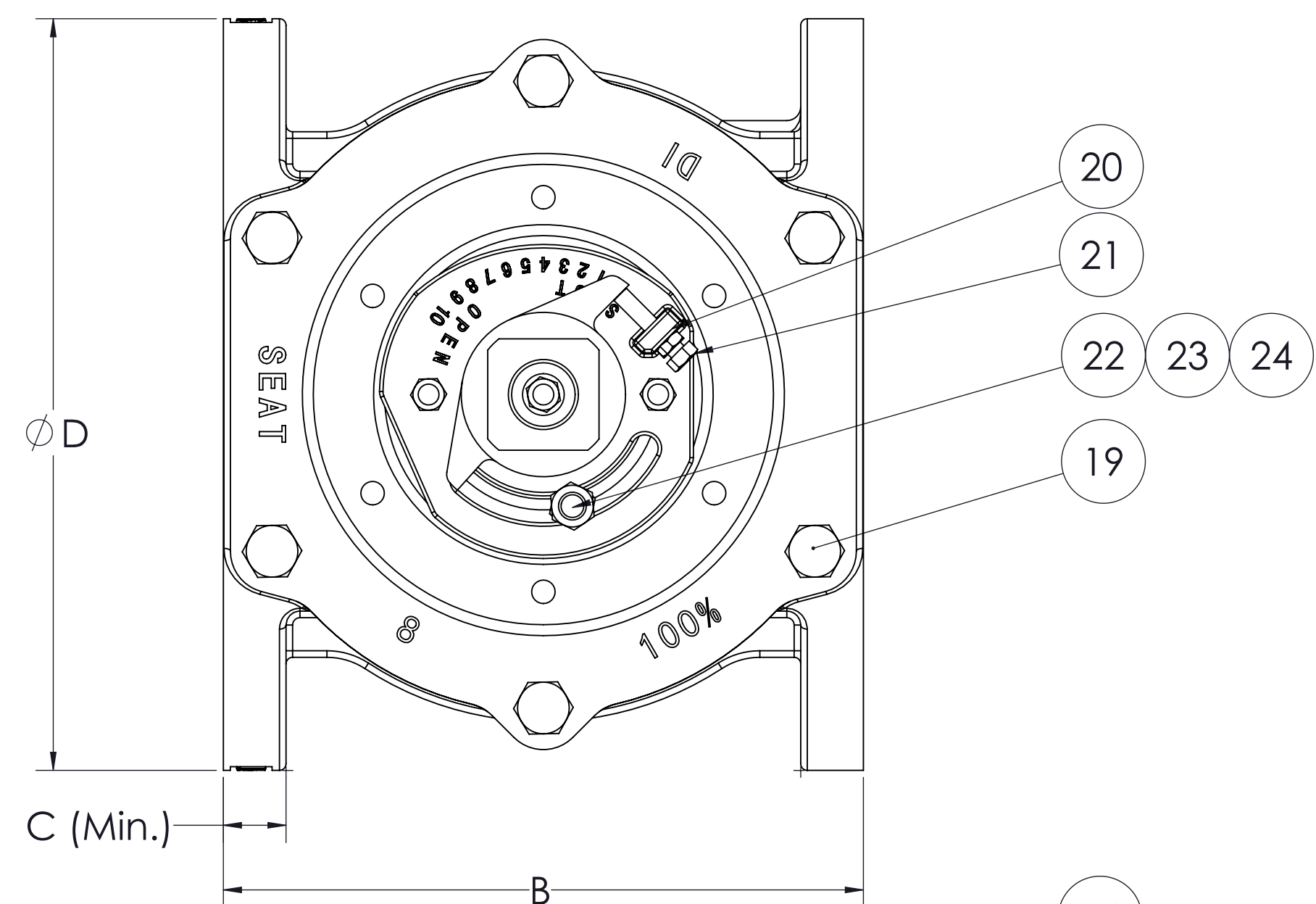
NOTE:
1. BODY CASTINGS ARE TRI-MARKED WITH "CLOW," "KENNEDY," AND "M&H"

VALVE SIZE RANGE	WATER WORKING PRESSURE (PSI)	HYDROSTATIC TEST (PSI)
3-12"	175	350
14-16"	150	300

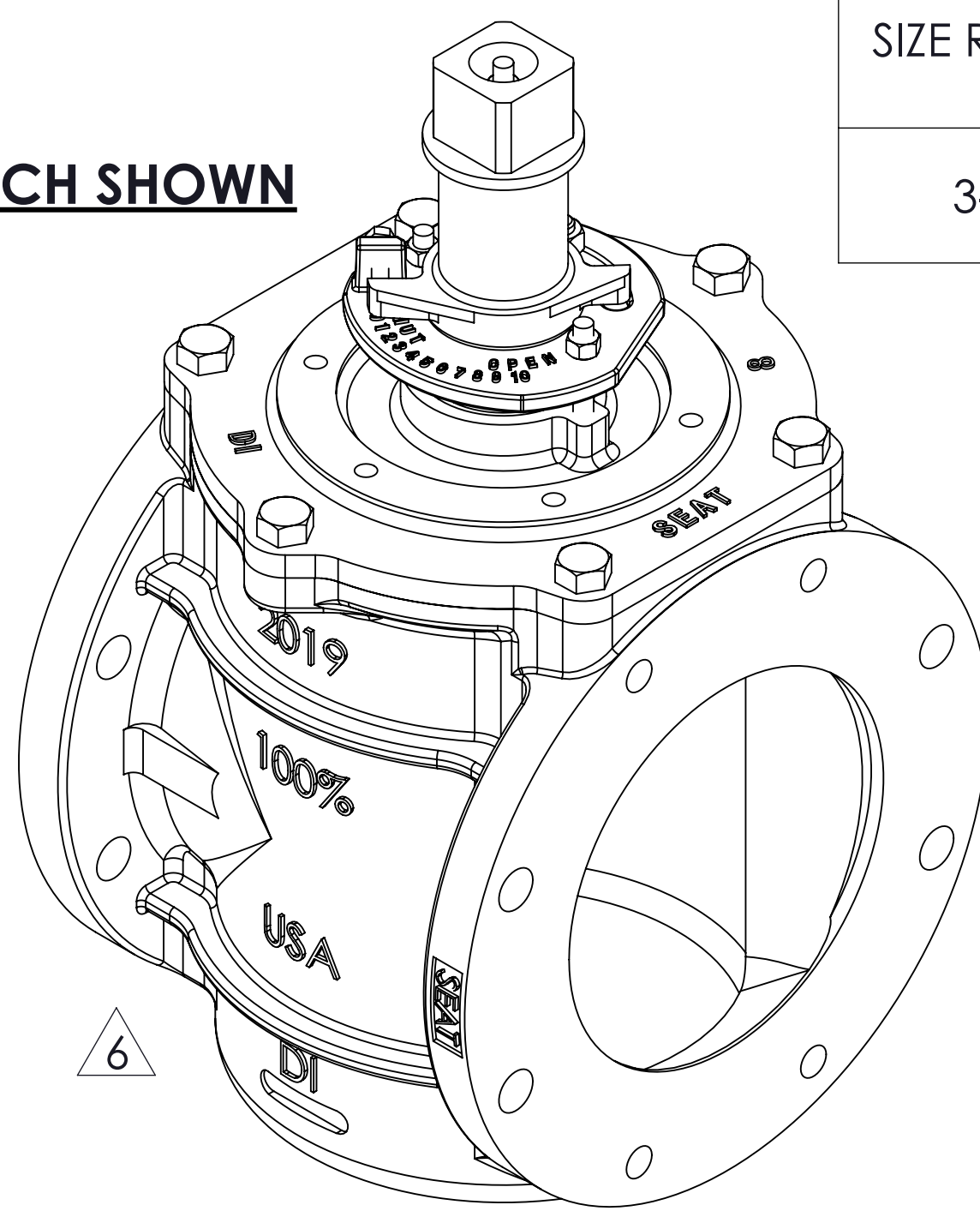
A [VALVE SIZE]	B	C	D	F	G	H	I	J	K	WEIGHT [LBS.]	JPM GEAR	GEAR RATIO	# OF TURNS TO OPEN (APPROX)
3	11.50	.58	Ø 7.62	4 x .75 THRU	Ø 6.19	3.76	7.50	9.01	2.8	75 LBS	JPM12B	40	10
4	14.25	.60	Ø 9.06	4 x .88 THRU	Ø 7.50	4.65	8.28	9.01	2.8	100 LBS	JPM12B	40	10
6	15.75	.63	Ø 11.06	6 x .88 THRU	Ø 9.50	5.78	10.30	9.41	2.8	165 LBS	JPM12FB	40	10
8	17.36	.66	Ø 13.39	6 x .88 THRU	Ø 11.75	7.48	12.54	9.41	2.8	230 LBS	JPM12FB	40	10
10	19.37	.70	Ø 15.62	8 x .88 THRU	Ø 14.25	8.88	14.02	10.08	3.9	340 LBS	JPM14B	53	13
12	20.75	.73	Ø 17.88	8 x .88 THRU	Ø 16.25	11.00	16.38	10.08	3.9	480 LBS	JPM14B	53	13
14	24.50	.79	Ø 20.25	10 x .88 THRU	Ø 18.75	12.88	18.00	10.71	4.9	720 LBS	JPM15B	68	17
16	27.25	.85	Ø 22.50	12 x .88 THRU	Ø 21.00	14.69	22.50	10.71	4.9	850 LBS	JPM15B	68	17

NOTE:
• FOR SERVICES WITH 3"- 8" PLUG VALVES IN EXCESS OF 25 PSI, USE OF A GEAR IS RECOMMENDED.
• GEAR MODEL AND BRAND ARE SUBJECT TO CHANGE WITHOUT NOTICE.

DRAWN	J CAPPER	DATE	9/26/17	KENNEDY VALVE Division of McWane, Inc. <small>1021 EAST WATE STREET ELMIRA, NEW YORK 14901</small>
CHECKED				
APPROVED				
DO NOT SCALE DRAWING				
MATERIAL: SEE TABLE				TITLE:
Weight: SEE TABLE				3"-16" "FULL FLOW" MJ EPV 6412-FF w/ JPM Gear - OP NUT
SIZE				DWG. NO.
D				SUB910444T
				REV
				6
<small>PROPRIETARY AND CONFIDENTIAL</small> <small>THE INFORMATION CONTAINED IS THE SOLE PROPERTY OF KENNEDY VALVE CO. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF KENNEDY VALVE CO. IS PROHIBITED. DESIGN & INVENTION RIGHTS RESERVED.</small>				SHEET 1 OF 1

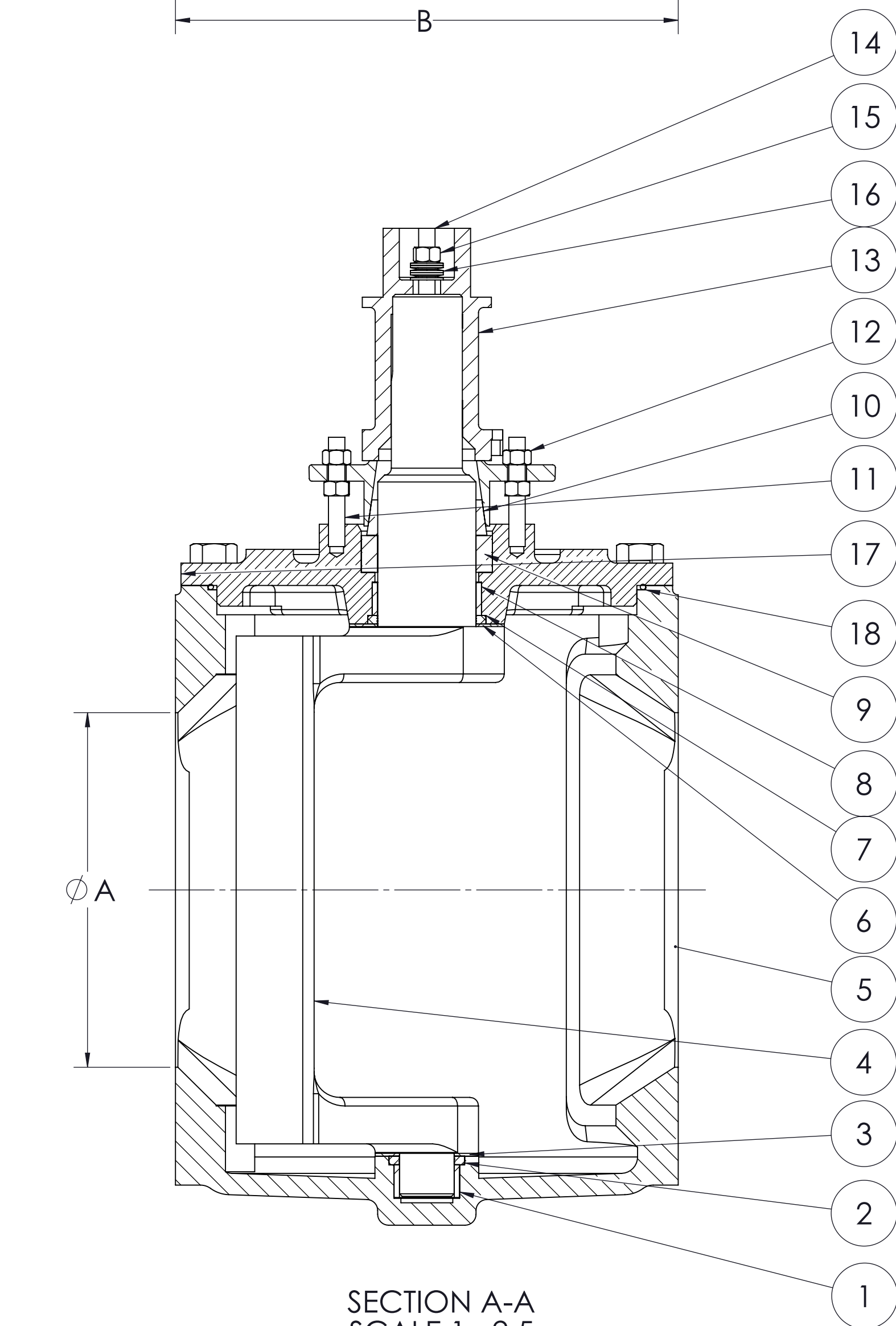


8 INCH SHOWN

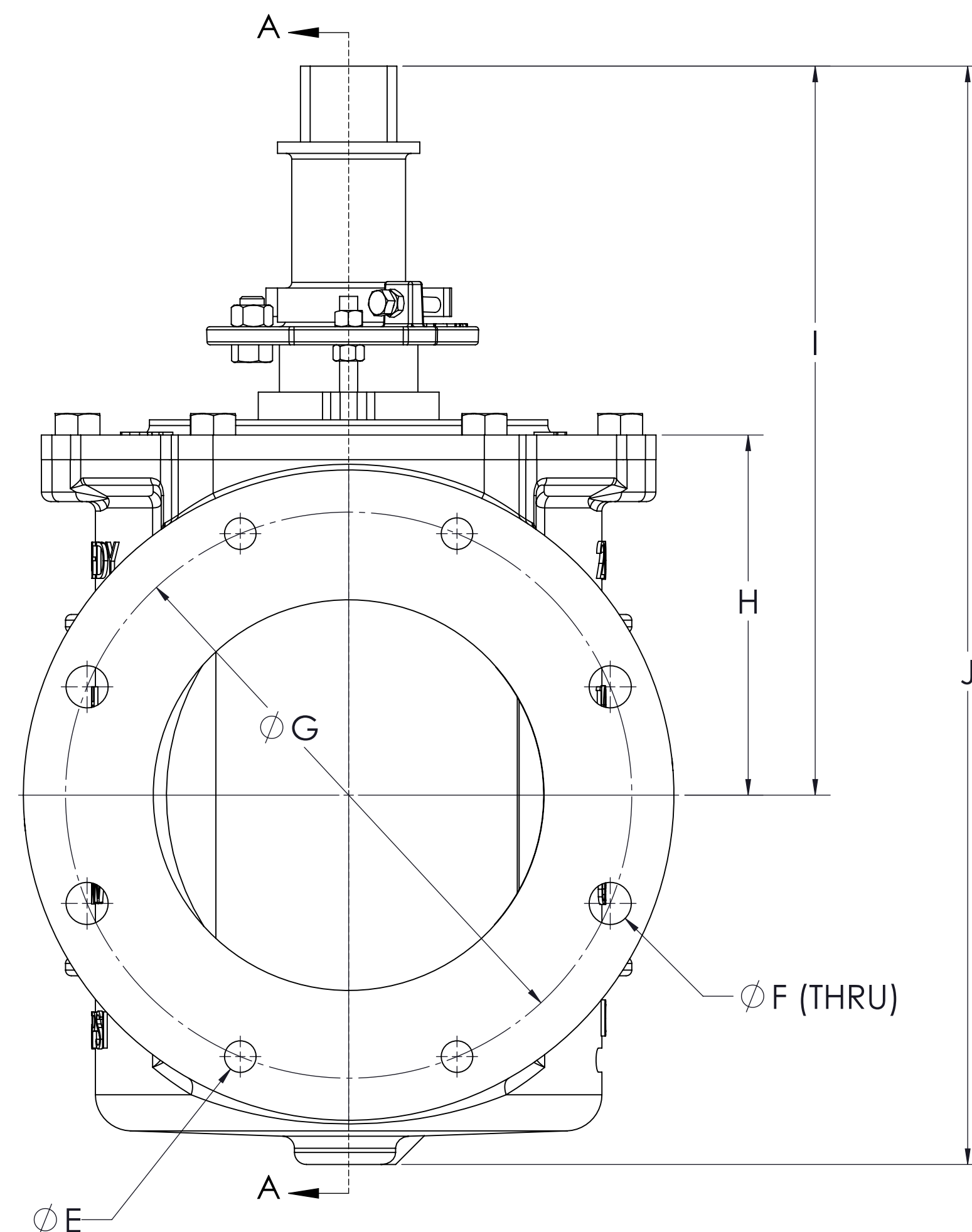


SIZE RANGE	WATER WORKING PRESSURE PSI	HYDROSTATIC TEST PSI
3-12	175 PSI	350 PSI

ITEM#	PART NAME	ASTM/ DESIGNATION	QTY.
1	LOWER SLEEVE BEARING	SINTERED ALLOY SS316	11
2	LOWER GRIT SEAL	NBR	1
3	LOWER THRUST WASHER	PTFE	1
4	PLUG	ASTM A536 GR.65-45-12 or GR.75-50-05 +NBR	1
5	BODY	ASTM A536 GR. 65-45-12 or 70-50-05	1
6	UPPER THRUST WASHER	PTFE	1
7	UPPER GRIT SEAL	NBR	1
8	UPPER SLEEVE BEARING	SINTERED ALLOY SS316	1
9	V-PACKING	NBR	1
10	BRAKE	PPS 40% GLASS FILLED	1
11	COVER STUDS	STAINLESS STEEL ASTM A276.T316	4
12	COVER STUD HEX NUTS	STAINLESS STEEL ASTM A276.T316	2
13	2" SQ. OP-NUT	ASTM A536 GR. 65-45-12 or 70-50-05	1
14	PLUG STEM STUD	STAINLESS STEEL ASTM A276.T316	1
15	HEX LOCKING NUT	STAINLESS STEEL ASTM A276.T316	1
16	DISC SPRING WASHER	STAINLESS STEEL ASTM A276.T316	5
17	COVER	ASTM A536 GR. 65-45-12 or 70-50-05	1
18	COVER O-RING	NBR	1
19	COVER BOLTS	STAINLESS STEEL ASTM A276.T316	4
20	HEX JAM NUT	STAINLESS STEEL ASTM A276.T316	1
21	FOLLOWER SQ. HEAD SET SCREW	STAINLESS STEEL ASTM A276.T316	1
22	SOCKET HEAD CAPSCREW	STAINLESS STEEL ASTM A276.T316	1
23	WASHER	STAINLESS STEEL ASTM A276.T316	1
24	HEX JAM NUT	STAINLESS STEEL ASTM A276.T316	1



SECTION A-A
SCALE 1 : 2.5

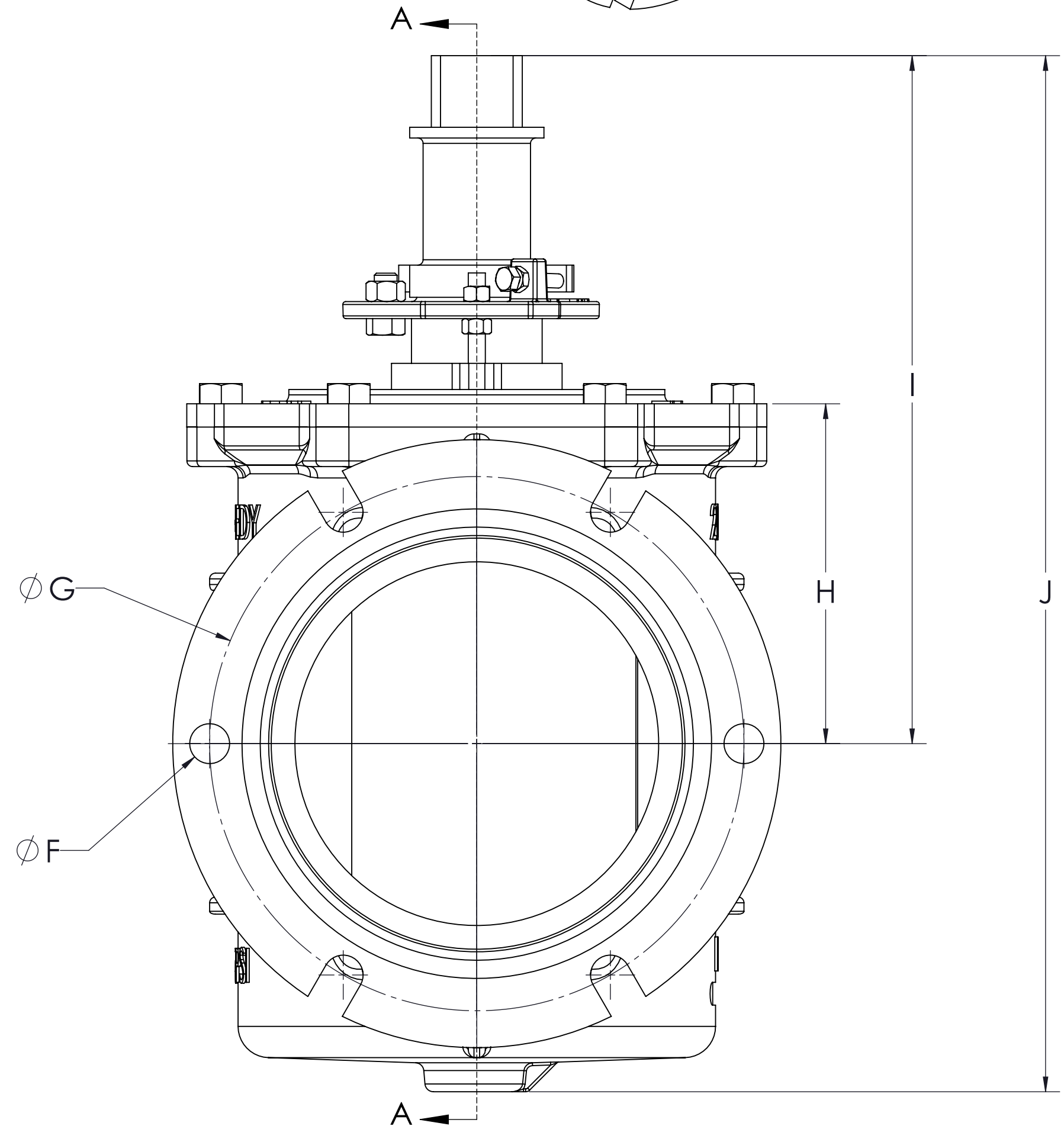
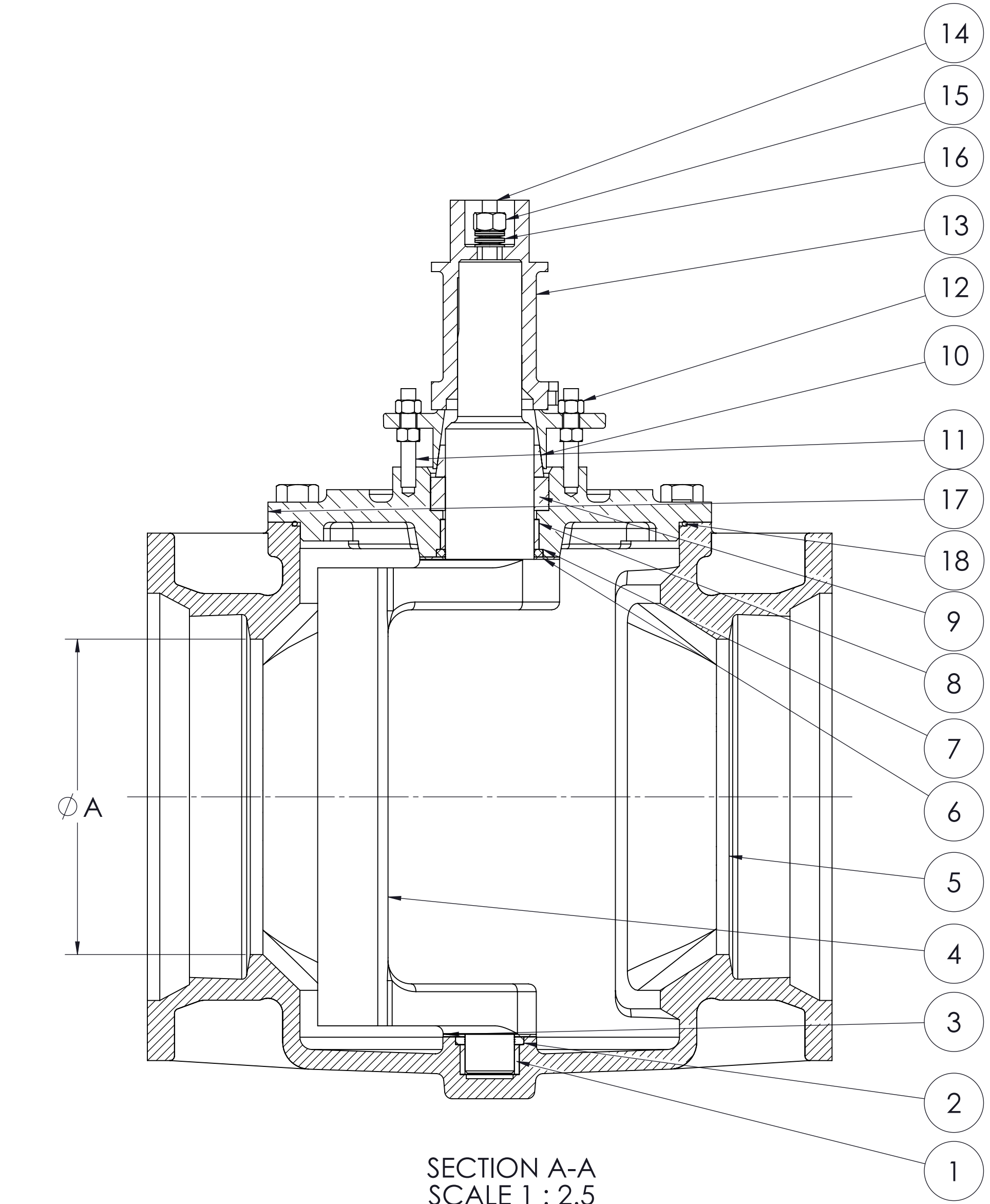
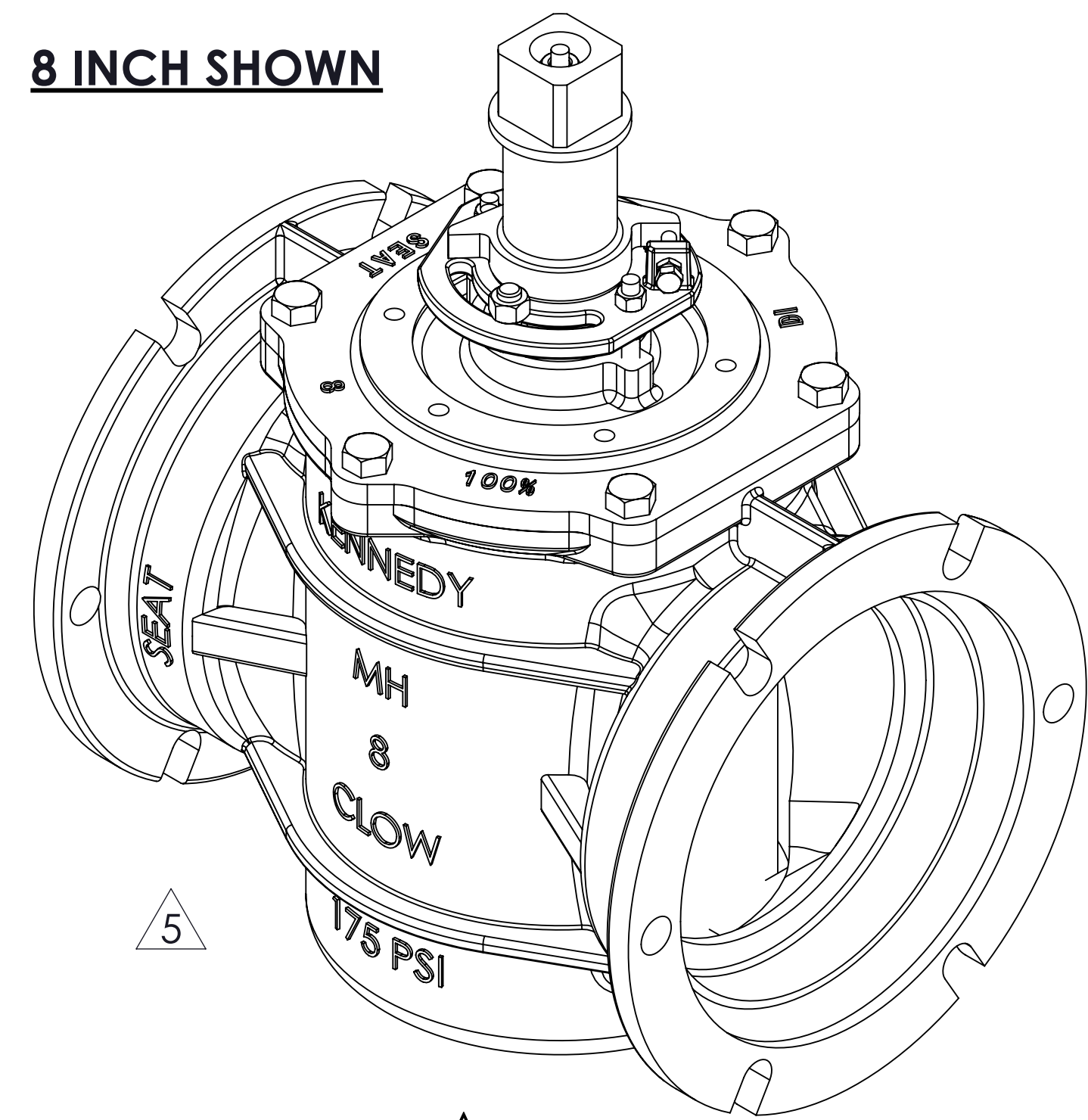
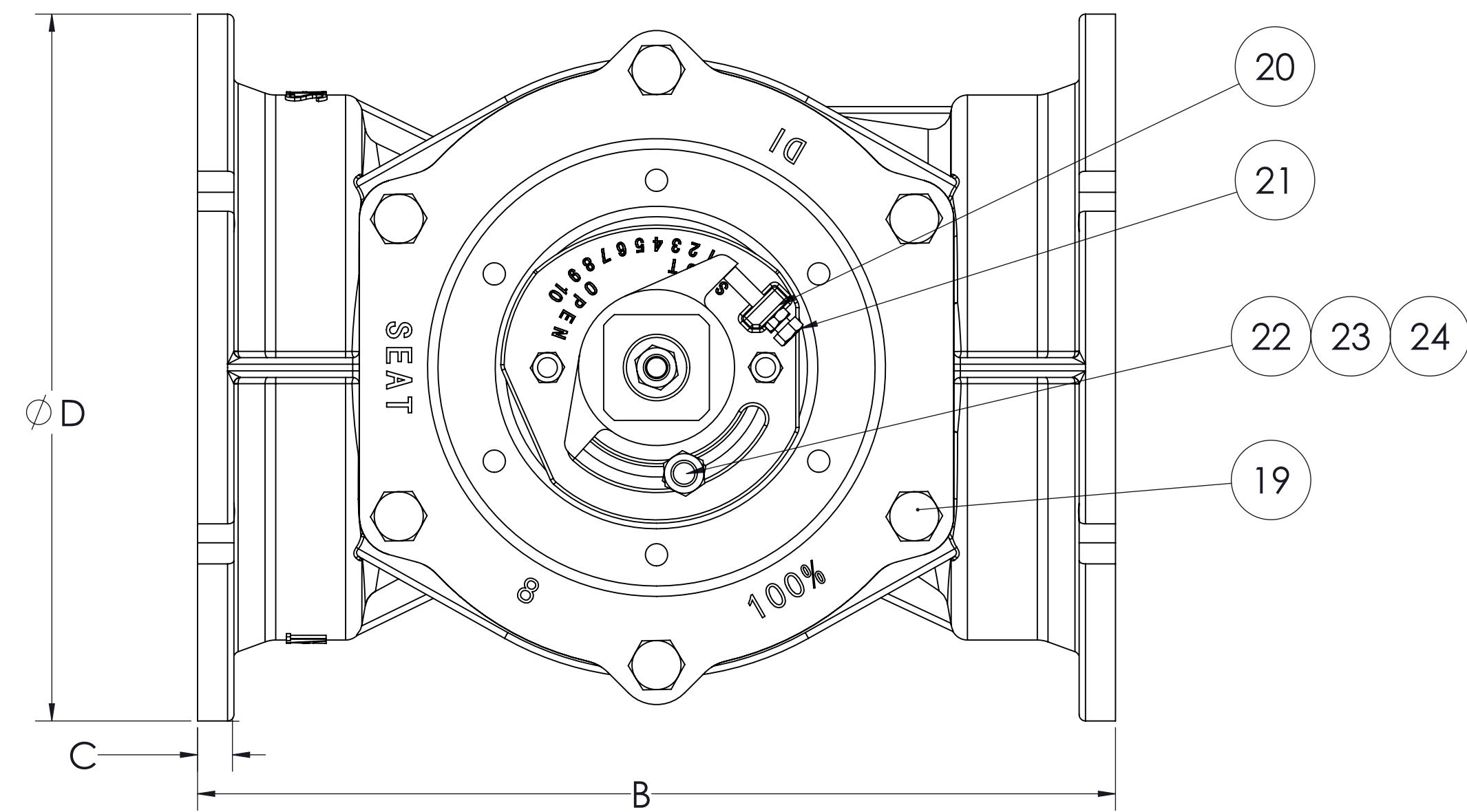


- NOTE:
- BODY CASTINGS ARE TRI-MARKED WITH "CLOW," "KENNEDY," AND "M&H"
 - 2" OP NUT ACCEPTS STANDARD 2" LEVER/WRENCH
 - FOR SERVICES IN EXCESS OF 25 PSI, USE OF A GEAR IS RECOMMENDED

A [VALVE SIZE]	B	C	D	E	F	G	H	I	J	WEIGHT [LBS.]
3	8.00	.75	7.50	4 x 5/8-11 ∇ .79	-	6.00	3.76	9.38	13.24	50 LBS
4	9.00	.94	9.00	4 x 5/8-11 ∇ .79	4 x .75	7.50	4.65	10.15	14.86	75 LBS
6	10.50	1.02	11.00	4 x 3/4-10 ∇ .79	4 x .81	9.50	5.78	12.96	18.75	125 LBS
8	11.50	1.13	13.50	4 x 3/4-10 ∇ .79	4 x .88	11.75	7.48	15.13	22.79	185 LBS

REVISIONS			
REV.	DESCRIPTION	BY	DATE
2	ADDED 316SS FASTENERS TO BOM AND ADDED NOTE PER CUSTOMER REQUEST	CAW	9/1/2015
3	ATTACHED LEVER	ML	10/8/2015
4	ADDED LEVER OPTION NOTE, PRESSURE NOTE	J CAPPER	7/26/2018
5	MADE FASTENERS 316SS STANDARD, EDITED MARKING NOTE	J CAPPER	2/26/2019
6	UPDATED WITH CORRECT BODY MARKINGS	CAW	3/26/2019

NAME	DATE	 KENNEDY VALVE Division of McWane, Inc. <small>1021 EAST WATKINS STREET ELMIRA, NEW YORK 14901</small>
DRAWN CAW	7/15/2015	
CHECKED ML	8/7/2015	
APPROVED		
DO NOT SCALE DRAWING		TITLE:
MATERIAL: SEE TABLE		3"-8" "FULL FLOW" FLG EPV (6412-FF) w/ 2" OP-NUT (LEVER OPTION)
Weight: SEE TABLE		SIZE DWG. NO. REV
		D SUB910245T 6
<small>PROPRIETARY AND CONFIDENTIAL</small> <small>THE INFORMATION CONTAINED IS THE SOLE PROPERTY OF KENNEDY VALVE CO. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF KENNEDY VALVE CO. IS PROHIBITED. DESIGN & INVENTION RIGHTS RESERVED.</small>		
		SHEET 1 OF 1



SECTION A-A
SCALE 1 : 2.5

NOTE: FOR SERVICES IN EXCESS OF 25 PSI,
USE OF A GEAR IS RECOMMENDED

ITEM#	PART NAME	ASTM/ DESIGNATION	QTY.
1	LOWER SLEEVE BEARING	SINTERED ALLOY SS316	11
2	LOWER GRIT SEAL	NBR	1
3	LOWER THRUST WASHER	PTFE	1
4	PLUG	ASTM A536 GR.65-45-12 or GR.75-50-05 +NBR	1
5	BODY	ASTM A536 GR. 65-45-12 or 70-50-05	1
6	UPPER THRUST WASHER	PTFE	1
7	UPPER GRIT SEAL	NBR	1
8	UPPER SLEEVE BEARING	SINTERED ALLOY SS316	1
9	V-PACKING	NBR	1
10	BRAKE	PPS 40% GLASS FILLED	1
11	COVER STUDS	STAINLESS STEEL ASTM A276.T316	4
12	COVER STUD HEX NUTS	STAINLESS STEEL ASTM A276.T316	2
13	2" SQ. OP-NUT	ASTM A536 GR. 65-45-12 or 70-50-05	1
14	PLUG STEM STUD	STAINLESS STEEL ASTM A276.T316	1
15	HEX LOCKING NUT	STAINLESS STEEL ASTM A276.T316	1
16	DISC SPRING WASHER	STAINLESS STEEL ASTM A276.T316	5
17	COVER	ASTM A536 GR. 65-45-12 or 70-50-05	1
18	COVER O-RING	NBR	1
19	COVER BOLTS	STAINLESS STEEL ASTM A276.T316	4
20	HEX JAM NUT	STAINLESS STEEL ASTM A276.T316	1
21	FOLLOWER SQ. HEAD SET SCREW	STAINLESS STEEL ASTM A276.T316	1
22	SOCKET HEAD CAPSCREW	STAINLESS STEEL ASTM A276.T316	1
23	WASHER	STAINLESS STEEL ASTM A276.T316	1
24	HEX JAM NUT	STAINLESS STEEL ASTM A276.T316	1

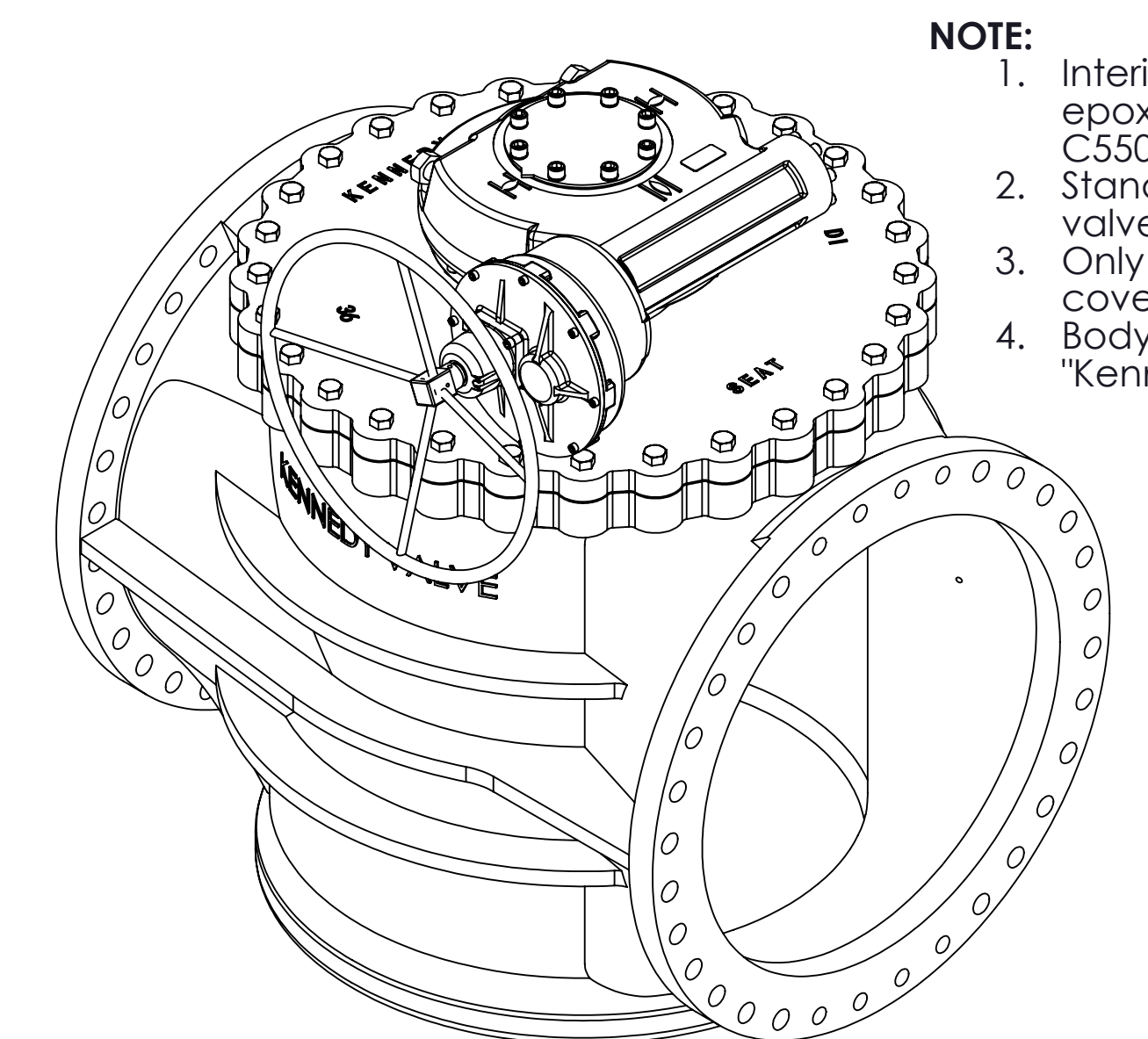
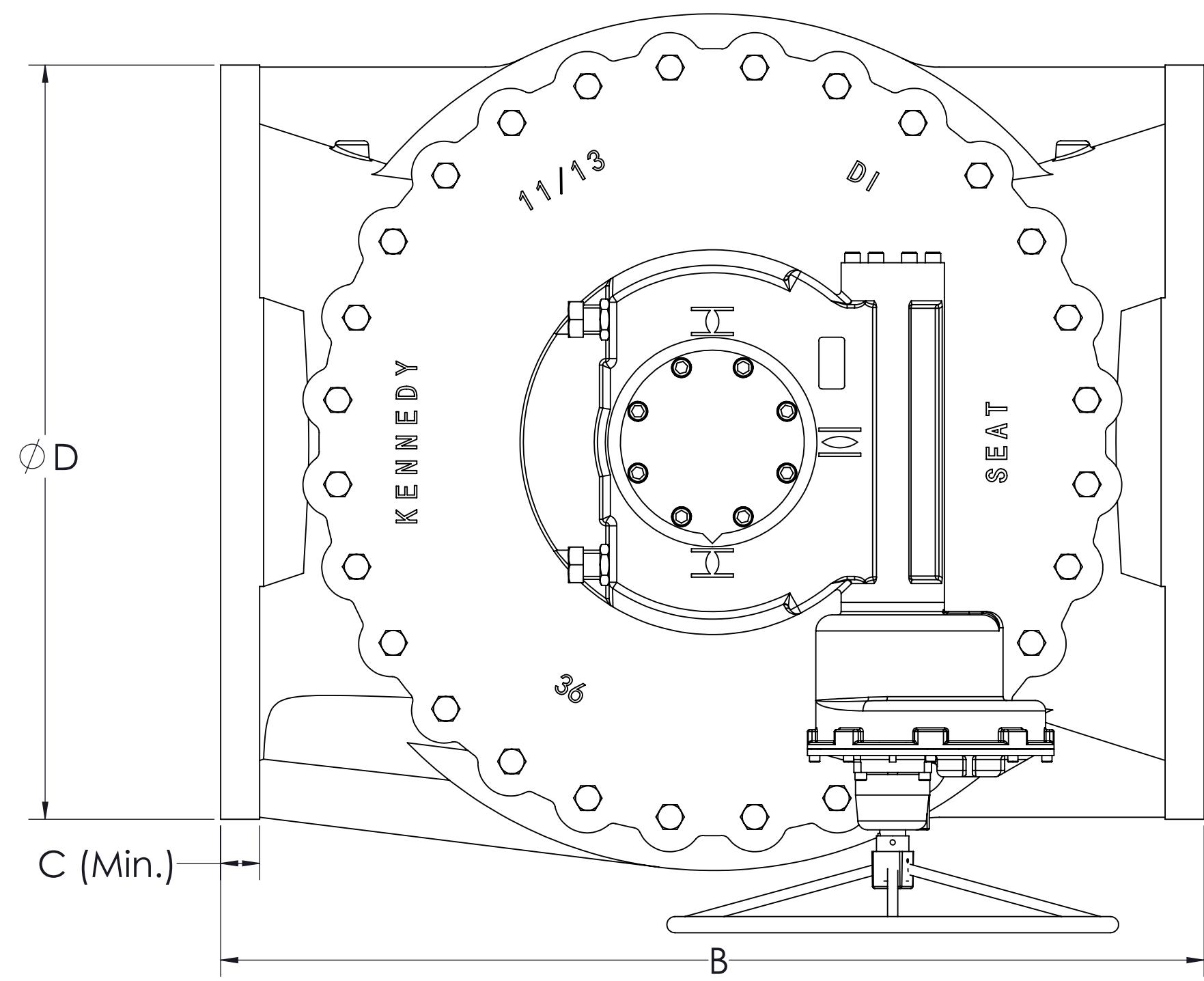
NOTE:
1. BODY CASTINGS ARE TRI-MARKED WITH "CLOW," "KENNEDY," AND "M&H"

REVISIONS			
REV.	DESCRIPTION	BY	DATE
2	ADDED 316SS FASTENERS TO BOM AND ADDED NOTE PER REQUEST CUSTOMER REQUEST	CAW	9/1/2015
3	ADDED PRESSURE NOTE	J CAPPER	7/26/2018
4	MADE FASTENERS 316SS STANDARD, EDITED MARKINGS NOTE	J CAPPER	2/26/2019
5	UPDATED WITH CORRECT BODY MARKINGS	CAW	3/26/2019

DRAWN	NAME	DATE	KENNEDY VALVE Division of McWane, Inc. <small>1021 EAST WATKINS STREET ELMIRA, NEW YORK 14901</small>
CHECKED	CAW	7/20/2015	
APPROVED	ML	8/8/2015	TITLE:
DO NOT SCALE DRAWING			3"-8" "FULL FLOW" MJ EPV (6413-FF) w/ 2" OP-NUT
MATERIAL: SEE TABLE			SIZE DWG. NO. REV
Weight: SEE TABLE			D SUB910208T 5
<small>PROPRIETARY AND CONFIDENTIAL</small> <small>THE INFORMATION CONTAINED IS THE SOLE PROPERTY OF KENNEDY VALVE CO. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF KENNEDY VALVE CO. IS PROHIBITED. DESIGN & INVENTION RIGHTS RESERVED.</small>			

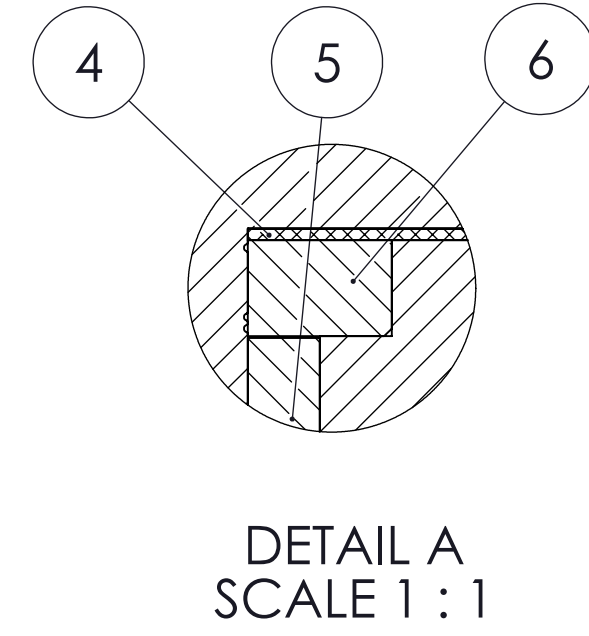
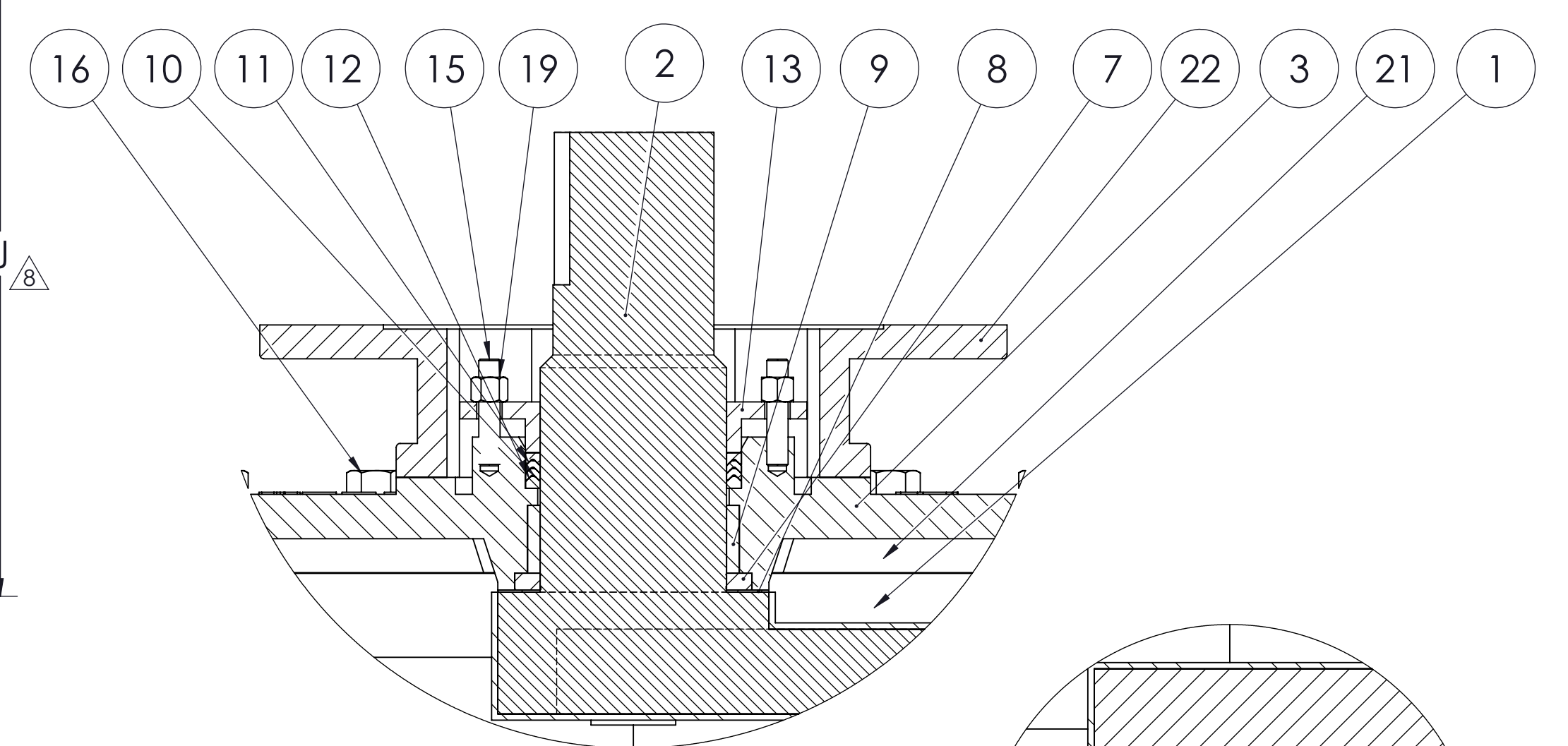
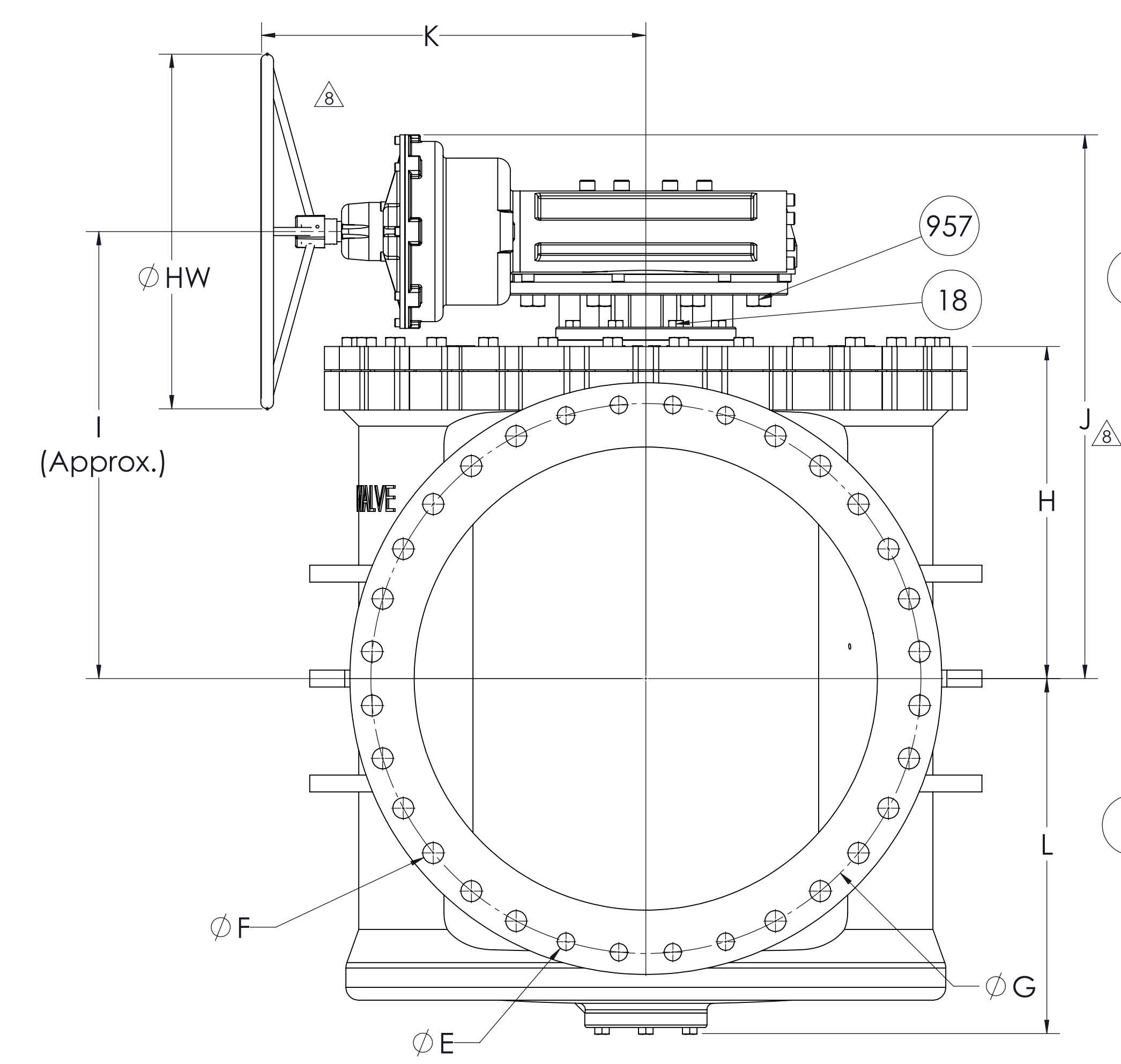
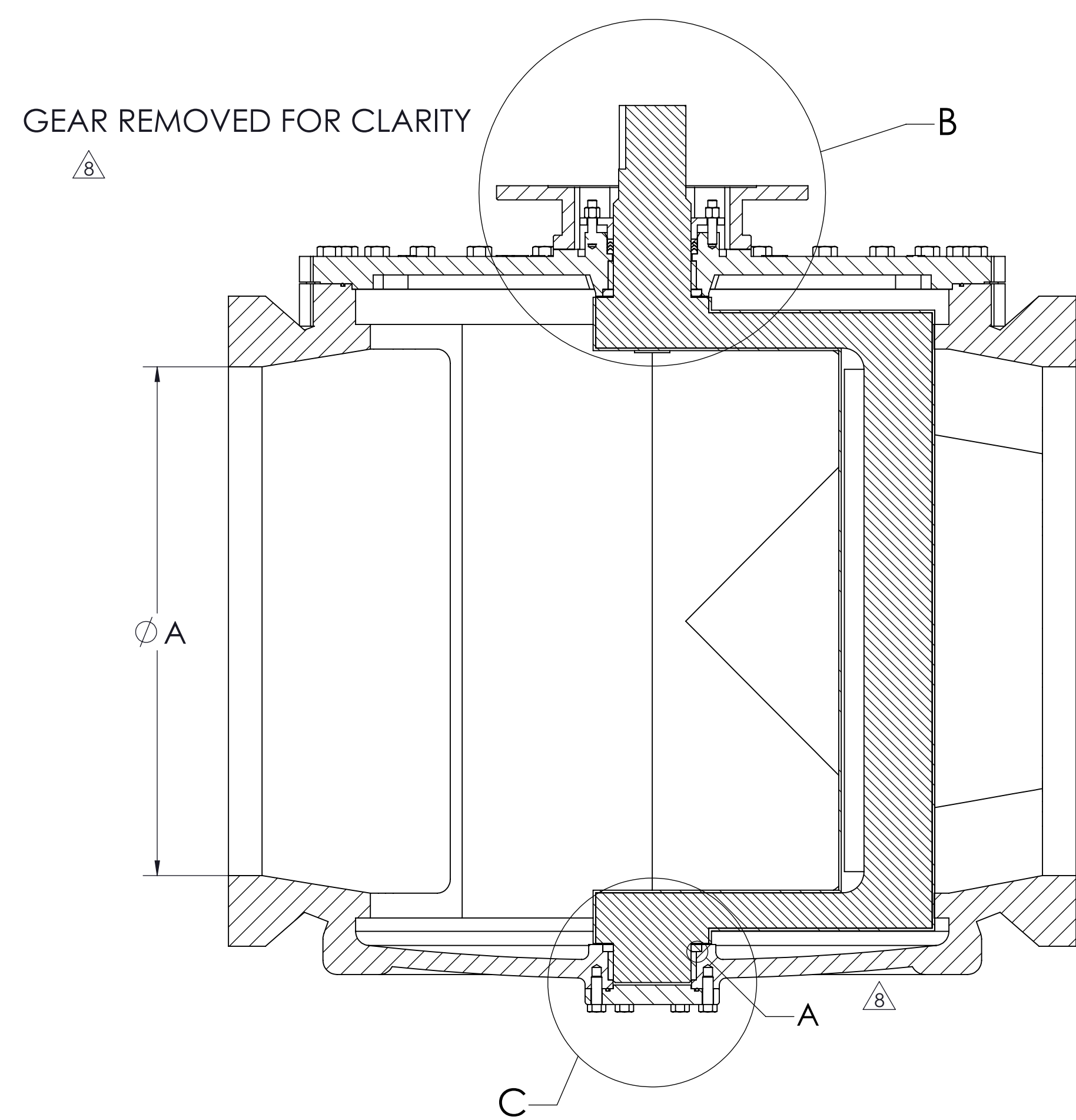
A [VALVE SIZE]	B	C	D	F	G	H	I	J	WEIGHT [LBS.]
3	11.50	.58	Ø 7.62	4 x .75 THRU	Ø 6.19	3.76	9.38	13.24	70 LBS
4	14.25	.60	Ø 9.06	4 x .88 THRU	Ø 7.50	4.65	10.15	14.86	100 LBS
6	15.75	.63	Ø 11.06	6 x .88 THRU	Ø 9.50	5.78	12.96	18.75	145 LBS
8	17.36	.66	Ø 13.39	6 x .88 THRU	Ø 11.75	7.48	15.13	22.79	200 LBS

SIZE RANGE	WATER WORKING PRESSURE PSI	HYDROSTATIC TEST PSI
3-12	175 PSI	350 PSI

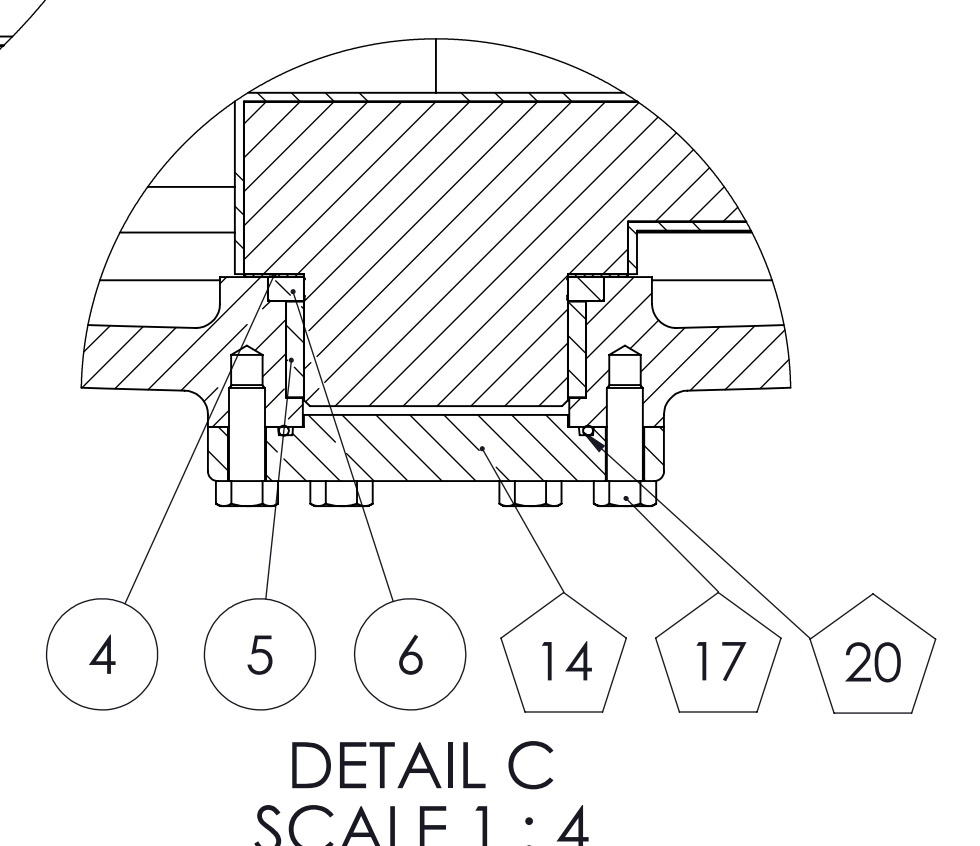


- NOTE:**
1. Interior and exterior ferrous metal surfaces epoxy coated to comply with the AWWA C550 Standard.
 2. Standard with handwheel on flanged valves.
 3. Only 30" and 36" valves have a bottom cover plate (see pentagon ballon items).
 4. Body castings are tri-marked with "Clow," "Kennedy," and "M&H"

ITEM NO.	DESCRIPTION	MATERIAL
1	BODY	ASTM A536 GR. 65-45-12 OR 70-50-05
2	PLUG	ASTM A536 GR. 65-45-12 OR 70-50-05+NBR
3	COVER	ASTM A536 GR. 65-45-12 OR 70-50-05
4	BOTTOM THRUST WASHER	PTFE
5	BOTTOM BEARING	SINTERED ALLOY SS316
6	GRIT GUARD SHAFT SEAL (LOWER)	NBR
7	GRIT GUARD SHAFT SEAL (UPPER)	NBR
8	UPPER THRUST WASHER	PTFE
9	UPPER BEARING WASHER	SINTERED ALLOY SS316
10	V2-PACKING-AN6225-55	NBR
11	V2-TOP-PACKING-AN6225-55	NBR
12	V-BOTTOM-PACKING-AN6225-55	NBR
13	FP GLAND (FOR ACTUATOR)	ASTM A536 GR. 65-45-12 OR 70-50-05
14	BOTTOM COVER	ASTM A536 GR. 65-45-12 OR 70-50-05
15	COVER STUDS	STAINLESS STEEL ASTM A276.T316
16	HEXAGON COVER BOLTS	STAINLESS STEEL ASTM A276.T316
17	BOTTOM COVER BOLTS	STAINLESS STEEL ASTM A276.T316
18	HEXAGON ADAPTER BOLTS	STAINLESS STEEL ASTM A276.T316
19	HEX NUT	STAINLESS STEEL ASTM A276.T316
20	O-RING - BOTTOM COVER	NBR
21	O-RING - TOP COVER	NBR
22	FP ADAPTER - CLOSE	ASTM A536 GR. 65-45-12 OR 70-50-05
49	ROTORK GEAR w/ HW	-
957	GEAR BOLTS	STAINLESS STEEL ASTM A276.T316




DETAIL B
SCALE 1 : 4



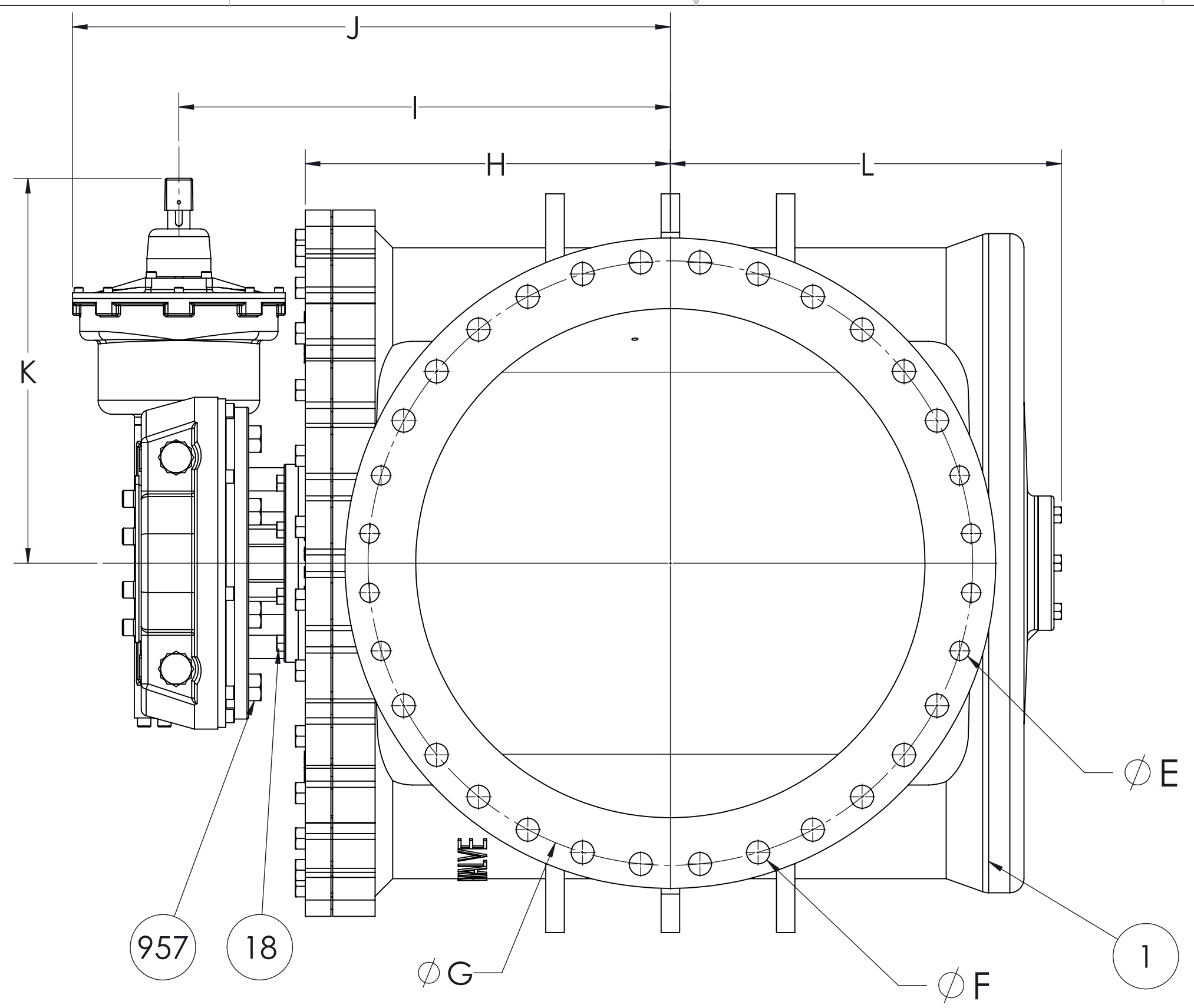
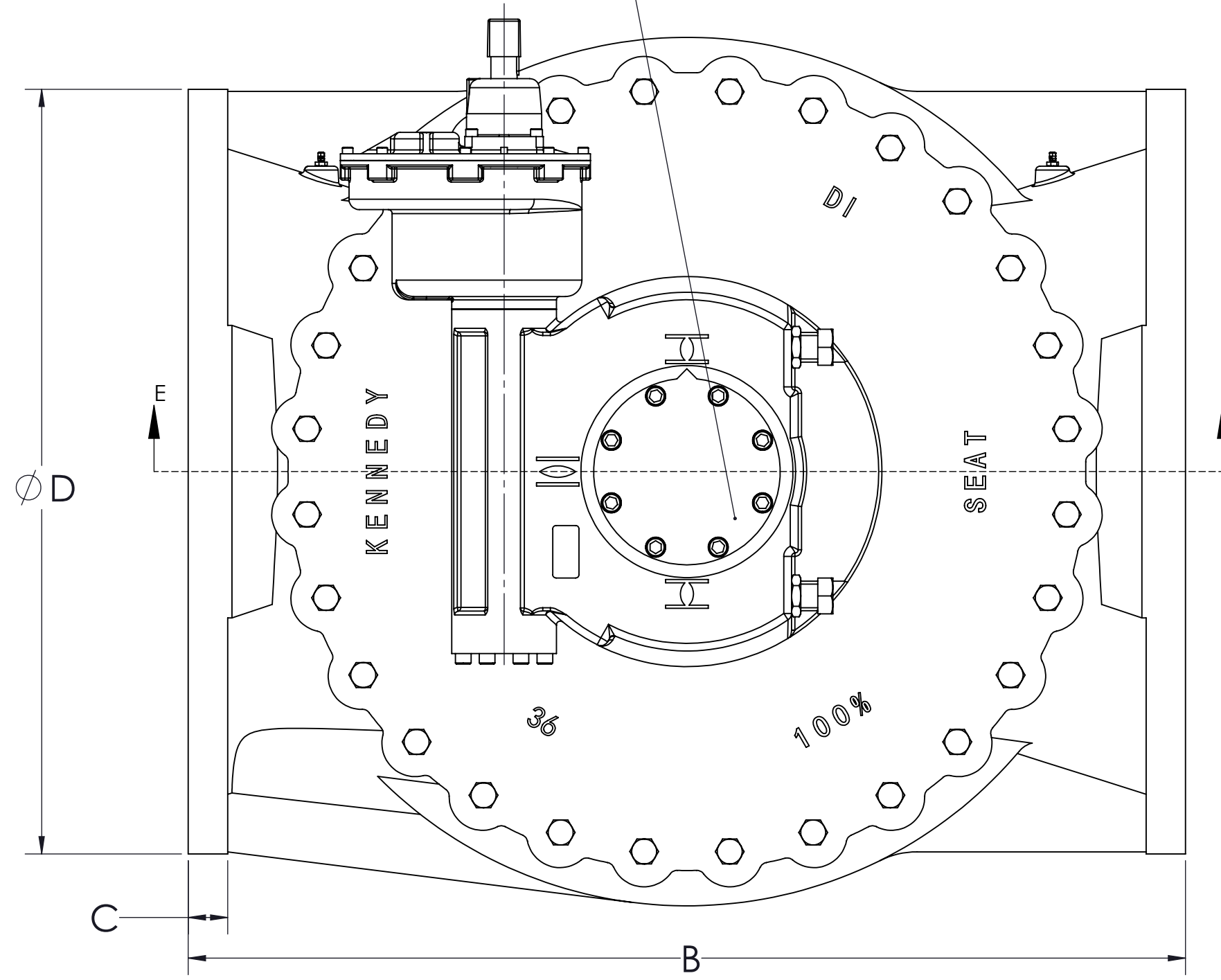
DETAIL C
SCALE 1 : 4

A [VALVE SIZE]	B	C	D	E	F	G	H	I	J	K	L	WEIGHT [LBS]	ROTORK GEAR	GEAR RATIO	TURNS TO OPEN (APPROX)	Ø HW	WATER WORKING PRESSURE PSI	HYDROSTATIC TEST PSI
18	21.50	1.58	Ø 25.00	8 x 1.13-7 UNS-2B ▽ 1.50	8 x Ø 1.25 THRU	Ø 22.75	16.42	21.50	27.6	17.7	18.3	1270	IW6 AWWA-IP68	152:1	38	30.0	150 PSI	300 PSI
20	23.50	1.69	Ø 27.50	8 x 1.13-7 UNS-2B ▽ 1.25	12 x Ø 1.25 THRU	Ø 25.00	17.09	22.25	28.6	17.4	1545	IW6 AWWA-IP68	228:1	57				
24	42.00	1.88	Ø 32.00	8 x 1.25-7 UNS-2B ▽ 2.00	12 x Ø 1.38 THRU	Ø 29.50	21.06	28.00	35.4	23.8	21.8	3429	IW7 AWWA-IP68	384:1	96			
30	51.00	2.13	Ø 38.75	8 x 1.25-7 UNS-2B ▽ 2.63	20 x Ø 1.38 THRU	Ø 36.00	22.19	30.69	37.2	29.9	22.5	6145	IW9 AWWA-IP68	696:1	174			
36	60.00	2.38	Ø 46.00	8 x 1.50-6 UNS-2B ▽ 3.50	24 x Ø 1.63 THRU	Ø 42.75	25.81	34.75	42.3	29.9	27.7	8532	IW9 AWWA-IP68	928:1	232	40.0		

ZONE	REV.	DESCRIPTION	DATE	APPROVED
1	1	RELEASED	8/6/15	ML
2	2	UPDATED TABLE FOR GEARING	8/14/2015	CW
3	3	ADDED NOTE FOR 316SS FASTENERS	9/14/2015	ML
4	4	ADDED 48" QUOTING DIMENSIONS	4/20/2016	CAW
5	5	UPDATED 48 INCH OAL FROM 80" TO 84"	5/4/2016	ML
6	6	UPDATED 36 INCH TABLE "F" TO 24X FROM 36X	8/18/2016	ML
7	7	REMOVED CV VALUES	3/30/2017	DPB
8	8	GEAR WAS IW82: 960:1: F700 HANDWHEEL	4/11/19	DB
9	9	UPDATED PLUG ORIENTATION, TABLE, NOTE, BOM, AND ADDED MISSING DIMENSIONS	6/5/19	CAW

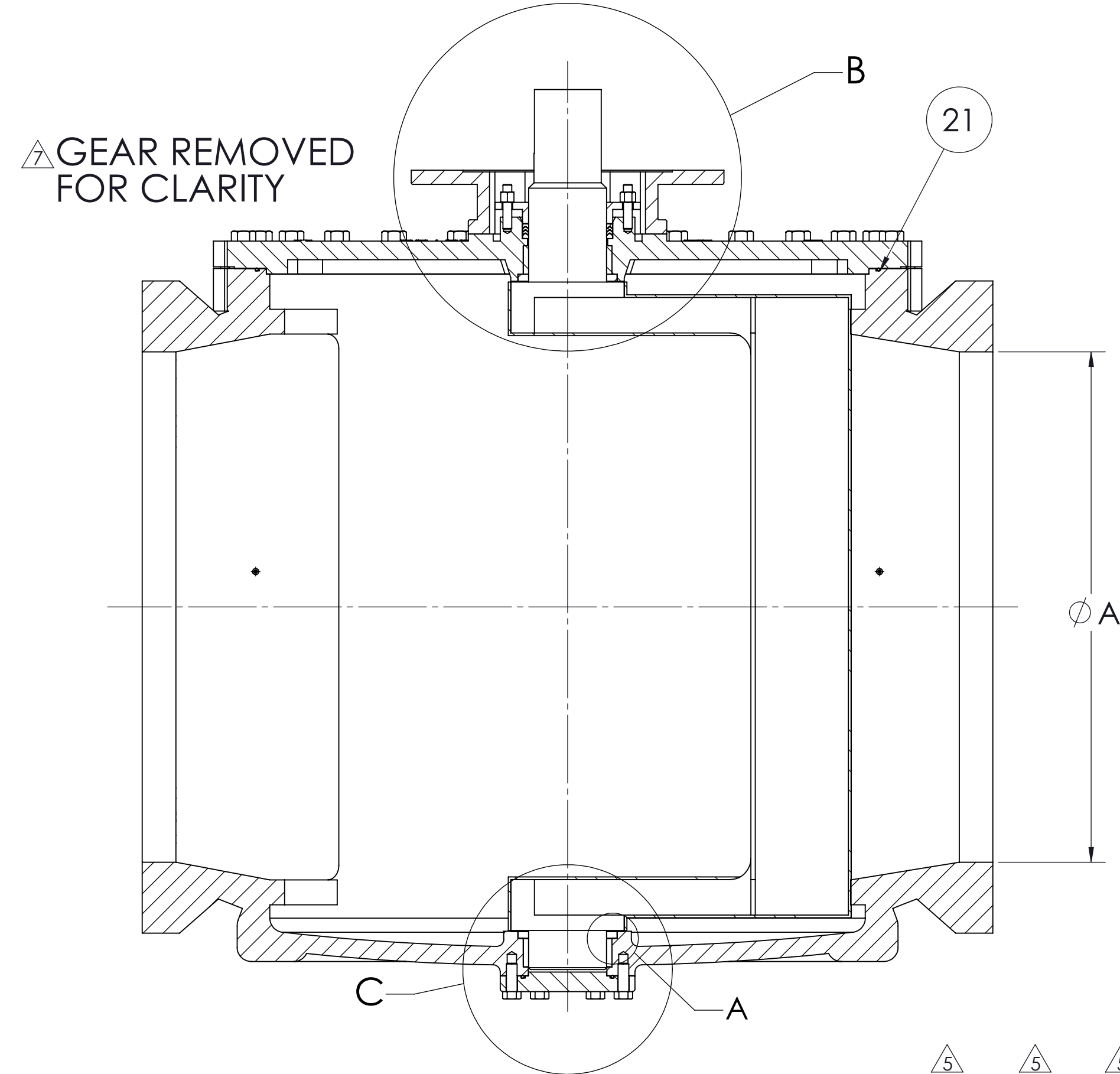
DRAWN	NAME	DATE	 KENNEDY VALVE Division of McWane, Inc. <small>1021 EAST WATER STREET ELMIRA, NEW YORK 14901</small>
CHECKED	CAW	7/20/2015	
APPROVED	ML	8/6/2015	
DO NOT SCALE DRAWING			TITLE:
MATERIAL: SEE TABLE			18"-36" "FULL FLOW" FLG EPV (6412-FF) w/ ROTORK GEAR-HW
Weight: SEE TABLE			SIZE DWG. NO. REV
			D SUB910207T 8
<small>THE INFORMATION CONTAINED IS THE SOLE PROPERTY OF KENNEDY VALVE CO. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF KENNEDY VALVE CO. IS PROHIBITED. DESIGN & INVENTION RIGHTS RESERVED.</small>			SHEET 1 OF 1

GEARBOX FOR BURIED SERVICE WILL NOT HAVE POSITION INDICATOR

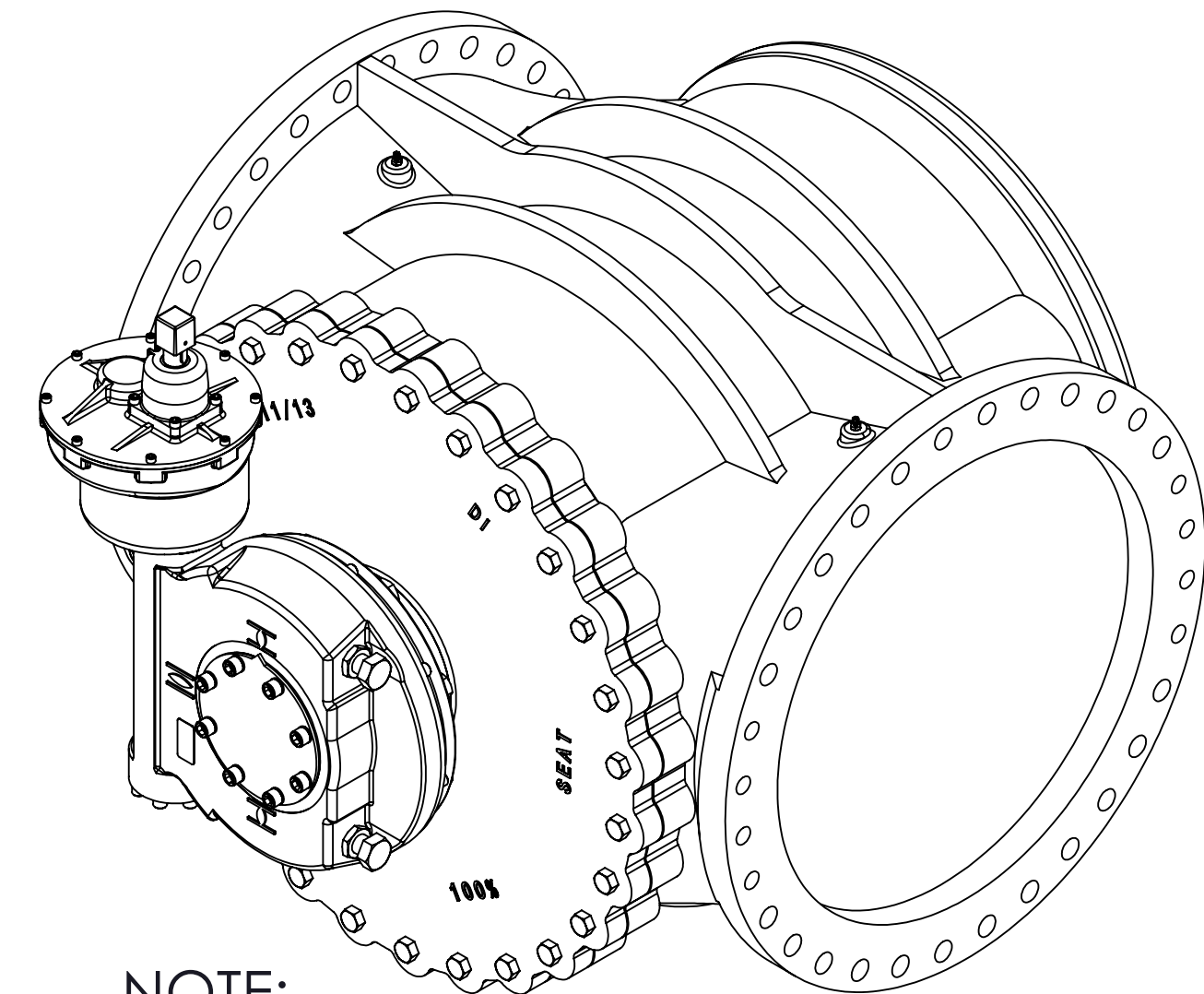


ITEM NO.	DESCRIPTION	MATERIAL
1	BODY - FLANGED	ASTM A536 GR. 65-45-12 OR 70-50-05
2	PLUG	ASTM A536 GR. 65-45-12 OR 70-50-05+NBR
3	COVER	ASTM A536 GR. 65-45-12 OR 70-50-05
4	BOTTOM THRUST WASHER	PTFE
5	BOTTOM BEARING	SINTERED ALLOY SS316
6	GRIT GUARD SHAFT SEAL (LOWER)	NBR
7	GRIT GUARD SHAFT SEAL (UPPER)	NBR
8	UPPER THRUST WASHER	PTFE
9	UPPER BEARING	SINTERED ALLOY SS316
10	V2-PACKING-AN6225-55	NBR
11	V2-TOP-PACKING-AN6225-55	NBR
12	V-BOTTOM-PACKING-AN6225-55	NBR
13	FP GLAND (FOR ACTUATOR)	ASTM A536 GR. 65-45-12 OR 70-50-05
14	BOTTOM COVER	ASTM A536 GR. 65-45-12 OR 70-50-05
15	COVER STUDS	STAINLESS STEEL ASTM A276.T316
16	HEXAGON COVER BOLTS	STAINLESS STEEL ASTM A276.T316
17	BOTTOM COVER BOLTS	STAINLESS STEEL ASTM A276.T316
18	HEXAGON ADAPTER BOLTS	STAINLESS STEEL ASTM A276.T316
19	HEX NUT	STAINLESS STEEL ASTM A276.T316
20	O-RING - BOTTOM COVER	NBR
21	O-RING - TOP COVER	NBR
22	FP ADAPTER - CLOSE	ASTM A536 GR. 65-45-12 OR 70-50-05
957	GEAR BOLTS	STAINLESS STEEL ASTM A276.T316

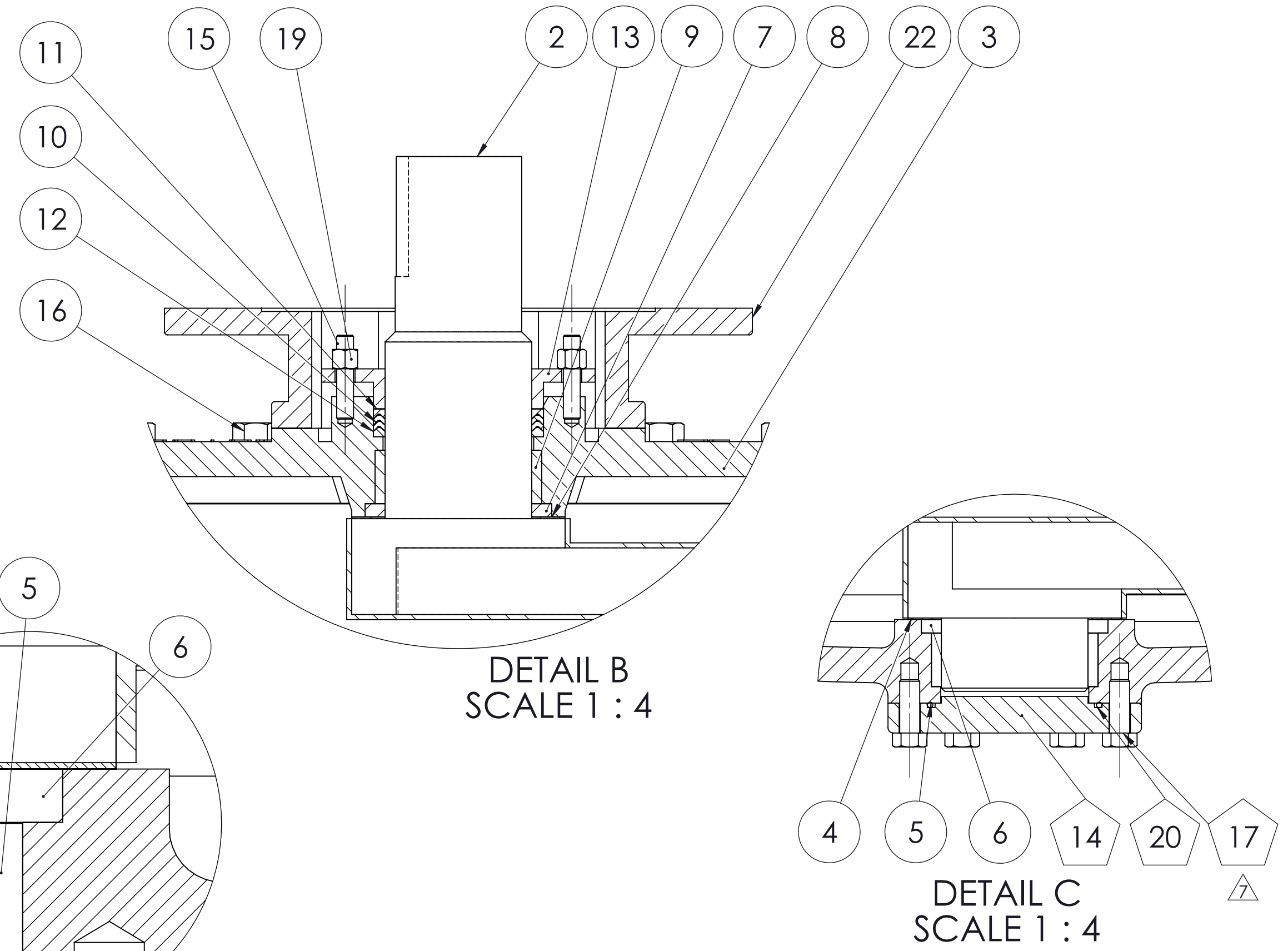
NOTE:
 1. Interior and exterior ferrous metal surfaces are epoxy-coated
 2. Only 30" and 36" valves have a bottom cover plate (see pentagon ballon items)
 3. Mount in orientation shown for buried service
 4. Gearbox for buried service will not have position indicator
 5. Body castings are tri-marked with "Clow," "Kennedy," and "M&H"



RECOMMENDED ORIENTATION FOR BURIED SERVICE:



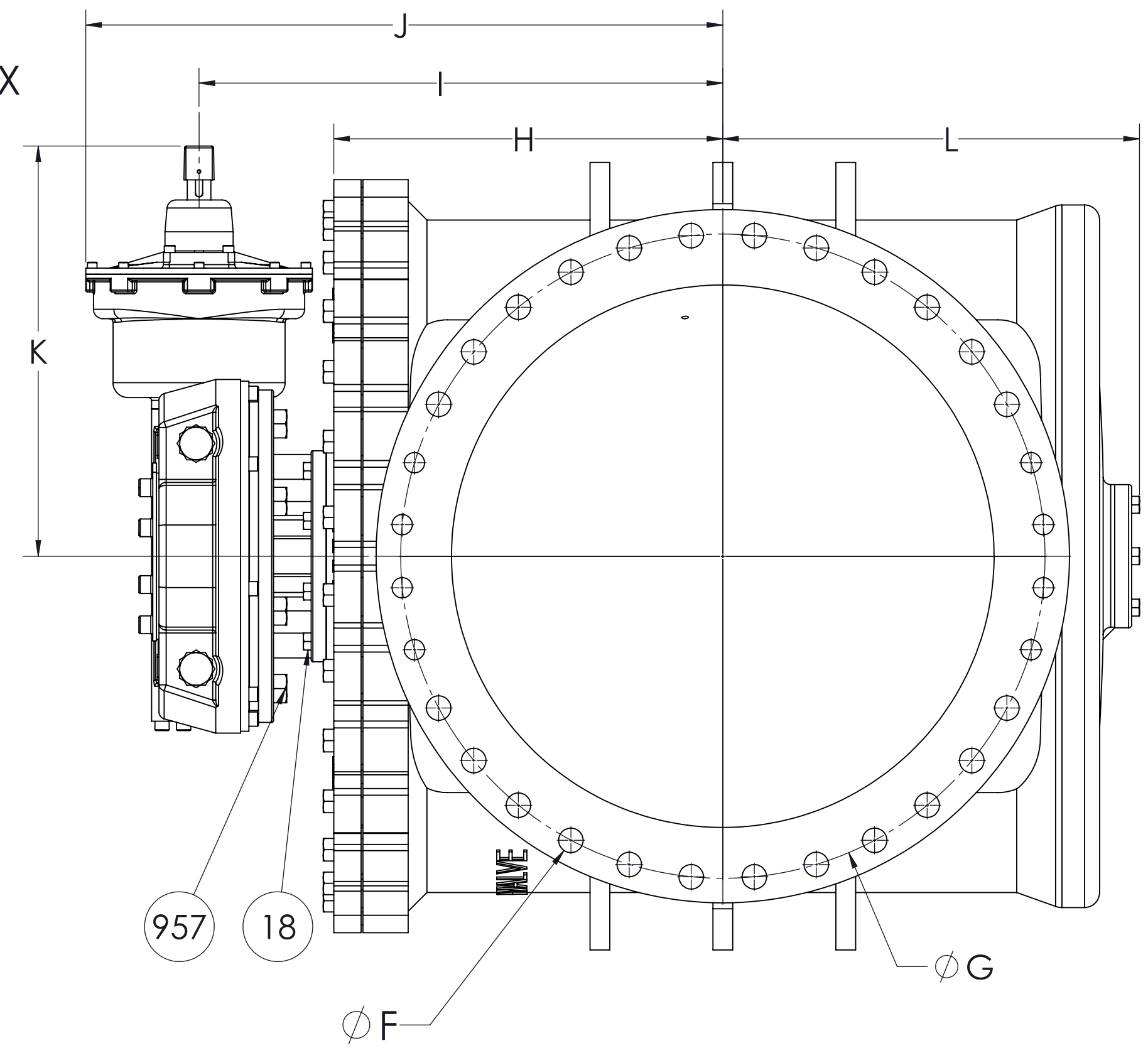
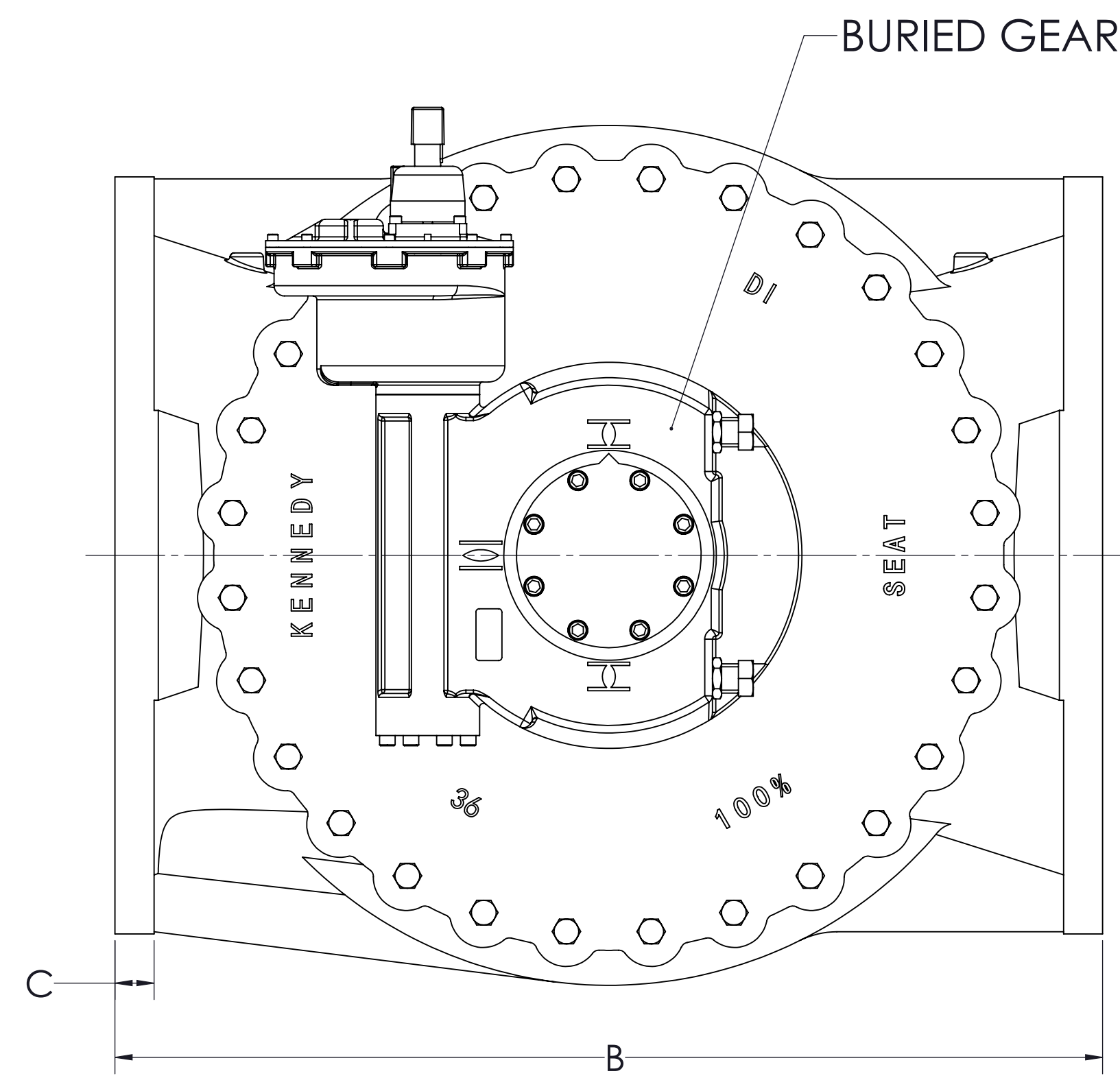
NOTE:
 • 36" VALVE SHOWN
 • SHOWN OPEN WITH PLUG UP



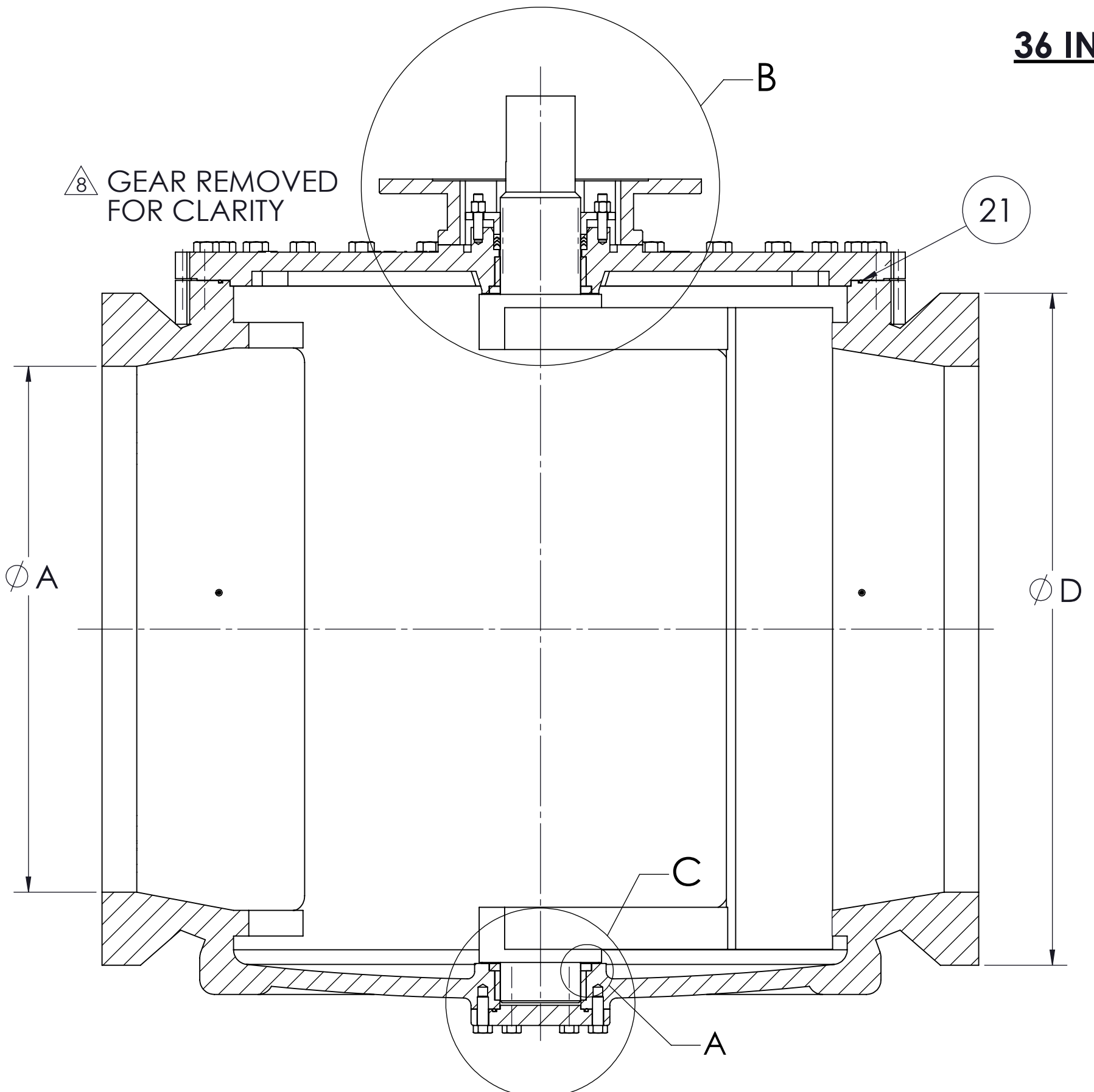
A [VALVE SIZE]	B	C	D	E	F	G	H	I	J	K	L	WEIGHT [LBS]	ROTORK GEAR	GEAR RATIO	TURNS TO OPEN (APPROX.)	RATED PRESSURE	HYDROSTATIC TEST PRESSURE
18	21.50	1.58	Ø 25.00	8 x 1.13-7 UNS-2B ↓ 1.50	8 x Ø 1.25 THRU	Ø 22.75	16.42	22.7	27.6	15.5	18.3	1262	IW6 AWWA-IP68	152:1	38	150 PSI	300 PSI
20	23.50	1.69	Ø 27.50	8 x 1.13-7 UNS-2B ↓ 1.25	12 x Ø 1.25 THRU	Ø 25.00	17.09	23.7	28.6	15.5	17.4	1537	IW6 AWWA-IP68	228:1	57		
24	42.00	1.88	Ø 32.00	8 x 1.25-7 UNS-2B ↓ 2.00	12 x Ø 1.38 THRU	Ø 29.20	21.06	27.4	35.4	21.6	21.8	3421	IW7 AWWA-IP68	384:1	96		
30	51.00	2.13	Ø 38.75	8 x 1.25-7 UNS-2B ↓ 2.63	20 x Ø 1.38	Ø 36.00	22.19	30.3	37.2	27.2	22.5	6135	IW9 AWWA-IP68	696:1	174		
36	60.00	2.38	Ø 46.00	8 x 1.50-6 UNS-2B ↓ 3.50	36 x Ø 1.63 THRU	Ø 42.75	25.81	34.7	42.27	27.2	27.7	8515	IW9 AWWA-IP68	928:1	232		

REV.	DESCRIPTION	APPROVED	DATE
1	RELEASED	ML	11/13/15
2	CHANGE DETAIL A VIEW SIZE. REMOVE OPTION TEXT FROM NOTES	ML	11/24/2015
3	EDITED GEAR INFORMATION	J.CAPPER	7/24/2018
4	MADE FASTENERS 316 SS STANDARD, REMOVED 14"-16" SIZES, REMOVED CV, ADDED DIM J,K,L, EDITED NOTES, UPDATED GEAR INFORMATION	DPB, J.CAPPER	2/19/19
5	FIXED ORIENTATIONS, ADDED J, K, L, REMOVED SIZES 14 & 16, UPDATED NOTE	CAW	3/20/2019
6	ADDED TRI-MARKING NOTE	J.CAPPER	4/8/2019
7	ADDED GEAR NOTE, CORRECT BALLOON SHAPE	J.CAPPER	6/11/2019

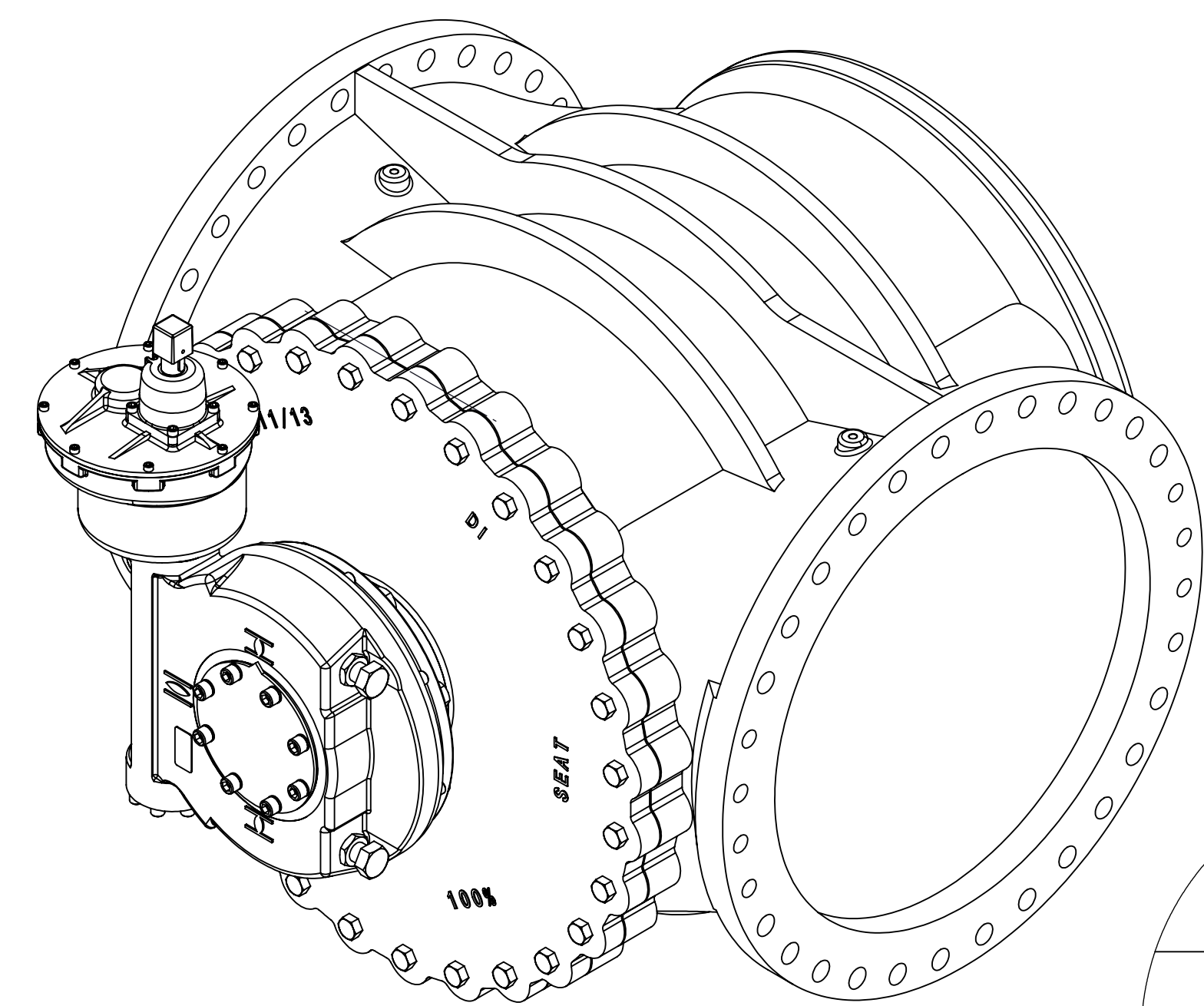
NAME	DATE	KENNEDY VALVE Division of McWane, Inc. 1021 EAST WATER STREET ELMIRA, NEW YORK 14901
DRAWN	11/13/2015	
CHECKED	11/13/2015	TITLE: 18"-36" "FULL FLOW" FLG EPV (6412-FF) w/ ROTORK GEAR for Bury Service
APPROVED		
MATERIAL:	SEE TABLE	DWG. NO. SUB910257T
Weight:	SEE TABLE	
THE INFORMATION CONTAINED IS THE SOLE PROPERTY OF KENNEDY VALVE CO. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF KENNEDY VALVE CO. IS PROHIBITED. DESIGN & INVENTION RIGHTS RESERVED.		PROPRIETARY AND CONFIDENTIAL SHEET 1 OF 1



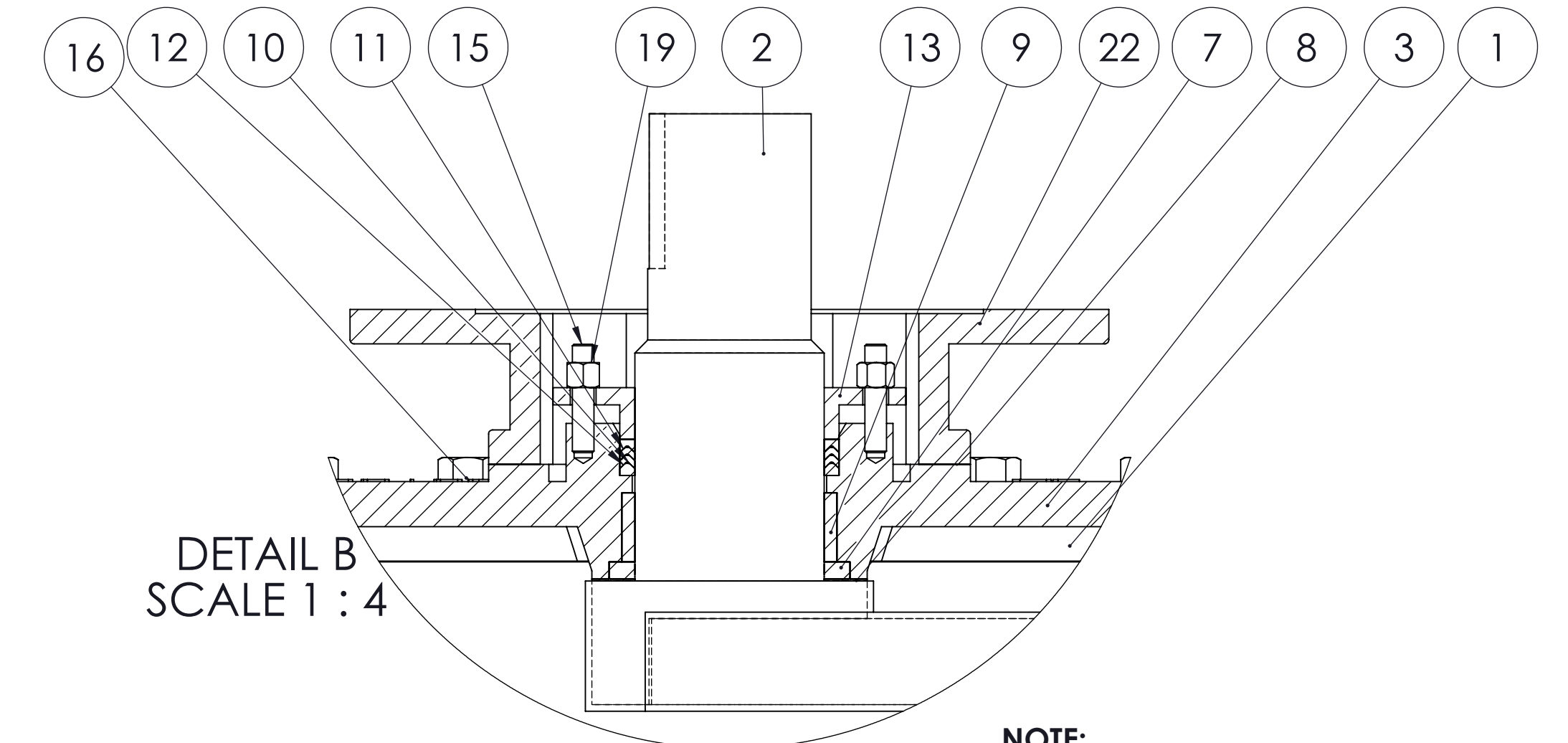
ITEM NO.	PART NUMBER	DESCRIPTION
1	Body-MJ	ASTM A536 Gr. 65-45-12 or 70-50-05
2	Plug Rubber Coating	ASTM A536 Gr. 65-45-12 or 70-50-05 NBR
3	Cover	ASTM A536 Gr. 65-45-12 or 70-50-05
4	Bottom Thrust	PTFE
5	Bottom Bearing	Sintered Alloy SS316
6	Grit Guard Shaft Seal (Lower)	NBR
7	Grit Guard Shaft Seal (Upper)	NBR
8	Upper Thrust	PTFE
9	Upper Bearing	Sintered Alloy SS316
10	V2-Packing-AN6225-55	NBR
11	V2-Top-Packing-AN6225-55	NBR
12	V-Bottom-Packing-AN6225-55	NBR
13	FP Gland (for Actuator)	ASTM A536 Gr. 65-45-12 or 70-50-05
14	Bottom Cover	ASTM A536 Gr. 65-45-12 or 70-50-05
15	Cover Studs	Stainless Steel ASTM A276.T316
16	Hexagon Cover Bolts	Stainless Steel ASTM A276.T316
17	Bottom Cover Bolts	Stainless Steel ASTM A276.T316
18	Hexagon Adaptor Bolts	Stainless Steel ASTM A276.T316
19	Cover Stud Hex Nut	Stainless Steel ASTM A276.T316
20	O-ring Bottom Cover	NBR
21	O-Ring Top Cover	NBR
22	FP Adaptor-Close	ASTM A536 Gr. 65-45-12 or 70-50-05
957	Gear Bolts	Stainless Steel ASTM A276 T316



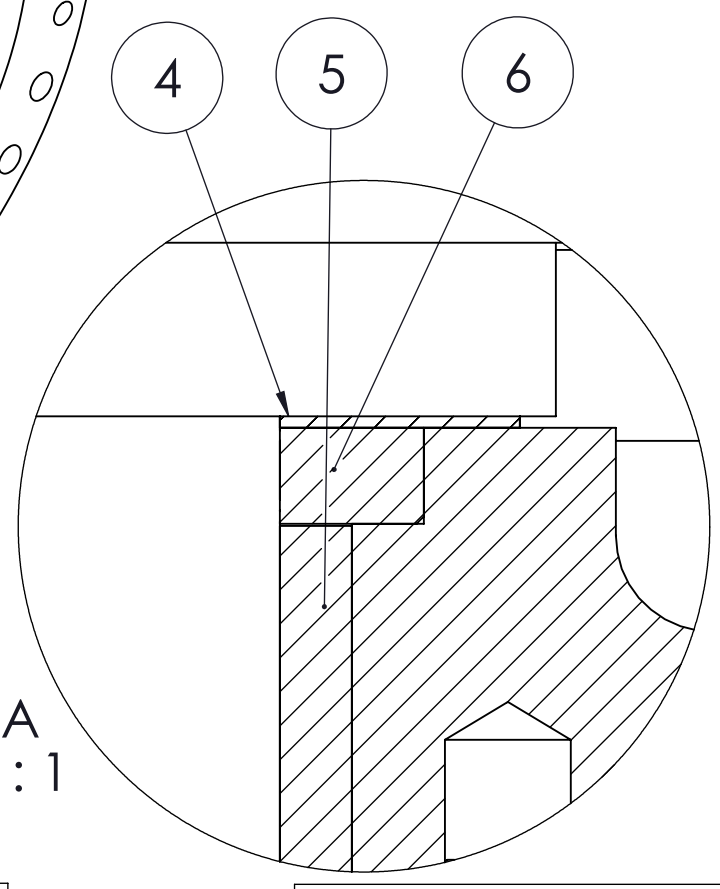
36 INCH SHOWN



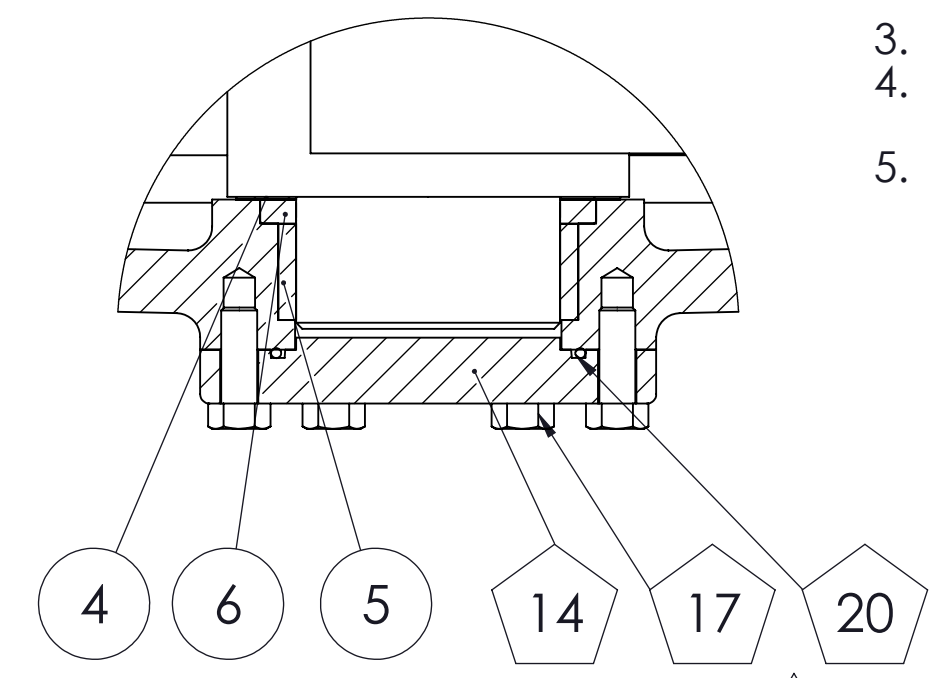
-SHOWN OPEN WITH PLUG UP
-RECOMENDED ORIENTATION
FOR BURIED SERVICE



DETAIL B
SCALE 1 : 4



DETAIL A
SCALE 1 : 1



DETAIL C
SCALE 1 : 4

- NOTE:**
1. Interior and exterior ferrous metal surfaces are epoxy-coated
 2. Only 30" and 36" valves have a bottom cover plate (see pentagon balloon items)
 3. Mount in orientation shown for buried service
 4. Gearbox for buried service will not have position indicator
 5. Body castings are tri-marked with "Clow," "Kennedy," and "M&H"

A [VALVE SIZE]	B	C	D	F	G	H	I	J	K	L	WEIGHT (LBS)	ROTORC GEAR	GEAR RATIO	TURNS TO OPEN (APPROX.)	WATER WORKING PRESSURE PSI	HYDROSTATIC TEST PSI
18	29.25	1.0	Ø24.84	12 x Ø7/8 THRU	Ø23-1/4	16.42	21.50	27.6	15.5	18.3	1262	IW6 AWWA-IP68	152:1	38	150 PSI	300 PSI
20	31.0	1.02	Ø27.08	14 x Ø7/8 THRU	Ø25-1/2	17.09	22.25	28.6	15.5	17.4	1537	IW6 AWWA-IP68	228:1	57		
24	42.00	1.02	Ø31.57	16 x Ø7/8 THRU	Ø30	21.06	26.37	35.4	21.6	21.8	3421	IW7 AWWA-IP68	384:1	96		
30	51.00	1.32	Ø39.12	20 x Ø1-1/8 THRU	Ø36-7/8	22.19	30.69	37.2	27.2	22.5	6135	IW9 AWWA-IP68	696:1	174		
36	60.00	1.45	Ø46.00	24 x Ø1-1/8 THRU	Ø43-3/4	25.81	34.75	42.3	27.2	27.7	8515	IW9 AWWA-IP68	928:1	232		

REV.	DESCRIPTION	DATE	APPROVED
1	RELEASED	11/13/15	ML
2	UPDATED FASTENER VIEW AND NOTES	2/19/2016	ML
3	ADDED ENCAPSULATION TO PLUG AND UPDATE TITLE BLOCK	4/5/2016	ML
4	UPDATED GEAR INFORMATION	5/11/2018	J CAPPER
5	316 SS STANDARD	2/19/2019	DPB
6	ADDED # OF TURNS TO OPEN AND CORRECTED GEARING INFORMATION. UPDATED "F" ADDED "J, K, & L" TO TABLE. REMOVED "I" AND "L" FROM DWG.	3/26/2019	CAW
7	ADDED TRI-MARKING NOTE	4/8/2019	J CAPPER
8	ADDED GEAR NOTE. CORRECTED BALLOON SHAPE	6/11/2019	J CAPPER

DRAWN	NAME	DATE	KENNEDY VALVE Division of McWane, Inc. <small>1021 EAST WATER STREET ELMIRA, NEW YORK 14901</small>
CHECKED	ML	12/17/2015	
APPROVED			TITLE:
DO NOT SCALE DRAWING			18"-36" "100% PORT" MJ Eccentric Plug Valve
MATERIAL: SEE TABLE			w/ ROTORK GEAR for Buried Service
Weight: SEE TABLE			SIZE DWG. NO. REV
			D SUB910280T 8
<small>PROPRIETARY AND CONFIDENTIAL</small> <small>THE INFORMATION CONTAINED IS THE SOLE PROPERTY OF KENNEDY VALVE CO. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF KENNEDY VALVE CO. IS PROHIBITED. DESIGN & INVENTION RIGHTS RESERVED.</small>			SHEET 1 OF 1