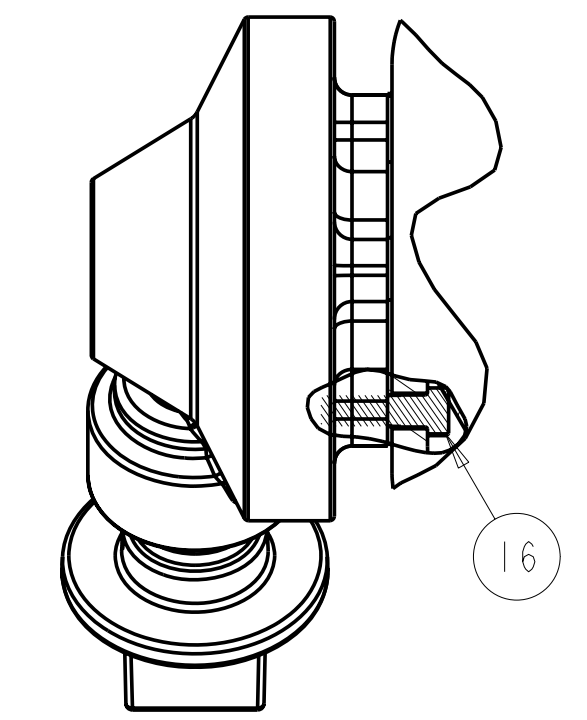
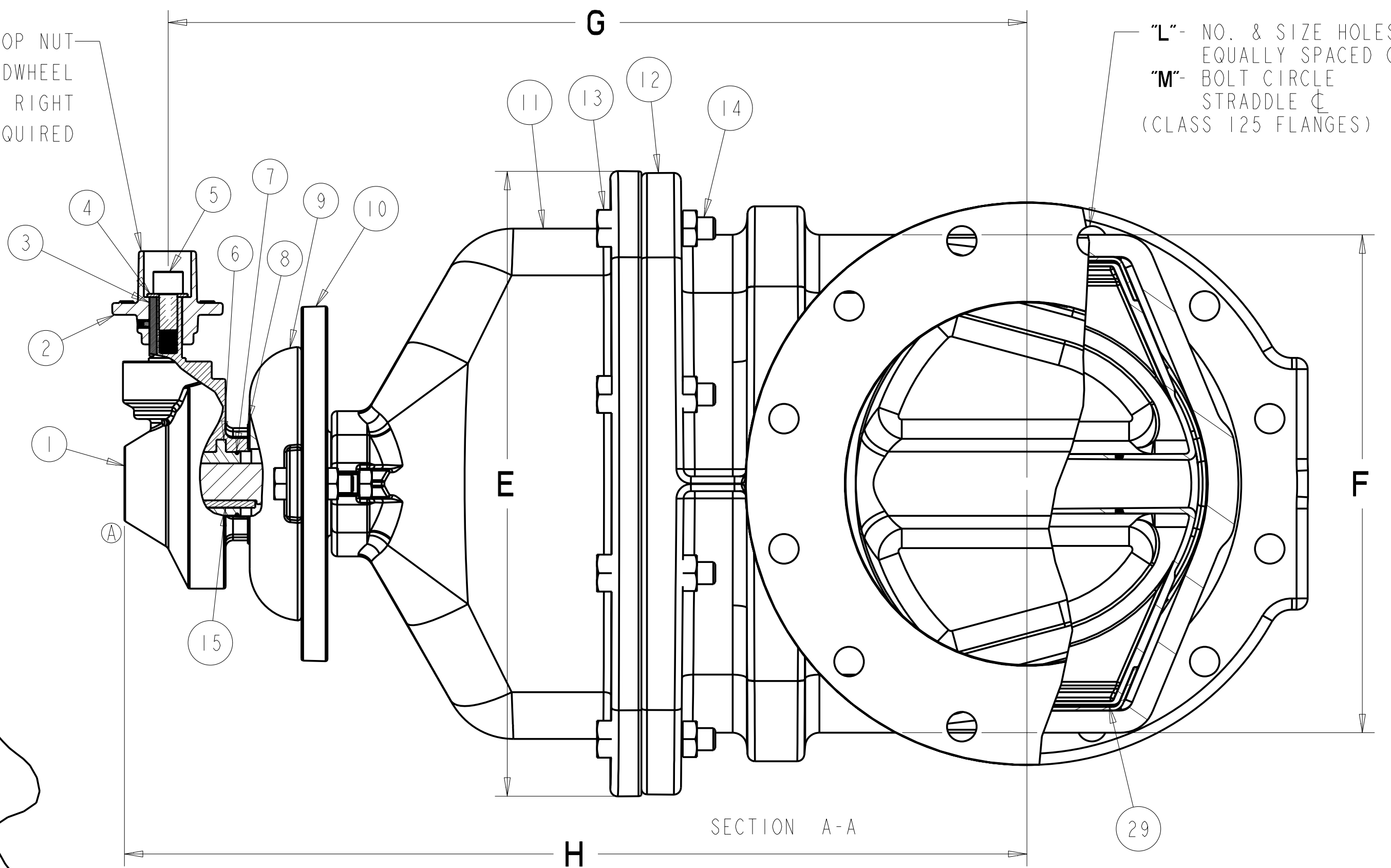


ITEM	DESCRIPTION	REQ'D	MATERIAL	ASTM	
1	BEVEL GEAR (SEE NOTE 3) [Ⓜ]	1	CAST IRON		
2	WRENCH/OP NUT	1	CAST IRON [SEE NOTE 2] [Ⓜ]	A126	CLASS B
3	KEY	1	STEEL		
4	HOLD DOWN WASHER	1	STEEL		
5	HEX. SOC. SCREW	1	STEEL		
6	GEAR STEM NUT	1	STEEL		
7	O-RING	1	RUBBER	D2000	
8	GEAR GASKET	1	RUBBER	D2000	
9	ADAPTER	1	CAST IRON [SEE NOTE 2] [Ⓜ]	A126	CLASS B
10	STUFFING BOX	1	CAST IRON [SEE NOTE 2] [Ⓜ]	A126	CLASS B
11	BONNET	1	CAST IRON [SEE NOTE 2] [Ⓜ]	A126	CLASS B
12	BODY	1	CAST IRON [SEE NOTE 2] [Ⓜ]	A126	CLASS B
13	BONNET BOLT	"P"	304 STAINLESS STEEL	A193	GROUP B8
14	BONNET BOLT NUT	"P"	304 STAINLESS STEEL	F594	GROUP 1
15	KEY	1	STEEL		
16	CAP SCREW	4	304 STAINLESS STEEL	A193	GROUP B8
17	ADAPTER BOLT	2	304 STAINLESS STEEL	A193	GROUP B8
18	ADAPTER BOLT NUT	2	304 STAINLESS STEEL	F594	GROUP 1
19	ADAPTER O-RING	1	RUBBER	D2000	
20	STUFFING BOX BOLT	2	304 STAINLESS STEEL	A193	GROUP B8
21	STUFFING BOX BOLT NUT	2	304 STAINLESS STEEL	F594	GROUP 1
22	STEM O-RINGS	3	RUBBER	D2000	
23	STUFFING BOX O-RING	1	RUBBER	D2000	
24	ANTI FRICTION WASHER	2	CELCON		M-90
25	STEM	1	BRONZE	B138	ALLOY C87600
26	BONNET BODY O-RING	1	RUBBER		
27	DISC NUT	1	BRONZE	B62	ALLOY C83600
28	DISC	1	SEE NOTES 1 & 2 [Ⓜ]		M-90
29	GUIDE CAP	2	CELCON		M-90
30	SET SCREW	1	STEEL		

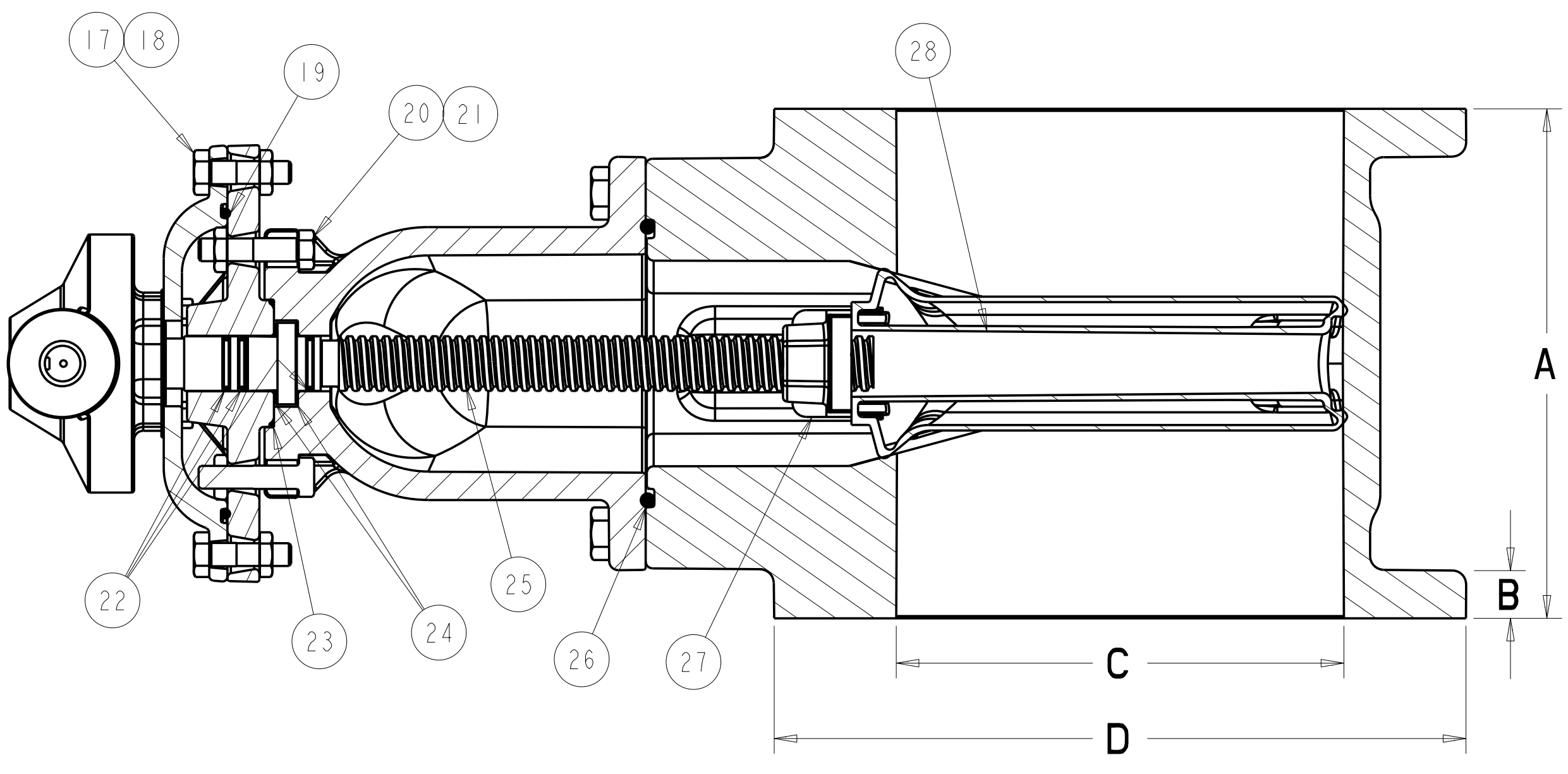
2" SQUARE WRENCH/OP NUT
OR 12.00" DIA HANDWHEEL
OPEN LEFT OR RIGHT
AS REQUIRED



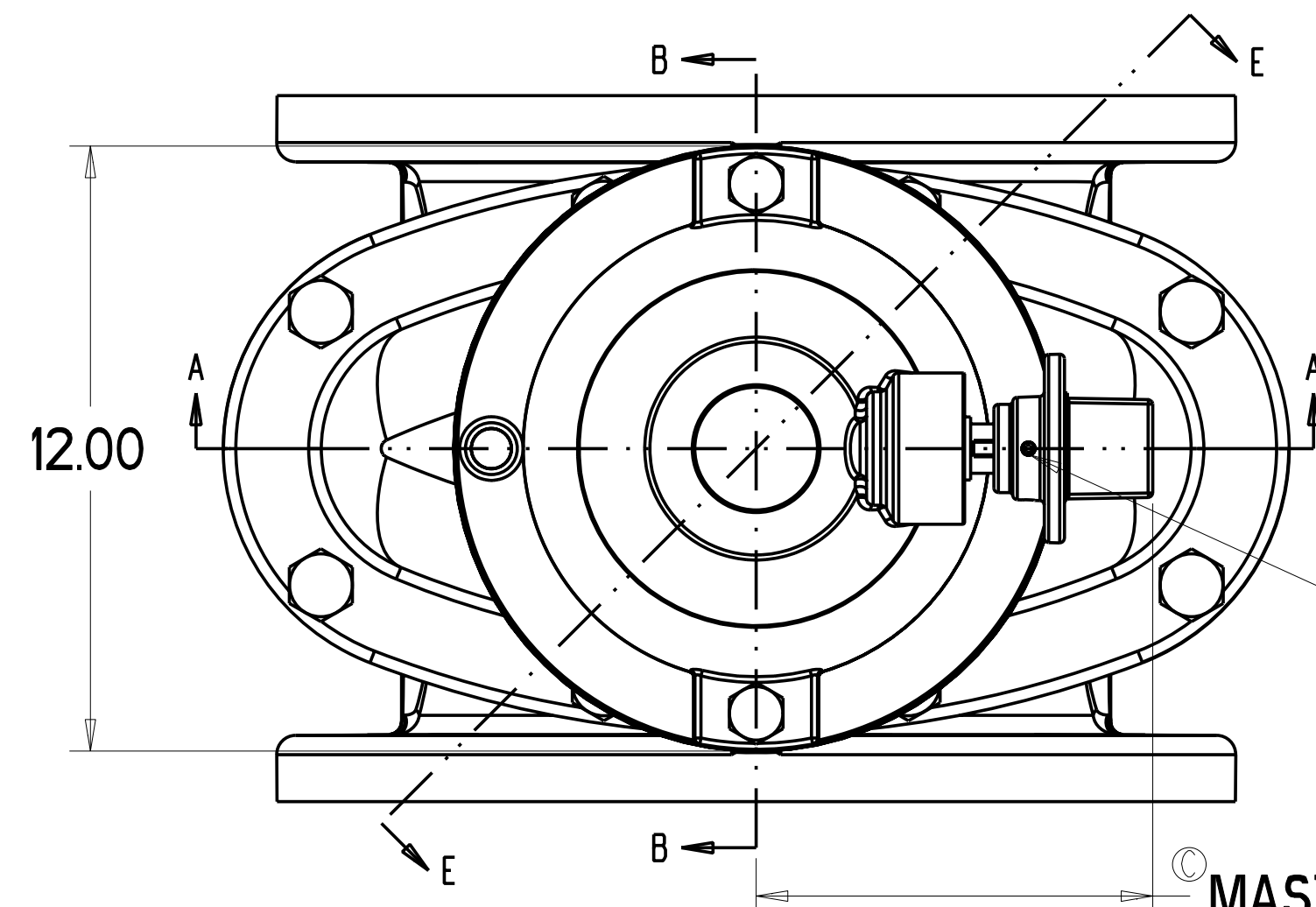
SECTION E-E



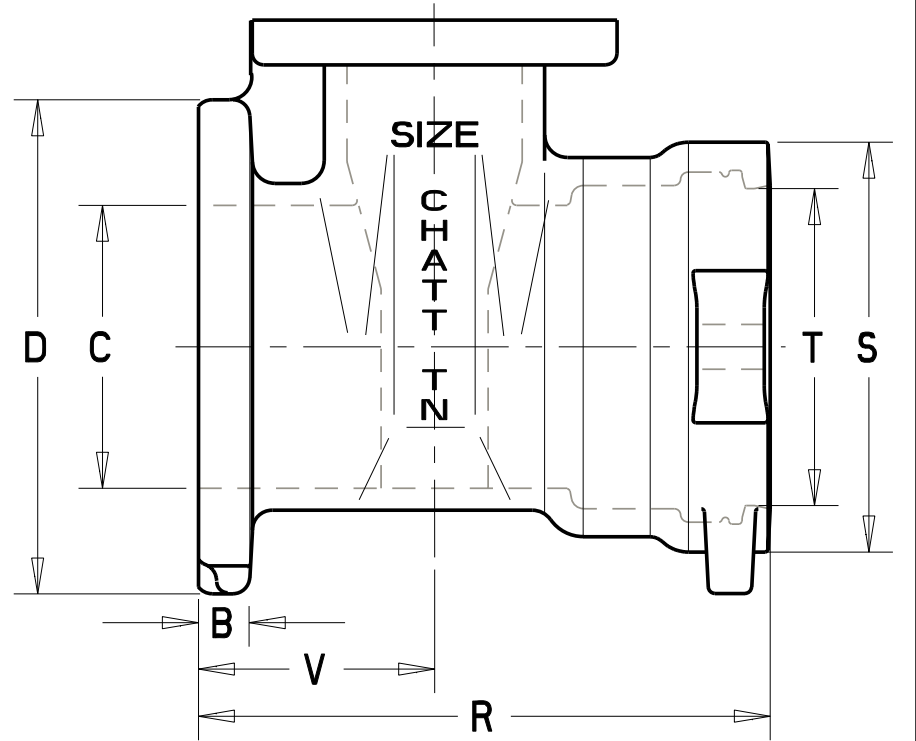
SECTION A-A



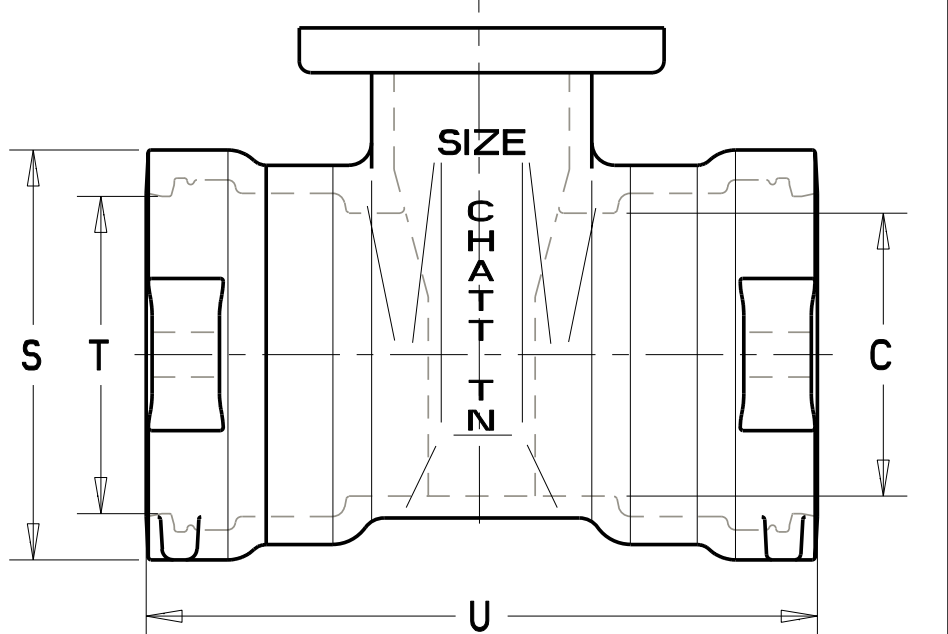
SECTION B-B
SCALE 0.300



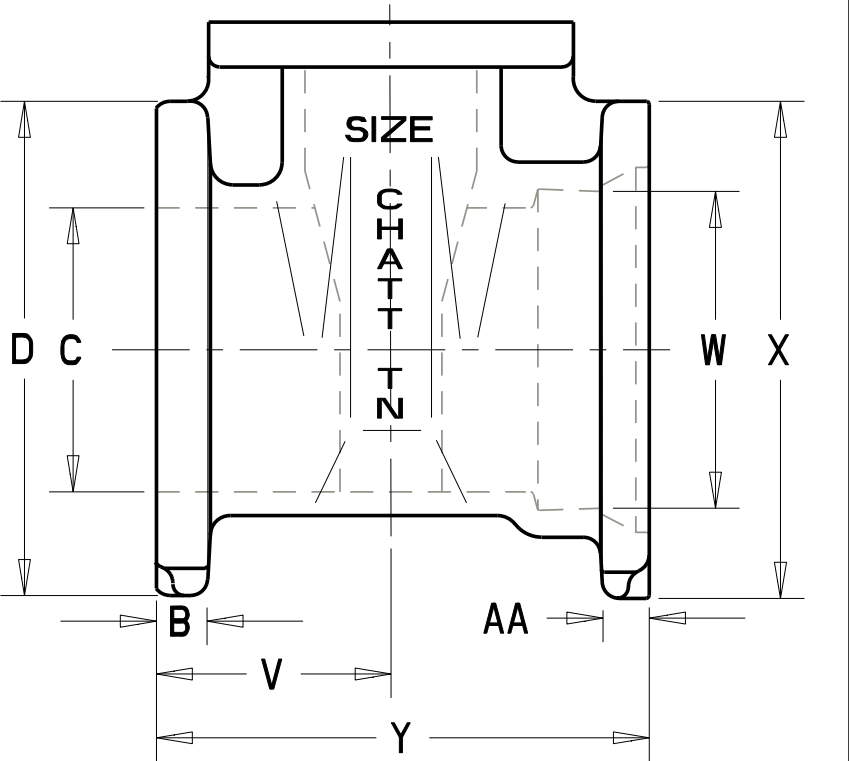
MASTERGEAR A03 - 7.72
ROTORK HOB210- 9.77



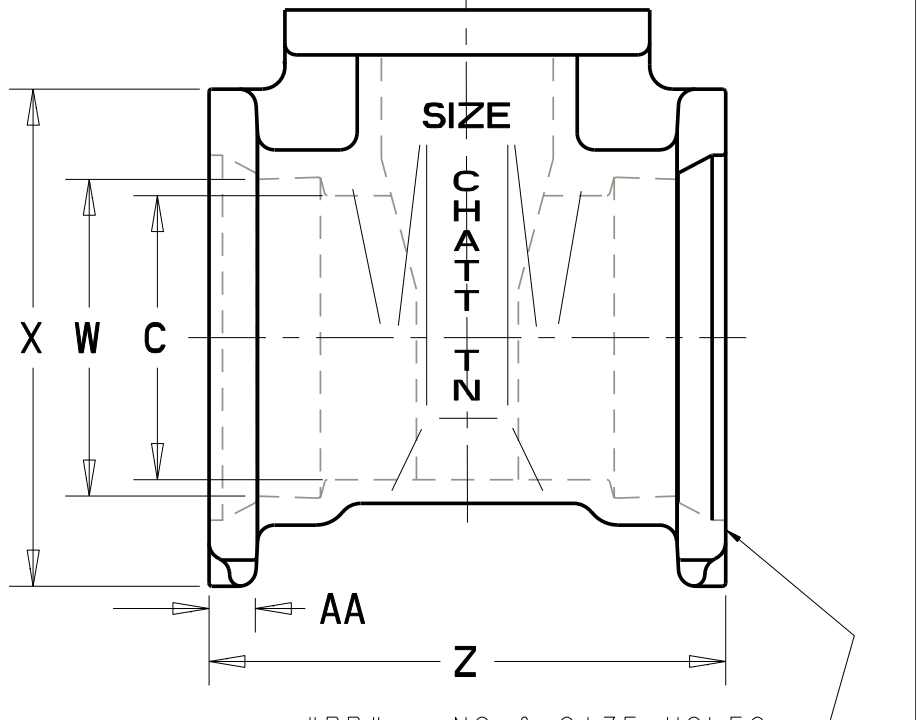
FLANGE X SLIP-ON ENDS



SLIP-ON ENDS



FLANGE X MECH JOINT ENDS



MECHANICAL JOINT ENDS

SIZE	A	B	C	D	E	F	G	H	L	M	P	R	S	T	U	V	W	X	Y	Z	AA	BB	CC	URNS TO OPEN MASTERGEAR RATIO 2.31	URNS TO OPEN ROTORK RATIO 2:1
3	8.00	0.80	3.30	7.50	8.63	6.01	13.75	15.88	4 - 0.75	6.00	6	NA	NA	NA	NA	4.55	4.06	7.50	8.80	9.62	0.94	4 - 0.75	6.19	25.3	22
4	9.00	0.94	4.30	9.00	10.79	8.25	15.56	17.69	8 - 0.75	7.50	4	10.91	6.88	4.92	12.81	4.50	4.90	9.12	9.50	10.00	1.00	4 - 0.88	7.50	32	28
6	10.50	1.06	6.30	11.00	13.50	10.50	19.28	21.41	8 - .880	9.50	6	12.73	9.12	7.02	14.96	5.25	7.00	11.12	11.06	11.60	1.09	6 - 0.88	9.50	47	41
8	11.50	1.19	8.30	13.50	16.36	13.21	22.68	24.81	8 - .880	11.75	6	14.72	11.38	9.30	17.94	5.75	9.15	13.37	12.09	12.68	1.18	6 - 0.88	11.75	61	53
10	13.00	1.25	10.30	16.00	19.99	16.48	23.99	26.45	12 - 1.00	14.25	8	15.75	13.50	11.38	18.50	6.50	11.20	15.62	13.94	14.88	1.25	8 - 0.88	14.00	76	66
12	14.00	1.31	12.30	19.00	21.00	16.83	28.68	31.14	12 - 1.00	17.00	8	16.35	15.75	13.33	18.70	7.00	13.30	17.88	14.50	15.00	1.31	8 - 0.88	16.25	89	77

NOTES:
1. RUBBER ENCAPSULATED CAST IRON DISC
CAST IRON - ASTM A126 CLASS B
RUBBER - SBR - ASTM D2000
2. MANUFACTURER'S OPTION TO UPGRADE
MAT'L TO DI - A536 GR 65-45-12
3. VALVES WILL BE FURNISHED WITH
ONE OF THE LISTED OPERATORS AT
THE MANUFACTURER'S DISCRETION
MASTERGEAR A03 OR ROTORK HOB210.

SR BY	CAP	02/02/07	UNLESS OTHERWISE NOTED	THIRD ANGLE PROJECTION	C.D. NO.
CHKD	JWB	02/02/07	BREAK CAST CORNERS!	PURCH. N/A	FINISH ASSY
ENGR	RWV	02/02/07	BREAK MECH CORNERS!		
MFR			TOLERANCES	REF. NO.	STR. NO.
MFG			UNLESS OTHERWISE NOTED	LINEAR ±	ANGULAR ±
TOOL					
FDRT					

APPROVED
By Jason W. Bradley at 5:56 pm, Aug 26, 2008

MAT'L	SEE TABLE	DESCR.	3"-12" RWGV WITH BEVEL GEARING	NUMBER	6785
Mueller Co.					