



### PARTS LIST

ITEM	DESCRIPTION	QTY	MATERIAL	ASTM	REMARKS
1	CAP SCREW	1	STEEL		SEE NOTE 4
2	WRENCH NUT (SEE NOTE 5)	1	CAST IRON	A126	CLASS B
3	BEVEL GEAR UNIT (SEE NOTE 6)	1			
4	STEM NUT	1	BRASS		
5	KEY	1	STEEL		
6	SOCKET HEAD SCREW	4	STEEL		SEE NOTE 4
7	GASKET	1	RUBBER	D2000	
8	ADAPTER	1	DUCTILE IRON	A536	GRADE 65-45-12
9	GASKET	1	RUBBER	D2000	
10	STUFFING BOX	1	DUCTILE IRON	A536	GRADE 65-45-12
11	SOCKET HEAD BOLT & NUT	4	STEEL		SEE NOTE 4
12	O-RING	1	RUBBER	D2000	
13	STEM	1	BRONZE		SEE NOTE 1
14	O-RING	3	RUBBER	D2000	
15	BONNET BUSHING	1	BRONZE	B62	
16	O-RING	1	RUBBER	D2000	
17	WASHER	2	BRASS		
18	HEX BOLT & NUT	4	STEEL		SEE NOTE 4
19	BONNET	1	DUCTILE IRON	A536	GR. 65-45-12
20	EYEBOLT	2	STEEL		GALVANIZED
21	O-RING	1	RUBBER	D2000	
22	HEX BOLT & NUT	"Z"	STEEL		SEE NOTE 4
23	DISC NUT	1	BRONZE	B62	
24	DISC	1	SEE NOTE 2		
25	GUIDE CAP	2	CELCON	M90	
26	BODY - FLG. X M.J.	1	DUCTILE IRON	A536	GR. 65-45-12
27	PIPE NIPPLE W/FLG	1	STEEL		
28	PIPE NIPPLE W/FLG	1	STEEL		
29	BY-PASS VALVE	1	SEE NOTE 3		
30	90° ELBOW	2	CAST STEEL		
31	FLANGE GASKET	5	RUBBER	D2000	
32	SPACER	1	STEEL	A36	
33	HEX BOLT	12	STEEL		SEE NOTE 4
34	HEX NUT	20	STEEL		SEE NOTE 4
35	STUD	4	STEEL		SEE NOTE 4
36	WRENCH NUT (SEE NOTE 5)	1	CAST IRON	A126	CLASS B
37	CAP SCREW	1	CARBON STEEL		SEE NOTE 4
38	STUFFING BOX	1	DUCTILE IRON	A536	GRADE 65-45-12
39	STUFFING BOX BOLT & NUT (STD HEX)	4	STEEL		SEE NOTE 4
40	HOLD-DOWN WASHER & NUT	1	STEEL		SEE NOTE 4
41	PIPE PLUG	2			SUPPLIED WHEN TAPPED

- NOTES:
- 18" - 36" VALVES - BRONZE ASTM B584 ALLOY C86400
  - RUBBER ENCAPSULATED DUCTILE IRON DISC  
RUBBER - SBR ASTM D2000  
DUCTILE IRON ASTM A536 GRADE 65-45-12
  - BY-PASS VALVE  
FOR 18" & 20" SIZES - 2" RWGV - FLANGE ENDS  
FOR 24" SIZE - 2.5" RWGV - FLANGE ENDS  
FOR 30" & 36" - 3" RWGV - FLANGE ENDS  
BY-PASS VALVES ARE EQUIPPED WITH 2" SQUARE WRENCH NUTS OR 6" DIA HANDWHEELS OPEN LEFT OR RIGHT AS REQUIRED.
  - BOLTS - SAE J429 GRADE 2  
NUTS - ASTM A563 GRADE B  
FASTENERS - PLATED TO ASTM F1941 CLASS Fe/Zn 12C
  - MANUFACTURE'S OPTION TO UPGRADE MATERIAL TO DI- A536 GRADE 65-45-12
  - VALVES WILL BE FURNISHED WITH ONE OF THE LISTED OPERATOR OPTIONS AT THE MANUFACTURER'S DISCRETION.  
18"-24" USE MASTERGEAR, RATIO 4.5:1 OR ROTORK, RATIO 4:1  
30" & 36" USE LIMITORQUE, RATIO 4:1 OR ROTORK, RATIO 4:1
  - THE INTERIOR/EXTERIOR OF THE BODY AND BONNET ARE COATED WITH FUSION BONDED EPOXY.

NOTE: TABLE DIMENSIONS - INCHES / [MILLIMETERS]

VALVE SIZE	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y	Z	AA	BB	CC	① TURNS TO OPEN MASTER-GEAR OR LIMITORQUE	② TURNS TO OPEN ROTORK	EST. WEIGHT	
18	44.50 [1130.30]	46.06 [1169.92]	21.50 [546.10]	32.50 [825.50]	30.50 [774.70]	24.88 [631.95]	20.74 [526.80]	19.64 [498.86]	1.06 [26.92]	25.00 [635.00]	18.38 [466.85]	1.69 [42.93]	5.00 [127.00]	8.50 [215.90]	8.75 [222.25]	19.25 [488.95]	9.88 [250.95]	7.96 [202.18]	8.99 [228.35]	12 - .88 [12 - 22.35]	23.25 [590.55]	16 - 1.25 [16 - 31.75]	12 [304.80]	22.75 [577.85]	12	44.19 [1122.43]	19.45 [494.03]	0.25 [6.35]	① 257	228	1,350
20	47.69 [1211.33]	49.25 [1250.95]	22.50 [571.50]	33.50 [850.90]	33.75 [857.25]	27.25 [692.15]	22.84 [580.14]	21.74 [552.20]	1.60 [40.64]	27.50 [698.50]	20.38 [517.65]	1.78 [45.21]	5.00 [127.00]	8.50 [215.90]	9.25 [234.95]	20.00 [508.00]	9.88 [250.95]	7.96 [202.18]	8.99 [228.35]	14 - .88 [14 - 22.35]	25.50 [647.70]	20 - 1.25 [20 - 31.75]	12 [304.80]	25.00 [635.00]	12	48.25 [1225.55]	21.45 [544.83]	0.25 [6.35]	① 284	252	1,800
24	54.06 [1373.12]	55.50 [1409.70]	25.06 [636.52]	39.31 [1003.30]	39.50 [1003.30]	31.88 [809.75]	27.05 [687.07]	25.94 [658.88]	1.12 [28.45]	32.00 [812.80]	24.38 [619.25]	2.00 [50.80]	6.00 [152.40]	10.31 [261.87]	10.25 [260.35]	22.00 [558.80]	12.38 [314.45]	7.96 [202.18]	8.99 [228.35]	16 - .88 [16 - 22.35]	30.00 [762.00]	20 - 1.38 [20 - 35.05]	12 [304.80]	29.50 [749.30]	16	53.88 [1368.55]	25.43 [645.92]	0.25 [6.35]	① 338	300	2,300
30	64.93 [1649.22]	66.52 [1689.61]	28.68 [728.47]	40.74 [1034.80]	48.00 [1219.20]	39.53 [1004.06]	33.47 [851.37]	32.18 [817.37]	1.25 [31.75]	38.75 [984.25]	30.38 [771.65]	2.12 [53.85]	7.08 [179.83]	11.39 [289.31]	13.00 [330.20]	29.75 [755.65]	12.38 [314.45]	9.85 [250.19]	9.88 [250.95]	20 - 1.125 [20 - 28.58]	36.88 [936.75]	28 - 1.38 [28 - 35.05]	18 [457.20]	36.00 [914.40]	20	65.38 [1660.65]	30.94 [785.88]	.516 [13.11]	372	372	5,000
36	77.19 [1960.63]	78.25 [1987.55]	32.04 [813.82]	44.37 [1127.00]	56.50 [1435.10]	46.41 [1178.81]	39.77 [1010.16]	38.48 [977.39]	1.45 [36.83]	46.00 [1168.40]	36.38 [924.05]	2.37 [60.20]	8.50 [215.90]	12.81 [325.37]	15.00 [381.00]	33.75 [857.25]	12.38 [314.45]	9.85 [250.19]	9.88 [250.95]	24 - 1.125 [24 - 28.58]	43.75 [1111.25]	32 - 1.63 [32 - 41.40]	18 [457.20]	42.75 [1085.85]	24	78.43 [1992.12]	36.94 [938.28]	.516 [13.11]	444	444	8,400

**APPROVED**  
By Charles Hines at 5:10 pm, Oct 19, 2010

SR #1	CAP	10/23/10	UNLESS OTHERWISE NOTED	THIRD ANGLE PROJECTION	C.D. NO.
CHNG	TRJ	10/23/10	BREAK CAST CORNERS!		PART. NO.
ENGR	RWV	10/23/10	BREAK MACH CORNERS!		
MFR				PURCH.	FINISH
INS				REF. NO.	SCALE
TOOL					NONE
DRY				STR. NO.	

**Mueller Co.** 18" - 36" RWTV-S TAPPING VALVE W/O/W/OUT BEVEL GEARING W/O/W/OUT BTM BY-PASS

NOTED

6760