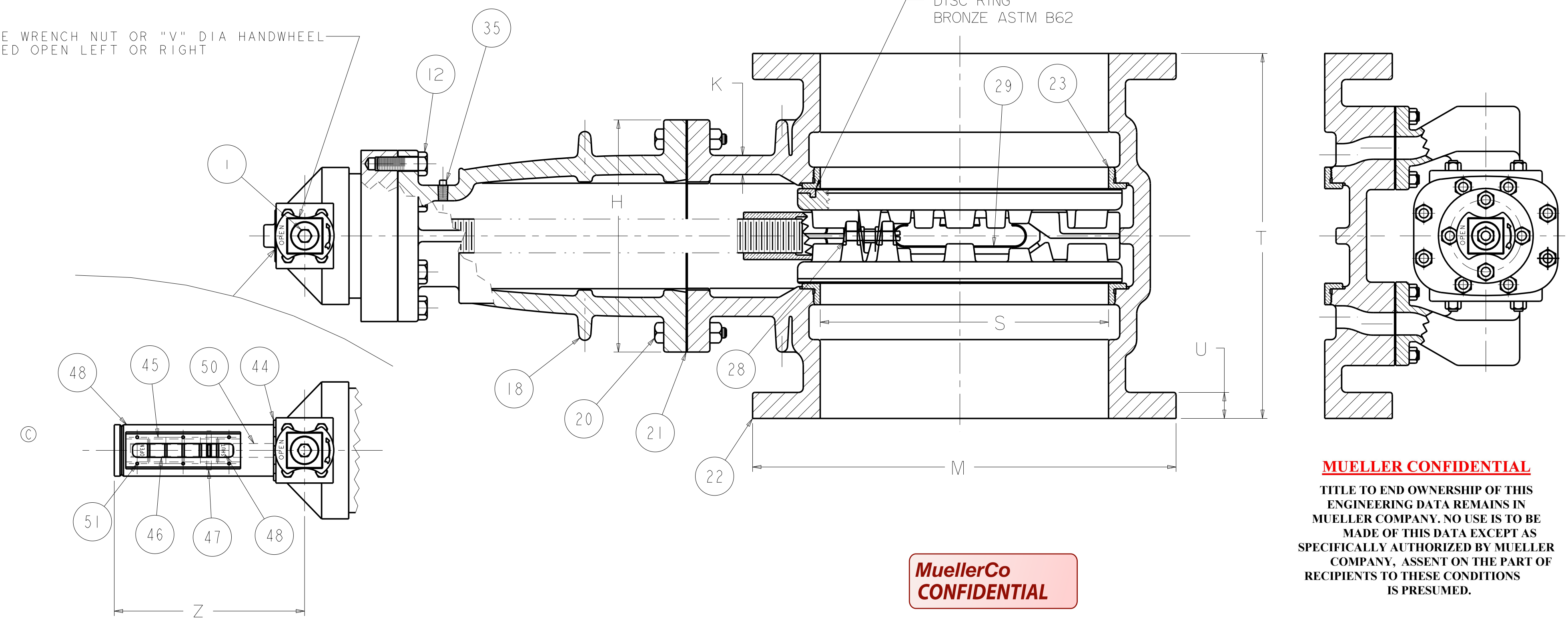


16IN - 36IN MUELLER GATE VALVES FLANGE ENDS NRS AWWA
 WITH MANUAL BEVEL GEAR ACTUATOR WITH OR WITHOUT BOTTOM BY-PASS
 WITH OR WITHOUT POSITION INDICATOR

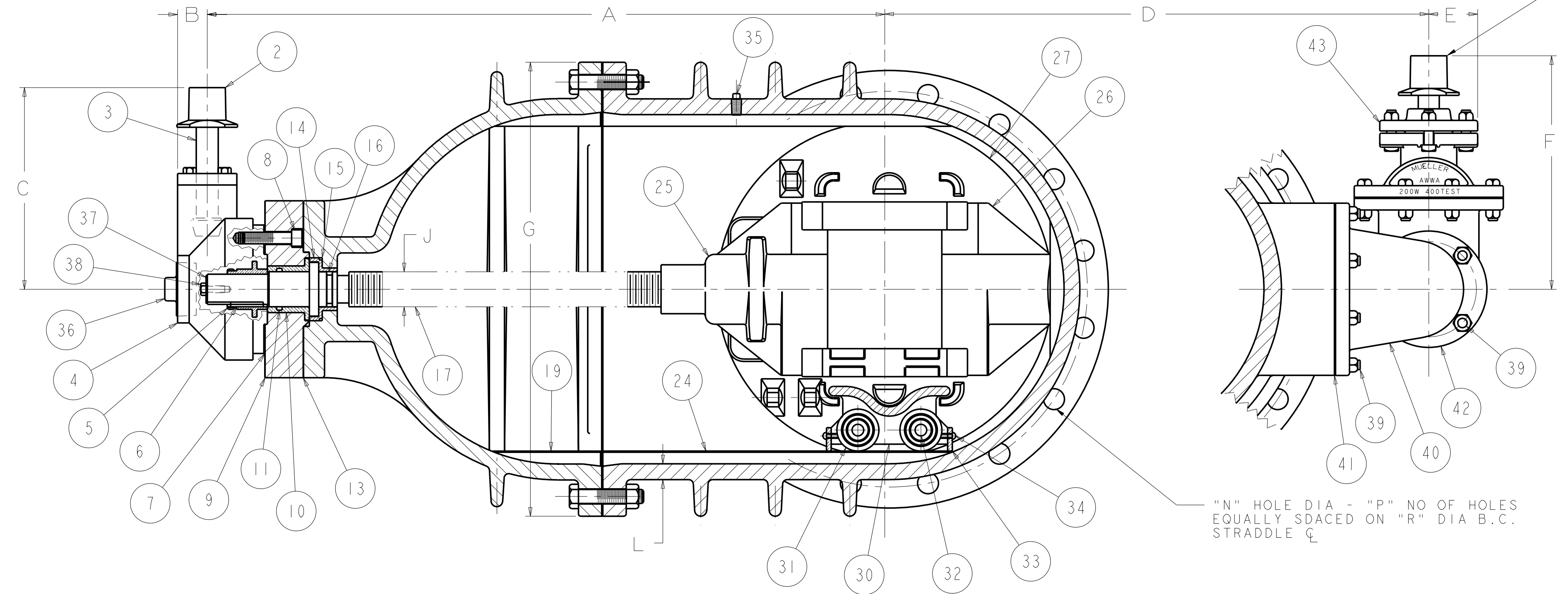
2IN SQUARE WRENCH NUT OR "V" DIA HANDWHEEL
 AS REQUIRED OPEN LEFT OR RIGHT

DISC RING
 BRONZE ASTM B62



MUELLER CONFIDENTIAL
 TITLE TO END OWNERSHIP OF THIS
 ENGINEERING DATA REMAINS IN
 MUELLER COMPANY. NO USE IS TO BE
 MADE OF THIS DATA EXCEPT AS
 SPECIFICALLY AUTHORIZED BY MUELLER
 COMPANY. ASSENT ON THE PART OF
 RECIPIENTS TO THESE CONDITIONS
 IS PRESUMED.

2IN SQUARE WRENCH NUT OR "W" DIA HANDWHEEL
 AS REQUIRED OPEN LEFT OR RIGHT



PARTS LIST				
ITEM	DESCRIPTION	REQ'D	MATERIAL	ASTM
1	CAP SCREW	1	ST STEEL	
2	WRENCH NUT	1	CAST IRON	A126 CLASS B
3	PINION SHAFT	1	*	
4	VALVE ACTUATOR	1		
5	DRIVE SLEEVE	1	*	
6	KEY	1	STEEL	
7	ACTUATOR GASKET	1	NEOPRENE	D2000 MUELLER R51
8	CAP SCREW	4	STEEL	A307 GR B PLATED
9	ACTUATOR ADAPTER	1	CAST IRON	A126 CLASS B
10	ADAPTER BUSHING	1	BRONZE	B62
11	O-RING	1	RUBBER	D2000 MUELLER R34
12	CAP SCREW	6	STEEL	A307 GR B PLATED
13	STANDARD GASKET	1	RUBBER	D2000
14	BONNET BUSHING	1	BRONZE	B62
15	O-RING	1	RUBBER	D2000 MUELLER R34
16	O-RING	1	RUBBER	D2000 MUELLER R34
17	STEM	1	BRONZE	**
18	BONNET	1	CAST IRON	***
19	BONNET TRACK	1	BRONZE	B62
20	BONNET BOLT	"X"	STEEL	A307 GR B [PLATED
21	BONNET GASKET	1	RUBBER	CLOTH INSERTED
22	BODY	1	CAST IRON	***
23	SEAT RING	2	BRONZE	B62
24	BODY TRACK	1	BRONZE	B62
25	TOP WEDGE NUT	1	BRONZE	B62
26	BOTTOM WEDGE	1	BRONZE	B62
27	DISC	2	CAST IRON	***
28	DISC PIN	2	BRASS	B21 ALLOY 464
29	SIDE SPREADER	2	BRONZE	B62
30	ROLLER CARRIAGE	1	CAST IRON	A126 CLASS B
31	ROLLER	2	BRONZE	B62
32	ROLLER SHAFT	2	BRASS	B21 ALLOY 464
33	TRACK SCRAPER	2	BRONZE	B62
34	MACHINE SCREW	4	BRASS	B21 ALLOY 464
35	TEST PLUG	2	STEEL	
36	PIPE PLUG	1	CAST IRON	
37	WASHER	1	STEEL	PLATED
38	CAP SCREW	1	STEEL	

BY-PASS VALVE PARTS				
39	STUD	"Y"	STEEL	PLATED
40	BY-PASS ELL	2	CAST IRON	A126 CLASS B
41	BY-PASS VLV GSKT	2	RUBBER	CLOTH INSERTED
42	ELL GASKET	2	RUBBER	CLOTH INSERTED
43	BY-PASS VALVE	1	SEE BY-PASS VALVE CHART	

VALVE SIZE	TURNS TO OPEN	BY-PASS SIZE	TURNS TO OPEN
16"	212±3	3	11
18"	236±3	3	11
20"	260±3	3	11
24"	308±3	4	14.5
30"	260±3	4	14.5
36"	298±3	6	20.5

BY-PASS VALVE CHART	
BY-PASS SIZE	SUB ASS'Y DWG NO
3"	6215
4"	6176
6"	6176

POSITION INDICATOR PARTS LIST				
ITEM	DESCRIPTION	REQ'D	MATERIAL	ASTM
44	LOCK WASHER	1	STEEL	
45	GASKET	1	RUBBER	
46	WINDOW	1	PLEXI GLASS	
47	POINTER	1	BRONZE	B138A ALLOY 676
48	DECAL	1		
49	HOUSING	1	STEEL	
50	INDICATOR STEM	1	BRONZE	
51	CAP SCREW	6	ST STEEL	

* SUPPLIED W/ACTUATOR BUT FINISHED BY MUELLER CO.
 ** 16IN SIZE ONLY - ASTM B138 ALLOY 675 W/ADDED LEAD FOR MACHINABILITY
 18IN - 36IN SIZES - ASTM B584 ALLOY 864
 *** 16IN - 24IN SIZES ASTM A126 CLASS B
 30IN & 36IN SIZES ASTM A126 CLASS C

VALVE SIZE	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U	V	W	X	Y	Z
16	36.75	1.56	9.88	16.88	4.00	12.50	24.38	12.88	1.88	1.06	0.84	23.50	1.12	16	21.25	16.00	20.25	1.44	16.00	8.0	18	20	10.12
18	39.88	1.56	9.88	17.75	4.00	12.50	28.00	14.88	2.00	1.12	0.94	25.00	1.25	16	22.75	18.00	22.00	1.56	18.00	8.0	20	20	10.12
20	44.88	1.62	9.88	18.88	4.00	12.50	30.50	16.12	2.12	1.18	1.00	27.50	1.25	20	25.00	20.00	22.25	1.69	20.00	8.0	20	20	10.18
24	53.12	2.00	11.56	23.12	4.50	15.00	35.25	18.00	2.38	1.44	1.18	32.00	1.38	20	29.50	24.00	25.50	1.88	24.00	11.0	24	24	12.25
30	64.62	2.50	11.56	26.88	4.50	15.00	42.62	21.00	3.00	1.94	1.56	38.75	1.38	28	36.00	30.00	28.75	2.12	30.00	11.0	32	24	12.75
36	75.25	2.50	11.56	30.25	5.94	18.12	49.75	23.25	3.25	2.19	1.75	46.00	1.62	32	42.50	36.00	32.00	2.38	30.00	13.0	36	36	12.75

④ ADDED ±3 298 WAS 312 JLC 7/28/95
 ⑥ ECN 0930 ADDED FACE PLATE & CAP SCREWS TO LIMITORQUE UNIT JLC
 ⑦ CHANGED BY-PASS VALVE PART NUMBERS ADDED POSITION INDICATOR VIEW JMB 3/6/97

DR BY: JLC	DATE: 3/6/93	UNLESS OTHERWISE NOTED	THIRD ANGLE PROJECTION	C.D. NO.
CHKD: TRJ	DATE: 3/6/93	BREAK CAST CORNERS!	PURCH. FINISH	PART. NO.
ENGR: RWV	DATE: 4/7/97	BREAK MACH CORNERS!		
MFG:		TOLERANCES	REF. NO.	SCALE
MFG:		UNLESS OTHERWISE NOTED	REF. NO.	SCALE
TOOL:		LINEAR	ANGULAR	NONE
FDRT:		±	±	STR. NO.
MATERIAL: NOTED				
Mueller Co.		DESCR. 16IN - 36IN MUELLER GATE VALVES - BEVEL GEARS POSITION INDICATOR - BOTTOM BY-PASS		NUMBER 6603