Drawing Number & Size	U6750 (D)	Rev.	D
Owner	ch.prodeng	Year	2009
Product Line	RWGV		
Description	AWWA C515 18"-36" USP1 RWGV'S W/ROTORK SPUR GEAR		
Part Numbers			
Sizes	18 20 24 30 36		
ECOs	1511865		
Key Words	AWWA C515 18"-36" USP1 RWGV'S W/ROTORK SPUR GEAR		
Material	NOTED		
Project Number	N/A		

AWWA C515 18" - 36" USP1 RESILIENT WEDGE GATE VALVES - W/ROTORK SPUR GEARING - W/ SIDE BY-PASS

*** BY-PASS VALVES
FOR 18" & 20" SIZES - 2" - RWGV - FLANGE ENDS
FOR 24" SIZE - 2.5" - RWGV - FLANGE ENDS
FOR 30" & 36" SIZE - 3" - RWGV- FLANGE ENDS
BY-PASS VALVES EQUIPPED WITH 2" SQUARE WRENCH NUT OR 6" DIA HANDWHEEL OPEN LEFT OR RIGHT AS REQUIRED
CONFORM TO AWWA C509

2" SQUARE WRENCH NUT OR OPEN LEFT OR RIGHT AS REQUIRED

G - NO. & SIZE OF BOLT HOLES EQUALLY SPACED ON H - DIA B.C. STRADDLE ∅

DETAIL OF CLEAN OUT PORTS (OPTIONAL) Ⓓ

SECTION A

PARTS LIST

ITEM	DESCRIPTION	REQ'D	MATERIAL	ASTM	
1	WRENCH NUT	1	CAST IRON [SEE NOTE 4]	A126	CLASS B
2	ROTORK SPUR GEAR IS-5	1	CAST IRON	A48	35B/40B
3	STUFFING BOX	1	HOT ROLLED STEEL	A36	
4	ADAPTER PLATE	1	HOT ROLLED STEEL	A36	
5	SOCKET HEAD SCREW	4	STEEL		SEE NOTE 2
6	GASKET	1	RUBBER	D2000	R51
7	O-RING	1	RUBBER	D2000	EPDM
8	SOCKET HEAD BOLT & NUT	4	STEEL		SEE NOTE 2
9	O-RING	1	RUBBER	D2000	EPDM
10	O-RING	1	RUBBER	D2000	EPDM
11	STEM	1	BRONZE		SEE NOTE 3
12	O-RING	3	RUBBER	D2000	EPDM
13	ANTI-FRICTION WASHER	2	BRASS		
14	BONNET BUSHING	1	BRONZE	B62	ALLOY C83600
15	EYE BOLT	2	STEEL		GALVANIZED
16	HEX BOLT & NUT	"J"	STEEL		SEE NOTE 2
17	O-RING	1	RUBBER	D2000	EPDM
18	DISC NUT	1	BRONZE	B62	ALLOY C83600
19	DISC ENCAPSULATED	1			SEE NOTE 1
20	GUIDE CAP	2	CELCON		M90
21	BODY	1	DUCTILE IRON	A536	GR 65-45-12
22	BONNET	1	DUCTILE IRON	A536	GR 65-45-12
23	SHORT NIPPLE	1	STEEL PIPE		
24	LONG NIPPLE	1	STEEL PIPE		
25	PIPE FLANGE	2	STEEL		
26	HEX BOLT	12	STEEL		SEE NOTE 2
27	PIPE GASKET	5	REINFORCED NEOPRENE	D2000	
28	HEX NUT	20	STEEL		SEE NOTE 2
29	PIPE ELBOW	2	CAST STEEL		
30	STUD	4	STEEL		SEE NOTE 2
31	SPACER	1	STEEL		
32	BY-PASS VALVE	1	***		
33	HEX NUT	2	STEEL	A136	
34	PIPE PLUG	2	SUPPLIED WHEN TAPPED		
35	BODY - FLG X MJ ENDS Ⓒ	1	DUCTILE IRON	A536	GR 65-45-12
36	BODY - MJ X MJ ENDS Ⓒ	1	DUCTILE IRON	A536	GR 65-45-12

35 FLG x MJ ENDS Ⓒ

MECH JOINT END(S) "AA" - NO. & SIZE HOLES AND OR SLOTS EQUALLY SPACED ON "BB" ∅ B.C.

36 MJ x MJ ENDS Ⓒ

NOTES:
Ⓐ 1) RUBBER ENCAPSULATED DUCTILE IRON DISC
RUBBER - EPDM ASTM D2000
DUCTILE IRON ASTM A536 GRADE 65-45-12

2) BOLTS ARE - SAE J429 GRADE 2
NUTS - ASTM A563 GRADE B
FASTENERS - PLATED TO ASTM F1941 CLASS Fe/Zn 12C

3) 18" VALVE - MANGANESE BRONZE CDA ALLOY C67600 H02 TEMPER
20" & 24" & 36" VALVES - BRONZE ASTM B584 ALLOY C86400

Ⓑ 4) MANUFACTURER'S OPTION TO UPGRADE TO MATERIAL DUCTILE IRON A536 GRADE 65-45-12

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	AA	BB	TURNS TO OPEN 18"-36" RATIO 4.1:1 Ⓐ	HANDWHEEL DIAMETER
18	49.64	30.50	25.00	18.38	17.00	1.69	16 - 1.25	22.75	12	10.24	8.00	5.00	8.50	21.50	9.88	32.50	8.50	19.00	19.64	20.74	24.88	21.00	1.06	12 - .88	23.25	234	18.00
20	52.75	33.75 Ⓐ	27.50	20.38	18.00	1.78 Ⓐ	20 - 1.25	25.00	12	10.24	8.00	5.00	8.50	22.50	9.88	33.50	9.00	19.75	21.74	22.84	27.25	21.50	1.60	14 - .88	25.50	258	18.00
24	59.15	39.50	32.00	24.38	20.00	2.00	20 - 1.38	29.50	16	10.24	8.00	6.00	10.31	25.06	12.38	37.31	10.00	21.75	25.94	27.05	31.88	23.50	1.12	16 - .88	30.00	308	18.00
30	70.83	48.00	38.75	30.38	26.00	2.12	28 - 1.38	36.00	20	10.24	8.00	7.08	11.67	27.70	12.38	43.20	13.00	29.75	32.18	33.47	39.53	33.50	1.25	20 - 1.125	36.88	381 Ⓑ	18.00
36	83.14	56.50	46.00	36.38	30.00	2.37	32 - 1.63	42.75	24	10.24	8.00	8.75	13.40	31.75	12.38	47.25	15.00	33.75	38.48	39.77	46.41	37.50	1.45	24 - 1.125	43.75	455 Ⓑ	24.00

Ⓐ ECO 1405384 CHANGED DISC AND O-RING MATERIAL TO EPDM ADDED COLUMN TO TABLE. 33.75 WAS 33.00 1.78 WAS 1.75 KWE 10/06/06

Ⓑ ECO 1456211 ADDED DUCTILE IRON ITEM 33 WAS HOT ROLLED STEEL A536 WAS A36 372 WAS 381 444 WAS 455 ADDED NOTE 4 CAP 12/14/07 ADDED DETAIL VIEW

Ⓒ ECO 1479463 ADDED MJXMJ AND FLXMJ END CONFIGURATIONS MCB 07/25/08

Ⓓ ECO 1511865 REMOVED NOTE "SIZES 24" AND LARGER" H D 7/28/09

ECO 1369977

APPROVED
By Nicholas Franklin at 3:25 pm, Aug 18, 2009

DR BY	CAP	11/17/05	UNLESS OTHERWISE NOTED
CHKR	PSG	11/17/05	BREAK CAST CORNER(S)
ENGR	RWV	11/17/05	BREAK MACH CORNER(S)
MGR			TOLERANCES
MFG			UNLESS OTHERWISE NOTED
TOOL			LINEAR ANGULAR
FDRY			± ±

THIRD ANGLE PROJECTION

C.B. NO.

PURCH. NO | FINISH ASSY | PATT. NO.

REF. NO. | SCALE NONE

STK. NO.

MAT'L NOTED

UNITED STATES PIPE AND FOUNDRY CO CHATTANOOGA TENNESSEE

DESCR AWWA C515 18"- 36" USP1 RWGV'S W/ROTORK SPUR GEAR

NUMBER U6750

U6750

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