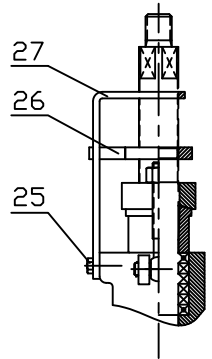
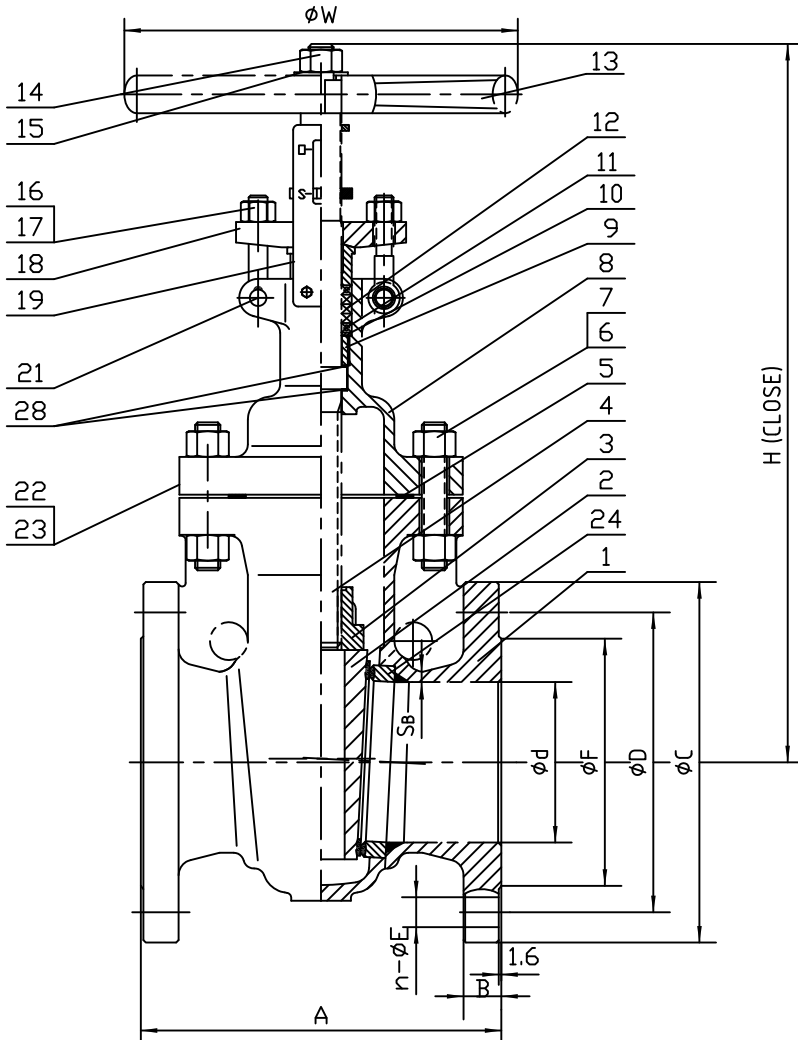


Wm. E. Williams No. N15F4AB Class 150 RF NRS Gate Valve ASTM A216 WCB (ALUMINUM BRONZE TRIM)



BILL OF MATERIALS		
ITEM	PART	MATERIAL
1	BODY	ASTM A216-WCB
2	WEDGE	ASTM A216-WCB+ALUM BRONZE
3	STEM NUT	ASTM A439 D-2
4	STEM	ALUMINUM BRONZE
5	GASKET	304+GRAPHITE
6	BOLT	ASTM A193-B7
7	NUT	ASTM A194-2H
8	BONNET	ASTM A216-WCB
9	RETAIN NUT	ASTM A276-410
10	GASKET	ASTM A276-410
11	PACKING	Stainless Steel Wire With Flexible
12	PACKING	GRAPHITE
13	HANDWHEEL	NODULAR CAST IRON
14	NUT	ASTM A29-1035
15	WASHER	ASTM A276-410
16	EYE BOLT	ASTM A193-B7
17	EYE NUT	ASTM A194-2H
18	GLAND FLANGE	ASTM A216-WCB
19	GLAND	ASTM A276-410
21	PIN	ASTM A29-1035
22	NAME PLATE	304SS
23	RIVET	304SS
24	BODY RING	ASTM A105+ALUM BRONZE
25	BOLT	ASTM A193-B7
26	INDICATOR	ASTM A29-1045
27	INDICATION ROD	ASTM A29-1020
28	THRUST WASHER	ALUMINUM BRONZE

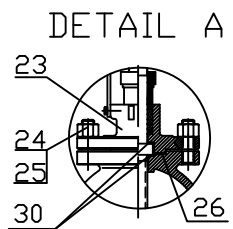
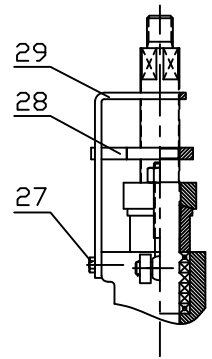
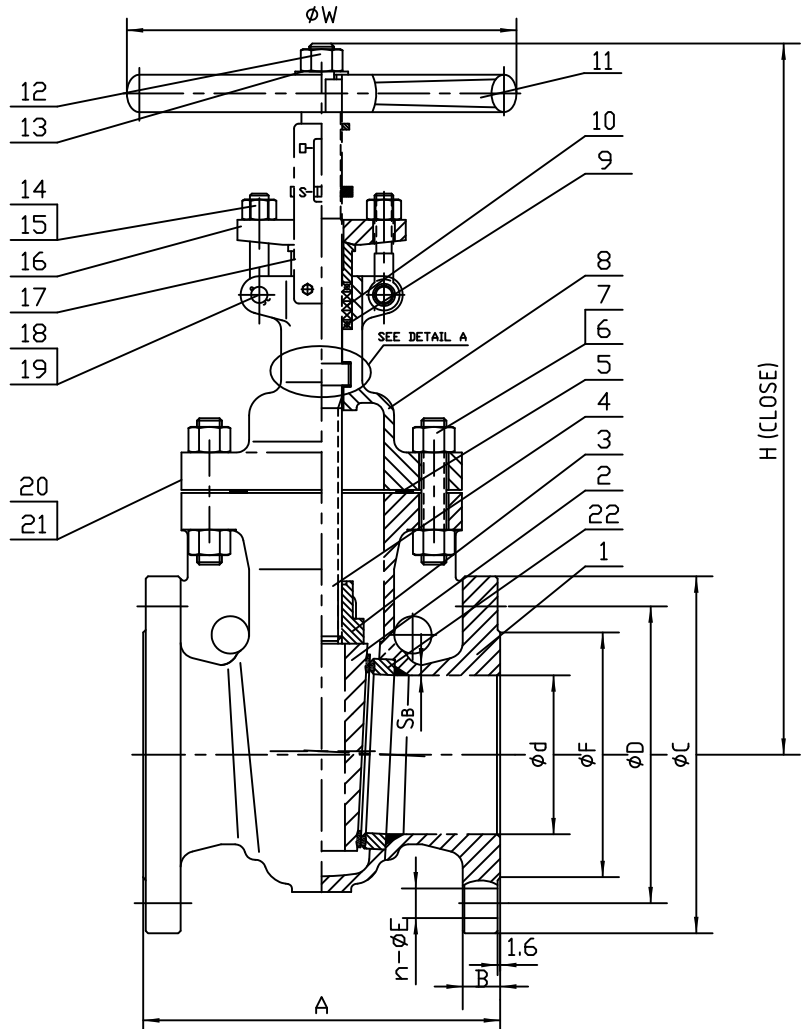
SIZE	d	A	B	C	D	n	E	F	H	W	S _b
2"	51	178	16	152	120.7	4	19	92.1	332	200	8.6
2-1/2"	64	190	17.5	178	139.7	4	19	104.8	362	200	9.5
3"	76	203	19	190	152.4	4	19	127	410	250	10.5
4"	102	229	24	229	190.5	8	19	157.2	464	250	11.5


WILLIAMS
 VALVE CORPORATION
38-52 REVIEW AVENUE
 LONG ISLAND CITY, NY 11101
 TEL: 718-392-1660
 FAX: 718-729-5106

TITLE: CAST STEEL NRS GATE VALVE
CLASS 150 - ALUMINUM BRONZE TRIM- RF - WCB BODY

					MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST: API 598			MATERIAL: ASTM A216 GR.WCB	UNITS: Inch, mm		
△	6/30/16	RELEASED PER P/L UPDATE	F.J.	R.P.	R.P.	DIM.OF FLANGE	ANSI B16.5	SHELL	HYDRO	450PSI	CLASS: 150	DATE: 06/12/15	SCALE: N.T.S.
△	6/12/15	RELEASED	F.J.	R.P.	R.P.	FACE TO FACE	ANSI B16.10	SEAT	AIR	80PSI	SIZE: 2" - 4"	FIG. No.: N15F-4AB	
						WALL THICKNESS	API 600	BACK SEAT	HYDRO	315PSI	DRAWN BY: F.J.		
NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	DESIGNED	API 600, ANSI B16.34				CHK'D & APR'D BY: R.P.	REV: 2	DWG No.:60GA120140-2-4-28

Wm. E. Williams No. N15F4AB Class 150 RF NRS Gate Valve ASTM A216 WCB (ALUMINUM BRONZE TRIM)



BILL OF MATERIALS		
ITEM	PART	MATERIAL
1	BODY	ASTM A216-WCB
2	WEDGE	ASTM A216-WCB+ALUM BRONZE
3	STEM NUT	ASTM A439 D-2
4	STEM	ALUMINUM BRONZE
5	GASKET	304+GRAPHITE
6	BOLT	ASTM A193-B7
7	NUT	ASTM A194-2H
8	BONNET	ASTM A216-WCB
9	PACKING	GRAPHITE
10	PACKING	GRAPHITE
11	HANDWHEEL	NODULAR CAST IRON
12	NUT	ASTM A29-1035
13	WASHER	ASTM A276-410
14	EYE BOLT	ASTM A193-B7
15	EYE NUT	ASTM A194-2H
16	GLAND FLANGE	ASTM A216-WCB
17	GLAND	ASTM A276-410
18	SPLIT PIN	ASTM A570 Gr.A
19	PIN	ASTM A29-1035
20	NAME PLATE	304SS
21	RIVET	304SS
22	BODY RING	ASTM A105+ALUM BRONZE
23	BONNET	ASTM A216-WCB
24	EYE BOLT	ASTM A193-B7
25	EYE NUT	ASTM A194-2H
26	GASKET	SS304+GRAPHITE
27	BOLT	ASTM A193-B7
28	INDICATOR	ASTM A29-1045
29	INDICATION ROD	ASTM A29-1020
30	THRUST WASHER	ALUMINUM BRONZE

SIZE	d	A	B	C	D	n	E	F	H	W	S _b
6"	152	267	26	279	241.3	8	22	215.9	609	300	12
8"	203	292	29	343	298.5	8	22	269.9	716	350	12.7
10"	254	330	31	406	362	12	25	323.8	801	400	14.5
12"	305	356	32	483	431.8	12	25	381	949	450	16
14"	337	381	35	533	476.3	12	29	412.8	1020	500	17
16"	387	406	37	597	539.8	16	29	469.9	1138	560	17.5
18"	438	432	40	635	578	16	32	533	1206	640	18.5
20"	489	457	43	699	635	20	32	584	1320	640	19.1

WILLIAM E. WILLIAMS VALVE CORPORATION
 38-52 REVIEW AVENUE, LONG ISLAND CITY, NY 11101
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TITLE: CAST STEEL NRS GATE VALVE
 CLASS 150 - ALUMINUM BRONZE TRIM- RF - WCB BODY

NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	DESIGNED	MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST: API 598	MATERIAL: ASTM A216 GR.WCB	UNITS: Inch, mm
△	6/30/16	RELEASED PER P/L UPDATE	F.J.	R.P.	R.P.		DIM.OF FLANGE	ANSI B16.5	SHELL	HYDRO	450PSI
							FACE TO FACE	ANSI B16.10	SEAT	AIR	80PSI
△	6/12/15	RELEASED	F.J.	R.P.	R.P.		WALL THICKNESS	API 600	BACK SEAT	HYDRO	315PSI
								API 600, ANSI B16.34			
									CHK'D & APR'D BY: R.P.	REV: 2	DWG No.: 60GA120140-28

MATERIAL: ASTM A216 GR.WCB
 CLASS: 150 DATE: 06/12/15
 SIZE: 6" - 20" FIG. No.: N15F-4AB
 DRAWN BY: F.J.
 CHK'D & APR'D BY: R.P. REV: 2 DWG No.: 60GA120140-28