



AWWA C509 250PSI/300PSI

FGN105/FGN108 Non-rising Stem Groove Joint Ends Resilient Wedge Gate Valves

- ◆ Bolted Bonnet • Non-Rising Stem • Resilient Wedge • Flanged x Groove • Groovex Groove
- ◆ 250 PSI/300 PSI/17.2 Bar Non-Shock Cold Working Pressure
- ◆ CONFORMS TO AWWA C509

MATERIAL LIST

PART	SPECIFICATION
1 Valve Body	Cast Iron ASTM A 536
2 Resilient Wedge	Ductile Iron ASTM A 536/EPDM ASTM D 2000
3 Wedge Nut	Bronze ASTM B 584 UNS C83600
4 Stem	Stainless Steel ASTM A 276 UNS S41000
5 Bonnet Gasket	EPDM ASTM D 2000
6 Bonnet Screw	Alloy Steel ASTM A 574M Zinc Plated
7 Bonnet	Cast Iron ASTM A 126-B
8 Stem Primary O-Ring	EPDM ASTM D 2000
9 Stem Thrust Washer	Stainless Steel ASTM A 276 UNS S41000
10 Gland Seal O-Ring	EPDM ASTM D 2000
11 Stem Ring Wiper	EPDM ASTM D 2000
12 Operating Nut Washer	Carbon Steel Zinc Plated
13 Operating Nut Screw	Alloy Steel ASTM A 574M Zinc Plated
14 Square Operating Nut	Cast Iron ASTM A 126-B
14(A) Handwheel (Optional)	Ductile Iron ASTM A 536
15 Stem Primary O-Ring	EPDM ASTM D 2000
16 Stem Seal Bushing	Brass ASTM B 16 UNS C36000

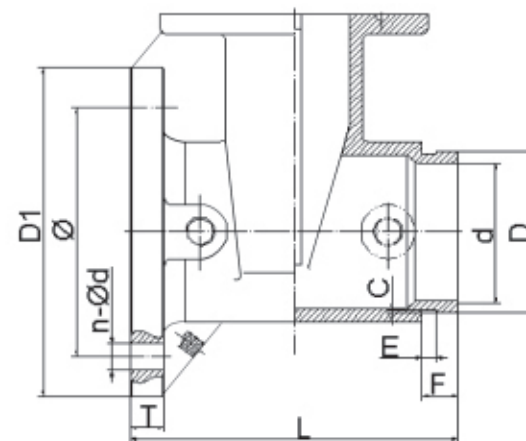


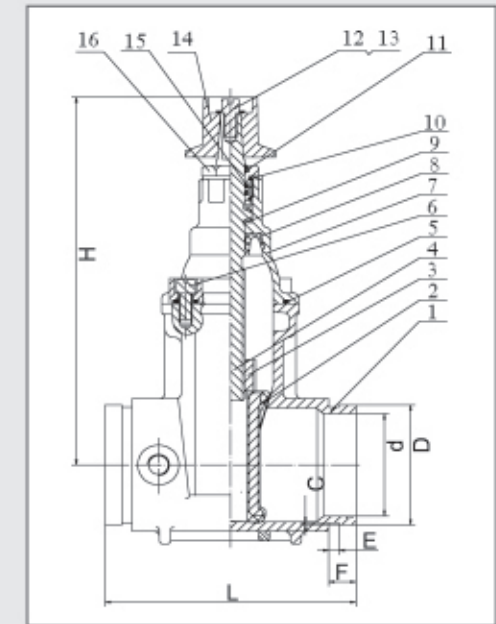
Fig x Groove

Coating—Electrostatically applied fusion-bonded epoxy 0.2–0.5mm. inside and outside. Meets or exceeds AWWA C550. Maximum operating temperature 160°F/71°C.



GroovexGroove FGN105

Fig x Groove FGN108



GroovexGroove

Freezing Weather Precaution—Subsequent to testing a piping system, valves should be in an open position to allow complete drainage.

DIMENSION-WEIGHTS-QUANTITIES

Size	Dimension																Bolt Circle	Flange Holes	Turns To Open				
	L	C	D	E	F	G	d	D1	T														
In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm				
2.5	65	7.5	190.5	0.08	2	2.87	73	0.31	7.95	0.94	24	7.87	200	2.6	65	7	178	0.69	17.5	5.5	140	4-φ19	8
3	80	8.0	203	0.08	2	3.50	89	0.35	9	0.98	25	10.00	254	3.0	73	7.5	191	0.75	19	6.00	152.5	4-φ19	10.5
4	100	9.00	229	0.08	2	4.49	114	0.35	9	0.98	25	10.00	254	4.0	100	9.0	229	0.94	24	7.50	190.5	8-φ19	13.75
6	150	10.5	267	0.08	2	6.61	168	0.35	9	0.98	25	12.40	315	6.0	150	11.0	279	1.00	25.4	9.50	241	8-φ23	16
8	200	11.5	292	0.09	2.3	8.62	219	0.47	12	1.22	31	14.76	375	8.0	200	13.5	343	1.13	28.6	11.73	298.5	8-φ23	17.5
10	250	13	330	0.1	2.55	10.74	272.9	0.52	13.2	1.25	31.7	16.38	416	10	250	15.95	406	1.19	30.2	14.25	362	12-φ23	21.5
12	300	14	356	0.13	3.35	12.78	324.5	0.52	13.2	1.25	31.7	17.52	445	12	300	19.02	483	1.25	31.8	17.01	432	12-φ23	26