Cast Steel: Gates/Globes/Checks
Milwaukee Valve Company
WCB Body/Bonnet/Cap/API 8 Trim

Features and Benefits

Gates
- Flexible Wedge for improved seating
- 2 bolt adjustable stem packing arrangement for longer packing life
- Stems have a grounded finish for improved packing seal
- Outside Screw and Yoke rising stem design

Globes
- Rotating seat disc for improved seating
- Outside Screw and Yoke rising stem design
- 2 bolt adjustable stem packing arrangement for longer packing life

Swing Checks
- Horizontal design
- Pinned rotating disc for improved sealing

Gate/Globe/Swing Checks
- Seat faces lapped for improved sealing
- Seats rings are sealed-welded for stable shut-off
- API 8 trim standard on Gate/Globe/Checks
- Materials to ASTM standards
- Heat codes and MTR's provided for traceability of each valve

Product Range
- ASME Class 150/300/600 Flanged and Butt-Weld Connections
- Size Range: 2"-24", Consult Factory for larger sizes

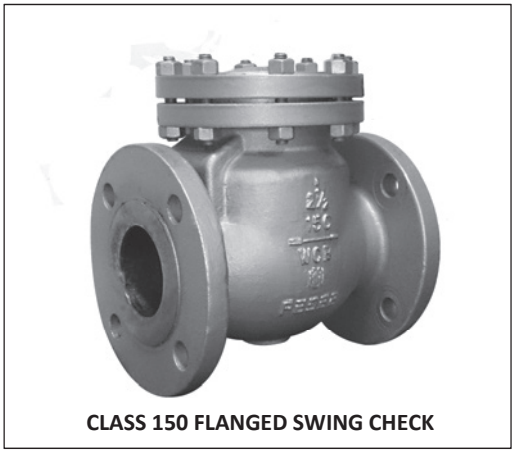
Operators Available
- Handwheel and Bevel Gear Operators available
- Electric Actuation available for Gates

Materials of Construction
- Body/Bonnet/Cap: ASTM A216 Gr WCB Cast Steel
- Trim: API 8 standard
- Stem: ASTM A182 F6a (410 Gr SS) for Gates/Globes
- Seats: A105-Cr-Co Hard faced seats and Seal Welded
- Packing: Multiple Graphite rings for Gates/Globes
- Body Gaskets: Graphite/Stainless Steel

Specifications and Standards
- Design: Wall Thickness & Trim API 600/ASME B16.34
- Connections: Flanges to ASME B16.5/Butt-weld to ASME 16.25
- End to End Dimensions: ASME B16.10
- Testing and Inspection: API 598, RP 591
- Pressure and Temperature: ASME B16.34
- Operating Temperature: -20 to 800° F
- By-Passes and Drains: MSS SP-45

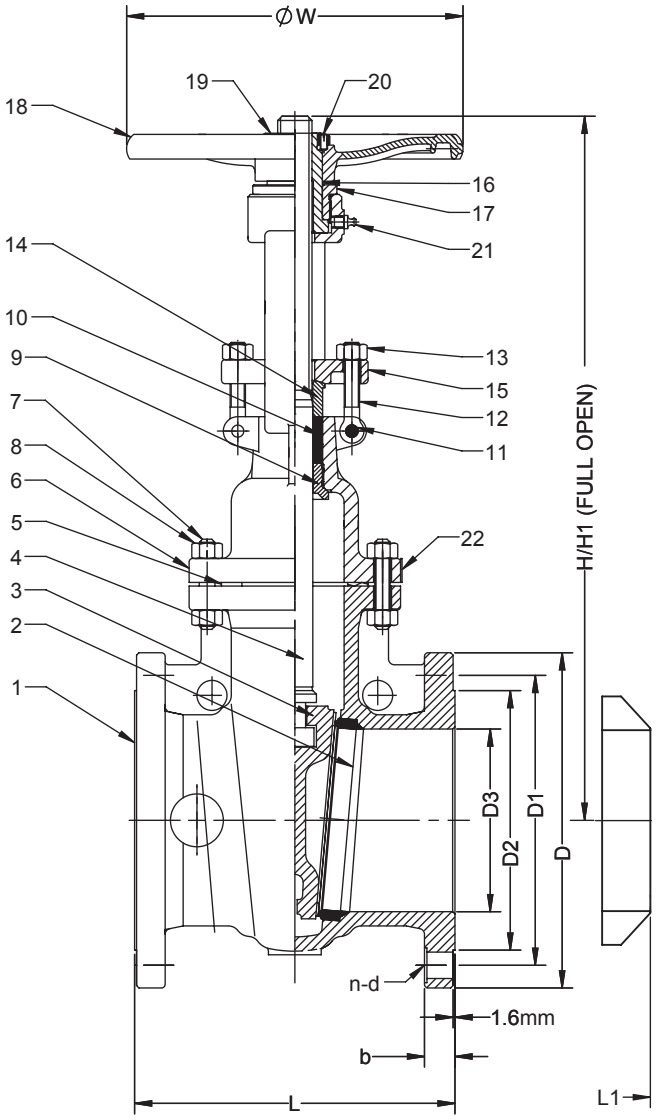
CLASS 150 FLANGED GATE

CLASS 150 FLANGED GLOBE



CLASS 150 FLANGED SWING CHECK

1550CB2 FLANGED ENDS
1552CB2 BUTT-WELD ENDS
GATE CLASS 150 2''-12''



SPECIFICATIONS
DESIGN: API 600 12th Edition, ASME B 16.34
PRESSURE-TEMP RATINGS: ASME B 16.34
CONNECTIONS: ASME B 16.5, B 16.25
FACE TO FACE : ASME B 16.10
TEST & INSPECTION: API 598 RP 591

MATERIAL LIST

ITEM	PART NAME	MATERIAL
1	BODY	ASTM A216 WCB
2	SEAT RING	A105+Co-Cr-W
3	WEDGE	ASTM A216 WCB+13Cr HF
4	STEM	ASTM A182 F6a
5	GASKET	GRAPHITE+SS CORE
6	BONNET	ASTM A216 WCB
7	STUD BODY/BONNET	A193 B7
8	NUT BODY/BONNET	A194 2H
9	BACKSEAT BUSHING	A276 TYPE 420
10	PACKING	GRAPHITE
11	GLAND EYEBOLT PIN	CARBON STEEL
12	GLAND EYEBOLT	CARBON STEEL
13	GLAND EYEBOLT NUT	CARBON STEEL
14	GLAND	A276 420
15	GLAND FLANGE	ASTM A216 WCB
16	YOKE BUSHING NUT	A439 TYPE D2
17	YOKE BUSHING	CARBON STEEL
18	HANDWHEEL	ASTM A536
19	HANDWHEEL NUT	CARBON STEEL
20	SET SCREW	CARBON STEEL
21	GREASE FITTING	BRASS
22	NAMEPLATE	304 SS

SIZE		L FACE TO FACE	L1 BUTT WELD	D DIA	D1 BOLT CIRCLE	D2 RAISED FACE DIA	D3 DIA	b THICKNESS	n NUMBER OF HOLES	d HOLE DIA	H CLOSED	H1 FULL OPEN	W HANDWHEEL
2"	IN	7.00	8.50	5.98	4.75	3.62	2.00	0.62	4	0.75	13.66	16.26	7.87
	MM	178	216	152	121	92	51	16		19	347	413	200
2 1/2"	IN	7.50	9.49	7.01	5.50	4.13	2.50	0.69	4	0.75	14.92	18.03	7.87
	MM	191	241	178	140	105	64	18		19	379	458	200
3"	IN	7.99	11.10	7.48	6.00	5.00	2.99	0.75	4	0.75	14.96	18.62	9.84
	MM	203	282	191	152	127	76	19		19	380	473	250
4"	IN	9.00	12.01	9.02	7.50	6.18	4.02	0.94	8	0.75	17.17	21.73	9.84
	MM	229	305	229	191	157	102	24		19	436	552	250
5"	IN	10.00	15.00	10.00	8.50	7.32	5.00	0.94	8	0.87	20.75	26.30	11.81
	MM	254	381	254	216	186	127	24		22	527	668	300
6"	IN	10.50	15.87	10.98	9.50	8.50	5.98	1.00	8	0.87	23.19	29.49	11.81
	MM	267	403	279	241	216	152	25		22	589	749	300
8"	IN	11.50	16.50	13.50	11.75	10.63	7.99	1.12	8	0.87	28.70	37.52	14.17
	MM	292	419	343	299	270	203	29		22	729	953	360
10"	IN	13.00	17.99	15.98	14.25	12.76	10.00	1.19	12	0.98	34.69	45.43	15.75
	MM	330	457	406	362	324	254	30		25	881	1154	400
12"	IN	14.00	19.76	19.02	17.00	15.00	12.01	1.25	12	0.98	40.20	52.95	17.72
	MM	356	502	483	432	381	305	32		25	1021	1345	450