



flow & process solutions



CRANE[®]

Energy Flow Solutions

Stockham Iron Valves



SETTING THE STANDARD IN SERVICE

 **STOCKHAM**[®]

SETTING THE STANDARD IN SERVICE

The Stockham Pledge

Stockham is committed to setting the standard in quality service to the Commercial Construction industry.

Our pledge to our customers is:

- A friendly voice every time you call
- Quick response to your quotes and questions
- On-time delivery
- Accurate shipments

General Information	5-8
Globe and Angle Valves	
Class 125.....	9-10, 34
Class 250.....	11-13
Class 300.....	14
Gate Valves	
Class 125.....	15-20, 23, 35-36
Class 150.....	21-22
Class 250.....	24-25
Swing Check Valves	
Class 125.....	26-29, 37
Class 250.....	30
Class 300.....	31
Wafer Check Valves	
200 CWP	32
Class 125.....	33
International Iron Valves	
Class 125.....	34-37
Malleable Valves	
Globe	14
Gate	21-23
Check.....	31
Stop Check Valves	
Y-Pattern.....	12
Angle Pattern	13
Technical Data	38-40

Figure Number Index

IRON VALVES		IRON VALVES	
FIG. NO.	PAGE	FIG. NO	PAGE
F-532	11	G-623	19
F-540	12	G-623-I	36
F-541	13	G-624.....	20
F-661	24	G-675.....	21
F-667	25	G-676.....	23
F-947	30	G-679.....	22
G-512.....	9	G-927.....	26
G-512-I	34	G-931.....	27
G-515.....	10	G-931-I	37
G-574.....	14	G-931 L & W.....	28
G-608.....	15	G-933.....	29
G-612.....	16	G-975.....	31
G-612-I	35	WG-961	32
G-613.....	17	WG-970	33
G-620.....	18		

For Commonly Used Valves

BRONZE

GLOBE

	<u>Stockham</u>	<u>NIBCO</u>	<u>Milwaukee</u>
Class 125	B-16	T-211-B	502
Class 300 SS Trim	B-74	T-276AP	593A
	B-66	T-275-B	572

GATE

Class 125 RS-Thread	B-100	T-111	148
Class 125 NRS-Thread	B-103	T-113	105
Class 125 RS-Solder	B-108	S-111	149
Class 125 NRS-Solder	B-104	S-113	115
Class 150 Union Bonnet	B-120	T-134	1151
Class 300 SS Trim	B-145	T-174-SS	1184

CHECK

Class 125 Thread	B-319Y	T-413-BY	509
Class 125 Solder	B-309Y	S-413-B	1509
Class 300 Swing Check	B-375	T-473-B	507
	B-321	T-433-B	515

IRON

GATE

	<u>Stockham</u>	<u>NIBCO</u>	<u>Milwaukee</u>	<u>Powell</u>	<u>Walworth</u>
Class 125 NRS	G-612	F-619	F2882 A	1787	W719F
Class 125 OS&Y	G-623	F-617-0	F2885 A	1793	W726F
Class 250 OS&Y	F-667	F-667-0	F2894 A	1797	W786F

GLOBE

Class 125	G-512	F-718-B	F2981 A	241	W906F
-----------	-------	---------	---------	-----	-------

SWING CHECK

Class 125 Flanged	G-931	F-918-B	F2974 A	559	W928F
-------------------	-------	---------	---------	-----	-------

STOP CHECK

Class 250 Straight-way Y-Pattern	F-540	----	----	----	----
Class 250 Angle Y-Pattern	F-541	F-869-B	----	----	----

Stockham iron body valves are proven performers in mechanical systems of commercial buildings throughout America. Chemical plants, steel mills, shipyards, refineries, pulp and paper mills, and utilities have also found that Stockham iron body valves do the job better and longer for their many general services.

QUALITY MANAGEMENT

Stockham is committed to a philosophy of total quality management. It begins with design, to comply with pertinent MSS and ASME Standards. Continuous improvement are applied in a process to improve materials and services to meet or exceed customer needs.

MATERIALS

The iron used as the basic valve material conforms to the chemical and physical requirements of the American Society of Testing and Materials A-126 Class B for Cast Iron Valves.

RATED WORKING PRESSURES

The pressure-temperature ratings of Stockham iron body valves in this catalog section are as follows:

TEMPERATURE °F	PRESSURE (PSIG)				
	CLASS 125 CAST IRON			CLASS 250 CAST IRON	
	SIZES	SIZES	SIZES	SIZES	SIZES
	2-12	14-24	30-36	2-12	14-24
-20 to 100	200	150	150	500	300
150	200	150	150	500	300
200	190	135	115	460	280
225	180	130	100	440	270
250	175	125	85	415	260
275	170	120	65	395	250
300	165	110	50	375	240
325	155	105		355	230
350	150	100		335	220
375	145			315	210
400	140			290	200
425	130			270	
450	125			250	
500					
600					
650					

The temperature shown for a corresponding pressure rating is the temperature of the pressure containing shell of the component. In general, this temperature is the same as that of the contained fluid. Composition disc valves are excluded from these ratings.

DESIGN:

GATE VALVES-CLASSES 125 and 250

Stem—All stems are designed for ample strength and are machined to function easily. Backseats are provided on OS&Y valves.

Packing Gland Assembly—Glands and gland flanges have a ball and socket joint which assures alignment. It provides for proper packing compression without binding against the stem.

Packing—Non-Asbestos.

Disc—Strong, solid wedge discs have disc guides for precision seating with minimum friction against body seats.

Yoke and Bonnet—One-piece yoke bonnets are utilized on 12" and smaller size OS&Y valves. Larger sizes have separate yokes and bonnets.

Stuffing Box—NRS valves have stuffing boxes assembled to bonnets to accommodate the packing gland assembly.

Seat Ring—Buttress-type seat rings are bottom-seated with accurately machined faces to match disc faces.

Handwheel or Operating Nut—Handwheels have large diameters for good leverage. Operating nuts, 2" square may be furnished on any NRS valve if specified.

Yoke Bushing—Yoke bushings on OS&Y valves have Acme threads for stem engagement, and handwheels fit snugly over bushings. Handwheels are securely locked to yoke bushings with locknuts. Bolted yoke cap secures the yoke bushing to yoke.

Body—Body sections are evenly distributed for maximum strength. Dimensions and drilling of end flanges of cast iron valves conform to the ASME Standard B16.1 for Classes 125 and 250 Cast Iron Flanges. Face-to-face dimensions comply with ASME Standard B16.10.

**DESIGN:
GLOBE AND ANGLE VALVES-OUTSIDE SCREW AND
YOKE-CLASSES 125 and 250**

Stem—Stems are machined with Acme threads which fully engage the yoke bushing threads at all times.

Packing Gland Assembly—Glands and gland flanges have a ball and socket joint which assures alignment and proper packing compression.

Packing—Non-Asbestos.

Backseat Bushing—Bushings are threaded into bonnets, providing beveled seats for backseating on stem shoulders.

Disc—Bronze discs are furnished in Class 125 and 250 globe and angle valves, which are regrindable. Disc nuts thread into disc. The Class 250 nonreturn stop-check valve conforms to ASME boiler codes and utilizes a dashpot and piston design to cushion the disc action.

Yoke Bonnet—One-piece yoke bonnets are fastened to bodies with capscrews.

Seat Rings—Seat rings are bottom seated and are readily renewable.

Handwheel—Handwheels have large diameters for ample leverage.

Yoke Bushing—Accurate Acme threads engage stem threads. Set screws fasten yoke bushings to yoke.

Body—Bodies are designed with uniform sections evenly distributed for maximum strength. Dimensions and drilling of end flanges on flanged valves conform to the ASME Standard B16.1 for Classes 125 and 250 Cast Iron Flanges. Face-to-face dimensions comply with the ASME Standard B16.10.

**DESIGN:
SWING CHECK VALVES-CLASSES 125 and 250**

Cap—Caps are bolted to bodies.

Hinge—Hinges are precisely drilled for assembly with discs.

Hinge Pin—Pins are located by side plugs screwed into bodies.

Disc—Disc faces are accurately machined for tight seal with seat rings.

Seat Ring—Buttress design of renewable seat rings provides bottom seating and good strength.

Body—Dimensions and drilling of end flanges on flanged valves conform to ASME Standard B16.1 for Classes 125 and 250 Cast Iron Flanges. Face-to-face dimensions comply with ASME B16.10.

Figure G-931 L&W:

2"-12" come standard with an adjustable lever arm which can be orientated in any position in 15° increments. These valves can be installed in horizontal lines or in vertical lines with upward flow. 14"-24" valves must be specified at the time of inquiry and order with the installation orientation for horizontal or vertical-upward flow.

ACCESSORIES—Stockham iron body valves may be furnished with motor operators, gearings, bypasses, floorstands, extension stems, lever and weight attachment or other accessories.

MARKING—Numerals indicate the size and pressure class. Cast arrows indicate direction of flow on check, globe and angle valves.

TESTING AND INSPECTION—Before shipment, each valve is individually tested under pressure for soundness of castings and tight closure to MSS Standards.

FINISH—External cast iron parts are coated with a durable black finish.

WEIGHTS AND DIMENSIONS—Dimensions and weights shown in this catalog section are furnished for estimating purposes only and are subject to change without notice. It is our intent to maintain basic dimensional requirements of accepted standards.

C_v COEFFICIENTS*
(For estimating purposes only)

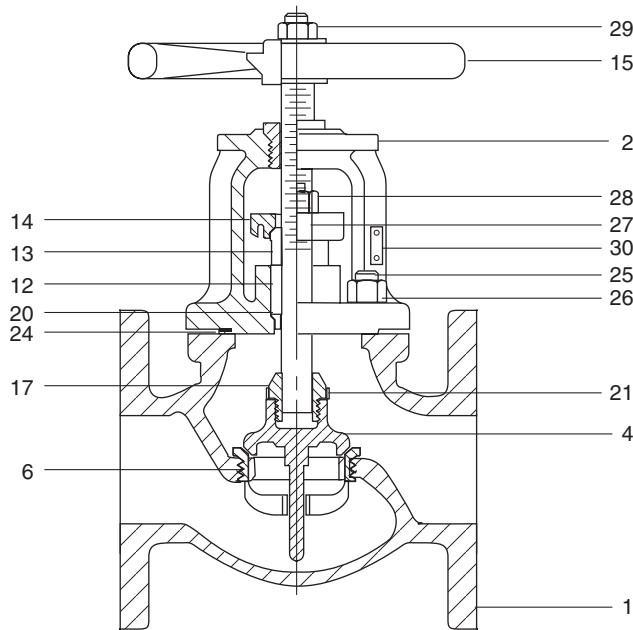
Size	Gate	Globe	Swing Check
2	327	50	131
2½	480	74	192
3	742	114	297
4	1314	202	526
5	2129	327	852
6	3175	487	1270
8	5691	873	2276
10	8970	1376	3588
12	13351	—	5340
14	16277	—	6511
16	21562	—	8625
18	28715	—	11486
20	35760	—	14304
24	52165	—	20866
30	82563	—	—
36	119910	—	—

*Fully open. C_v=GPM @ 1 PSI ΔP, 60°F Water

The above values for Swing Check Valves are correct only when the valve is fully open. This corresponds to a velocity of 6 ft./sec. for water flow.

Figure G-512

Class 125 • Bolted Bonnet • OS&Y • Bronze Trim • Flanged Ends



Materials of Construction

No.	Description	Material
1	Body	Hi-Str. Cast Iron
2	Bonnet	Hi-Str. Cast Iron
4	Disc	(2" - 6") Bronze (8" - 10") Cast Iron
6	Body Seat Ring	Bronze
7	Disc Seat Ring*	(8" & 10") Bronze
8	Stem	Manganese Bronze
9	Yoke Bushing	Manganese Bronze
12	Packing	Non-Asbestos Rings
13	Gland	(2" - 4") Brass (5" - 10") Bronze
14	Gland Flange	Ductile
15	Handwheel	Ductile
17	Disc Stem Ring	Bronze
20	Stem Hole Bushing	Brass
21	Locking Device	(2" - 6") 18-8 SST Sheet
22	Disc Guide Stem*	(8" & 10") Brass
23	Disc Guide Stem Pin*	(8" & 10") Brass
24	Bonnet Gasket	Non-Asbestos Sheet
25	Bonnet Studs	Steel
26	Bonnet Stud Nuts	Steel
27	Gland Studs	Naval Brass
28	Gland Stud Nuts	Brass
29	Handwheel Nut	Steel - Phos. Coated
30	Identification Plate	Aluminum

* Not shown

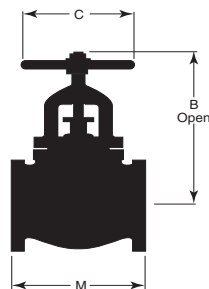
Industry Standards

Complies with MSS SP-85 Type 1

See page 6 for Pressure Temperature Ratings

Dimensions and Weights

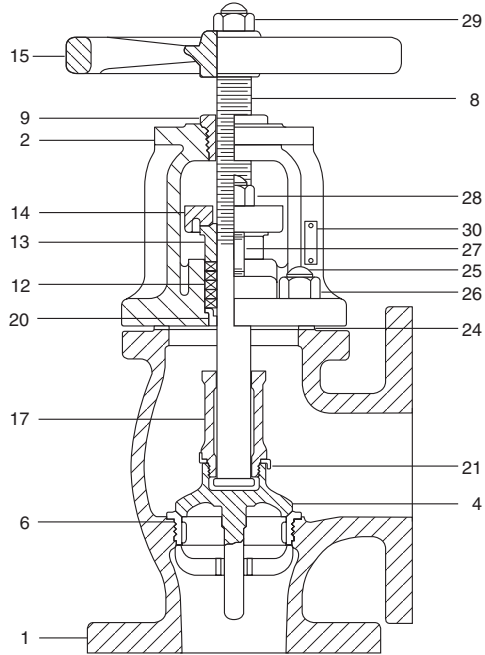
Inches (millimeters) - Pounds (kilograms)



Valve Size	Dimensions			WT
	B	C	M	
2	11.12	8.00	8.00	35
	(282)	(203)	(203)	(15)
2 1/2	11.50	8.00	8.50	40
	(292)	(203)	(216)	(18)
3	13.25	9.00	9.50	57
	(337)	(229)	(241)	(26)
4	15.50	10.00	11.50	95
	(394)	(254)	(292)	(43)
5	17.50	10.00	13.00	126
	(445)	(254)	(330)	(57)
6	19.50	12.00	14.00	176
	(495)	(305)	(356)	(80)
8	25.00	16.00	19.50	344
	(635)	(406)	(495)	(156)
10	30.50	18.00	24.50	570
	(775)	(457)	(622)	(259)

Figure G-515

Class 125 • Bolted Bonnet • OS&Y • Bronze Trim • Flanged End



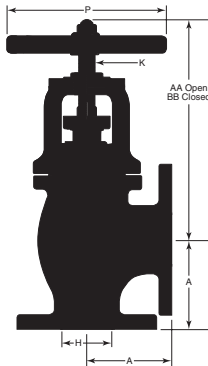
Materials of Construction

No.	Description	Material
1	Body	Cast Iron
2	Bonnet	Cast Iron
4	Disc	Bronze
6	Seat Ring	Bronze
8	Stem	Manganese Bronze
9	Yoke Bushing	Manganese Bronze
12	Packing	Non-Asbestos Rings
13	Gland	(2" - 4") Brass
		(6") Bronze
14	Gland Flange	Ductile
15	Handwheel	Ductile
17	Disc Stem Ring	Bronze
20	Stem Hole Bushing	Brass
21	Locking Device	18-8 Stainless Steel
24	Bonnet Gasket	Non-Asbestos Sheet
25	Bonnet Studs	Carbon Steel
26	Bonnet Stud Nuts	Carbon Steel
27	Gland Studs	Naval Brass
28	Gland Stud Nuts	Brass
29	Handwheel Nut	Carbon Steel
30	Identification Plate	Aluminum

Industry Standards

Complies with MSS SP-85 Type 2

See page 6 for Pressure Temperature Ratings



Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

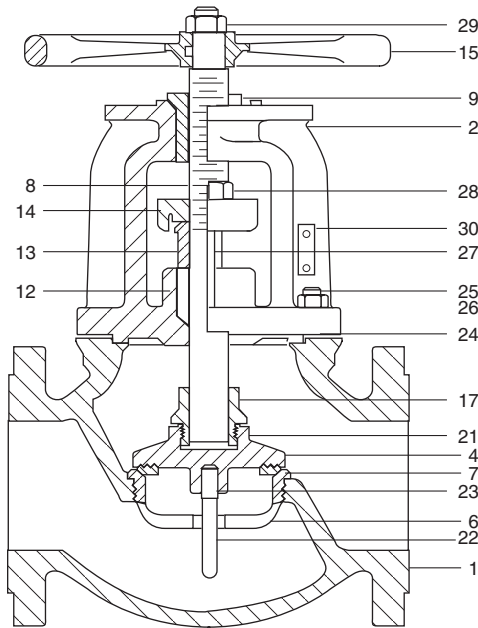
Valve Size	Dimensions						WT
	A	H	K	P	AA	BB	
2	4.00	2.00	0.88	8.00	11.00	10.25	32
	(102)	(51)	(22)	(203)	(279)	(260)	(15)
2 ½	4.25	2.50	0.88	8.00	11.50	10.50	38
	(108)	(64)	(22)	(203)	(292)	(267)	(17)
3	4.75	3.00	1.00	9.00	12.75	11.75	54
	(121)	(76)	(25)	(229)	(324)	(299)	(25)
4	5.75	4.00	1.12	10.00	15.00	13.75	88
	(146)	(102)	(29)	(254)	(381)	(349)	(40)
6	7.00	6.00	1.25	12.00	19.50	17.75	158
	(178)	(152)	(32)	(305)	(495)	(451)	(72)

Iron Globe Valves



Figure F-532

Class 250 • Bolted Bonnet • OS&Y • Bronze Trim • Flanged Ends



Materials of Construction

No.	Description	Material
1	Body	Hi-Str. Cast Iron
2	Bonnet	Hi-Str. Cast Iron
4	Disc	(2" - 3") Bronze (4" - 8") Cast Iron
6	Body Seat Ring	Bronze
7	Disc Seat Ring	Bronze
8	Stem	Manganese Bronze
9	Yoke Bushing	Manganese Bronze
12	Packing	Non-Asbestos Rings
13	Gland	Bronze
14	Gland Flange	(2", 3" & 6") Steel (2½", 4", 5" & 8") Mall. Iron
15	Handwheel	Malleable Iron
17	Disc Stem Ring	Bronze
21	Locking Device	(2" - 5") 18-8 SST Sheet
22	Disc Guide Stem	Steel
23	Disc Guide Stem Pin	Steel
24	Gasket	Non-Asbestos Sheet
25	Bonnet Studs	Steel
26	Bonnet Stud Nuts	Steel
27	Gland Studs	Steel - Phos. Coated
28	Gland Stud Nuts	Steel - Phos. Coated
29	Handwheel Nut	Steel - Phos. Coated
30	Identification Plate	Aluminum
31	Disc - Disc Stem Ring Pin*	Steel

* Not Shown

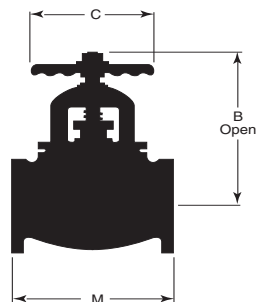
Industry Standards

Complies with MSS SP-85 Type 1

See page 6 for Pressure Temperature Ratings

Dimensions and Weights

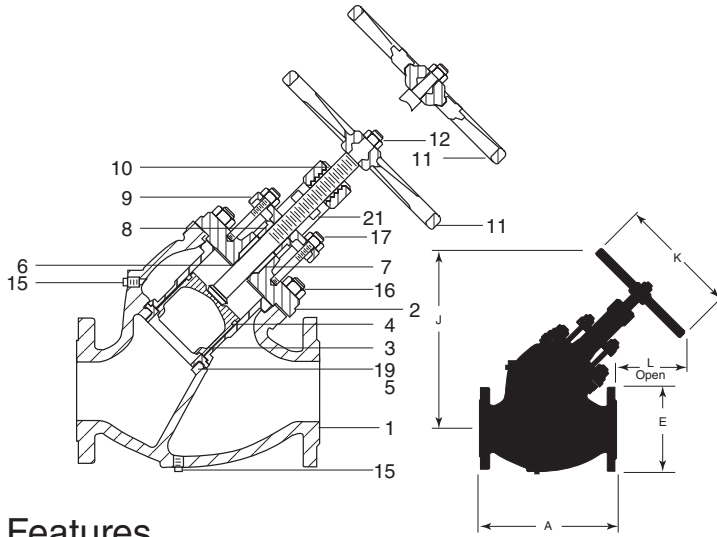
Inches (millimeters) - Pounds (kilograms)



Valve Size	Dimensions			WT
	B	C	M	
2	13.75	9.00	10.50	62
	(349)	(229)	(267)	(28)
2 ½	14.75	10.00	11.50	82
	(375)	(254)	(292)	(37)
3	16.50	10.00	12.50	118
	(419)	(254)	(318)	(54)
4	18.50	12.00	14.00	167
	(470)	(305)	(356)	(76)
6	23.25	16.00	17.50	320
	(591)	(406)	(445)	(145)
8	28.50	20.00	21.00	570
	(724)	(508)	(533)	(259)

Figure F-540

Class 250 • Bolted Bonnet • OS&Y • Bronze Trim • Flanged Ends



Features

- Valve designed for steam applications that operate between 100 and 250 psig.
- The Stop-Check feature of this valve requires a minimum of 50 psi pressure differential between piping system and boiler to operate properly.
- For installation between boilers supplying the same steam header, and positioned with pressure under the disc. Straightway is for horizontal or vertical line with upward flow. Angle valves are for "horizontal-downward" or "upward-horizontal" flow.
- These valves will perform the four following important functions:
 1. Act as an automatic-non return valve applied as a containment device to prevent gross backflow of steam from main header to boiler in case the boiler fails.
 2. Assist in cutting out boiler, when ceasing to fire. In this case, valve disc automatically closes to restrict backflow of steam to the boiler.
 3. Assist in returning boiler after a shutdown.
 4. Restricts backflow of steam from header into boiler which has been shut down and accidentally opened. The check valve feature should not be relied upon for primary shut-off.
- Cylindrical shaped disc is the only pressure-actuated part, light in weight with ample guiding surface. It is specially designed to produce a maximum lift at minimum velocities. There are no wing guides to cause "spinning" with resultant rapid wear.
- Long throttling lip on disc retards flow when seating position is approached. Disc chattering is prevented and wiredrawing of seating surfaces is reduced.
- Flat Seats, accurately machined, facilitate true seating.
- Removable cast iron liner guides the disc throughout its full travel. Being entirely independent of the body, it is not subject to distortion by expansion strains.
- Piston Ring 6" and larger adds to dashpot's ability to avoid rapid disc movements. Where pulsations are extremely severe, two rings can be installed.
- Dashpot is self-contained in the liner. It provides an effective cushion for the disc to prevent pipe line vibrations or hammering on the seat at low velocities or on pulsating loads.
- Flanges conform to ASME B16.1. Flanges have 1/16" raised face with concentric grooves.
- The body has integral bosses for drain connections. The bosses are tapped and plugged.
- Determining the proper valve size needed is important. The size of a stop check valve should be based on the boiler capacity and steam flow through the valve, rather than on the size of the boiler outlet or existing piping.

Materials of Construction

No.	Description	Material
1	Body	Gray Cast Iron
2	Bonnet	Gray Cast Iron
3	Disc	(2½", 3", 4", 5") Steam Bronze (6", 8", 10") Gray Cast Iron
4	Liner	(2½", 3", 4", 5") Gray Cast Iron (6", 8", 10") Gray Cast Iron- Nickel Plated
5	Body Seat Ring	Steam Bronze
6	Stem	Carbon Steel - Nickel Plated
7	Packing	Non-Asbestos Rings
8	Gland	(2½", 3", 4", 5", 6") Brass (8", 10") Brass
9	Gland Flange	Ductile Iron
10	Yoke Bushing	Manganese Bronze
11	Handwheel	(2½", 3", 4", 5", 6") Ductile Iron (8", 10") Brass
12	Handwheel Nut	Carbon Steel
13	Piston Ring**	(6", 8", 10") Chrome Vanadium Steel
14	Throttling Lip*	(6", 8", 10") Steam Bronze
15	Drain Plug	Carbon Steel - Zinc Plated
16	Bonnet Studs	Carbon Steel
	Bonnet Stud Nuts	Carbon Steel
17	Gland Studs	Carbon Steel - Zinc Plated
	Gland Stud Nuts	Carbon Steel - Zinc Plated
18	Bonnet Gasket*	Non-Asbestos Sheet
19	Seat Ring Gasket	Non-Asbestos Sheet
20	Locking Pin*	(6", 8", 10") Carbon Steel - Zinc Plated
21	ID Plate	Aluminum

* Not Shown

** Sizes 5" and smaller made without Piston Ring
See pages 38 - 40 for sizing and other Technical Data

Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

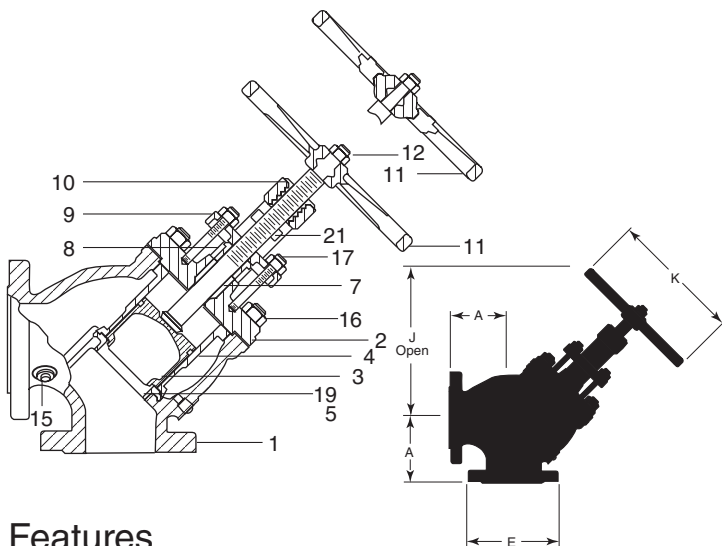
Valve Size	Dimensions					WT
	A	E	J	K	L	
2½	13.00	7.50	15.75	9.00	5.00	103
	(330)	(191)	(400)	(229)	(127)	(47)
3	14.75	8.25	19.75	10.00	7.25	140
	(375)	(210)	(502)	(254)	(184)	(64)
4	17.00	10.00	21.75	10.00	7.75	226
	(432)	(254)	(552)	(254)	(197)	(103)
5	19.00	11.00	25.75	14.00	10.50	307
	(483)	(279)	(654)	(356)	(267)	(139)
6	21.50	12.50	29.25	16.00	11.75	420
	(546)	(318)	(743)	(406)	(298)	(191)
8	26.00	15.00	36.75	20.00	16.25	737
	(660)	(381)	(933)	(508)	(413)	(335)
10	30.00	17.50	41.75	20.00	17.75	1250
	(762)	(445)	(1,060)	(508)	(451)	(568)

Iron Angle Stop Check Valves



Figure F-541

Class 250 • Bolted Bonnet • OS&Y • Bronze Trim • Flanged Ends



Features

- Valve designed for steam applications that operate between 100 and 250 psig.
- The Stop-Check feature of this valve requires a minimum of 50 psi pressure differential between piping system and boiler to operate properly.
- For installation between boilers supplying the same steam header, and positioned with pressure under the disc. Straightway is for horizontal or vertical line with upward flow. Angle valves are for "horizontal-downward" or "upward-horizontal" flow.
- These valves will perform the four following important functions:
 1. Act as an automatic-non return valve applied as a containment device to prevent gross backflow of steam from main header to boiler in case the boiler fails.
 2. Assist in cutting out boiler, when ceasing to fire. In this case, valve disc automatically closes to restrict backflow of steam to the boiler.
 3. Assist in returning boiler after a shutdown.
 4. Restricts backflow of steam from header into boiler which has been shut down and accidentally opened. The check valve feature should not be relied upon for primary shut-off.
- Cylindrical shaped disc is the only pressure-actuated part, light in weight with ample guiding surface. It is specially designed to produce a maximum lift at minimum velocities. There are no wing guides to cause "spinning" with resultant rapid wear.
- Long throttling lip on disc retards flow when seating position is approached. Disc chattering is prevented and wiredrawing of seating surfaces is reduced.
- Flat Seats, accurately machined, facilitate true seating.
- Removable cast iron liner guides the disc throughout its full travel. Being entirely independent of the body, it is not subject to distortion by expansion strains.
- Piston Ring 6" and larger adds to dashpot's ability to avoid rapid disc movements. Where pulsations are extremely severe, two rings can be installed.
- Dashpot is self-contained in the liner. It provides an effective cushion for the disc to prevent pipe line vibrations or hammering on the seat at low velocities or on pulsating loads.
- Flanges conform to ASME B16.1. Flanges have 1/16" raised face with concentric grooves.
- The body has integral bosses for drain connections. The bosses are tapped and plugged.
- Determining the proper valve size needed is important. The size of a stop check valve should be based on the boiler capacity and steam flow through the valve, rather than on the size of the boiler outlet or existing piping.

Materials of Construction

No.	Description	Material
1	Body	Gray Cast Iron
2	Bonnet	Gray Cast Iron
3	Disc	(2½", 3", 4", 5") Steam Bronze (6", 8", 10") Gray Cast Iron
4	Liner	(2½", 3", 4", 5") Gray Cast Iron (6", 8", 10") Gray Cast Iron- Nickel Plated
5	Body Seat Ring	Steam Bronze
6	Stem	Carbon Steel - Nickel Plated
7	Packing	Non-Asbestos Rings
8	Gland	(2½", 3", 4", 5", 6") Brass (8", 10") Brass
9	Gland Flange	Ductile Iron
10	Yoke Bushing	Manganese Bronze
11	Handwheel	(2½", 3", 4", 5", 6") Ductile Iron (8", 10") Brass
12	Handwheel Nut	Carbon Steel
13	Piston Ring**	(6", 8", 10") Chrome Vanadium Steel
14	Throttling Lip*	(6", 8", 10") Steam Bronze
15	Drain Plug	Carbon Steel - Zinc Plated
16	Bonnet Studs Bonnet Stud Nuts	Carbon Steel Carbon Steel
17	Gland Studs Gland Stud Nuts	Carbon Steel - Zinc Plated Carbon Steel - Zinc Plated
18	Bonnet Gasket*	Non-Asbestos Sheet
19	Seat Ring Gasket	Non-Asbestos Sheet
20	Locking Pin*	(6", 8", 10") Carbon Steel - Zinc Plated
21	ID Plate	Aluminum

* Not Shown

** Sizes 5" and smaller made without Piston Ring
See pages 38 - 40 for sizing and other Technical Data

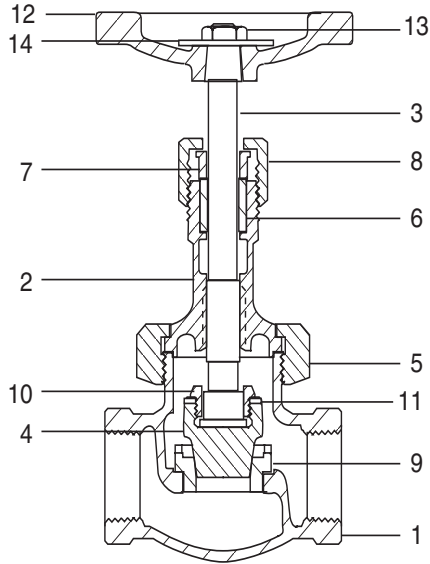
Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

Valve Size	Dimensions				WT
	A	E	J	K	
2½"	5.75	7.50	13.25	9.00	86
	(146)	(191)	(337)	(229)	(39)
3"	6.25	8.25	14.75	10.00	123
	(159)	(210)	(375)	(254)	(55)
4"	7.00	10.00	16.25	10.00	186
	(178)	(254)	(413)	(254)	(84)
5"	7.88	11.00	19.50	14.00	250
	(200)	(279)	(495)	(356)	(113)
6"	8.75	12.50	22.50	16.00	340
	(222)	(318)	(572)	(406)	(154)
8"	10.50	15.00	28.75	20.00	640
	(267)	(381)	(730)	(508)	(291)
10"	12.25	17.50	32.50	20.00	1025
	(311)	(445)	(826)	(508)	(465)

Figure G-574

Class 300 • Union Bonnet • Rising Stem • Nickel Plug • Threaded Ends



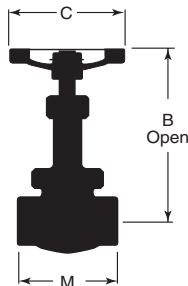
Materials of Construction

No.	Description	Material
1	Body	Malleable Iron
2	Bonnet	Malleable Iron
3	Stem	Malleable Iron
4	Plug	Nickel Alloy
5	Union Ring	Malleable Iron
6	Packing	Asbestos Free
7	Gland	Mild Steel
8	Packing Nut	Malleable Iron
9	Body Seat Ring	13% Chrome Steel
10	Disc Stem Ring	13% Chrome Steel
11	Lock Washer	18-8 Stainless Steel
12	Handwheel	Malleable Iron
13	Handwheel Nut	Steel (Phosphated)
14	Identification Plate	Aluminum

Temperature Valve Ratings		Working Pressures, Non-shock, PSI	
°F	°C	PSI	kPa
-20 to 150	-30 to 65	1000	6894
200	93	960	6618
250	121	925	6377
300	149	890	6136
350	177	850	5860
400	205	810	5584
450	232	775	5343
500	260	740	5102
550	288	700	4826

Dimensions and Weights

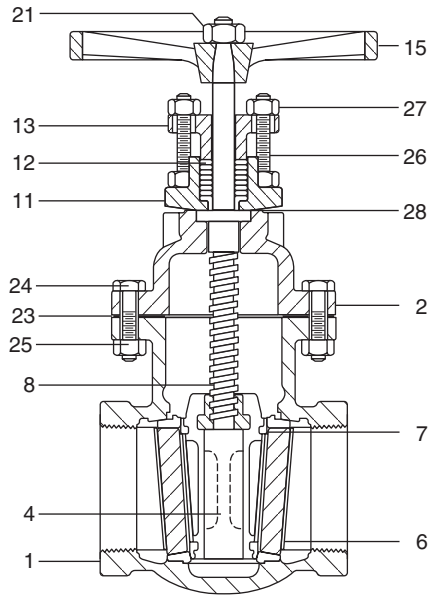
Inches (millimeters) - Pounds (kilograms)



Valve Size	Dimensions			WT
	B	C	M	
1/4	5.38	2.56	3.62	1.8
	(137)	(65)	(92)	(.82)
3/8	5.38	2.56	3.62	1.8
	(137)	(65)	(92)	(.82)
1/2	5.24	2.56	2.80	1.54
	(133)	(65)	(71)	(.74)
3/4	5.31	2.75	3.31	2.53
	(135)	(70)	(84)	(1.14)
1	6.73	3.06	3.90	3.8
	(171)	(78)	(99)	(1.71)
1 1/4	7.68	3.62	4.41	5.93
	(195)	(92)	(112)	(2.67)
1 1/2	8.62	4.06	4.92	8.07
	(219)	(103)	(125)	(3.63)
2	9.80	4.75	5.98	12.76
	(249)	(121)	(152)	(5.74)

Figure G-608

Class 125 • Bolted Bonnet • Non-Rising Stem • Bronze Trim • Threaded Ends



Materials of Construction

No.	Description	Material
1	Body	Cast Iron
2	Bonnet	Cast Iron
4	Disc	(2" - 3") Bronze (4") Cast Iron
6	Seat Ring	Bronze
7	Disc Ring	(4") Bronze
8	Stem	Manganese Bronze
11	Stuffing Box	Ductile
12	Packing	Non-Asbestos Rings
13	Gland Flange	Ductile
15	Handwheel	Ductile
21	Handwheel Nut	Carbon Steel
23	Bonnet Gasket	Non-Asbestos Sheet
24	Bonnet Bolt	Carbon Steel
25	Bonnet Bolt Nut	Carbon Steel
26	Gland Bolt	Carbon Steel
27	Gland Bolt Nut	Carbon Steel EZP
28	Stuffing Box Gasket	Non-Asbestos Sheet
34	Stuffing Box Bolt*	Carbon Steel
35	Stuffing Box Bolt Nut*	Carbon Steel

* Not shown

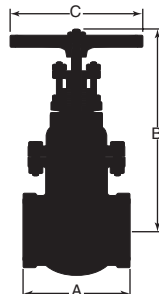
Industry Standards

Complies with MSS SP-70 Type 1 and WW-V-58 Type 1, Class 1

See page 6 for Pressure Temperature Ratings

Dimensions and Weights

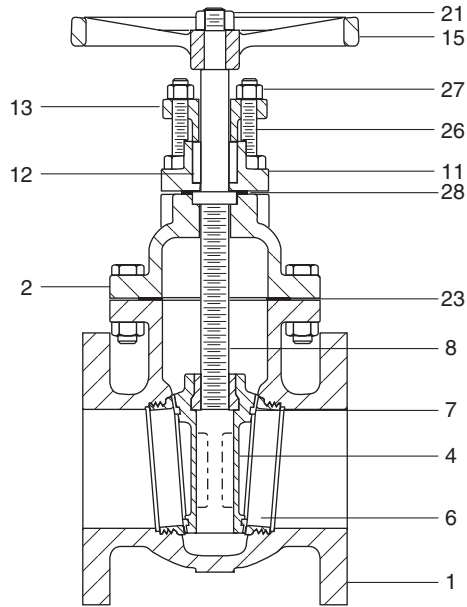
Inches (millimeters) - Pounds (kilograms)



Valve Size	Dimensions			WT
	A	B	C	
2	5.38 (137)	11.31 (287)	8.00 (203)	25 (11)
2 ½	6.62 (168)	12.40 (315)	8.00 (203)	31 (14)
3	7.00 (178)	13.25 (337)	8.00 (203)	44 (20)
4	8.00 (203)	16.31 (414)	10.00 (254)	71 (32)

Figure G-612

Class 125 • Bolted Bonnet • Non-Rising Stem • Bronze Trim • Flanged Ends



Materials of Construction

No.	Description	Material
1	Body	Cast Iron
2	Bonnet	Cast Iron
4	Disc	(2" - 3") Bronze
		(4" - 30") Cast Iron
6	Seat Ring	(2" - 12") Bronze
		(14" - 30") Bronze
7	Disc Ring	(4" - 12") Bronze
		(14" - 30") Bronze
8	Stem	(2" - 12") Manganese Bronze
		(14" - 30") Copper-Silicon Bronze
11	Stuffing Box	(2" - 8") Ductile
		(10" - 30") Cast Iron
12	Packing	Non-Asbestos Rings
13	Gland Flange	(2" - 8") Ductile
		(14" - 30") Ductile
14	Gland*	(10" - 12") Bronze
15	Handwheel	Ductile
21	Handwheel Nut	Carbon Steel
23	Bonnet Gasket	Non-Asbestos Sheet
24	Bonnet Bolt	Carbon Steel
25	Bonnet Bolt Nut	Carbon Steel
26	Gland Bolt	Carbon Steel
27	Gland Bolt Nut	Carbon Steel E2P
28	Stuffing Box Gasket	Non-Asbestos Sheet
34	Stuffing Box Bolt*	Carbon Steel
35	Stuffing Box Bolt Nut*	Carbon Steel
55	Gland Follower*	(10" - 12") Ductile

* Not shown

Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

Valve Size	Dimensions			WT
	B	C	M	
2	11.31	8.00	7.00	30
	(287)	(203)	(178)	(14)
2 ½	12.40	8.00	7.50	40
	(315)	(203)	(191)	(18)
3	13.25	8.00	8.00	56
	(337)	(203)	(203)	(25)
4	16.31	10.00	9.00	90
	(414)	(254)	(229)	(41)
5	18.00	10.00	10.00	126
	(457)	(254)	(254)	(57)
6	20.69	12.00	10.50	152
	(526)	(305)	(267)	(68)
8	24.12	14.00	11.50	260
	(613)	(356)	(292)	(117)
10	33.00	20.00	13.00	490
	(838)	(508)	(330)	(222)
12	36.50	20.00	14.00	672
	(927)	(508)	(356)	(304)
14	40.50	20.00	15.00	968
	(1029)	(508)	(381)	(440)
16	48.00	22.00	16.00	1180
	(1219)	(559)	(406)	(535)
18	50.75	22.00	17.00	1701
	(1289)	(559)	(432)	(772)
20	56.12	24.00	18.00	2188
	(1426)	(610)	(457)	(993)
24	64.00	30.00	20.00	3150
	(1626)	(762)	(508)	(1432)
30	86.63	30.00	24.00	1701
	(2200)	(762)	(610)	(772)

Industry Standards

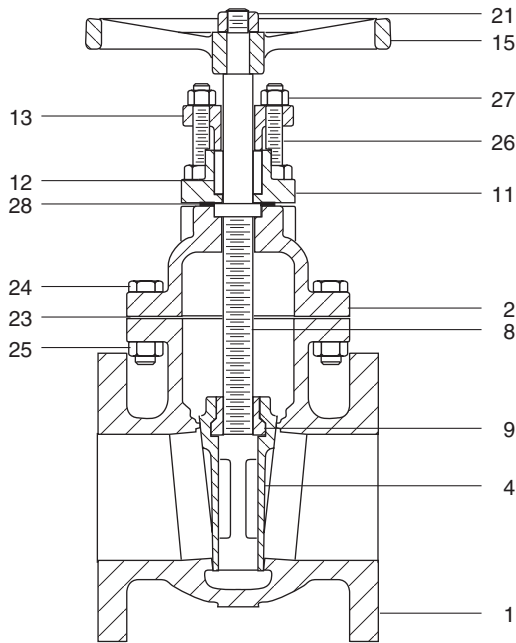
Complies with MSS SP-70 Type 1

See page 6 for Pressure Temperature Ratings



Figure G-613

Class 125 • Bolted Bonnet • Non-Rising Stem • All Iron • Flanged Ends



Materials of Construction

No.	Description	Material
1	Body	Cast Iron
2	Bonnet	Cast Iron
4	Disc	Cast Iron
8	Stem	Steel - Nickel Plated
9	Disc Nut	(4" - 8") 13 CR Stainless Steel
11	Stuffing Box	Ductile
12	Packing	Non-Asbestos Rings
13	Gland Flange	Ductile
15	Handwheel	Ductile
21	Handwheel Nut	Carbon Steel
23	Bonnet Gasket	Non-Asbestos Sheet
24	Bonnet Bolt	Carbon Steel
25	Bonnet Bolt Nut	Carbon Steel
26	Gland Bolt	Carbon Steel
27	Gland Bolt Nut	Carbon Steel EZP
28	Stuffing Box Gasket	Non-Asbestos Sheet
34	Stuffing Box Bolt*	Carbon Steel
35	Stuffing Box Bolt Nut*	Carbon Steel

* Not shown

Industry Standards

Complies with MSS SP-70 Type 1

See page 6 for Pressure Temperature Ratings

Dimensions and Weights

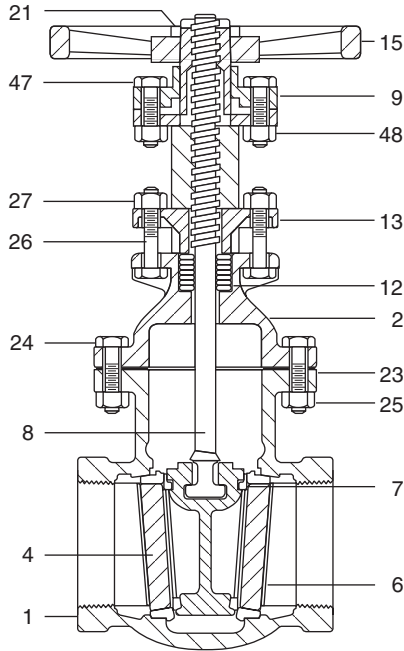
Inches (millimeters) - Pounds (kilograms)



Valve Size	Dimensions			WT
	B	C	M	
2	11.31	8.00	7.00	30
	(287)	(203)	(178)	(14)
2 ½	12.40	8.00	7.50	44
	(315)	(203)	(191)	(20)
3	13.25	8.00	8.00	56
	(337)	(203)	(203)	(25)
4	16.31	10.00	9.00	91
	(414)	(254)	(229)	(41)
5	18.00	10.00	10.00	126
	(457)	(254)	(254)	(57)
6	20.69	12.00	10.50	152
	(526)	(305)	(267)	(69)
8	24.12	14.00	11.50	260
	(613)	(356)	(292)	(118)

Figure G-620

Class 125 • Bolted Bonnet • OS&Y • Bronze Trim • Threaded Ends



Materials of Construction

No.	Description	Material
1	Body	Cast Iron
2	Yoke Bonnet	Cast Iron
4	Disc	(2") Bronze
		(2½" - 3") Bronze
		(4") Cast Iron
6	Seat Ring	Bronze
7	Disc Ring	(4") Bronze
8	Stem	Manganese Bronze
9	Yoke Sleeve	Manganese Bronze
12	Packing	Non-Asbestos Rings
13	Gland	Ductile
15	Handwheel	Ductile
21	Handwheel Nut	Sintered Nickel Steel
23	Bonnet Gasket	Non-Asbestos Sheet
24	Bonnet Bolt	Carbon Steel
25	Bonnet Bolt Nut	Carbon Steel
26	Gland Bolt	Carbon Steel
27	Gland Bolt Nut	Carbon Steel EZP
46	Yoke Cap*	Ductile
47	Yoke Cap Bolt	Carbon Steel
48	Yoke Cap Bolt Nut	Carbon Steel

* Not shown

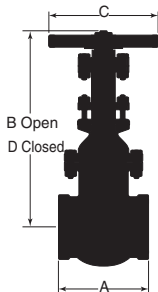
Industry Standards

Complies with MSS SP-70 Type 1 and WW-V-58 Type 1, Class 1

See page 6 for Pressure Temperature Ratings

Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)



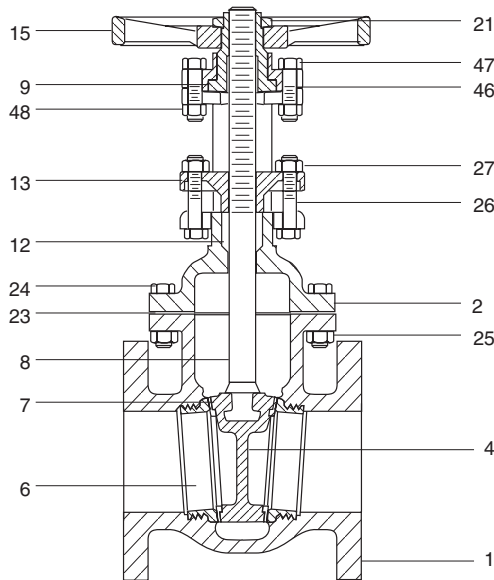
Valve Size	Dimensions				WT
	A	B	C	D	
2	5.38	14.75	8.00	12.50	25
	(137)	(375)	(203)	(318)	(11)
2 ½	6.62	16.06	8.00	13.31	38
	(168)	(408)	(203)	(338)	(17)
3	7.00	17.38	8.00	13.88	46
	(178)	(441)	(203)	(353)	(21)
4	8.00	21.44	10.00	17.06	77
	(203)	(545)	(254)	(433)	(35)

Iron Gate Valves



Figure G-623

Class 125 • Bolted Bonnet • OS&Y • Bronze Trim • Flanged Ends



Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

Valve Size	Dimensions			WT
	B	C	M	
2	14.75	8.00	7.00	33
	(375)	(203)	(178)	(15)
2 1/2	16.06	8.00	7.50	47
	(408)	(203)	(191)	(21)
3	17.38	8.00	8.00	58
	(441)	(203)	(203)	(26)
4	21.44	10.00	9.00	97
	(545)	(254)	(229)	(44)
5	25.81	10.00	10.00	135
	(656)	(254)	(254)	(61)
6	30.31	12.00	10.50	162
	(770)	(305)	(267)	(73)
8	37.75	14.00	11.50	280
	(959)	(356)	(292)	(126)
10	49.41	18.00	13.00	502
	(1255)	(457)	(330)	(228)
12	56.81	18.00	14.00	670
	(1442)	(457)	(356)	(304)
14	64.88	20.00	15.00	1093
	(1648)	(508)	(381)	(496)
16	75.25	22.00	16.00	1425
	(1911)	(559)	(406)	(647)
18	82.00	22.00	17.00	1738
	(2083)	(559)	(432)	(789)
20	90.62	24.00	18.00	2085
	(2302)	(610)	(457)	(946)
24	105.38	30.00	20.00	3183
	(2677)	(762)	(508)	(1445)
30	160.25	30.00	24.00	5795
	(4070)	(762)	(610)	(2629)
36	192.69	30.00	28.00	7622
	(4894)	(762)	(711)	(3457)

Materials of Construction

No.	Description	Material
1	Body	Cast Iron
2	Bonnet	Cast Iron
4	Disc	(2") Bronze
		(2 1/2" & 3") Bronze
		(4" - 36") Cast Iron
6	Body Seat Ring	(2" - 12") Bronze
		(14" - 36") Bronze
7	Disc Seat Ring	(4" - 12") Bronze
		(14" - 36") Bronze
8	Stem	(2" - 12") Manganese Bronze
		(14" - 36") Brass
9	Yoke Sleeve	(2" - 12") Manganese Bronze
		(14" - 36") Ductile Iron
12	Packing	Non-Asbestos Rings
13	Gland (1 Piece)	(2" - 8") Ductile Iron
		(14" - 36") Ductile Iron
		Gland*
13	Gland Flange*	(10" & 12") Bronze
		(10" & 12") Ductile Iron
15	Handwheel	Ductile Iron
21	Handwheel Nut	(2" - 8") Sintered Nickel Steel
		(10" - 36") Ductile Iron
23	Bonnet Gasket	Non-Asbestos Sheet
24	Bonnet Bolt	Carbon Steel
25	Bonnet Bolt Nut	Carbon Steel
26	Gland Bolt	(2" - 12") Carbon Steel
26	Gland Eyebolt*	(14" - 36") Carbon Steel
27	Gland Bolt Nut	Carbon Steel
46	Yoke Cap	(2" - 8") Ductile Iron
		(10" - 12") Cast Iron
47	Yoke Cap Bolt	(2" - 12") Carbon Steel
48	Yoke Cap Bolt Nut	(2" - 12") Carbon Steel
49	Stem Collar Seat*	(14" - 36") Brass
50	Disc Pin*	(14" - 36") Brass
51	Yoke Bolt*	(14" - 36") Carbon Steel
52	Yoke Bolt Nut*	(14" - 36") Carbon Steel
53	Yoke to Bonnet Bolt*	(14" - 36") Carbon Steel
54	Backseat Bushing*	(14" - 36") Brass
55	Eyebolt Pin*	(14" - 36") Carbon Steel
56	Yoke*	(14" - 36") Cast Iron

* Not shown

Industry Standards

Complies with MSS SP-70 Type 1

See page 6 for Pressure Temperature Ratings

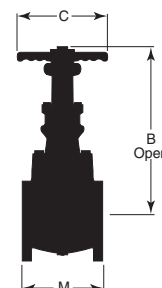
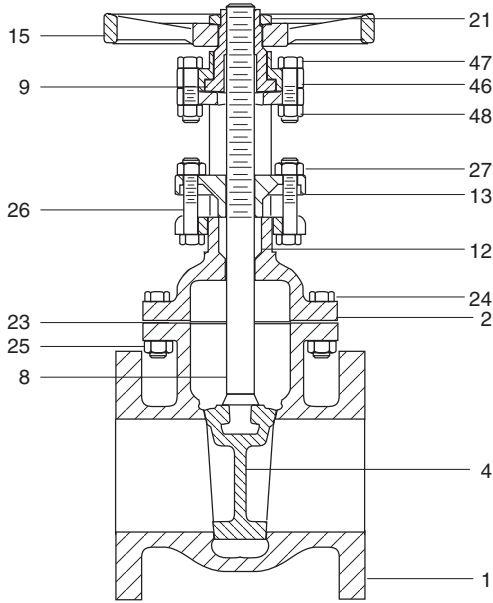


Figure G-624

Class 125 • Bolted Bonnet • OS&Y • All Iron • Flanged Ends



Materials of Construction

No.	Description	Material
1	Body	Cast Iron
2	Bonnet	Cast Iron
4	Disc	Cast Iron
6	Seat Ring	(12" - 36") Cast Iron
8	Stem	Carbon Steel, NI-PLA
9	Yoke Sleeve	Manganese Bronze
12	Packing	Non-Asbestos Rings
13	Gland	(2" - 8") Ductile (10" - 36") Carbon Steel ZN-PLA
15	Handwheel	Ductile
21	Handwheel Nut	(2" - 10") Sintered Nickel Steel (12" - 36") Ductile
23	Bonnet Gasket	Non-Asbestos Sheet
24	Bonnet Bolt	Carbon Steel
25	Bonnet Bolt Nut	Carbon Steel
26	Gland Bolt	Carbon Steel
27	Gland Bolt Nut	Carbon Steel, ZN-PLA
46	Yoke Cap	Ductile
47	Yoke Cap Bolt	Carbon Steel
48	Yoke Cap Bolt Nut	Carbon Steel
55	GLD Follower*	(10" - 36") Ductile

Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

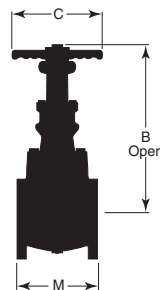
Valve Size	Dimensions			WT
	B	C	M	
2	14.75	8.00	7.00	33
	(375)	(203)	(178)	(15)
2 ½	16.06	8.00	7.50	47
	(408)	(203)	(191)	(21)
3	17.38	8.00	8.00	58
	(441)	(203)	(203)	(26)
4	21.44	10.00	9.00	97
	(545)	(254)	(229)	(44)
5	25.81	10.00	10.00	135
	(656)	(254)	(254)	(61)
6	30.31	12.00	10.50	162
	(770)	(305)	(267)	(73)
8	37.75	14.00	11.50	280
	(959)	(356)	(292)	(126)
10	49.41	18.00	13.00	502
	(1255)	(475)	(330)	(228)
12	56.81	18.00	14.00	670
	(1442)	(457)	(356)	(304)
14	64.38	20.00	15.00	1093
	(1635)	(508)	(381)	(497)
16	75.25	22.00	16.00	1425
	(1911)	(559)	(406)	(647)
18	82.00	22.00	17.00	1738
	(2083)	(559)	(432)	(790)
20	90.62	24.00	18.00	2085
	(2302)	(610)	(457)	(911)
24	105.28	30.00	20.00	3183
	(2674)	(762)	(508)	(1446)
30	129.62	36.00	24.00	5795
	(3292)	(914)	(610)	(2360)
36	155.62	42.00	28.00	7522
	(3953)	(1067)	(711)	(3417)

* Not shown

Industry Standards

Complies with MSS SP-70 Type 1

See page 6 for Pressure Temperature Ratings

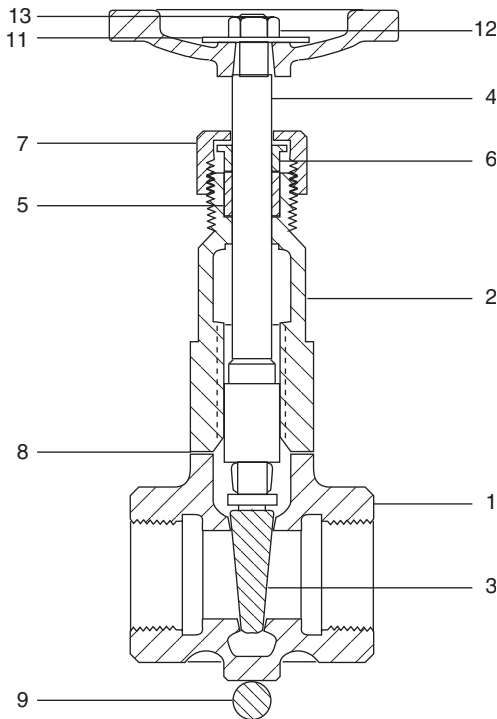


Malleable Iron Gate Valves



Figure G-675

Class 150 • U-Bolt Bonnet • Rising Stem • All Iron • Threaded Ends



Materials of Construction

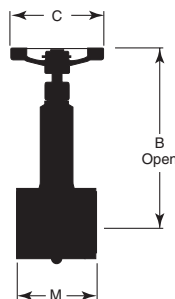
No.	Description	Material
1	Body	Malleable Iron
2	Bonnet	Malleable Iron
3	Disc	Malleable Iron
4	Stem	Nickel Plated Steel
5	Packing	Asbestos Free
6	Gland	Nickel Plated Steel
7	Packing Nut	Malleable Iron
8	Gasket	Asbestos Free
9	"U" Bolt	Mild Steel
10	"U" Bolt Nuts*	Mild Steel
11	Identification Plate	Aluminum
12	Handwheel Nut	Mild Steel
13	Handwheel	Malleable Iron

* Not shown

Temperature		Working Pressures, Non-shock			
Valve Ratings		1/4" - 2" (6mm - 50mm)		2 1/2" - 4" (65mm - 100mm)	
		150 psi, Sat. Steam		125 psi, Sat. Steam	
°F	°C	PSI	kPa	PSI	kPa
-20 to 150	-30 to 65	225	1550	175	1210
200	93	210	1450	165	1140
225	107	200	1380	160	1100
250	121	190	1310	150	1030
275	135	185	1280	145	1000
300	149	175	1210	140	970
325	163	165	1140	135	930
350	177	160	1100	125	860
375	191	150	1030	120	830

Dimensions and Weights

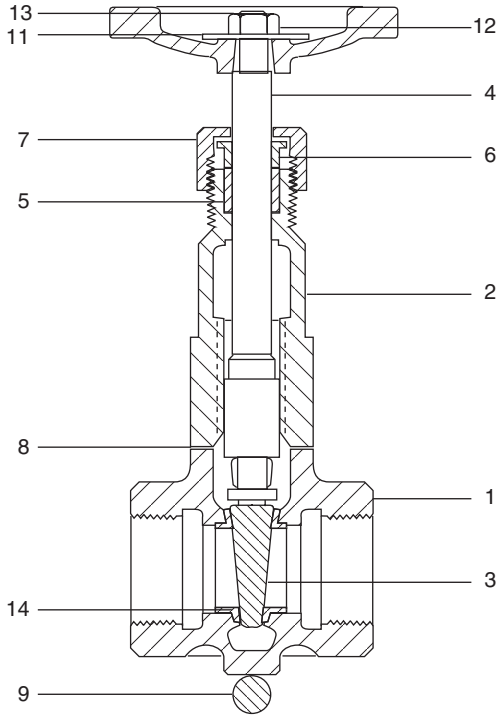
Inches (millimeters) - Pounds (kilograms)



Valve Size	Dimensions			WT
	B	C	M	
1/4	5.08	2.06	3.00	1.40
	(129)	(52)	(76)	(0.64)
3/8	5.08	2.06	3.00	1.40
	(129)	(52)	(76)	(0.64)
1/2	5.08	2.06	2.06	1.86
	(129)	(52)	(52)	(0.84)
3/4	6.18	2.56	2.32	2.44
	(157)	(65)	(59)	(1.10)
1	7.40	2.76	2.56	3.53
	(188)	(70)	(65)	(1.60)
1 1/4	8.90	3.07	2.87	5.80
	(226)	(78)	(73)	(2.63)
1 1/2	9.96	3.62	3.15	7.00
	(253)	(92)	(80)	(3.17)
2	11.61	4.06	3.62	11.20
	(295)	(103)	(92)	(5.08)
2 1/2	12.91	4.76	4.13	19.20
	(328)	(121)	(105)	(8.71)
3	15.35	5.98	4.57	23.10
	(390)	(152)	(116)	(10.47)
4	19.76	9.02	5.55	52.67
	(502)	(229)	(141)	(23.61)

Figure G-679

Class 150 • U-Bolt Bonnet • Rising Stem • Bronze Trim • Threaded Ends



Materials of Construction

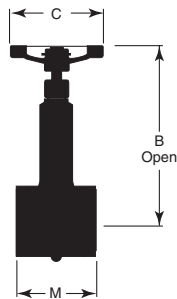
No.	Description	Material
1	Body	Malleable Iron
2	Bonnet	Malleable Iron
3	Disc	Bronze
4	Stem	Brass
5	Packing	Asbestos Free
6	Gland	(½"-3") Rod Brass (4") Bronze
7	Packing Nut	Malleable Iron
8	Gasket	Asbestos Free
9	"U" Bolt	Mild Steel
10	"U" Bolt Nuts*	Mild Steel
11	Identification Plate	Aluminum
12	Handwheel Nut	Mild Steel
13	Handwheel	Malleable Iron
14	Body Seat Rings	Bronze

* Not shown

Temperature		Working Pressures, Non-shock			
Valve Ratings		¼" - 2" (6mm - 50mm)		2½" - 4" (65mm - 100mm)	
°F	°C	150 psi, Sat. Steam 225 psi, CWP		125 psi, Sat. Steam 175 psi, CWP	
		PSI	kPa	PSI	kPa
-20 to 150	-30 to 65	225	1550	175	1210
200	93	210	1450	165	1140
225	107	200	1380	160	1100
250	121	190	1310	150	1030
275	135	185	1280	145	1000
300	149	175	1210	140	970
325	163	165	1140	135	930
350	177	160	1100	125	860
375	191	150	1030	120	830

Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)



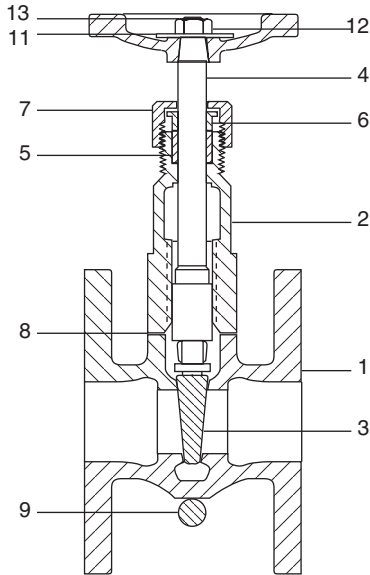
Valve Size	Dimensions			WT
	B	C	M	
¼	5.08	2.06	3.00	1.40
	(129)	(52)	(76)	(0.64)
⅜	5.08	2.06	3.00	1.40
	(129)	(52)	(76)	(0.64)
½	5.08	2.06	2.06	1.76
	(129)	(52)	(52)	(0.80)
¾	6.18	2.56	2.32	2.44
	(157)	(65)	(59)	(1.10)
1	7.40	2.76	2.56	3.53
	(188)	(70)	(65)	(1.60)
1¼	8.90	3.07	2.87	5.80
	(226)	(78)	(73)	(2.63)
1½	9.96	3.62	3.15	7.00
	(253)	(92)	(80)	(3.17)
2	11.61	4.06	3.62	11.20
	(295)	(103)	(92)	(5.08)
2½	12.91	4.76	4.13	19.20
	(328)	(121)	(105)	(8.71)
3	15.35	5.98	4.57	23.10
	(390)	(152)	(116)	(10.47)
4	19.76	9.02	5.55	52.10
	(502)	(229)	(141)	(23.61)

Malleable Iron Gate Valves



Figure G-676

Class 125 • U-Bolt Bonnet • Rising Stem • All Iron • Flanged Ends

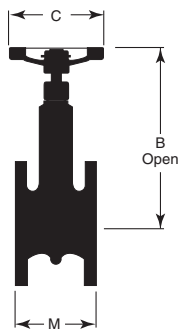


Materials of Construction

No.	Description	Material
1	Body	Malleable Iron
2	Bonnet	Malleable Iron
3	Disc	Malleable Iron
4	Stem	N/plated Steel
5	Packing	Asbestos Free
6	Gland	Ni Plated Steel
7	Packing Nut	Malleable Iron
8	Gasket	Asbestos Free
9	"U" Bolt	Mild Steel
10	"U" Bolt Nuts*	Steel
11	Identification Plate	Aluminum
12	Handwheel Nut	Mild Steel
13	Handwheel	Malleable Iron

* Not shown

Temperature		Working Pressures, Non-shock			
Valve Ratings		1" - 2" (25mm - 50mm)		2½" - 4" (65mm - 100mm)	
		200 psi, CWP		175 psi, CWP	
°F	°C	PSI	kPa	PSI	kPa
-20 to 150	-30 to 65	200	1380	175	1210
200	93	185	1280	165	1140
225	107	175	1210	160	1100
250	121	165	1140	150	1030
275	135	155	1070	145	1000
300	149	145	1000	140	970
325	163	135	930	135	930
350	177	130	900	125	860
375	191	120	830	120	830



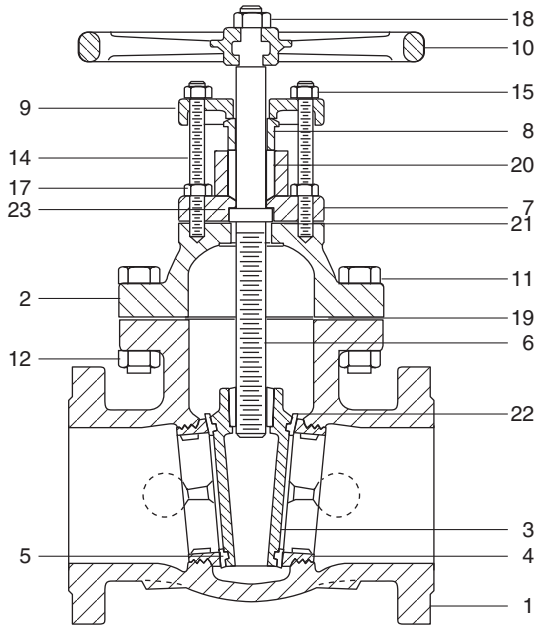
Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

Valve Size	Dimensions			WT
	B	C	M	
1	7.40	2.76	3.19	5.50
	(188)	(70)	(81)	(2.49)
1½	9.96	3.62	3.74	10.40
	(253)	(92)	(95)	(4.71)
2	11.61	4.06	4.25	14.30
	(295)	(103)	(108)	(6.48)
2½	12.91	4.76	4.92	22.00
	(328)	(121)	(125)	(9.97)
3	15.35	5.98	5.08	32.00
	(390)	(152)	(129)	(14.50)
4	19.76	9.02	6.77	60.00
	(502)	(229)	(172)	(27.19)

Figure F-661

Class 250 • Bolted Bonnet • Non-Rising Stem • Bronze Trim • Flanged Ends



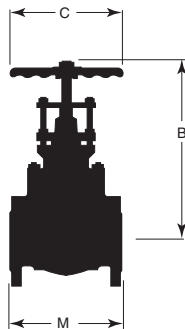
Materials of Construction

No.	Description	Material
1	Body	Cast Iron
2	Bonnet	Cast Iron
3	Disc	(2" - 4") Bronze (6" - 12") Cast Iron
4	Seat Ring	Bronze
5	Disc Ring	(6" - 12") Bronze
6	Stem	(2" - 8") Manganese Bronze (10") Naval Brass (12") Manganese Bronze
7	Stuffing Box	(2" - 4") Ductile (6" - 12") Cast Iron
8	Gland	(2" - 4") Ductile (6" - 12") Bronze
9	Gland Flange	(6" - 12") Ductile
10	Handwheel	Ductile
11	Bonnet Bolts	Carbon Steel
12	Bonnet Bolt Nuts	Carbon Steel
13	Stuffing Box Bolts*	Carbon Steel
14	Gland Studs Gland Bolts	(2½" - 6") Carbon Steel (2", 8" - 12") Carbon Steel
15	Gland Stud or Bolt Nuts	Steel EZP
16	Stuffing Box Studs*	Carbon Steel
17	Stuff Box Stud - Bolt Nuts	Carbon Steel
18	Handwheel Nut	Carbon Steel
19	Bonnet Gasket	Non-Asbestos Sheet
20	Packing	Non-Asbestos Rings
21	Stuffing Box Gasket	Non-Asbestos Sheet
22	Disc Bushing	Bronze
23	Identification Plate	Aluminum

*Not shown

Industry Standards

Complies with MSS SP-70 Type 1 and WW-V-58, Type 1, Class 1
See page 6 for Pressure Temperature Ratings



Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

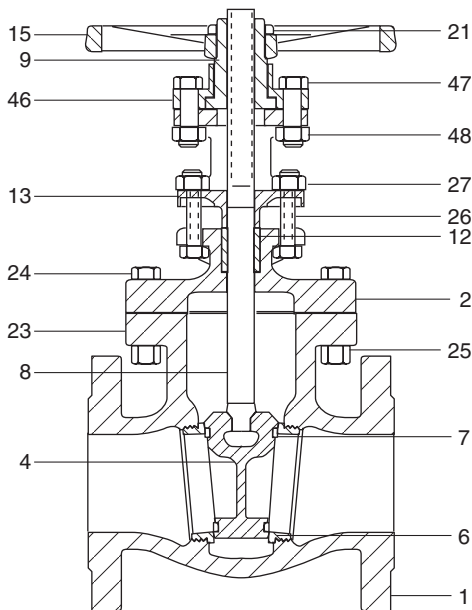
Valve Size	Dimensions			WT
	B	C	M	
2	11.94	8.00	8.50	47
	(303)	(203)	(216)	(21)
2 ½	12.94	8.00	9.50	84
	(328)	(203)	(241)	(38)
3	14.50	10.00	11.12	113
	(368)	(254)	(282)	(51)
4	17.38	12.00	12.00	175
	(441)	(305)	(305)	(79)
6	23.00	16.00	15.88	335
	(584)	(406)	(403)	(151)
8	30.75	20.00	16.50	545
	(781)	(508)	(419)	(246)
10	36.00	22.00	18.00	854
	(914)	(559)	(457)	(385)
12	39.75	24.00	19.75	1250
	(1010)	(610)	(502)	(563)

Iron Gate Valves



Figure F-667

Class 250 • Bolted Bonnet • OS&Y • Bronze Trim • Flanged Ends



Materials of Construction

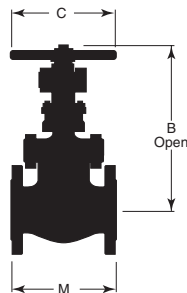
No.	Description	Material
1	Body	Cast Iron
2	Bonnet	Cast Iron
4	Disc	(2" - 3") Bronze
		(4" - 12") Cast Iron
6	Seat Ring	Bronze
7	Disc Ring	(4" - 12") Bronze
8	Stem	(2", 2½", 3", 4", 6", 8") Manganese Bronze
		(5", 10", 12") Naval Brass
9	Yoke Sleeve	Manganese Bronze
12	Packing	Non-Asbestos Rings
13	Gland	(2", 2½", 3", 4", 6") Ductile
		(8" - 12") Bronze
14	Gland Flange*	(5") Carbon Steel
		(8", 10", 12") Ductile
15	Handwheel	Ductile
21	Handwheel Nut	(2" - 6") Sintered Nickel Steel
		(8" - 12") Ductile
23	Bonnet Gasket	Non-Asbestos Sheet
24	Bonnet Bolt	Carbon Steel
25	Bonnet Bolt Nut	Carbon Steel
26	Gland Bolt	(2", 2½", 3", 4", 6", 8") Carbon Steel
		(5", 10", 12") Carbon Steel
27	Gland Bolt Nut	Carbon Steel EZP
46	Yoke Cap	(2", 2½", 3", 4", 6") Ductile
		(8") Cast Iron
47	Yoke Cap Bolt	Carbon Steel
48	Yoke Cap Bolt Nut	Carbon Steel
51	Yoke Hub Bolt*	(5", 10", 12") Carbon Steel
52	Yoke Hub Bolt Nut*	(5", 10", 12") Carbon Steel
53	Yoke Pad Bolt*	(5", 10", 12") Carbon Steel

*Not shown

Industry Standards

Complies with MSS SP-70 Type 1 and WW-V-58, Type 1, Class 1

See page 6 for Pressure Temperature Ratings



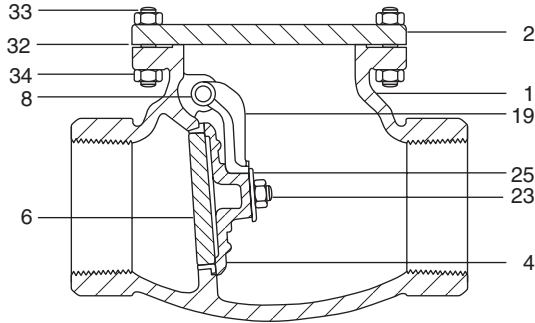
Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

Valve Size	Dimensions			WT
	B	C	M	
2	15.06	8.00	8.50	54
	(382)	(203)	(216)	(24)
2 ½	16.69	8.00	9.50	80
	(424)	(203)	(241)	(36)
3	18.75	10.00	11.12	114
	(476)	(254)	(282)	(52)
4	23.44	12.00	12.00	174
	(595)	(305)	(305)	(79)
5	24.00	14.00	15.00	280
	609	356	381	127
6	31.75	16.00	15.88	332
	(806)	(406)	(403)	(151)
8	39.88	18.00	16.50	600
	(1,012)	(457)	(419)	(270)
10	41.75	22.00	18.00	920
	(1060)	(559)	(457)	(417)
12	47.00	24.00	19.75	1400
	(1193)	(610)	(502)	(635)

Figure G-927

Class 125 • Bolted Cap • Bronze Trim • Threaded Ends



Materials of Construction

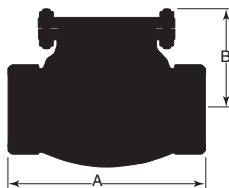
No.	Description	Material
1	Body	Cast Iron
2	Cap	Cast Iron
4	Disc	Bronze
6	Seat Ring	Bronze
8	Hinge Pin	Alum Silicon Bronze
19	Hinge	Bronze
23	Disc Nut	Brass
24	Side Plug*	Brass
25	Disc Washer	Brass
28	Hinge Pin Bushing*	Brass
32	Bonnet Gasket	Non-Asbestos Sheet
33	Cap Bolt	Carbon Steel
34	Cap Bolt Nut	Carbon Steel
36	Identification Plate	Aluminum

* Not shown

Industry Standards

Complies with MSS SP-71, Type 1

See page 6 for Pressure Temperature Ratings



Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

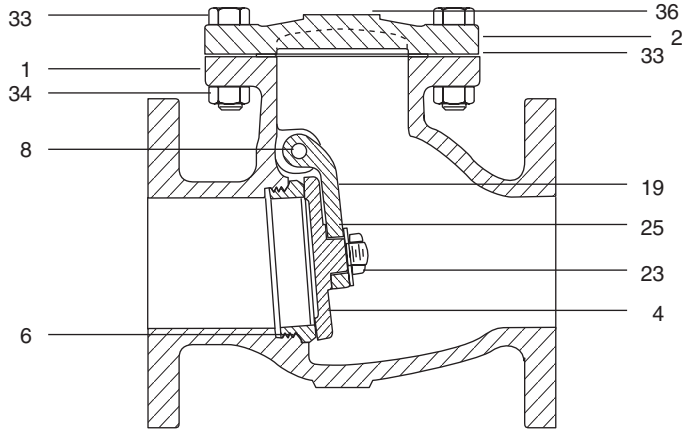
Valve Size	Dimensions		WT
	A	B	
2	6.12	4.50	18
	(155)	(114)	(8)
2 ½	7.25	5.38	22
	(184)	(137)	(10)
3	8.00	5.88	29
	(203)	(149)	(13)
4	9.25	6.62	54
	(235)	(168)	(25)

Iron Check Valves



Figure G-931

Class 125 • Bolted Cap • Bronze Trim • Flanged Ends



Materials of Construction

No.	Description	Material
1	Body	Cast Iron
2	Cap	Cast Iron
4	Disc	(2" - 6") Bronze (8" - 24") Cast Iron
6	Seat Ring	(2" - 12") Bronze (14" - 24") Bronze
7	Disc Ring	(8" - 12") Bronze (14" - 24") Bronze
8	Hinge Pin	(2" - 8") Alum Silicon Bronze (10" - 12") Naval Brass (14" - 16") Stainless Steel (18" - 24") Stainless Steel
19	Hinge	(2" - 6") Bronze (8" - 12") Ductile (18" - 24") Ductile (14" - 16") Carbon Steel
20	Disc Stud	(8" - 16") Steel (18" - 24") Steel
21	Disc Stud Pin	(8" - 16") 18-8 Stainless Steel (18" - 24") Steel
23	Disc Nut	(2" - 6") Brass (8" - 24") Steel
24	Side Plug	(2" - 16") Brass (18" - 24") Ductile
25	Disc Washer	(2" - 6") Brass (8" - 16") Steel
26	Lockwasher*	(18" - 24") Steel
27	Plain Washer*	(18" - 24") Steel
28	Hinge Pin Bushing*	(2" - 12") Brass (14" - 16") Bronze
32	Bonnet Gasket	Non-Asbestos Sheet
33	Cap Bolt	Carbon Steel
34	Cap Bolt Nut	Carbon Steel
36	Identification Plate	Aluminum

Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

Valve Size	Dimensions		WT
	B	M	
2	4.50	8.00	25
	(114)	(203)	(11)
2 ½	5.38	8.50	30
	(137)	(216)	(14)
3	5.88	9.50	42
	(149)	(241)	(19)
4	6.62	11.50	74
	(168)	(292)	(33)
5	7.75	13.00	100
	(197)	(330)	(45)
6	8.25	14.00	125
	(210)	(356)	(56)
8	10.25	19.50	230
	(260)	(495)	(104)
10	12.00	24.50	490
	(305)	(622)	(219)
12	13.75	27.50	660
	(349)	(699)	(317)
14	15.50	31.00	794
	(393)	(787)	(360)
16	17.63	36.00	1020
	(447)	(914)	(462)
18	19.25	36.00	1304
	(610)	(914)	(591)
20	27.62	40.00	2590
	(702)	(1016)	(1117)
24	31	46.00	3840
	(787)	(1168)	(1745)

* Not shown

Industry Standards

Complies with Military Spec. MIL-V-18436 and MSS SP-71, Type 1
See page 6 for Pressure Temperature Ratings

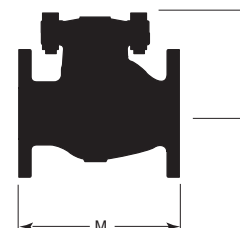
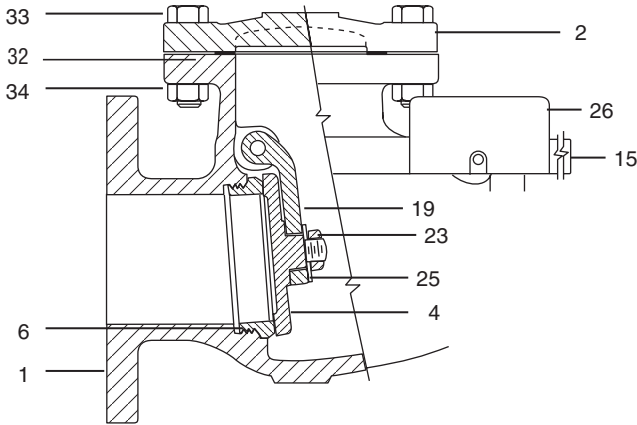


Figure G-931 L&W

Class 125 • Bolted Cap • Bronze Trim • Flanged End • Lever & Weight



Materials of Construction

No.	Description	Material
1	Body	Ferrosteel
2	Cap	Ferrosteel
4	Disc	(2" - 6") Bronze (8") Ferros Steel
6	Body Seat Ring	Bronze
7	Disc Seat Ring*	(8") Bronze
8	Hinge Pin**	Exelloy
11	Stuffing Box**	Brass
12	Packing**	Non-Asbestos
14	Packing Nut**	Bronze
15	Lever†	Malleable Iron
19	Hinge†	(2" - 6") Bronze (8") Malleable Iron
20	Disc Stud*	(8") Steel
21	Disc Stud Pin*	(8" 18-8 Stainless Steel
22	Hinge Pin Key**	Steel
23	Nut for Disc	(2" - 6") Brass (8") Steel
24	Hinge Pin Plug*	Brass
25	Disc Washer	(2" - 6") Brass (8") Steel
26	Weight†	Cast Iron
27	Hinge Pin Bushing*	Bronze
28	Lever Washer**	Steel
29	Coupling**	Malleable Iron
30	Gib-Key**	Steel
31	Lever Nut**	Steel Di-Chromate
32	Gasket†	Non-Asbestos Sheet
33	Cap Bolts	Steel
34	Cap Bolt Nuts	Steel
36	ID Plate*	Aluminum

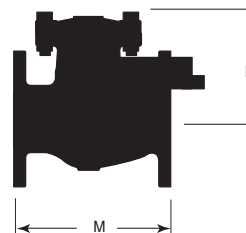
Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

Valve Size	Dimensions		WT
	B	M	
2	4.50	8.00	30
	(114)	(203)	(14)
2 ½	5.38	8.50	40
	(137)	(216)	(18)
3	5.88	9.50	54
	(149)	(241)	(24)
4	6.62	11.50	85
	(168)	(292)	(38)
6	8.25	14.00	137
	(210)	(356)	(62)
8	10.25	19.50	240
	(260)	(495)	(108)
10	12.00	24.50	460
	(305)	(622)	(208)
12	13.75	27.50	700
	(349)	(699)	(317)
14	16.88	31.00	1060
	(429)	(787)	(481)
16	19.12	36.00	1500
	(486)	(914)	(682)
18	24.00	38.00	1970
	(610)	(965)	(895)
20	27.62	42.00	2590
	(702)	(1067)	(1117)
24	31.00	46.00	3840
	(787)	(1168)	(1745)

* Not shown

† Parts indicated are necessary for changing regular valve to outside lever and weight
See page 7 for Lever and Weight Technical Orientation Data

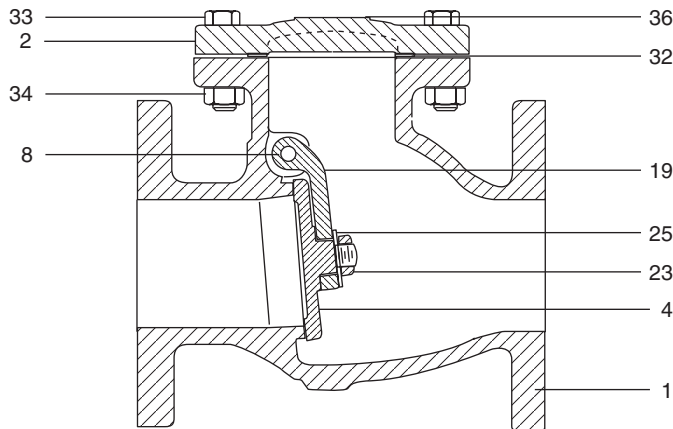


Iron Check Valves



Figure G-933

Class 125 • Bolted Cap • All Iron • Flanged Ends



Materials of Construction

No.	Description	Material
1	Body	Cast Iron
2	Cap	Cast Iron
4	Disc	(2" - 4") Ductile (6" - 24") Cast Iron
6	Seat Ring*	(5", 10" - 24") Cast Iron (2" - 4", 6" - 8") Cast Iron (Integral)
8	Hinge Pin	Stainless Steel
19	Hinge	Ductile
20	Disc Stud	(8" - 16") Steel (18" - 24") Steel
21	Disc Stud Pin	(8" - 16") 18-8 Stainless Steel (18" - 24") Steel
23	Disc Nut	(8" - 24") Steel
24	Side Plug*	(2" - 12") Carbon Steel (14" - 24") Ductile
25	Disc Washer	(2" - 12") Carbon Steel
26	Lockwasher*	(14" - 24") Steel
27	Plain Washer*	(14" - 24") Steel
28	Hinge Pin Bushing*	(2" - 12") Carbon Steel
32	Cap Gasket	Non-Asbestos Sheet
33	Cap Bolt	Carbon Steel
34	Cap Bolt Nut	Carbon Steel
36	Identification Plate	Aluminum

* Not shown

Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

Valve Size	Dimensions		WT
	B	M	
2	4.50	8.00	25
	(114)	(203)	(11)
2 ½	5.38	8.50	30
	(137)	(216)	(13)
3	5.88	9.50	42
	(149)	(241)	(19)
4	6.62	11.50	74
	(168)	(292)	(33)
5	7.75	13.00	100
	(197)	(330)	(45)
6	8.25	14.00	125
	(210)	(356)	(56)
8	10.25	19.50	230
	(260)	(495)	(104)
10	12.00	24.50	440
	(305)	(622)	(200)
12	13.75	27.50	660
	(349)	(699)	(299)
14	16.88	31.00	1060
	(429)	(787)	(481)
16	19.12	36.00	1500
	(486)	(914)	(682)
18	24.00	38.00	1970
	(610)	(965)	(895)
20	27.62	42.00	2590
	(702)	(1067)	(1117)
24	31.00	46.00	3840
	(787)	(1168)	(1745)

Industry Standards

Complies with Military Spec. MIL-V-18436 and MSS SP-71, Type 1

See page 6 for Pressure Temperature Ratings

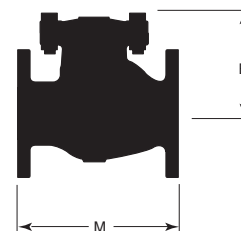
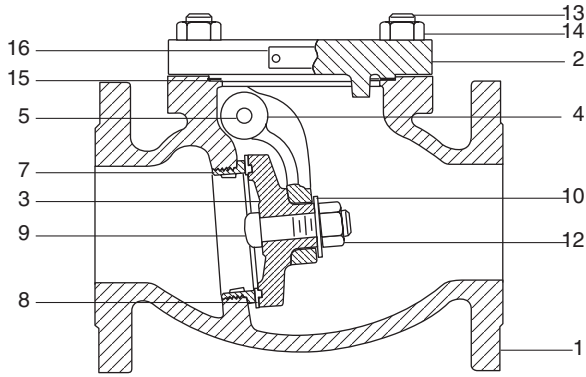


Figure F-947

Class 250 • Bolted Cap • Bronze Trim • Flanged Ends



Materials of Construction

No.	Description	Material
1	Body	Ferrosteel
2	Cap	Ferrosteel
3	Disc	(2" - 3") Bronze
		(4" - 8") Cast Iron
4	Hinge	Malleable Iron
5	Hinge Pin	(2" - 3") 13 Cr. Stainless Steel
		(4" - 8") Bronze
6	Hinge Pin Plug*	Bronze
7	Body Seat Ring	Bronze
8	Disc Seat Ring	(4" - 8") Bronze
9	Disc Bolt	(4" - 8") Steel
10	Disc Nut Washer	Steel
12	Disc Bolt Nut	Steel - Dichromate Fin.
13	Cap Studs	Steel
14	Cap Stud Nuts	Steel
15	Gasket	Non-Asbestos Sheet
16	Identification Plate	Aluminum

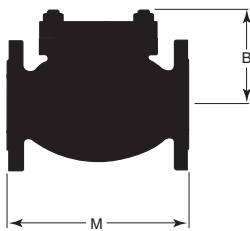
*Not shown

Industry Standards

Complies with MSS SP-71 Type 1 and
 Military Specifications MIL-V-18436 Group B, Type 3, Trim 5
 See page 6 for Pressure Temperature Ratings

Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)



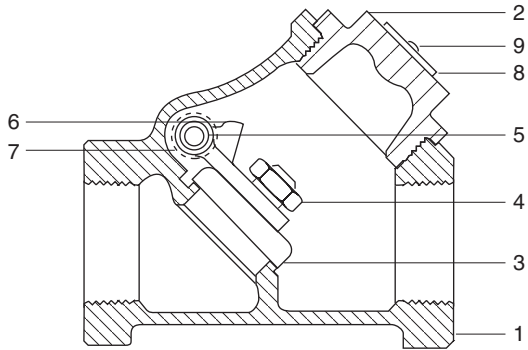
Valve Size	Dimensions		WT
	B	M	
2	5.25	10.50	46
	(133)	(267)	(21)
2 ½	6.00	11.50	64
	(152)	(292)	(29)
3	6.25	12.50	90
	(159)	(318)	(41)
4	7.25	14.00	133
	(184)	(356)	(60)
6	9.00	17.50	250
	(229)	(445)	(113)
8	11.00	21.00	410
	(279)	(533)	(185)

Malleable Iron Check Valves



Figure G-975

Class 300 • Threaded Cap • Y-Pattern • All Iron • Threaded Ends



Materials of Construction

No.	Description	Material
1	Body	Malleable Iron
2	Cap	Malleable Iron
3	Disc	($\frac{1}{2}$ " & $\frac{3}{4}$ ") Mild Steel
		(1" - 2") Malleable Iron
4	Disc Hinge Nut	Steel
5	Hinge Pin	13% Chrome Steel
6	Hinge	Malleable Iron
7	Hinge Pin Plug	13% Chrome Steel
8	Identification Plate	Aluminum
9	Drive Screw	Steel

Temperature Valve Ratings		Working Pressures, Non-shock, PSI	
°F	°C	PSI	kPa
-20 to 150	-30 to 65	1000	6894
200	93	960	6618
250	121	925	6377
300	149	890	6136
350	177	850	5860
400	205	810	5584
450	232	775	5343
500	260	740	5102
550	288	700	4826

Dimensions and Weights

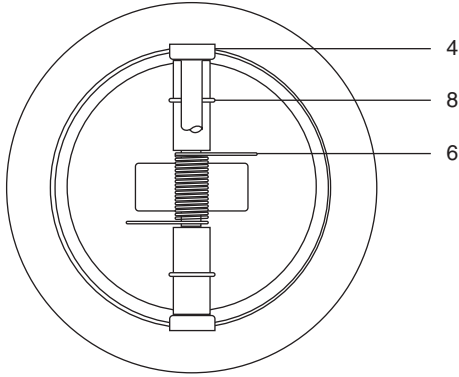
Inches (millimeters) - Pounds (kilograms)



Valve Size	Dimensions		WT
	M	B	
$\frac{1}{2}$	2.75	1.69	1.0
	(70)	(43)	(.43)
$\frac{3}{4}$	3.27	2.00	1.50
	(83)	(51)	(.65)
1	4.06	2.45	2.50
	(103)	(62)	(1.11)
1 $\frac{1}{4}$	4.75	2.85	2.90
	(120)	(73)	(1.30)
1 $\frac{1}{2}$	5.40	3.29	5.80
	(137)	(84)	(2.61)
2	6.62	4.28	10.0
	(168)	(109)	(4.51)

Figure WG-961

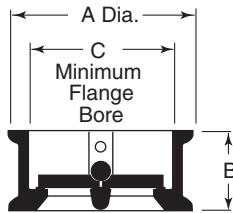
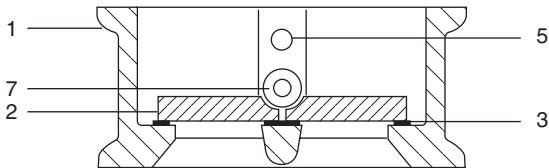
200 CWP • Iron Body • EPDM Seat



Materials of Construction

No.	Description	Material
1	Body	Cast Iron
2	Disc*	Stainless Steel
3	Seal	EPDM
4	Pin Retainer	Cast Iron
5	Stop Pin	Stainless Steel
6	Spring	Stainless Steel
7	Hinge Pin	Stainless Steel
8	Plate Bearing	PTFE

*2", 2½", 5", 10", & 12" Material: Aluminum Bronze



Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

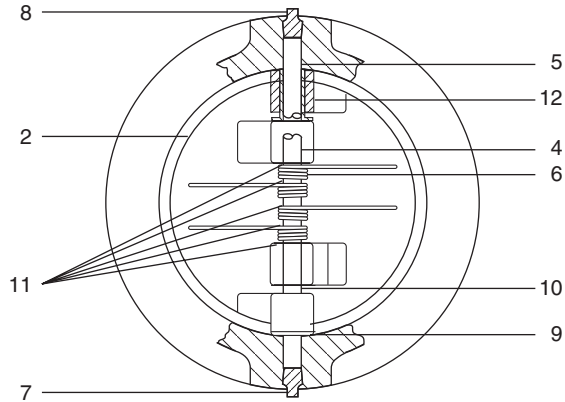
Valve Size	Dimensions			WT
	A	B	C	
2	4.12	2.12	2.06	5.00
	(105)	(54)	(52)	(2.27)
2 ½	4.88	2.12	2.47	7.00
	(124)	(54)	(63)	(3.17)
3	5.38	2.25	3.06	9.00
	(137)	(57)	(78)	(4.08)
4	6.88	2.50	4.00	13.00
	(175)	(64)	(102)	(5.90)
5	7.75	2.75	5.00	22.00
	(197)	(70)	(127)	(9.98)
6	8.75	3.00	6.06	31.00
	(222)	(76)	(154)	(14.06)
8	11.00	3.75	7.97	69.00
	(279)	(95)	(202)	(31.29)
10	13.38	4.25	10.00	95.00
	(340)	(108)	(254)	(43.08)
12	16.12	5.62	11.94	156.00
	(409)	(143)	(303)	(70.20)

Iron Wafer Check Valves



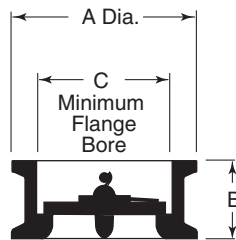
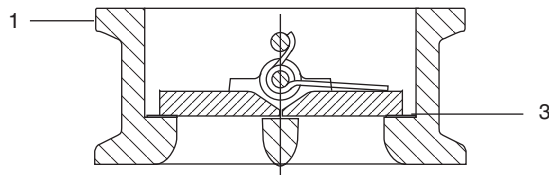
Figure WG-970

Class 125 • Iron Body • Buna-N Seat



Materials of Construction

No.	Description	Material
1	Body	Cast Iron
2	Plate	Aluminum Bronze
3	Seal	Buna-N
4	Stop Pin	316 Stainless Steel
5	Hinge Pin	316 Stainless Steel
6	Spring	316 Stainless Steel
7	Stop Pin Retainer	316 Stainless Steel
8	Hinge Pin Retainer	316 Stainless Steel
9	Body Bearing	PTFE
10	Plate Bearing	PTFE
11	Spring Bearing	PTFE



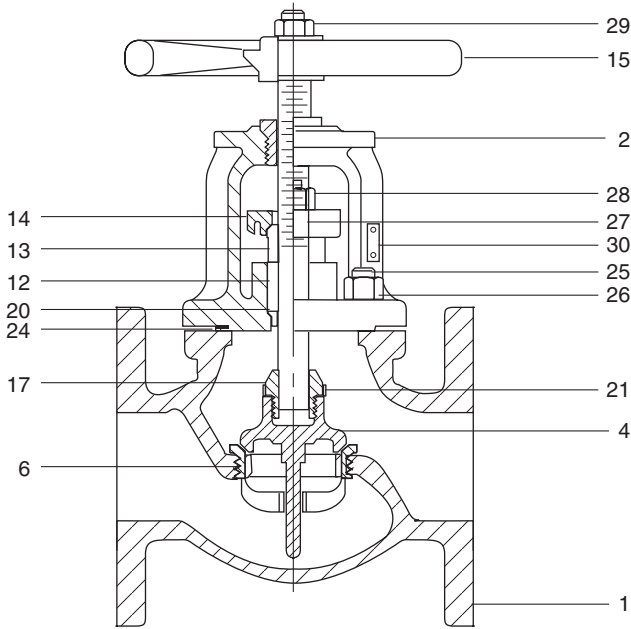
Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

Valve Size	Dimensions			WT
	A	B	C	
2	4.12	2.12	2.06	5.00
	(105)	(54)	(52)	(2.27)
2 ½	4.88	2.12	2.47	7.00
	(124)	(54)	(63)	(3.17)
3	5.38	2.25	3.06	9.00
	(137)	(57)	(78)	(4.08)
4	6.88	2.50	4.00	13.00
	(175)	(64)	(102)	(5.90)
5	7.75	2.75	5.00	22.00
	(197)	(70)	(127)	(9.98)
6	8.75	3.00	6.06	31.00
	(222)	(76)	(154)	(14.06)
8	11.00	3.75	7.97	69.00
	(279)	(95)	(202)	(31.28)
10	13.38	4.25	10.00	95.00
	(340)	(108)	(254)	(43.08)
12	16.12	5.62	11.94	156.00
	(409)	(143)	(303)	(70.75)
14	17.75	7.25	12.50	203
	(451)	(184)	(316)	(92.06)
16	20.25	7.50	15.00	247.00
	(514)	(191)	(381)	(112.02)
18	21.62	8.00	16.88	303.00
	(549)	(203)	(429)	(137.01)
20	23.88	8.38	18.81	390.00
	(607)	(213)	(478)	(176.87)
24	28.25	8.75	22.62	566.00
	(724)	(222)	(575)	(256.69)
30	34.75	12.00	29.25	1083.00
	(883)	(305)	(743)	(491.15)
36	41.25	14.50	35.00	1505.00
	(1048)	(368)	(889)	(682.54)

Figure G-512-I*

Class 125 • Bolted Bonnet • OS&Y • Bronze Trim • Flanged Ends



Materials of Construction

No.	Description	Material
1	Body	Hi-Str. Cast Iron
2	Bonnet	Hi-Str. Cast Iron
4	Disc	(2" - 6") Bronze (8" - 10") Cast Iron
6	Body Seat Ring	Bronze
7	Disc Seat Ring*	(8" & 10") Bronze
8	Stem	Manganese Bronze
9	Yoke Bushing	Manganese Bronze
12	Packing	Non-Asbestos Rings
13	Gland	(2" - 4") Brass (5" - 10") Bronze
14	Gland Flange	Ductile
15	Handwheel	Ductile
17	Disc Stem Ring	Bronze
20	Stem Hole Bushing	Brass
21	Locking Device	(2" - 6") 18-8 SST Sheet
22	Disc Guide Stem*	(8" & 10") Brass
23	Disc Guide Stem Pin*	(8" & 10") Brass
24	Bonnet Gasket	Non-Asbestos Sheet
25	Bonnet Studs	Steel
26	Bonnet Stud Nuts	Steel
27	Gland Studs	Naval Brass
28	Gland Stud Nuts	Brass
29	Handwheel Nut	Steel - Phos. Coated
30	Identification Plate	Aluminum

* Not shown

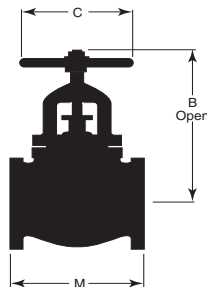
Industry Standards

Complies with MSS SP-85 Type 1

See page 6 for Pressure Temperature Ratings

Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

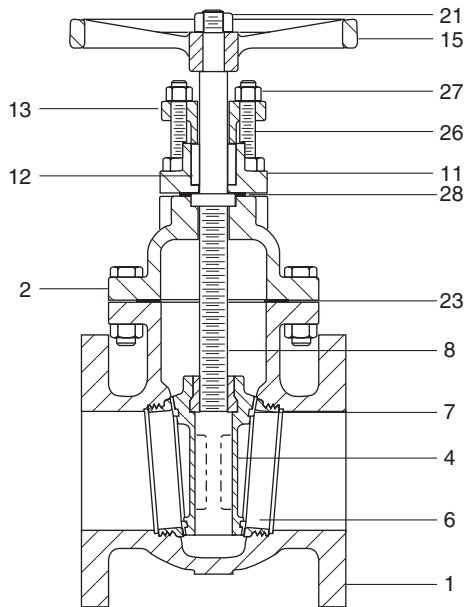


Valve Size	Dimensions			WT
	B	C	M	
2	11.12	8.00	8.00	35
	(282)	(203)	(203)	(15)
2 ½	11.50	8.00	8.50	40
	(292)	(203)	(216)	(18)
3	13.25	9.00	9.50	57
	(337)	(229)	(241)	(26)
4	15.50	10.00	11.50	95
	(394)	(254)	(292)	(43)
5	17.50	10.00	13.00	126
	(445)	(254)	(330)	(57)
6	19.50	12.00	14.00	176
	(495)	(305)	(356)	(80)
8	25.00	16.00	19.50	344
	(635)	(406)	(495)	(156)
10	30.50	18.00	24.50	570
	(775)	(457)	(622)	(259)

* NOTE: All International Iron valves are painted gray.

Figure G-612-I*

Class 125 • Bolted Bonnet • Non-Rising Stem • Bronze Trim • Flanged Ends



Materials of Construction

No.	Description	Material
1	Body	Cast Iron
2	Bonnet	Cast Iron
4	Disc	(2" - 3") Bronze (4" - 12") Cast Iron
6	Seat Ring	Bronze
7	Disc Ring	(4" - 12") Bronze
8	Stem	Manganese Bronze
11	Stuffing Box	(2" - 8") Ductile (10" - 12") Cast Iron
12	Packing	Non-Asbestos Rings
13	Gland Flange	(2" - 8") Ductile
14	Gland*	(10" - 12") Bronze
15	Handwheel	Ductile
21	Handwheel Nut	Carbon Steel
23	Bonnet Gasket	Non-Asbestos Sheet
24	Bonnet Bolt	Carbon Steel
25	Bonnet Bolt Nut	Carbon Steel
26	Gland Bolt	Carbon Steel
27	Gland Bolt Nut	Carbon Steel EZP
28	Stuffing Box Gasket	Non-Asbestos Sheet
34	Stuffing Box Bolt*	Carbon Steel
35	Stuffing Box Bolt Nut*	Carbon Steel
55	Gland Follower*	(10" - 12") Ductile

* Not shown

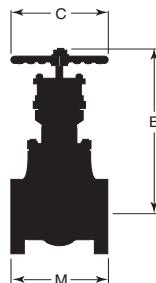
Industry Standards

Complies with MSS SP-70 Type 1

See page 6 for Pressure Temperature Ratings

Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

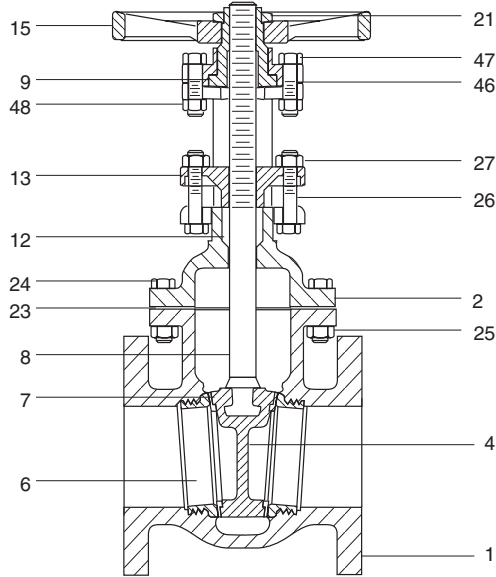


Valve Size	Dimensions			WT
	B	C	M	
2	11.31 (287)	8.00 (203)	7.00 (178)	30 (14)
2 ½	12.40 (315)	8.00 (203)	7.50 (191)	40 (18)
3	13.25 (337)	8.00 (203)	8.00 (203)	56 (25)
4	16.31 (414)	10.00 (254)	9.00 (229)	90 (41)
5	18.00 (457)	10.00 (254)	10.00 (254)	126 (57)
6	20.69 (526)	12.00 (305)	10.50 (267)	152 (68)
8	24.12 (613)	14.00 (356)	11.50 (292)	260 (117)
10	32.25 (819)	16.00 (406)	13.00 (330)	484 (220)
12	36.00 (914)	18.00 (457)	14.00 (356)	685 (311)

* NOTE: All International Iron valves are painted gray.

Figure G-623-I*

Class 125 • Bolted Bonnet • OS&Y • Bronze Trim • Flanged Ends



Materials of Construction

No.	Description	Material
1	Body	Cast Iron
2	Bonnet	Cast Iron
4	Disc	(2") Bronze
		(2½" & 3") Bronze
		(4" - 12") Cast Iron
6	Body Seat Ring	Bronze
7	Disc Seat Ring	(4" - 12") Bronze
8	Stem	Manganese Bronze
9	Yoke Sleeve	Manganese Bronze
12	Packing	Non-Asbestos Rings
13	Gland (1 Piece)	(2" - 8") Ductile Iron
	Gland*	(10" & 12") Bronze
	Gland Flange*	(10" & 12") Ductile Iron
15	Handwheel	Ductile Iron
21	Handwheel Nut	(2" - 8") Sintered Nickel Steel
		(10" - 12") Ductile Iron
23	Bonnet Gasket	Non-Asbestos Sheet
24	Bonnet Bolt	Carbon Steel
25	Bonnet Bolt Nut	Carbon Steel
26	Gland Bolt	Carbon Steel
	Gland Eyebolt	Carbon Steel
27	Gland Bolt Nut	Carbon Steel
46	Yoke Cap	(2" - 8") Ductile Iron
		(10" - 12") Cast Iron
47	Yoke Cap Bolt	Carbon Steel
48	Yoke Cap Bolt Nut	Carbon Steel

* Not shown

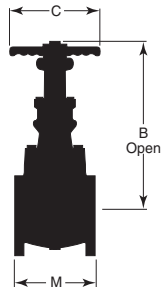
Industry Standards

Complies with MSS SP-70 Type 1

See page 6 for Pressure Temperature Ratings

Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

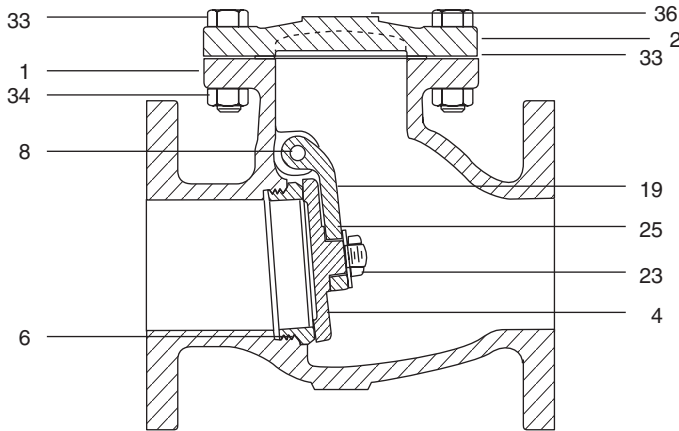


Valve Size	Dimensions			WT
	B	C	M	
2	14.75	8.00	7.00	33
	(375)	(203)	(178)	(15)
2½	16.06	8.00	7.50	47
	(408)	(203)	(191)	(21)
3	17.38	8.00	8.00	58
	(441)	(203)	(203)	(26)
4	21.44	10.00	9.00	97
	(545)	(254)	(229)	(44)
5	25.81	10.00	10.00	135
	(656)	(254)	(254)	(61)
6	30.31	12.00	10.50	162
	(770)	(305)	(267)	(73)
8	37.75	14.00	11.50	280
	(959)	(356)	(292)	(126)
10	44.94	16.00	13.00	502
	(1141)	(406)	(330)	(228)
12	53.69	18.00	14.00	670
	(1364)	(457)	(356)	(304)

* NOTE: All International Iron valves are painted gray.

Figure G-931-I*

Class 125 • Bolted Cap • Bronze Trim • Flanged Ends



Materials of Construction

No.	Description	Material
1	Body	Cast Iron
2	Cap	Cast Iron
4	Disc	(2" - 6") Bronze (8" - 12") Cast Iron
6	Seat Ring	Bronze
7	Disc Ring	(8" - 12") Bronze
8	Hinge Pin	(2" - 8") Alum Silicon Bronze (10" - 12") Naval Brass
19	Hinge	(2" - 6") Bronze (8" - 12") Ductile
20	Disc Stud	(8" - 12") Steel
21	Disc Stud Pin	(8" - 12") 18-8 Stainless Steel
23	Disc Nut	(2" - 6") Brass (8" - 12") Steel
24	Side Plug	Brass
25	Disc Washer	(2" - 6") Brass (8" - 12") Steel
28	Hinge Pin Bushing*	Brass
32	Bonnet Gasket	Non-Asbestos Sheet
33	Cap Bolt	Carbon Steel
34	Cap Bolt Nut	Carbon Steel
36	Identification Plate	Aluminum

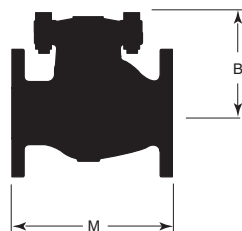
* Not shown

Industry Standards

Complies with Military Spec. MIL-V-18436 and MSS SP-71, Type 1
See page 6 for Pressure Temperature Ratings

Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)



Valve Size	Dimensions		WT
	B	M	
2	4.50	8.00	25
	(114)	(203)	(11)
2 ½	5.38	8.50	30
	(137)	(216)	(14)
3	5.88	9.50	42
	(149)	(241)	(19)
4	6.62	11.50	74
	(168)	(292)	(33)
5	7.75	13.00	100
	(197)	(330)	(45)
6	8.25	14.00	125
	(210)	(356)	(56)
8	10.25	19.50	230
	(260)	(495)	(104)
10	12.00	24.50	490
	(305)	(622)	(219)
12	13.75	27.50	660
	(349)	(699)	(317)

* NOTE: All International Iron valves are painted gray.

Technical Data

Y-Pattern Stop Check Valve

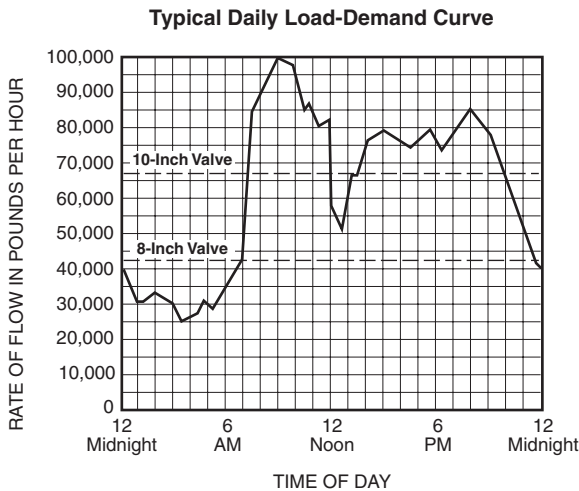
Selecting the Proper Size – Determining Pressure Drop

Since stop-check valves have a floating disc member, it is important the valve be sized to provide full disc lift under flow conditions prevailing during the major portion of the service life. If the valve is too large, the disc will float in a partially open position and may cause fluttering of the disc and rapid wear.

Conversely, if the valve is too small, pressure drop will be excessive. The chart on the following page is a graphic presentation of flow data determined by test. Its use offers a simple method of determining the best size stop-check valve, as well as the pressure drop under varying conditions of flow, without any computation.

How to Use the Chart Shown on the Following Page

Given: Steam Pressure-Temperature...250 psig 450°F
Flow Rate...Typical Daily Demand Curve



Find: Valve Catalog No. and the best size for above installation.

Solution:

1. Enter the Temperature chart at 450 °F. Move vertically upward to the curved line for 250 psi, then horizontally to the right to establish a point on the specific volume scale. From this point, draw a line through the flow rate being investigated (100,000 Lb/H) and establish a point on Index 1.

2. From that point, draw another line through the valve size, for example the 8-inch size, and establish a point on Index 2. Now move horizontally to the diagonal pressure drop line on the right side. Where these lines intersect, the pressure drop is 7.5 psi for the 8-inch, Class 250 globe valve and 8.5 psi for the 8-inch Class 250 angle valve.

Chart solutions resulting in a point on Index 2 that falls below the Line A-A for Class 250 valves indicate the disc will not be fully lifted under the flow conditions used. Operation under such conditions is not recommended but, at times, must be tolerated for short periods during the low loads.

3. Enter the chart where Line A-A intersects Index 2 for Class 250 valves. Move diagonally upward through the size being investigated (8-inch) and establish a second point on Index 1. From this point, extend a line to the specific volume established in Step 1 and at its intersection with the flow rate line, read 48,000 Lb/H as the minimum flow rate at which the disc will be in the fully lifted position. The pressure drop at this flow rate is 1.9 psi for globe and 2.1 psi for angle valves.

4. Repeat Steps 2 and 3 for other possible valve sizes, tabulate results, and make size selection on basis of pressure drop and duration of partial disc lift considerations.

Valve Size (Inches)	Press drop @ Max.Min. Flow rate (100,000 #/Hr.), psi		Flow Rate for Wide open valve #/Hr.
	Globe	Angle	#/Hr.
6	20.5	22.5	26,500
8	7.5	8.5	48,000
10	3.3	3.6	68,000

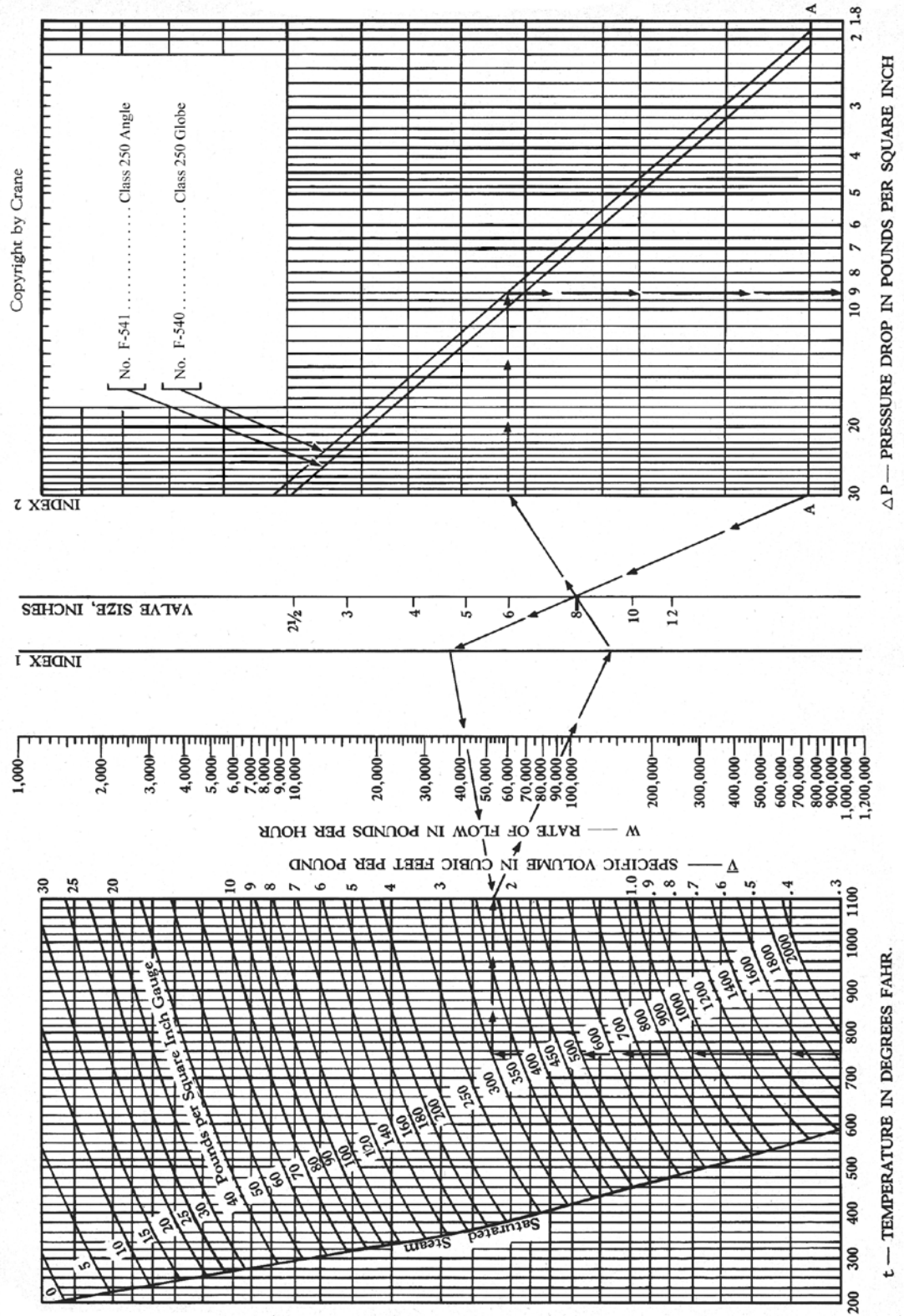
Dotted lines on Demand Curve indicate minimum flow rates for wide open 8" and 10" valves.

5. The best choice for this example would be the 10" size because pressure drop is much lower and duration of partially lifted disc is only slightly greater than for the 8" size.

6. Pressure drop for any intermediate flow condition can be determined as outlined in Steps 1 and 2.

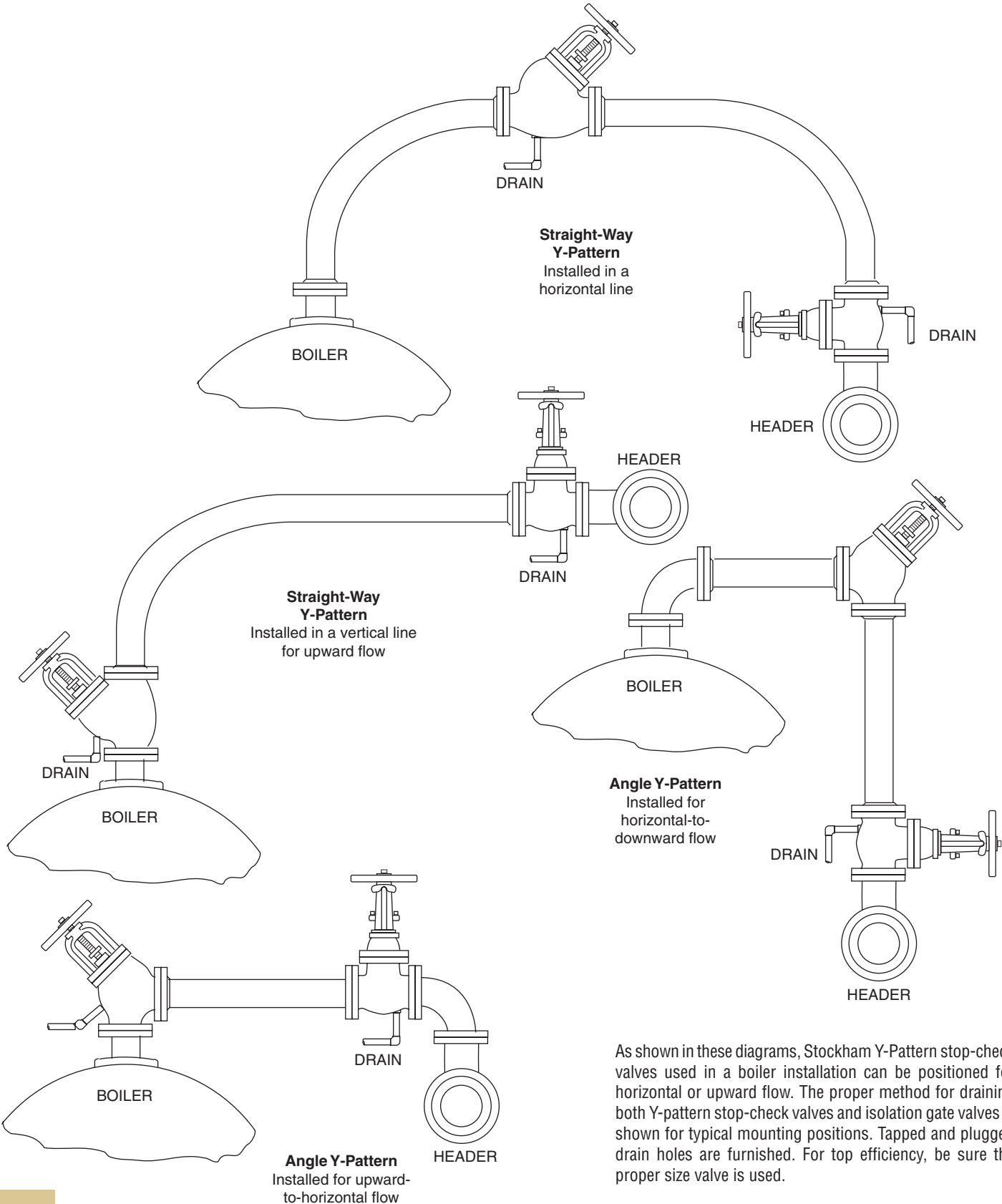
7. Valves require a minimum of 50 psi differential pressure to seat the valve.

Stockham Bolted Bonnet Stop-Check Valves Selecting the Proper Size – Determining Pressure Drop



Installation Recommendations

Y-Pattern Stop-Check and Isolation Gate Valves



As shown in these diagrams, Stockham Y-Pattern stop-check valves used in a boiler installation can be positioned for horizontal or upward flow. The proper method for draining both Y-pattern stop-check valves and isolation gate valves is shown for typical mounting positions. Tapped and plugged drain holes are furnished. For top efficiency, be sure the proper size valve is used.

CRANE[®]

Energy Flow Solutions



CRANE Energy Flow Solutions[®]
brands you know...technology you want...solutions you need



Ball, Check, Corrosion Resistant Gate and Globe Valves



Lined Check and Resilient Seated Butterfly Valves

CRANE[®]

Ball, Bronze, Butterfly, Cast Steel, and Iron Valves

DUO-CHEK[®] UNI-CHEK[®]

High Performance Wafer Check Valves



High Performance Butterfly and Metal Seated Valves



Ball, Bronze, Butterfly, Cast Steel, and Iron Valves



KROMBACH
ARMATUREN

Valve System Solutions, Highly Engineered Specialty Valves

NOZ-CHEK[®] COMPAC-NOZ[®]

Nozzle-Type, Severe Service Check Valves



PACIFIC VALVES

High Pressure and Severe Service Valves

STOCKHAM[®]

Ball, Bronze, Butterfly, Cast Steel, and Iron Valves



Cast Steel Valves

VALVE SERVICES

Certified Valve Repair Services



Potravinářský průmysl
Farmaceutický průmysl
Biotechnologie
Petrochemie
Chemický průmysl
Energetika
Úprava vody
Papírenství a zpracování celulózy
Plynárenský průmysl
Keramický průmysl
Zpracovatelský průmysl



Firma s tradicí od r. 1990 se při svém vzniku zaměřila na dodávky základních komponent, přístrojové a měřicí techniky a dodávky technologií pro farmaceutický a potravinářský průmysl. Cílem bylo zajistit kompletní dodavatelsko - inženýrské služby, včetně servisu. V roce 1998, který byl pro firmu velmi významným mezníkem, proběhla transformace společnosti do nynější formy. V dalších letech činnosti společnosti dochází k rozšíření portfolia a je navazována spolupráce s partnery v oblasti armatur, komponent, ventilů, procesní měřicí techniky a čerpadel.

Oblastí působnosti je potravinářský, farmaceutický průmysl, biotechnologie, chemický průmysl, petrochemie, úprava vody, papírenství a celulóza, energetika, keramický průmysl a zpracovatelský průmysl.

Firma REGOM INSTRUMENTS je díky širokému dodavatelskému portfoliu a bohatým zkušenostem schopna zajistit dodávky armatur, komponent, čerpadel, přístrojů a zařízení.

Cílem společnosti REGOM INSTRUMENTS je poskytování kvalitních služeb a spolehlivých dodávek pro co nejširší okruh zákazníků.



REGOM INSTRUMENTS s.r.o.

Brabcova 1159 / 2

147 00 Praha 4

CZECH REPUBLIC

Tel: +420 241 402 206

Fax: +420 241 400 290

Mail: regom@regom.cz

Skype: regom-office

www.regom.cz