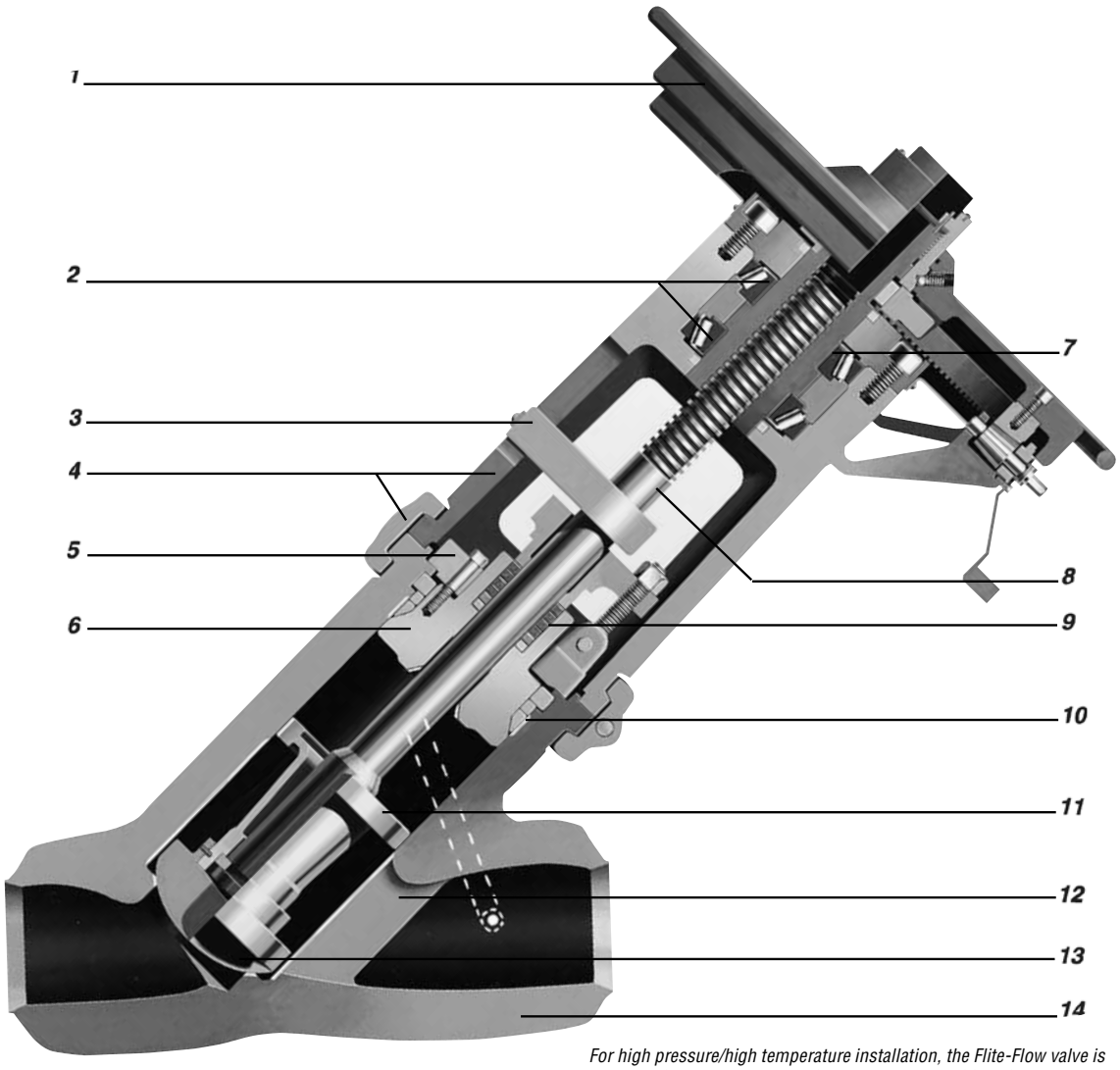
Features and Description of Edward Flite-Flow® Globe Valves



For high pressure/high temperature installation, the Flite-Flow valve is capable of handling millions of pounds per hour of fluid flow - without sacrificing low pressure drop or piping flexibility.

1. **Impactor handwheel** - provides many times the closing force of an ordinary handwheel for positive seating. Impactogear, available on larger sizes, allows cycling by one man utilizing the air wrench adaptor.
2. **Thrust bearings** minimize torque requirements and eliminate side loading due to out-of-position orientation. Smoother operation and longer valve life is possible.
3. **Stem guide collar** - prevents stem rotation and provides valve position indication.
4. **Yoke/Yoke lock ring** - the yoke is designed for ready access to the packing chamber and the lock ring allows quick disassembly for maintenance.
5. **Bonnet retainer** provides loading to effect a seal at the pressure seal gasket.
6. **Bonnet** is precision machined, retains packing and provides an integral hard-faced stem backseat.
7. **Yoke bushing material** has low coefficient of friction which substantially reduces torque and thread wear and eliminates galling.
8. **Stem** has ACME threads, is machined to a fine finish and is heat treated for improved strength and hardness to resist wear.
9. **Stem packing system** utilizes flexible graphite packing material with anti-extrusion rings for optimum sealability and life.
10. **Composite Pressure seal gasket** is a preloaded, pressure energized design for long reliable service.
11. **Disk piston** is body guided to eliminate misalignment, galling and stem bending.
12. **Guide ribs** - hardfaced on Flite-Flow and some angle patterns, provide body guiding for disk/piston assemblies.
13. **Integral hardsurfaced seats** both body and disk provide shutoff and long seat life.

Parts Specification List for Globe Valves Stop, Stop-Check & Piston Lift Check

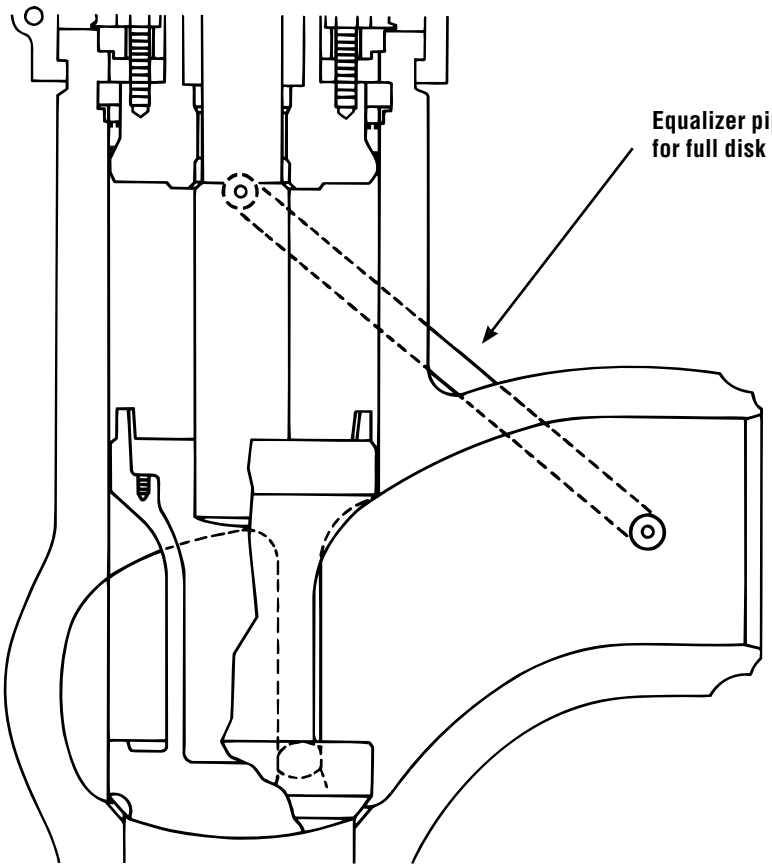
This is not a complete list. Construction and materials will vary between sizes and pressure classes and may be changed without notice. For a complete, accurate, and itemized description of a particular valve, contact your Flowserve Edward Valves sales representative.

Description(1)	ASTM No.	ASTM No.	ASTM No.	ASTM No.	ASTM No.
Body/Bonnet*	A-216 Grade WCB	A-217 Grade WC6	A-217 Grade WC9	A-217 Grade C12A	A-351 Grade CF8M
Disk	A-105 —	A-182 Grade F11	A-182 Grade F22	A-182 Grade F91	A-182 Grade F316
Body-Guided Disk Nut	A-216 Grade WCB	A-217 Grade WC6	A-217 Grade WC9	A-217 Grade C12A	A-182 Grade F316
Stem	A-182 Grade F6a	A-182 Grade F6a	A-565 Grade 616 HT	A-565 Grade 616 HT	A-638 Grade 660 T2
Yoke Bushing	B-148 Alloy 95400	B-148 Alloy 95400	B-148 Alloy 95400	B-148 Alloy 95400	B-148 Alloy 95400
Packing Rings	Flexible Graphite inner rings and suitable anti-extrusion rings.				
Junk Rings	AISI 1117 Cad. Plated	AISI 1117 Cad. Plated	AISI 1117 Cad. Plated	AISI 1117 Cad. Plated	A-182 Grade F316/Stellite I.D.
Pressure Seal Gasket	Composite Pressure Seal Gasket.				
Spacer Ring	A-668 Grade 4140 Cad. Plated	A-668 Grade 4140 Cad. Plated	A-668 Grade 4140 Cad. Plated	A-668 Grade 4140 Cad. Plated	A-182 Grade F6 CL4
Gasket Retainer	A-182 Grade F6 CL4	A-182 Grade F6 CL4	A-565 Grade 616 HT	A-565 Grade 616 HT	A-638 Grade 660 T2
Bonnet Retainer	A-216 Grade WCB	A-216 Grade WCB	A-216 Grade WCB	A-216 Grade WCB	A-216 Grade WCB
Bonnet Retainer Studs	A-193 Grade B7	A-193 Grade B7	A-193 Grade B7	A-193 Grade B7	A-193 Grade B7
Bonnet Retainer Nuts	A-194 Grade 2H	A-194 Grade 2H	A-194 Grade 2H	A-194 Grade 2H	A-194 Grade 2H
Gland	A-148 Grade 90-60	A-148 Grade 90-60	A-148 Grade 90-60	A-148 Grade 90-60	A-148 Grade 90-60/Chrome Plated
Eye Bolt	A-193 Grade B7/Cad. Plated	A-193 Grade B7/Cad. Plated	A-193 Grade B7/Cad. Plated	A-193 Grade B7/Cad. Plated	A-193 Grade B7/Cad. Plated
Eye Bolt Nuts	A-194 Grade 2/Cad. Plated	A-194 Grade 2/Cad. Plated	A-194 Grade 2/Cad. Plated	A-194 Grade 2/Cad. Plated	A-194 Grade 2/Cad. Plated
Eye Bolt Pins	A-182 Grade F6a Class 4	A-182 Grade F6a Class 4	A-182 Grade F6a Class 4	A-182 Grade F6a Class 4	A-182 Grade F6a Class 4
Stem Guide Collar	A-515 Grade 70	A-515 Grade 70	A-515 Grade 70	A-515 Grade 70	A-515 Grade 70
Stem Guide Key	A-331 Grade 4140 HT	A-331 Grade 4140 HT	A-331 Grade 4140 HT	A-331 Grade 4140 HT	A-331 Grade 4140 HT
Yoke	A-216 Grade WCB	A-216 Grade WCB	A-216 Grade WCB	A-216 Grade WCB	A-216 Grade WCB
Yoke Lock Ring	A-216 Grade WCB	A-216 Grade WCB	A-216 Grade WCB	A-216 Grade WCB	A-216 Grade WCB
Yoke Lock Ring Studs	A-193 Grade B7	A-193 Grade B7	A-193 Grade B7	A-193 Grade B7	A-193 Grade B7
Yoke Lock Ring Nuts	A-194 Grade 2H	A-194 Grade 2H	A-194 Grade 2H	A-194 Grade 2H	A-194 Grade 2H
Impactor Handwheel	A-126 Class A	A-126 Class A	A-126 Class A	A-126 Class A	A-126 Class A
Crossarm, Handwheel	A-536 Grade 65-45-12	A-536 Grade 65-45-12	A-536 Grade 65-45-12	A-536 Grade 65-45-12	A-536 Grade 65-45-12
Handwheel Bearing Nut	A-536 Grade 65-45-12	A-536 Grade 65-45-12	A-536 Grade 65-45-12	A-536 Grade 65-45-12	A-536 Grade 65-45-12
Stem Collar	A-182 Grade F6a	A-182 Grade F6a	A-565 Grade 616 HT	A-565 Grade 616 HT	A-638 Grade 660 T2

(1) Through Class 2500, for Series 4500 valves, some construction differences exist. Contact your Edward Valves sales representative for more information.
** Other material grades available on application.*

Features and Description of Edward Stop-Check (Non-Return) Valves

Edward stop-check (non-return) valves offer the same tight-sealing performance as Edward stop valves, and at the same time, give check valve protection in the event of fluid back flow. Edward stop-check valves are commonly used to prevent back flow from a header fed from two or more sources when there is a loss of pressure in one of the sources — for example, the boiler outlet to a common header or at the feedwater heater outlets.

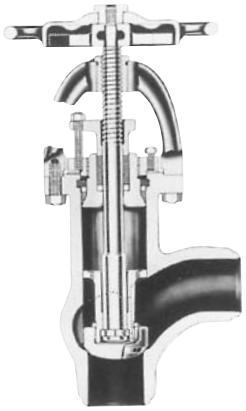


Equalizer

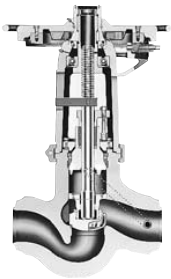
All Edward cast steel stop-check valves are equipped with an Equalizer pipe. Acting as an external pressure balancing pipeline, the Equalizer connects the zone above the disk with the lower pressure area in the valve outlet (see drawing above). This reduces pressure above the disk, and as a result, causes the higher pressure below the disk to raise the disk to full lift. The Equalizer helps reduce pressure drop and disk-piston movement and wear.

All other features are the same as those defined on page C2 for stop valves.

Flite-Flow®



Angle



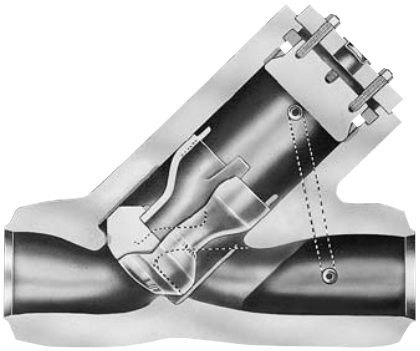
Globe

Elbow Down

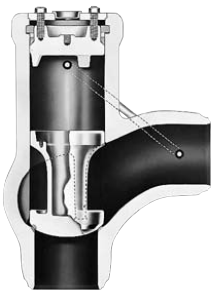
Features and Description of Edward Check Valves

Over 75 years of valve field experience coupled with ongoing research and development programs have led to Flowserve Edward Valves reputation as a leader in supplying horizontal, angle, Flite-Flow and Elbow Down piston lift check valves.

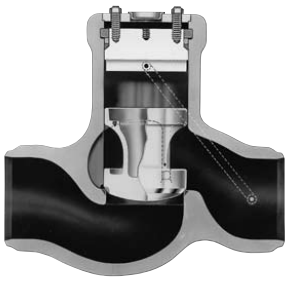
These check valves all incorporate time proven design features such as: equalizers for full lift at lower flows; body guided disk-piston assemblies for seat alignment and stable operation; integral Stellite seating surfaces for long life and tight sealing; and streamlined flow shapes for low pressure drop. Flowserve Edward Valves maintains a reputation for the "Preferred" valve in critical high pressure high temperature applications.



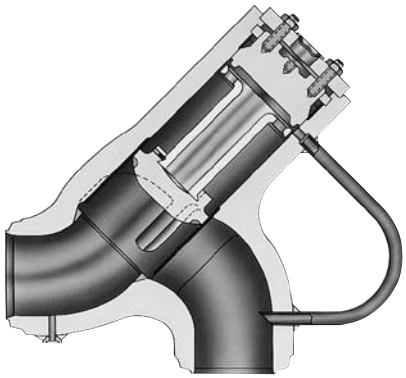
Flite-Flow®



Angle



Globe



Elbow Down

C

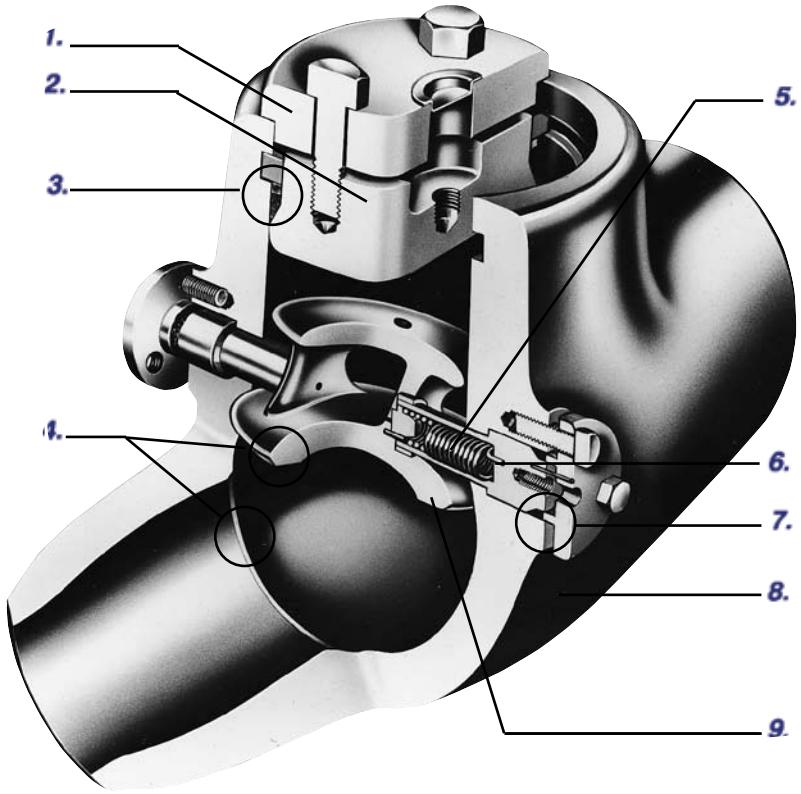
Features and Descriptions of Edward One-Piece Tilting Disk Check Valves

The Edward tilting disk check valve is designed to close as quickly as possible. It minimizes loud, damaging slamming and vibration noises caused when high velocity reverse flow is allowed to build up before the completion of closing.

Quick Closing

Quick closing is achieved through a combination of several design construction features. The disk is dome shaped to avoid hesitation of disk motion or closing, common to conventional flat disks. For minimum pendulum period — an important factor in assuring quick closing — the disk pivot is located close to the center of gravity of the disk.

All disk surfaces are open to line fluid, so that no dashpot action can delay closing. The disk pivots on pin supports having chrome-plated bearings for minimum friction. Totally enclosed torsion springs in the pivot pins help speed the closing action, although the disk is counter-weighted sufficiently to close automatically without aid from the springs whether the valve is in a vertical or horizontal position. Since the springs are fully enclosed in the pins, they are not subject to possible erosive effects of line fluids and foreign matter cannot get in. There is no bolting in the flow stream.



Adjustable Hinge Pins

Available factory-installed or as a conversion kit, Edward Valves unique adjustable hinge pin replaces the usual concentric hinge pins with double offset eccentric hinge pins, making core alignment a matter of simply dialing in the fit.

1. Cover retainer provides loading through the cover retainer and bolting to initiate a seal at the pressure seal gasket.
2. Cover is precision machined to retain pressure integrity and critical gasket seating surfaces.
3. Composite pressure seal gasket is a preloaded pressure energized flexible graphite composite for long reliable service.
4. Integral hardsurfaced seats, both body and disk, provide positive shutoff and long seat life.
5. Springs ensure quick closing of the disk by providing a positive seating force to speed closing.
6. Hinge pin provides a disk pivot point close to its center of gravity for fast response to flow reversals which minimizes water hammer effects.
7. Hinge pin gasket is spiral wound, coated steel, or flexible graphite for long reliable service.
8. Body features a straight thru compact design for low pressure drop.
9. Disk assembly is dome shaped and counterweighted for fast response to flow reversals.

Parts Specification List for Edward One-Piece Tilting Disk Check

This is not a complete list. Construction and materials will vary between sizes and pressure classes and may be changed without notice. For a complete, accurate, and itemized description of a particular valve, contact your Flowserve Edward Valves sales representative.

Description[1]	ASTM No.	ASTM No.	ASTM No.	ASTM No.	ASTM No.
Body Cover*	A-216 Grade WCB	A-217 Grade WC6	A-217 Grade WC9	A-217 Grade C12A	A-351 Grade CF8M
Disk	A-105 —	A-182 Grade F11	A-182 Grade F22	A-182 Grade F91	A-182 Grade F316
Pressure Seal Gasket*	Composite Pressure Seal Gasket				
Spacer Ring	A-668 Grade 4140 Cad. Plated	A-668 Grade 4140 Cad. Plated	A-668 Grade 4140 Cad. Plated	A-668 Grade 4140 Cad. Plated	Grade 182 Grade F6 CL4
Gasket Retainer	A-182 Grade F6 CL4	A-182 Grade F6 CL4	A-565 Grade 616 HT	A-565 Grade 616 HT	A-638 Grade 660 T2
Cover Retainer	A-216 Grade WCB	A-216 Grade WCB	A-216 Grade WCB	A-216 Grade WCB	A-216 Grade WCB
Cover Retainer Cap-screws or Studs	A-193 Grade B7	A-193 Grade B7	A-193 Grade B7	A-193 Grade B7	A-193 Grade B7
Cover Retainer Nuts	A-194 Grade 2H	A-194 Grade 2H	A-194 Grade 2H	A-194 Grade 2H	A-194 Grade 2H
Hinge Pin Gasket Size 2½, 3, 4	Spiral Wound Gasket (Asb. Free)	Spiral Wound Gasket (Asb. Free)	Spiral Wound Gasket (Asb. Free)	Spiral Wound Gasket (Asb. Free)	Spiral Wound Gasket (Asb. Free)
Hinge Pin Gasket Size 6 & Larger	Graphite Gasket				
Hinge Pin	A-182 Grade F6aCL4	A-182 Grade F6aCL4	A-565 Grade 616 HT	A-565 Grade 616 HT	A-638 Grade 660 Type 2
Hinge Pin Bolts	A-193 Grade B7	A-193 Grade B16	A-193 Grade B16	A-453 Grade 660B	A-453 Grade 660B
Hinge Pin Retainer	A-105 —	A-182 Grade F11	A-182 Grade F22	A-182 Grade F91	A-182 Grade F316
Hinge Pin Springs†	A-313	A-313	A-313	A-313	A-313

**Other material grades available on application.*
***All ANSI Class 600 valves utilize an asbestos-free spiral wound bonnet gasket.*
†Hinge Pin Torsion Springs required in size 6 and larger valves only.

C

Features and Description of Edward Equiwedge® Gate Valves

For detailed description of the two-piece flexible wedge see page C10.

1. **Yoke bushing** - material has low coefficient of friction which substantially reduces torque and thread wear and eliminates galling.
2. **Weather/Grease seals** - are provided to protect against environmental conditions.
3. **Yoke** - the yoke is designed for ready access to the packing chamber.
4. **Packing and junk ring** - utilizes flexible graphite packing material with anti-extrusion rings for optimum sealability and life.
5. **Extended bonnet design** - further separates the packing chamber from fluid flow area for longer packing life. Also provides accessible area for leakoff connections if required.
6. **Composite pressure seal gasket** - preloaded, pressure energized design, for long reliable service.
7. **Body guiding system** - holds the wedge halves together and absorbs thrust loads due to line flow. Integral hardfaced guide system components reduce friction and prevent galling for longer valve life.
8. **Conical stem backseat** - Cone-on-cone design provides a reliable sealing geometry that operates over many valve cycles without leakage.
9. **Body** - rugged cast steel body provides maximum flow efficiency. Information on alternate materials can be obtained through your Flowserve representative.
10. **Handwheel** - spoke design provides more efficient transfer of load with minimum weight.
11. **Tapered roller bearings** - on larger valves, tapered roller bearings reduce torque, carry the stem thrust and provide additional radial support for side loads imposed by handwheel or power actuator. Smaller size valves have needle roller bearings.
12. **Stem** - has ACME threads, is machined to a fine finish and is heat treated for improved strength and hardness to resist wear.
13. **Packing gland** - made of alloy steel, and retained against the stuffing box pressure by an easy-to-maintain stud and heavy hex nut assembly.
14. **Bonnet retaining ring** - assures an effective, tight seal by pulling the bonnet and gasket together at the pressure seal.
15. **Yoke lock ring** - permits easier field maintenance of upper structure without disturbing pressure containing parts. Valves in smaller sizes utilize a wishbone yoke design. Class 600 valves utilize a bolted pressure seal bonnet.
16. **Bonnet backseat** - especially hard faced to assure long-term sealability.
17. **Hemispherical-type bonnet** - reduces valve body height and provides weight savings. Hemispherical-type design results in better pressure distribution across the bonnet area.
18. **Two-piece wedge assembly** - allows each wedge half to flex and adjust independently to compensate for body distortions caused by thermal changes or pipe bending stresses. (see pg. C10)
19. **Welded-in seat ring with hardfaced seat** - assures better wear and longer valve life. Seat ring is welded into the valve body to prevent leakage.

Parts Specification List for Gate Valves

This is not a complete list. Construction and materials will vary between sizes and pressure classes and may be changed without notice. For a complete, accurate, and itemized description of a particular valve, contact your Flowserve Edward Valves sales representative.

Description	ASTM No.	ASTM No.	ASTM No.	ASTM No.	ASTM No.
Body/Bonnet*	A-216 Grade WCB	A-217 Grade WC6	A-217 Grade WC9	A-217 Grade C12A	A-351 Grade CF8M
Gate 2½-6	A-743 Grade CA-28 MWV	A-743 Grade CA-28 MWV	A-743 Grade CA-28 MWV	A-732 Grade 21	A-732 Grade 21
Gate 8 and up*	A-216 Grade WCB	A-217 Grade WC6	A-217 Grade WC9	A-217 Grade C12A	A-351 Grade CF8M
Stem	A-182 Grade F6 CL4	A-182 Grade F6 CL4	A-565 Grade 616 HT	A-565 Grade 616 HT	A-638 Grade 660 T2
Yoke Bushing	B-148 Alloy 95400	B-148 Alloy 95400	B-148 Alloy 95400	B-148 Alloy 95400	B-148 Alloy 95400
Packing Rings	Flexible Graphite inner rings and suitable anti-extrusion rings.				
Junk Rings	AISI 1117 Cad. Plated	AISI 1117 Cad. Plated	AISI 1117 Cad. Plated	AISI 1117 Cad. Plated	A-182 Grade F316/Stellite I.D.
Pressure Seal Gasket**	Composite Pressure Seal Gasket.				
Spacer Ring	— A-668 Grade 4140 Cad. Plated	— A-668 Grade 4140 Cad. Plated	— A-668 Grade 4140 Cad. Plated	— A-668 Grade 4140 Cad. Plated	— A-182 Grade F6 CL4
Gasket Retainer	A-182 Grade F6 CL4	A-182 Grade F6 CL4	A-565 Grade 616 HT	A-565 Grade 616 HT	A-638 Grade 660 T2
Bonnet Retainer	A-515 Grade 70	A-515 Grade 70	A-515 Grade 70	A-515 Grade 70	A-515 Grade 70
Bonnet Retainer Studs	A-193 Grade B7	A-193 Grade B7	A-193 Grade B7	A-193 Grade B7	A-193 Grade B7
Bonnet Retainer Nuts	A-194 Grade 2H	A-194 Grade 2H	A-194 Grade 2H	A-194 Grade 2H	A-194 Grade 2H
Gland	A-148 Grade 90-60	A-148 Grade 90-60	A-148 Grade 90-60	A-148 Grade 90-60	A-148 Grade 90-60/Chrome Plated
Gland Studs	A-193 Grade B7/Cad. Plated	A-193 Grade B7/Cad. Plated	A-193 Grade B7/Cad. Plated	A-193 Grade B7/Cad. Plated	A-193 Grade B7/Cad. Plated
Gland Nuts	A-194 Grade 2/Cad. Plated	A-194 Grade 2/Cad. Plated	A-194 Grade 2/Cad. Plated	A-194 Grade 2/Cad. Plated	A-194 Grade 2/Cad. Plated
Yoke	A-216 Grade WCB	A-216 Grade WCB	A-216 Grade WCB	A-216 Grade WCB	A-216 Grade WCB
Yoke Lock Ring	A-216 Grade WCB	A-216 Grade WCB	A-216 Grade WCB	A-216 Grade WCB	A-216 Grade WCB
Yoke Lock Ring Studs	A-193 Grade B7	A-193 Grade B7	A-193 Grade B7	A-193 Grade B7	A-193 Grade B7
Yoke Lock Ring Nuts	A-194 Grade 2H	A-194 Grade 2H	A-194 Grade 2H	A-194 Grade 2H	A-194 Grade 2H
Handwheel	A-126 Class A	A-126 Class A	A-126 Class A	A-126 Class A	A-126 Class A

** Hardfaced wedge guide rails and seating surfaces.*
*** Size 2½ thru 6, Class 600 & Size 2½ thru 4, Class 900 also available with bolted bonnet/flat gasket.*

C

Features and Description of Edward Equiwedge® Gate Valves

Unique Two-Piece Flexible Wedge

Wedging action provides tight seat sealing, even at low differential pressures. Wedge guiding by grooves in body minimizes seat wear and damage, since seating surfaces of wedge and body are in contact over less than 5% of total travel. Two separate flexible wedge halves are free to align with seats even when they are tilted or rotated due to thermal effects or piping loads. Resistance to thermal binding assures opening with a torque or load less than design closing load.

Wedge guide area and strength provides capability to support high differential pressures with valve partially open, so Equiwedge gate valves can be opened or closed under "blowdown" conditions. By-passes are not required if full differential is specified for actuator sizing.

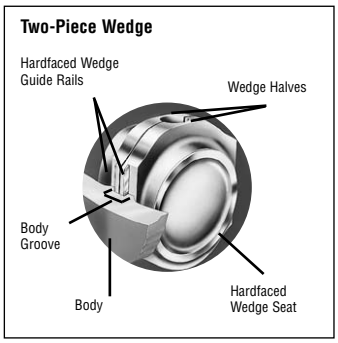


Figure 1

The outstanding design feature of the Equiwedge gate valve is unique two-piece wedge that permits maximum independence and flexibility for good sealability and freedom from sticking.

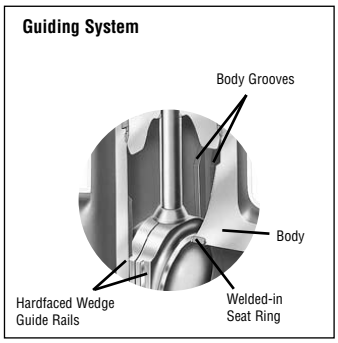


Figure 2

The body groove extends high in the body neck region so that in the open position the wedge assembly is both trapped and fully guided. Body grooves are hardfaced in stainless steel and critical service valves.

Center Cavity Overpressurization

Some valve designs are capable of sealing simultaneously against a pressure differential between an internal cavity of the valve and the adjacent pipe in both directions. All double seated gate valves, including Equiwedge, are examples of such a design. In fact, seat joint integrity for these valves is tested in the factory by pressurizing the center cavity and simultaneously examining each seat. However, if a fluid is entrapped in such a valve while closed, and then subsequently heated, a dangerous rise in pressure can result thus leading to pressure boundary failure.

Both ASME/ANSI B16.34 (Valves - Flanged, Threaded and Welding End), para 2.3.3 and ANSI/ASME B31.1 (Pressure Piping Code), para 107.1(c), recognize this situation and require that the Purchaser shall provide means in design, installation and/or operation to assure that the pressure in the valve shall not exceed the rated pressure for the attained temperature. Therefore, if deemed necessary by the Purchaser, and so specified in the purchase order, Flowserve Edward Valves can provide an equalizer system (internal or external) that will relieve this trapped fluid to the upstream piping or a relief valve that will exhaust excessive pressure to some other specified area. It should be understood that an internal or external equalizer will change a basically by-directional gate valve to a design with fully effective seat sealing in only one direction. The equalizer bypasses the upstream seat and would allow leakage by that seat if the pressure should be reversed. The "downstream" seat would become the "upstream" seat with pressure reversed; the wedging action provided by stem load provides good upstream seat sealing at low to moderate pressures, but leakage could be excessive at high pressures.

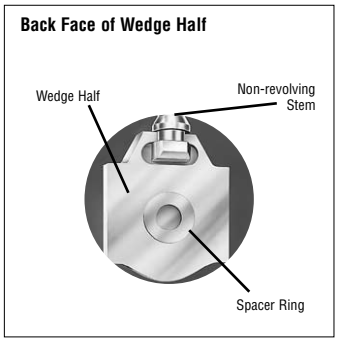


Figure 3

Wedge halves are separated the proper amount by a spacer ring which provides controlled deflection from stem loading. Use of a space and weight-saving "captured stem" (shown here and in Figure 4) is possible because of the two-piece wedge design.

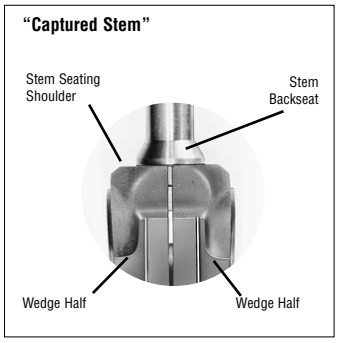
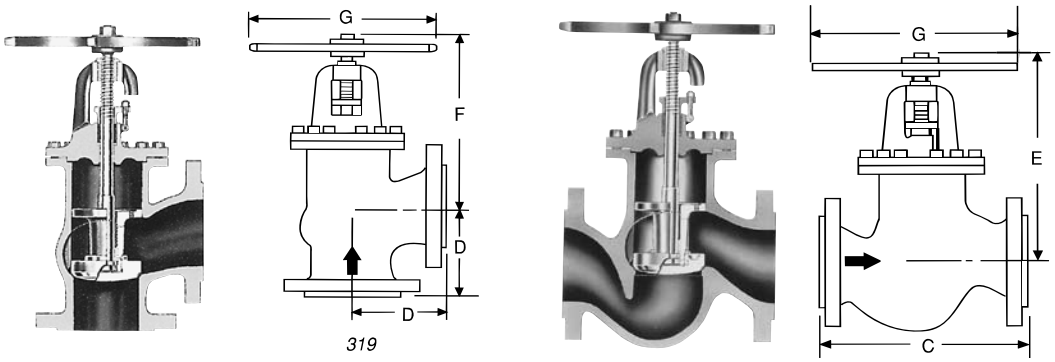


Figure 4

The Equiwedge two-piece wedge design allows the use of a space and weight saving "captured stem."

Excessive pressure trapped in the center cavity of a gate valve can also produce "pressure locking" — a condition that can make opening difficult or impossible. Either an internal or an external equalizer will prevent pressure locking. However, a relief valve may allow the center cavity pressure to be higher than either the upstream or downstream pressure, and this can allow pressure locking to occur. The Flowserve Edward Valves unique ACCEV (Automation Center Cavity Equalizing Valve) can alleviate this problem. Refer to section F, page F4 for additional information.

Stop Valves Class 300 740 PSI @ 100°F (51.0 BAR @ 38°C)



C

Standard Features

- Bodies and bonnets are cast steel (WCB & WC6).
- Bolted Bonnet, OS & Y.
- Globe & angle design.
- Integral Stellite seat, disk and backseat.
- Body-guided disk piston.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.
- Long Terne# steel gasket.

Pressure Class 300 (PN 50)

Fig. No.	Type	Ends	NPS (DN)
318	Globe	Flanged	3 (80) thru 12 (300)
318Y	Globe	Buttwelding	
319	Angle	Flanged	2½ (65) thru 12 (300)
319Y	Angle	Buttwelding	
329	Angle	Threaded	2½ (65)
329Y	Angle	Socket Welding	

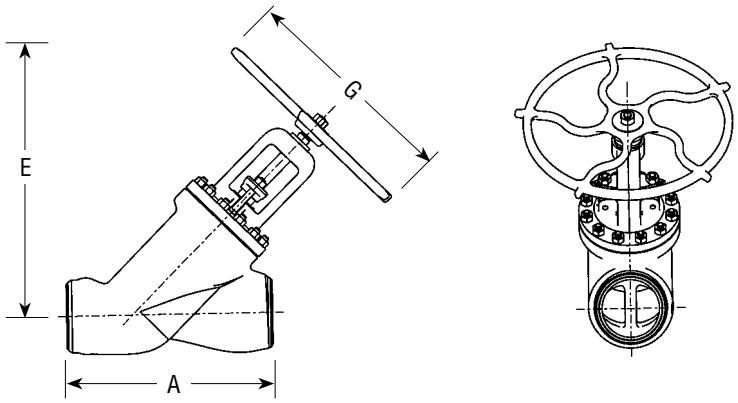
Dimensions – Globe & Angle

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 318/318Y, 319/319Y, 329/329Y	NPS	2½	3	4	5	6	8	10	12
	DN	65	80	100	125	150	200	250	300
C - Face to Face, Globe (Flanged)•		—	12.5	14	15.76	17.5	22	24.5	28
			318	356	400	445	559	622	711
D - Center to Face, Angle (Flanged)•		5.75	6.25	7	7.88	8.75	11	12.25	14
		146	159	178	200	222	279	310	356
E - Center to Top, Globe (Open)		—	16.2	16.7	20.1	24.8	28.4	34.3	39.7
			411	424	510	630	721	871	1008
F - Center to Top, Angle (Open)		13.6	14.4	14.6	17.7	21.4	24.2	28.8	32.9
		345	366	371	450	544	615	731	836
G - Handwheel/Handle Diameter*		11	11.5	11.5	15	18	22	22	26
		279	292	292	381	457	559	559	660
Weight, Globe (Flanged)		—	100	193	226	370	525	895	1520
			45	88	103	168	238	406	689
Weight, Globe (Welding)		—	80	95	172	295	400	720	1270
			36	43	78	134	181	327	576
Weight, Angle (Flanged)		65	94	126	210	300	425	710	1250
		29	43	57	95	136	193	322	561
Weight, Angle (Welding)		55	70	85	152	225	325	530	970
		25	32	39	69	102	147	240	440

** Regular handwheel standard on all sizes except size 12 has an impactor handwheel and size 2½ has an impactor handle.*
• Center to end or end to end dimensions for welding end valves same as center to contact face or contact face to contact face dimensions for flanged end valves.
 # Long Terne Steel is a product coated by immersion in molten terne metal. Terne Metal is an alloy of lead and a small amount (about 3%) of tin.

Stop Valves Class 300 740 PSI @ 100°F (51.0 BAR @ 38°C)



Standard Features

- Bodies and bonnets are cast steel (WCB, WC6).
- Bolted or OS & Y.
- Y-Pattern.
- Integral Stellite seat, disk and backseat.
- Body-guided disk piston.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.
- Gasket:
  - Size 2½ – 6 – asbestos-free, spiral wound.
  - All others – Long Terne# steel.

Pressure Class 300 (PN 50)*

Fig. No.	Type	Ends	NPS (DN)
1314	Flite-Flow	Flanged	2½ (65) thru 16 (400)
1314Y	Flite-Flow	Buttwelding	
1324	Flite-Flow	Threaded	2½ (65)
1324Y	Flite-Flow	Socket Welding	

** Size 3&4 Buttweld Valves are Class 400. See page C17.*

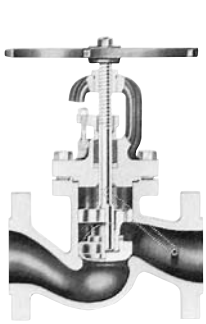
Dimensions – Flite-Flow®

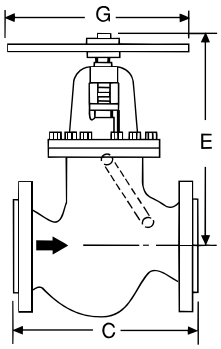
Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 1314/1314Y 1324/1324Y	NPS	2 ½	3	4	6	8	10	12	14	16
	DN	65	80	100	150	200	250	300	350	400
A_1- End to End (Welding)		11.5	13	15.5	20	26.5	31	40	40	42
		292	330	394	508	673	787	1016	1016	1067
A_2- Face to Face (Flanged)		11.5	16	20.25	23.75	29	34.75	43	43.25	44
		292	406	514	603	737	883	1092	1099	1118
E - Center to Top (Open)		16	17.2	22	29	35	41	47.8	47.8	47.8
		406	437	559	737	889	1041	1213	1213	1213
G - Handwheel Diameter**		11	11.5	15	22	22	26	30	30	30
		279	292	381	559	559	660	762	762	762
Weight (Welding)		56	100	150	300	575	1030	1500	1525	1575
		25	45	68	136	261	468	682	693	716
Weight (Flanged)		70	130	200	380	700	1200	1750	1850	1950
		32	59	91	173	318	545	795	841	886

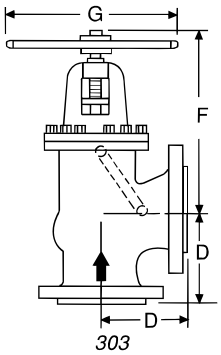
 # Long Terne Steel is a product coated by immersion in molten terne metal. Terne Metal is an alloy of lead and a small amount (about 3%) of tin.
*** Impactor handwheel standard on 10" and larger Flite-Flow Valves. Impactor handle standard on 2½" valve.*

Stop-Check (Non-Return) Valves Class 300 740 PSI @ 100°F (51.0 BAR @ 38°C)

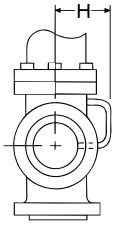




304



303



C

Standard Features

- Bodies and bonnets are cast steel (WCB & WC6).
- Bolted Bonnet, OS & Y.
- Globe & angle design.
- Integral Stellite seat, disk and backseat.
- Body-guided disk piston.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.
- Gasket:
  - Size 2½ – asbestos-free, spiral wound.
  - All others – Long Terne# steel.
- Equipped with equalizer.

Pressure Class 300 (PN 50)

Fig. No.	Type	Ends	NPS (DN)
304	Globe	Flanged	3 (80) thru 12 (300)
304Y	Globe	Buttwelding	
303	Angle	Flanged	2½ (65) thru 12 (300)
303Y	Angle	Buttwelding	

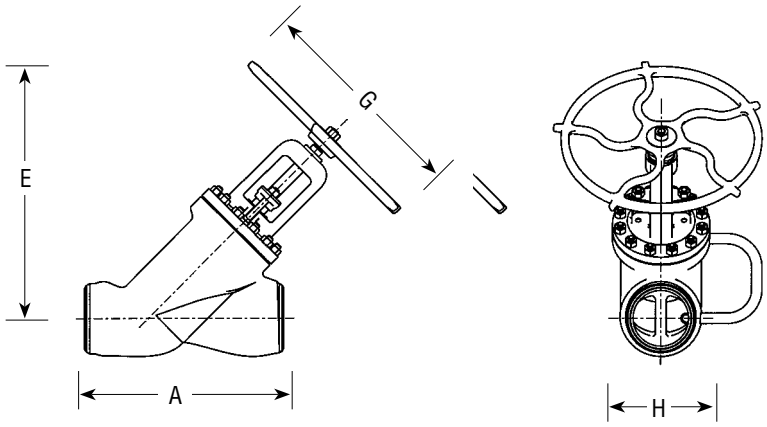
Dimensions – Globe & Angle

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 303/303Y, 304/304Y	NPS	2½	3	4	5	6	8	10	12
	DN	65	80	100	125	150	250	250	300
C - Face to Face, Globe•		—	12.5	14	15.76	17.5	22	24.5	28
			318	356	400	445	559	622	711
D - Center to Face, Angle•		5.75	6.25	7	7.88	8.75	11	12.25	14
		146	159	178	200	222	279	310	356
E - Center to Top, Globe		—	16.2	16.7	20.1	24.8	28.4	34.3	39.7
			411	424	510	630	721	871	1008
F - Center to Top, Angle		13.6	14.4	14.6	17.7	21.4	24.2	28.8	32.9
		345	366	371	450	544	615	731	836
G - Handwheel/Handle Diameter*		11	11.5	11.5	15	18	22	22	26
		279	292	292	381	457	559	559	660
H - Clearance for Equalizer		5.9	8.7	8.5	10	9.6	11	13.7	15
		150	221	216	254	244	279	348	381
Weight, Globe (Flanged)		—	100	110	230	370	525	920	1525
			45	50	104	168	238	417	692
Weight, Globe (Welding)		—	75	95	175	295	400	765	1365
			34	43	79	134	181	327	619
Weight, Angle (Flanged)		66	100	130	200	300	450	700	1250
		29	45	59	91	136	204	318	567
Weight, Angle (Welding)		51	70	90	152	215	325	560	970
		23	32	41	69	98	147	254	440

** Regular handwheel standard on all sizes except size 12 has an impactor handwheel and size 2½ has an impactor handle.*
• Center to end or end to end dimensions for welding end valves same as center to contact face or contact face to contact face dimensions for flanged end valves.
 # Long Terne Steel is a product coated by immersion in molten terne metal. Terne Metal is an alloy of lead and a small amount (about 3%) of tin.

Stop-Check (Non-Return) Valves Class 300 740 PSI @ 100°F (51.0 BAR @ 38°C)



Standard Features

- Bodies and bonnets are cast steel (WCB, WC6).
- Bolted bonnet, OS & Y.
- Y-Pattern.
- Integral Stellite seat, disk and backseat.
- Body-guided disk piston.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.
- Gasket:
  - Size 2½ – 6 – asbestos-free, spiral wound.
  - All others – Long Terne# steel.
- Equipped with equalizer.

Pressure Class 300 (PN 50)*

Fig. No.	Type	Ends	NPS (DN)
1302	Flite-Flow	Flanged	2½ (65) thru 16 (400)
1302Y	Flite-Flow	Buttwelding	

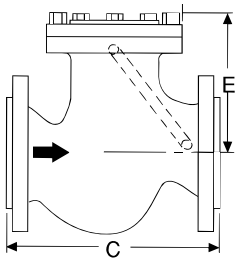
Dimensions – Flite-Flow®

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 1302/1302Y	NPS	2½	3	4	6	8	10	12	14	16
	DN	65	80	100	150	200	250	300	350	400
A_1 - End to End (Welding)		11.5	13	15.5	20	26.5	31	40	40	42
		292	330	394	508	673	787	1016	1016	1067
A_2 - Face to Face (Flanged)		11.5	16	20.25	23.75	29	34.75	43	43.25	44
		292	406	514	603	737	885	1092	1099	1118
E - Center to Top (Open)		16	17.2	22	29	35	41	47.8	47.8	47.8
		406	437	559	737	889	1041	1213	1213	1213
G - Handwheel Diameter**		11	11.5	15	22	22	26	30	30	30
		279	292	381	559	559	660	762	762	762
Weight (Welding)		56	100	150	300	575	1030	1500	1525	1575
		25	45	68	136	261	468	682	693	716
Weight (Flanged)		70	130	200	380	700	1200	1750	1850	1950
		32	59	91	173	318	545	795	841	886

 # Long Terne Steel is a product coated by immersion in molten terne metal. Terne Metal is an alloy of lead and a small amount (about 3%) of tin.
*** Impactor handwheel standard on 10 NPS & larger Flite-Flow Valves. 2½ NPS has impactor handle.*

Check Valves Class 300 740 PSI @ 100°F (51.0 BAR @ 38°C)



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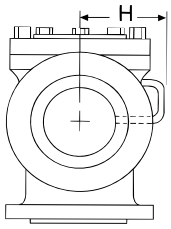
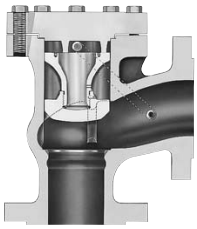
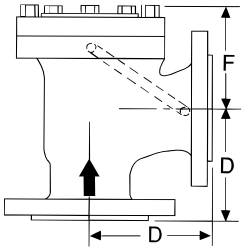






393

C

Standard Features

- Bodies and covers are cast steel (WCB & WC6).
- Bolted cover.
- Globe & angle design.
- Integral Stellite seat and disk.
- Body-guided disk piston.
- Gasket:
  - Size 2½ – asbestos-free, spiral wound.
  - All others – Long Terne# steel.
- Equipped with equalizer.

Pressure Class 300 (PN 50)

Fig. No.	Type	Ends	NPS (DN)
391	Angle	Threaded	2½ (65)
391Y	Angle	Socket Welding	
394	Globe	Flanged	3 (80) thru 12 (300)
394Y	Globe	Buttwelding	
393	Angle	Flanged	2½ (65) thru 12 (300)
393Y	Angle	Buttwelding	

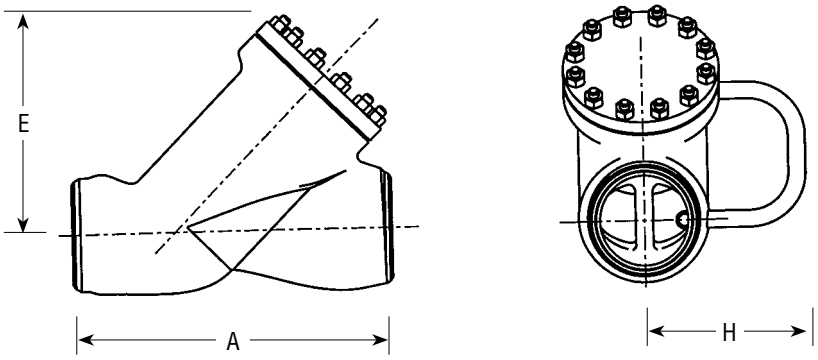
Dimensions – Globe & Angle

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 391/391Y, 394/394Y, 393/393Y	NPS	2½	3	4	5	6	8	10	12
	DN	65	80	100	125	150	200	250	300
C - Face to Face, Globe•		—	12.5	14	15.76	17.5	22	24.5	28
			318	356	400	445	559	622	711
D - Center to Face, Angle•		5.75	6.25	7	7.88	8.75	11	12.25	14
		146	159	178	200	222	279	310	356
E - Center to Top, Globe		—	6.58	7.08	8.88	11.4	13.1	15.9	18.5
			167	180	226	290	333	405	470
F - Center to Top, Angle		3.88	4.82	4.96	6.44	8.04	8.9	10.5	11.7
		99	122	126	164	204	226	267	297
H - Clearance for Equalizer		5.9	8.7	8.5	10	9.6	11	13.7	15
		150	221	216	254	244	279	348	381
Weight, Globe (Flanged)		—	85	120	195	320	470	835	1280
			39	54	88	145	213	379	581
Weight, Globe (Welding)		—	60	85	141	250	350	620	1050
			27	39	64	113	159	281	476
Weight, Angle (Flanged)		49	78	108	175	250	375	600	980
		22	35	49	79	113	170	272	445
Weight, Angle (Welding)		35	53	70	121	260	250	430	820
		16	24	32	55	118	113	195	372

• Center to end or end to end dimensions for welding end valves same as center of contact face to contact face dimensions for flanged end valves.
 # Long Terne Steel is a product coated by immersion in molten terne metal. Terne Metal is an alloy of lead and a small amount (about 3%) of tin.

Check Valves Class 300 740 PSI @ 100°F (51.0 BAR @ 38°C)



Standard Features

- Bodies and covers are cast steel (WCB & WC6).
- Bolted cover.
- Y-Pattern.
- Integral Stellite seat and disk.
- Body-guided disk piston.
- Gasket:
  - Size 2½ – 6 – asbestos-free, spiral wound.
  - All others – Long Terne# steel.
- Equipped with equalizer.

Pressure Class 300 (PN 50)*

FIG. NO.	TYPE	ENDS	NPS (DN)
1392	Flite-Flow	Flanged	2½ (65)
1392Y	Flite-Flow	Buttwelding	16 (400)
1390	Flite-Flow	Threaded	2½ (65)
1390Y	Flite-Flow	Socket Welding	

** Size 3&4 Buttweld Valves are Class 400. See page C18.*

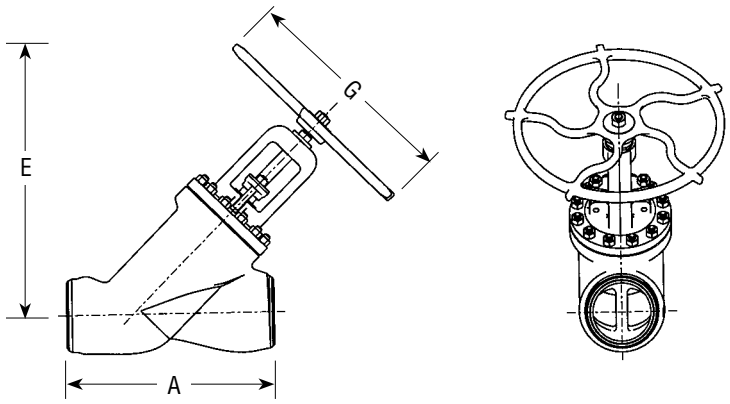
Dimensions – Flite-Flow®

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 1392/1392Y	NPS	2½	3	4	6	8	10	12	14	16
	DN	65	80	100	150	200	250	300	350	400
A1- End to End (Welding)		11.5	13	15.5	20	26.5	31	40	40	42
		292	330	394	508	673	787	1016	1016	1067
A2- Face to Face (Flanged)		11.5	16	20.25	23.75	29	34.75	43	43.25	44
		292	406	514	603	737	883	1092	1099	1118
E - Center to Top/Check Valve		7	8	11	13.5	17	20	25.5	25.5	25.5
		178	203	279	343	432	508	648	648	648
Weight (Welding)		40	70	105	210	400	700	1050	1075	1125
		18	32	48	95	182	318	477	489	511
Weight (Flanged)		54	100	150	290	520	875	1300	1400	1500
		25	45	68	132	236	398	591	636	682

 # Long Terne Steel is a product coated by immersion in molten terne metal. Terne Metal is an alloy of lead and a small amount (about 3%) of tin.

Stop Valves Class 400 990 PSI @ 100°F (68.3 BAR @ 38°C)



C

Standard Features

- Bodies and bonnets are cast steel (WCB, WC6).
- Bolted bonnet, OS & Y.
- Y-Pattern.
- Integral Stellite seat, disk and backseat.
- Body-guided disk piston.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.
- Asbestos-free spiral wound gasket.

Pressure Class 400 (PN 68)

Fig. No.	Type	Ends	NPS (DN)
1314Y	Flite-Flow	Buttwelding	3 (80) thru 4 (100)

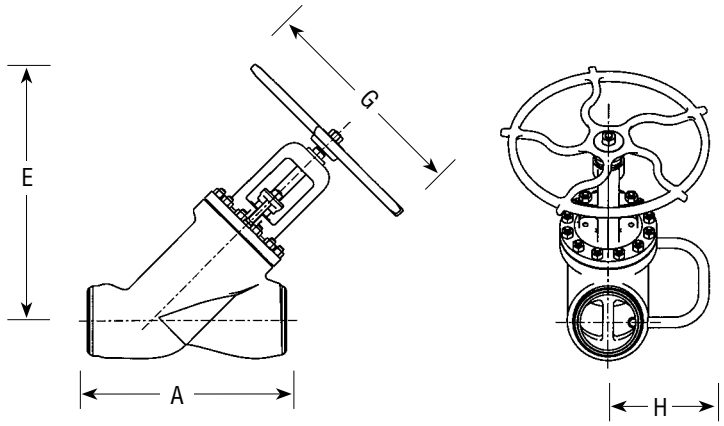
Dimensions – Flite-Flow®

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 1314Y	NPS	3	4
	DN	80	100
A_1- End to End (Welding)		14	15.5
		356	394
E - Center to Top (Open)		16	22
		406	559
G - Handwheel Diameter		11.5	16
		292	406
Weight (Welding)		100	150
		45	68

≠ Long Terne Steel is a product coated by immersion in molten terne metal. Terne Metal is an alloy of lead and a small amount (about 3%) of tin.

Stop-Check (Non-Return) Valves Class 400 990 PSI @ 100°F (68.3 BAR @ 38°C)



Standard Features

- Bodies and bonnets are cast steel (WCB, WC6).
- Bolted or pressure-seal bonnet, OS & Y.
- Y-Pattern.
- Integral Stellite seat, disk and backseat.
- Body-guided disk piston.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.
- Asbestos-free spiral wound gasket.
- Equipped with equalizer.

Pressure Class 400 (PN 68)

FIG. NO.	TYPE	ENDS	NPS (DN)
1302Y	Flite-Flow	Buttwelding	3 (80) thru 4 (100)

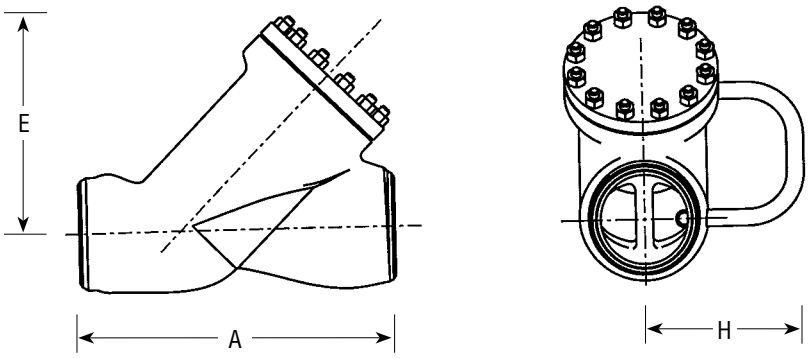
Dimensions – Flite-Flow®

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 1302Y	NPS	3	4
	DN	80	100
A - End to End (Welding)		14	15.5
		356	394
E - Center to Top (Open)		16	22
		406	559
G - Handwheel Diameter		11.5	16
		292	406
H - Equalizer Clearance		8.0	9.5
		203	241
Weight (Welding)		100	150
		45	68

 # Long Terne Steel is a product coated by immersion in molten terne metal. Terne Metal is an alloy of lead and a small amount (about 3%) of tin.

Check Valves Class 400 990 PSI @ 100°F (68.3 BAR @ 38°C)



C

Standard Features

- Bodies and covers are cast steel (WCB, WC6).
- Bolted cover.
- Y-Pattern.
- Integral Stellite seat and disk.
- Body-guided disk piston.
- Asbestos-free spiral wound gasket.
- Equipped with equalizer.

Pressure Class 400 (PN 68)

Fig. No.	Type	Ends	NPS (DN)
1392Y	Flite-Flow	Buttwelding	3 (80) thru 4 (100)

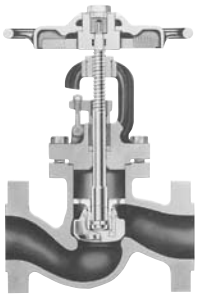
Dimensions – Flite-Flow®

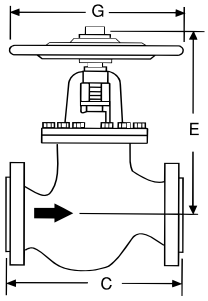
Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 1392Y	NPS	3	4
	DN	80	100
A - End to End (Welding)		14	15.5
		356	394
E - Center to Top/Check Valve		8	11
		203	279
H - Equalizer Clearance		8.0	9.5
		203	241
Weight (Welding)		70	105
		32	48

 # Long Terne Steel is a product coated by immersion in molten terne metal. Terne Metal is an alloy of lead and a small amount (about 3%) of tin.

Stop Valves Class 600 1480 PSI @ 100°F (102.1 BAR @ 38°C)





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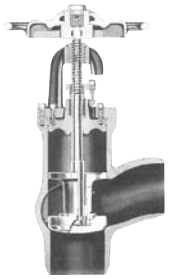
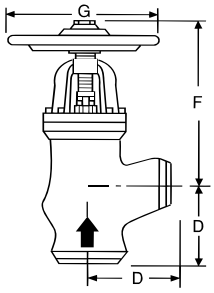




617Y

Standard Features

- Bodies and bonnets are cast steel (WCB, WC6, WC9, C12A).
- Bolted or pressure-seal bonnet, OS & Y.
- Globe or angle.
- Integral Stellite seat, disk and backseat.
- Body-guided disk piston.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.
- Long Terne# steel or composite pressure-seal gasket.

Pressure Class 600 (PN 110)

FIG. NO.		TYPE	ENDS	BONNET	NPS (DN)
STD CL	SPL CL				
616	—	Globe	Flanged	Bolted Pressure Seal	8 (200) thru 14 (350)
616Y	716Y	Globe	Buttwelding	Bolted Pressure Seal	
617	—	Angle	Flanged	Bolted Pressure Seal	8 (200) thru 14 (350), 24 (600), 28 (700) & 30 (750)
617Y	717Y	Angle	Buttwelding	Bolted Pressure-Seal	
618	—	Globe	Flanged	Bolted	2½ (65) thru 6 (150)
618Y	—	Globe	Buttwelding	Bolted	
619	—	Angle	Flanged	Bolted	
619Y	—	Angle	Buttwelding	Bolted	

Dimensions – Globe & Angle*

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

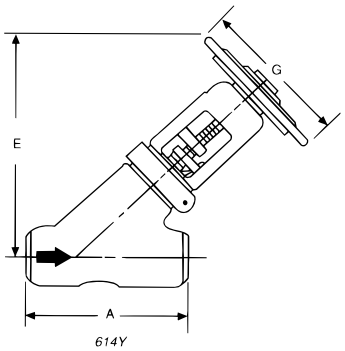
Figure No. 616/616Y, 617/617Y, 618/618Y, 619/619Y, 716Y, 717Y	NPS	2½	3	4	5	6	8	10	12	14
	DN	65	80	100	125	150	200	250	300	350
C - Face to Face, Globe •		13	14	17	20	22	26	31	33	35
		330	356	432	508	559	660	787	838	889
D - Center to Face, Angle •		6.5	7	8.5	10	11	13	15.5	16.5	17.5
		165	178	216	254	279	330	394	419	445
E - Center to Top, Globe		16.2	16.7	20.1	24.8	28.4	34.3	39.7	43.6	47
		411	424	511	630	721	871	1008	1107	1194
F - Center to Top, Angle		14.4	14.6	17.7	21.4	24.2	28.8	32.9	36.1	38.8
		366	371	450	544	615	731	836	917	986
G - Handwheel/Handle Diameter**		12	12	14	16	16	20	26	30	30
		305	305	356	406	406	508	660	762	762
Weight, Globe (Flanged)		110	135	245	425	525	900	1550	2200	2640
		50	61	111	193	238	408	703	998	1198
Weight, Globe (Welding)		90	110	180	315	400	750	1200	1850	2250
		41	50	82	143	181	340	544	839	1021
Weight, Angle (Flanged)		100	122	228	355	460	730	1230	1790	2120
		45	55	103	161	209	331	558	812	962
Weight, Angle (Welding)		100	125	170	245	350	540	950	1450	1760
		45	57	77	111	159	245	431	658	798

** Angle valves only, are also available in Sizes 24, 28, and 30. Dimensions available upon request.*

*** Impactor handwheel is standard on all size valves.*

• Center to end or end to end dimensions for welding and valves same as center to contact face or contact face to contact face dimensions for flanged end valves.

Stop Valves Class 600 1480 PSI @ 100°F (102.1 BAR @ 38°C)



C

Standard Features

- Bodies and bonnets are cast steel (WCB, WC6, WC9, C12A).
- Pressure-seal bonnet, OS & Y.
- Y-Pattern.
- Integral Stellite seat, disk and backseat.
- Body-guided disk piston.
- 13% chromium stainless steel stem.
- Asbestos-free graphite packing.
- Spiral wound or composite pressure-seal gasket.

Pressure Class 600 (PN 110)*

Fig. No.		Type	Ends	Bonnet	NPS (DN)
STD CL	SPL CL				
614***	—	Flite-Flow	Flanged	*Pressure Seal	3 (80) thru 32 (800)
614Y	714Y	Flite-Flow	Buttwelding	*Pressure Seal	

** 3&4 Bolted bonnet with asbestos-free spiral wound gasket.*

** Size 3&4 Buttweld Valves are Class 700. See page C28.*

Dimensions – Flite-Flow®

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 614Y/714Y, 614***	NPS	3	4	6	8	10	12	14	16	20	24	26	28	32
	DN	80	100	150	200	250	300	250	400	500	600	650	700	800
A_1 - End to End, (Welding)		13	15.5	20	26	31	38	38	41	60	66	70	81.5	90
		330	394	508	660	788	965	965	1041	1524	1676	1778	2070	2286
A_2 - Face to Face, (Flanged)		16.75	21.25	29	33	39	43	43	52	*	*	*	*	*
		425	540	737	838	991	1092	1092	1321					
E - Center to Top, (Open)		17.5	21.5	28.5	34	42	49	49	74	71	*	*	*	*
		445	546	724	864	1067	1245	1245	1880	1803				
G - Handwheel Diameter		12	14	16	20	26	30	30	48	48	*	*	*	*
		305	356	406	508	660	762	762	1219	1219				
Weight, (Welding)		110	150	450	850	1400	2050	2050	5500	9200	*	*	*	*
		50	68	204	385	635	930	930	2495	4173				
Weight, (Flanged)		150	240	570	1000	1800	2450	2550	6500	*	*	*	*	*
		68	109	259	454	816	1111	1157	2948					

** Dimensions and information supplied upon request.*

*** Impactor handwheel standard on all Flite-Flow Valves.*

**** Flanged valves are available in sizes 3 through 16.*

Stop Valves Class 600 1480 PSI @ 100°F (102.1 BAR @ 38°C)

Standard Features

- Bodies and bonnets are cast steel (WCB, WC6, WC9, C12A).
- Bolted or pressure-seal bonnet OS & Y.
- Integral Stellite seats and backseat.
- Two-piece body-guided wedge.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.
- Long Terne# steel or composite pressure-seal gasket.
- Available in standard or venturi pattern.
- Yoke bushing thrust bearings.

Pressure Class 600 (PN 110)

Fig. No.		Type	Ends	Bonnet	NPS (DN)
STD CL	SPL CL				
1611*	—	Equiwedge Gate	Flanged	Pressure-Seal	2½ (65) thru 28 (700)
1611Y	1711Y	Equiwedge Gate	Buttwelding	Pressure-Seal	
1611BY	1711BY	Venturi Pattern	Buttwelding	Pressure-Seal	8 (200) thru 32 (800)
		Equiwedge Gate			
A1611	—	Equiwedge Gate	Flanged	Bolted	2½ (65) thru 6 (150)
A1611Y	—	Equiwedge Gate	Buttwelding		

** Flanges to size 24 only.*

Dimensions – Equiwedge Gate

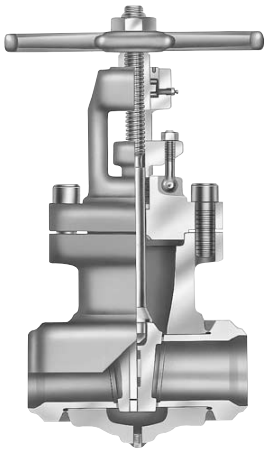
Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

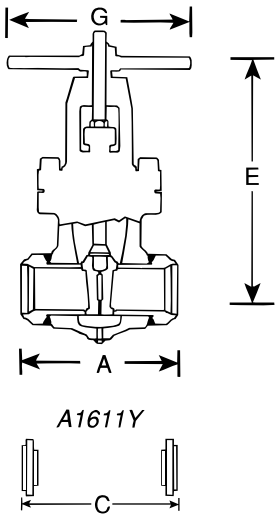
Figure No. 1611/1611Y, 1711Y, A1611/A1611Y	NPS	2½	3	4	6	8	10	12	14
	DN	65	80	100	150	200	250	300	350
A - End to End (Welding)		10	10	12	18	23	28	32	35
		254	254	305	457	584	711	813	889
C - Face to Face (Flanged)		13	14	17	22	26	31	33	35
		330	356	432	559	660	787	838	889
E - Center to Top, (Open)		22.25	22.25	25.5	31.75	39.75	48	54	58.5
		565	565	648	806	1010	1219	1372	1486
G - Handwheel Diameter		14	14	14	24	24	30	30	36
		356	356	356	610	610	762	762	914
Weight (Welding)		81	81	175	372	667	1050	1623	2345
		37	37	79	169	303	476	738	1066
E - Center to Top, (Open) A1611/A1611Y		22.5	22.5	24	27.38				
		572	572	610	695				
Weight (Welding) A1611Y		130	130	175	390				
		59	59	79	177				

** E, G, and other dimensions and information supplied upon request.*
 # Long Terne Steel is a product coated by immersion in molten terne metal. Terne Metal is an alloy of lead and a small amount (about 3%) of tin.

Figure No. 1611/1611Y, 1711Y	NPS	16	18	20	22	24	26	28
	DN	400	450	500	550	600	650	700
A - End to End (Welding)		39	43	47	51	55	57	61
		991	1092	1194	1295	1397	1448	1549
C - Face to Face (Flanged)		39	43	47	51	55	57	61
		991	1092	1194	1295	1397	1448	1549
E - Center to Top, (Open)		67	76	82.75	89	96	101	110.5
		1702	1930	2102	2261	2438	2565	2807
G - Handwheel Diameter		36	36	36	48	48	48	48
		914	914	914	1219	1219	1219	1219
Weight (Welding)		2950	3600	5000	5700	6500	8000	10,000
		1338	1633	2268	2585	2948	3628	4535

Stop Valves Class 600 1480 PSI @ 100°F (102.1 BAR @ 38°C)





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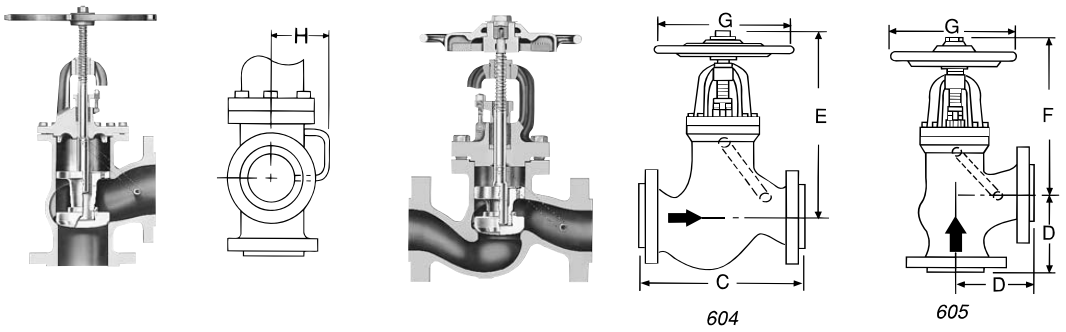
Dimensions – Equiwedge Gate Venturi Pattern

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 1611BY, 1711BY	NPS	8x6x8	10x8x10	12x10x12	14x12x14	16x14x16	18x16x18
	DN	200	250	300	350	400	450
A - End to End (Welding)		18	23	28	32	35	39
		457	584	711	813	889	991
E - Center to Top, (Open)		31.75	39.75	48	54	58.5	67
		806	1010	1219	1372	1486	1702
G - Handwheel Diameter		24	24	30	30	36	36
		610	610	762	762	914	914
Weight (Welding)		372	610	1114	1623	2345	2950
		169	277	506	738	1066	1338

Figure No. 1611BY, 1711BY	NPS	20x18x20	22x20x22	24x20x24	26x22x26	28x24x28	30x26x30	32x28x32
	DN	500	550	600	650	700	750	800
A - End to End (Welding)		43	47	47	51	55	57	61
		1092	1194	1194	1295	1397	1448	1549
E - Center to Top, (Open)		76	82.75	82.75	89	96	101	110.5
		1930	2102	2102	2261	2438	2565	2807
G - Handwheel Diameter		36	36	48	48	48	48	48
		914	914	1219	1219	1219	1219	1219
Weight (Welding)		3600	5000	5700	6500	7000	8500	10,500
		1633	2268	2585	2948	3175	3855	4762

Stop-Check (Non-Return) Valves Class 600 1480 PSI @ 100°F (102.1 BAR @ 38°C)



Standard Features

- Bodies and bonnets are cast steel (WCB, WC6, WC9 C12A).
- Bolted or pressure-seal bonnet OS & Y.
- Globe or angle.
- Integral Stellite seat, disk and backseat.
- Body-guided disk piston.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.
- Long terne# steel or composite pressure seal gasket.
- Equipped with equalizer.

Pressure Class 600 (PN 110)

FIG. NO.		TYPE	ENDS	BONNET	NPS (DN)
STD CL	SPL CL				
604	—	Globe	Flanged	Bolted	2½ (65) thru 6 (150)
604Y	—	Globe	Buttwelding	Bolted	
605	—	Angle	Flanged	Bolted	
605Y	—	Angle	Buttwelding	Bolted	
606	—	Globe	Flanged	Pressure-Seal	8 (200) thru 14 (350)
606Y	706Y	Globe	Buttwelding	Pressure-Seal	
607	—	Angle	Flanged	Pressure-Seal	8 (200) thru 14 (350), 24 (600), 28 (700) & 30 (750)
607Y	707Y	Angle	Buttwelding	Pressure-Seal	

Dimensions – Globe & Angle*

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

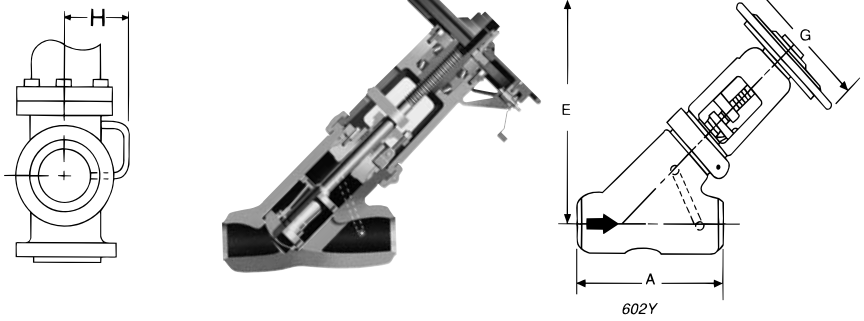
Figure No. 604/604Y, 605/605Y, 606/606Y, 607/607Y, 706Y, 707Y	NPS	2½	3	4	5	6	8	10	12	14
	DN	65	80	100	125	150	200	250	300	350
C - Face to Face, Globe**		13	14	17	20	22	26	31	33	35
		330	356	432	508	559	660	787	838	889
D - Center to Face, Angle**		6.5	7	8.5	10	11	13	15.5	16.5	17.5
		165	178	216	254	279	330	394	419	445
E - Center to Top, Globe		16.2	16.7	20.1	24.8	28.4	34.3	39.7	43.6	47
		411	424	511	630	721	871	1008	1107	1194
F - Center to Top, Angle		14.4	14.6	17.7	21.4	24.2	28.8	32.9	36.1	38.8
		366	371	450	544	615	731	836	917	986
G - Handwheel Diameter#		12	12	14	16	16	20	26	30	30
		305	305	356	406	406	508	660	762	762
H - Clearance for Equalizer		8.7	8.5	10	9.6	11	11.8	13	13.7	15.7
		221	216	254	244	279	300	330	348	399
Weight, Globe (Flanged)		110	135	220	425	540	960	1540	2200	2680
		50	61	112	193	245	435	699	998	1216
Weight, Globe (Welding)		84	110	185	335	410	750	1270	1850	2250
		38	50	84	152	186	340	596	839	1021
Weight, Angle (Flanged)		105	125	225	325	460	750	1200	1790	2150
		48	57	102	147	209	340	544	812	975
Weight, Angle (Welding)		80	90	168	245	350	560	950	1450	1760
		36	41	76	111	159	254	431	667	798

** Angle valves only, are also available in Sizes 24, 28, and 30. Dimensions available upon request.*

*** Center to end or end to end dimensions for welding and valves same as center to contact face or contact face to contact face dimensions for flanged end valves.*

 # Impactor handwheel is standard on all size valves.

Stop-Check (Non-Return) Valves Class 600 1480 PSI @ 100°F (102.1 BAR @ 38°C)



C

Standard Features

- Bodies and bonnets are cast steel (WCB, WC6, WC9, C12A).
- Bolted or pressure-seal bonnet, OS & Y.
- Y-Pattern.
- Integral Stellite seat, disk and backseat.
- Body-guided disk piston.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.
- Spiral wound or composite pressure seal gasket.
- Equipped with equalizer.

Pressure Class 600 (PN 110)*

Fig. No.		Type	Ends	Bonnet	NPS (DN)
STD CL	SPL CL				
***602	—	Flite-Flow	Flanged	Pressure-Seal*	3 (80) thru 32 (800)
602Y	702Y	Flite-Flow	Buttwelding	Pressure-Seal*	

** Size 3 & 4 - Bolted bonnet with asbestos-free spiral wound gasket.*
** Size 3 & 4 Buttweld Valves are Class 700. See page C28.*

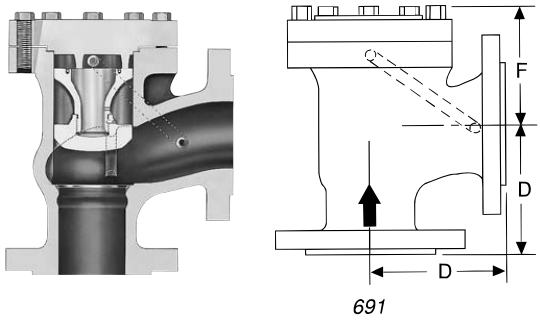
Dimensions – Flite-Flow®

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 602Y/702Y, ***602	NPS	3	4	6	8	10	12	14	16	20	24	26	28	32
	DN	80	100	150	200	250	300	250	400	500	600	650	700	800
A1 - End to End, (Welding)		13	15.5	20	26	31	38	38	41	60	66	70	81.5	90
		330	394	508	660	787	965	965	1041	1524	1676	1778	2070	2286
A2 - Face to Face, (Flanged)		16.75	21.25	29	33	39	43	43	52	*	*	*	*	*
		425	540	737	838	991	1092	1092	1321					
E - Center to Top, (Open)		17.5	21.5	28.5	34	42	49	49	74	71	*	*	*	*
		445	546	724	864	1067	1245	1245	1880	1803				
G - Handwheel Diameter		12	14	16	20	26	30	30	48	48	*	*	*	*
		305	356	406	508	660	762	762	1219	1219				
H - Equalizer Clearance		7	9	10	12	13	14	14	22	24	*	*	*	*
		178	229	254	305	330	356	356	559	610				
Weight, (Welding)		110	150	450	850	1400	2050	2050	5500	9200	*	*	*	*
		50	68	204	385	635	930	930	2495	4173				
Weight, (Flanged)		150	240	570	1000	1800	2850	3100	6500	*	*	*	*	*
		68	109	259	454	816	1293	1406	2948					

** E, G, and other dimensions and information supplied upon request.*
*** Impactor handwheel standard on all Flite-Flow Valves.*
**** Flanged valves available in sizes 3 thru 16.*

Check Valves Class 600 1480 PSI @ 100°F (102.1 BAR @ 38°C)



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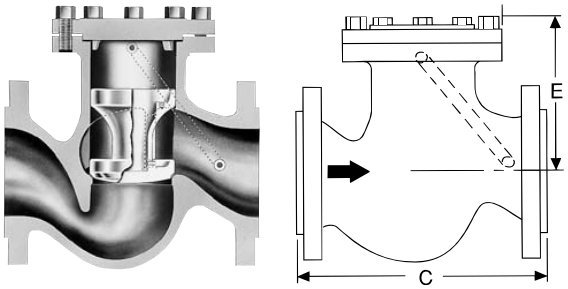


690

Standard Features

- Bodies and covers are cast steel (WCB, WC6, WC9, C12A).
- Bolted or pressure-seal cover.
- Y-Pattern, globe, angle, or tilting disk.
- Integral Stellite seats.
- Body-guided disk piston, globe, angle & Flite-Flow.
- Long Terne# steel or pressure-seal gasket.
- Equipped with equalizer, globe, angle & Flite-Flow.

Pressure Class 600 (PN 110)*

Fig. No.		Type	Ends	Bonnet	NPS (DN)
STD CL	SPL CL				
670Y	770Y	Tilting Disk	Buttwelding	Bolted	6 (150) thru 20 (500)
690	—	Globe	Flanged	Bolted	2½ (65) thru 6 (150)
690Y	—	Globe	Buttwelding	Bolted	
691	—	Angle	Flanged	Bolted	
691Y	—	Angle	Buttwelding	Bolted	
***692	—	Flite-Flow	Flanged	*Pressure Seal	3 (80) thru 32 (800)
692Y	792Y	Flite-Flow	Buttwelding	*Pressure Seal	
694	—	Globe	Flanged	Pressure Seal	8 (200) thru 14 (350)
694Y	794Y	Globe	Buttwelding	Pressure Seal	
695	—	Angle	Flanged	Pressure Seal	
695Y	795Y	Angle	Buttwelding	Pressure Seal	

** Size 3&4 - Bolted bonnet with asbestos-free spiral wound gasket.*
** Size 3&4 Buttweld Flite-Flow Valves are Class 700. See page C29.*

Dimensions – Globe & Angle

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

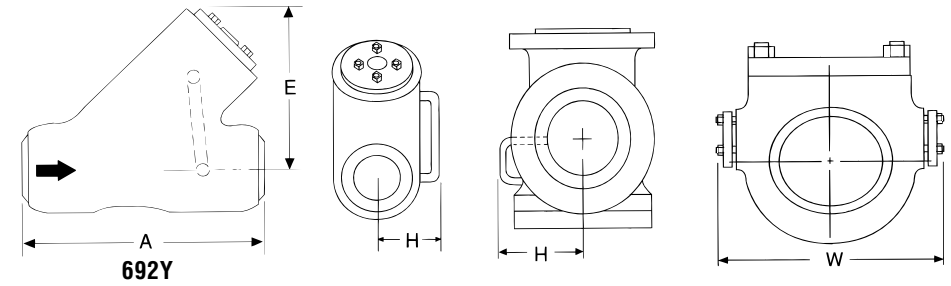
Figure No. 690/690Y, 691/691Y, 694/694Y, 695/695Y, 794Y, 795Y	NPS	2½	3	4	5	6	8	10	12	14
	DN	65	80	100	125	150	200	250	300	350
C - Face to Face, Globe (Flanged)•		13	14	17	20	22	26	31	33	35
		330	356	432	508	559	660	787	838	889
D - Center to Face, Angle (Flanged)•		6.5	7	8.5	10	11	13	15.5	16.5	17.5
		165	178	216	254	279	330	394	419	445
E - Center to Top, Globe		6.6	7.1	8.9	11.4	13.1	17.3	20.2	23.2	25.1
		168	180	226	290	333	439	513	589	638
F - Center to Top, Angle		4.8	5.0	6.4	8.0	8.9	11.9	13.4	15.5	16.6
		122	127	163	203	226	302	340	394	422
H - Clearance for Equalizer		8.7	8.5	10	9.6	11	11.8	13	13.7	15.7
		221	216	254	244	279	300	330	348	399
Weight, Globe (Flanged)		80	110	210	360	460	815	1290	1870	2320
		36	50	95	163	209	370	585	848	1052
Weight, Globe (Welding)		60	80	140	250	325	620	1040	1550	1930
		27	36	64	113	147	281	472	703	875
Weight, Angle (Flanged)		72	95	184	290	380	590	990	1490	1830
		33	43	84	132	172	268	449	676	830
Weight, Angle (Welding)		50	70	124	180	250	400	710	1170	1440
		23	32	56	82	113	181	322	531	653

• Center to end or end to end dimensions for welding end valves same as center to contact face or contact face to contact face dimensions for flanged end valves.
 # Long Terne Steel is a product coated by immersion in molten terne metal. Terne Metal is an alloy of lead and a small amount (about 3%) of tin.
**** Flanged valves available in sizes 3 to 16.*

Check Valves Class 600 1480 PSI @ 100°F (102.1 BAR @ 38°C)

Standard Features

- Bodies and covers are cast steel (WCB, WC6, WC9, C12A).
- Bolted or pressure-seal cover.
- Y-Pattern, globe, angle, or tilting disk.
- Integral Stellite seats.
- Body-guided disk piston, globe, angle & Flite-Flow.
- Gasket: Sizes 3 & 4 asbestos-free, spiral wound. All others: composite pressure seal.
- Equipped with equalizer, globe, angle & Flite-Flow.



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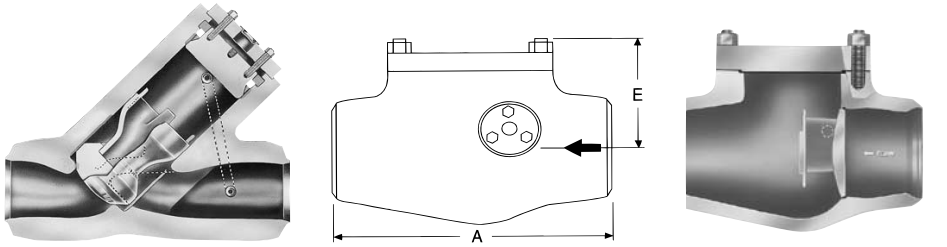


670Y

C

Dimensions – Flite-Flow

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

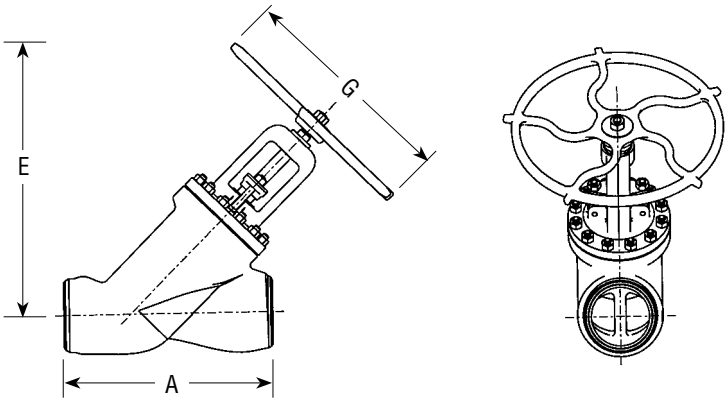
Figure No.692Y/792Y ***692	NPS	3	4	6	8	10	12	14	16	20	24	26	28	32
	DN	80	100	150	200	250	300	250	400	500	600	650	700	800
A - End to End (Welding)		13	15.5	20	26	31	38	38	41	60	66	70	81.5	90
		330	394	508	660	787	965	965	1041	1524	1676	1778	2070	2286
A_2 - Face to Face (Flanged)		16.75	21.5	29	33	39	43	43	52	*	*	*	*	*
		425	540	737	838	991	1092	1321	1321	*	*	*	–	–
E - Center to Top		7	11	15.75	17.75	21.25	25.25	25.25	31.5	36.0	*	*	*	*
		178	279	400	451	540	641	641	800	914				
H - Equalizer Clearance		7	9	10	12	13	14	14	22	24	*	*	*	*
		178	229	254	305	330	356	356	559	610	*	*	*	*
Weight (Welding)		80	125	375	575	1000	1450	1450	3300	*	*	*	*	*
		35	55	170	261	454	658	658	1497					
Weight (Flanged)		120	200	520	750	1250	1900	2150	4300	*	*	–	–	–
		54	90	236	340	567	862	975	1950					

** E, H and other dimensions and information supplied upon request.*
**** Flanged valves available in sizes 3 thru 16.*
Note: Size 3&4 Buttweld Class 600 Flite-Flow valves are Class 700. See page C30.

Dimensions – Tilting Disk

Figure No. 670Y/770Y	NPS	6	8	10	12	14	16	18	20
	DN	150	200	250	300	350	400	450	500
A - End to End (Welding)		19.5	22	28.5	34.5	34.5	43.25	48.25	53.5
		495	559	724	876	876	1099	1226	1359
E - Center to Top		9.5	10.5	13.5	15.5	15.5	20.5	22.5	23.75
		241	267	343	394	394	521	572	603
W - Width		15.25	17.5	21	25	25	32.25	34	38.5
		387	445	533	635	635	819	864	978
Weight (Welding)		300	500	950	1450	1550	2550	3550	5650
		136	225	428	653	698	1148	1598	2543

Stop Valves Class 700 1725 PSI @ 100°F (119.0 BAR @ 38°C)



Standard Features

- Bodies and bonnets are cast steel (WCB, WC6, WC9, C12A).
- Bolted bonnet, OS & Y.
- Y-Pattern.
- Integral Stellite seat, disk and backseat.
- Body-guided disk piston.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.
- Asbestos-free spiral wound gasket.

Pressure Class 700 (PN 120)

Fig. No.		Type	Ends	Bonnet	NPS (DN)
STD CL	SPL CL				
614Y	714Y	Flite-Flow	Buttwelding	Bolted	3 (80) and 4 (100)

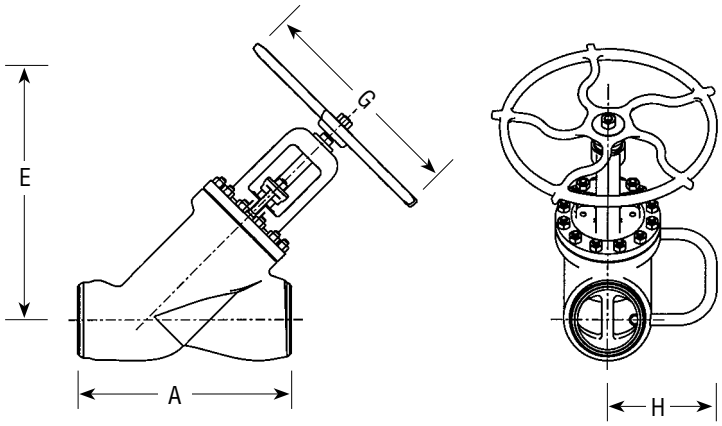
Dimensions – Flite-Flow®

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No.614Y**, 714Y**	NPS	3	4
	DN	80	100
A - End to End (Welding)		14	15.5
		356	394
E - Center to Top, (Open)		16	21.5
		406	546
G - Handwheel Diameter		11	14
		279	356
Weight (Welding)		110	150
		50	68

*** Impactor handwheel standard on all Flite-Flow Valves.*

Stop-Check (Non-Return) Valves Class 700 1725 PSI @ 100°F (119.0 BAR @ 38°C)



Standard Features

- Bodies and bonnets are cast steel (WCB, WC6, WC9, C12A).
- Bolted bonnet, OS & Y.
- Y-Pattern.
- Integral Stellite seat, disk and backseat.
- Body-guided disk piston.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.
- Asbestos-free spiral wound gasket.
- Equipped with equalizer.

Pressure Class 700 (PN 120)

Fig. No.		Type	Ends	Bonnet	NPS (DN)
STD CL	SPL CL				
602Y	702Y	Flite-Flow	Buttwelding	Bolted	3 (80) and 4 (100)

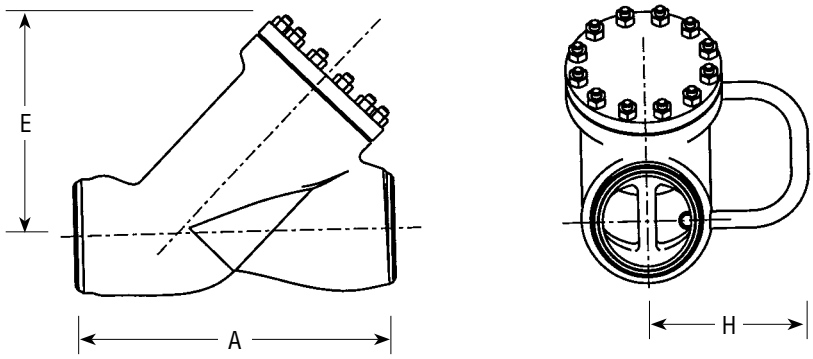
Dimensions – Flite-Flow®

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No.602Y/702Y	NPS	3	4
	DN	80	100
A - End to End (Welding)		14	15.5
		356	394
E - Center to Top (Open)		16	21.5
		406	546
G - Handwheel Diameter**		11	14
		279	356
H - Equalizer Clearance		7	9
		178	229
Weight (Welding)		110	150
		50	68

*** Impactor handwheel standard on Flite-Flow Valves.*

Check Valves Class 700 1725 PSI @ 100°F (119.0 BAR @ 38°C)



Standard Features

- Bodies and covers are cast steel (WCB, WC6, WC9, C12A).
- Bolted cover.
- Y-Pattern.
- Integral Stellite seat and disk.
- Body-guided disk piston.
- Asbestos-free spiral wound gasket.
- Equipped with equalizer.

Pressure Class 700 (PN 120)

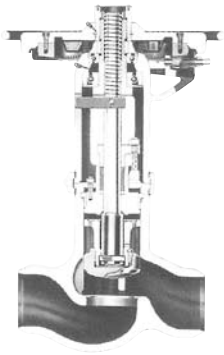
Fig. No.		Type	Ends	Bonnet	NPS (DN)
STD CL	SPL CL				
692Y	792Y	Flite-Flow	Buttwelding	Bolted	3 (80) & 4 (100)

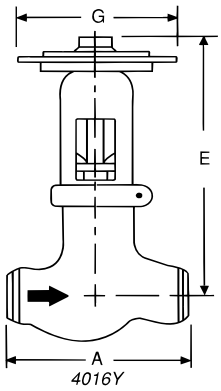
Dimensions – Flite-Flow®

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

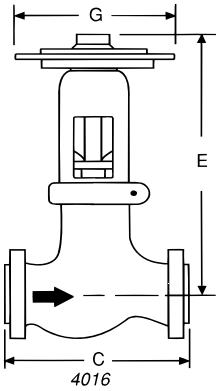
Figure No.692Y/792Y	NPS	3	4
	DN	80	100
A - End to End (Welding)		14	15.5
		356	394
E - Center to Top		8	11
		203	279
H - Equalizer Clearance		7	9
		178	229
Weight (Welding)		80	125
		35	55

Stop Valves Class 900 2220 PSI @ 100°F (153.1 BAR @ 38°C)





4016Y



4016

C

Standard Features

- Bodies and bonnets are cast steel (WCB, WC6, WC9, C12A, CF8M, or CF8C).
- Pressure-seal Bonnet, OS & Y.
- Y-Pattern, globe & angle design.
- Integral Stellite seat, disk and backseat.
- Body-guided disk piston.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.
- Yoke bushing thrust bearings size 5 and larger.

Pressure Class 900 (PN 150)*

Fig. No.		Type	Ends	NPS (DN)
STD CL	SPL CL			
4016	—	Globe	Flanged	3 (80) thru 14 (350)
4016Y	4316Y	Globe	Buttwelding	
4017	—	Angle	Flanged	3 (80) thru 24 (600)
4017Y	4317Y	Angle	Buttwelding	
4014		Flite-Flow	Flanged	3 (80) thru 16 (400)
4014Y	4314Y	Flite-Flow	Buttwelding*	

Size 3 & 4 Buttweld Flite-Flow Valves are class 1100 - see page C40.

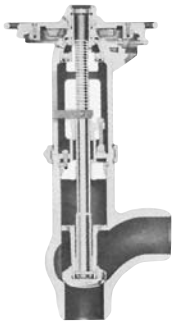
Dimensions - Globe & Angle

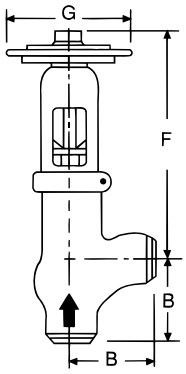
Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 4016/4016Y, 4017/4017Y, 4316Y, 4317Y	NPS	3	4	5	6	8	10	12	14
	DN	80	100	125	150	200	250	300	350
A - End to End (Welding)		15	18	22	24	29	33	38	40.5
		381	457	559	610	737	838	965	1029
B - Center to Face (Welding)		7.5	9	11	12	14.5	16.5	19	19
		190	229	279	305	368	419	483	483
C - Face to Face (Flanged)		15	18	22	24	29	33	38	40.5
		381	457	559	610	737	838	965	1029
D - Center to Face (Flanged)		7.5	9	11	12	14.5	16.5	19	21.75
		190	229	279	305	368	419	483	552
E - Center to Top, Globe (Open)		22.5	26.25	30.6	37	46	54.75	64.75	71.25
		572	667	777	940	1168	1391	1645	1810
F - Center to Top, Angle (Open)		20.4	23.75	28.25	34.25	43.4	49.25	60	60
		518	603	718	870	1102	1251	1524	1524
G - Handwheel Diameter*		16	16	20	20	28	28	36	36
		406	406	508	508	711	711	914	914
Weight, Globe (Flanged)		210	310	610	800	1570	2410	3700	4600
		95	141	277	363	712	1093	1665	2086
Weight, Globe (Welding)		175	235	500	620	1390	2300	3100	3850
		79	107	227	281	630	1043	1395	1746
Weight, Angle (Flanged)		206	284	540	710	1360	2103	3010	3060
		93	129	245	322	612	946	1365	1388
Weight, Angle (Welding)		150	210	410	552	1035	1690	2555	2580
		68	95	185	250	466	761	1159	1170

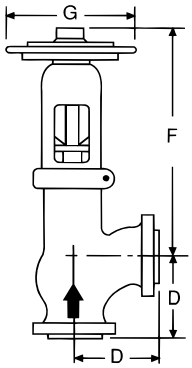
** Impactor handwheel is standard on all valves.*

Stop Valves Class 900 2220 PSI @ 100°F (153.1 BAR @ 38°C)

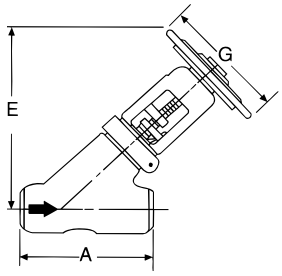




4017 Y



4017



4014 Y

Dimensions - Angle

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 4017/4017Y, 4317Y	NPS	16	18	20	24
	DN	400	450	500	600
B - Center to End (Welding)		26	**	32.5	39
		660		825	991
F - Center to Top, Angle		78.5	**	95	102
		1994		2413	2591
G - Handwheel Diameter*		48	**	72	72
		1219		1829	1829
Weight, Angle (Welding)		4440	**	8150	13,750
		2014		3697	6237

*** Size 18 angle - available upon request.*

Dimensions - Flite-Flow®

Figure No. 4014/4014Y, 4314Y	NPS	3	4	6	8	10	12	14	16
	DN	80	100	150	200	250	300	350	400
A_1 - End to End (Welding)		17	18.5	20	26	31	38	38	44.5
		432	479	508	660	787	965	965	1130
A_2 - Face to Face (Flanged)		22.25	23.75	30	38	44	50	51	58
		565	603	762	965	1118	1270	1295	1473
E - Center to Top (Open)		20	25	35	44	51	60	60	73
		508	635	889	1118	1295	1524	1524	1854
G - Handwheel Diameter*		16	16	20	28	28	36	36	48
		406	406	508	711	711	914	914	1219
Weight (Welding)		190	275	550	1150	2100	3400	3400	5550
		86	125	249	522	953	1542	1542	2517
Weight (Flanged)		250	370	775	1550	2650	4150	4550	6950
		113	168	352	703	1202	1882	2064	3152

** Impactor handwheel is standard on all valves.*
Note: Size 3&4 Buttweld Class 900 Flite-Flow Valves are Class 1100. See page C40.

Stop Valves Class 900 2220 PSI @ 100°F (153.1 BAR @ 38°C)

Standard Features

- Bodies and bonnets are cast steel (WCB, WC6, WC9, C12A, CF8M or CF8C).
- Bolted or pressure-seal bonnet, OS & Y.
- Integral Stellite seat, disk and backseat.
- Two-piece body-guided wedge.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.
- Available in standard or venturi pattern.
- Yoke bushing thrust bearings.
- Long Terne# steel or composite pressure seal gasket.

Pressure Class 900 (PN 150)

Fig. No.		Type	Ends	Bonnet	NPS (DN)
STD CL	SPL CL				
1911	—	Equiwedge Gate	Flanged*	Pressure-Seal	2½ (65) thru 28 (700)
1911Y	14311Y	Equiwedge Gate	Buttwelding	Pressure-Seal	
1911BY	14311BY	Venturi Pattern Equiwedge Gate	Buttwelding	Pressure-Seal	8 (200) thru 32 (800)
A1911	—	Equiwedge Gate	Flanged	Bolted	2½ (65) thru 4 (100)
A1911Y	—	Equiwedge Gate	Buttwelding		

C

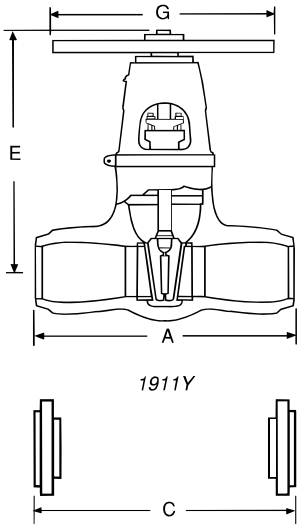
Dimensions – Equiwedge Gate

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 1911/1911Y, 14311Y, A1911/ A1911Y	NPS	2½	3	4	6	8	10	12	14
	DN	65	80	100	150	200	250	300	350
A - End to End (Welding)		12	12	14	20	26	31	36	39
		305	305	356	508	660	787	914	991
C - Face to Face (Flanged)		16.5	15	18	24	29	33	38	40.5
		419	381	457	610	737	838	965	1029
E - Center to Top (Open)		21.25	21.25	24.5	33.5	40	46.75	54.5	59
		540	540	622	851	1016	1187	1384	1499
G - Handwheel Diameter		14	14	18	24	24	36	36	36
		356	356	457	610	610	914	914	914
Weight (Welding)		95	125	165	380	690	1523	2118	2805
		43	57	75	172	313	692	963	1275
E - Center to Top, (Open) A1911/A1911Y		22.5	22.5	24					
		572	572	610					
Weight, (Welding) A1911Y		130	130	190					
		59	59	86					

Figure No. 1911/1911Y, 14311Y	NPS	16	18	20	22	24	26	28
	DN	400	450	500	550	600	650	700
A - End to End (Welding)		43	48	52	57	61	64	68
		1092	1291	1321	1448	1549	1626	1727
C - Face to Face (Flanged)		44.5	48	52	57	61	Available Upon Request	
		1130	1291	1321	1448	1549		
E - Center to Top (Open)		68	73.75	82	89.25	95	102	109
		1727	1873	2083	2267	2413	2591	2769
G - Handwheel Diameter		36	36	48	48	48	60	60
		914	914	1219	1219	1219	1524	1524
Weight (Welding)		4150	4300	5800	7500	9600	12,000	
		1882	1950	2631	3402	4355	5443	

Stop Valves Class 900 2220 PSI @ 100°F (153.1 BAR @ 38°C)



Dimensions - Equiwedge Gate Venturi Pattern

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

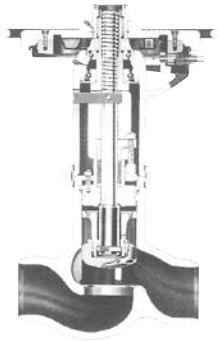
Figure No. 1911BY, 14311BY	NPS	8x6x8	10x8x10	12x10x12	14x12x14	16x14x16	18x16x18
	DN	200	250	300	350	400	450
A - End to End (Welding)		20	26	31	36	39	43
		508	660	787	914	991	1092
E - Center to Top (Open)		33.5	40	46.75	54.5	59	68
		851	1016	1187	1384	1499	1727
G - Handwheel Diameter		24	24	36	36	36	36
		610	610	914	914	914	914
Weight (Welding)		530	891	1523	2118	2805	4150
		241	405	692	963	1275	1882

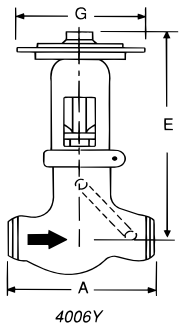
Figure No. 1911BY, 14311BY	NPS	20x18x20	22x20x22	24x20x24	26x22x26	28x24x28	30x26x30	32x28x32
	DN	500	550	600	650	700	750	800
A - End to End (Welding)		48	52	52	57	61	64	68
		1219	1321	1321	1448	1549	1626	1727
E - Center to Top (Open)		73.75	82	82	89.25	95	102	109
		1873	2083	2083	2267	2413	2591	2769
G - Handwheel Diameter		36	48	48	48	48	60	60
		914	1219	1219	1219	1219	1524	1524
Weight (Welding)		4500	6970	7200	8000	10,000	12,500	15,000
		2041	3162	3266	3629	4536	5670	6804

Stop-Check (Non-Return) Valves Class 900 2220 PSI @ 100°F (153.1 BAR @ 38°C)

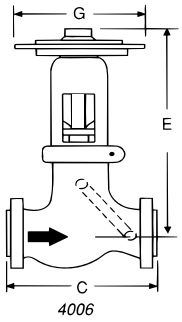
Standard Features

- Bodies and bonnets are cast steel (WCB, WC6, WC9, C12A, CF8M or CF8C).
- Pressure-seal Bonnet, OS & Y.
- Y-Pattern, globe & angle design.
- Integral Stellite seat, disk and backseat.
- Body-guided disk piston.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.
- Equipped with equalizer.
- Yoke bushing thrust bearings.





4006Y



4006

C

Pressure Class 900 (PN 150)*

FIG. NO.		TYPE	ENDS	NPS (DN)
STD CL	SPL CL			
4006	—	Globe	Flanged	3 (80) thru 14 (350)
4006Y	4306Y	Globe	Buttwelding	
4007	—	Angle	Flanged	3 (80) thru 24 (600)
4007Y	4307Y	Angle	Buttwelding	
4002	—	Flite-Flow	Flanged	3 (80) thru 16 (400)
4002Y	4302Y	Flite-Flow	Buttwelding*	

** Size 3&4 Buttweld Flite-Flow Valves are Class 1100 - see page C41.*

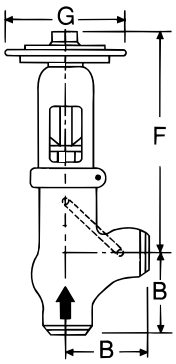
Dimensions – Globe & Angle

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

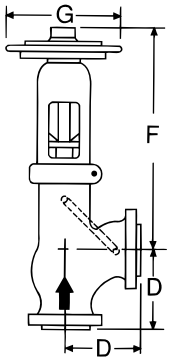
Figure No. 4006/4006Y, 4007/4007Y, 4306Y, 4307Y	NPS	3	4	5	6	8	10	12	14
	DN	80	100	125	150	200	250	300	350
A - End to End (Welding)		15	18	22	24	29	33	38	40.5
		381	457	559	610	737	838	965	1029
B - Center to End (Welding)		7.5	9	11	12	14.5	16.5	19	19
		190	22	279	305	368	419	483	483
C - Face to Face (Flanged)		15	18	22	24	29	33	38	40.5
		381	457	559	610	737	838	965	1029
D - Center to Face (Flanged)		7.5	9	11	12	14.5	16.5	19	21.75
		190	229	279	305	368	419	483	552
E - Center to Top, Globe (Open)		22.5	26.25	30.63	37	46	54.75	64.75	71.25
		572	667	778	940	1168	1391	1645	1810
F - Center to Top, Angle (Open)		20.38	23.75	28.25	34.25	43.38	49.25	60	62.75
		518	603	718	870	1102	1251	1524	1594
G - Handwheel Diameter*		16	16	20	20	28	28	36	36
		406	406	508	508	711	711	914	914
H - Clearance for Equalizer		7.5	7.63	9.75	10.75	12.5	12.88	14.75	17.38
		190	194	248	273	318	327	375	441
Weight, Globe (Flanged)		220	314	615	800	1570	2425	3700	4600
		100	142	279	363	712	1100	1665	2087
Weight, Globe (Welding)		175	245	500	642	1400	2300	3100	4750
		79	111	227	291	635	1043	1406	2155
Weight, Angle (Flanged)		206	284	540	690	1360	2103	3010	3060
		93	129	245	313	617	954	1365	1388
Weight, Angle (Welding)		150	215	410	552	1035	1600	2555	2580
		68	98	186	250	469	725	1159	1170

** Impactor handwheel is standard on all valves.*

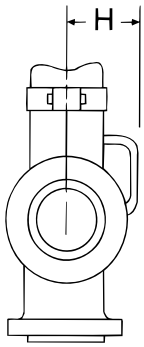
Stop-Check (Non-Return) Valves Class 900 2220 PSI @ 100°F (153.1 BAR @ 38°C)

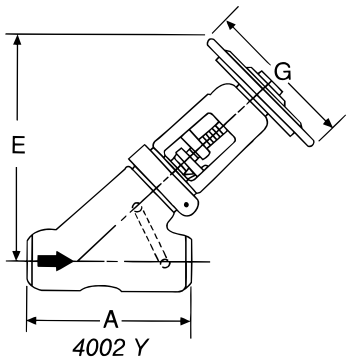


4007 Y



4007





4002 Y

Dimensions – Angle

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 4007/4007Y, 4307Y	NPS	16	18	20	24
	DN	400	450	500	600
B - Center to End (Welding)		26	**	32.5	39
		660		825	991
F - Center to Top, Angle		78.5	**	95	102
		1994		2413	2591
G - Handwheel Diameter*		48	**	72	72
		1219		1829	1829
H - Clearance for Equalizer		20	**	21.5	30
		50.8		546	762
Weight, Angle (Welding)		4960	**	8150	13,750
		2250		3697	6237

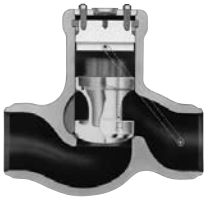
*** Size 18" Angle - Available Upon Request.*

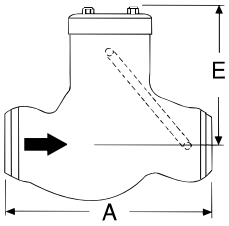
Dimensions – Flite-Flow

Figure No. 4002/4002Y, 4302Y	NPS	3	4	6	8	10	12	14	16
	DN	80	100	150	200	250	300	350	400
A_1 - End to End (Welding)		17	18.5	20	26	31	38	38	44.5
		432	470	508	660	787	965	965	1130
A_2 - Face to Face (Flanged)		22.25	23.75	30	38	44	50	51	58
		565	603	762	965	1118	1270	1295	1473
E - Center to Top (Open)		20	25	35	44	51	60	60	73
		508	635	889	1118	1295	1524	1524	1854
G - Handwheel Diameter*		16	16	20	28	28	36	36	48
		406	406	508	711	711	914	914	1219
H - Equalizer Clearance		9	9.3	10	12.5	16	15	15	25.75
		229	236	254	318	406	381	381	654
Weight (Welding)		190	275	555	1150	2100	3400	3400	5550
		86	125	252	522	953	1542	1542	2517
Weight (Flanged)		250	370	775	1550	2650	4150	4550	6950
		113	168	352	703	1202	1882	2064	3153

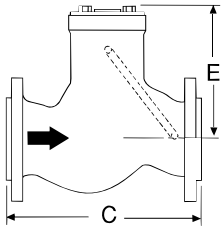
** Impactor handwheel is standard on all valves.*
Note: Size 3&4 Buttweld Class 900 Flite-Flow Valves are Class 1100. See page C41.

Check Valves Class 900 2220 PSI @ 100°F (153.1 BAR @ 38°C)

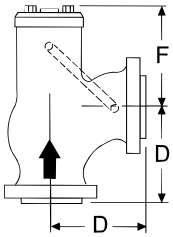




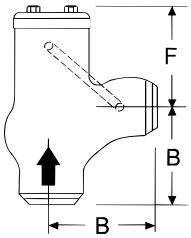
4094Y



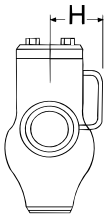
4094



4095



4095Y



C

Standard Features

- Bodies and Covers are cast steel (WCB, WC6, WC9, C12A, CF8M or CF8C).
- Pressure-seal Cover.
- Globe, angle & tilting disk design.
- Integral Stellite seats.
- Body-guided disk piston. (Globe & Angle)
- Equipped with equalizer. (Globe & Angle)

Pressure Class 900 (PN 150)*

Fig. No.		Type	Ends	NPS (DN)
STD CL	SPL CL			
970Y	4370Y	Tilting Disk	Buttwelding	2½ (65) thru 24 (600)
4094	—	Globe	Flanged	3 (80) thru 14 (350)
4094Y	4394Y	Globe	Buttwelding	
4095	—	Angle	Flanged	3 (80) thru 24 (600)
4095Y	4395Y	Angle	Buttwelding	
4092	—	Flite-Flow	Flanged	3 (80) thru 16 (400)
4092Y	4392Y	Flite-Flow	Buttwelding*	

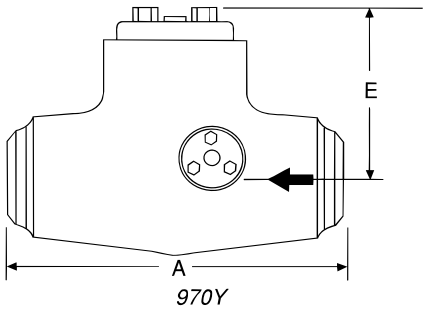
**Size 3&4 Buttweld Flite-Flow Valves are Class 1100 - see page C42.*

Dimensions – Globe & Angle

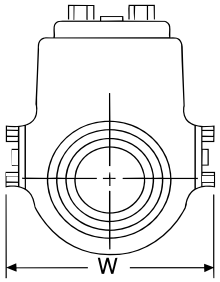
Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

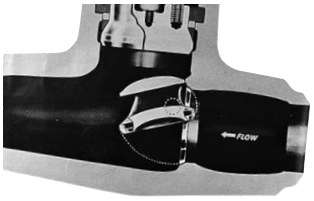
Figure No. 4094/4094Y, 4095/4095Y, 4394Y, 4395Y	NPS	3	4	5	6	8	10	12	14
	DN	80	100	125	150	200	250	300	350
A - End to End (Welding)		15	18	22	24	29	33	38	40.5
		381	457	559	610	737	838	965	1029
B - Center to End (Welding)		7.5	9	11	12	14.5	16.5	19	20.25
		190	229	279	305	368	419	483	514
C - Face to Face (Flanged)		15	18	22	24	29	33	38	40.5
		381	457	559	610	737	838	965	1029
D - Center to Face (Flanged)		7.5	9	11	12	14.5	16.5	19	20.25
		190	229	279	305	368	419	483	514
E - Center to Top, Globe		11	12	13.75	15.63	18.5	22.25	26.25	28.75
		279	305	349	397	470	565	667	730
F - Center to Top, Angle		9.25	10.25	11.25	12.5	16	16.75	21.5	21.5
		235	260	286	318	406	425	546	546
H - Clearance for Equalizer		7.5	7.63	9.75	10.75	12.5	12.88	14.75	17.38
		190	194	248	273	318	327	275	441
Weight, Globe (Flanged)		140	246	426	550	1188	1310	2710	3820
		64	112	193	249	539	594	1229	1733
Weight, Globe (Welding)		108	160	272	400	840	1090	2110	3070
		49	73	123	181	381	494	957	1393
Weight, Angle (Flanged)		134	217	356	485	898	1080	2165	2345
		61	98	161	220	407	490	982	1064
Weight, Angle (Welding)		115	131	202	290	510	860	1565	1860
		52	59	92	132	231	390	710	844

Check Valves Class 900 2220 PSI @ 100°F (153.1 BAR @ 38°C)



970Y





Dimensions – Angle

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 4095/4095Y, 4395Y	NPS	16	18	20	24
	DN	400	450	500	600
B - Center to End, (Welding)		26	29	32.5	39
		660	737	825	991
F - Center to Top, Angle (Open)		29	32	32	36
		737	813	813	914
G - Handwheel Diameter		20	21	21.5	30
		508	533	546	762
Weight, Angle (Welding)		2675	3710	4930	8190
		1213	1682	2636	3714

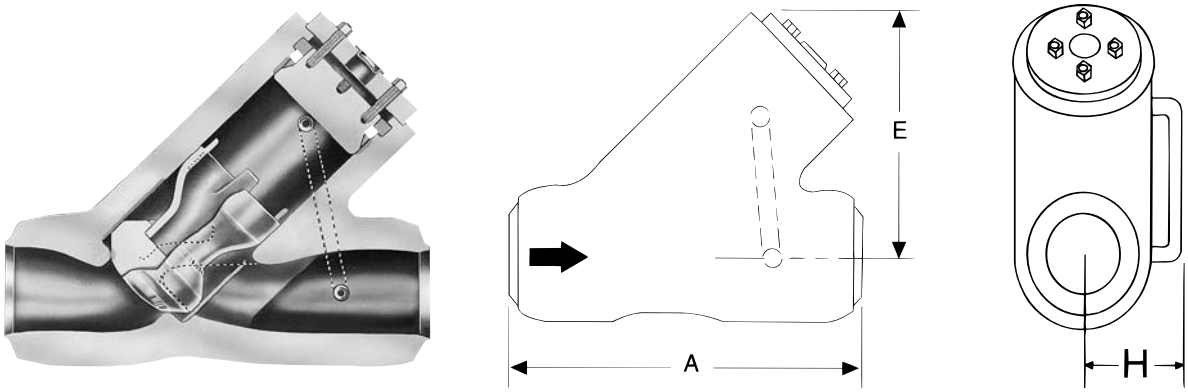
Dimensions – Tilting Disk

Figure No. 970Y, 4370Y	NPS	2½*	3*	4*	6	8	10
	DN	65	80	100	150	200	250
A - End to End (Welding)		12	12	12	22	28	34
		305	305	305	559	711	864
E - Center to Top		7.25	7.25	7.25	9.25	11	13
		184	184	184	235	279	330
W - Width		10.5	10.5	10.5	16.5	16	20.5
		267	267	267	419	406	521
Weight (Welding)		95	95	120	535	600	1010
		43	43	54	243	272	458

** Spiral wound hinge pin gaskets; hinge pin torsion spring not required.*

Figure No. 970Y, 4370Y	NPS	12	14	16	18	20	24
	DN	300	350	400	450	500	600
A - End to End (Welding)		42	40.5	47	53	51.5	78
		1067	1029	1194	1346	1308	1981
E - Center to Top		15.75	15.75	18.75	18.75	23	36
		400	400	476	476	584	914
W - Width		26.5	26.5	29	29	37.5	55
		673	673	737	737	953	1397
Weight (Welding)		2090	2090	3260	3300	4510	10,200
		948	948	1479	1497	2046	4627

Check Valves Class 900 2200 PSI @ 100°F (153.1 BAR @ 38°C)



4092Y

Standard Features

- Bodies and covers are cast steel (WCB, WC6, WC9, C12A, CF8M or CF8C).
- Pressure-seal cover.
- Y-Pattern.
- Integral Stellite seats.
- Body-guided disk piston.
- Equipped with equalizer.

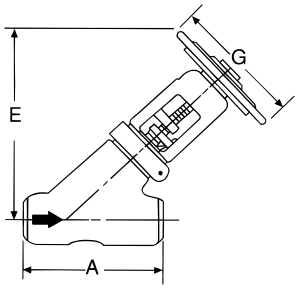
Dimensions – Flite-Flow

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 4092/4092Y, 4392Y	NPS	3	4	6	8	10	12	14	16
	DN	80	100	150	200	250	300	350	400
A_1 - End to End (Welding)		17	18.5	20	26	31	38	38	44.5
		432	470	508	660	787	914	914	1092
A_2 - Face to Face (Flanged)		22.25	23.75	30	38	44	50	51	58
		565	603	762	965	1118	1270	1295	1473
E - Center to Top		10	11	13.5	17.25	20.25	24	24	30
		254	279	343	438	514	610	610	762
H - Equalizer Clearance		9	9.3	10	12.5	16	15	15	25.75
		229	236	254	318	406	381	381	654
Weight (Welding)		130	175	300	710	1300	2050	2050	3900
		59	79	136	322	590	930	930	1769
Weight (Flanged)		190	250	520	1100	1850	2800	3200	5300
		86	113	236	499	839	1270	1452	2404

** Impactor handwheel is standard on all valves.*
Note: Size 3&4 Buttweld Class 900 Flite-Flow Valves are Class 1100. See page C42.

Stop Valves Class 1100 2715 PSI @ 100°F (187.2 BAR @ 38°C)



4014 Y

Standard Features

- Bodies and bonnets are cast steel (WCB, WC6, WC9, CF8M, or CF8C).
- Pressure-seal bonnet, OS & Y.
- Y-Pattern.
- Integral Stellite seat, disk and backseat.
- Body-guided disk piston.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.

Pressure Class 1100 (PN 190)

Fig. No.		Type	Ends	NPS (DN)
STD CL	SPL CL			
4014Y	4314Y	Flite-Flow	Buttwelding	3 (80) and 4 (100)

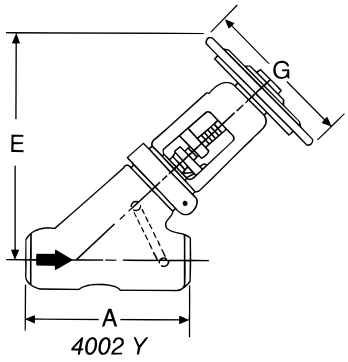
Dimensions – Flite-Flow®

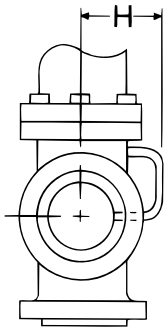
Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 4014Y, 4314Y	NPS	3	4
	DN	80	100
A - End to End (Welding)		17	18.5
		432	470
E - Center to Top (Open)		20	25
		508	635
G - Handwheel Diameter*		16	16
		406	406
Weight (Welding)		190	275
		86	125

** Impactor handwheel is standard on all valves.*

Stop-Check (Non-Return) Valves Class 1100 2715 PSI @ 100°F (187.2 BAR @ 38°C)





C

Standard Features

- Bodies and bonnets are cast steel (WCB, WC6, WC9, C12A, CF8M, or CF8C).
- Pressure-seal bonnet, OS & Y.
- Y-Pattern.
- Integral Stellite seat, disk and backseat.
- Body-guided disk piston.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.
- Equipped with equalizer.

Pressure Class 1100 (PN 190)

Fig. No.		Type	Ends	NPS (DN)
STD CL	SPL CL			
4002Y	4302Y	Flite-Flow	Buttwelding	3 (80) and 4 (100)

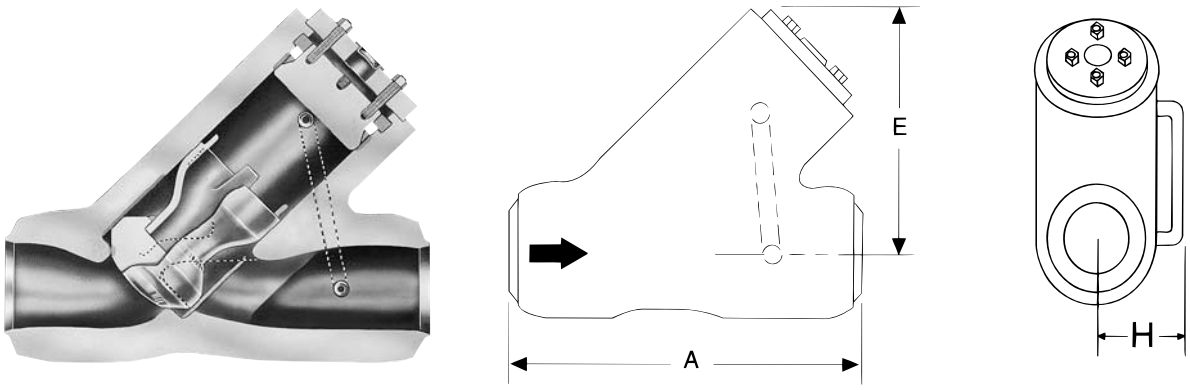
Dimensions – Flite-Flow®

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 4002Y, 4302Y	NPS	3	4
	DN	80	100
A - End to End (Welding)		17	18.5
		432	470
E - Center to Top (Open)		20	25
		508	635
G - Handwheel Diameter*		16	16
		406	406
H - Equalizer Clearance		9	10
		229	254
Weight (Welding)		190	275
		86	125

** Impactor handwheel is standard on all valves.*

Check Valves Class 1100 2715 PSI @ 100°F (187.2 BAR @ 38°C)



4092Y

Standard Features

- Bodies and covers are cast steel (WCB, WC6, WC9, C12A, CF8M, or CF8C).
- Pressure-seal cover.
- Y-Pattern.
- Integral Stellite seat and disk.
- Body-guided disk piston.
- Equipped with equalizer.

Pressure Class 1100 (PN 190)

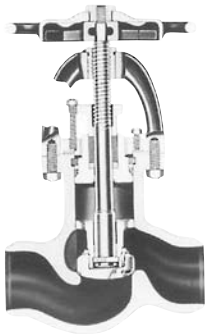
Fig. No.		Type	Ends	NPS (DN)
STD CL	SPL CL			
4092Y	4392Y	Flite-Flow	Buttwelding	3 (80) and 4 (100)

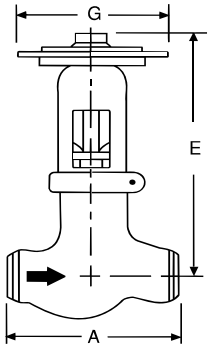
Dimensions – Flite-Flow®

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

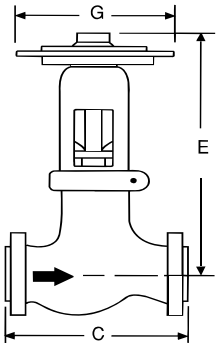
Figure No. 4092Y, 4392Y	NPS	3	4
	DN	80	100
A - End to End (Welding)		17	18.5
		432	470
E - Center to Top		10	11
		254	279
H - Equalizer Clearance		9	10
		229	254
Weight (Welding)		130	175
		59	79

Stop Valves Class 1500 3705 PSI @ 100°F (255.5 BAR @ 38°C)





7516Y



7516

C

Standard Features

- Bodies and bonnets are cast steel (WCB, WC6, WC9, C12A, CF8M or CF8C).
- Pressure-seal bonnet, OS & Y.
- Y-Pattern, globe & angle design.
- Integral Stellite seats and backseat.
- Body-guided disk piston.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.
- Yoke bushing thrust bearings size 5 and larger.

Pressure Class 1500 (PN 260)*

Fig. No.		Type	Ends	NPS (DN)
STD CL	SPL CL			
7514Y	2014Y	Flite-Flow	Buttwelding*	3 (80) thru 24 (600)
7516	—	Globe	Flanged	2½ (65) thru 14 (350)
7516Y	2016Y	Globe	Buttwelding	
7517	—	Angle	Flanged	2½ (65) thru 24 (600)
7517Y	2017Y	Angle	Buttwelding	

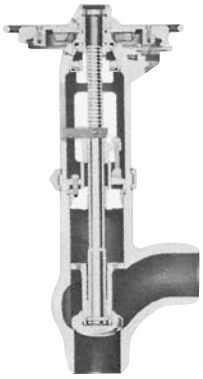
Dimensions – Globe & Angle

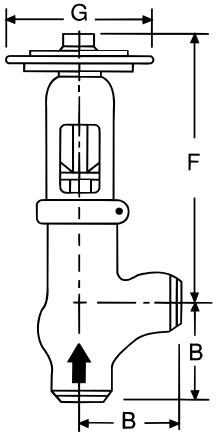
Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 7516/7516Y, 2016Y 7517/7517Y, 2017Y	NPS	2½	3	4	5	6	8	10	12	14
	DN	65	80	100	125	150	200	250	300	350
A - End to End (Welding)		13	15	18	22	24	29	33	38	40.5
		330	381	457	559	610	737	838	965	1029
B - Center to End (Welding)		6.5	7.5	9	11	12	14.5	16.5	19	20.25
		165	190	229	279	305	368	419	483	514
C - End to End (Flanged)		16.5	18.5	21.5	26.5	27.75	32.75	39	44.5	49.5
		419	470	546	673	705	832	991	1130	1257
D - Center to End (Flanged)		8.25	9.25	10.75	13.25	13.88	16.38	19.5	22.25	24.75
		210	235	273	337	353	416	495	565	629
E - Center to Top, Globe (Open)		19.25	22.5	26.25	30.63	36.5	48.75	59.5	70	70
		489	572	667	778	927	1238	1511	1778	1778
F - Center to Top, Angle (Open)		18	20.4	23.75	28.25	34.75	45.75	56	66.3	66.75
		457	518	603	718	883	1162	1422	1684	1695
G - Handwheel Diameter*		14	16	16	20	20	28	36	36	48
		356	406	406	508	508	711	914	914	1219
Weight, Globe (Flanged)		167	260	385	760	960	1800	3150	4910	5900
		76	118	175	345	435	816	1429	2227	2676
Weight, Globe (Welding)		90	175	270	525	700	1620	2600	3710	4850
		41	79	122	238	317	735	1179	1683	2200
Weight, Angle (Flanged)		153	230	330	730	865	1580	2780	4100	4850
		69	104	150	331	392	717	1261	1860	2200
Weight, Angle (Welding)		80	150	255	510	670	1250	2200	2900	3800
		36	68	116	231	304	567	998	1315	1724

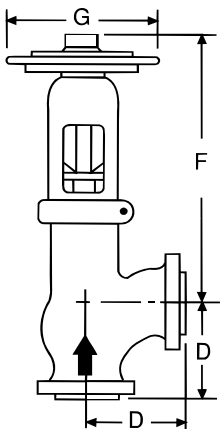
**Impactor handle is standard on size 2½ Globe and Angle valves.*
**Impactor handwheel is standard on all other size Globe and Angle valves and all Flite-Flow valves.*
**Impactogear is available on size 8 and larger Globe, Angle and Flite-Flow valves.*

Stop Valves Class 1500 3705 PSI @ 100°F (255.5 BAR @ 38°C)

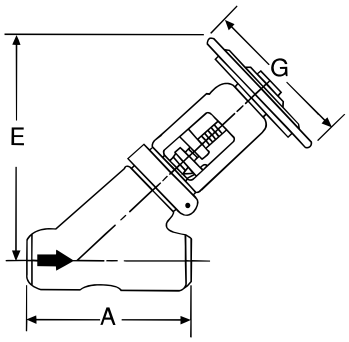




7517Y



7517



7514Y

Dimensions – Globe & Angle

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 7517/7517Y, 2017Y	NPS	16	18	20	24
	DN	400	450	500	600
B - Center to End (Welding)		23.5	23.5	28.5	35.5
		597	597	724	902
F - Center to Top, Angle		77.5	77.5	84	103
		1969	1969	2134	2616
G - Handwheel Diameter*		48	48	72	72
		1219	1219	1829	1829
Weight, Angle (Welding)		6600	6800	9500	16,200
		2994	3084	4309	7348

Dimensions – Flite-Flow®

Figure No. 7514Y/2014Y	NPS	3	4	6	8	10	12	14	16	18	20	24
	DN	80	100	150	200	250	300	350	400	450	500	600
A - End to End (Welding)		17	18.5	27.75	30	36.25	43	41	54	63	54.5	59.5
		432	470	705	762	921	1092	1041	1372	1600	1384	1511
E - Center to Top (Open)		20	25	34.25	45	53.5	60.75	60.75	78.5	78.5	96	96
		508	635	870	1143	1359	1543	1543	1994	1994	2438	2438
G - Handwheel Diameter*		16	16	20	28	36	36	36	48	48	72	72
		406	406	508	711	914	914	914	1219	1219	1829	1829
Weight (Welding)		210	300	700	1550	2725	4220	4300	7650	8390	10,500	16,800
		95	136	318	702	1236	1914	1950	3470	3806	4763	7620

**Impactor handle is standard on size 2½ Globe and Angle valves.*
**Impactor handwheel is standard on all other size Globe and Angle valves and all Flite-Flow valves.*
**Impactogear is available on size 8 and larger Globe, Angle and Flite-Flow valves.*
Note: Size 3&4 Buttweld Class 1500 Flite-Flow Valves are Class 1800. See page C53.

Stop Valves Class 1500 3705 PSI @ 100°F (255.5 BAR @ 38°C)

Standard Features

- Bodies and bonnets are cast steel (WCB, WC6, WC9,C12A, CF8M or CF8C).
- Pressure-seal bonnet, OS & Y.
- Integral Stellite seats and backseat.
- Two-piece body-guided wedge.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.
- Available in standard or venturi pattern.
- Yoke bushing thrust bearings.

C

Pressure Class 1500 (PN 260)

Fig. No.		Type	Ends	NPS (DN)
STD CL	SPL CL			
11511	—	Equiwedge Gate	Flanged*	2½ (65) thru 24 (600)
11511Y	12011Y	Equiwedge Gate	Buttwelding	
11511BY	12011BY	Venturi Pattern Equiwedge Gate	Buttwelding	8 (200) thru 28 (700)

** Optional weld-on flanges.*

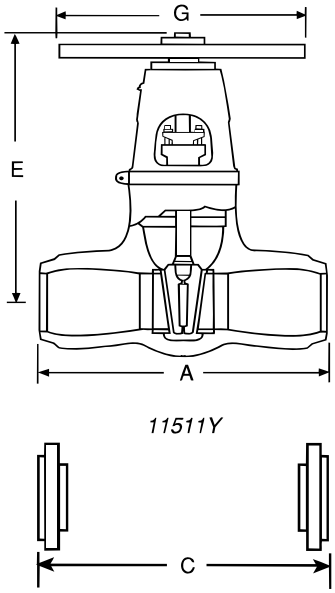
Dimensions – Equiwedge Gate

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 11511/11511Y, 12011Y	NPS	2½	3	4	6	8	10	12
	DN	65	80	100	150	200	250	300
A - End to End (Welding)		12	12	16	22	28	34	39
		305	305	406	559	711	864	991
C - Face to Face (Flanged)		16.5	18.5	21.5	27.75	32.75	39	44.5
		419	470	546	705	832	991	1130
E - Center to Top (Open)		21.25	21.25	24.25	31.5	40	48.25	55.25
		540	540	616	800	1016	1226	1403
G - Handwheel Diameter		14	14	18	24	36	36	36
		356	356	457	610	914	914	914
Weight (Welding)		125	125	190	490	675	1730	2725
		57	57	86	222	306	785	1236

Figure No. 11511/11511Y, 12011Y	NPS	14	16	18	20	22	24
	DN	350	400	450	500	550	600
A - End to End (Welding)		42	47	53	58	67	76.5
		1067	1194	1346	1473	1702	1943
C - Face to Face (Flanged)		49.5	54.5	60.5	65.5	71	76.5
		1257	1384	1537	1664	1803	1943
E - Center to Top (Open)		61	68.75	73.75	80	86.75	93.5
		1549	1746	1873	2032	2203	2375
G - Handwheel Diameter		48	48	48	60	60	60
		1219	1219	1219	1524	1524	1524
Weight (Welding)		3660	4450	6000	8000	10,500	13,000
		1660	2019	2722	3629	4763	5897

Stop Valves Class 1500 3705 PSI @ 100°F (255.5 BAR @ 38°C)



Dimensions – Equiwedge Gate Venturi Pattern

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

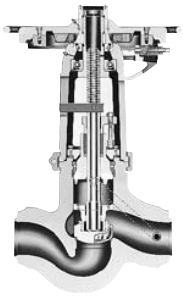
Figure No. 11511BY, 12011BY	NPS	8x6x8	10x8x10	12x10x12	14x12x14	16x14x16	18x16x18
	DN	200	250	300	350	400	450
A - End to End (Welding)		22	28	34	39	42	47
		559	711	864	991	1067	1194
E - Center to Top (Open)		31.5	40	48.25	55.25	61	68.75
		800	1016	1226	1403	1549	1746
G - Handwheel Diameter		24	36	36	36	48	48
		610	914	914	914	1219	1219
Weight (Welding)		490	1082	1690	2725	3600	4600
		222	491	767	1236	1633	2087

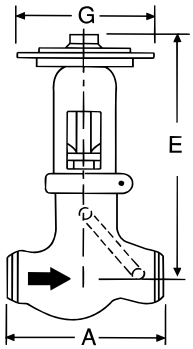
Figure No. 11511BY, 12011BY	NPS	20x18x20	22x20x22	24x20x24	26x22x26	28x24x28
	DN	500	550	600	650	700
A - End to End (Welding)		53	58	58	67	76.5
		1346	1473	1473	1702	1943
E - Center to Top (Open)		73.75	80	80	86.75	93.5
		1873	2032	2032	2203	2375
G - Handwheel Diameter		48	60	60	60	60
		1219	1524	1524	1524	1524
Weight (Welding)		6200	8200	8,500	11,000	13,500
		2812	3720	3855	4990	6124

Stop-Check (Non-Return) Valves Class 1500 3705 PSI @ 100°F (255.5 BAR @ 38°C)

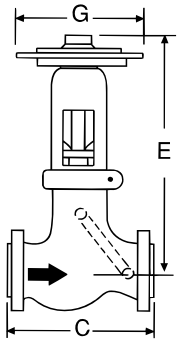
Standard Features

- Bodies and bonnets are cast steel (WCB, WC6, WC9, C12A, CF8M or CF8C).
- Pressure-seal bonnet, OS & Y.
- Y-Pattern, globe or angle design.
- Integral Stellite seats and backseat.
- Body-guided disk piston.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.
- Equipped with equalizer.
- Yoke bushing thrust bearings size 5 and larger.

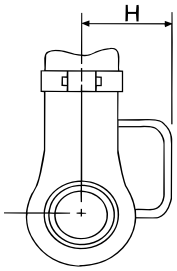




7506Y



7506



C

Pressure Class 1500 (PN 260)*

FIG. NO.		TYPE	ENDS	NPS (DN)
STD CL	SPL CL			
7502Y	2002Y	Flite-Flow	Buttwelding*	3 (80) thru 24 (600)
7506	—	Globe	Flanged	2½ (65) thru 14 (350)
7506Y	2006Y	Globe	Buttwelding	
7507	—	Angle	Flanged	2½ (65) thru 24 (600)
7507Y	2007Y	Angle	Buttwelding	

** Size 3 & 4 Buttweld Flite-Flow Valves are Class 1800. See page C54.*

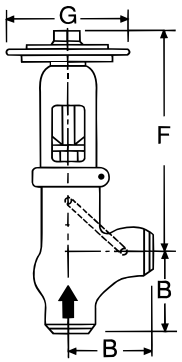
Dimensions – Globe & Angle

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

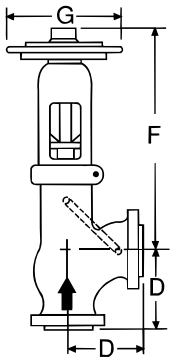
Figure No. 7506/7506Y, 7507/7507Y, 2006Y, 2007Y	NPS	2½	3	4	5	6	8	10	12	14
	DN	65	80	100	125	150	200	250	300	350
A - End to End (Welding)		13	15	18	22	24	29	33	38	40.5
		330	381	457	559	610	737	838	965	1029
B - Center to End (Welding)		6.5	7.5	9	11	12	14.5	16.5	19	20.25
		165	190	229	279	305	368	419	483	514
C - Face to Face (Flanged)		16.5	18.5	21.5	26.5	27.75	32.75	39	44.5	49.5
		419	470	546	673	705	832	991	1130	1257
D - Center to Face (Flanged)		8.25	9.25	10.75	13.25	13.88	16.38	19.5	22.25	24.75
		210	235	273	337	353	416	495	565	628
E - Center to Top, Globe		19.25	22.5	26.25	30.63	36.5	48.75	59.5	70	70
		489	572	667	778	927	1238	1511	1778	1778
F - Center to Top, Angle		18	20.38	23.75	28.25	34.75	45.75	56	66.3	66.75
		457	518	603	718	883	1162	1422	1684	1695
G - Handwheel Diameter*		14	16	16	20	20	28	36	36	48
		356	406	406	508	508	711	914	914	1219
H - Clearance for Equalizer		6.75	7.75	7.75	10	10.75	12.75	14	15	17.38
		171	197	197	254	273	324	356	381	441
Weight, Globe (Flanged)		167	270	385	770	960	1800	3150	4910	5900
		76	122	175	349	435	816	1429	2227	2676
Weight, Globe (Welding)		90	180	270	570	710	1470	2600	3710	4850
		41	82	122	258	322	667	1179	1683	2200
Weight, Angle (Flanged)		153	230	330	730	865	1580	2780	4100	4850
		69	104	149	331	392	717	1261	1860	2200
Weight, Angle (Welding)		77	160	255	510	585	1250	2200	2900	3800
		35	73	116	231	265	567	998	1315	1724

**Impactor handle is standard on size 2½ Globe and Angle valves.*
**Impactor handwheel is standard on all other size Globe and Angle valves and all Flite-Flow valves.*
**Impactogear is available on size 8 and larger Globe, Angle and Flite-Flow valves.*

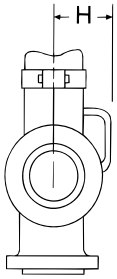
Stop-Check (Non-Return) Valves Class 1500 3705 PSI @ 100°F (255.5 BAR @ 38°C)

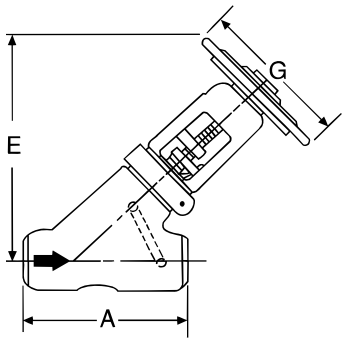


7507Y



7507





7502Y

Dimensions – Angle

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

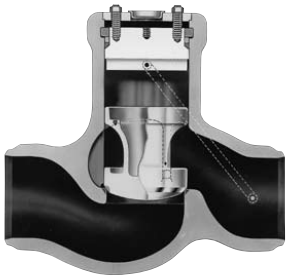
Figure No. 7507/7507Y, 2007Y	NPS	16	18	20	24
	DN	400	450	500	600
B - Center to End (Welding)		23.5	23.5	28.5	35.5
		597	597	724	902
F - Center to Top, Angle		77.5	77.5	84	103
		1969	1969	2134	2616
G - Handwheel Diameter*		48	48	72	72
		1219	1219	1829	1829
H - Clearance for Equalizer		19.5	19.5	23	28.5
		495	495	584	724
Weight, Angle (Welding)		6600	6800	9500	16,200
		2994	3084	4309	7348

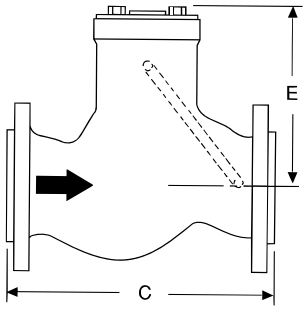
Dimensions – Flite-Flow

Figure No. 7502Y, 2002Y	NPS	3	4	6	8	10	12	14	16	18	20	24
	DN	80	100	150	200	250	300	350	400	450	500	600
A - End to End (Welding)		17	18.5	27.75	30	36.25	43	41	54	63	54.5	59.5
		432	470	705	762	921	1092	1041	1372	1600	1384	1511
E - Center to Top		20	25	34.25	45	53.5	60.75	60.75	78.5	78.5	96	96
		508	635	870	1143	1359	1543	1543	1994	1994	2438	2438
G - Handwheel Diameter*		16	16	20	28	36	36	36	48	48	72	72
		406	406	508	711	914	914	914	1219	1219	1829	1829
H - Equalizer Clearance		9	10	10.75	12.75	15.75	16.5	16.5	19.5	19.5	28	28
		229	254	273	324	400	419	419	495	495	711	711
Weight (Welding)		210	300	720	1600	2820	4260	4280	8450	8400	10,500	11,500
		95	136	327	726	1279	1932	1941	3833	3810	4763	5216

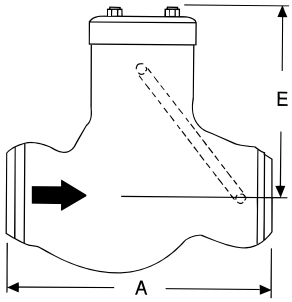
**Impactor handle is standard on size 2½ Globe and Angle valves.*
**Impactor handwheel is standard on all other size Globe and Angle valves and all Flite-Flow valves.*
**Impactogear is available on size 8 and larger Globe, Angle and Flite-Flow valves.*
Note: Size 3&4 Buttweld Class 1500 Flite-Flow Valves are Class 1800. See page C55.

Check Valves Class 1500 3705 PSI @ 100°F (255.5 BAR @ 38°C)





7594



7594Y

C

Standard Features

- Bodies and covers are cast steel (WCB, WC6, WC9, C12A, CF8M or CF8C).
- Pressure-seal cover OS & Y.
- Globe or angle design.
- Integral Stellite seats.
- Body-guided disk piston.
- Equipped with equalizer.

Pressure Class 1500 (PN 260)*

Fig. No.		Type	Ends	NPS (DN)
STD CL	SPL CL			
7594	—	Globe	Flanged	2½ (65) thru 14 (350)
7594Y	2094Y	Globe	Buttwelding	
7595	—	Angle	Flanged	2½ (65) thru 24 (600)
7595Y	2095Y	Angle	Buttwelding	
7592Y	2092Y	Flite-Flow	Buttwelding*	3 (80) thru 24 (600)

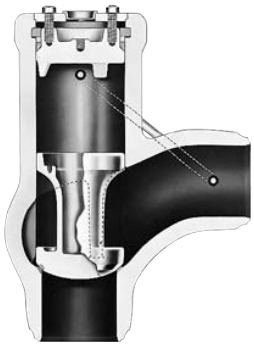
**Size 3&4 Buttweld Flite-Flow Valves are Class 1800. See page C55.*

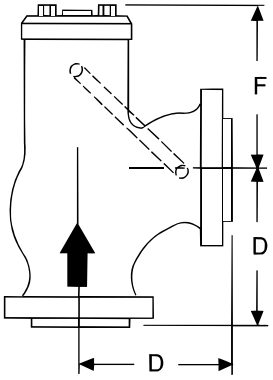
Dimensions – Globe & Angle

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

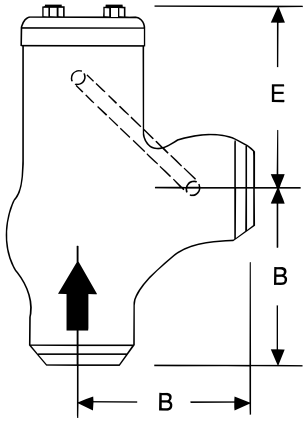
Figure No. 2094Y, 2095Y, 7594/7594Y, 7595/7595Y	NPS	2½	3	4	5	6	8	10
	DN	65	80	100	125	150	200	250
A - End to End (Welding)		13	15	18	22	24	29	33
		330	381	457	559	610	737	838
B - Center to End (Welding)		6.5	7.5	9	11	12	14.5	16.5
		165	190	229	279	305	368	419
C - Face to Face (Flanged)		16.5	18.5	21.5	26.5	27.75	32.75	39
		419	470	546	673	705	832	991
D - Center to Face (Flanged)		8.25	9.25	10.75	13.25	13.88	16.38	19.5
		210	235	273	337	353	416	495
E - Center to top, Globe		9.25	11	12	13.75	15	18.75	20.75
		235	279	305	349	381	476	527
F - Center to Top, Angle		8.25	9.25	10.25	11.25	13	15.75	17.25
		210	235	260	286	330	400	438
H - Clearance for Equalizer		6.75	7.75	7.75	10	10.75	12.75	14
		171	197	197	254	273	324	356
Weight, Globe (Flanged)		125	195	320	534	684	1390	2360
		57	88	145	242	310	631	1070
Weight, Globe (Welding)		65	115	180	308	470	960	1530
		29	52	82	140	213	435	694
Weight, Angle (Flanged)		107	186	290	350	470	1070	1060
		49	84	132	159	213	485	481
Weight, Angle (Welding)		57	94	152	260	340	680	1230
		26	43	69	118	154	308	558

Check Valves Class 1500 3705 PSI @ 100°F (255.5 BAR @ 38°C)

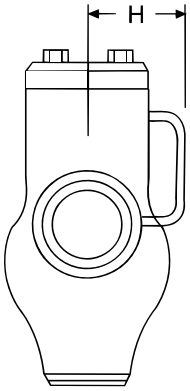




7595



7595Y

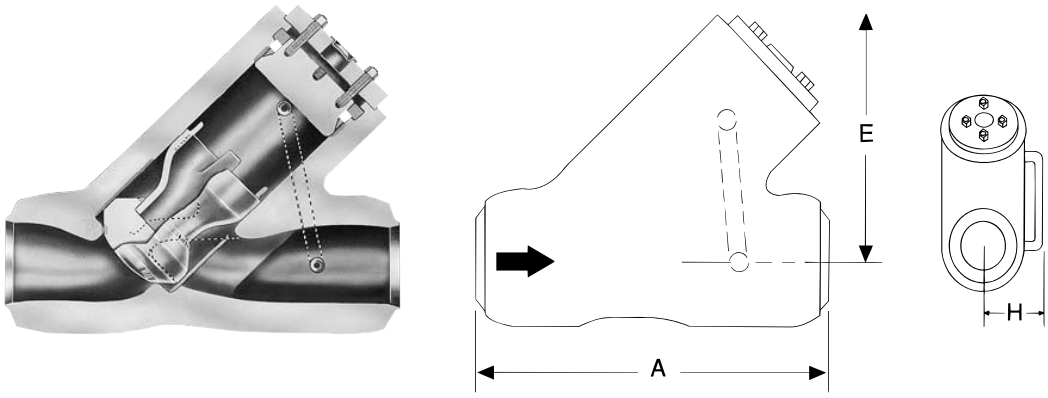


Dimensions – Globe & Angle

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 2094Y, 2095Y, 7594/7594Y, 7595/7595Y	NPS	12	14	16	18	20	24
	DN	300	350	400	450	500	600
A - End to End (Welding)		38	40.5	Valve Not Available			
		965	1029				
B - Center to End (Welding)		19	20.25	23.5	23.5	28.5	35.5
		483	514	597	597	724	902
C - Face to Face (Flanged)		44.5	49.5	Valve Not Available			
		1130	1257				
D - Center to Face (Flanged)		22.25	24.75	Available Upon Request			
		565	629				
E - Center to Top, Globe		24.25	30	Valve Not Available			
		616	762				
F - Center to Top, Angle		20.5	25	24.5	24.5	42	51
		521	635	622	622	1067	1295
H - Clearance for Equalizer		15	17.38	19.5	19.5	23	28.5
		381	441	495	495	584	724
Weight, Globe (Flanged)		3100	4400	Valve Not Available			
		1406	1995				
Weight, Globe (Welding)		2310	3300	Available Upon Request			
		1040	1497				
Weight, Angle (Flanged)		2320	3900	Valve Not Available			
		1044	1769				
Weight, Angle (Welding)		1530	2060	4700	4880	6820	11,600
		686	927	2131	2213	3093	5261

Check Valves Class 1500 3705 PSI @ 100°F (255.5 BAR @ 38°C)



7592Y

C

Standard Features

- Bodies and covers are cast steel (WCB, WC6, WC9, C12A, CF8M or CF8C).
- Pressure-seal cover.
- Y-Pattern.
- Integral Stellite seats.
- Body-guided disk piston.
- Equipped with equalizer.

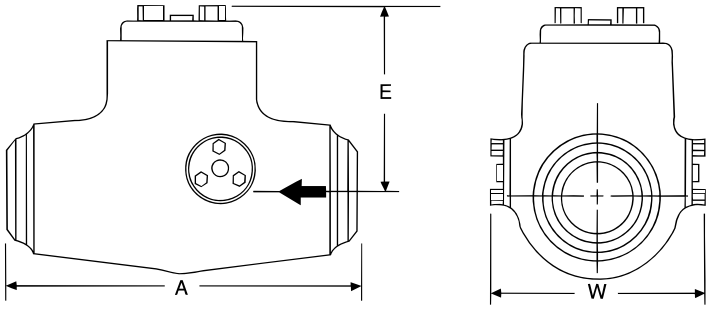
Dimensions – Flite-Flow

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 2092Y, 7592Y	NPS	3	4	6	8	10	12	14	16	18	20	24
	DN	80	100	150	200	250	300	350	400	450	500	600
A - End to End		17	18.5	27.75	30	36.25	43	41	54	63	54.5	58
		432	470	705	762	921	1092	1041	1372	1600	1384	1478
E - Center to Top		10	11	16	20.75	25.5	29.25	29.25	34	34	43	43
		254	279	406	527	648	743	743	864	864	1092	1092
H - Equalizer Clearance		9	10	10.75	12.75	15.75	16.5	16.5	19.5	19.5	28	28
		229	254	273	324	400	419	419	495	495	711	711
Weight		140	200	480	900	1750	2525	2525	5550	5850	6700	11,200
		64	91	218	408	794	1145	1145	2517	2654	3039	5080

Note: Size 3&4 Buttweld Class 1500 Flite-Flow Valves are Class 1800. See page C55.

Check Valves Class 1500 3705 PSI @ 100°F (255.5 BAR @ 38°C)



1570Y

Standard Features

- Bodies and covers are cast steel (WCB, WC6, WC9, C12A, CF8M or CF8C).
- Pressure-seal cover.
- Y-Pattern.
- Integral Stellite seats.
- Body-guided disk piston.

Pressure Class 1500 (PN 260)

Fig. No.		Type	Ends	NPS (DN)
STD CL	SPL CL			
1570Y	2070Y	Tilting Disk	Buttwelding	2½ (65) thru 24 (600)

Dimensions – Tilting Disk

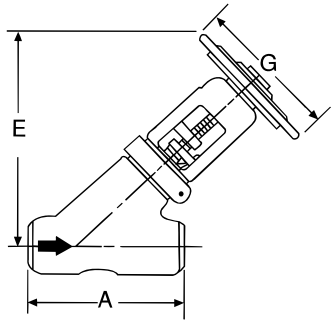
Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 1570Y, 2070Y	NPS	2½*	3*	4*	6	8	10
	DN	65	80	100	150	200	250
A - End to End (Welding)		12	12	12	22	28	34
		305	305	305	559	711	864
E - Center to Top		7.25	7.25	7.25	9.25	11	13
		184	184	184	235	279	330
W - Width		10.5	10.5	10.5	16.5	16.75	20.5
		267	267	267	419	425	521
Weight (Welding)		90	90	95	460	600	1005
		41	41	43	209	272	456

** Spiral wound hinge pin gaskets; hinge pin torsion spring not required.*

Figure No. 1570Y	NPS	12	14	16	18	20	24
	DN	300	350	400	450	500	600
A - End to End (Welding)		42	40.5	47	53	51.5	58
		1067	1029	1194	1346	1308	1473
E - Center to Top		15.75	15.75	18.75	18.75	23	36
		400	400	476	476	584	914
W - Width		26.5	26.5	29	29	37.5	55
		673	673	737	737	953	1397
Weight (Welding)		1520	1550	3280	3590	4600	10,300
		689	703	1487	1628	2087	4672

Stop Valves Class 1800 4445 PSI @ 100°F (306.6 BAR @ 38°C)



7514Y

C

Standard Features

- Bodies and bonnets are cast steel (WCB, WC6, WC9, C12A, CF8M or CF8C).
- Pressure-seal cover, OS & Y.
- Y-Pattern.
- Integral Stellite seats.
- Body-guided disk piston.
- 13% chromium stainless steel stem.

Pressure Class 1800 (PN 310)

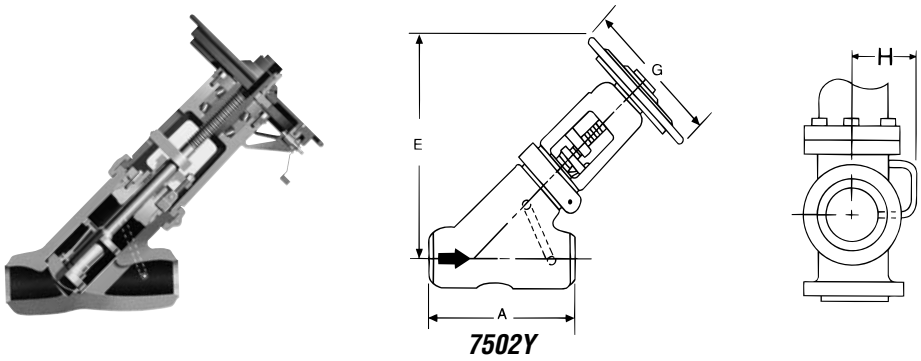
Fig. No.		Type	Ends	NPS (DN)
STD CL	SPL CL			
7514Y	2014Y	Flite-Flow	Buttwelding	3 (80) and 4 (100)

Dimensions – Flite-Flow®

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 7514Y, 2014Y	NPS	3	4
	DN	80	100
A - End to End		17	18.5
		432	470
E - Center to Top (Open)		20	25
		508	635
G - Handwheel Diameter*		16	16
		406	406
Weight (Welding)		210	300
		95	136

Stop-Check (Non-Return) Valves Class 1800 4445 PSI @ 100°F (306.6 BAR @ 38°C)



7502Y

Standard Features

- Bodies and bonnets are cast steel (WCB, WC6, WC9, C12A, CF8M or CF8C).
- Pressure-seal bonnet, OS&Y.
- Y-Pattern.
- Integral Stellite seats.
- Body-guided disk piston.
- Equipped with equalizer.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.

Pressure Class 1800 (PN 310)

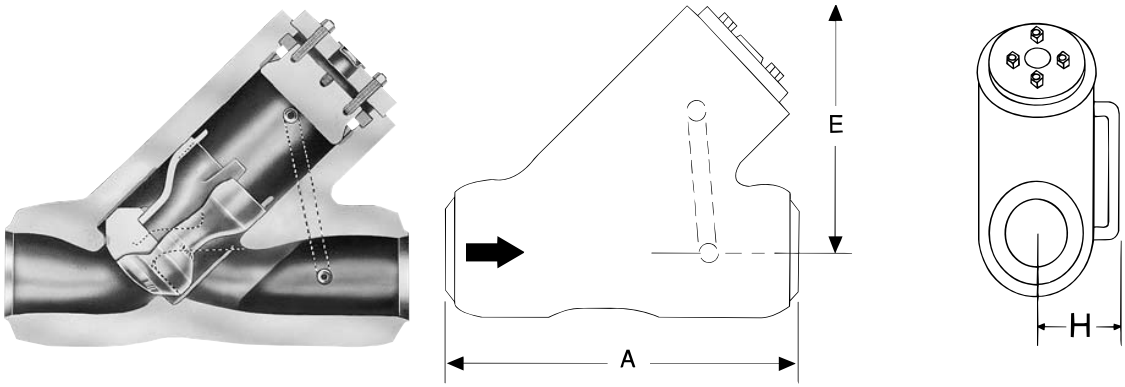
Fig. No.		Type	Ends	NPS (DN)
STD CL	SPL CL			
7502Y	2002Y	Flite-Flow	Buttwelding	3 (80) and 4 (100)

Dimensions – Flite-Flow®

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 7502Y, 2002Y	NPS	3	4
	DN	80	100
A - End to End		17	18.5
		432	470
E - Center to Top (Open)		20	25
		508	635
G - Handwheel Diameter*		16	16
		406	406
H - Equalizer Clearance		9	10
		229	254
Weight (Welding)		210	300
		95	136

Check Valves Class 1800 4445 PSI @ 100°F (306.6 BAR @ 38°C)



7592Y

Standard Features

- Bodies and covers are cast steel (WCB, WC6, WC9, C12A, CF8M, or CF8C).
- Pressure-seal cover.
- Y-Pattern.
- Integral Stellite seat and disk.
- Body-guided disk piston.
- Equipped with equalizer.

Pressure Class 1800 (PN 310)

Fig. No.		Type	Ends	NPS (DN)
STD CL	SPL CL			
7592Y	2092Y	Flite-Flow	Buttwelding	3 (80) and 4 (100)

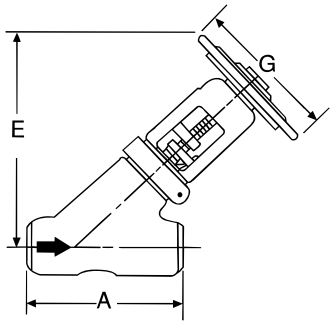
Dimensions – Flite-Flow®

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 7592Y, 2092Y	NPS	3	4
	DN	80	100
A - End to End		17	18.5
		432	470
E - Center to Top (Open)		10	11
		254	279
H - Equalizer Clearance		9	10
		229	254
Weight (Welding)		140	200
		64	91

Stop Valves Class 2000 4940 PSI @ 100°F (340.7 BAR @ 38°C)

2214Y



2214Y

Standard Features

- Bodies and bonnets are cast steel (WCB, WC6, WC9, C12A, CF8M or CF8C).
- Pressure-seal cover, OS & Y.
- Y-Pattern.
- Integral Stellite seat, disk and backseat.
- Body-guided disk piston.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.

Pressure Class 2000 (PN 340)

Fig. No.		Type	Ends	NPS (DN)
STD CL	SPL CL			
2214Y	3214Y	Flite-Flow	Buttwelding	12 (300) and 14 (350)

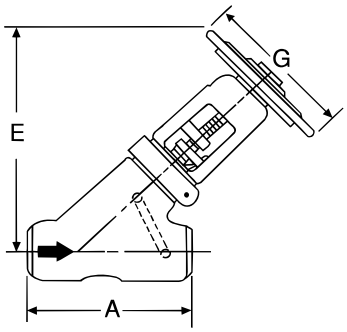
Dimensions – Flite-Flow®

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 2214Y, 3214Y	NPS	12	14
	DN	300	350
A - End to End		39	39
		991	991
E - Center to Top (Open)		58	58
		1473	1473
G - Handwheel Diameter*		48	48
		1219	1219
Weight (Welding)		4300	4300
		1950	1950

Stop-Check (Non-Return) Valves Class 2000 4940 PSI @ 100°F (340.7 BAR @ 38°C)

2202Y



2202Y

C

Standard Features

- Bodies and bonnets are cast steel (WCB, WC6, WC9, C12A, CF8M, or CF8C).
- Pressure-seal bonnet, OS & Y.
- Y-Pattern.
- Integral Stellite seat, disk and backseat.
- Body-guided disk piston.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.
- Equipped with equalizer.

Pressure Class 2000 (PN 340)

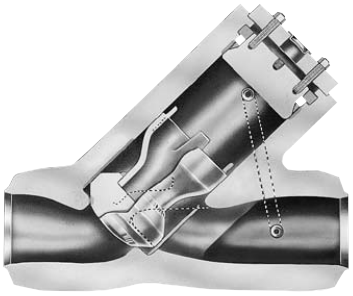
Fig. No.		Type	Ends	NPS (DN)
STD CL	SPL CL			
2202Y	3202Y	Flite-Flow	Buttwelding	12 (300) and 14 (350)

Dimensions – Flite-Flow®

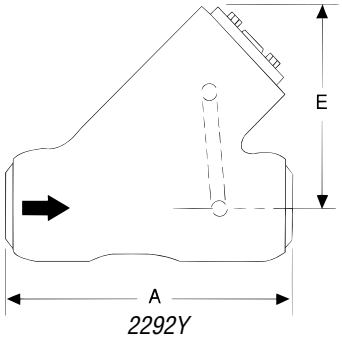
Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 2202Y, 3202Y	NPS	12	14
	DN	300	350
A - End to End		39	39
		991	991
E - Center to Top (Open)		58	58
		1473	1473
G - Handwheel Diameter*		48	48
		1219	1219
H - Equalizer Clearance		18	18
		457	457
Weight		4300	4300
		1950	1950

Check Valves Class 2000 4940 PSI @ 100°F (340.7 BAR @ 38°C)



2292Y



2292Y

Standard Features

- Bodies and covers are cast steel (WCB, WC6, WC9, C12A, CF8M, or CF8C).
- Pressure-seal cover.
- Y-Pattern.
- Integral Stellite seat and disk.
- Body-guided disk piston.
- Equipped with equalizer.

Pressure Class 2000 (PN 340)

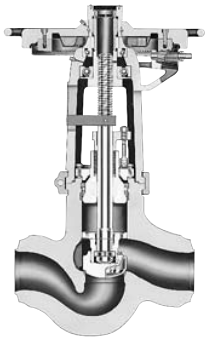
Fig. No.		Type	Ends	NPS (DN)
STD CL	SPL CL			
2292Y	3292Y	Flite-Flow	Buttwelding	12 (300) and 14 (350)

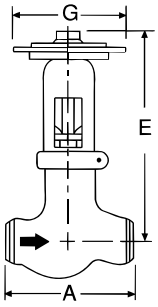
Dimensions – Flite-Flow®

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

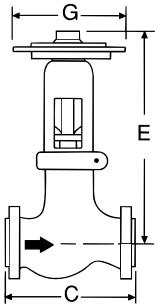
Figure No. 2292Y, 3292Y	NPS	12	14
	DN	300	350
A - End to End		39	39
		991	991
E - Center to Top		24	24
		610	610
H - Equalizer Clearance		18	18
		457	457
Weight		2900	2900
		1315	1315

Stop Valves Class 2500 6170 PSI @ 100°F (425.5 BAR @ 38°C)





3916Y



3916

C

Standard Features

- Bodies and bonnets are cast steel (WCB, WC6, WC9, C12A, CF8M or CF8C).
- Pressure-seal bonnet, OS & Y.
- Vertical, Y-Pattern & angle design.
- Integral Stellite seat, disk and backseat.
- Body-guided disk piston.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.
- Yoke bushing thrust bearings size 5 and larger.

Pressure Class 2500 (PN 420)*

Fig. No.		Type	Ends	NPS (DN)
STD CL	SPL CL			
3914Y	4414Y	Flite-Flow	Buttwelding*	3 (80) thru 24 (600)
3916	—	Globe	Flanged	2½ (65) thru 12 (300)
3916Y	4416Y	Globe	Buttwelding	
3917	—	Angle	Flanged*	2½ (65) thru 24 (600)
3917Y	4417Y	Angle	Buttwelding	

** Flanges to size 12 only.*

** Size 3 & 4 Buttweld Flite-Flow Valves are Class 2900. See page C65.*

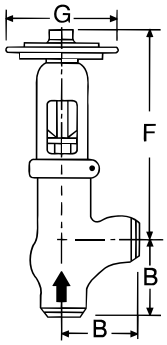
Dimensions - Globe & Angle

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

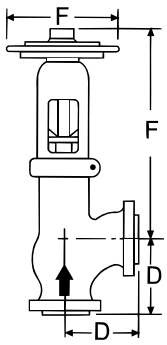
Figure No. 3916/3916Y, 3917/3917Y, 4416Y/4417Y	NPS	2½	3	4	5	6	8	10	12
	DN	65	80	100	125	150	200	250	300
A1 - End to End, (Welding)		13	15	18	22	24	29	33	38
		330	381	457	559	610	737	838	965
B - Center to End, (Welding)		6.5	7.5	9	11	12	14.5	16.5	19
		165	190	228	279	305	368	419	483
C - Face to Face, (Flanged)		20	22.75	26.5	31.25	36	40.25	50	56
		508	578	673	794	914	1022	1270	1422
D - Center to Face, Flanged		10	11.38	13.25	15.63	18	20.13	25	28
		254	289	337	397	457	511	635	711
E - Center to Top, Globe (Open)		19.63	22.38	25.25	28.25	37.63	47.25	55.25	72.5
		499	568	572	718	955	1200	1403	1842
F - Center to Top, Angle (Open)		18	20	22.5	25	33.75	42.25	48.75	69.5
		457	508	641	635	857	1073	1238	1765
G - Handwheel/Handle Diameter*		14	16	16	20	28	28	36	48
		356	406	406	508	711	711	914	1219
Weight, Globe (Flanged)		158	330	442	890	1586	2370	3160	5050
		72	150	200	404	719	1075	1433	2290
Weight, Globe (Welding)		95	165	255	560	900	1610	2440	3400
		43	75	115	254	408	730	1107	1542
Weight, Angle (Flanged)		150	255	490	830	1466	2120	3320	4650
		68	115	222	376	665	961	1505	2109
Weight, Angle (Welding)		82	148	220	465	780	1450	2110	3000
		37	67	100	211	354	657	957	1360

**Impactor handle is standard on size 2½ Globe and Angle valves.*
**Impactor handwheel is standard on all other size Globe, Angle and all Flite-Flow valves.*
**Impactogear is available on size 6 and larger valves.*

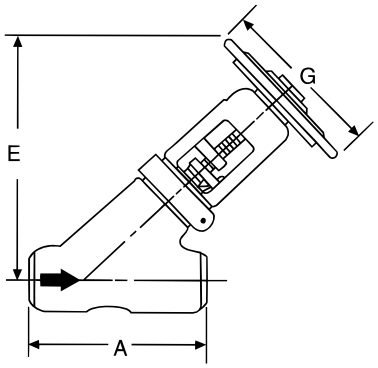
Stop Valves Class 2500 6170 PSI @ 100°F (425.5 BAR @ 38°C)



3917Y



3917



3914Y

Dimensions – Angle

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 3917/3917Y, 4417Y	NPS	14	16	18	20	22	24
	DN	350	400	450	500	550	600
B - Center to End (Welding)		20.25	20.25	23.5	23.5	26	28.5
		514	514	597	597	660	724
F - Center to Top, Angle (Open)		67	67	92	92	89.5	96
		1701	1701	2300	2300	2238	2438
G - Handwheel Diameter*		48	48	72	72	72	72
		1219	1219	1829	1829	1829	1829
Weight, Angle (Welding)		5350	5410	10,460	10,540	14,350	18,200
		2427	2454	4745	4781	6509	8255

Dimensions – Flite-Flow

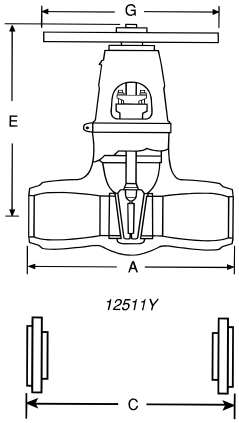
Figure No. 3914Y, 4414Y	NPS	3	4	6	8	10	12	14	16	18	20	24
	DN	80	100	150	200	250	300	350	400	450	500	600
A - End to End (Welding)		17	18.5	24	30	36	41	48.75	48.75	58	58	68
		432	470	610	762	914	1041	1238	1238	1473	1473	1727
E - Center to Top (Open)		20	25	37.5	41.75	50	65	69	69	93.8	93.8	113
		508	635	953	1060	1270	1651	1753	1753	2382	2382	2870
G - Handwheel Diameter*		16	16	28	28	36	48	48	48	72	72	72
		406	406	711	711	914	1219	1219	1219	1829	1829	1829
Weight (Welding)		230	325	875	1610	2750	4600	6990	7010	12,700	12,790	16,570
		104	147	397	730	1247	2087	3171	3180	5761	5802	7516

**Impactor handle is standard on size 2-½ Globe and Angle valves.*
**Impactor handwheel is standard on all other size Globe, Angle and all Flite-Flow valves.*
**Impactogear is available on size 6 and larger valves.*
Note: Size 3&4 Buttweld Class 2500 Flite-Flow Valves are Class 2900. See page C65.

Stop Valves Class 2500 6170 PSI @ 100°F (425.5 BAR @ 38°C)

Standard Features

- Bodies and bonnets are cast steel (WCB, WC6, WC9, C12A, CF8M or CF8C).
- Pressure-seal bonnet, OS & Y.
- Integral Stellite seat and backseat.
- Two-piece body-guided wedge.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.
- Available in standard or venturi pattern.
- Yoke bushing thrust bearings.



C

Pressure Class 2500 (PN 420)

Fig. No.		Type	Ends	NPS (DN)
STD CL	SPL CL			
12511	—	Equiwedge Gate	Flanged*	2-½ (65) thru 24 (600)
12511Y	14411Y	Equiwedge Gate	Buttwelding	
12511BY	14411BY	Venturi Pattern Equiwedge Gate	Buttwelding	8 (200) thru 28 (700)

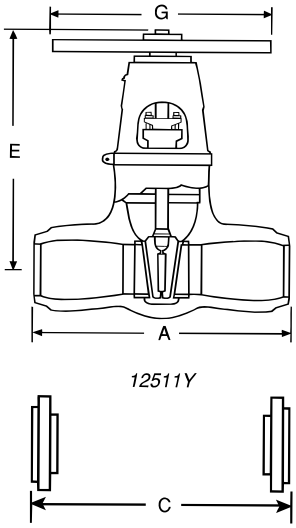
Dimensions – Equiwedge Gate

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 12511/12511Y, 14411Y	NPS	2-½	3	4	6	8	10	12
	DN	65	80	100	150	200	250	300
A - End to End (Welding)		13	14.5	18	24	30	36	41
		330	368	457	610	762	914	1041
C - Face to Face (Flanged)		20	22.75	26.5	36	40.25	50	56
		508	578	673	914	1022	1270	1422
E - Center to Top (Open)		21.5	21.5	22	31.75	36.75	49.25	56
		546	546	559	806	933	1251	1422
G - Handwheel/Handle Diameter		24	24	24	30	36	36	48
		610	610	610	762	914	914	1219
Weight (Welding)		126	126	318	715	1245	2130	3557
		57	57	144	324	565	966	1613

Figure No. 12511/12511Y, 14411Y	NPS	14	16	18	20	22	24
	DN	350	400	450	500	550	600
A - End to End (Welding)		44	49	55	62	64	66
		1118	1245	1397	1575	1626	1676
C - Face to Face (Flanged)		N/A					
E - Center to Top (Open)		56.75	66	71	75.5	87.25	88.75
		1441	1676	1803	1918	2116	2254
G - Handwheel Diameter		48	48	60	60	72	72
		1219	1219	1524	1524	1829	1829
Weight (Welding)		5167	6600	8600	11,400	13,000	15,000
		2349	2994	3901	5171	5897	6804

Stop Valves Class 2500 6170 PSI @ 100°F (425.5 BAR @ 38°C)



Dimensions – Equiwedge Gate Venturi Pattern

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

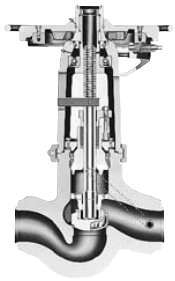
Figure No. 12511BY/14411BY	NPS	8x6x8	10x8x10	12x10x12	14x12x14	16x14x16
	DN	200	250	300	350	400
A - End to End (Welding)		24	30	36	41	44
		610	762	914	1041	1118
E - Center to Top (Open)		31.75	36.75	49.25	56	56.75
		806	933	1251	1422	1441
G - Handwheel Diameter		30	36	36	48	48
		762	914	914	1219	1219
Weight (Welding)		715	1245	2165	3557	5167
		325	566	984	1617	2349

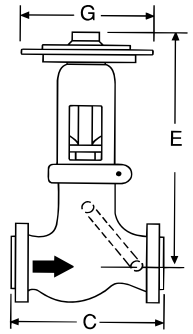
Figure No. 12511BY/14411BY	NPS	18x16x18	20x18x20	22x20x22	24x20x24	26x22x26	28x24x28
	DN	450	500	550	600	650	700
A - End to End (Welding)		49	55	62	62	64	66
		1245	1397	1575	1575	1626	1676
E - Center to Top (Open)		66	71	75.5	75.5	87.25	88.75
		1676	1803	1918	1918	2116	2254
G - Handwheel Diameter		48	60	60	60	72	72
		1219	1524	1524	1524	1829	1829
Weight (Welding)		6600	8600	11,400	13,000	15,000	15,000
		2994	3901	5171	5900	6800	6800

Stop-Check (Non-Return) Valves Class 2500 6170 PSI @ 100°F (425.5 BAR @ 38°C)

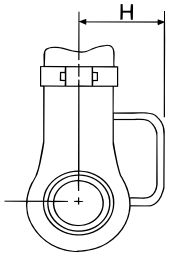
Standard Features

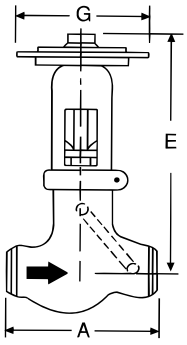
- Bodies and bonnets are cast steel (WCB, WC6, WC9, C12A, CF8M or CF8C).
- Pressure-seal bonnet, OS & Y.
- Y-Pattern, globe & angle design.
- Integral Stellite seat, disk and backseat.
- Body-guided disk piston.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.
- Equipped with equalizer.
- Yoke bushing thrust bearings size 5 and larger.





3906





3906Y

C

Pressure Class 2500 (PN 420)*

Fig. No.		Type	Ends	NPS (DN)
STD CL	SPL CL			
3902Y	4402Y	Flite-Flow	Buttwelding*	3 (80) thru 24 (600)
3906	—	Globe	Flanged	2-½ (65) thru 12 (300)
3906Y	4406Y	Globe	Buttwelding	
3907	—	Angle	Flanged*	2-½ (65) thru 24 (600)
3907Y	4407Y	Angle	Buttwelding	

** Flanges to size 12 only.*

** Size 3 & 4 Buttweld Flite-Flow Valves are Class 2900. See page C66.*

Dimensions – Globe & Angle

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

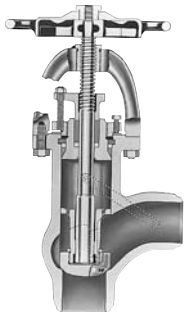
Figure No. 3906/3906Y, 3907/3907Y, 4406Y, 4407Y	NPS	2-½	3	4	5	6	8	10	12
	DN	65	80	100	125	150	200	250	300
A - End to End (Welding)		13	15	18	22	24	29	33	38
		330	381	457	559	610	737	838	965
B - Center to End (Welding)		6.5	7.5	9	11	12	14.5	16.5	19
		165	190	229	279	305	368	419	483
C - Face to Face,(Flanged)		20	22.75	26.5	31.25	36	40.25	50	56
		508	578	673	794	914	1022	1270	1422
D - Center to Face (Flanged)		10	11.38	13.25	15.63	18	20.13	25	28
		254	289	337	397	457	511	635	711
E - Center to Top, Globe		19.63	22.38	25.25	28.25	37.63	47.25	55.25	72.5
		499	568	641	718	956	1200	1403	1842
F - Center to Top, Angle		18	20	22.5	25	33.75	42.25	48.75	69.5
		457	508	572	635	857	1073	1238	1765
G - Handwheel/Handle Diameter*		14	16	16	20	28	28	36	48
		356	406	406	508	711	711	914	1219
H - Clearance for Equalizer		7.25	8	8.5	8.5	11	11.5	14	16
		184	203	216	216	279	292	356	406
Weight, Globe (Flanged)		160	350	520	900	1600	2400	3200	5100
		73	159	236	408	726	1089	1452	2313
Weight, Globe (Welding)		95	169	263	570	915	1730	2480	3450
		43	77	119	259	415	785	1125	1565
Weight, Angle (Flanged)		152	260	420	840	1480	2150	3360	4700
		69	118	191	381	671	975	1524	2132
Weight, Angle (Welding)		84	150	228	475	795	1480	2140	3050
		38	68	103	215	361	671	971	1383

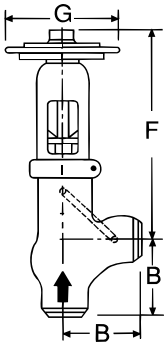
**Impactor handle is standard on size 2-½ Globe and Angle valves.*

**Impactor handwheel is standard on all other size Globe, Angle and all Flite-Flow valves.*

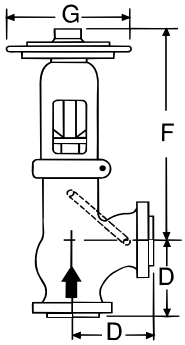
**Impactogear is available on size 6 and larger valves.*

Stop-Check (Non-Return) Valves Class 2500 6170 PSI @ 100°F (425.5 BAR @ 38°C)

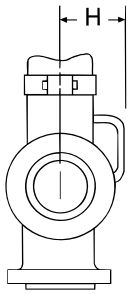


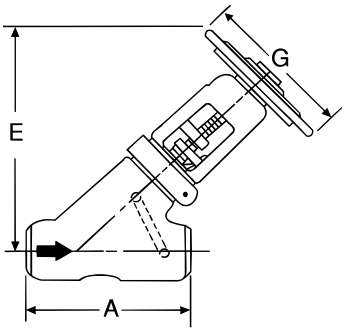


3907Y



3907





3902Y

Dimensions – Angle

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

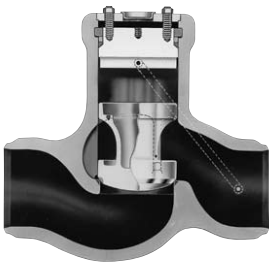
Figure No. 3907/3907Y, 4407Y	NPS	14	16	18	20	22	24
	DN	350	400	450	500	550	600
B - Center to End (Welding)		20.25	20.25	23.5	23.5	26	28.5
		514	514	597	597	660	724
F - Center to Top, Angle		67	67	92	92	89.5	96
		1702	1702	2337	2337	2273	2438
G - Handwheel Diameter*		48	48	72	72	72	72
		1219	1219	1829	1829	1829	1829
H - Clearance for Equalizer		18.5	18.5	22	22	23	24
		470	470	559	559	584	610
Weight, Angle (Welding)		5390	5450	10,540	10,620	14,470	18,340
		2445	2472	4781	4817	6564	8319

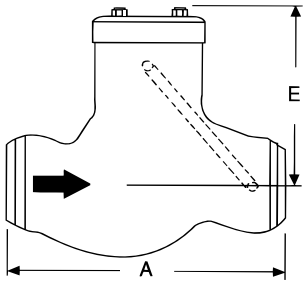
Dimensions – Flite-Flow

Figure No. 3902Y, 4402Y	NPS	3	4	6	8	10	12	14	16	18	20	24
	DN	80	100	150	200	250	300	350	400	450	500	600
A - End to End (Welding)		17	18.5	24	30	36	41	48.75	48.75	58	58	68
		432	470	610	762	914	1041	1238	1238	1473	1473	1727
E - Center to Top		20	25	37.5	41.75	50	65	69	69	93.8	93.8	113
		508	635	953	1060	1290	1651	1753	1753	2383	2383	2870
G - Handwheel Diameter*		16	16	28	28	36	48	48	48	72	72	72
		408	406	711	711	914	1219	1219	1219	1829	1829	1829
H - Equalizer Clearance		9	10	11	11.5	15.75	17.5	20.25	20.25	23.5	23.5	32
		229	254	279	292	400	445	514	514	591	591	813
Weight (Welding)		230	325	890	1610	2750	4600	6990	7010	12,700	12,790	16,570
		104	147	404	730	1247	2087	3170	3179	5760	5802	7516

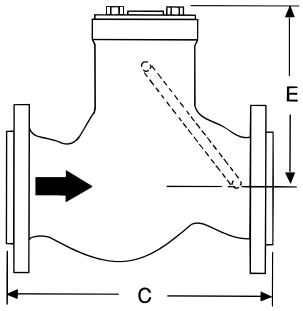
** Impactor handwheel is standard on all valves.*
** Impactogear is available on size 6 and larger valves.*
Note: Size 3&4 Buttweld Class 2500 Flite-Flow Valves are Class 2900. See page C66.

Check Valves Class 2500 6170 PSI @ 100°F (425.5 BAR @ 38°C)





3994Y



3994

C

Standard Features

- Bodies and covers are cast steel (WCB, WC6, WC9, C12A, CF8M or CF8C).
- Pressure-seal cover.
- Integral Stellite seats.
- Body-guided disk piston.
- Equipped with equalizer.

Pressure Class 2500 (PN 420)*

Fig. No.		Type	Ends	NPS (DN)
STD CL	SPL CL			
3992Y	4492Y	Flite-Flow	Buttwelding*	3 (80) thru 24 (600)
3994	—	Globe	Flanged	2-½ (65) thru 12 (300)
3994Y	4494Y	Globe	Buttwelding	
3995	—	Angle	Flanged*	2-½ (65) thru 24 (600)
3995Y	4495Y	Angle	Buttwelding	
2570Y	4470Y	Tilting Disk	Buttwelding	2-½ (65) thru 24 (600)

**Flanges to size 12 only.*

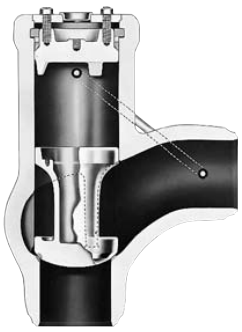
**Size 3&4 Buttweld Flite-Flow Valves are Class 2900. See page C67.*

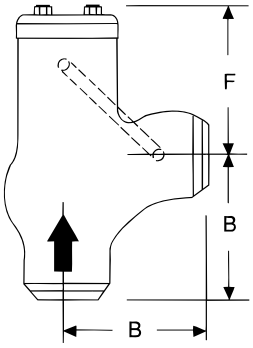
Dimensions – Globe & Angle

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

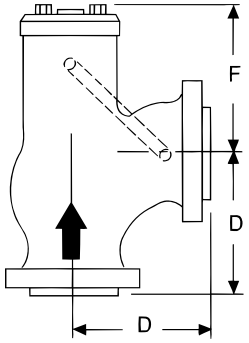
Figure No. 3994/3994Y, 3995/3995Y, 4494Y,4495Y	NPS	2-½	3	4	5	6	8	10	12
	DN	65	80	100	125	150	200	250	300
A - End to End (Welding)		13	15	18	22	24	29	33	38
		330	381	457	559	610	737	838	965
B - Center to End (Welding)		6.5	7.5	9	11	12	14.5	16.5	19
		165	190	229	279	305	368	419	483
C - Face to Face (Flanged)		20	22.75	26.5	31.25	36	40.5	50	56
		508	578	673	794	914	1022	1270	1422
D - Center to Face (Flanged)		10	11.38	13.25	15.63	18	20.13	25	28
		254	289	337	397	457	511	635	711
E - Center to Top, Globe		9.25	10.38	11.25	12.25	14	17	19.25	23
		235	264	286	311	356	432	489	584
F - Center to top, Angle		7.63	8.38	8.5	9	10.25	12	12.75	20
		194	213	216	229	260	305	324	508
H - Clearance for Equalizer		7.25	8	8.5	8.5	11	11.5	14	16
		184	203	216	216	279	292	356	406
Weight, Globe (Flanged)		120	200	290	670	900	1760	2920	4070
		54	91	131	304	408	798	1324	1846
Weight, Globe (Welding)		65	108	185	318	490	1010	1690	2420
		29	49	84	144	222	458	766	1098
Weight, Angle (Flanged)		112	185	275	610	820	1610	2520	3860
		51	84	124	277	372	730	1143	1751
Weight, Angle (Welding)		57	92	155	263	372	827	1284	2210
		26	42	70	119	169	375	582	1002

Check Valves Class 2500 6170 PSI @ 100°F (425.5 BAR @ 38°C)

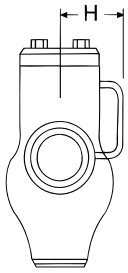


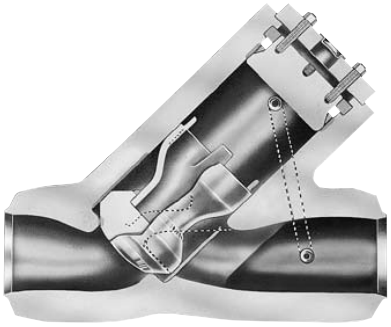


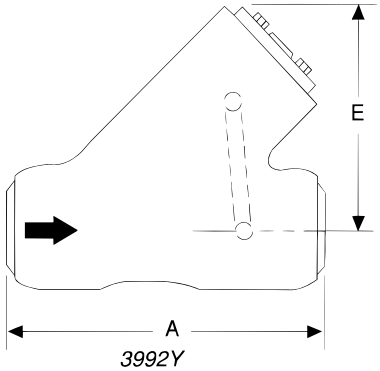
3995Y



3995







3992Y

Dimensions – Angle

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

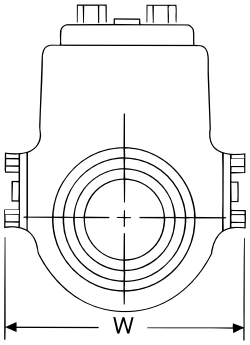
Figure No. 3995/3995Y, 4495Y	NPS	14	16	18	20	22	24
	DN	350	400	450	500	550	600
B - Center to End (Welding)		20.25	20.25	23.5	23.5	26	28.5
		514	514	597	597	660	724
F - Center to Top, Angle		21.75	21.75	26.5	26.5	30.5	33
		552	552	673	673	775	838
H - Clearance for Equalizer		18.5	18.5	22	22	23	24
		470	470	559	559	584	610
Weight, Angle (Welding)		3210	3270	5570	5650	8100	10,550
		1456	1483	2527	2562	3674	4785

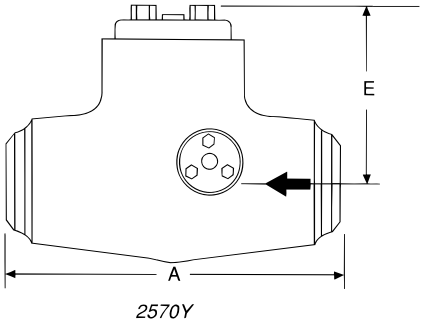
Dimensions – Flite-Flow

Figure No. 3992Y, 4492Y	NPS	3	4	6	8	10	12	14	16	18	20	24
	DN	80	100	150	200	250	300	350	400	450	500	600
A - End to End (Welding)		17	18.5	24	30	36	41	48.75	48.75	58	58	68
		432	470	610	762	914	1041	1238	1238	1473	1473	1727
E - Center to Top		10	11	14.25	18.75	22.25	26.75	28.5	28.5	36.5	36.5	54
		254	279	362	476	565	679	724	724	927	927	1372
H - Equalizer Clearance		9	10	11	11.5	15.75	17.5	20.25	20.25	23.5	23.5	32
		229	254	279	292	400	445	514	514	591	591	813
Weight (Welding)		150	225	510	950	1950	2730	4300	4300	8100	8190	12,620
		68	102	230	431	884	1238	1950	1950	3674	3715	5724

Note: Size 3&4 Buttweld Class 2500 Flite-Flow Valves are Class 2900. See page C67.

Check Valves Class 2500 6170 PSI @ 100°F (425.5 BAR @ 38°C)





C

Standard Features

- Bodies and covers are cast steel (WCB, WC6, WC9, C12A, CF8M or CF8C).
- Pressure-seal cover.
- Integral Stellite seats.

Dimensions – Tilting Disk

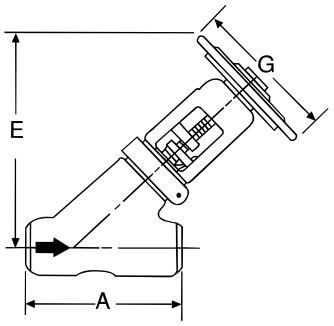
Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 2570Y, 4470Y	NPS	2-½*	3*	4*	6	8	10
	DN	65	80	100	150	200	250
A - End to End (Welding)		12	12	12	24	30	36
		305	305	305	610	762	914
E - Center to Top		7.25	7.25	7.25	9.5	10.5	12.5
		184	184	184	241	267	318
W - Width		10.5	10.5	10.5	15	18	20
		267	267	267	381	457	508
Weight (Welding)		95	95	95	435	800	1180
		43	43	43	197	363	535

**Spiral wound hinge pin gaskets; hinge pin torsion spring not required.*

Figure No. 2570Y, 4470Y	NPS	12	14	16	18	20	24
	DN	300	350	400	450	500	600
A - End to End (Welding)		41	44	44	55	55	63
		1041	1118	1118	1397	1397	1600
E - Center to Top		15.75	17.75	17.75	23.75	23.75	31
		400	451	451	603	603	787
W - Width		24.25	28.5	28.5	35	35	45
		616	724	724	889	889	1143
Weight (Welding)		2250	3200	3200	5580	5690	13,200
		1021	1452	1452	2531	2581	5988

Stop Valves Class 2900 7160 PSI @ 100°F (493.8 BAR @ 38°C)



3914Y

Standard Features

- Bodies and bonnets are cast steel (WCB, WC6, WC9, C12A, CF8M, or CF8C).
- Pressure-seal bonnet, OS & Y.
- Y-Pattern.
- Integral Stellite seat, disk and backseat.
- Body-guided disk piston.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.

Pressure Class 2900 (PN 490)

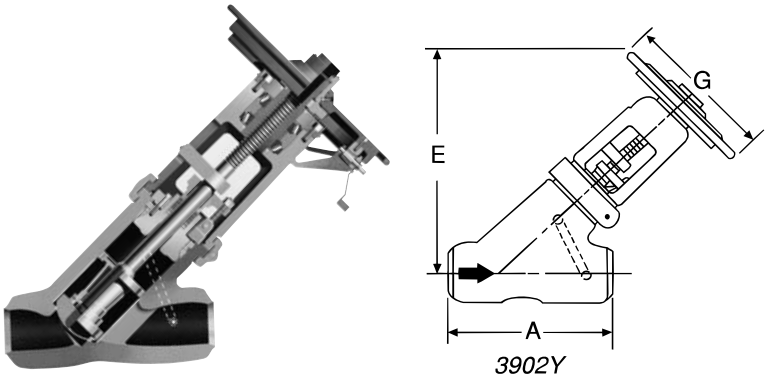
Fig. No.		Type	Ends	NPS (DN)
STD CL	SPL CL			
3914Y	4414Y	Flite-Flow	Buttwelding	3 (80) and 4 (100)

Dimensions – Flite-Flow®

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 3914Y, 4414Y	NPS	3	4
	DN	80	100
A - End to End		17	18.5
		432	470
E - Center to Top (Open)		20	25
		508	635
G - Handwheel Diameter		16	16
		406	406
Weight		230	325
		104	147

Stop-Check (Non-Return) Valves Class 2900 7160 PSI @ 100°F (493.8 BAR @ 38°C)



Standard Features

- Bodies and bonnets are cast steel (WCB, WC6, WC9, C12A, CF8M, or CF8C).
- Pressure-seal bonnet, OS & Y.
- Y-Pattern.
- Integral Stellite seat, disk and backseat.
- Body-guided disk piston.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.
- Equipped with equalizer.

Pressure Class 2900 (PN 490)

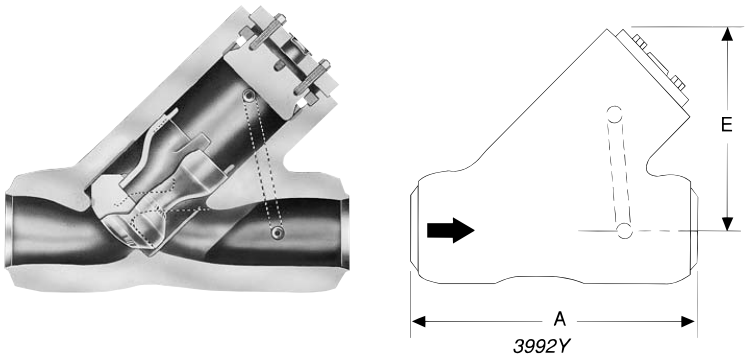
Fig. No.		Type	Ends	NPS (DN)
STD CL	SPL CL			
3902Y	4402Y	Flite-Flow	Buttwelding	3 (80) and 4 (100)

Dimensions – Flite-Flow®

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 3902Y, 4402Y	NPS	3	4
	DN	80	100
A - End to End		17	18.5
		432	470
E - Center to Top (Open)		20	25
		508	635
G - Handwheel Diameter*		16	16
		406	406
H - Equalizer Clearance		9	10
		229	254
Weight		230	325
		104	147

Check Valves Class 2900 7160 PSI @ 100°F (493.8 BAR @ 38°C)



Standard Features

- Bodies and covers are cast steel (WCB, WC6, WC9, C12A, CF8M, or CF8C).
- Pressure-seal cover.
- Y-Pattern.
- Integral Stellite seat and disk.
- Body-guided disk piston.
- Equipped with equalizer.

Pressure Class 2900 (PN 490)

Fig. No.		Type	Ends	NPS (DN)
STD CL	SPL CL			
3992Y	4492Y	Flite-Flow	Buttwelding	3 (80) and 4 (100)

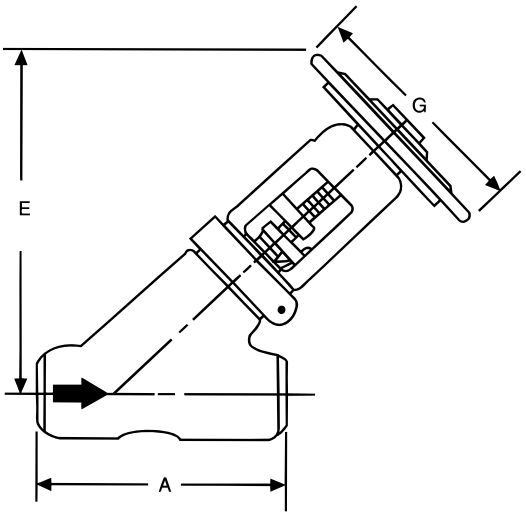
Dimensions – Flite-Flow®

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 3992Y, 4492Y	NPS	3	4
	DN	80	100
A - End to End		17	18.5
		432	470
E - Center to Top		10	11
		254	279
H - Equalizer Clearance		9	10
		229	254
Weight		150	225
		68	102

Stop Valves Series 4500

These Series 4500 valves are designed and rated to Edward Valve standards. See paragraph 3.2, Page G59 for additional information.



4514Y

Standard Features

- Bodies and bonnets are cast steel (WCB, WC6, WC9, C12A, CF8M or CF8C).
- Pressure-seal bonnet, OS & Y.
- Y-Pattern.
- Integral Stellite seats and backseat.
- Body-guided disk piston.
- 13% chromium stainless steel stem.
- Yoke bushing thrust bearings.

Series 4500

Fig. No.		Type	Ends	NPS (DN)
STD CL	SPL CL			
4514Y	5014Y	Flite-Flow	Buttwelding	4 (100) thru 10 (250)

Dimensions – Flite-Flow

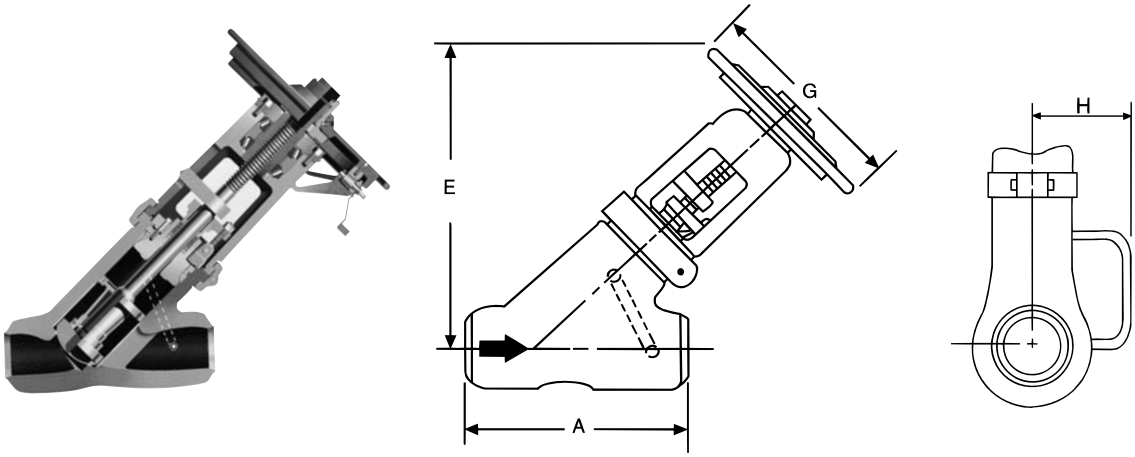
Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 4514Y, 5014Y	NPS	4	6	8	10
	DN	100	150	200	250
A - End to End		28	31	31	39.75
		711	787	787	1010
E - Center to Top (Open)		27.4	35	48.25	52.75
		696	889	1226	1340
G - Handwheel Diameter*		20	28	36	36
		508	711	914	914
Weight		625	1360	2510	4020
		284	617	1139	1823

** Impactor handwheel is standard on size 4 & larger. Impactogear is available on size 6 and larger.*

Stop Check (Non-Return) Valves Series 4500

These Series 4500 valves are designed and rated to Edward Valve standards. See paragraph 3.2, Page G59 for additional information.



4502Y

Standard Features

- Bodies and bonnets are cast steel (WCB, WC6, WC9, C12A, CF8M or CF8C).
- Pressure-seal bonnet, OS & Y.
- Y-Pattern.
- Integral Stellite seats and backseats.
- Body-guided disk piston.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.
- Equipped with equalizer.
- Yoke bushing thrust bearings.

Series 4500

Fig. No.		Type	Ends	NPS (DN)
STD CL	SPL CL			
4502Y	5002Y	Flite-Flow	Buttwelding	4 (100) thru 10 (250)

Dimensions – Flite Flow

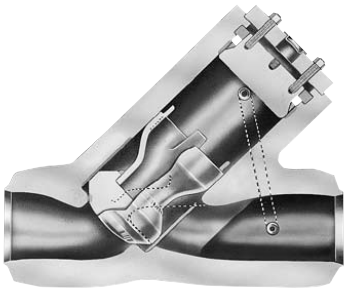
Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

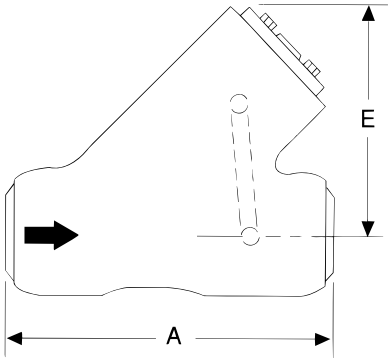
Figure No. 4502Y/5002Y	NPS	4	6	8	10
	DN	100	150	200	250
A - End to End		28	31	31	39.75
		711	787	787	1010
E - Center to Top		27.4	35	48.25	52.75
		695	889	1226	1340
G - Handwheel Diameter*		20	28	36	36
		508	711	914	914
H - Equalizer Clearance		9.75	10.6	14.5	18.5
		248	270	368	470
Weight		625	1360	2510	4020
		284	617	1139	1823

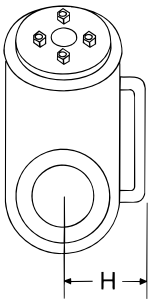
**Impactor handwheel is standard on size 4 & larger. Impactogear is available on size 6 and larger.*

Check Valves Series 4500

These Series 4500 valves are designed and rated to Edward Valve standards. See paragraph 3.2, Page G59 for additional information.







4592Y

Standard Features

- Bodies and covers are cast steel (WCB, WC6, WC9, C12A, CF8M or CF8C).
- Pressure-seal cover.
- Y-Pattern design.
- Integral Stellite seats.
- Body-guided disk piston.
- Equipped with Equalizer.

Series 4500

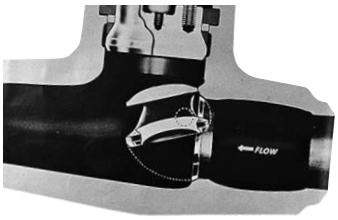
Fig. No.		Type	Ends	NPS (DN)
STD CL	SPL CL			
4592Y	5092Y	Flite-Flow	Buttwelding	4 (100) thru 10 (250)

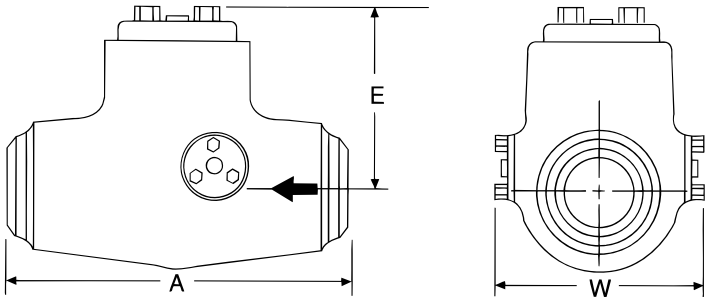
Dimensions – Flite Flow

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 4592Y/5092Y	NPS	4	6	8	10
	DN	100	150	200	250
A - End to End		28	31	31	39.75
		711	787	787	1010
E - Center to Top		14	18	20	26
		356	457	508	660
H - Equalizer Clearance		9.75	10.6	14.5	18.5
		248	269	368	470
Weight		415	800	1500	2300
		188	360	675	1035

Check Valves Class 4500 11,110 PSI @ 100°F (766.2 BAR @ 38°C)





4570Y

Standard Features

- Bodies and covers are cast steel (WCB, WC6, WC9, C12A, CF8M or CF8C).
- Pressure-seal cover.
- Tilting Disk design.
- Integral Stellite seats.

Class 4500 (PN 760)

Fig. No.		Type	Ends	NPS (DN)
STD CL	SPL CL			
4570Y	5070Y	Tilting Disk	Buttwelding	6 (150) and 8 (200)

Dimensions – Tilting Disk

Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 4570Y/5070Y	NPS	6	8
	DN	150	200
A - End to End		20	24
		508	610
E - Center to Top		10.25	11.375
		260	289
W - Width		17.5	19
		445	483
Weight		520	1330
		234	599