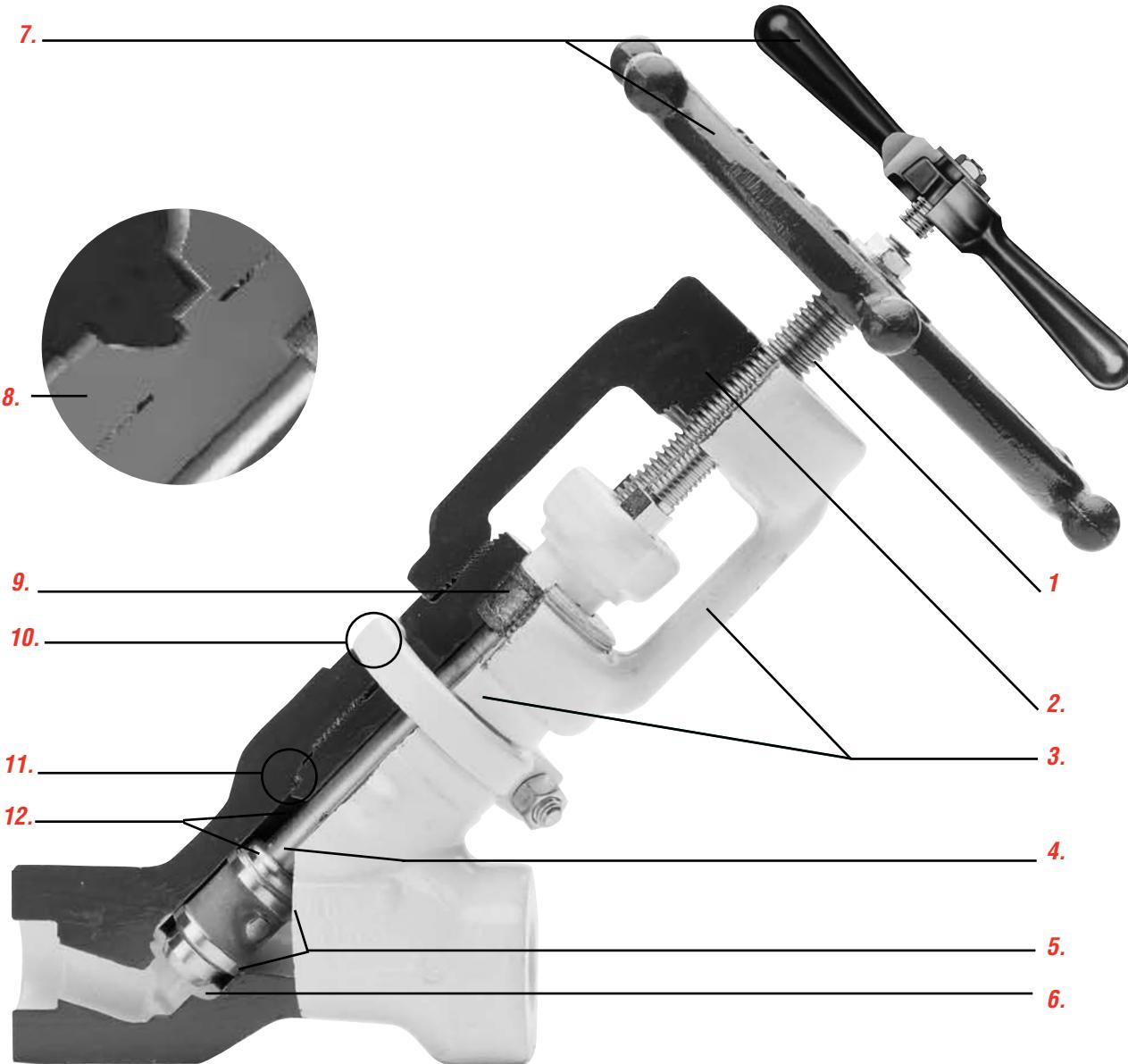


Features and Description of Edward Univalve® Globe Valves



1. **Stem** has ACME threads, is ground to a fine finish and is hardened to resist wear.
2. **Yoke bushing** material has low coefficient of friction which substantially reduces torque and stem wear and eliminates galling. Mechanical upset locks yoke bushing to yoke.
3. **Yoke-bonnet assembly** is two piece to facilitate disassembly for faster in-line internal repairs.
4. **Inclined stem** construction and optimum flow shape minimizes flow direction changes and reduces pressure drop.
5. **Body-guided disk** utilizes anti-thrust rings to eliminate misalignment, galling and stem bending.
6. **Integral hardsurfaced seat** provides positive shutoff and long seat life.
7. **Handwheel** on smaller size valves is rugged and knobbed to provide sure grip even when wearing gloves. Impactor handle or handwheel on larger, higher pressure valves provides many times the closing force of an ordinary handwheel for positive seating.
8. **Threaded bonnet** has ACME threads for resistance to galling and ease of disassembly. Unwelded models utilize a graphite gasket for dependable sealing. Welded models employ a fillet weld (canopy weld on stainless steel valves) for absolute protection from body-bonnet leakage.
9. **Stem packing system** utilizes flexible graphite packing material with carbon fiber anti-extrusion rings for optimum sealability and life.
10. **Bonnet locking collar** (unwelded valves only)
11. **Bonnet seal ring** is die formed flexible graphite gasket seated to a prescribed bonnet torque to provide reliable bonnet seal.
12. **Integral backseat** provides a secondary stem seal back up for positive shutoff and leak protection.

Part Specification List for Edward Univalve®

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.

B

Description	ASTM No.	ASTM No.	ASTM No.	ASTM No.
Body	A-105 —	A-182 Grade F-22	A-182 Grade F-316/F-347*	A-182 Grade F91
Bonnet	A-696 Grade C	A-739 Grade B-22	A-479 T-316/347	A-182 Grade F91
Stem	A-479 T-410CL3	A-479 T-410CL3	A-638 Grade 660	A-638 Grade 660
Disk	A-732 Grade 21	A-732 Grade 21	A-732 Grade 21	A-732 Grade 21
Body Seat	Stellite 21	Stellite 21	Stellite 21	Stellite 21
Junk Ring	—	—	A-732 Grade 21	—
Packing Rings	Flexible Graphite System	Flexible Graphite System	Flexible Graphite System	Flexible Graphite System
Gland	A-668 Grade 4140	A-668 Grade 4140	A-182 Grade F6a	A-668 Grade 4140
Gland Adjusting Screw	A-582 T-416	A-582 T-416	A-582 T-416	A-582 T-416
Yoke	A-181 Class 70	A-181 Class 70	A-181 Class 70	A-181 Class 70
Yoke Bushing	B150 Alloy C61900 or C62300			
Yoke Bolt	A-307 Grade A	A-307 Grade A	A-307 Grade A	A-307 Grade A
Yoke Nut	A-563 Grade A	A-563 Grade A	A-563 Grade A	A-563 Grade A
Handwheel/Impactor Handle Adapter	Malleable or Ductile Iron			
Stem Nut/Washer	Mild Steel Plated	Mild Steel Plated	Mild Steel Plated	Mild Steel Plated
Bonnet Seal Ring**	Flexible Graphite	Flexible Graphite	Flexible Graphite	Flexible Graphite
Bonnet Insert†	A-582 T-416	A-582 T-416	A-479 T-316	A-582 T-416
Locking Collar††	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel
Spring††	A-313 T-302	A-313 T-302	A-313 T-302	INCONEL X-750

Parts shown above are not applicable to all Univalve® valves.

* Other Stainless grades available on application.

** Used in unwelded and Class 4500 welded design only.

† Class 4500 welded design only.

†† Check valves only.

††† Unwelded valves only.

Edward Forged Steel Valves Feature Body-Guided Disks To Prevent Side-Thrust and Eliminate –

1. Stem galling & binding 2. Disk-seat misalignment and damage 3. High operating torque

Valve disks are guided by rings that fit snugly within the body bore and ensure perfect disk-and-seat alignment despite the side thrust of modern high velocities and high pressure-differentials. This protects the stem and its contact points; eliminates galling, scoring, bending and the high operating torque resulting from these abuses. Because they eliminate disk wobble and ensure alignment of disk with seat, they also provide more dependable closing and longer disk, seat and body life.

Double Duty for Lower Bearing - The lower ring not only serves as a highly efficient anti-side thrust bearing but serves too, as a "flow director." Its snug fit within the bonnet bore reduces by 90% the amount of flow that can get into the bonnet cavity and exert thrust forces against the side of the disk. In short, the anti-thrust ring design diverts 90% of the line forces into controllable channels.

Machining is Important, Too - To ensure concentric alignment essential to tight seating, the body bore and the stellite seat are both machined in a single operation. The disk's anti-thrust rings and conical stellite seat face are also faced in a single operation.

Streamlined Flow Passages for Highest C_v Values - The inclined bonnet globe stop valves (and check and stop-check valves) continue the Flowserve reputation for the ultimate in flow passage streamlining. Inclined bonnet construction minimizes flow directional changes and minimizes wear caused by excessive turbulence.

Whether it's pounds per hour of steam or gallons per minute of liquid, the inclined bonnet valves give you better flow capacity.

Flow Under or Over Disk - Normal practice is to install globe valves with flow entering from below the disk. However, piping designers may confidently install Edward globe stop valves with flow entering over the disk when space problems or other considerations suggest this procedure. Our valves operate equally well with flow in either direction; however, with flow over the disk, packing is under pressure when the valve is closed and there is a slight penalty in C_v value.

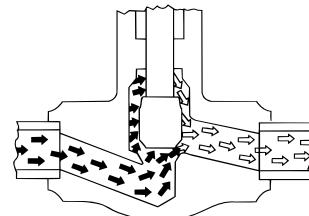


Figure 1

Ordinary Vertical Stem Globe Valves are subject to side-thrust under high pressure drop conditions. Illustration shows how upstream pressure can slip past stem-guided disk and impart a thrust toward the downstream side of the valve. Tests have proven that this thrust causes disk-seat misalignment plus galling and scoring.

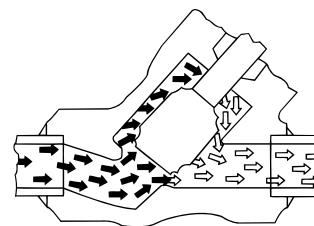


Figure 2

Inclined Stem Globe Valves of the stem-guided type are also subject to side-thrust under the same conditions. This illustration shows path pressure through the valve.

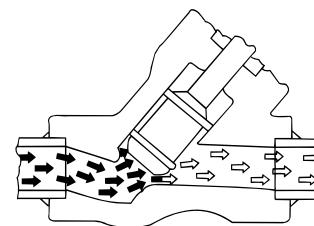


Figure 3

This illustration shows the Edward body-guided disk with anti-thrust rings. Lower guide eliminates 90% of the flow upward and behind the disk. Both guide rings maintain perfect alignment. This effectively eliminates all side-thrust problems.

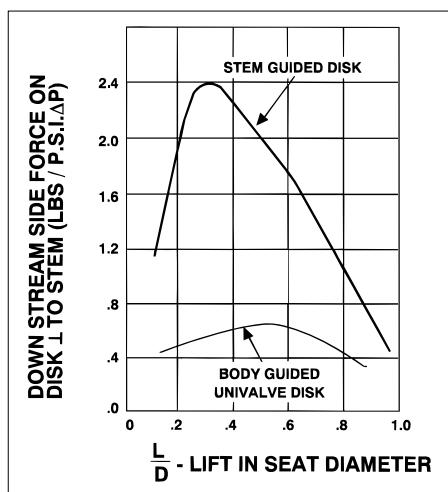


Figure 4

Graph illustrates relationship of side-thrust in conventional stem-guided Globe Valve and in Edward Univalve with body-guided disk.

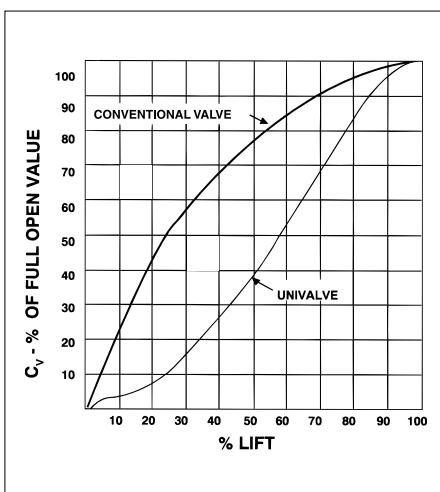
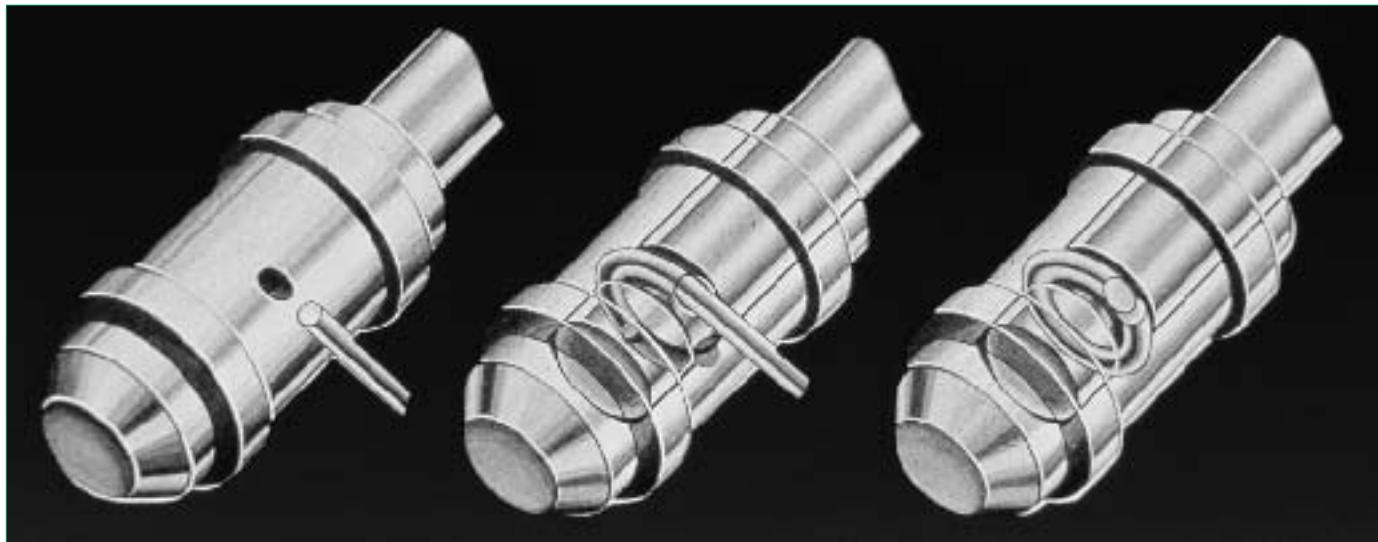


Figure 5

Graph illustrates typical throttling curves for conventional stem-guided Globe Valve and Univalve. Note, the Univalve Curve illustrates that finest control is obtained at low lifts, when it is needed. Contrast this with conventional valve curve which shows rapid flow increase as disk lifts off seat.

Here's How the Unique Stem-Disk Assembly is Made...

**B****Figure 1**

First, a Stellite wire is inserted into a hole in a Univalve body guided disk.

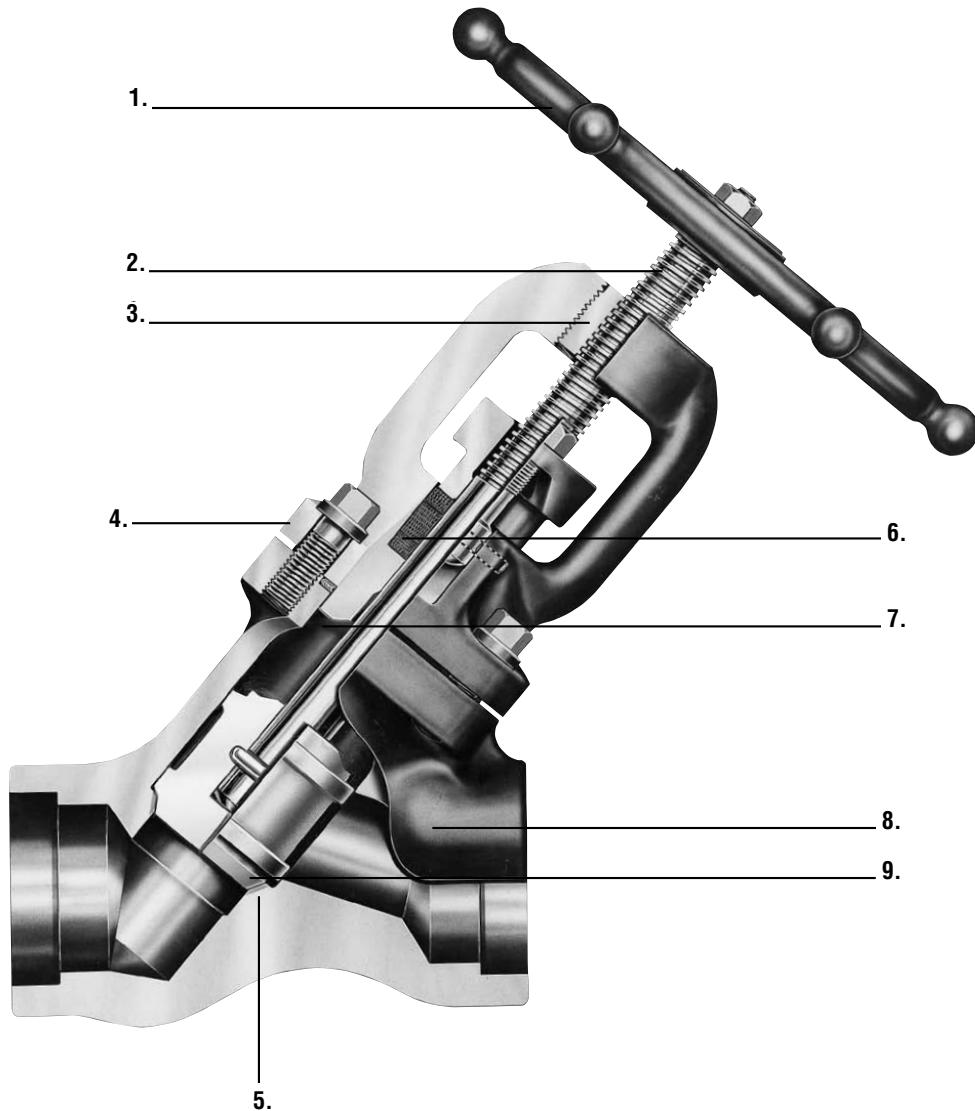
Figure 2

Next, the Stellite wire is fed around circular grooves, adjacent to one another, on the inside bore of the disk and outside diameter of the stem.

Figure 3

Finally the hole through which the wire was fed is welded closed.

Features and Description of Edward Bolted Bonnet Globe Valves



- 1. Handwheel** is rugged and knobbed to provide sure grip even when wearing gloves.
- 2. Stem** has ACME threads, is ground to a fine finish and is hardened to resist wear.
- 3. Yoke bushing material** has low coefficient of friction which substantially reduces torque and stem wear and eliminates galling. Mechanical upset locks yoke bushing to yoke.
- 4. Bolted Bonnet joint** utilizes a spiral wound gasket for positive sealing and four-bolt

design for ease of assembly. Bonnet has pilot extension to ensure proper alignment and positive metal to metal stop to prevent over-compression of gasket.

5. Integral hardsurfaced seat provides positive shutoff and long seat life.

6. Stem packing system utilizes flexible graphite packing material with anti-extrusion rings for optimum sealability and life.

- 7. Integral backseat** provides a secondary stem seal backup for positive shutoff and leak protection.
- 8. Body** utilizes optimized flow passages to minimize flow direction changes and reduce pressure drop.
- 9. Body-guided disk** utilizes anti-thrust rings to eliminate misalignment, galling and stem bending.

Part Specification List for Edward Bolted Bonnet Globe 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 Edward Valves sales representative.

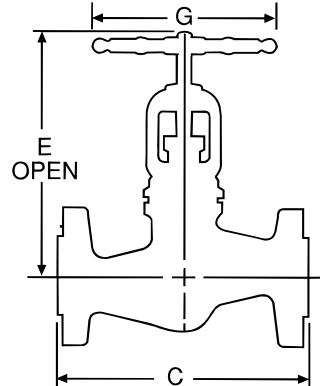
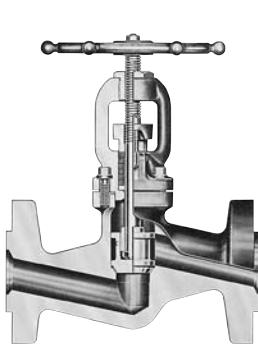
B

Description	Bolted Bonnet	
	ASTM No.	ASTM No.
Body/Bonnet	A-105 —	A-182 Grade F11
Disk	AISI 615 Stainless Steel	AISI 615 Stainless Steel
Body Seat	Stellite 21	Stellite 21
Stem	A-582 T-416	A-582 T-416
Cap Screws	A-193 Grade B-7	A-193 Grade B-7
Gasket	Spiral Wound Non Asbestos	Spiral Wound Non-Asbestos
Packing	Flexible Graphite System	Flexible Graphite System
Gland	A-536 GR. 80-55-06	A-536 GR. 80-55-06
Yoke Bushing	B-150 C61900 or C62300	B-150 C61900 or C62300
Handwheel/Handle	Malleable or Ductile Iron	Malleable or Ductile Iron
Stem Nut	Mild Steel-Plated	Mild Steel-Plated
Eye Bolt	A-582 T-416	A-582 T-416
Eye Bolt Nut	A-563 Grade A	A-563 Grade A
Eye Bolt Pin	AISI Grade 4140	AISI Grade 4140
Spring**	A-313 T302	A-313 T302
Ball**	A-276 T440 C	A-276 T440 C

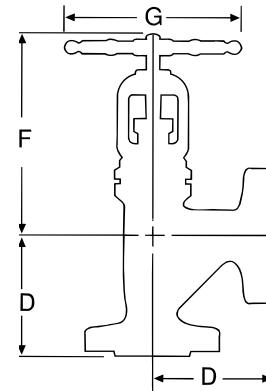
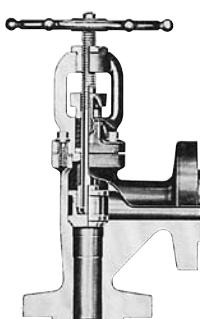
***Check valves only*

NOTES: Parts shown above are not applicable to all Bolted Bonnet valves. Consult your Edward Valves sales representative for special applications.

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



828



829

Standard Features

- Bodies and bonnets are of forged steel (A105).
- Bolted bonnet, OS&Y.
- Globe & angle design.
- Body-guided hardened stainless steel disk.
- Integral Stellite seat.
- Integral backseat.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.
- Asbestos-free spiral wound bonnet gasket.
- Knobbed handwheel.

Pressure Class 600 (PN 110)

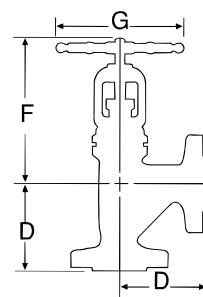
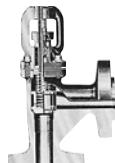
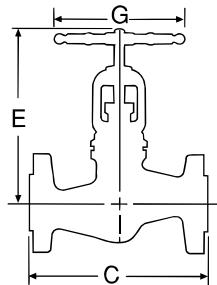
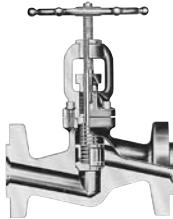
Fig. No.	Type	Ends	NPS (DN)
828	Globe	Flanged	1/2 (15) thru 2 (50)
829	Angle	Flanged	

Dimensions – Globe & Angle

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

Figure No. 828, 829	NPS	1/2	3/4	1	1 1/4	1 1/2	2
	DN	15	20	25	32	40	50
C - Face to Face, Globe (Flanged)	6.5	7.5	8.5	9.5	9.5	11.5	
	165	191	216	241	241	292	
D - Center to Face, Angle (Flanged)	3.3	3.8	4.3	4.8	4.8	5.8	
	84	97	109	122	122	147	
E - Center to Top, Globe (Open)	6.1	6.9	7.7	11.1	11.1	12.1	
	155	175	196	282	282	307	
F - Center to Top, Angle (Open)	5.7	6.4	7.1	10.2	10.2	11.0	
	145	163	180	259	259	279	
G - Handwheel Diameter	3.8	4.3	4.8	7.1	7.1	8.5	
	97	109	122	180	180	216	
Weight, Globe	7.5	12	16	27	32	38	
	3.4	5.4	7.2	12.2	14.4	17.1	
Weight, Angle	7	11	15	26	31	36	
	3.2	5	6.8	11.7	14	16.2	

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



846

847

B

Standard Features

- Bodies and bonnets are of forged steel (A105).
- Bolted bonnet, OS & Y.
- Globe & angle design.
- Body-guided hardened stainless steel disk.
- Integral Stellite seat.
- Integral backseat.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.
- Asbestos-free spiral wound bonnet gasket.
- Knobbed handwheel.
- Stainless steel spring.

Pressure Class 600 (PN 110)

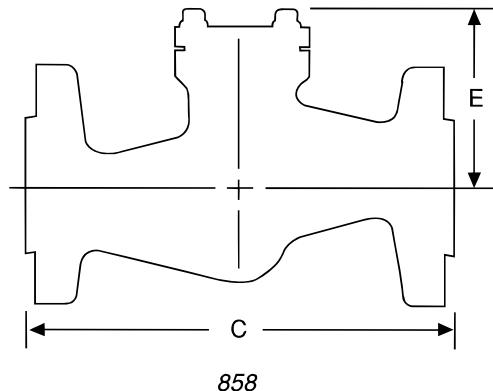
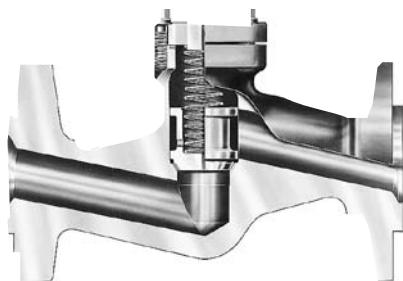
Fig. No.	Type	Ends	NPS (DN)
846	Globe	Flanged	1/2 (15) thru 2 (50)
847	Angle	Flanged	

Dimensions – Globe & Angle

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

Figure No. 846, 847	NPS	1/2	3/4	1	1 1/4	1 1/2	2
	DN	15	20	25	32	40	50
C - Face to Face, Globe (Flanged)	6.5	7.5	8.5	9.5	9.5	11.5	
	165	191	216	241	241	292	
D - Center to Face, Angle (Flanged)	3.3	3.8	4.3	4.8	4.8	5.8	
	84	97	109	122	122	147	
E - Center to Top, Globe (Open)	6.1	6.9	7.7	11.1	11.1	12.1	
	155	175	196	282	282	307	
F - Center to Top, Angle (Open)	5.7	6.4	7.1	10.2	10.2	11.0	
	145	163	180	259	259	279	
G - Handwheel Diameter	3.8	4.3	4.8	7.1	7.1	8.5	
	97	109	122	180	180	216	
Weight, Globe	7.5	12	16	27	32	38	
	3.4	5.4	7.2	12.2	14.4	17.1	
Weight, Angle	7	11	15	26	31	36	
	3.2	5	6.8	11.7	14	16.2	

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



Standard Features

- Bodies and covers are of forged steel (A105).
- Bolted cover.
- Globe design.
- Body-guided hardened stainless steel disk.
- Integral Stellite seat.
- Asbestos-free spiral wound cover gasket.
- Stainless steel spring.

Pressure Class 600 (PN 110)

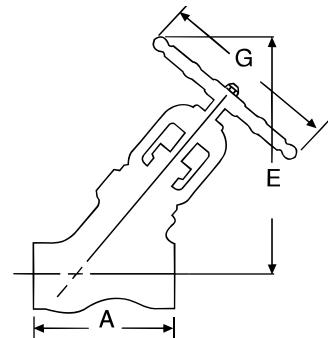
Fig. No.	Type	Ends	NPS (DN)
858	Globe	Flanged	½ (15) thru 2 (50)

Dimensions – Globe & Angle

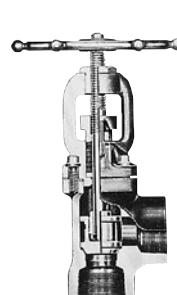
Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 858	NPS	½	¾	1	1¼	1½	2
	DN	15	20	25	32	40	50
C - Face to Face, Globe (Flanged)	6.5	7.5	8.5	9.5	9.5	11.5	
	165	191	216	241	241	292	
E - Center to Top	2.3	2.7	3.1	4.2	4.2	4.7	
	58	69	79	107	107	119	
Weight	6.5	11	13	21	26	29	
	2.9	5	5.9	9.5	11.7	13.1	

Stop Valves Class 800 2000 PSI @ 100°F (137.9 BAR @ 38°C)



848Y



849

B

Standard Features

- Bodies and bonnets are of forged steel (A105 or F11).
- Bolted bonnet, OS & Y.
- Y-Pattern or angle design.
- Body-guided hardened stainless steel disk.
- Integral Stellite seat.
- Integral backseat.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.
- Asbestos-free spiral wound bonnet gasket.
- Knobbed handwheel.

Pressure Class 800 (PN 130)

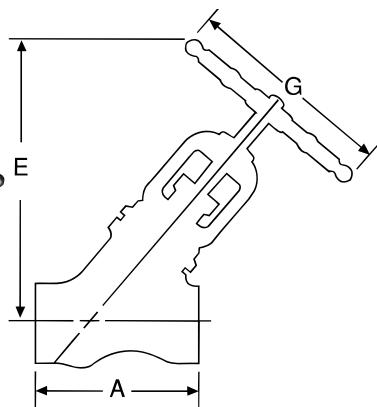
Fig. No.	Type	Ends	NPS (DN)
848	Y-Pattern	Threaded	
849Y	Y-Pattern	Socket Welding	
849	Angle	Threaded	
849Y	Angle	Socket Welding	1/4 (8) thru 2 (50)

Dimensions – Globe & Angle

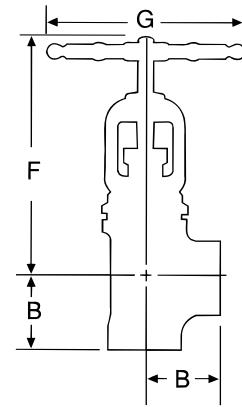
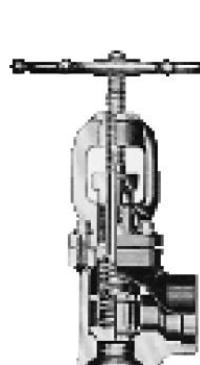
Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 848/848Y, 849/849Y	NPS	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
	DN	8	10	15	20	25	32	40	50
A - End to End, Globe	3	3	3	3.6	4.3	5.8	5.8	6.5	
	76	76	76	91	109	147	147	165	
B - Center to End, Angle	1.5	1.5	1.5	1.8	2	2.9	2.9	3.3	
	38	38	38	46	51	74	74	84	
E - Center to Top, Globe (Open)	6	6	6	6.8	7.6	10.9	10.9	12.1	
	152	152	152	173	193	277	277	307	
F - Center to Top, Angle (Open)	5.7	5.7	5.7	6.4	7.1	10.2	10.2	11	
	145	145	145	163	180	259	259	279	
G - Handwheel Diameter	3.8	3.8	3.8	4.3	4.8	7.1	7.1	8.5	
	97	97	97	109	122	180	180	216	
Weight, Globe	4	4	4	5.5	7.5	16	16	23	
	1.8	1.8	1.8	2.5	3.4	7.2	7.2	10.4	
Weight, Angle	4	4	4	5.5	7	17	17	24	
	1.8	1.8	1.8	2.5	3.2	7.7	7.7	10.8	

Stop-Check Valves Class 800 2000 PSI @ 100°F (137.9 BAR @ 38°C)



868



869Y

Standard Features

- Bodies and bonnets are of forged steel (A105 or F11).
- Bolted bonnet, OS & Y.
- Y-Pattern or angle design.
- Body-guided hardened stainless steel disk.
- Integral Stellite seat.
- Integral backseat.
- 13% chromium stainless steel stem.
- Asbestos-free graphitic packing.
- Asbestos-free spiral wound bonnet gasket.
- Knobbed handwheel.
- Stainless steel spring

Pressure Class 800 (PN 130)

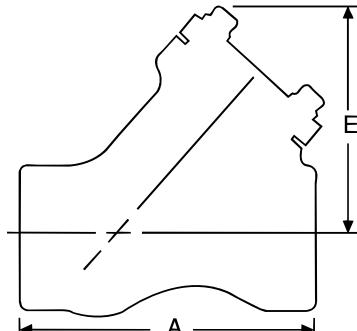
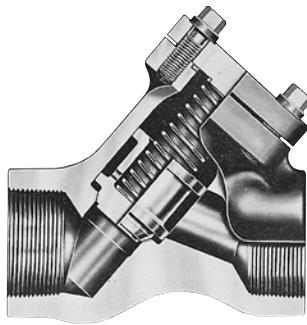
Fig. No.	Type	Ends	NPS (DN)
868	Y-Pattern	Threaded	1/4 (8) thru 2 (50)
868Y	Y-Pattern	Socket Welding	
869	Angle	Threaded	
869Y	Angle	Socket Welding	

Dimensions – Globe & Angle

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

Figure No. 868/868Y, 869/869Y	NPS	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
	DN	8	10	15	20	25	32	40	50
A - End to End, Globe	3	3	3	3.6	4.3	5.8	5.8	6.5	
	76	76	76	91	109	147	147	165	
B - Center to End, Angle	1.5	1.5	1.5	1.8	2	2.9	2.9	3.3	
	38	38	38	46	51	74	74	84	
E - Center to Top, Globe (Open)	6	6	6	6.8	7.6	10.9	10.9	12.1	
	152	152	152	173	193	277	277	307	
F - Center to Top, Angle (Open)	5.7	5.7	5.7	6.4	7.1	10.2	10.2	11	
	145	145	145	163	180	259	259	279	
G - Handwheel Diameter	3.8	3.8	3.8	4.3	4.8	7.1	7.1	8.5	
	97	97	97	109	122	180	180	216	
Weight, Globe	4	4	4	5.5	7.5	16	16	23	
	1.8	1.8	1.8	2.5	3.4	7.2	7.2	10.4	
Weight, Angle	4	4	4	5.5	7	17	17	24	
	1.8	1.8	1.8	2.5	3.2	7.7	7.7	10.8	

Piston Check Valves Class 800 2000 PSI @ 100°F (137.9 BAR @ 38°C)


B

838

Standard Features

- Bodies and covers are of forged steel (A105 or F11).
- Bolted cover.
- Y-Pattern.
- Body-guided hardened stainless steel disk.
- Integral Stellite seat.
- Asbestos-free spiral wound cover gasket.
- Stainless steel spring. (Optional without springs, see page G14.)

Pressure Class 800 (PN 130)

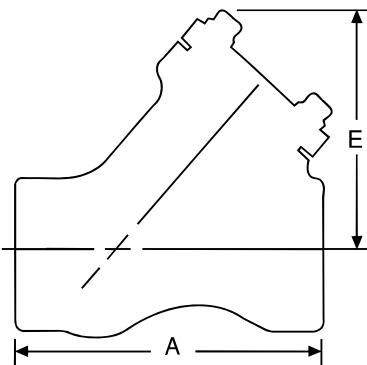
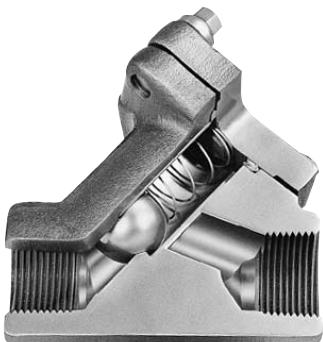
Fig. No.	Type	Ends	NPS (DN)
838	Y-Pattern	Threaded	1/4 (8) thru 2 (50)
838Y	Y-Pattern	Socket Welding	

Dimensions – Globe

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

Figure No. 838/838Y	NPS	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
	DN	8	10	15	20	25	32	40	50
A - End to End	3	3	3	3.6	4.3	5.8	5.8	6.5	
	76	76	76	91	109	147	147	165	
E - Center to Top	2.8	2.8	2.8	3.3	3.8	4.6	4.6	5.1	
	71	71	71	84	97	117	117	130	
Weight	2	2	2	3.5	5	11	10	14	
	.9	.9	.9	1.6	2.3	5	4.5	6.3	

Ball Check Valves Class 800 2000 PSI @ 100°F (137.9 BAR @ 38°C)



832

Standard Features

- Bodies and covers are of forged steel (A105 or F11).
- Bolted cover.
- Y-Pattern.
- Integral Stellite seat.
- Asbestos-free spiral wound cover gasket.
- Stainless steel spring.
- Stainless steel ball.

Pressure Class 800 (PN 130)

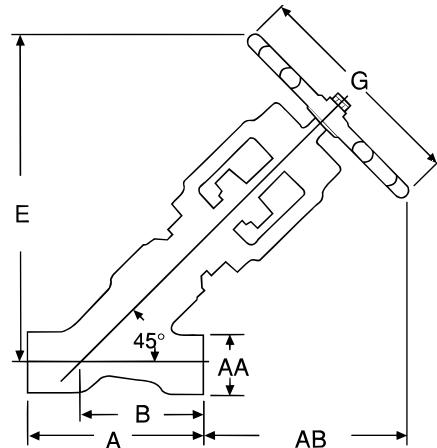
Fig. No.	Type	Ends	NPS (DN)
832	Y-Pattern	Threaded	1/4 (8) thru 2 (50)
832Y	Y-Pattern	Socket Welding	

Dimensions – Globe

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

Figure No. 832/832Y	NPS	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
	DN	8	10	15	20	25	32	40	50
A - End to End		3	3	3	3.6	4.3	5.8	5.8	6.5
		76	76	76	91	109	147	147	165
E - Center to Top		2.8	2.8	2.8	3.3	3.8	4.6	4.6	5.1
		71	71	71	84	97	117	117	130
Weight		2	2	2	3.5	5	11	10	14
		.9	.9	.9	1.6	2.3	5	4.5	6.4

Univalve® Stop Valves Class 1690 4225 PSI @ 100°F (291.4 BAR @ 38°C)


B

Standard Features

- Available Body Materials
 - A105 carbon steel.
 - F22 alloy steel.
 - F91 alloy steel.
 - F316, F347 stainless steel.
 - Other material on application.
- Unwelded (graphitic seal) or welded bonnet.
- OS & Y.
- Y-Pattern.
- Body-guided investment cast Stellite disk.
- Integral Stellite seat.
- Integral backseat.
- Asbestos-free graphitic packing.

36124

Pressure Class 1690 (PN 290)

Fig. No.		Type	Ends	NPS (DN)
Welded	Unweld.			
36120	36220	Y-Pattern	Threaded	1/2 (15) thru 1 (25)
36124	36224	Y-Pattern	Socket Welding	1/2 (15) thru 2 1/2 (65)
36128	36228	Y-Pattern	Buttwelding	1/2 (15) thru 4 (100)

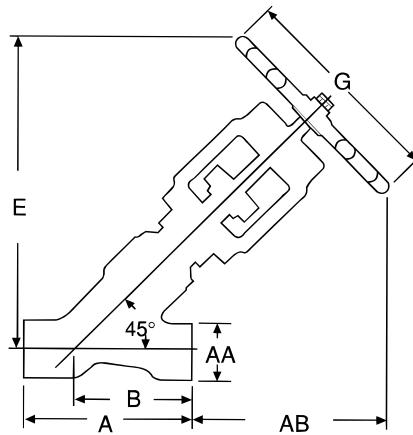
Dimensions – Globe

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

Figure No. 36120, 36124, 36128, 36220, 36224, 36228	NPS	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
	DN	15	20	25	32	40	50	65	80	100
A - End to End	6.0	6.0	6.0	6.7	6.7	8.2	10.7	10.7	12.8	
	152	152	152	170	170	208	272	272	325	
AA - End Hub Diameter	2.30	2.30	2.30	3.20	3.20	3.64	4.00	4.00	4.80	
	58	58	58	81	81	92	102	102	122	
AB - Handwheel Clearance (Open)	7.5	7.5	7.5	11.0	11.0	11.6	12.5	12.5	11.2	
	191	191	191	279	279	295	318	318	284	
B - Center to End	4.0	4.0	4.0	4.8	4.8	6.1	7.1	7.1	8.8	
	102	102	102	122	122	155	180	180	224	
E - Center to Top (Open)	11.5	11.5	11.5	15.9	15.9	17.7	19.6	19.6	20.0	
	292	292	292	404	404	450	498	498	508	
G - Handwheel/Handle Diameter	8.5	8.5	8.5	14.3*	14.3*	14.3*	16.0**	16.0**	16.0**	
	216	216	216	363*	363*	363*	406**	406**	406**	
Weight, Welded	19	19	19	36	36	57	100	100	138	
	9	9	9	16	16	26	46	46	63	
Weight, Unwelded	20	20	20	38	38	59	104	104	142	
	9	9	9	17	17	27	47	47	64	

* Impactor Handle **Impactor Handwheel

Univalve® Stop-Check Valves Class 1690 4225 PSI @ 100°F (291.4 BAR @ 38°C)



36164

Standard Features

- Available Body Materials
 - A105 carbon steel.
 - F22 alloy steel.
 - F91 alloy steel.
 - F316, F347 stainless steel.
 - Other material on application.
- Unwelded (graphitic seal) or welded bonnet.
- OS & Y.
- Y-Pattern.
- Body-guided investment cast Stellite disk.
- Integral Stellite seat.
- Integral backseat.
- Asbestos-free graphitic packing.

Pressure Class 1690 (PN 290)

Fig. No.		Type	Ends	NPS (DN)
Welded	Unweld.			
36160	36260	Y-Pattern	Threaded	1/2 (15) thru 1 (25)
36164	36264	Y-Pattern	Socket Welding	1/2 (15) thru 2 1/2 (65)
36168	36268	Y-Pattern	Buttwelding	1/2 (15) thru 4 (100)

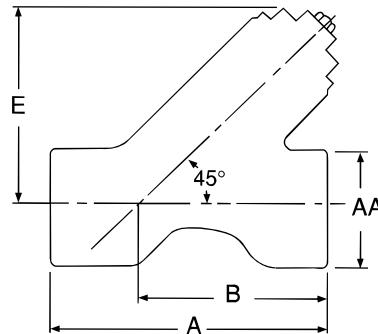
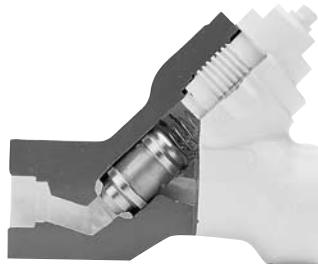
Dimensions – Globe

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

Figure No. 36160, 36164, 36168, 36260, 36264, 36268	NPS	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
	DN	15	20	25	32	40	50	65	80	100
A - End to End		6.0	6.0	6.0	6.7	6.7	8.2	10.7	10.7	12.8
		152	152	152	170	170	208	272	272	325
AA - End Hub Diameter		2.30	2.30	2.30	3.20	3.20	3.64	4.00	4.00	4.80
		58	58	58	81	81	92	102	102	122
AB - Handwheel Clearance (Open)		7.5	7.5	7.5	11.0	11.0	11.6	12.5	12.5	11.2
		191	191	191	279	279	295	318	318	284
B - Center to End		4.0	4.0	4.0	4.8	4.8	6.1	7.1	7.1	8.8
		102	102	102	122	122	155	180	180	224
E - Center to Top (Open)		11.5	11.5	11.5	15.9	15.9	17.7	19.6	19.6	20.0
		292	292	292	404	404	450	498	498	508
G - Handwheel/Handle Diameter		8.5	8.5	8.5	14.3*	14.3*	14.3*	16.0**	16.0**	16.0**
		216	216	216	363*	363*	363*	406**	406**	406**
Weight, Welded		19	19	19	36	36	57	100	100	138
		9	9	9	16	16	26	46	46	63
Weight, Unwelded		20	20	20	38	38	59	104	104	142
		9	9	9	17	17	27	47	47	64

* Impactor Handle ** Impactor Handwheel

Univalve® Piston Check Valves Class 1690 4225 PSI @ 100°F (291.4 BAR @ 38°C)



36174

Standard Features

- Available Body Materials
 - A105 carbon steel.
 - F22 alloy steel.
 - F91 alloy steel.
 - F316, F347 stainless steel.
 - Other material on application.
- Unwelded (graphitic seal) or welded cover.
- Y-Pattern.
- Body-guided investment cast Stellite disk.
- Integral Stellite seat.
- Stainless steel spring. (Optional without springs, see page G-14.)

Pressure Class 1690 (PN 290)

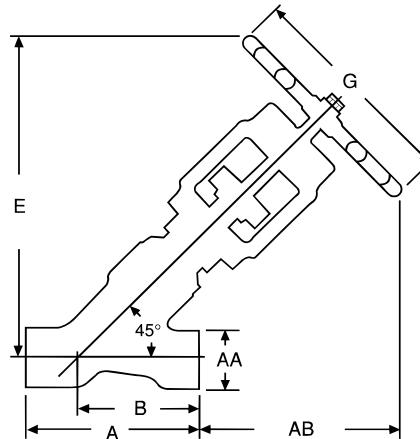
Fig. No.		Type	Ends	NPS (DN)
Welded	Unweld.			
36170	36270	Y-Pattern	Threaded	1/2 (15) thru 1 (25)
36174	36274	Y-Pattern	Socket Welding	1/2 (15) thru 2-1/2 (65)
36178	36278	Y-Pattern	Buttwelding	1/2 (15) thru 4 (100)

Dimensions – Globe

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

Figure No. 36170, 36174, 36178, 36270, 36274, 36278	NPS	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
	DN	15	20	25	32	40	50	65	80	100
A - End to End	6.0	6.0	6.0	6.7	6.7	8.2	10.7	10.7	12.8	
	152	152	152	170	170	208	272	272	325	
AA - End Hub Diameter	2.30	2.30	2.30	3.20	3.20	3.64	4.00	4.00	4.80	
	58	58	58	81	81	92	102	102	122	
B - Center to End	4.0	4.0	4.0	4.8	4.8	6.1	7.1	7.1	8.8	
	102	102	102	122	122	155	180	180	224	
E - Center to Top	3.9	3.9	3.9	5.0	5.0	5.8	7.2	7.2	7.8	
	99	99	99	127	127	147	183	183	198	
Weight	14	14	14	22	22	31	44	44	86	
	6	6	6	10	10	14	20	20	39	

Univalve® Stop Valves Class 2680 6700 PSI @ 100°F (462.1 BAR @ 38°C)



66124

Standard Features

- Available Body Material
 - A105 carbon steel.
 - F22 alloy steel.
 - F91 alloy steel.
 - F316, F347 stainless steel.
 - Other material on application.
- Unwelded (graphitic seal) or welded bonnet.
- OS & Y.
- Y-Pattern.
- Body-guided investment cast Stellite disk.
- Integral Stellite seat.
- Integral backseat.
- Asbestos free graphitic packing.

Pressure Class 2680 (PN 460)

Fig. No.		Type	Ends	NPS (DN)
Welded	Unweld.			
66120	66220	Y-Pattern	Threaded*	½ (15) thru 1 (25)
66124	66224	Y-Pattern	Socket Welding	½ (15) thru 2-½ (65)
66128	66228	Y-Pattern	Buttwelding	½ (15) thru 4 (100)

* Threaded end valves are limited to Pressure Class 2500.

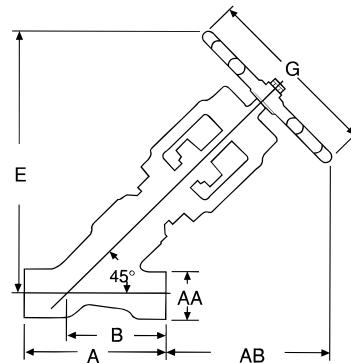
Dimensions – Globe

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

Figure No. 66120, 66124, 66128, 66220, 66224, 66228	NPS	½	¾	1	1-¼	1-½	2	2-½	3	4
	DN	15	20	25	32	40	50	65	80	100
A - End to End	6.0	6.0	6.0	6.7	6.7	10.7	12.8	12.8	12.8	12.8
	152	152	152	170	170	272	325	325	325	325
AA - End Hub Diameter	2.30	2.30	2.30	3.20	3.20	4.00	4.80	4.80	4.80	4.80
	58	58	58	81	81	102	122	122	122	122
AB - Handwheel Clearance, (Open)	7.5	7.5	7.5	9.8	9.8	11.6	11.2	11.2	11.2	11.2
	191	191	191	249	249	296	284	284	284	284
B - Center to End	4.0	4.0	4.0	4.8	4.8	7.1	8.8	8.8	8.8	8.8
	102	102	102	122	122	180	224	224	224	224
E - Center to Top, (Open)	11.5	11.5	11.5	14.6	14.6	18.6	20.0	20.0	20.0	20.0
	292	292	292	371	371	472	508	508	508	508
G - Handwheel/Handle Diameter	8.5	8.5	8.5	11.0*	11.0*	14.3*	16.0**	16.0**	16.0**	16.0**
	216	216	216	279*	279*	363*	406**	406**	406**	406**
Weight, Welded	19	19	19	34	34	79	142	142	142	142
	9	9	9	16	16	36	65	65	65	65
Weight, Unwelded	20	20	20	36	36	83	146	146	146	146
	9	9	9	17	17	38	66	66	66	66

* Impactor Handle ** Impactor Handwheel

Univalve® Stop-Check Valves Class 2680 6700 PSI @ 100°F (462.1 BAR @ 38°C)



66164

B

Standard Features

- Available Body Material
 - A105 carbon steel.
 - F22 alloy steel.
 - F91 alloy steel.
 - F316, F347 stainless steel.
 - Other material on application
- Unwelded (graphitic seal) or welded bonnet.
- OS & Y.
- Y-Pattern.
- Body-guided investment cast Stellite disk.
- Integral Stellite seat.
- Integral backseat.
- Asbestos-free graphitic packing.

Pressure Class 2680 (PN 460)

Fig. No.		Type	Ends	NPS (DN)
Welded	Unweld.			
66160	66260	Y-Pattern	Threaded*	1/2 (15) thru 1 (25)
66164	66264	Y-Pattern	Socket Welding	1/2 (15) thru 2 1/2 (65)
66168	66268	Y-Pattern	Buttwelding	1/2 (15) thru 4 (100)

*Threaded end valves are limited to Pressure Class 2500

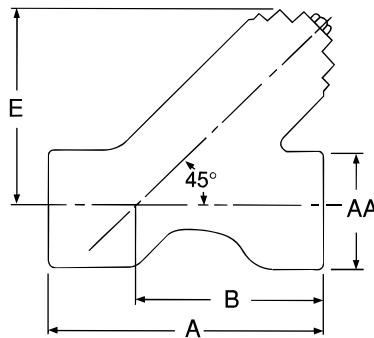
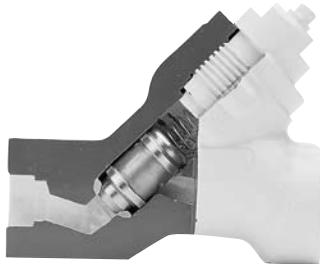
Dimensions – Globe

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

Figure No. 66160, 66164, 66168, 66260, 66264, 66268	NPS DN	1/2 15	3/4 20	1 25	1 1/4 32	1 1/2 40	2 50	2 1/2 65	3 80	4 100
A - End to End	6.0	6.0	6.0	6.7	6.7	10.7	12.8	12.8	12.8	12.8
	152	152	152	170	170	272	325	325	325	325
AA - End Hub Diameter	2.30	2.30	2.30	3.20	3.20	4.00	4.80	4.80	4.80	4.80
	58	58	58	81	81	102	122	122	122	122
AB - Handwheel Clearance (Open)	7.5	7.5	7.5	9.8	9.8	11.6	11.2	11.2	11.2	11.2
	191	191	191	249	249	295	284	284	284	284
B - Center to End	4.0	4.0	4.0	4.8	4.8	7.1	8.8	8.8	8.8	8.8
	102	102	102	122	122	180	224	224	224	224
E - Center to Top (Open)	11.5	11.5	11.5	14.6	14.6	18.6	20.0	20.0	20.0	20.0
	292	292	292	371	371	472	508	508	508	508
G - Handwheel/Handle Diameter	8.5	8.5	8.5	11.0*	11.0*	14.3*	16.0**	16.0**	16.0**	16.0**
	216	216	216	279*	279*	363*	406**	406**	406**	406**
Weight, Welded	19	19	19	34	34	79	142	142	142	142
	9	9	9	16	16	36	65	65	65	65
Weight, Unwelded	20	20	20	36	36	83	146	146	146	146
	9	9	9	17	17	38	66	66	66	66

* Impactor Handle **Impactor Handwheel

Univalue® Piston Check Valves Class 2680 6700 PSI @ 100°F (462.1 BAR @ 38°C)



Standard Features

- Available Body Material
 - A105 carbon steel.
 - F22 alloy steel.
 - F91 alloy steel.
 - F316, F347 stainless steel.
 - Other material on application.
- Unwelded (graphitic seal) or welded cover.
- Y-Pattern.
- Body-guided investment cast Stellite disk.
- Integral Stellite seat.
- Stainless steel spring. (Optional without springs, see page G14.)

66174

Pressure Class 2680 (PN 460)

Fig. No.		Type	Ends	NPS (DN)
Welded	Unweld.			
66170	66270	Y-Pattern	Threaded*	1/2 (15) thru 1 (25)
66174	66274	Y-Pattern	Socket Welding	1/2 (15) thru 2 1/2 (65)
66178	66278	Y-Pattern	Buttwelding	1/2 (15) thru 4 (100)

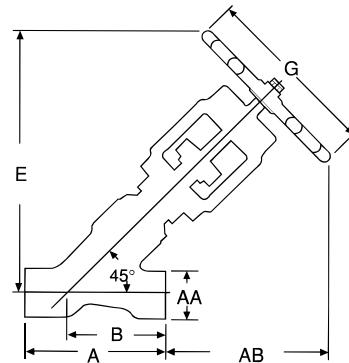
* Threaded end valves are limited to Pressure Class 2500.

Dimensions – Globe

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

Figure No. 66170, 66174, 66178, 66270, 66274, 66278	NPS	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
	DN	15	20	25	32	40	50	65	80	100
A - End to End		6.0	6.0	6.0	6.7	6.7	10.7	12.8	12.8	12.8
		152	152	152	170	170	272	325	325	325
AA - End Hub Diameter		2.30	2.30	2.30	3.20	3.20	4.00	4.80	4.80	4.80
		58	58	58	81	81	102	122	122	122
B - Center to End		4.0	4.0	4.0	4.8	4.8	7.1	8.8	8.8	8.8
		102	102	102	122	122	180	224	224	224
E - Center to Top (Open)		3.9	3.9	3.9	5.0	5.0	7.0	7.8	7.8	7.8
		99	99	99	127	127	178	198	198	198
Weight		14	14	14	22	22	52	86	86	86
		6	6	6	10	10	24	39	39	39

Univalve® Stop Valves Class 4500 11,250 PSI @ 100°F (775.9 BAR @ 38°C)



96124

B

Standard Features

- Available Body Material
 - A105 carbon steel.
 - F22 alloy steel.
 - F91 alloy steel.
 - F316, F347 stainless steel.
 - Other material on application.
- Unwelded (graphitic seal) or welded bonnet.
- OS & Y.
- Y-Pattern.
- Body-guided investment cast Stellite disk.
- Integral Stellite seat.
- Integral backseat.

Pressure Class 4500 (PN 760)

Fig. No.		Type	Ends	NPS (DN)
Welded	Unweld.			
96124	96224	Y-Pattern	Socket Welding	1/2 (15) thru 2 (50)
96128	96228	Y-Pattern	Buttwelding	1/2 (15) thru 4 (100)

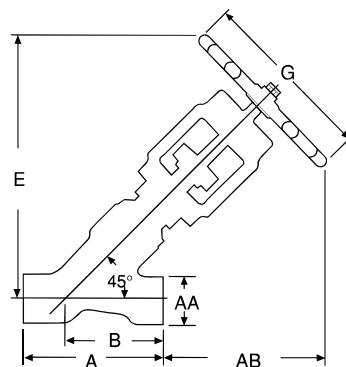
Dimensions – Globe

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

Figure No. 96124, 96128, 96224, 96228	NPS	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
	DN	15	20	25	32	40	50	65	80	100
A - End to End	8.2	8.2	8.2	8.2	8.2	12.8	12.8	12.8	12.8	12.8
	208	208	208	208	208	325	325	325	325	325
AA - End Hub Diameter	3.64	3.64	3.64	3.64	3.64	4.80	4.80	4.80	4.80	4.80
	92	92	92	92	92	122	122	122	122	122
AB - Handwheel Clearance (Open)	7.3	7.3	7.3	7.3	7.3	11.2	11.2	11.2	11.2	11.2
	185	185	185	185	185	284	284	284	284	284
B - Center to End	6.1	6.1	6.1	6.1	6.1	8.8	8.8	8.8	8.8	8.8
	155	155	155	155	155	224	224	224	224	224
E - Center to Top (Open)	13.4	13.4	13.4	13.4	13.4	20.0	20.0	20.0	20.0	20.0
	340	340	340	340	340	508	508	508	508	508
G - Handwheel/Handle Diameter	8.5	8.5	8.5	8.5	8.5	16.0**	16.0**	16.0**	16.0**	16.0**
	216	216	216	216	216	406**	406**	406**	406**	406**
Weight, Welded	43	43	43	43	43	158	158	158	158	158
	20	20	20	20	20	72	72	72	72	72
Weight, Unwelded	45	45	45	45	45	162	162	162	162	162
	21	21	21	21	21	74	74	74	74	74

** Impactor Handwheel

Univalve® Stop-Check Valves Class 4500 11,250 PSI @ 100°F (775.9 BAR @ 38°C)



96164

Standard Features

- Available Body Material
 - A105 carbon steel.
 - F22 alloy steel.
 - F91 alloy steel.
 - F316, F347 stainless steel.
 - Other material on application.
- Unwelded (graphitic seal) or welded bonnet.
- OS & Y.
- Y-Pattern.
- Body-guided investment cast Stellite disk.
- Integral Stellite seat.
- Integral backseat.
- Asbestos-free graphitic packing.

Pressure Class 4500 (PN 760)

Fig. No.		Type	Ends	NPS (DN)
Welded	Unweld.			
96164	96264	Y-Pattern	Socket Welding	½ (15) thru 2 (50)
96168	96268	Y-Pattern	Buttwelding	½ (15) thru 4 (100)

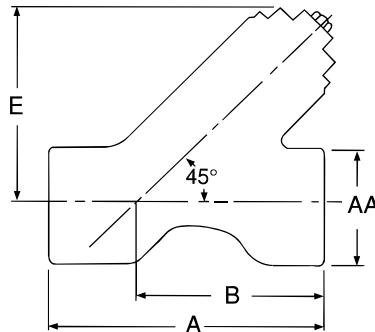
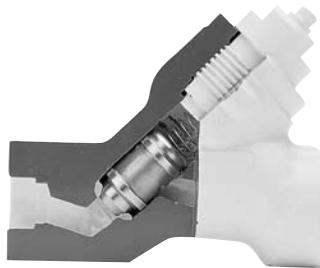
Dimensions – Globe

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

Figure No. 96164, 96168, 96264, 96268	NPS	½	¾	1	1¼	1½	2	2½	3	4
	DN	15	20	25	32	40	50	65	80	100
A - End to End	8.2	8.2	8.2	8.2	8.2	12.8	12.8	12.8	12.8	12.8
	208	208	208	208	208	325	325	325	325	325
AA - End Hub Diameter	3.64	3.64	3.64	3.64	3.64	4.80	4.80	4.80	4.80	4.80
	92	92	92	92	92	122	122	122	122	122
AB - Handwheel Clearance (Open)	7.3	7.3	7.3	7.3	7.3	11.2	11.2	11.2	11.2	11.2
	185	185	185	185	185	284	284	284	284	284
B - Center to End	6.1	6.1	6.1	6.1	6.1	8.8	8.8	8.8	8.8	8.8
	155	155	155	155	155	224	224	224	224	224
E - Center to Top (Open)	13.4	13.4	13.4	13.4	13.4	20.0	20.0	20.0	20.0	20.0
	340	340	340	340	340	508	508	508	508	508
G - Handwheel/Handle Diameter	8.5	8.5	8.5	8.5	8.5	16.0**	16.0**	16.0**	16.0**	16.0**
	216	216	216	216	216	406**	406**	406**	406**	406**
Weight, Welded	43	43	43	43	43	158	158	158	158	158
	20	20	20	20	20	72	72	72	72	72
Weight, Unwelded	45	45	45	45	45	162	162	162	162	162
	21	21	21	21	21	74	74	74	74	74

** Impactor Handwheel

Univalve® Piston Check Valves Class 4500 11,250 PSI @ 100°F (775.9 BAR @ 38°C)


B

Standard Features

- Available Body Material
 - A105 carbon steel.
 - F22 alloy steel.
 - F91 alloy steel.
 - F316, F347 stainless steel.
 - Other material on application.
- Unwelded (graphitic seal) or welded cover.
- Y-Pattern.
- Body-guided investment cast Stellite disk.
- Integral Stellite seat.
- Stainless steel spring. (Optional without springs, see page G14.)

96174

Pressure Class 4500 (PN 760)

Fig. No.		Type	Ends	NPS (DN)
Welded	Unweld.			
96174	96274	Y-Pattern	Socket Welding	½ (15) thru 2 (50)
96178	96278	Y-Pattern	Buttwelding	½ (15) thru 4 (100)

Dimensions – Globe

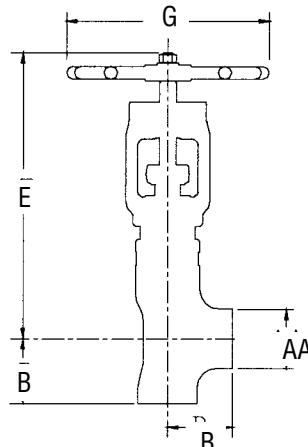
Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 96174, 96178, 96274, 96278	NPS	½	¾	1	1¼	1½	2	2½	3	4
	DN	15	20	25	32	40	50	65	80	100
A - End to End		8.2	8.2	8.2	8.2	8.2	12.8	12.8	12.8	12.8
		208	208	208	208	208	325	325	325	325
AA - End Hub Diameter		3.64	3.64	3.64	3.64	3.64	4.80	4.80	4.80	4.80
		92	92	92	92	92	122	122	122	122
B - Center to End		6.1	6.1	6.1	6.1	6.1	8.8	8.8	8.8	8.8
		155	155	155	155	155	224	224	224	224
E - Center to Top		5.4	5.4	5.4	5.4	5.4	7.9	7.9	7.9	7.9
		137	137	137	137	137	201	201	201	201
Weight		35	35	35	35	35	92	92	92	92
		16	16	16	16	16	42	42	42	42

Univale® Angle Stop Valves Class 1690 4225 PSI @ 100°F (291.4 BAR @ 38°C)

Standard Features

- Available Body Material
 - A105 carbon steel.
 - F22 alloy steel.
 - F91 alloy steel.
 - F316, F347 stainless steel.
 - Other material on application.
- Unwelded (graphitic seal) or Welded Bonnet.
- OS&Y.
- Angle Pattern.
- Body-guided investment cast Stellite disk.
- Integral Stellite seat.
- Integral Backseat.
- Asbestos-free graphitic packing.



Pressure Class 1690 (PN 290)

Fig. No.		Type	Ends	NPS (DN)
Welded	Unweld.			
36125	36225	Angle	Socket Welding	1/2 (15) thru 2 1/2 (65)
36129	36229	Angle	Buttwelding	1/2 (15) thru 4 (100)

Dimensions – Angle

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

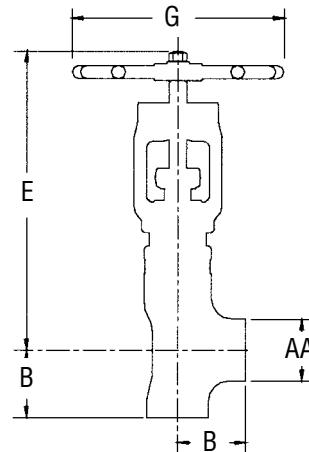
Figure No. 36125, 36129, 36225, 36229	NPS	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
	DN	15	20	25	32	40	50	65	80	100
AA - Hub Diameter		2.3	2.3	2.3	3.8	3.8	3.6	4.0	4.0	4.8
		58	58	58	97	97	91	102	102	122
B - Center to End		2.5	2.5	2.5	3.6	3.6	4.1	4.5	4.5	5.3
		64	64	64	91	91	104	114	114	135
E - Center to Top (Open)		11.7	11.7	11.7	14.9	14.9	17.3	19.1	19.1	19.7
		297	297	297	378	378	439	485	485	500
G - Handwheel/Handle Diameter		8.5	8.5	8.5	14.3*	14.3*	14.3*	16.0**	16.0**	16.0**
		216	216	216	363	363	363	406	406	406
Weight, Welded		18	18	18	40	40	60	103	103	139
		8.2	8.2	8.2	18.1	18.1	27.2	46.7	46.7	63.0
Weight, Unwelded		19	19	19	42	42	62	107	107	143
		8.6	8.6	8.6	19.1	19.1	28.1	48.5	48.5	64.9

* Impactor Handle **Impactor Handwheel

Univalve® Angle Stop-Check Valves Class 1690 4225 PSI @ 100°F (291.4 BAR @ 38°C)

Standard Features

- Available Body Material
 - A105 carbon steel.
 - F22 alloy steel.
 - F91 alloy steel.
 - F316, F347 stainless steel.
 - Other material on application.
- Unwelded (graphitic seal) or Welded Bonnet.
- OS&Y.
- Angle Pattern.
- Body-guided investment cast Stellite disk.
- Integral Stellite seat.
- Integral Backseat.
- Asbestos-free graphitic packing.


B

Pressure Class 1690 (PN 290)

Fig. No.		Type	Ends	NPS (DN)
Welded	Unweld.			
36165	36265	Angle	Socket Welding	1/2 (15) thru 2 1/2 (65)
36169	36269	Angle	Buttwelding	1/2 (15) thru 4 (100)

Dimensions – Angle

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

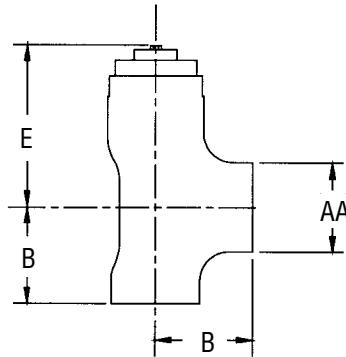
Figure No. 36165, 36169, 36265, 36269	NPS	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
	DN	15	20	25	32	40	50	65	80	100
AA - Hub Diameter		2.3	2.3	2.3	3.8	3.8	3.6	4.0	4.0	4.8
		58	58	58	97	97	91	102	102	122
B - Center to End		2.5	2.5	2.5	3.6	3.6	4.1	4.5	4.5	5.3
		64	64	64	91	91	104	114	114	135
E - Center to Top (Open)		11.7	11.7	11.7	14.9	14.9	17.3	19.1	19.1	19.7
		297	297	297	378	378	439	485	485	500
G - Handwheel/Handle Diameter		8.5	8.5	8.5	14.3*	14.3*	14.3*	16.0**	16.0**	16.0**
		216	216	216	363	363	363	406	406	406
Weight, Welded		18	18	18	40	40	60	103	103	139
		8.2	8.2	8.2	18.1	18.1	27.2	46.7	46.7	63.0
Weight, Unwelded		19	19	19	42	42	62	107	107	143
		8.6	8.6	8.6	19.1	19.1	28.1	48.5	48.5	64.9

* Impactor Handle **Impactor Handwheel

Univalue® Angle Check Valves Class 1690 4225 PSI @ 100°F (291.4 BAR @ 38°C)

Standard Features

- Available Body Material
 - A105 carbon steel.
 - F22 alloy steel.
 - F91 alloy steel.
 - F316, F347 stainless steel.
 - Other material on application.
- Unwelded (graphitic seal) or Welded Cover.
- Angle Pattern.
- Body-guided investment cast Stellite disk.
- Integral Stellite seat.
- Stainless steel spring. (Optional without spring, see page G14.)



Pressure Class 1690 (PN 290)

Fig. No.		Type	Ends	NPS (DN)
Welded	Unweld.			
36175	36275	Angle	Socket Welding	½ (15) thru 2½ (65)
36179	36279	Angle	Buttwelding	½ (15) thru 4 (100)

Dimensions - Angle

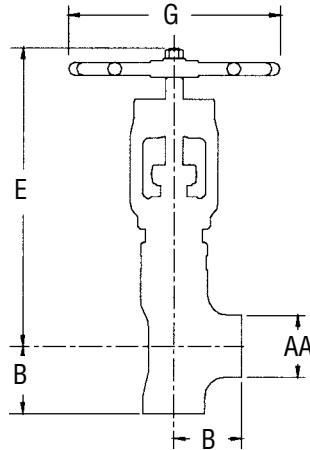
Black numerals are in inches and pounds
Colored numerals are in millimeters and kilograms

Figure No. 36175, 36179, 36275, 36279	NPS	½	¾	1	1¼	1½	2	2½	3	4
	DN	15	20	25	32	40	50	65	80	100
AA - Hub Diameter		2.3	2.3	2.3	3.8	3.8	3.6	4.0	4.0	4.8
		58	58	58	97	97	91	102	102	122
B - Center to End		2.5	2.5	2.5	3.6	3.6	4.1	4.5	4.5	5.3
		64	64	64	91	91	104	114	114	135
E - Center to Top		4.6	4.6	4.6	5.7	5.7	6.2	7.2	7.2	7.8
		117	117	117	145	145	157	183	183	198
Weight		8	8	8	21	21	30	41	41	76
		3.6	3.6	3.6	9.5	9.5	13.6	18.6	18.6	34.5

Univalve® Angle Stop Valves Class 2680 6700 PSI @ 100°F (462.1 BAR @ 38°C)

Standard Features

- Available Body Material
 - A105 carbon steel.
 - F22 alloy steel.
 - F91 alloy steel.
 - F316, F347 stainless steel.
 - Other material on application.
- Unwelded (graphitic seal) or Welded Bonnet.
- OS&Y.
- Angle Pattern.
- Body-guided investment cast Stellite disk.
- Integral Stellite seat.
- Integral Backseat.
- Asbestos-free graphitic packing.


B

Pressure Class 2680 (PN 460)

Fig. No.		Type	Ends	NPS (DN)
Welded	Unweld.			
66125	66225	Angle	Socket Welding	1/2 (15) thru 2 1/2 (65)
66129	66229	Angle	Buttwelding	1/2 (15) thru 4 (100)

Dimensions – Angle

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

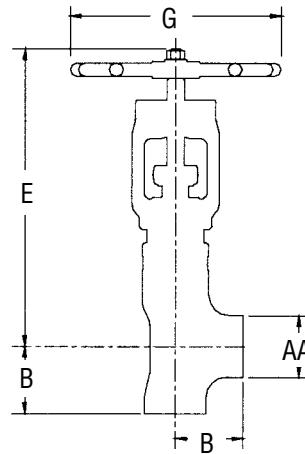
Figure No. 66125, 66129, 66225, 66229	NPS	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
	DN	15	20	25	32	40	50	65	80	100
AA - Hub Diameter		2.3	2.3	2.3	3.8	3.8	4.0	4.8	4.8	4.8
		58	58	58	97	97	102	122	122	122
B - Center to End		2.5	2.5	2.5	3.6	3.6	4.5	5.3	5.3	5.3
		64	64	64	91	91	114	135	135	135
E - Center to Top (Open)		11.7	11.7	11.7	14.9	14.9	18.2	19.7	19.7	19.7
		297	297	297	378	378	462	500	500	500
G - Handwheel/Handle Diameter		8.5	8.5	8.5	11.0*	11.0*	14.3*	16.0**	16.0**	16.0**
		216	216	216	279	279	363	406	406	406
Weight, Welded		18	18	18	38	38	76	139	139	139
		8.2	8.2	8.2	17.2	17.2	34.5	63.0	63.0	63.0
Weight, Unwelded		19	19	19	40	40	80	143	143	143
		8.6	8.6	8.6	18.1	18.1	36.3	64.9	64.9	64.9

* Impactor Handle **Impactor Handwheel

Univale® Angle Stop-Check Valves Class 2680 6700 PSI @ 100°F (462.1 BAR @ 38°C)

Standard Features

- Available Body Material
 - A105 carbon steel.
 - F22 alloy steel.
 - F91 alloy steel.
 - F316, F347 stainless steel.
 - Other material on application.
- Unwelded (graphitic seal) or Welded Bonnet.
- OS&Y.
- Angle Pattern.
- Body-guided investment cast Stellite disk.
- Integral Stellite seat.
- Integral Backseat.
- Asbestos-free graphitic packing



Pressure Class 2680 (PN 460)

Fig. No.		Type	Ends	NPS (DN)
Welded	Unweld.			
66165	66265	Angle	Socket Welding	1/2 (15) thru 2 1/2 (65)
66169	66269	Angle	Buttwelding	1/2 (15) thru 4 (100)

Dimensions – Angle

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

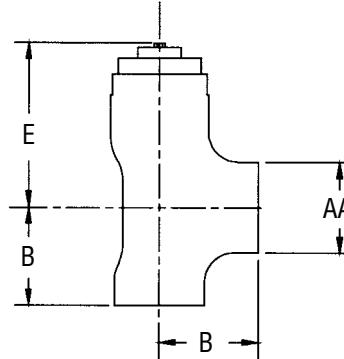
Figure No. 66165, 66169, 66265, 66269	NPS	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
	DN	15	20	25	32	40	50	65	80	100
AA - Hub Diameter	2.3	2.3	2.3	3.8	3.8	4.0	4.8	4.8	4.8	4.8
	58	58	58	97	97	102	122	122	122	122
B - Center to End	2.5	2.5	2.5	3.6	3.6	4.5	5.3	5.3	5.3	5.3
	64	64	64	91	91	114	135	135	135	135
E - Center to Top (Open)	11.7	11.7	11.7	14.9	14.9	18.2	19.7	19.7	19.7	19.7
	297	297	297	378	378	462	500	500	500	500
G - Handwheel/Handle Diameter	8.5	8.5	8.5	11.0*	11.0*	14.3*	16.0**	16.0**	16.0**	16.0**
	216	216	216	279	279	363	406	406	406	406
Weight, Welded	18	18	18	38	38	76	139	139	139	139
	8.2	8.2	8.2	17.2	17.2	34.5	63.0	63.0	63.0	63.0
Weight, Unwelded	19	19	19	40	40	80	143	143	143	143
	8.6	8.6	8.6	18.1	18.1	36.3	64.9	64.9	64.9	64.9

* Impactor Handle **Impactor Handwheel

Univale® Angle Check Valves Class 2680 6700 PSI @ 100°F (462.1 BAR @ 38°C)

Standard Features

- Available Body Material
 - A105 carbon steel.
 - F22 alloy steel.
 - F91 alloy steel.
 - F316, F347 stainless steel.
 - Other material on application.
- Unwelded (graphitic seal) or Welded Cover.
- Angle Pattern.
- Body-guided investment cast Stellite disk.
- Integral Stellite seat.
- Stainless steel spring. (Optional without spring, see page G14.)


B

Pressure Class 2680 (PN 460)

Fig. No.		Type	Ends	NPS (DN)
Welded	Unweld.			
66175	66275	Angle	Socket Welding	½ (15) thru 2½ (65)
66179	66279	Angle	Buttwelding	½ (15) thru 4 (100)

Dimensions – Angle

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

Figure No. 66175, 66179, 66275, 66279	NPS	½	¾	1	1¼	1½	2	2½	3	4
	DN	15	20	25	32	40	50	65	80	100
AA - Hub Diameter	2.3	2.3	2.3	3.8	3.8	4.0	4.8	4.8	4.8	4.8
	58	58	58	97	97	102	122	122	122	122
B - Center to End	2.5	2.5	2.5	3.6	3.6	4.5	5.3	5.3	5.3	5.3
	64	64	64	91	91	114	135	135	135	135
E - Center to Top	4.6	4.6	4.6	5.7	5.7	7.2	7.8	7.8	7.8	7.8
	117	117	117	145	145	183	198	198	198	198
Weight	8	8	8	23	23	46	76	76	76	76
	3.6	3.6	3.6	10.4	10.4	20.9	34.5	34.5	34.5	34.5