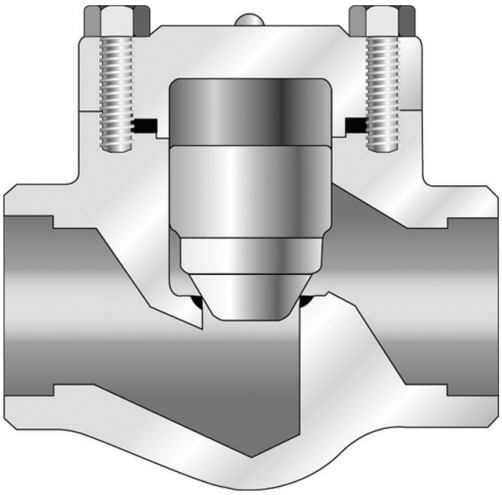
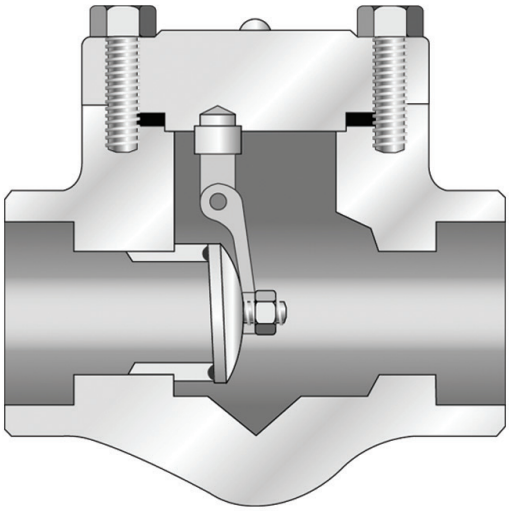
LIFT CHECK VALVE



LIFT CHECK



SWING CHECK

LIFT CHECK VALVE DESCRIPTION

They have an advantage over most other types of check valve in that they need only a relatively short lift to obtain full valve opening. The lift check valve uses a free-moving closure element that is placed above the seat. It prevents backflow and maintains pressure. The lift check valve is recommended to install in horizontal piping lines because the disc is pushed up by the flow until the flow reverses when gravity and down stream pressure close the closure element against the seat.

CLASS

API 800, 1500
ANSI 150, 300, 600, 900, 1500, 2500, 4500

SIZE

3/8", 1/2", 3/4", 1", 11/4", 11/2", 2"

MATERIAL

ASTM A105, A182-F5, A182-F9, A182-F11, A182-F22, A182-F304, A182-F316, A182-F304L, A182-F316L, A350-LF2

END CONNECTION

SOCKET WELDING, THREADED
BUTT WELDING, FLANGED

FEATURE

BOLTED COVER OR WELDED COVER
INTEGRAL SEAT

SWING CHECK VALVE DESCRIPTION

prevent reversal of flow through pipe lines. The swing check valve uses a hinged door to open during flow and to close against a pressure reversal. Swing check valve can be installed in horizontal or vertical upward flow piping. They offer low resistance to flow and are particularly suited to low velocity service

CLASS

API 800, 1500
ANSI 150, 300, 600, 900, 1500

SIZE

3/8", 1/2", 3/4", 1", 11/4", 11/2", 2"

MATERIAL

ASTM A105, A182-F5, A182-F9, A182-F11, A182-F22, A182-F304, A182-F316, A182-F304L, A182-F316L, A182-F321, A182-F347, A182-F51, A182-F91, A350-LF2
Other Materials also Available on Application

END CONNECTION

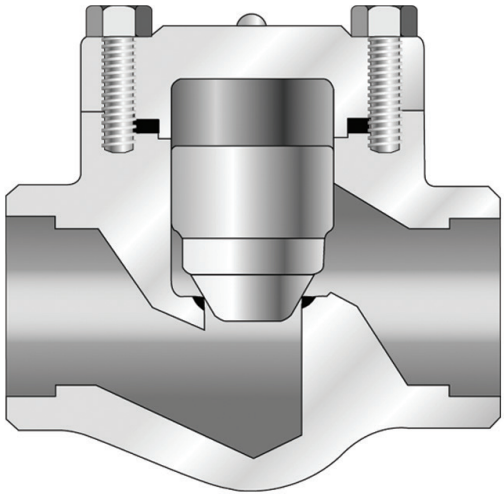
Socket welding, threaded
Butt welding, flanged

FEATURE

Bolted cover or welded cover
Renewable seat

LIFT CHECK VALVE

BOLTED COVER



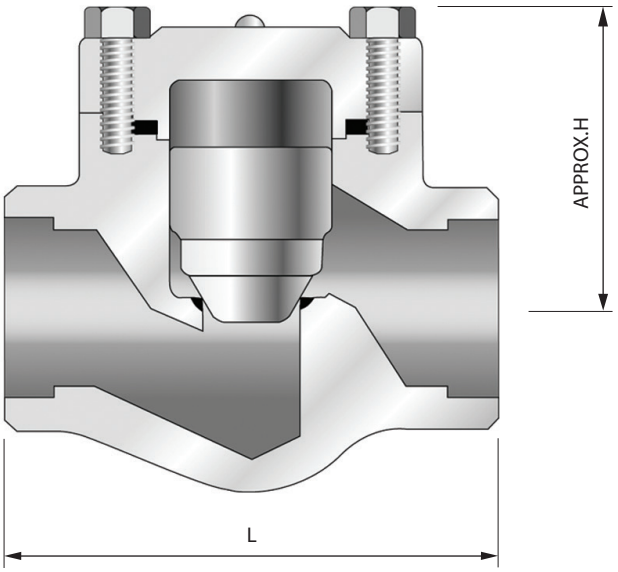
LIFT CHECK

STANDARD MATERIAL SPECIFICATIONS

NO.	PART NAME	Q'TY	MATERIAL-ASTM				
			A105	F304	F304L	F316	F316L
1	Body	1	A105	A182-F304	A182-F304L	A182-F316	A182-F316L
3	Cover	1	A105	A182-F304	A182-F304L	A182-F316	A182-F316L
5	Disc	1	A276-410	A276-304	A276-316		
12	Cover Bolt	4	A193-B7	A193-B8			
13	Gasket	1	SS304+Graphite		SS316+Graphite		
23	Nameplate	1	Aluminum				

CLASS 600 & 1500

BOLTED COVER



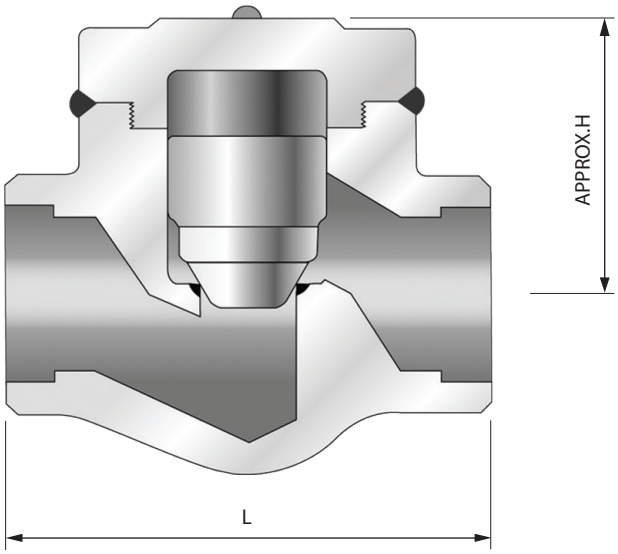
LIFT CHECK

DIMENSIONS & WEIGHTS

CLASS	PORT	VALVE SIZE	CENTER TO TOP, OPEN	END TO END	PORT DIAMETER	WEIGHT
			H	L	d	
		DN	mm	mm	mm	kg
600 & 800	REDUCED	10	51	73	8	1.3
		15	51	73	11	1.2
		20	55	87	13	1.3
		25	65	96	19	2.1
		32	76	121	25	4.0
		40	84	141	28	4.7
		50	101	161	36	7.1
	FULL	10	51	73	10	1.3
		15	55	87	13	1.3
		20	65	96	19	2.1
		25	76	121	22	4.0
		32	84	141	28	4.7
		40	101	161	32	7.1
		50	116	220	42	10.7
1500	REDUCED	10	65	87	8	1.2
		15	65	96	11	1.2
		20	65	96	13	2.1
		25	76	121	19	4.0
		32	84	141	25	4.7
		40	101	161	28	7.1
		50	116	172	36	10.5

CLASS 1500 & 2500

WELDED COVER



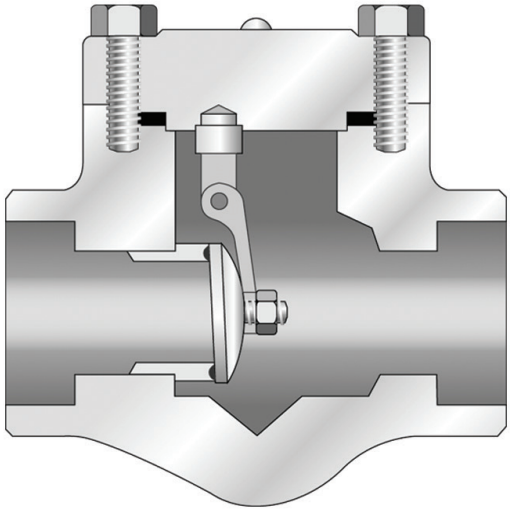
LIFT CHECK

DIMENSIONS & WEIGHTS

CLASS	PORT	VALVE SIZE	CENTER TO TOP, OPEN	END TO END	PORT DIAMETER	WEIGHT
			H	L	d	
		DN	mm	mm	mm	kg
1500	FULL	15	65	96	13	2.1
		20	73	121	18	4.0
		25	80	141	22	4.7
		32	100	161	28	7.1
		40	110	172	32	10.7
		50	140	200	35	12.5
2500	FULL	15	73	121	11	7.1
		20	80	141	14	7.1
		25	100	161	19	7.1
		32	110	172	25	10.7
		40	140	200	28	10.7
		50	160	220	38	12.5

SWING CHECK VALVE

BOLTED COVER



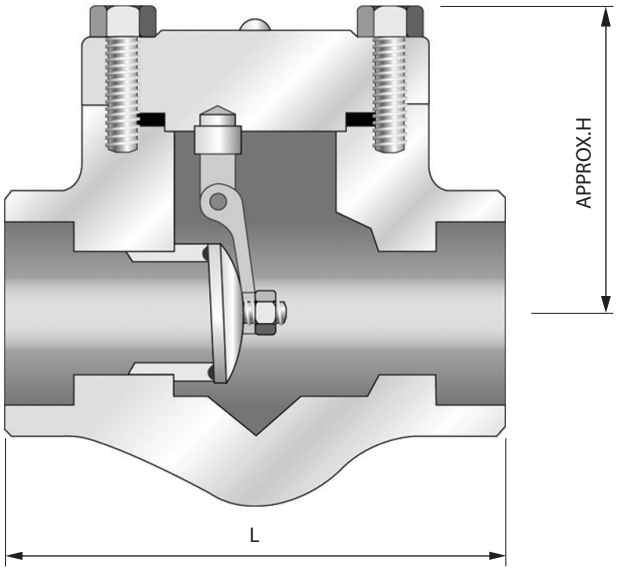
SWING CHECK

STANDARD MATERIAL SPECIFICATIONS

NO.	PART NAME	Q'TY	MATERIAL-ASTM				
			A105	F304	F304L	F316	F316L
1	Body	1	A105	A182-F304	A182-F304L	A182-F316	A182-F316L
3	Cover	1	A105	A182-F304	A182-F304L	A182-F316	A182-F316L
5	Disc	1	A276-410	A276-304		A276-316	
7	Seat Ring	1	A276-410	A276-304		A276-316	
8	Retaining Nut	1	A194-2H		A194-8		
9	Hinge	1				A351-CF8M	
10	Hinge Pin	1			A276-316		
11	Supporter	1				A276-316	
12	Cover Bolt	4	A193-B7		A193-B8		
13	Gasket	1	SS304+Graphite			SS316+Graphite	
23	Nameplate	1			Aluminum		

CLASS 800 & 1500

BOLTED COVER



SWING CHECK

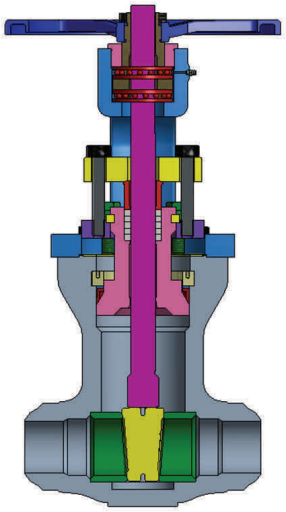
DIMENSIONS & WEIGHTS

CLASS	PORT	VALVE SIZE	CENTER TO TOP, OPEN	END TO END	PORT DIAMETER	WEIGHT
			H	L	d	
		DN	mm	mm	mm	kg
800	REDUCED	10	51	73	10	1.1
		15	51	73	10	1.0
		20	55	87	13	1.4
		25	65	96	19	2.2
		32	76	121	25	4.0
		40	84	141	30	4.1
		50	101	161	37	6.0
	FULL	10	51	73	10	1.0
		15	55	87	13	1.4
		20	65	96	19	2.2
		25	76	121	25	4.0
		32	84	141	30	4.1
		40	101	161	37	6.0
		50	116	170	43	10.6
1500	REDUCED	10	65	87	10	1.4
		15	65	96	13	1.4
		20	65	96	13	2.2
		25	76	121	19	4.0
		32	84	141	25	4.1
		40	101	161	30	6.0
		50	116	172	37	9.3

HIGH PRESSURE FORGED STEEL VALVE

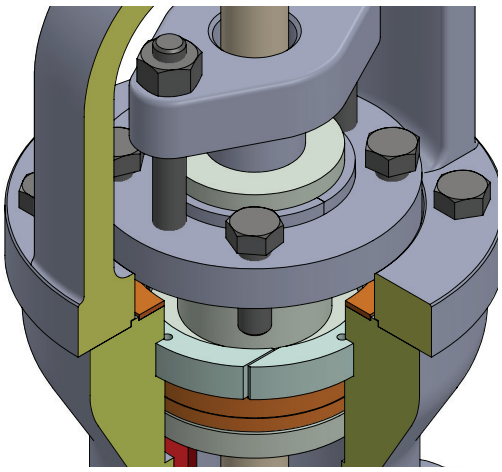
HIGHER INTEGRITY

By selecting valve with a forged body the user automatically increases the safety and integrity of their plant and process equipment. It has long been known that forged valve are tougher, more resistant to impact, withstand higher induced pipe stresses and are more structurally superior to equivalent castings.



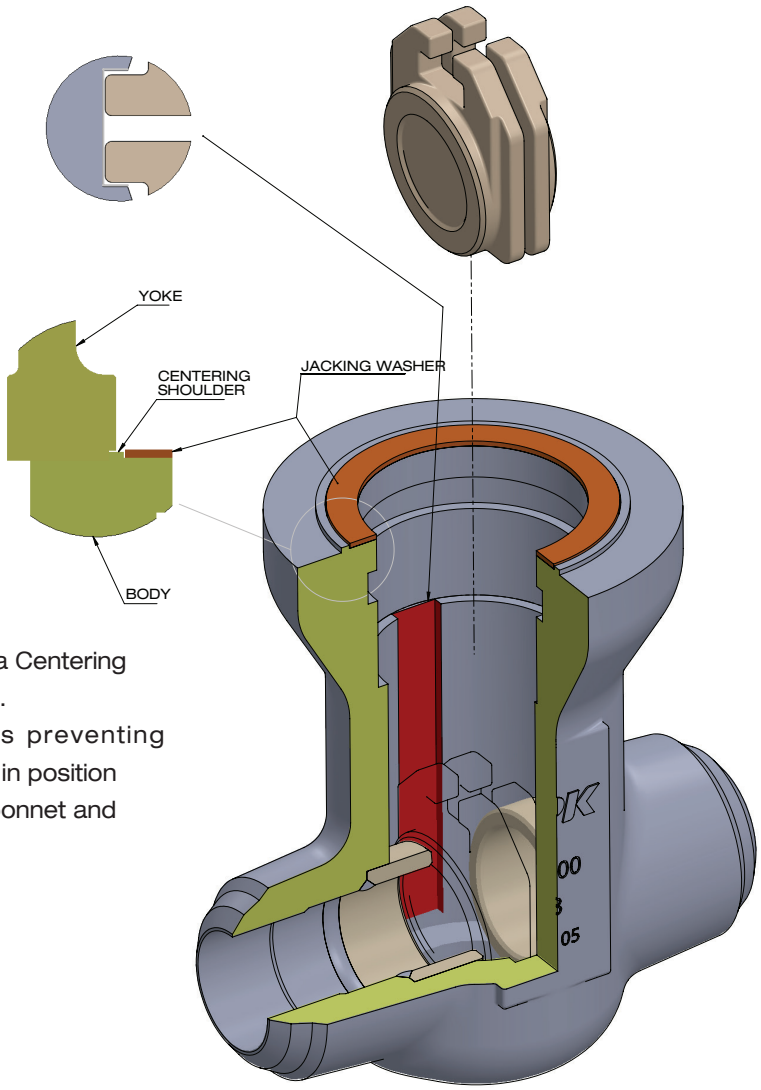
MAINTAINABILITY

Most all small-bore pressure seals bonnets are equipped with large a diameter threaded mechanisms to engage the bonnet and pressure seal gasket. It is very well known in industry that large diameter threads are extremely troublesome during maintenance especially in high temperature applications where over time oxides develop in the threads rendering them almost impossible to separate. The new SB design of forged pressure seal is the "small-bore valve with big bore advantages". This innovation incorporates features normally reserved for large bore pressure seals into this neat yet accessible package. Its accessible and very maintenance friendly. PK have adapted the conventional large diameter valve bonnet draw bolt mechanism into this small-bore design. The innovation made possible by reversing the conventional draw bolts mechanism into a jacking bolt design.



INTERNALLY MACHINED BODY GUIDES

The SB Series Body has internally machined Obturator guides that are more accurate and less problematic than the conventional welded guides.
Welded guides can break due to stress and vibration or even corrosion and could result in parts ending up in the process. Guide failure can also result in the valve jamming.
Precision machined guides result in less obturator vibration. Poor Quality guiding causes damage to the seating surfaces.
SB Series innovation is in accurate machining, resulting in the obturator being held steady and in the desired position.

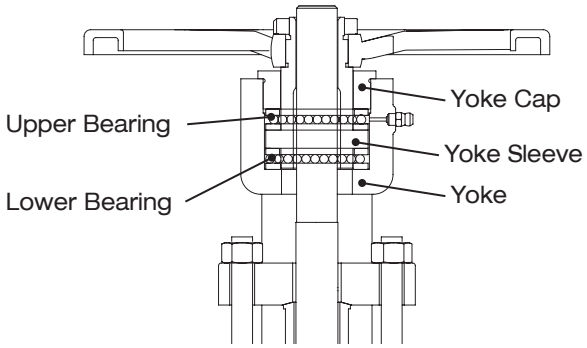


SELF-CENTERING ASSEMBLY

The Body to Yoke mating surface is equipped with a Centering Shoulder that serves as a guide to the Jacking Ring.
The shoulder captures the Jacking Ring thus preventing misalignment during assembly and retains the Ring in position while the jacking bolts apply the initial force to the bonnet and pressure seal gasket

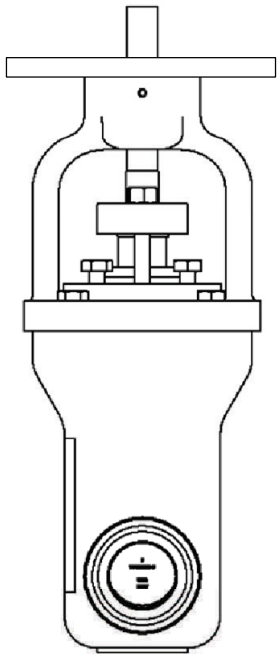
ACTUATOR

Dual thrust bearings reduce friction and minimize actuation hysteresis. The use of Ball Bearing reduces friction and makes for smooth handwheel operation. The Yoke Cap is tack welded to prevent accidental loosening.



ACTUATOR MOUNTING

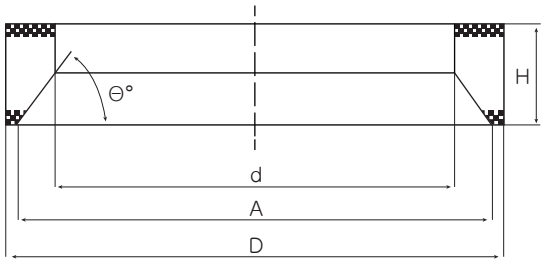
Because Yoke is robust cast steel it can accommodate actuation. When ordered the valve yoke can be supplied complete with actuator mounting flange. The flange can be pre-drilled to match the customers drawings to facilitate actuator ease of actuator installation.



THE PRESSURE-SEAL GASKET

The SB series is offered with two styles of pressure seal gasket. For most applications and unless specified by the purchaser the SB serious will be provided with an Inconel Graphite composite gasket. Alternately and for the more severe applications a silver plated soft iron gasket can be provided.

The pressure seal jacking mechanism will be fully engaged during factory Hydro test and the seal integrity proven. Should it become necessary during the installation to disassemble the valve, then the pressure seal gasket should be replaced. Pressure seal gaskets are not reusable.

Symbol	Shape
A	

Remark : A. Utilize the symbols shown about to indicate the section shape of pressure seal ring gaskets

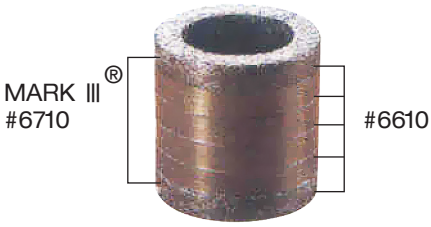
PACKING

THE SB SERIES COMES STANDARD WITH SET OF DIE-FORMED GRAPHITE V-RINGS RMED GRAPHITE V-RINGS

PILLAR FLEXIBLE GRAPHITE PACKINGS

Pillar style No. 6710+6610

Pure graphite preformed, one cut type packing. It is superior for heat, chemical and radiation resistance. The combination use with Style 6710 is recommended Recommendation for nuclear power station : style 6610N



PERFORMANCE

PH	0 to 14
Temp	-270 to 600℃
Press	43.1 MPa {440 kgf/ cm^2} (ANSI class 2500)

APPLICATION

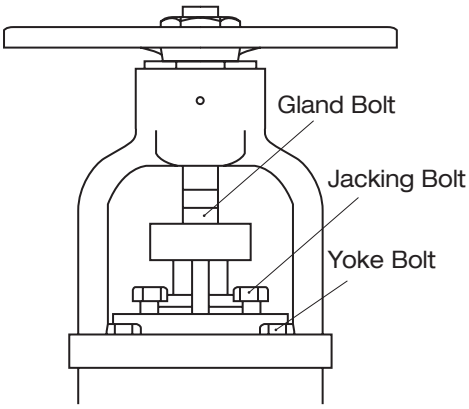
Water, steam, oil, heat transfer oil, solvent, gas, LNG, strong acid, strong alkali, high pressure & high temperature valves, cryogenic valves, high pressure gas valves

BACKSEAT

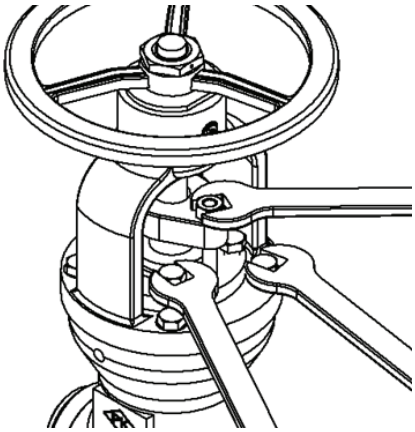
The Backseat is accomplished by a hard-face weld overlay in Stellite #6 directly onto the bonnet which is then machined into a reciprocal cone to match the stem. Backseats should not be used for packing replacement while under pressure. This practice is dangerous and can result in serious injury.

It is also recommended that valve are not left in the backseat position permanently as the packing may dryout and deteriorate. It is better practice to open the valve fully to the backseat then rotate the hand-wheel one turn towards the closed position.

EASE OF MAINTENANCE



The SB Series design considered all aspects of the valve including maintainability. One of the key objectives in the design was to make a valve that provided ease of access to all bolting required by maintenance. The three bolting functions Gland, Jacking and Yoke within the yoke arch are layered and oriented in such a way that they provide an uncluttered ease of access.



The Jacking Bolts intentionally protrude above the Bonnet Clamp in order to provide access, this also mitigates any interference with the yoke flange bolting.

" The SB SERIES IS EASY AND VERY MAINTENANCE FRIENDLY "

FORGINGS ARE STRONGER

Forgings surpass casting in predictable strength properties, producing superior strength that is assured, and repeatable from part to part. The grain in castings is random and cannot obtain the strengthening effects of hot and cold working. In the forging process, controlled deformation (usually at elevated temperatures) results in greater metallurgical soundness and improved mechanical properties of the material.

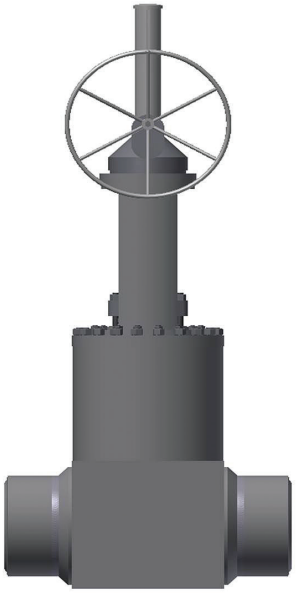
FRONT

SIDE

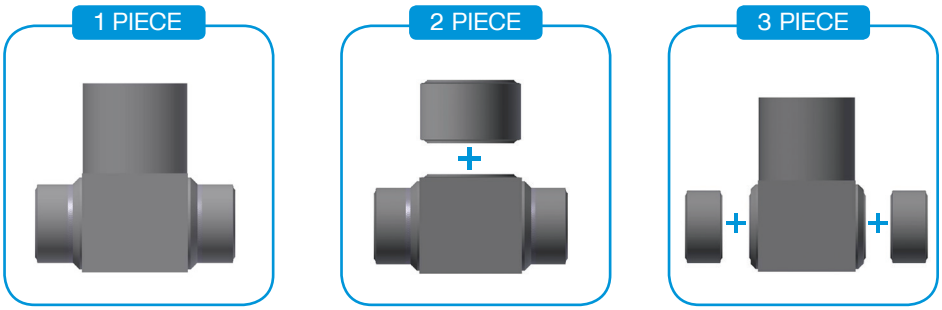
In most cases, forging stock has been pre-worked to remove porosity resulting from the solidification process. This produces directional alignment (or "grain flow") for important directional properties in strength, ductility, and resistance to impact and fatigue.

These properties are deliberately oriented in directions requiring maximum strength. Working the material achieves recrystallization and grain refinement that yields the maximum strength potential of the material with the minimum property variation, piece to piece. Properly developed grain flow in forgings closely follows the outline of the component. In contrast, bar stock and plate have unidirectional grain flow; any

FREE FORGING GATE VALVE

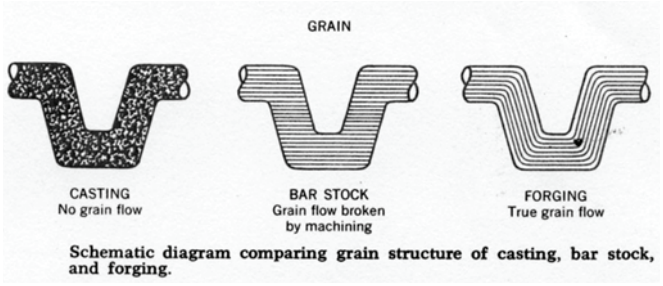


- Large size gate valves are manufactured with free forging(Above 8")
- There are 3 kinds of manufacturing method

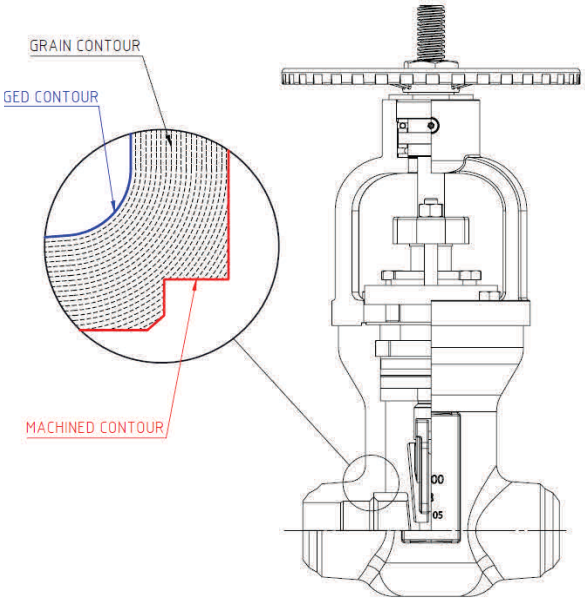


FORGING REFINES DEFECTS FROM CAST INGOTS OR CONTINUOUS CAST BAR.

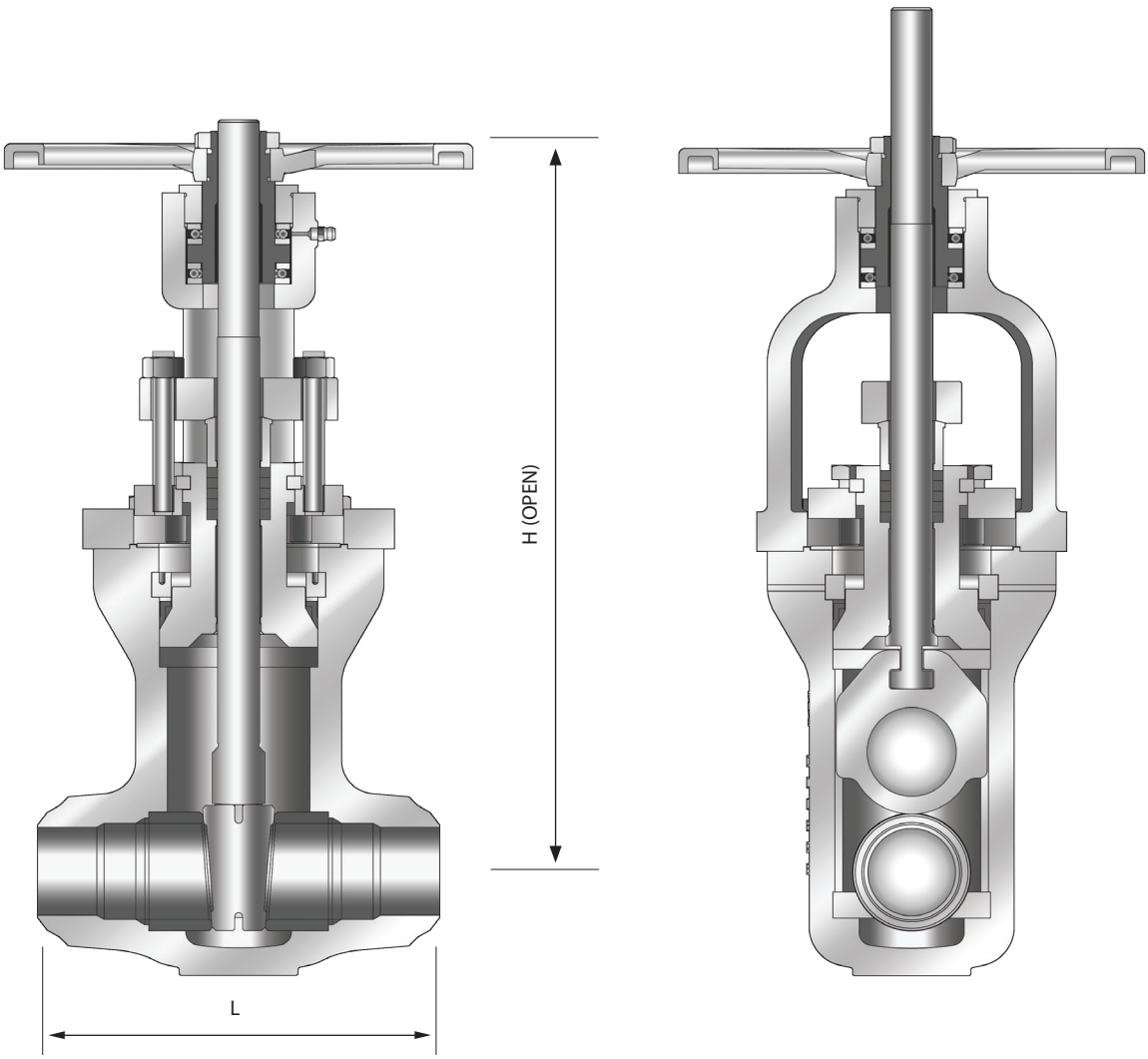
A casting has neither grain flow nor directional strength nor can the process prevent formation of certain metallurgical defects. Pre-working forge stock produces a grain flow oriented in directions requiring maximum strength. Dendritic structures, alloy segregation's and like imperfections are refined in forging.



Schematic diagram comparing grain structure of casting, bar stock, and forging.



FORGED STEEL GATE VALVE



900 # UNIT : mm

SIZE	2	3	4
L	215.9	304.8	355.6
DIA D1	315	355	400
H	531	660	813
WEIGHT(Kgf)	41	80	129

1500 # UNIT : mm

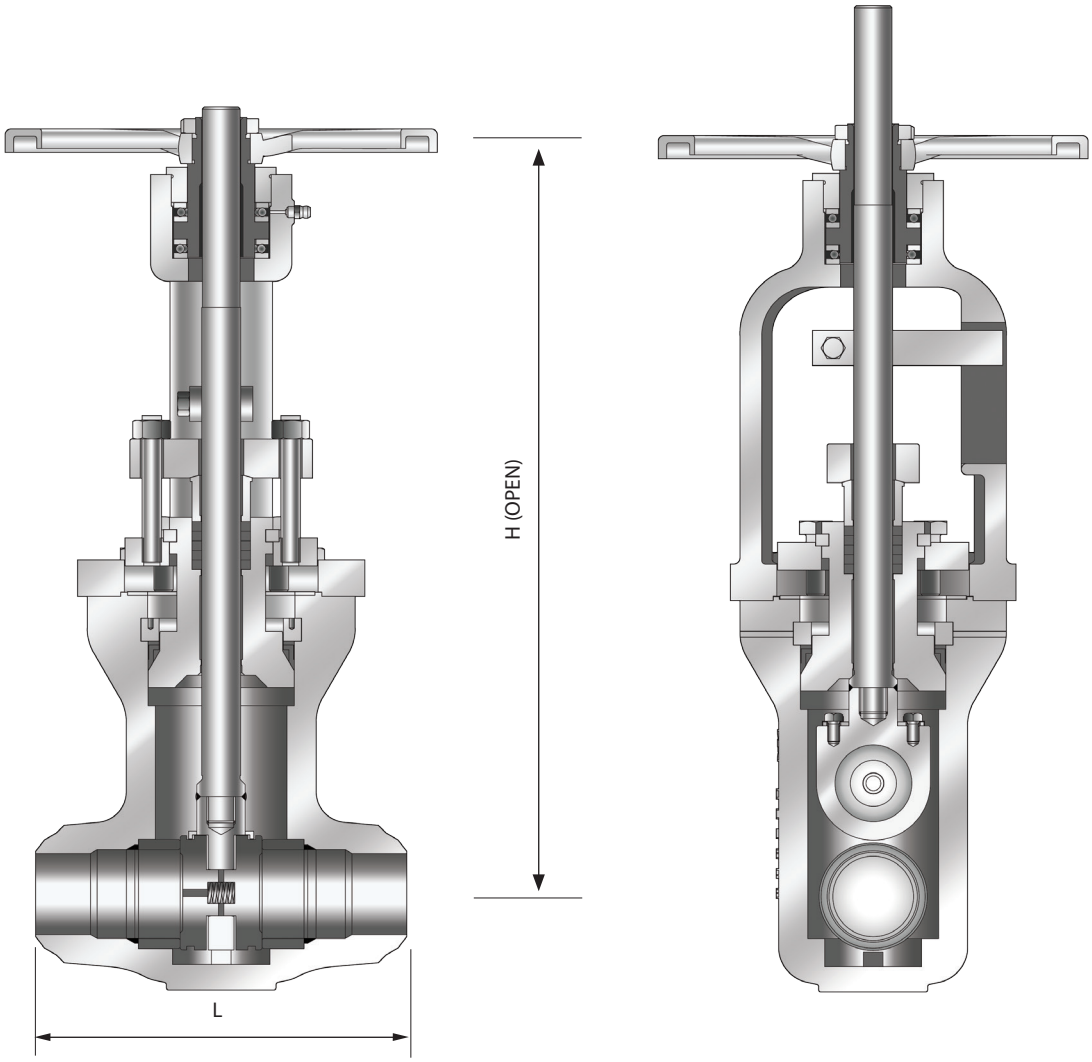
SIZE	2	3	4
L	215.9	304.8	406.4
DIA D1	315	355	400
H	531	660	813
WEIGHT(Kgf)	41	80	143

STANDARD MATERIAL SPECIFICATIONS

FORGED STEEL GATE VALVE					
NO.	PART NAME	MATERIAL			
1	BODY	A105	A182-F11	A182-F22	A182-F91
2	BONNET	A105	A182-F11	A182-F22	A182-F91
3	DISC	A216-WCB+STL	A217-WC6+STL	A217-WC9+STL	A217-C12A+STL
4	STEM	A479-410	A479-410	A479-410	A479-410
5	YOKE	A216-WCB	A216-WCB	A216-WCB	A216-WCB
6	BODY SEAT RING	A576-1020+STL	A182-F11+STL	A182-F22+STL	A182-F91+STL
7	BACK SEAT	A105+STL	A182-F11+STL	A182-F22+STL	A182-F91+STL
8	PACKING	GRAPHITE+GRAPHITE WITH INCONEL WIRE, FOR LFE			
9	GASKET	SOFT STEEL	304 STAINLESS STEEL	304 STAINLESS STEEL	304 STAINLESS STEEL
10	BONNET RETAINER	A576-1045	A576-1045	A576-1045	A576-1045
11	BONNET FLANGE	A576-1045	A576-1045	A576-1045	A576-1045
12	JACKING WASHER	A240-410	A240-410	A240-410	A240-410
13	RETAINER	A576-1045+Cr	A240-304	A240-304	A240-304
14	ADAPTOR RING	A240-410	A240-410	A240-410	A240-410
15	PACKING GLAND	A576-1020+Cr	A479-410	A479-410	A479-410
16	JACKING BOLT	A193-B7	A193-B7	A193-B7	A193-B7
17	GLAND FLANGE	A283-D	A283-D	A283-D	A283-D
18	GLAND BOLT	A193-B7	A193-B7	A193-B7	A193-B7
19	GLAND NUT	A194-2H	A194-2H	A194-2H	A194-2H
20	YOKE BOLT	A193-B7	A193-B7	A193-B7	A193-B7
21	YOKE SLEEVE	A439-D2C	A439-D2C	A439-D2C	A439-D2C
22	YOKE CAP	A576-1020	A576-1020	A576-1020	A576-1020
23	BEARING	STEEL	STEEL	STEEL	STEEL
24	GREASE NIPPLE	STEEL+Cr	STEEL+Cr	STEEL+Cr	STEEL+Cr
25	HANDWHEEL	A197	A197	A197	A197
26	HANDWHEEL NUT	A47-32510+Zn	A47-32510+Zn	A47-32510+Zn	A47-32510+Zn

1. SHELL WALL THICKNESS : ASME B16.34
2. END TO END DIMENSIONS : ASME B16.10
3. BUTT WELDING END : ASME B16.25

FORGED STEEL PS GATE VALVE



900 # UNIT : mm

SIZE	2	3	4
L	215.9	304.8	355.6
DIA D1	315	355	400
H	581	730	913
WEIGHT(Kgf)	45	90	140

1500 # UNIT : mm

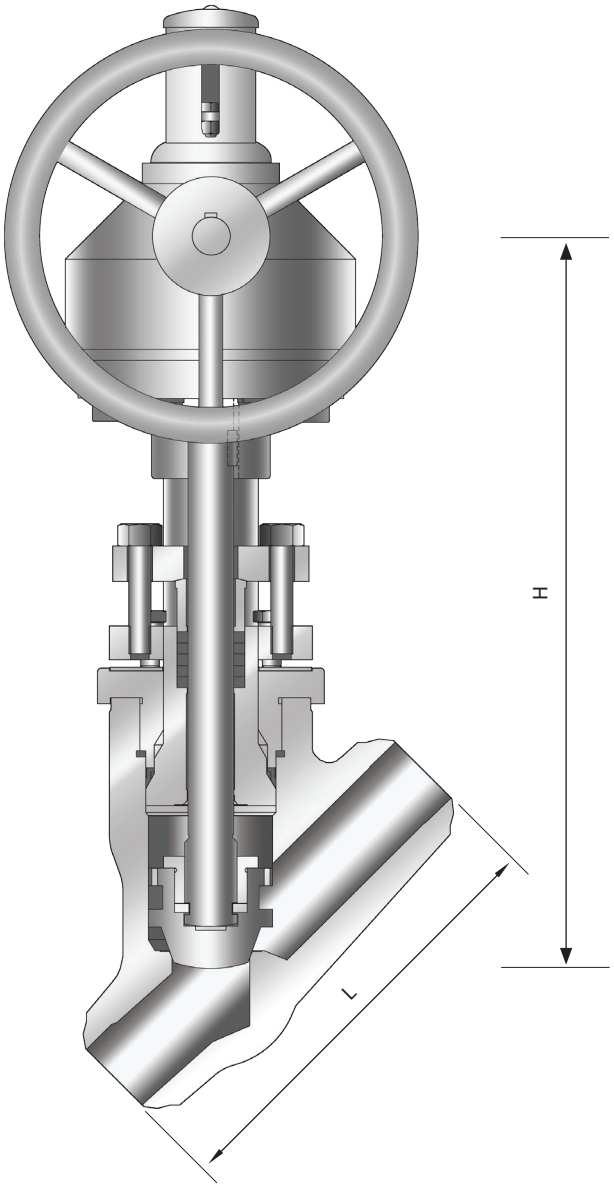
SIZE	2	3	4
L	215.9	304.8	406.4
DIA D1	315	355	400
H	581	660	913
WEIGHT(Kgf)	45	90	150

STANDARD MATERIAL SPECIFICATIONS

FORGED STEEL PS GATE VALVE		
NO.	**PART NAME**	**MATERIAL**
1	BODY	A105
2	BONNET	A105
3	DISC	A105+STL
4	STEM	A479-410
5	YOKE	A216-WCB
6	BODY SEAT RING	A576-1020+STL
7	BACK SEAT	A105+STL
8	PACKING	GRAPHITE+GRAPHITE WITH INCONEL WIRE, FOR LFE
9	GASKET	SOFT STEEL
10	BONNET RETAINER	A240-410
11	BONNET FLANGE	A576-1045
12	JACKING WASHER	A240-410
13	RETAINER	A576-1045+Cr
14	ADAPTOR RING	A240-410
15	PACKING GLAND	A576-1020+Cr
16	JACKING BOLT	A193-B7
17	GLAND FLANGE	A283-D
18	GLAND BOLT	A193-B7
19	GLAND NUT	A194-2H
20	YOKE BOLT	A193-B7
21	YOKE SLEEVE	A439-D2C
22	YOKE CAP	A576-1020
23	BEARING	STEEL
24	GREASE NIPPLE	STEEL+Cr
25	HANDWHEEL	A197
26	HANDWHEEL NUT	A47-32510+Zn
27	DISC GUIDE	A576-1020
28	KEY PLATE	A240-304
29	KEY PLATE BOLT	A193-B8
30	SET WASHER	A240-304
31	COIL SPRING	SWOSC-V
32	YOKE STOPPER	STEEL
33	STOPPER BOLT	STEEL

1. SHELL WALL THICKNESS : ASME B16.34
2. END TO END DIMENSIONS : ASME B16.10
3. BUTT WELDING END : ASME B16.25

FORGED STEEL Y-GLOBE VALVE



900 #

UNIT : mm

SIZE	2	3	4
L	279.4	368.3	457.2
DIA D1	350	350	400
H	536	631	724
WEIGHT(Kgf)	78	142	209

1500 #

UNIT : mm

SIZE	2	3	4
L	279.4	368.3	457.2
DIA D1	350	350	400
H	536	631	724
WEIGHT(Kgf)	78	142	209

2500 #

UNIT : mm

SIZE	2	3	4
L	279.4	368.3	457.2
DIA D1	350	400	450
H	588	662	763
WEIGHT(Kgf)	100	177	283

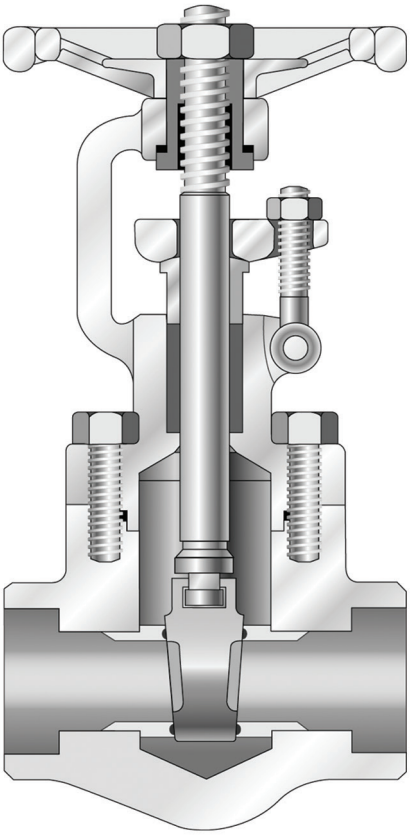
STANDARD MATERIAL SPECIFICATIONS

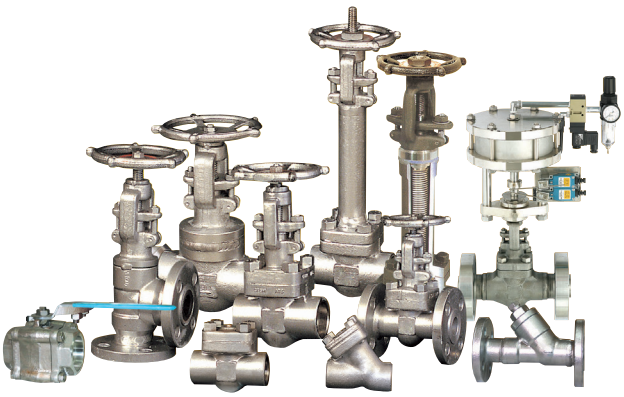
FORGED STEEL Y-GLOBE VALVE		
NO.	**PART NAME**	**MATERIAL**
1	BODY	A105
2	BONNET	A105
3	DISC	A216-WCB+STL
4	STEM	A479-410
5	YOKE	A216-WCB
6	BODY SEAT RING	A105+STL
7	BACK SEAT	A105+STL
8	PACKING	GRAPHITE+GRAPHITE WITH INCONEL WIRE, FOR LFE
9	GASKET	SOFT STEEL
10	BONNET FLANGE	A576-1045
11	JACKING WASHER	A240-410
12	PACKING GLAND	A576-1020+Cr
13	JACKING BOLT	A193-B7
14	GLAND FLANGE	A283-D
15	GLAND BOLT	A193-B7
16	GLAND NUT	A194-2H
17	LOCK NUT	A479-410
18	CONNECTION WASHER	A240-304
19	THRUST PAD	479-410
20	STOPPER BOLT	A193-B7
21	STOPPER NUT	A194-2H
22	KEY	A576-1045
23	GEAR BOX	DUCTILE IRON
24	INDICATOR	PLASTIC
25	STEM COVER	A53
26	WASHER	A576-1045+Zn
27	BOLT	A193-B7
28	HAND WHEEL	A576-1020

1. SHELL WALL THICKNESS : ASME B16.34, AP1600
2. END TO END DIMENSIONS : ASME B16.10
3. BUTT WELDING END : ASME B16.25

FORGED STEEL VALVE

GATE VALVE





DESCRIPTION

serves as efficient stop valve with flow in either direction. They are commonly used where a minimum of pressure drop is important because they offer practically no resistance to flow when fully open. Throttling is not conducive to accurate and consistent flow control. Also the valve may be damaged by the high velocity across the seats. They function best fully open or fully closed.

CLASS

API 800, 1500
ANSI 150, 300, 600, 900, 1500, 2500

SIZE

3/8", 1/2", 3/4", 1", 11/4", 11/2", 2"

MATERIAL

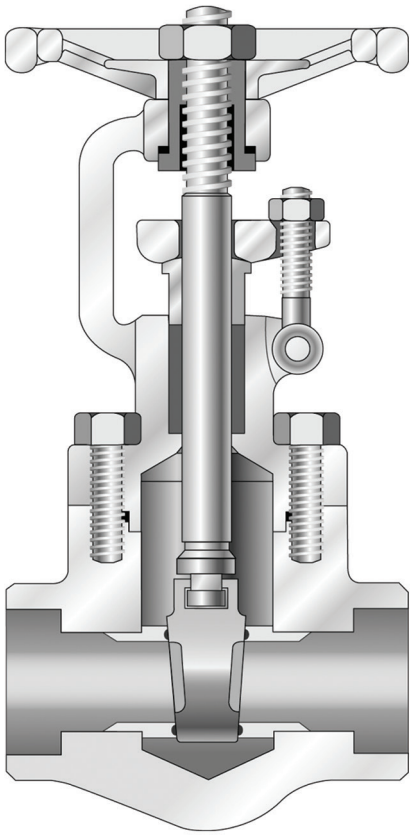
ASTM A105, A182-F5, A182-F9, A182-F11, A182-F22, A182-F304, A182-F316, A182-F304L, A182-F316L, A182-F321, A182-F347, A182-F51, A182-F91, A350-LF2
Other Materials also Available on Application

END CONNECTION

Socket welding, threaded
Butt welding, flanged

FEATURE

Bolted bonnet or welded bonnet
Outside screw & yoke
Solid wedge disc
Renewable seat



STANDARD MATERIAL SPECIFICATIONS

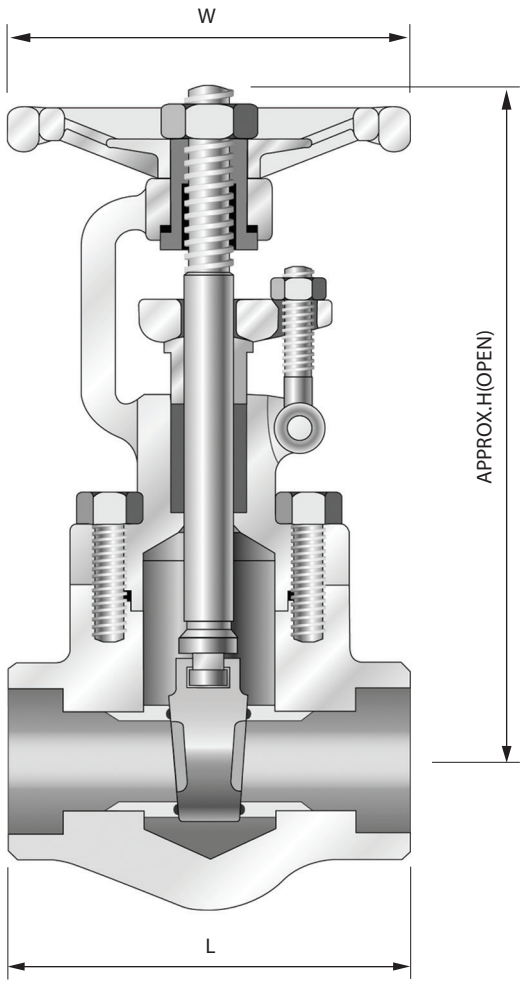
PART No.	PART NAME	Q'TY	A105	ASTM SPECIFICATIONS(SPECS-GRADES/TYPES)								
				A182				A182				
				F304	F304L	F316	F316L	F1	F5	F9	F11	F22
1	Body	1	A105	A182-F304	A182-F304L	A182-F316	A182-F316L	A182-F1	A182-F5	A182-F9	A182-F11	A182-F22
2	Bonnet	1	A105	A182-F304	A182-F304L	A182-F316	A182-F316L	A182-F1	A182-F5	A182-F9	A182-F11	A182-F22
4	Stem	1	A276-410	A276-304	A276-316			A276-410				
5	Disc	1	A217-CA15	A351-CF8	A351-CF8M			A217-CA15				
7	Seat Ring	2	A276-410+STL	A276-304+STL'	A276-316+STL'			A276-410+STL'				
12	Bonnet Bolt	4	A193-B7	A193-B8				A193+B7				
13	Gasket	1	SS304+Graphite	SS316+Graphite				SS304+Graphite				
14	Gland	1	A276-304									
15	Gland Packing	1set	Graphite									
16	Gland Flange	1	A105	A182 F304				A105				
17	Gland Bolt	2	A193-B8									
18	Gland Bolt Nut	2	A194-2H	A194-8				A194-2H				
19	Gland Bolt Pin	2	A276-304									
20	Sleeve	1	A276-410									
21	Sleeve Washer	2	A276-410									
22	Handwheel	1	A197									
23	Nameplate	1	Aluminum									
24	Handwheel Nut	1	SS400+Zn PLATE									

(1)A105 also Available with 0.25% Maximum Carbon.

Other Materials also Available on Application.

CLASS 600 & 800

BOLTED BONNET OS &Y



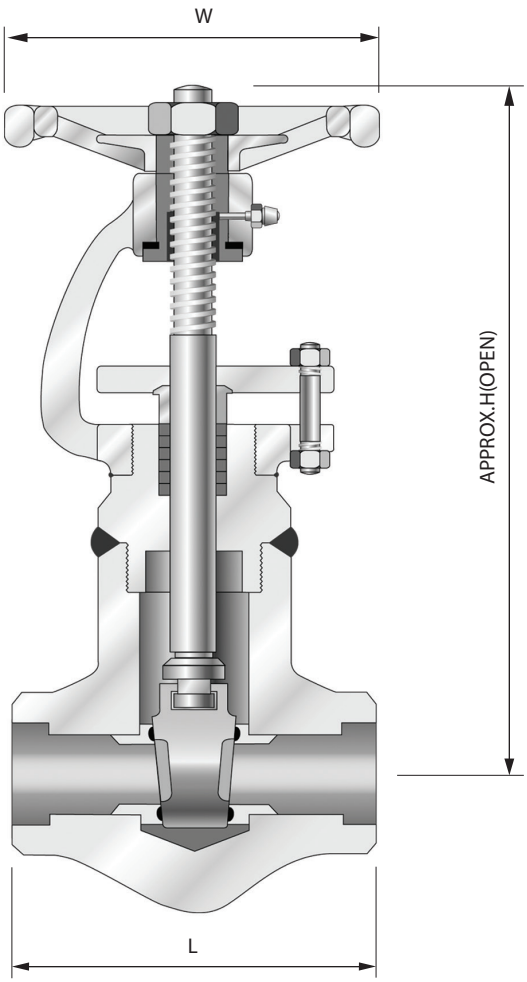
Bolted Bonnet

DIMENSION AND WEIGHT

CLASS	PORT	VALVE SIZE	CENTER TO TOP, OPEN	END TO END	HAND WHEEL DIAMETER	PORT DIAMETER	WEIGHT
			H	L	W	d	
		DN	mm	mm	mm	mm	kg
600 & 800	REDUCED	10	133	73	90	10	1.5
		15	133	73	90	10	1.4
		20	149	87	90	13	1.9
		25	178	96	105	19	2.7
		32	210	121	125	25	4.8
		40	222	141	125	30	5.4
		50	257	161	150	37	8.9
	FULL	10	133	73	90	10	1.4
		15	149	87	90	13	1.9
		20	178	96	105	19	2.7
		25	210	121	125	25	4.8
		32	222	141	125	30	5.4
		40	257	161	150	37	8.9
		50	292	170	165	43	11.2

CLASS 900 & 1500

WELDED BONNET



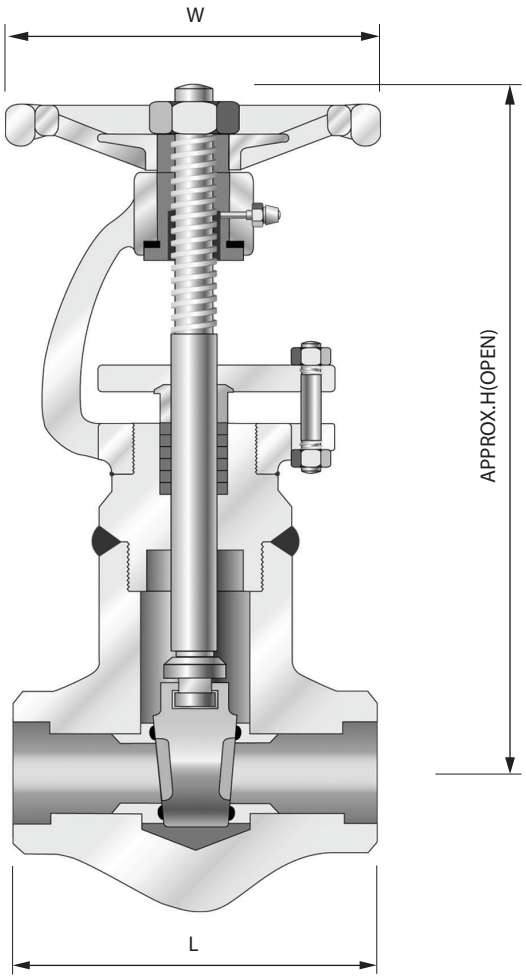
Seal Welded Bonnet

DIMENSION AND WEIGHT

CLASS	PORT	VALVE SIZE	CENTER TO TOP, OPEN	END TO END	HAND WHEEL DIAMETER	PORT DIAMETER	WEIGHT
			H	L	W	d	
		DN	mm	mm	mm	mm	kg
900 & 1500	FULL	10	233	96	150	10	2.3
		15	233	96	150	13	2.3
		20	245	121	150	19	4.8
		25	300	141	200	25	5.4
		32	331	161	200	30	8.9
		40	355	172	200	37	15.2
		50	439	200	245	37	25.4

CLASS 2500

WELDED BONNET

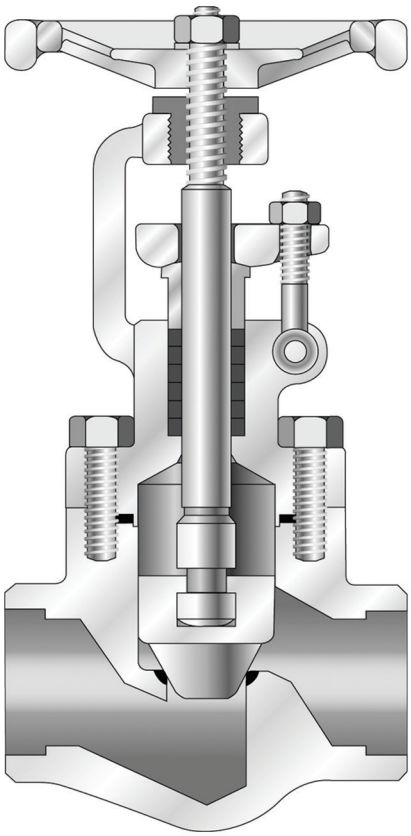


Seal Welded Bonnet

DIMENSION AND WEIGHT

CLASS	PORT	VALVE SIZE	CENTER TO TOP, OPEN	END TO END	HAND WHEEL DIAMETER	PORT DIAMETER	WEIGHT
			H	L	W	d	
		DN	mm	mm	mm	mm	kg
2500	FULL	15	245	121	150	11	2.9
		20	300	141	200	14	4.8
		25	331	161	200	20	5.4
		32	335	172	200	26	8.9
		40	439	200	245	29	26.8
		50	481	220	315	38	33.4

GLOBE VALVE



DESCRIPTION

Globe Valve is ideal for throttling service.
Their flow characteristics permit accurate and repeatable flow control. However, caution must be exercised to avoid extremely close throttling when pressure drop exceeds 20%.
This creates excessive noise, vibration, and possibly damage to valve and piping.

CLASS

API 800, 1500
ANSI 150, 300, 600, 900, 2500, 4500

SIZE

3/8", 1/2", 3/4", 1", 11/4", 11/2", 2"

MATERIAL

ASTM A105, A182-F5, A182-F9, A182-F11, A182-F22, A182-F304, A182-F316, A182-F304L, A182-F316L, A182-F321, A182-F347, A182-F51, A182-F91, A350-LF2
Other Materials also Available on Application

END CONNECTION

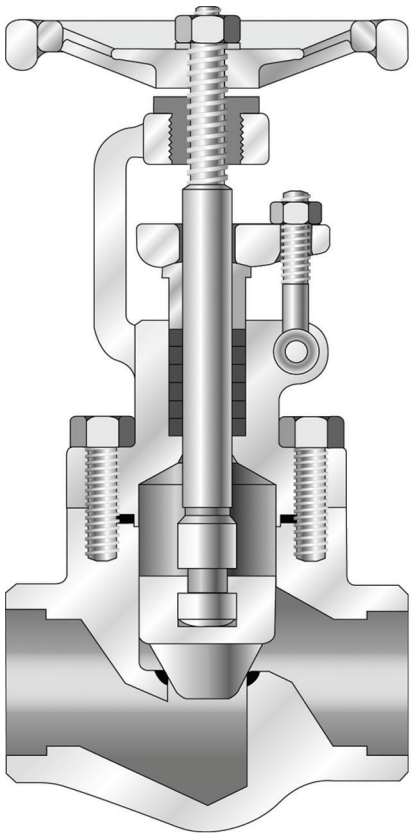
Socket welding, threaded
Butt welding, flanged

FEATURE

Bolted bonnet or welded bonnet
Outside screw & yoke
Plug disc
Integral seat

GLOBE VALVE

BOLTED BONNET OS &Y



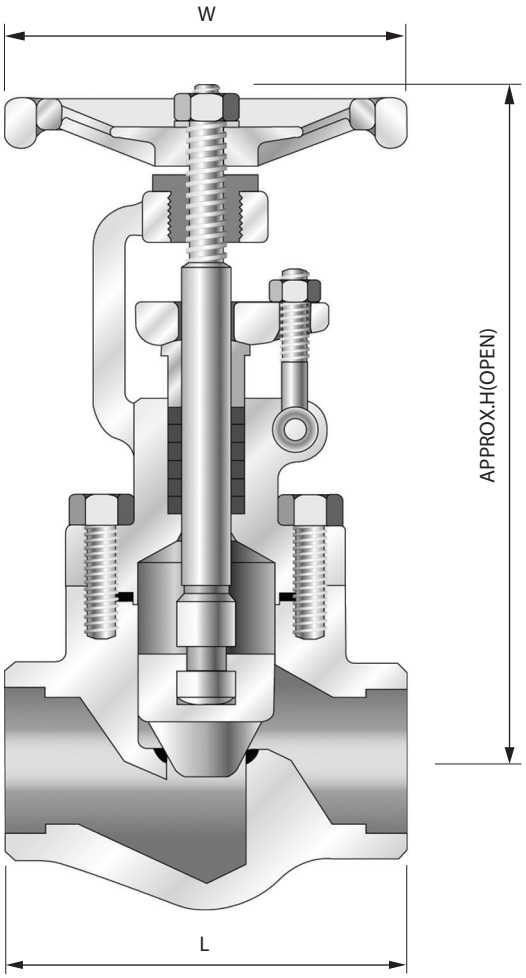
Bolted Bonnet

STANDARD MATERIAL SPECIFICATIONS

PART No.	PART NAME	Q'TY	A105	ASTM SPECIFICATIONS(SPECS-GRADES/TYPES)								
				A182				A182				
				F304	F304L	F316	F316L	F1	F5	F9	F11	F22
1	Body	1	A105	A182-F304	A182-F304L	A182-F316	A182-F316L	A182-F1	A182-F5	A182-F9	A182-F11	A182-F22
2	Bonnet	1	A105	A182-F304	A182-F304L	A182-F316	A182-F316L	A182-F1	A182-F5	A182-F9	A182-F11	A182-F22
4	Stem	1	A276-410	A276-304	A276-316			A276-410				
5	Disc	1	A217-CA15	A351-CF8	A351-CF8M			A217-CA15				
12	Bonnet Bolt	4	A193-B7	A193-B8				A193+B7				
13	Gasket	1	SS304+Graphite	SS316+Graphite				SS304+Graphite				
14	Gland	1	A276-304									
15	Gland Packing	1set	Graphite									
16	Gland Flange	1	A105	A182+F304				A105				
17	Gland Bolt	2	A193-B8									
18	Gland Bolt Nut	2	A194-2H	A194-8				A194-2H				
19	Gland Bolt Pin	2	A276-304									
20	Sleeve	1	A276-410									
22	Handwheel	1	A197									
23	Nameplate	1	Aluminum									
24	Handwheel Washor	1	A108-1020									
25	Handwheel Net	1	A307-B									

CLASS 600 & 800

BOLTED BONNET OS &Y



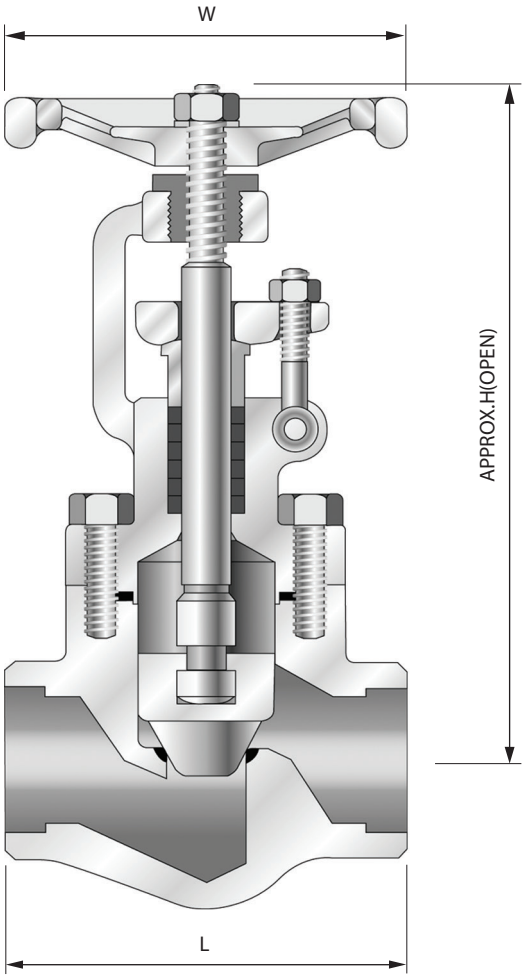
Bolted Bonnet

DIMENSION AND WEIGHT

CLASS	PORT	VALVE SIZE	CENTER TO TOP, OPEN	END TO END	HAND WHEEL DIAMETER	PORT DIAMETER	WEIGHT
			H	L	W	d	
		DN	mm	mm	mm	mm	kg
600 & 800	REDUCED	10	134	73	90	8	1.5
		15	134	73	90	11	1.4
		20	146	87	90	13	1.9
		25	177	96	105	19	2.7
		32	205	121	125	25	4.9
		40	215	141	125	28	5.8
		50	248	161	150	36	9.3
	FULL	10	146	73	90	11	1.4
		15	146	87	90	13	1.9
		20	177	96	105	19	2.7
		25	205	121	125	22	4.9
		32	215	141	125	28	5.8
		40	248	161	150	32	9.3
		50	276	220	165	42	11.2

CLASS 900 & 1500

BOLTED BONNET OS &Y



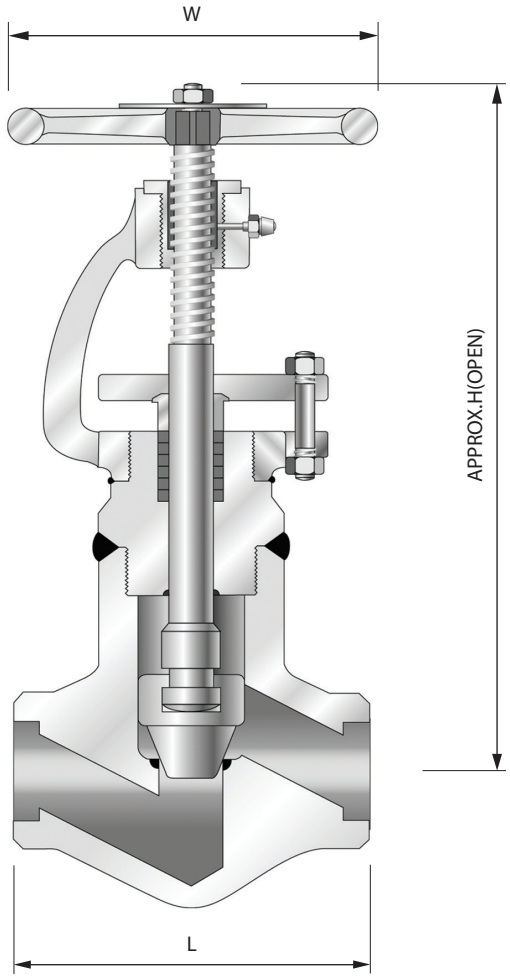
Bolted Bonnet

DIMENSION AND WEIGHT

CLASS	PORT	VALVE SIZE	CENTER TO TOP, OPEN	END TO END	HAND WHEEL DIAMETER	PORT DIAMETER	WEIGHT
			H	L	W	d	
		DN	mm	mm	mm	mm	kg
900 & 1500	REDUCED	10	177	87	105	8	1.9
		15	177	96	105	11	1.9
		20	177	96	105	13	2.7
		25	205	121	125	19	4.9
		32	215	141	125	25	5.8
		40	248	161	150	28	9.3
		50	276	172	165	36	20.4

CLASS 1500 & 2500

WELDED BONNET OS &Y



Seal Welded Bonnet

DIMENSION AND WEIGHT

CLASS	PORT	VALVE SIZE	CENTER TO TOP, OPEN	END TO END	HAND WHEEL DIAMETER	PORT DIAMETER	WEIGHT
			H	L	W	d	
		DN	mm	mm	mm	mm	kg
1500	FULL	15	233	96	150	13	6.75
		20	245	121	150	18	8.9
		25	299	141	200	19	16.5
		32	325	161	200	25	18.4
		40	347	172	200	32	26.4
		50	433	200	245	36	33.5
2500	FULL	15	245	121	150	11	18.4
		20	299	141	200	14	18.3
		25	325	161	200	19	18.3
		32	347	172	200	25	26.4
		40	433	200	245	28	26.4
		50	486	220	315	38	33.5