

**Cast
Stainless
Steel
Gate, Globe
& Check
Valves to
ASME
B16.34**



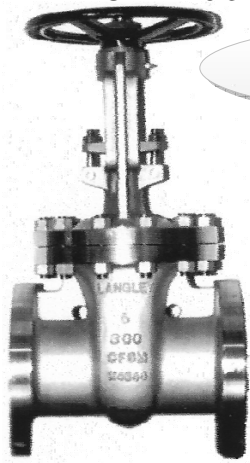
YPS - Langley Valves

WPS - Langley Valves

ASME B16.34

Cast Gates

in Stainless Steels

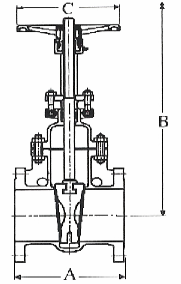


Features

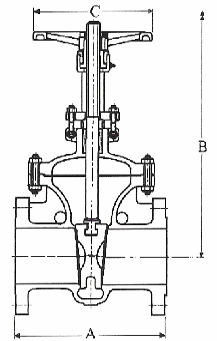
- Ø - Light wall design API 603 and ASME B16.34
Generally to API 600 except wall thickness
- Ø - Full Bore, Bolted Bonnet, OS & Y.
- Ø - Integral seats
- Ø - Flexible Graphite low emissions stuffing box
- Ø - Flexible wedge on 3" and greater
- Ø - Bubble tight shut off to API 598, better than ANSI class V and VI
- Ø - Wetted parts conform to NACE MR-01-75
- Ø - Traceable body shell materials
- Ø - CE marked products to PED 97/23/EC

Dimensions

Class	Size	DN	A (mm)	B (mm)	C (mm)	Wt (Kg)	Cv (usgpm)
150#	0.5"	15	108	192	90	3.6	16
	0.75"	20	118	197	90	4.0	38
	1"	25	127	221	110	5.4	70
	1.5"	40	165	278	130	9.2	164
	2"	50	178	369	180	14.4	307
	3"	80	203	470	200	24.0	709
	4"	100	229	582	225	40.0	1290
	6"	150	267	754	250	65.0	3100
	8"	200	292	962	300	101	5710
	10"	250	330	1013	350	153	8920
	12"	300	356	1194	400	220	13300
	14"	350	381	1365	500	315	16200
300#	16"	400	406	1540	560	380	21500
	18"	450	432	1664	560	533	28600
	20"	500	457	1829	680	690	35700
	24"	600	508	2184	760	964	52100
	0.5"	15	140	193	90	5.0	16
	0.75"	20	152	200	90	7.2	38
	1"	25	165	223	110	8.3	70
	1.5"	40	191	251	130	12.0	164
	2"	50	216	405	200	20.0	307
	3"	80	283	486	225	41.0	709
	4"	100	305	610	250	61.0	1290
	6"	150	403	842	350	113	3100
	8"	200	419	892	400	190	5710
	10"	250	457	1245	450	290	8920
	12"	300	502	1450	500	430	13300
	14"	350	762	1740	560	670	16200
16"	400	838	1784	560	825	21500	
18"	450	914	1972	610	986	27800	
20"	500	991	2200	660	1400	34800	
24"	600	1143	2540	660	1958	51000	



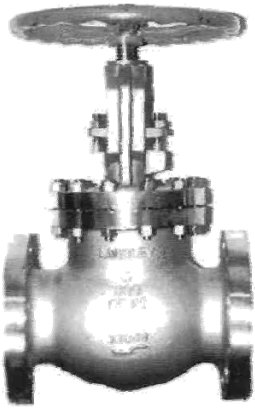
Class 150



Class 300

Options

- Ø - Austenitic, and Duplex Stainless Steels;
- Ø - Bonnet extensions for low temperatures
- Ø - Hardfaced trim for non-lubricating fluids
- Ø - Soft seats for searching applications below 220C
- Ø - Live loaded gland packing
- Ø - Flat, spiral wound and ring type bonnet gaskets
- Ø - Indicator and locking device
- Ø - Impactor handwheels, reduction gears, extensions, electric and pneumatic actuators.
- Ø - Radiographic quality to ASME B16.34 Annex B
- Ø - Special functional and material testing
- Ø - Replaceable threaded seat ring



U.P.S - Langley Values

ASME B16.34 Cast Globes

in Stainless Steels and Nickel Alloys

Features

- Ø - Light wall design to ASME B16.34 standard class
Generally to BS1873 as applicable
- Ø - Full Bore, Bolted Bonnet, OS & Y.
- Ø - Integral seat
- Ø - Flexible Graphite low emissions stuffing box
- Ø - Bubble tight shut off to API 598, better than
ANSI class V and VI
- Ø - Wetted parts conform to NACE MR-01-75

Ø - Traceable body shell materials

Ø - CE marked products to PED 97/23/EC

Options

- Ø - Austenitic, and Duplex Stainless Steels;
- Ø - Bonnet extensions for low temperatures
- Ø - Hardfaced trim for non-lubricating fluids.
- Ø - Check and Feed or Screw-Down-Non-Return,
functions as check valve when open
- Ø - Soft disc insert for searching applications to 220C
- Ø - Live loaded gland packing

Dimensions

Class	Size	DN	A (mm)	B (mm)	C (mm)	Wt (Kg)	Cv (usgpm)
150#	0.5"	15	108	156	89	3.6	2.4
	0.75"	20	118	191	89	4.0	5.6
	1"	25	127	257	114	5.9	10
	1.5"	40	165	283	152	10.4	24
	2"	50	203	324	203	15.0	46
	3"	80	241	394	254	31.0	107
	4"	100	292	476	254	44.0	195
	6"	150	406	565	381	78.0	469
300#	8"	200	495	711	508	126	864
	10"	250	622	876	610	195	1340
	0.5"	15	152	206	89	5.2	2.4
	0.75"	20	178	229	89	6.6	5.6
	1"	25	203	279	114	8.2	10
	1.5"	40	229	340	203	16.0	24
	2"	50	267	372	203	23.0	46
	3"	80	318	457	254	54.6	107
	4"	100	356	514	331	67.0	195
	6"	150	445	749	457	135	469
	8"	200	559	781	508	231	864
	10"	250	622	1016	600	380	1340

Ø - Replaceable threaded seat ring

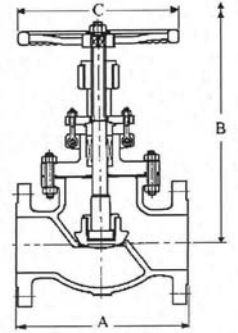
Ø - Flat & spiral wound bonnet gaskets

Ø - Indicator and locking device

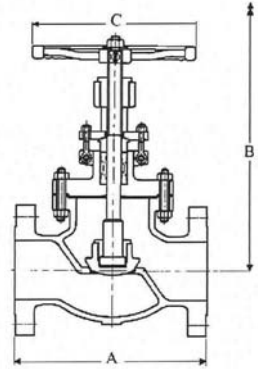
Ø - Impactor handwheels, reduction gears,
extensions, electric and pneumatic actuators.

Ø - Special functional and material testing

Ø - Radiographic quality to ASME B16.34 Annex B



Class 150



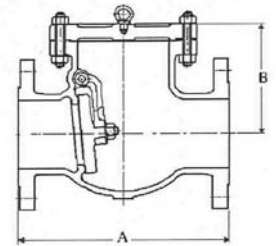
Class 300

in Stainless Steels and Nickel Alloys

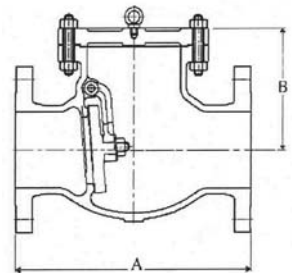


Dimensions

Class	Size	DN	A (mm)	B (mm)	Wt (Kg)	Cv (usgpm)
150#	0.5"	15	108	85	2.7	16
	0.75"	20	118	86	3.1	37
	1"	25	127	94	3.6	69
	1.5"	40	165	115	7.7	164
	2"	50	203	123	11.0	306
	3"	80	241	149	21.0	708
	4"	100	292	169	33.0	1290
	6"	150	356	218	61.0	3105
	8"	200	495	253	106	5710
	10"	250	622	279	156	8920
300#	12"	300	698	330	229	13340
	14"	350	787	412	292	16260
	16"	400	864	445	566	21500
	18"	450	978	475	707	28600
	0.5"	15	152	85	4.3	16
	0.75"	20	178	86	5.0	37
	1"	25	216	95	7.7	69
	1.5"	40	241	122	12.7	164
	2"	50	267	138	16.0	306
	3"	80	318	180	34.0	708
300#	4"	100	356	200	53.0	1290
	6"	150	444	311	101	3100
	8"	200	533	326	153	5710
	10"	250	622	384	251	8920
	12"	300	711	427	379	13300
	14"	350	838	504	725	16200
300#	16"	400	864	533	914	21500
	18"	450	978	585	1036	27800



Class 150



Class 300

Features

- Ø - Light wall design to ASME B16.34
Generally to BS1868 as applicable
- Ø - Full Bore, Bolted Cover, swing disc
- Ø - Integral seat
- Ø - Wetted parts conform to NACE MR-01-75
- Ø - Traceable body shell materials
- Ø - CE marked products to PED 97/23/EC

Options

- Ø - Austenitic, and Duplex Stainless Steels;
Nickel Alloys and Superalloys
- Ø - Hardfaced trim for non-lubricating fluids
- Ø - Replaceable threaded seat ring
- Ø - Soft seats for searching applications below 220C
- Ø - Flat, spiral wound and ring type bonnet gaskets
- Ø - Radiographic quality to ASME B16.34 Annex B
- Ø - Special functional and material testing

Valve Materials

Material Group	Common Name	Nominal Type	ASTM Casting Specification for Body/Bonnet/Disc/W edge/Hinge.	Application Notes	Equivalent Forged Material
Stainless Steel	Austenitic S.Steel 300 series S.Steel	304 : 18Cr-8Ni	A351-CF8	0.04% min. carbon for	A182-F304
		304L : 18Cr-8Ni	A351-CF3	Up to 800F(427C)	A182-F304L
		316 : 16Cr-12Ni-2Mo	A351-CF8M	0.04% min. carbon for	A182-F316
		316L : 16Cr-12Ni-2Mo	A351-CF3M	Up to 800F(427C)	A182-F316L
		317L: 19Cr-10Ni-3Mo	A351-CG3M	Up to 800F(427C)	A182-F317L
		347: 18Cr-10Ni-Cb(Nb)	A351-CF8C	0.04% min. carbon and heat treat at 2000F(1100C) for service temps.>1000F(538C)	A182-F347(H)
		16Cr-12Ni-2Mo-Cb(Nb)	A351-CF10MC	0.04% min. carbon and heat treat at 2000F(1100C) for service temps.>1000F(538C)	
	Alloy 20	28Ni-19Cr-Cu-Mo	A351-CN7M	service to 600F(316C)	A182-F20
	Duplex	22Cr-5Ni-3Mo-N UNS S31803	A890-J92205 CD3MN-grade 4A	service to 600F(316C)	A182-F51

Stem/Stem Nut /Hinge Pin Materials

Stem materials are at least equal to the valve body material for corrosion resistance, and are produced from barstock to an appropriate specification including ASTM A276 for Stainless Steels

Wedge/Discs and Seats

Seats are normally integral design in stainless steel and nickel alloy valves the faces being renewable through lapping or grinding when necessary to restore sealing performance. Integral or welded in seats are always recommended for steam and gaseous service.

The base material for disc and seat material is at least equal to the valve body material. When required seating surfaces are hardfaced with Stellite 6 for erosion and galling resistance, being recommended for all non-lubricating services including low temperature, dry gas and steam.

Bonnet/Cover Gasket Types and Materials

Spiral wound gaskets are available for all pressure classes. The winding and inner ring material have at least the corrosion resistance of the body material. The filler material is Graphite as standard, having nearly universal fluid compatibility, the best sealing performance and fire resistance.

Non-circular gaskets for class 150 gate valves in sizes 3" and above are made from metal mesh reinforced Graphite material. The mesh is produced from material of at least equal corrosion resistance to the body.

Other gasket materials and designs are available on request for specific applications.

Gland Packing - Stem Seal

The standard gland packing is a 5 ring system comprising 3 central flexible graphite sealing rings with 2 anti-extrusion braided carbon fibre end rings fitted top and bottom.

Gland Packing - can qualified against specific leak tightness classes according to ISO 15484 by production or prototype testing as required.

Other gland packing materials and designs are available on request for specific applications.

Bolting

Bonnet bolting as standard is ASTM A193 - B8 class 2 studs fitted with ASTM A194 - grade 8 nuts.