

SZNAJDER 
STAHLWAREN



Industrial fittings

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RESILIENT SEATED GATE VALVE

◆ Normal Features:

- ※ Ductile Iron Body & Bonnet with high strength and impact resistance.
- ※ Rubber Encapsulated DI wedge to ensure drop tight sealing.
- ※ Rubber bonnet gasket for longevity and protection of bonnet bolts.
- ※ Stainless Steel Stem with high strength and corrosion resistance.
- ※ Back sealing facility to allow for replacement of seals under full operating pressure.
- ※ Straight through full bore to avoid debris traps.
- ※ Isolated fasteners for corrosion protection.
- ※ Wiper ring to prevent impurities from entering the stem sealing system.
- ※ Anti friction thrust washer for low operating torques. Integral cast in foot for safe and easy storage.
- ※ Full diameter waterway Hand wheel, square cap operation.



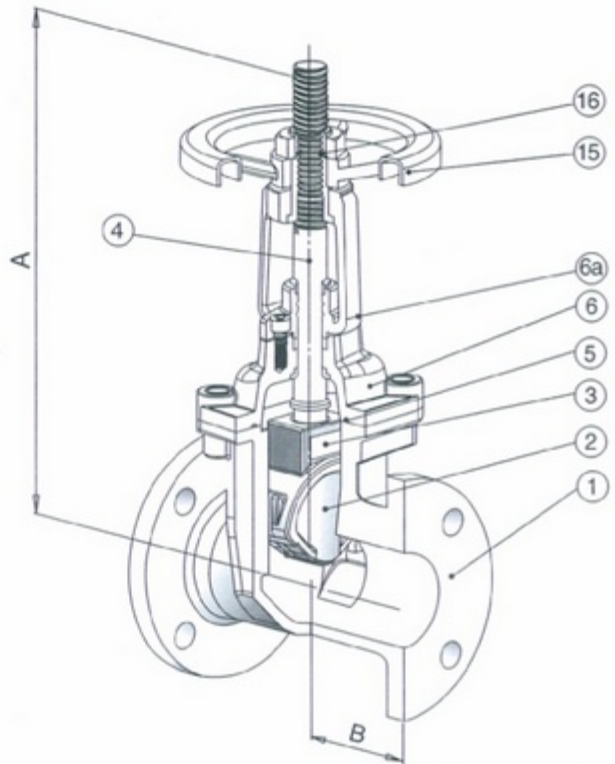
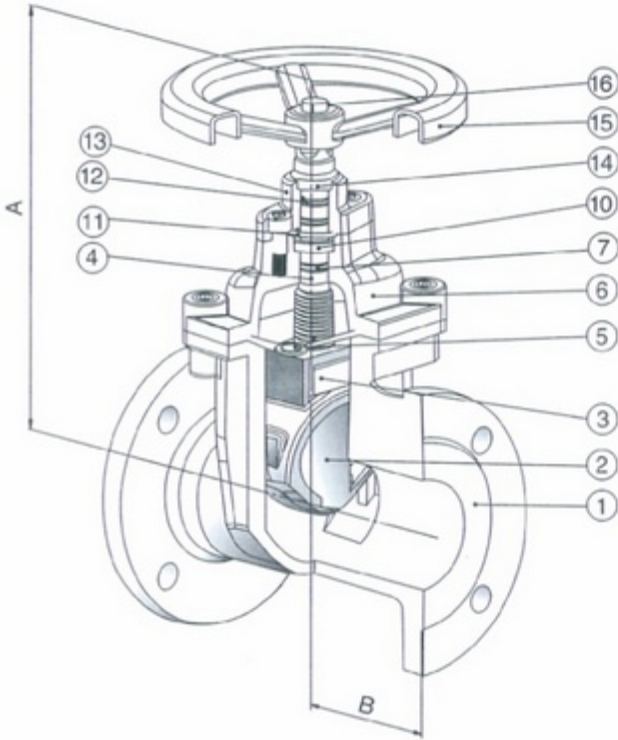
◆ Application :

Resilient Seated Gate Valves are suitable for use in drinking water and waste water, which can be installed under or above ground. Rising stem gate valves are normally used in fire service application and socket end resilient gate valves are normally used in PVC pipelines.

◆ Service conditions:

Normal : Temperature from -10°C to 120°C for EPDM seat.

Temperature from -12°C to 82°C for NBR seat.



Item No	Description	Material	Specification	Specification
1	Body	Ductile Iron	GGG50	ASTM A536
2	Wedge	Ductile Iron +NBR	GGG50 +NBR	ASTM A536 +NBR
		Ductile Iron +EPDM	GGG50 +EPDM	ASTM A536 +EPDM
3	Wedge Nut	Brass	Brass	ASTM B16
4	Stem	Stainless Steel	20Cr13	SS416
		Brass	Brass	ASTM B16
5	Bonnet Gasket	EPDM /NBR	EPDM /NBR	EPDM /NBR
6	Bonnet	Ductile Iron	GGG50	ASTM A536
6a	Yoke	Ductile Iron	GGG50	ASTM A536
7	O Ring	EPDM /NBR	EPDM /NBR	EPDM /NBR
8	Guide Bushing	Nylon	Nylon	Nylon
9	Circlip	Stainless Steel		
10	Stem Collar	Brass	Brass	ASTM B16
11	O Ring	EPDM /NBR	EPDM /NBR	EPDM /NBR
12	O Ring	EPDM /NBR	EPDM /NBR	EPDM /NBR
13	Gland Flange	Ductile Iron	GGG50	ASTM A536
14	Dustproof Ring	EPDM /NBR	EPDM /NBR	EPDM /NBR
15	HandWheel	Ductile Iron	GGG50	ASTM A536
16	Stem Nut	Mn-Brass	Brass	ASTM B16

Fig. Z4714



Features:

- Inside Screw
- Bolt Bonnet
- Non-Rising Stem
- Rubber Encapsulated Wedge
- Low-torque Operation
- Flanged Ends

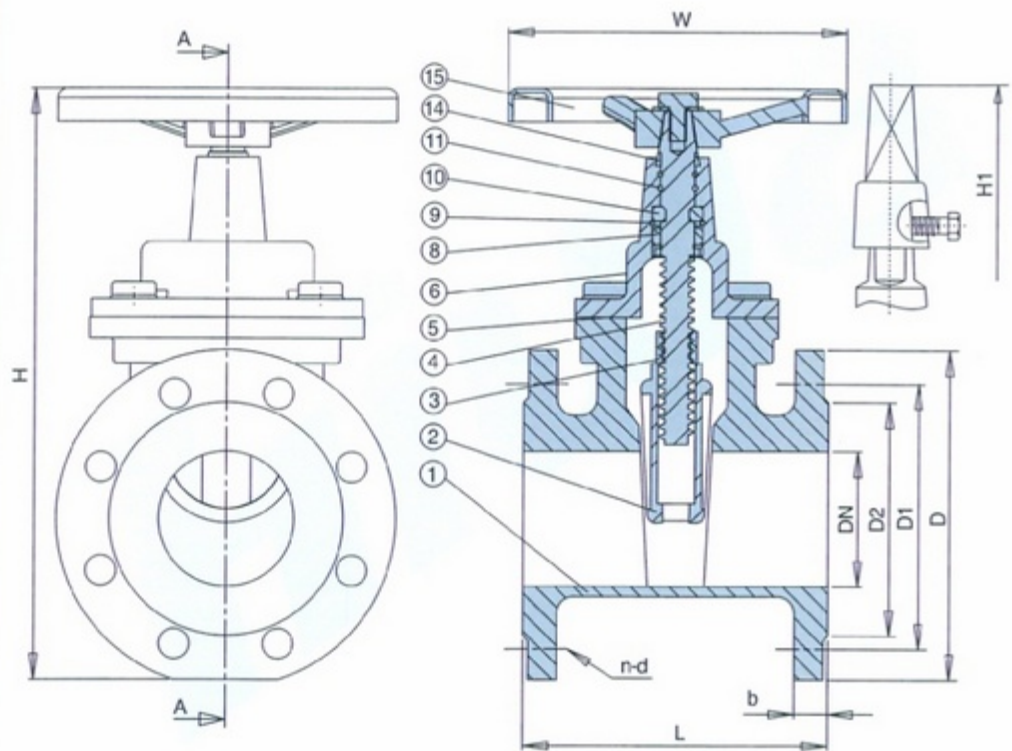
BASIC DESIGN STANDARDS	
Basic Design	DIN 3352
Face to Face	DIN 3202-F4
Flanges	DIN 2533 PN 16
Testing	DIN 3230

PRESSURE TEST TO DIN 3230			
DN	Pressure Rating (PN)	Hydro-Test Pressure(Mpa)	
		Body	Seat
40-600	10	1.5	1.1
40-400	16	2.4	1.76

※ Specific Characteristic according to Customer's request



DIN3352 F4 Non-Rising Stem Resilient Seated Gate Valve



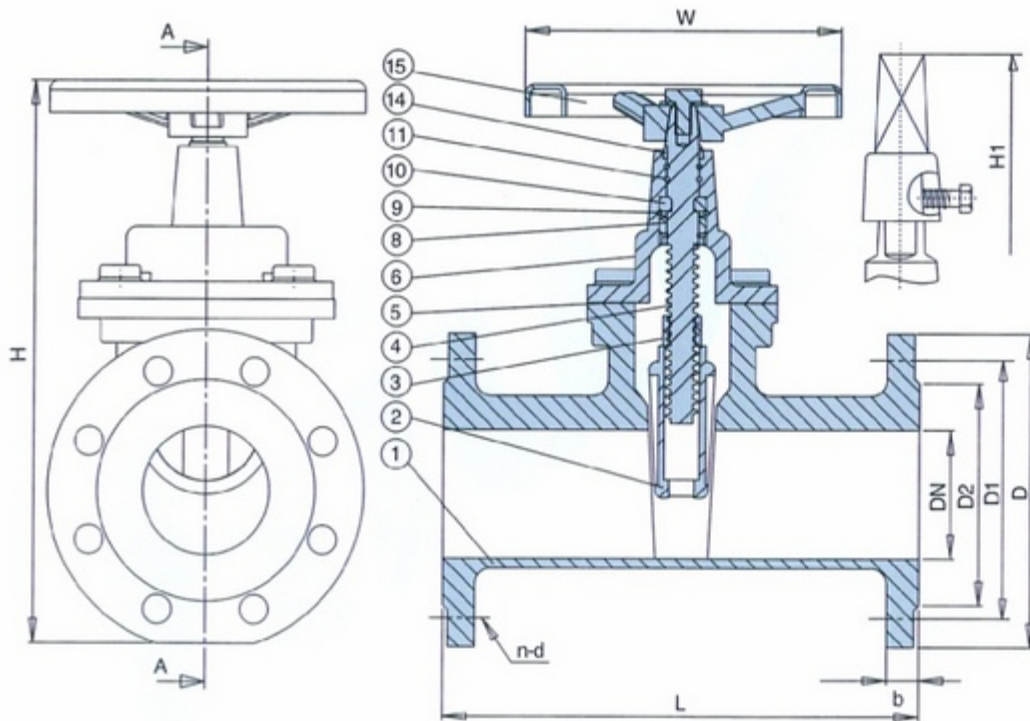
▲ FREEZING WEATHER PRECAUTION:

Subsequent to testing a piping system, valves should be left in opened position for completing drainage.

▲ DIMENTIONS(mm)

Size	L	D	D1	D2	b	n-d	H	H1	W	W.T(kg)
DN40	140	150	110	88	17	4-18	285	335	140	9
DN50	150	165	125	102	18	4-18	295	350	140	10.5
DN65	170	185	145	122	18	4-18	328	368	140	12
DN80	180	200	160	138	18	8-18	350	400	200	16
DN100	190	220	180	158	19	8-18	400	440	200	21
DN125	200	250	210	188	19	8-18	428	488	240	25.5
DN150	210	285	240	212	19	8-22	485	545	240	33
DN200	230	340	295	268	22	12-22	560	630	295	52
DN250	250	405	355	320	22	12-26	635	735	360	86
DN300	270	460	410	378	26	12-26	700	830	360	118
DN350	290	520	470	438	28	16-26	970	955	460	165
DN400	310	580	525	490	30	16-30	1020	1070	460	225
DN450	330	640	585	548	30	20-30	1120	1200	560	490
DN500	350	715	650	610	32	20-33	1220	1300	650	620
DN600	390	840	770	725	36	20-36	1370	1470	650	760

DIN3352 F5 Non-Rising Stem Resilient Seated Gate Valve



Features:

- Inside Screw
- Bolt Bonnet
- Non-Rising Stem
- Rubber Encapsulated Wedge
- Low-torque Operation
- Flanged Ends

BASIC DESIGN STANDARDS

Basic Design	DIN3352
Face to Face	DIN3202-F5
Flanges	DIN2533 PN16
Testing	DIN 3230

▲ FREEZING WEATHER PRECAUTION:

Subsequent to testing a piping system, valves should be left in opened position for completing drainage.

▲ DIMENTIONS(mm)

Size	L	D	D1	D2	b	n-d	H	H1	W	W.T(kg)
DN50	250	165	125	102	18	4-18	295	350	140	11
DN65	270	185	145	122	18	4-18	328	368	140	14
DN80	280	200	160	138	18	8-18	350	400	200	19
DN100	300	220	180	158	19	8-18	400	440	200	23
DN125	325	250	210	188	19	8-18	428	488	240	30
DN150	350	285	240	212	19	8-22	485	545	240	40
DN200	400	340	295	268	22	12-22	560	630	295	62
DN250	450	405	355	320	22	12-26	635	735	360	105
DN300	500	460	410	378	26	12-26	700	830	360	160
DN350	550	520	470	438	28	16-26	970	955	460	320
DN400	600	580	525	490	30	16-30	1020	1070	460	420
DN450	650	640	585	548	30	20-30	1120	1200	560	590
DN500	700	715	650	610	32	20-33	1220	1300	650	730
DN600	800	840	770	725	36	20-36	1370	1470	650	890

PRESSURE TEST TO DIN 3230

DN	Pressure Rating (PN)	Hydro-Test Pressure(Mpa)	
		Body	Seat
40-600	10	1.5	1.1
40-600	16	2.4	1.76

※ Specific Characteristic according to Customer's request



Fig. Z4703



Features:

- ✦ Inside Screw
- ✦ Bolt Bonnet
- ✦ Non-Rising Stem
- ✦ Rubber Encapsulated Wedge
- ✦ Low-torque Operation
- ✦ Flanged Ends

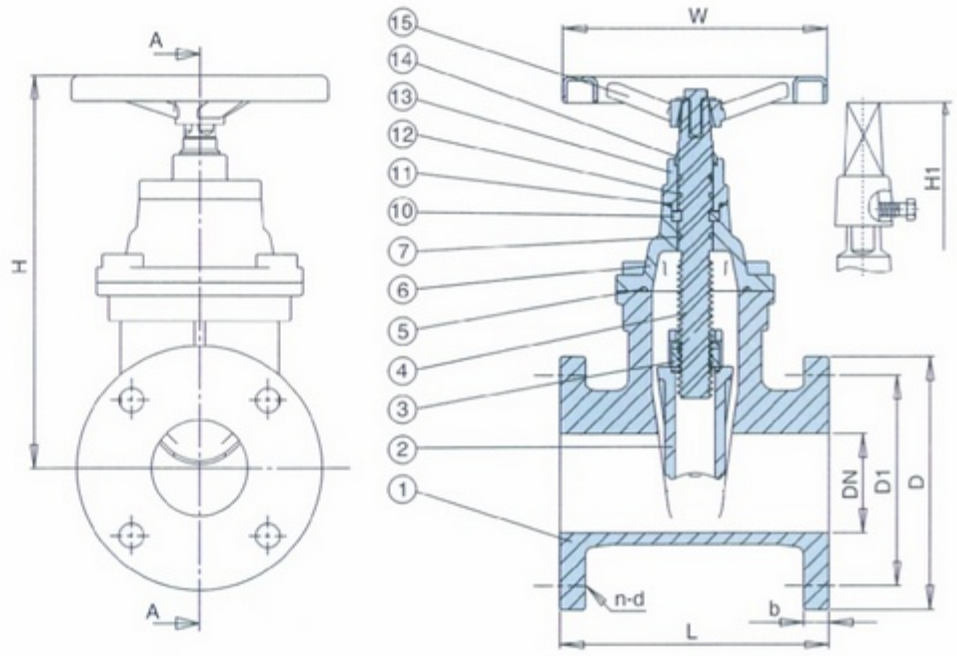
BASIC DESIGN STANDARDS	
Basic Design	AWWA C509
Face to Face	ANSI B 16.10
Flanges	ANSI B16.1
Testing	AWWA C509

PRESSURE TEST TO AWWA C509			
Size	Pressure	Test Pressure	
	NonShook (psi)	Body	Seat
2" -12"	250	500	250
14" -24"	150	300	150

✦ Specific Characteristic according to Customer's request



AWWA C509 Non-Rising Stem Resilient Seated Gate Valve



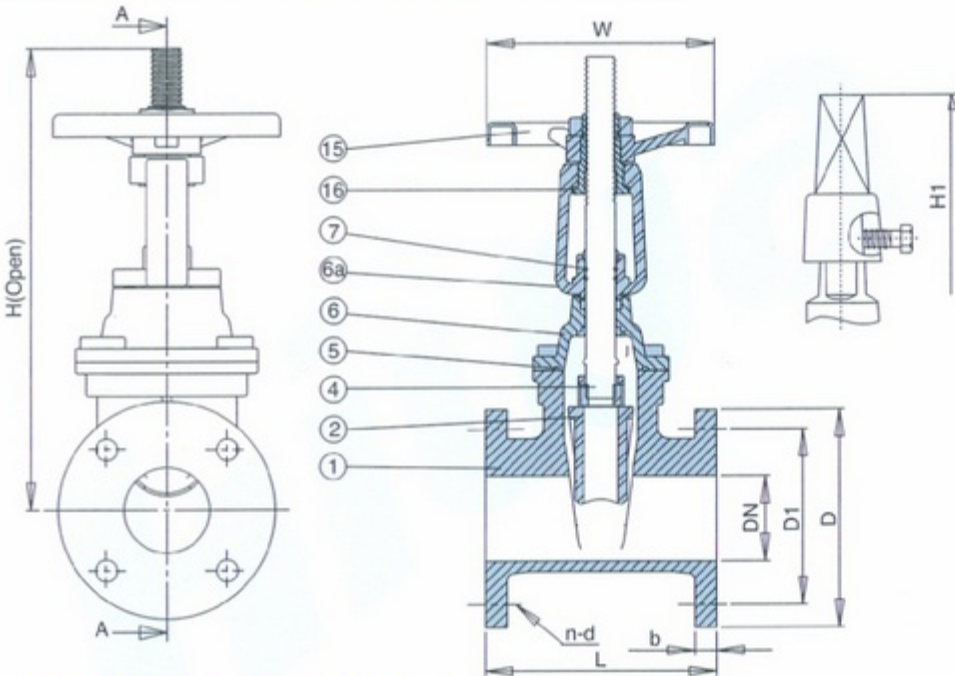
▲ FREEZING WEATHER PRECAUTION:

Subsequent to testing a piping system, valves should be left in opened position for completing drainage.

▲ DIMENTIONS

Size	L	D	D1	b	n	d	H	H1	W	W.T(kg)
1.5	in 6.5	5	3.88	0.56	4	0.63	9.84	12.60	7.1	13
	mm 165	127	98.5	14.2		16	250	320	180	
2	in 7.0	6	4.75	0.62	4	0.75	10.04	12.80	7.1	14
	mm 178	152	120.7	15.8		19	255	325	180	
2.5	in 7.5	7	5.5	0.69	4	0.75	11.02	13.78	7.1	16
	mm 190	178	139.7	17.5		19	280	350	180	
3	in 8.0	7.5	6	0.75	4	0.75	11.81	14.57	7.9	23
	mm 203	191	152.4	19		19	300	370	200	
4	in 9.0	9	7.5	0.94	8	0.75	13.54	16.30	9.1	28
	mm 229	229	190.5	23.9		19	344	414	200	
5	in 10.0	10	8.5	0.94	8	0.88	16.14	18.90	9.8	37
	mm 254	254	215.9	23.9		22	410	480	250	
6	in 10.5	11	9.5	1	8	0.88	17.36	20.12	11.0	52
	mm 267	279	241.3	25.4		22	441	511	280	
8	in 11.5	13.5	11.75	1.12	8	0.88	20.83	23.58	12.6	77
	mm 292	343	298.5	28.5		22	529	599	320	
10	in 13.0	16	14.25	1.19	12	1	24.17	26.93	14.2	127
	mm 330	406	362	30.2		25	614	684	360	
12	in 14.0	19	17	1.25	12	1	27.56	30.31	19.7	176
	mm 356	483	431.8	31.8		25	700	770	500	
14	in 15.0	21	18.75	1.38	12	1.12	34.65	37.40	19.7	322
	mm 381	533	476.3	35		29	880	950	500	
16	in 16.0	23.5	21.25	1.44	16	1.12	38.98	41.73	19.7	432
	mm 406	597	539.8	36.6		29	990	1060	500	
18	in 17.0	25	22.75	1.56	16	1.25	44.09	47.24	19.7	542
	mm 432	635	577.9	39.6		32	1120	1200	500	
20	in 18.0	27.5	25	1.69	20	1.25	48.03	51.18	19.7	695
	mm 457	699	635	42.9		32	1220	1300	500	
24	in 20.0	32	29.5	1.88	20	1.38	53.94	57.87	19.7	845
	mm 508	813	749.3	47.8		35	1370	1470	500	

AWWA C509 Rising Stem Resilient Seated Gate Valve



▲ FREEZING WEATHER PRECAUTION:

Subsequent to testing a piping system, valves should be left in opened position for completing drainage.

▲ DIMENTIONS

DN		L	D	D1	b	n	d	H(open)	H1	W	W.T(kg)
1.5"	in	6.5	5	3.88	0.56	4	0.63	14.37	12.60	7.1	16
	mm	165	127	98.5	14.2		16	365	320	180	
2"	in	7.0	6	4.75	0.62	4	0.75	15.16	12.99	7.1	18
	mm	178	152	120.7	15.8		19	385	330	180	
2.5"	in	7.5	7	5.5	0.69	4	0.75	16.34	13.58	7.1	21
	mm	190	178	139.7	17.5		19	415	345	180	
3"	in	8.0	7.5	6	0.75	4	0.75	20.39	17.13	8.1	30
	mm	203	191	152.4	19		19	518	435	205	
4"	in	9.0	9	7.5	0.94	8	0.75	22.44	18.31	9.4	35
	mm	229	229	190.5	23.9		19	570	465	240	
5"	in	10.0	10	8.5	0.94	8	0.88	29.33	24.21	9.4	48
	mm	254	254	215.9	23.9		22	745	615	240	
6"	in	10.5	11	9.5	1	8	0.88	31.10	24.80	11.0	60
	mm	267	279	241.3	25.4		22	790	630	280	
8"	in	11.5	13.5	11.75	1.12	8	0.88	38.98	30.71	12.6	85
	mm	292	343	298.5	28.5		22	990	780	320	
10"	in	13.0	16	14.25	1.19	12	1	46.26	36.02	14.2	139
	mm	330	406	362	30.2		25	1175	915	360	
12"	in	14.0	19	17	1.25	12	1	54.72	42.52	17.7	194
	mm	356	483	431.8	31.8		25	1390	1080	450	



Features:

- ※ Outside Screw and Yoke
- ※ Bolt Bonnet
- ※ Rising Stem
- ※ Rubber Encapsulated Wedge
- ※ Low-torque Operation
- ※ Flanged Ends

BASIC DESIGN STANDARDS	
Basic Design	AWWA C509
Face to Face	ANSI B16.10
Flanges	ANSI B16.1
Testing	AWWA C509

PRESSURE TEST TO AWWA C509			
Size	Pressure NonShock (psi)	Test Pressure	
		Body	Seat
2" -12"	250	500	250
14" -24"	150	300	150

※ Specific Characteristic according to Customer's request



Fig. Z4704

RESILIENT SEATED GATE VALVE



Features:

- Inside Screw
- Bolt Bonnet
- Non-Rising Stem
- Rubber Encapsulated Wedge
- Low-torque Operation
- Flanged Ends

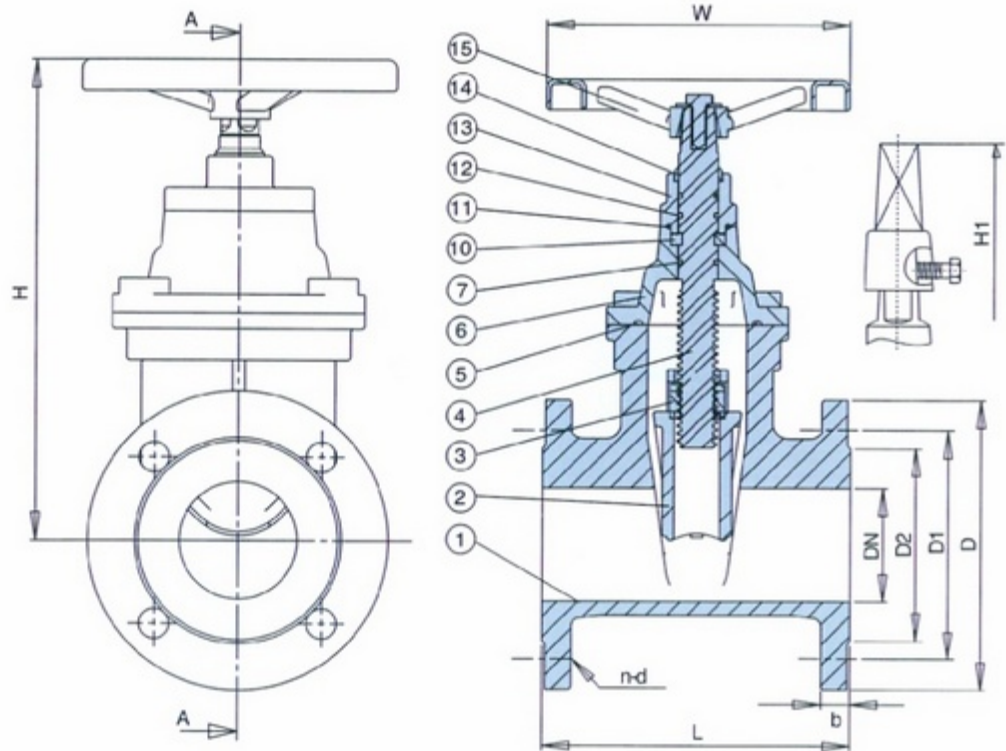
BASIC DESIGN STANDARDS	
Basic Design	BS 5163 Type A&B
Face to Face	BS 5163
Flanges	BS 4504 PN 16
Testing	BS 6755

PRESSURE TEST TO BS 6755			
DN	Pressure Rating (PN)	Hydro-Test Pressure(Mpa)	
		Body	Seat
40-600	16	2.4	1.76

※ Specific Characteristic according to Customer's request



BS5163 Non-Rising Stem Resilient Seated Gate Valve



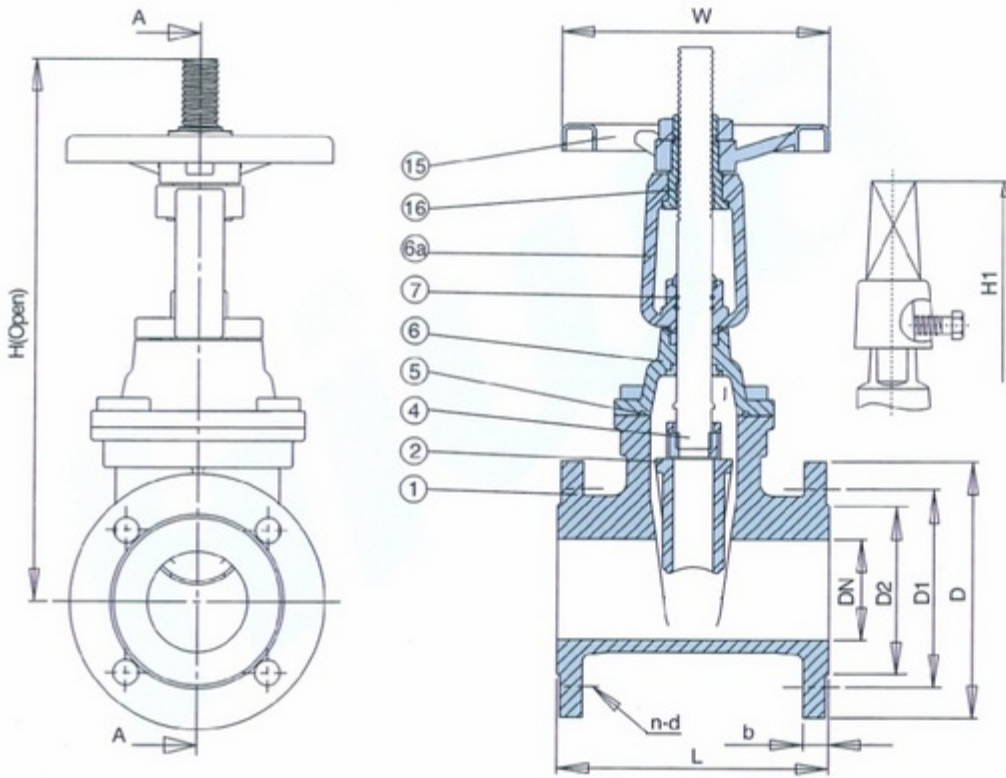
▲ FREEZING WEATHER PRECAUTION:

Subsequent to testing a piping system, valves should be left in opened position for completing drainage.

▲ DIMENTIONS(mm)

Size	L	D	D1	D2	b	n-d	H	H1	W	W.T(kg)
DN40	165	150	110	84	19	4-19	250	320	180	12
DN50	178	165	125	99	19	4-19	255	325	180	13
DN65	190	185	145	118	19	4-19	280	350	180	15
DN80	203	200	160	132	19	8-19	300	370	205	22
DN100	229	220	180	156	19	8-19	344	414	240	26
DN125	254	250	210	184	19	8-19	410	480	240	35
DN150	267	285	240	211	19	8-23	441	511	280	50
DN200	292	340	295	266	20	12-23	529	599	320	75
DN250	330	405	355	319	22	12-28	614	684	360	125
DN300	356	460	410	370	24.5	12-28	700	770	450	174
DN350	381	520	470	429	26.5	16-28	880	950	500	320
DN400	406	580	525	480	28	16-31	990	1060	560	430
DN450	432	640	585	548	30	20-31	1120	1200	560	440
DN500	457	715	650	609	31.5	20-34	1220	1300	650	690
DN600	508	840	770	720	36	20-37	1370	1470	650	840

BS5163 Rising Stem Resilient Seated Gate Valve



Features:

- ✱ Outside Screw and Yoke
- ✱ Bolt Bonnet
- ✱ Rising Stem
- ✱ Rubber Encapsulated Wedge
- ✱ Low-torque Operation
- ✱ Flanged Ends

BASIC DESIGN STANDARDS	
Basic Design	BS 5163
Face to Face	BS 5163
Flanges	BS 4504 PN 16
Testing	BS 6755

PRESSURE TEST TO BS 6755			
DN	Pressure Rating (PN)	Hydro-Test Pressure(Mpa)	
		Body	Seat
40-300	16	2.4	1.76

✱ Specific Characteristic according to Customer's request

▲ FREEZING WEATHER PRECAUTION:

Subsequent to testing a piping system, valves should be left in opened position for completing drainage.

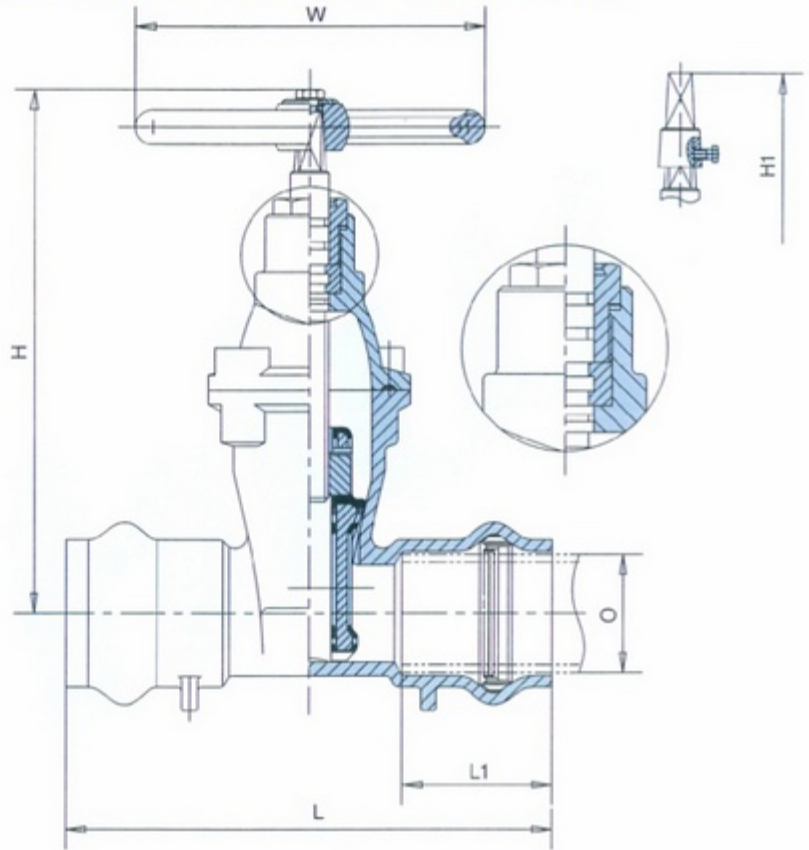
▲ DIMENSIONS(mm)

Size	L	D	D1	D2	b	n-d	H(Open)	H1	W	W.T(kg)
DN40	165	150	110	84	19	4-19	365	320	180	16
DN50	178	165	125	99	19	4-19	385	330	180	17
DN65	190	185	145	118	19	4-19	415	345	180	20
DN80	203	200	160	132	19	8-19	518	435	205	29
DN100	229	220	180	156	19	8-19	570	465	240	34
DN125	254	250	210	184	19	8-19	745	615	240	42
DN150	267	285	240	211	19	8-23	790	630	280	58
DN200	292	340	295	266	20	12-23	990	780	320	83
DN250	330	405	355	319	22	12-28	1175	915	360	138
DN300	356	460	410	370	24.5	12-28	1390	1080	450	192



Fig. Z4716S

DIN3352 Socket End NRS Resilient Seated Gate Valve



BASIC DESIGN STANDARDS

Basic Design	DIN 3352
Face to Face	ISO 5752 15 Series
Connection	Suitable for PVC Tube
Testing	DIN 3230

PRESSURE TEST TO DIN 3230

DN	Pressure Rating (PN)	Hydro-Test Pressure(Mpa)	
		Body	Seat
50-300	16	2.4	1.76

※ Specific Characteristic according to Customer's request

▲ FREEZING WEATHER PRECAUTION:

Subsequent to testing a piping system, valves should be left in opened position for completing drainage.

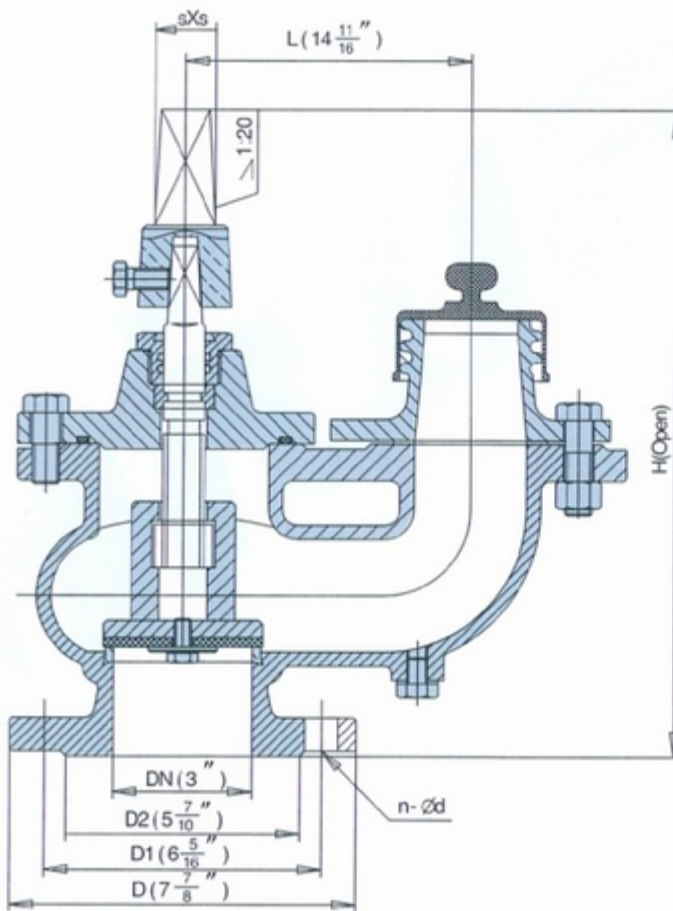
▲ DIMENTIONS(mm)

Size	O	L	L1	H	H1	W	W.T(kg)
DN50	63	250	77	300	370	180	11
DN65	75	270	80	310	380	180	12
DN80	90	280	84	350	420	205	18
DN100	110	300	88	380	450	240	23
DN125	125	325	91	420	490	240	38
	140	325	91	420	490	240	40
DN150	160	350	94	470	540	280	47
DN200	200	400	100	590	660	320	74
	225	400	100	590	660	320	78
DN250	250	450	125	680	750	360	127
DN300	315	500	140	790	860	450	191



Fig. BS750

BS750 Undergrand Fire Hydrant



Test:

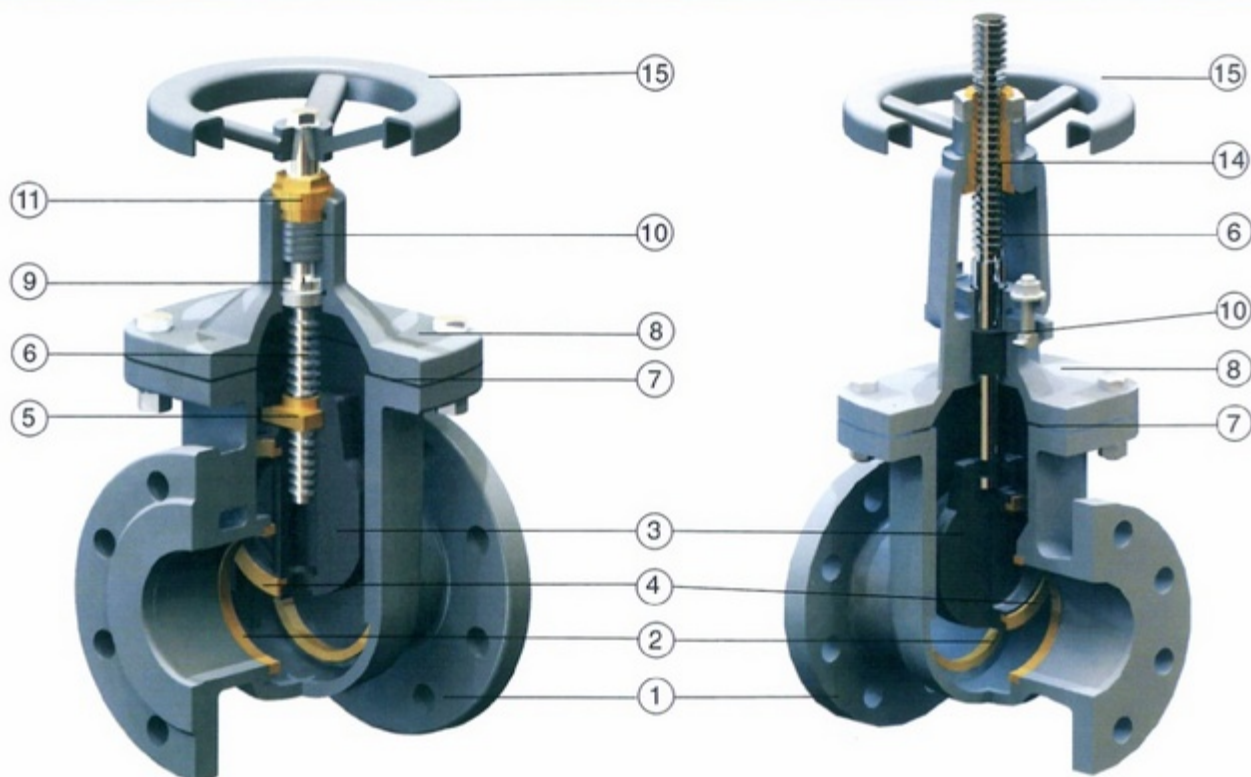
- ❖ Executed BS750 1984 standard
- ❖ Sealing test pressure: 1.6MPa
- ❖ Strength test pressure: 2.4MPa
- ❖ Working pressure 1.6MPa

❖ Specific Characteristic according to Customer's request

▲ MATERIAL LIST

NO	Spare part name	Material
1	Body	BS1452 220
2	Disc	BS1452 220
3	Bonnet & Cap nut	BS1452 220
4	Stem	2Cr13
5	Body sealing & holding rings	Brass
6	Disc sealing & O rings	NBR
7	Screwed outlets	Brass





Body

Oval bore design to ensure good compression and deformation resist performance . Body surface with FEB coated to ensure good ageing resistance & weather resisting property.

Seat

Embedded type seat, safety and integrated.

Disc

Disc with guide groove to protect the sealing face , also to ensure on-off freely.

Gasket

Compound Graphite gasket,good performance and long service life.

Bolt, Nut, Half Ring

Stem is oriented by half ring and double bolt&nut to ensure the disc on-off freely.

Handwheel

Handwheel with tapered square hole, easy to install and fasten.

Packing

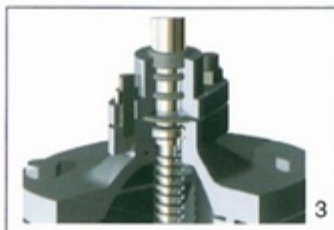
Soft graphite, long service life,easy to sealing and maintain.

Stem Nut

Cooper stem nut, good anticorrosion performance.

Top sealing

1. Reliable seal, long service life, easy to maintain, high temperature resistant and incorrodible.
2. Low open torque, turning freely, suitable for resilient seal gate valve.
3. Low open torque, turning freely, easy to maintain.
4. Reliable seal, long service life, easy to install and maintain.



◆ Application :

The series of gate valve is specially designed to suit for transportation, distribution and extraction system in water, air, low pressure steam, gas and petroleum industry, not recommend for steam service.

◆ Normal Features:

1. Renewable Brass or Bronze Seat Ring.
2. Non-Asbestos Packing and Gasket.
3. Disc seat ring in all sizes are pressed into disc.
4. Big flow area, small flow resistance coefficient and good leak tightness in high pressure.
5. Widely use field, good adaptability.
6. No direction demand, easy to install in pipe.
7. Good material washability.

◆ Service conditions:

Normal : Temperature from -10°C to 120°C for Brass or Bronze seat.

◆ Materials & Specifications

Item No.	Part Name	Material		Specification
1	Body	Cast Iron	GG25	ASTM A126B
		Ductile Iron	GGG50	ASTM A536
2	Seat Ring	Brass	Brass	ASTM B16
		Bronze	Bronze	ASTM B62
3	Wedge	Cast Iron	GG25	ASTM A126B
		Ductile Iron	GGG50	ASTM A536
4	Wedge Ring	Brass	Brass	ASTM B16
		Bronze	Bronze	ASTM B62
5	Wedge Nut	Brass	Brass	ASTM B16
6	Stem	Stainless Steel	20Cr13	SS416
		Brass	Brass	ASTM B16
7	Bonnet Gasket	Graphite+Steel	Graphite+Steel	Graphite+Steel
8	Bonnet	Cast Iron	GG25	ASTM A126B
		Ductile Iron	GGG50	ASTM A536
9	Stem Collar	Stainless Steel	20Cr13	SS 410
10	Packing	Graphite	Graphite	Graphite
11	Gland Nut	Brass	Brass	ASTM B16
12	Stuffing Box	Cast Iron	GG25	ASTM A126B
		Ductile Iron	GGG50	ASTM A536
13	Gland Follower	Ductile Iron	GGG50	ASTM A536
14	Stem Nut	Brass	Brass	ASTM B16
15	HandWheel	Ductile Iron	GGG50	ASTM A536

Fig. Z4514



Features:

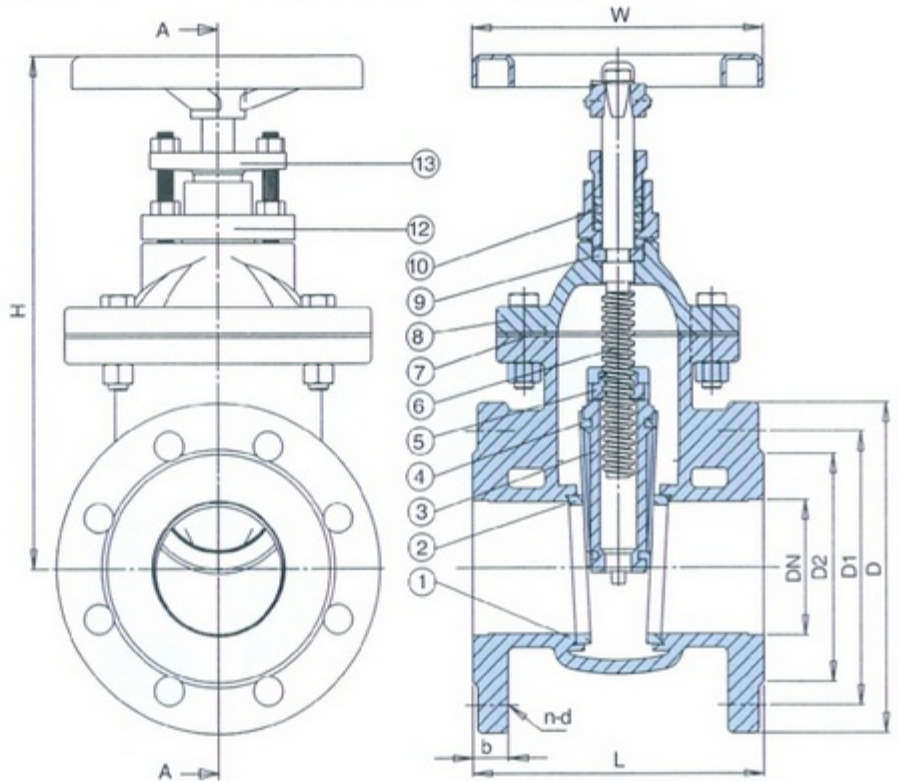
- ※ Inside Screw
- ※ Bolt Bonnet
- ※ Non-Rising Stem
- ※ Solid Wedge Disc
- ※ Brass or Bronze Trim
- ※ Flanged Ends

BASIC DESIGN STANDARDS	
Basic Design	DIN 3352
Face to Face	DIN 3202-F4
Flanges	DIN 2532 PN10
Testing	DIN 3230

PRESSURE TEST TO DIN 3230			
DN	Pressure Rating (PN)	Hydro-Test Pressure(Mpa)	
		Body	Seat
40-600	10	1.5	1.1
40-200	16	2.4	1.76

※ Specific Characteristic according to Customer's request

DIN3352 F4 Non-Rising Stem Solid Wedge Gate Valve



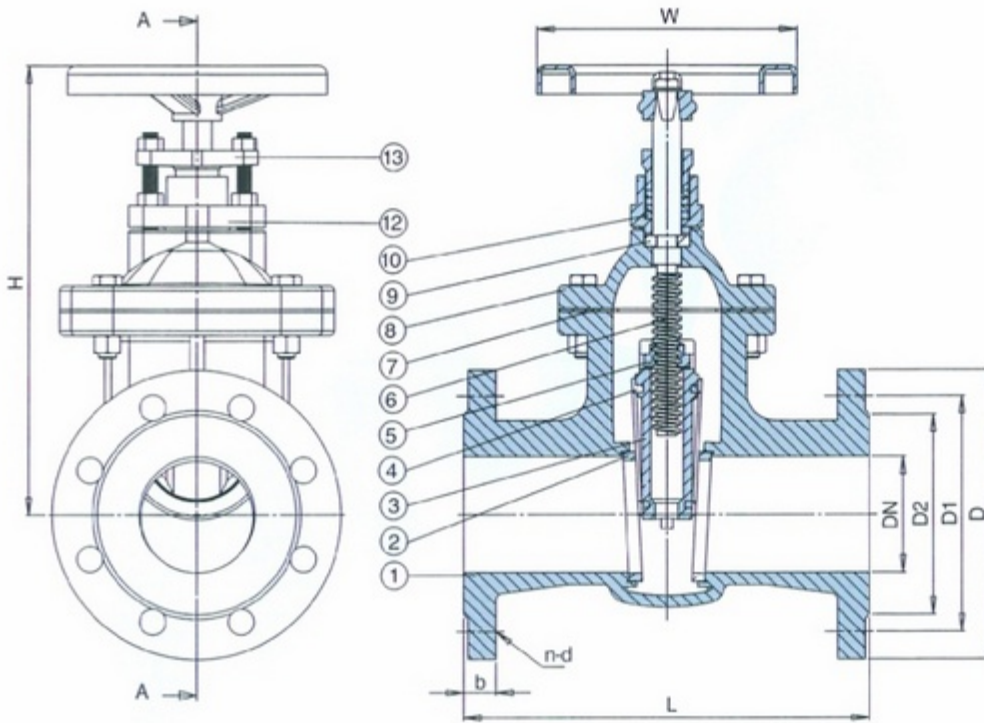
▲ FREEZING WEATHER PRECAUTION:

Subsequent to testing a piping system, valves should be left in opened position for completing drainage.

▲ DIMENTIONS(mm)

Size	L	D	D1	D2	b	n-d	H	W	W.T(kg)
DN40	140	150	110	88	18	4-18	240	180	11
DN50	150	165	125	102	20	4-18	250	180	13.4
DN65	170	185	145	122	20	4-18	265	180	16.8
DN80	180	200	160	138	22	8-18	300	200	22.9
DN100	190	220	180	158	24	8-18	350	200	29.9
DN125	200	250	210	188	26	8-18	410	250	43
DN150	210	285	240	212	26	8-22	450	280	56
DN200	230	340	295	268	26	8-22	550	300	102
DN250	250	395	350	320	28	12-22	650	360	127
DN300	270	445	400	370	28	12-22	710	400	165
DN350	290	505	460	430	30	16-22	1000	450	225
DN400	310	565	515	482	32	16-26	1123	450	369.6
DN450	330	615	565	532	32	20-26	1204	640	426.8
DN500	350	670	620	585	34	20-26	1295	640	572
DN600	390	780	725	685	36	20-30	1478	900	809.6

DIN3352 F5 Non-Rising Stem Solid Wedge Gate Valve



Features:

- Inside Screw
- Bolt Bonnet
- Non-Rising Stem
- Solid Wedge Disc
- Brass or Bronze Trim
- Flanged Ends

▲ FREEZING WEATHER PRECAUTION:

Subsequent to testing a piping system, valves should be left in opened position for completing drainage.

▲ DIMENSIONS(mm)

Size	L	D	D1	D2	b	n-d	H	W	W.T(kg)
DN40	240	150	110	88	18	4-18	240	180	13.7
DN50	250	165	125	102	20	4-18	250	180	15.7
DN65	270	185	145	122	20	4-18	265	180	19.8
DN80	280	200	160	138	22	8-18	300	200	25.9
DN100	300	220	180	158	24	8-18	350	200	33.5
DN125	325	250	210	188	26	8-18	410	250	49
DN150	350	285	240	212	26	8-22	450	280	68
DN200	400	340	295	268	30	12-22	550	300	97
DN250	450	405	355	320	32	12-26	650	360	136
DN300	500	460	410	378	32	12-26	710	400	185
DN350	550	520	470	438	36	16-26	1000	450	260
DN400	600	580	525	490	38	16-30	1123	450	462
DN450	650	640	585	548	40	20-30	1204	640	533.5
DN500	700	715	650	610	42	20-33	1295	640	715
DN600	800	840	770	725	48	20-36	1478	900	1012

BASIC DESIGN STANDARDS

Basic Design	DIN3352
Face to Face	DIN3202-F5
Flanges	DIN2533 PN16
Testing	DIN 3230

PRESSURE TEST TO DIN 3230

DN	Pressure Rating (PN)	Hydro-Test Pressure(Mpa)	
		Body	Seat
40-600	16	2.4	1.76

※ Specific Characteristic according to Customer's request



Fig. Z4114



Features:

- ✦ Outside Screw and Yoke
- ✦ Bolt Bonnet
- ✦ Rising Stem
- ✦ Solid Wedge Disc
- ✦ Brass or Bronze Trim
- ✦ Flanged Ends

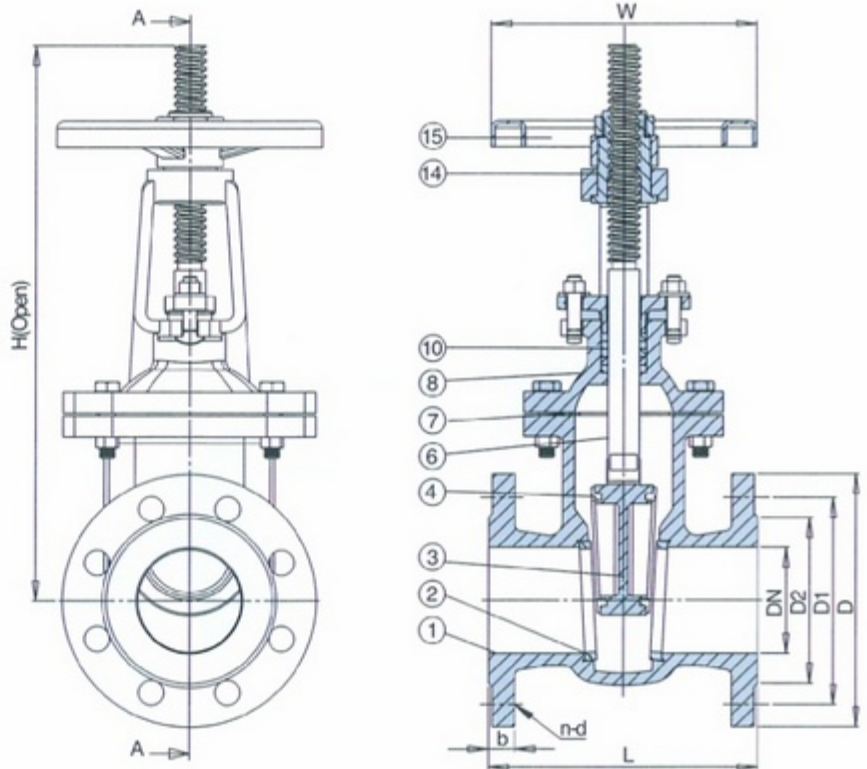
BASIC DESIGN STANDARDS	
Basic Design	DIN3352
Face to Face	DIN3202-F4
Flanges	DIN2532 PN10
Testing	DIN 3230

PRESSURE TEST TO DIN 3230			
DN	Pressure Rating (PN)	Hydro-Test Pressure(Mpa)	
		Body	Seat
40-600	10	1.5	1.1
40-200	16	2.4	1.76

✦ Specific Characteristic according to Customer's request



DIN3352 F4 Rising Stem Solid Wedge Gate Valve



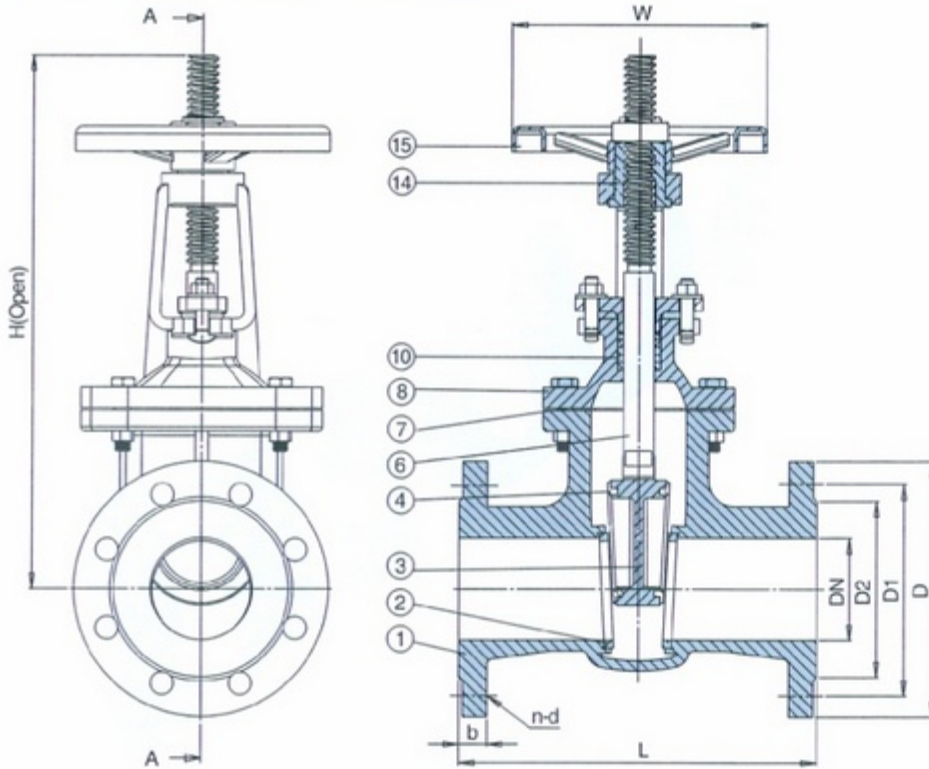
▲ FREEZING WEATHER PRECAUTION:

Subsequent to testing a piping system, valves should be left in opened position for completing drainage.

▲ DIMENSIONS(mm)

Size	L	D	D1	D2	b	n-d	H(open)	W	W.T(kg)
DN40	140	150	110	88	18	4-18	320	180	12
DN50	150	165	125	102	20	4-18	347	180	15
DN65	170	185	145	122	20	4-18	390	180	18.5
DN80	180	200	160	138	22	8-18	470	200	25.1
DN100	190	220	180	158	24	8-18	535	200	32.3
DN125	200	250	210	188	26	8-18	644	250	44.6
DN150	210	285	240	212	26	8-22	739	280	59.2
DN200	230	340	295	268	26	8-22	936	300	88
DN250	250	395	350	320	28	12-22	1133	360	138
DN300	270	445	400	370	28	12-22	1330	400	177.5
DN350	290	505	460	430	30	16-22	1533	450	240
DN400	310	565	515	482	32	16-26	1905	450	420
DN450	330	615	565	532	32	20-26	2072	640	485
DN500	350	670	620	585	34	20-26	2302	640	650
DN600	390	780	725	685	36	20-30	2650	900	920

DIN3352 F5 Rising Stem Solid Wedge Gate Valve



▲ FREEZING WEATHER PRECAUTION:

Subsequent to testing a piping system, valves should be left in opened position for completing drainage.

▲ DIMENSIONS(mm)

Size	L	D	D1	D2	b	n-d	H(open)	W	W.T(kg)
DN40	240	150	110	88	18	4-18	320	180	15
DN50	250	165	125	102	20	4-18	347	180	17.3
DN65	270	185	145	122	20	4-18	390	180	21.5
DN80	280	200	160	138	22	8-18	470	200	28.1
DN100	300	220	180	158	24	8-18	535	200	35.9
DN125	325	250	210	188	26	8-18	644	250	50.6
DN150	350	285	240	212	26	8-22	739	280	71.2
DN200	400	340	295	268	30	12-22	936	300	83
DN250	450	405	355	320	32	12-26	1133	360	147
DN300	500	460	410	378	32	12-26	1330	400	210
DN350	550	520	470	438	36	16-26	1533	450	280
DN400	600	580	525	490	38	16-30	1905	450	487.2
DN450	650	640	585	548	40	20-30	2072	640	562.6
DN500	700	715	650	610	42	20-33	2302	640	754
DN600	800	840	770	725	48	20-36	2650	900	1067.2



Features:

- Outside Screw and Yoke
- Bolt Bonnet
- Rising Stem
- Solid Wedge Disc
- Brass or Bronze Trim
- Flanged Ends

BASIC DESIGN STANDARDS

Basic Design	DIN 3352
Face to Face	DIN 3202-F5
Flanges	DIN 2533 PN16
Testing	DIN 3230

PRESSURE TEST TO DIN 3230

DN	Pressure Rating (PN)	Hydro-Test Pressure(Mpa)	
		Body	Seat
40-600	10	1.5	1.1
40-600	16	2.4	1.76

※ Specific Characteristic according to Customer's request



Fig. Z4103



Features:

- Outside Screw and Yoke
- Bolt Bonnet
- Rising Stem
- Solid Wedge Disc
- Brass or Bronze Trim
- Flanged Ends

BASIC DESIGN STANDARDS	
Basic Design	MSS SP-70
Face to Face	ANSI B16.10
Flanges	ANSI B16.1
Testing	MSS SP-70

PRESSURE TEST TO MSS SP-70
• Working Pressure NonShock(psi)

Size	Saturated Steam	Cold Water, Oil, Gas
1.5" -12"	125	200
14" -24"		150

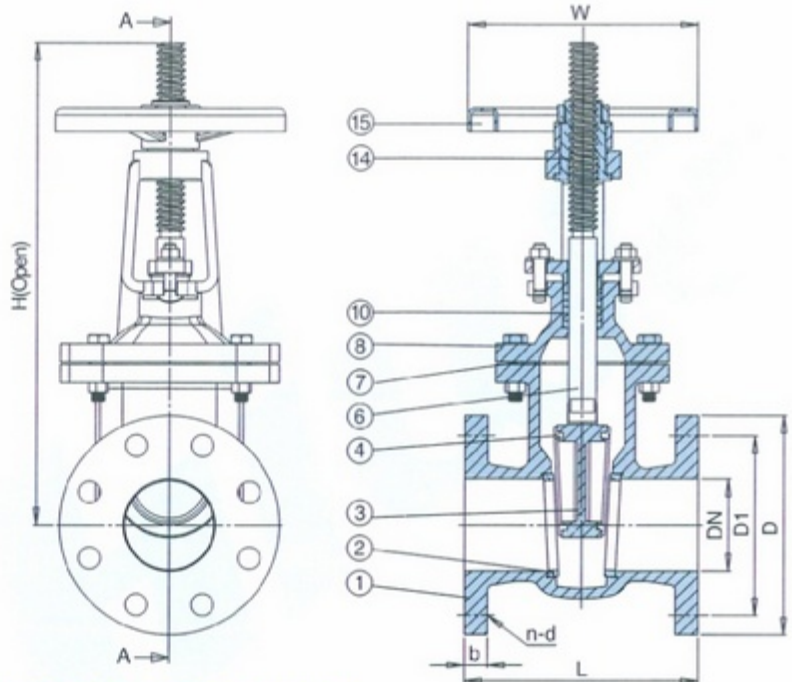
• Test Pressure (psi)

Size	Shell (Water)	Seat (Water)
1.5" -12"	350	220
14" -24"	265	165

• Specific Characteristic according to Customer's request



Class 125 Rising Stem Solid Wedge Gate Valve



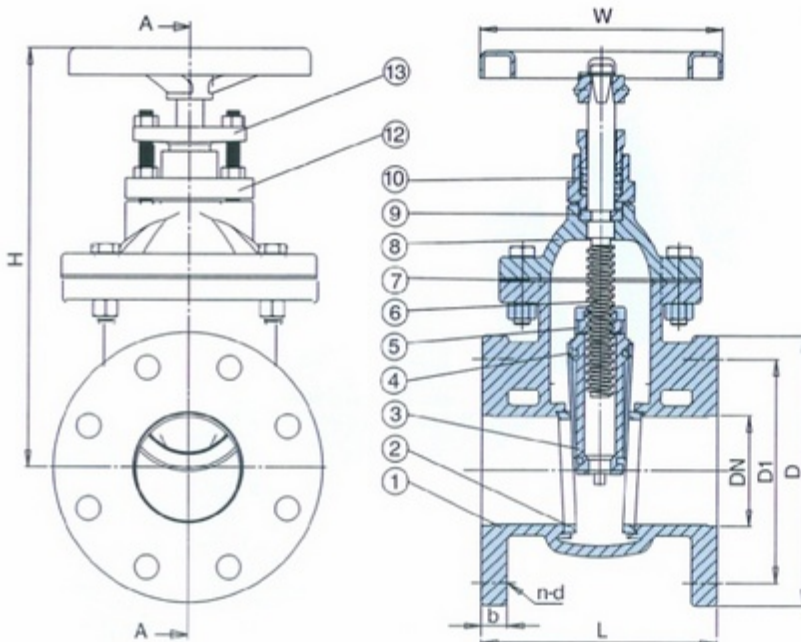
▲ FREEZING WEATHER PRECAUTION:

Subsequent to testing a piping system, valves should be left in opened position for completing drainage.

▲ DIMENTIONS

Size	L	D	D1	b	n	d	H(open)	W	W.T(kg)	
1.5	in	6.5	5	3.88	0.56	4	0.62	12.6	7.1	15
	mm	165.1	127	98.6	14.2	16	320	180		
2	in	7.0	6	4.75	0.62	4	0.75	13.7	7.1	17
	mm	177.8	152	120.7	15.8	19	347	180		
2.5	in	7.5	7	5.5	0.69	4	0.75	15.4	7.1	18
	mm	190.5	178	139.7	17.5	19	390	180		
3	in	8.0	7.5	6	0.75	4	0.75	18.5	7.9	24.8
	mm	203.2	191	152.4	19	19	470	200		
4	in	9.0	9	7.5	0.94	8	0.75	21.1	7.9	34.6
	mm	228.6	229	190.5	23.9	19	535	200		
5	in	10.0	10	8.5	0.94	8	0.88	25.4	9.8	50.4
	mm	254.0	254	215.9	23.9	22	644	250		
6	in	10.5	11	9.5	1	8	0.88	29.1	11.0	63
	mm	266.7	279	241.3	25.4	22	739	280		
8	in	11.5	13.5	11.75	1.12	8	0.88	36.9	11.8	92
	mm	292.1	343	298.5	28.5	22	936	300		
10	in	13.0	16	14.25	1.19	12	1	44.6	14.2	149
	mm	330.2	406	362	30.2	25	1133	360		
12	in	14.0	19	17	1.25	12	1	52.4	15.7	197.5
	mm	355.6	483	431.8	31.8	25	1330	400		
14	in	15.0	21	18.75	1.38	12	1.12	60.4	17.7	261.5
	mm	381.0	533	476.3	35	29	1533	450		
16	in	16.0	23.5	21.25	1.44	16	1.12	75.0	17.7	441
	mm	406.4	597	539.8	36.6	29	1905	450		
18	in	17.0	25	22.75	1.56	16	1.25	81.6	25.2	509.3
	mm	431.8	635	577.9	39.6	32	2072	640		
20	in	18.0	27.5	25	1.69	20	1.25	90.6	25.2	682.5
	mm	457.2	699	635	42.9	32	2302	640		
24	in	20.0	32	29.5	1.88	20	1.38	104.3	35.4	966
	mm	508.0	813	749.3	47.8	35	2650	900		

Class 125 Non-Rising Stem Solid Wedge Gate Valve



▲ FREEZING WEATHER PRECAUTION:

Subsequent to testing a piping system, valves should be left in opened position for completing drainage.

▲ DIMENSIONS

Size		L	D	D1	b	n	d	H	W	W.T(kg)
1.5	in	6.5	5	3.88	0.56	4	0.62	9.4	7.1	13
	mm	165.1	127	98.6	14.2		16	240	180	
2	in	7.0	6	4.75	0.62	4	0.75	9.8	7.1	15
	mm	177.8	152	120.7	15.8		19	250	180	
2.5	in	7.5	7	5.5	0.69	4	0.75	10.4	7.1	18.5
	mm	190.5	178	139.7	17.5		19	265	180	
3	in	8.0	7.5	6	0.75	4	0.75	11.8	7.9	24.9
	mm	203.2	191	152.4	19		19	300	200	
4	in	9.0	9	7.5	0.94	8	0.75	13.8	7.9	34.8
	mm	228.6	229	190.5	23.9		19	350	200	
5	in	10.0	10	8.5	0.94	8	0.88	16.1	9.8	48
	mm	254.0	254	215.9	23.9		22	410	250	
6	in	10.5	11	9.5	1	8	0.88	17.7	11.0	61.3
	mm	266.7	279	241.3	25.4		22	450	280	
8	in	11.5	13.5	11.75	1.12	8	0.88	21.7	11.8	106
	mm	292.1	343	298.5	28.5		22	550	300	
10	in	13.0	16	14.25	1.19	12	1	25.6	14.2	138
	mm	330.2	406	362	30.2		25	650	360	
12	in	14.0	19	17	1.25	12	1	28.0	15.7	175
	mm	355.6	483	431.8	31.8		25	710	400	
14	in	15.0	21	18.75	1.38	12	1.12	39.4	17.7	240
	mm	381.0	533	476.3	35		29	1000	450	
16	in	16.0	23.5	21.25	1.44	16	1.12	44.2	17.7	420
	mm	406.4	597	539.8	36.6		29	1123	450	
18	in	17.0	25	22.75	1.56	16	1.25	47.4	25.2	485
	mm	431.8	635	577.9	39.6		32	1204	640	
20	in	18.0	27.5	25	1.69	20	1.25	51.0	25.2	650
	mm	457.2	699	635	42.9		32	1295	640	
24	in	20.0	32	29.5	1.88	20	1.38	58.2	35.4	920
	mm	508.0	813	749.3	47.8		35	1478	900	



Features:

- Inside Screw
- Bolt Bonnet
- Non-Rising Stem
- Solid Wedge Disc
- Brass or Bronze Trim
- Flanged Ends

BASIC DESIGN STANDARDS	
Basic Design	MSS SP-70
Face to Face	ANSI B16.10
Flanges	ANSI B16.1
Testing	MSS SP-70

PRESSURE TEST TO MSS SP-70

- Working Pressure NonShook(PSI)

Size	Saturated Steam	Cold Water, Oil, Gas
1.5" -12"	125	200
14" -24"		150

- Test Pressure (PSI)

Size	Shell (Water)	Seat (Water)
1.5" -12"	350	220
14" -24"	265	165

※ Specific Characteristic according to Customer's request



Fig. Z41032

CAST IRON GATE VALVE



Features:

- Outside Screw and Yoke
- Bolt Bonnet
- Rising Stem
- Solid Wedge Disc
- Brass or Bronze Trim
- Flanged Ends

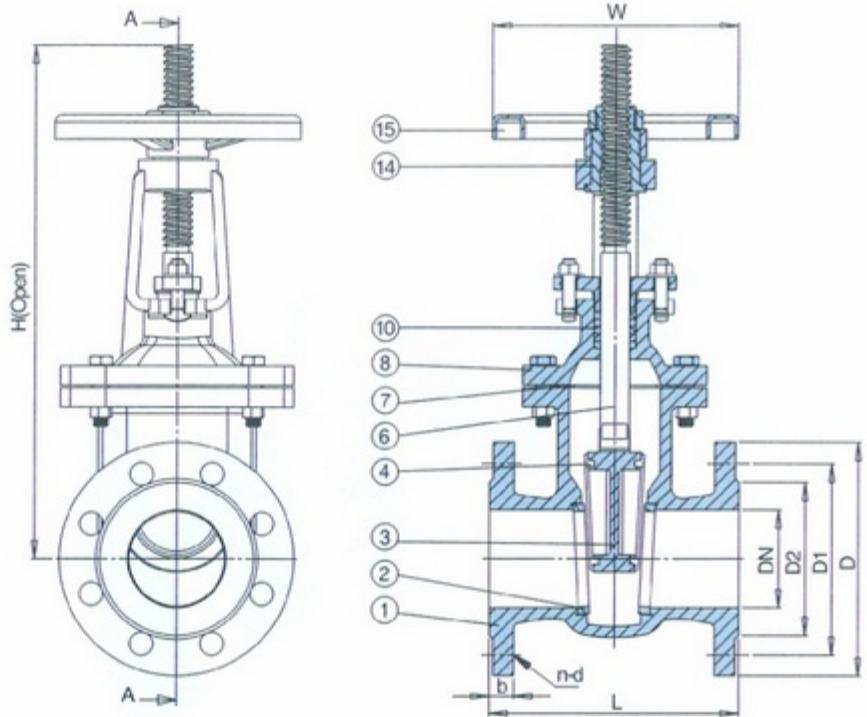
BASIC DESIGN STANDARDS	
Basic Design	BS 5150
Face to Face	BS 5150
Flanges	BS 4504 PN16
Testing	BS 6755

PRESSURE TEST TO BS 6755			
DN	Pressure Rating (PN)	Hydro-Test Pressure(Mpa)	
		Body	Seat
40-600	10	1.5	1.1
40-600	16	2.4	1.76

※ Specific Characteristic according to Customer's request



BS5150 Rising Stem Solid Wedge Gate Valve



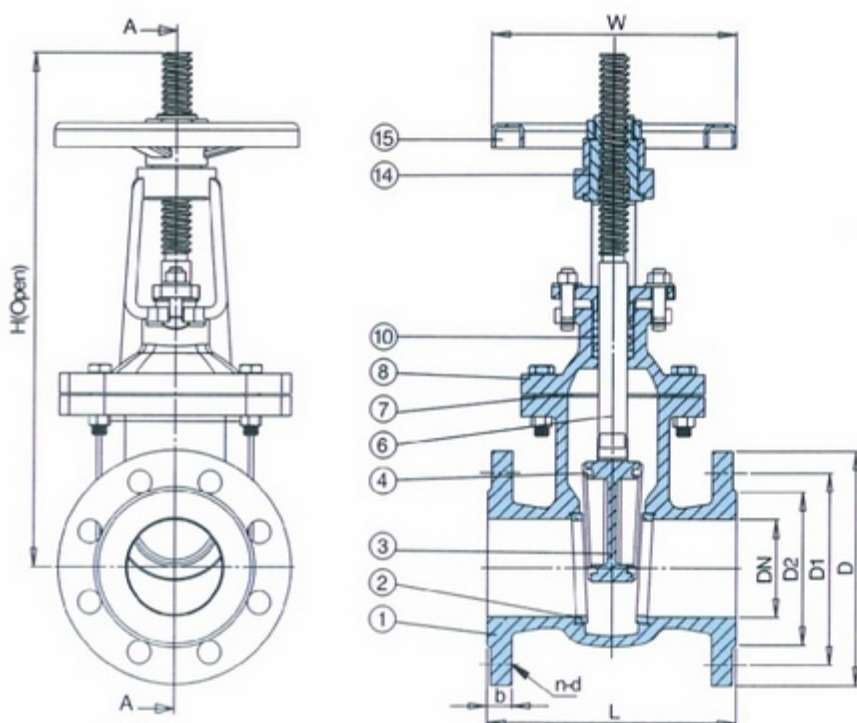
▲ FREEZING WEATHER PRECAUTION:

Subsequent to testing a piping system, valves should be left in opened position for completing drainage.

▲ DIMENTIONS(mm)

Size	L	D	D1	D2	b	n-d	H(open)	W	W.T(kg)
DN40	165	150	110	88	18	4-19	320	180	14.5
DN50	178	165	125	102	20	4-19	347	180	17
DN65	190	185	145	122	20	4-19	390	180	18
DN80	203	200	160	138	22	8-19	470	200	24.8
DN100	229	220	180	158	24	8-19	535	200	34.6
DN125	254	250	210	188	26	8-19	644	250	50.4
DN150	267	285	240	212	26	8-23	739	280	63
DN200	292	340	295	268	30	12-23	936	300	92
DN250	330	405	355	320	32	12-28	1133	360	149
DN300	356	460	410	378	32	12-28	1330	400	197.5
DN350	381	520	470	438	36	16-28	1533	450	261.5
DN400	406	580	525	490	38	16-31	1905	450	441
DN450	432	640	585	548	40	20-31	2072	640	509.3
DN500	457	715	650	610	42	20-34	2302	640	682.5
DN600	508	840	770	725	48	30-37	2650	900	966

BS5163 Rising Stem Solid Wedge Gate Valve



Features:

- ✦ Outside Screw and Yoke
- ✦ Bolt Bonnet
- ✦ Rising Stem
- ✦ Solid Wedge Disc
- ✦ Brass or Bronze Trim
- ✦ Flanged Ends

▲ FREEZING WEATHER PRECAUTION:

Subsequent to testing a piping system, valves should be left in opened position for completing drainage.

▲ DIMENSIONS(mm)

Size	L	D	D1	D2	b	n-d	H(open)	W	W.T(kg)
DN40	165	150	110	88	18	4-19	320	180	14.5
DN50	178	165	125	102	20	4-19	347	180	17
DN65	190	185	145	122	20	4-19	390	180	18
DN80	203	200	160	138	22	8-19	470	200	24.8
DN100	229	220	180	158	24	8-19	535	200	34.6
DN125	254	250	210	188	26	8-19	644	250	50.4
DN150	267	285	240	212	26	8-23	739	280	63
DN200	292	340	295	268	30	12-23	936	300	92
DN250	330	405	355	320	32	12-28	1133	360	149
DN300	356	460	410	378	32	12-28	1330	400	197.5
DN350	381	520	470	438	36	16-28	1533	450	261.5
DN400	406	580	525	490	38	16-31	1905	450	441
DN450	432	640	585	548	40	20-31	2072	640	509.3
DN500	457	715	650	610	42	20-34	2302	640	682.5
DN600	508	840	770	725	48	30-37	2650	900	966

BASIC DESIGN STANDARDS	
Basic Design	BS 5163
Face to Face	BS 5163
Flanges	BS 4504 PN16
Testing	BS 6755

PRESSURE TEST TO BS 6755			
DN	Pressure Rating (PN)	Hydro-Test Pressure(Mpa)	
		Body	Seat
40-600	10	1.5	1.1
40-600	16	2.4	1.76

✦ Specific Characteristic according to Customer's request



Fig. Z45032



Features:

- Inside Screw
- Bolt Bonnet
- Non-Rising Stem
- Solid Wedge Disc
- Brass or Bronze Trim
- Flanged Ends

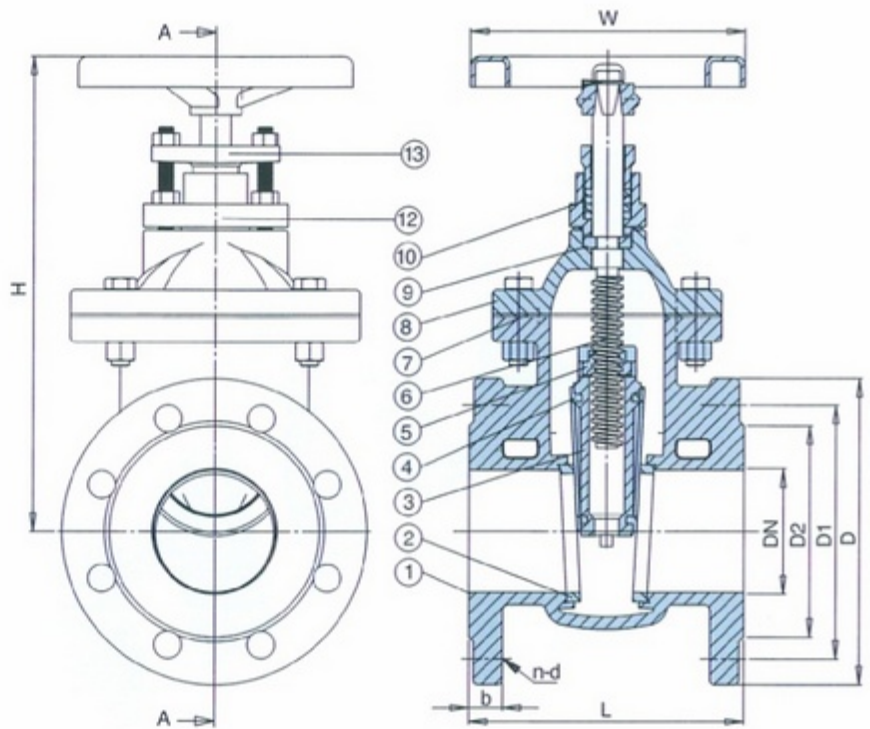
BASIC DESIGN STANDARDS	
Basic Design	BS5150
Face to Face	BS5150
Flanges	BS4504 PN16
Testing	BS6755

PRESSURE TEST TO BS 6755			
DN	Pressure Rating (PN)	Hydro-Test Pressure(Mpa)	
		Body	Seat
40-600	10	1.5	1.1
40-600	16	2.4	1.76

※ Specific Characteristic according to Customer's request



BS5150 Non-Rising Stem Solid Wedge Gate Valve



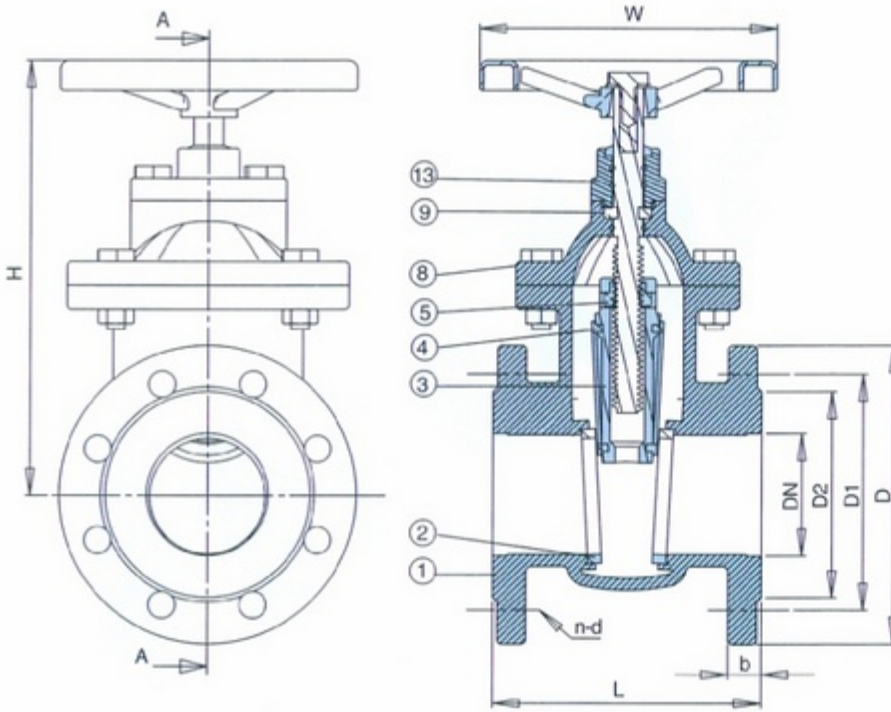
▲ **FREEZING WEATHER PRECAUTION:**

Subsequent to testing a piping system, valves should be left in opened position for completing drainage.

▲ **DIMENSIONS(mm)**

Size	L	D	D1	D2	b	n-d	H	W	W.T(kg)
DN40	165	150	110	88	18	4-19	240	180	13
DN50	178	165	125	102	20	4-19	250	180	15
DN65	190	185	145	122	20	4-19	265	180	18.5
DN80	203	200	160	138	22	8-19	300	200	24.9
DN100	229	220	180	158	24	8-19	350	200	34.8
DN125	254	250	210	188	26	8-19	410	250	48
DN150	267	285	240	212	26	8-23	450	280	61.3
DN200	292	340	295	268	30	12-23	550	300	106
DN250	330	405	355	320	32	12-28	650	360	138
DN300	356	460	410	378	32	12-28	710	400	175
DN350	381	520	470	438	36	16-28	1000	450	240
DN400	406	580	525	490	38	16-31	1123	450	420
DN450	432	640	585	548	40	20-31	1204	640	485
DN500	457	715	650	610	42	20-34	1295	640	650
DN600	508	840	770	725	48	30-37	1478	900	920

BS5163 Non-Rising Stem Solid Wedge Gate Valve



Features:

- Inside Screw
- Bolt Bonnet
- Non-Rising Stem
- Solid Wedge Disc
- Brass or Bronze Trim
- Flanged Ends

▲ FREEZING WEATHER PRECAUTION:

Subsequent to testing a piping system, valves should be left in opened position for completing drainage.

▲ DIMENTIONS(mm)

Size	L	D	D1	D2	b	n-d	H	W	W.T(kg)
DN40	165	150	110	88	18	4-19	240	180	13
DN50	178	165	125	102	20	4-19	250	180	15
DN65	190	185	145	122	20	4-19	265	180	18.5
DN80	203	200	160	138	22	8-19	300	200	24.9
DN100	229	220	180	158	24	8-19	350	200	34.8
DN125	254	250	210	188	26	8-19	410	250	48
DN150	267	285	240	212	26	8-23	450	280	61.3
DN200	292	340	295	268	30	12-23	550	300	106
DN250	330	405	355	320	32	12-28	650	360	138
DN300	356	460	410	378	32	12-28	710	400	175
DN350	381	520	470	438	36	16-28	1000	450	240
DN400	406	580	525	490	38	16-31	1123	450	420
DN450	432	640	585	548	40	20-31	1204	640	485
DN500	457	715	650	610	42	20-34	1295	640	650
DN600	508	840	770	725	48	30-37	1478	900	920

BASIC DESIGN STANDARDS

Basic Design	BS 5163
Face to Face	BS 5163
Flanges	BS4504 PN16
Testing	BS 6755

PRESSURE TEST TO BS 6755

DN	Pressure Rating (PN)	Hydro-Test Pressure(Mpa)	
		Body	Seat
40-600	10	1.5	1.1
40-600	16	2.4	1.76

※ Specific Characteristic according to Customer's request



Fig. Z41031



Features:

- Outside Screw and Yoke
- Bolt Bonnet
- Rising Stem
- Solid Wedge Disc
- Brass or Bronze Trim
- Flanged Ends

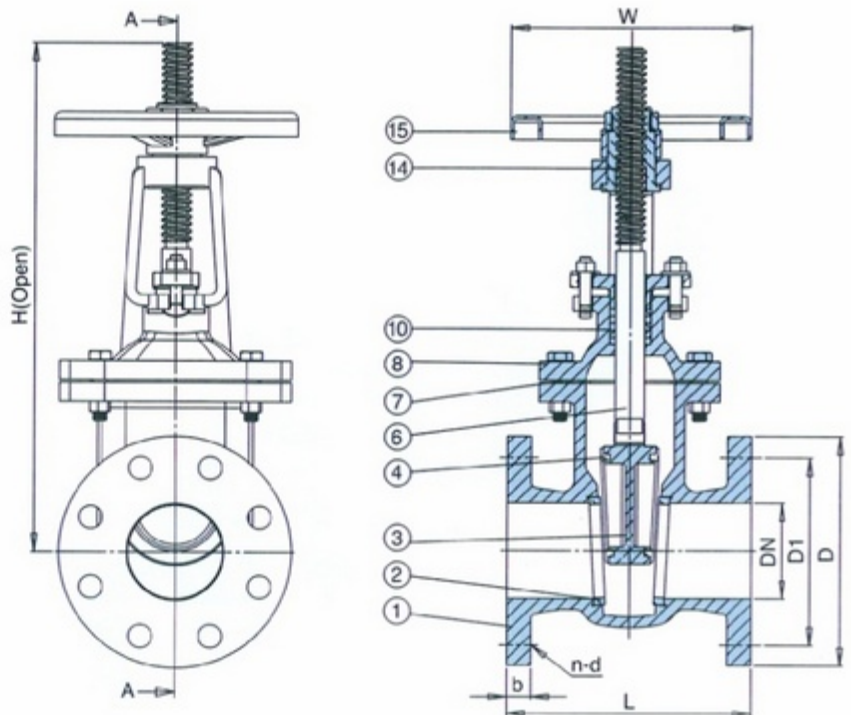
BASIC DESIGN STANDARDS	
Basic Design	JIS B2044
Face to Face	JIS B2002
Flanges	JIS B2212
Testing	JIS B2003

PRESSURE TEST TO JIS B2003			
DN	Pressure Rating	Hydro-Test Pressure(Mpa)	
		Body	Seat
40-400	10K	21.0	15.4
40-500	10K	18.0	13.2

※ Specific Characteristic according to Customer's request



JIS B2044 Rising Stem Solid Wedge Gate Valve



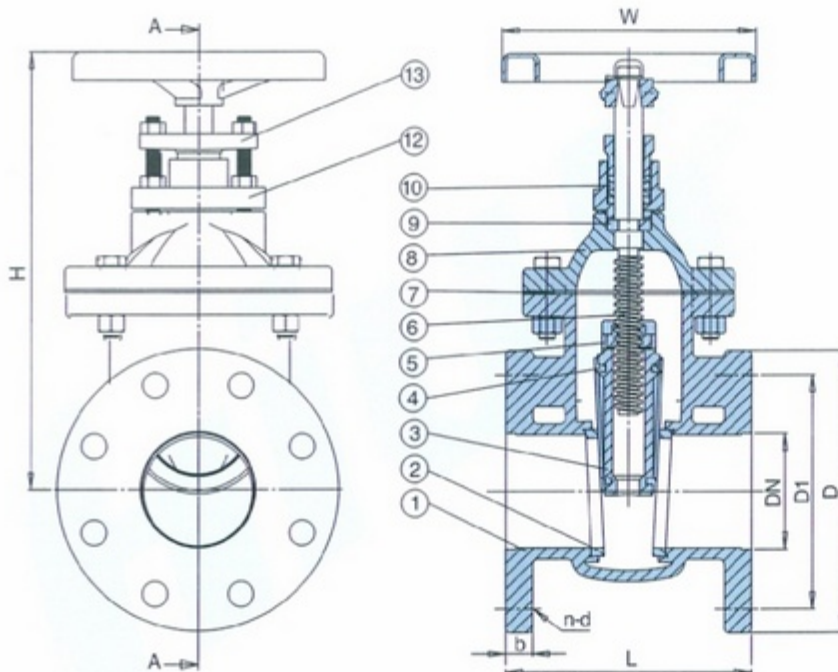
▲ FREEZING WEATHER PRECAUTION:

Subsequent to testing a piping system, valves should be left in opened position for completing drainage.

▲ DIMENTIONS(mm)

Size	L	D	D1	b	n-d	H(open)	W	W.T(kg)
DN40	165	140	105	20	4-19	320	180	14.5
DN50	178	155	120	20	4-19	347	180	17
DN65	190	175	140	22	4-19	390	190	18
DN80	203	185	150	22	8-19	470	200	24.8
DN100	229	210	175	24	8-19	535	200	34.6
DN125	254	250	210	24	8-23	644	250	50.4
DN150	267	280	240	26	8-23	739	280	63
DN200	292	330	290	26	12-23	936	300	92
DN250	330	400	355	30	12-25	1133	360	149
DN300	356	445	400	32	16-25	1330	400	197.5
DN350	381	490	445	34	16-25	1533	450	261.5
DN400	406	560	510	36	16-27	1905	450	441
DN450	432	620	565	38	20-27	2072	640	509.3
DN500	457	675	620	40	20-27	2302	640	682.5

JIS B2043 Non-Rising Stem Solid Wedge Gate Valve



Features:

- Inside Screw
- Bolt Bonnet
- Non-Rising Stem
- Solid Wedge Disc
- Brass or Bronze Trim
- Flanged Ends

BASIC DESIGN STANDARDS

Basic Design	JIS B2043
Face to Face	JIS B2002
Flanges	JIS B2212
Testing	JIS B2003

▲ FREEZING WEATHER PRECAUTION:

Subsequent to testing a piping system, valves should be left in opened position for completing drainage.

▲ DIMENTIONS(mm)

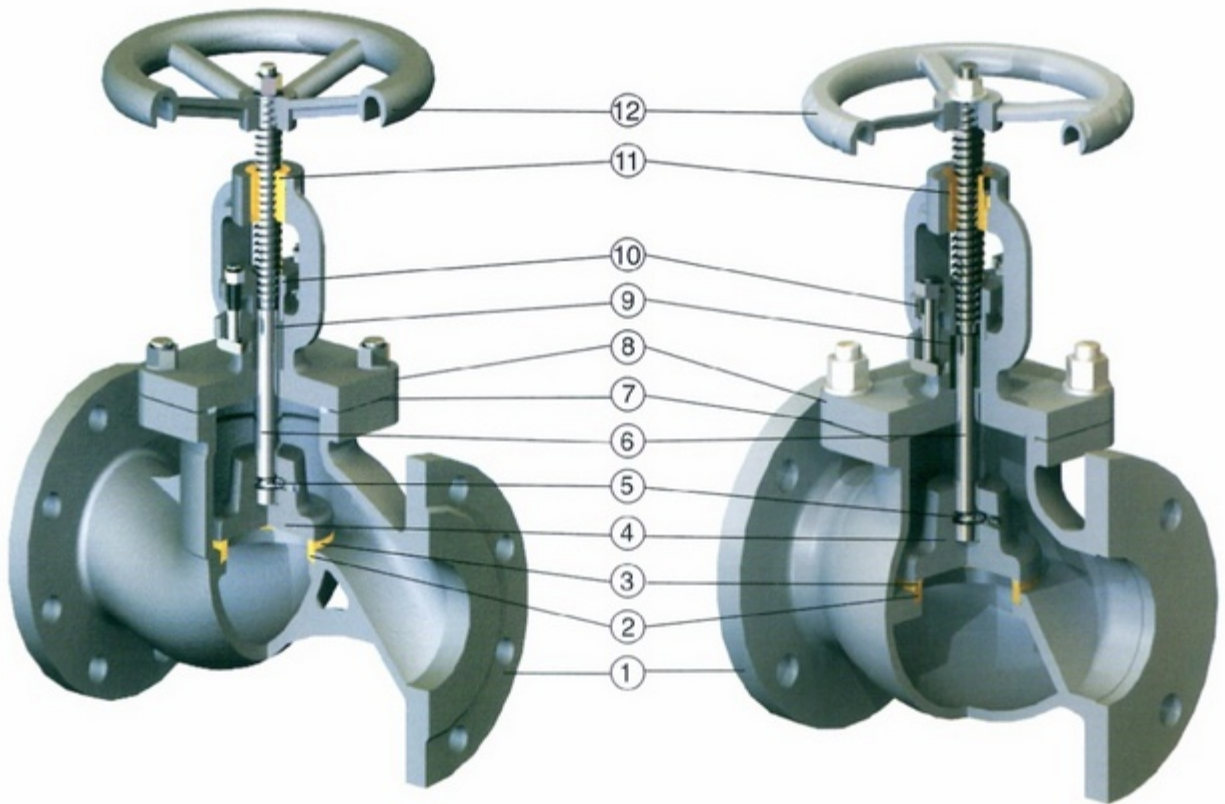
Size	L	D	D1	b	n-d	H	W	W.T(kg)
DN40	165	140	105	20	4-19	240	180	13
DN50	178	155	120	20	4-19	250	180	15
DN65	190	175	140	22	4-19	265	180	18.5
DN80	203	185	150	22	8-19	300	200	24.9
DN100	229	210	175	24	8-19	350	200	34.8
DN125	254	250	210	24	8-23	410	250	48
DN150	267	280	240	26	8-23	450	280	61.3
DN200	292	330	290	26	12-23	550	300	106
DN250	330	400	355	30	12-25	650	360	138
DN300	356	445	400	32	16-25	710	400	175
DN350	381	490	445	34	16-25	1000	450	240
DN400	406	560	510	36	16-27	1123	450	420
DN450	432	620	565	38	20-27	1204	640	485
DN500	457	675	620	40	20-27	1295	640	650

PRESSURE TEST TO JIS B2003

DN	Pressure Rating	Hydro-Test Pressure(Mpa)	
		Body	Seat
40-400	10K	21.0	15.4
40-500	10K	18.0	13.2

※ Specific Characteristic according to Customer's request





Body

Optimized cavity design, full bore, little flow resistance, good pressurization characteristic.

Seat Ring

Inlaid structure, anticorrosive materials, good sealing property, and long service life.

Disc Ring

Anticorrosive materials, good sealing property, and long time service.

Disc

Ductile Iron material with high strength and impact resistance.

Screw

Bearing steel materials, corrosion proof, long service life.

Ball

Ball connection between disc and stem, turning flexible and sealing credible.

Stem

Stainless steel, corrosion proof, long service life, good mechanical property.

Gasket

Soft graphite, long service life, easy to sealing and maintain.

Nut

High quality carbon steel, better performance.

Stud

High quality carbon steel, better performance.

Packing

Soft graphite, long service life, easy to sealing and maintain.

Gland

High strengthen design, easy to use.

T Bolt

T bolts and nuts, easy to use.

Bonnet

High strengthen design, safe and credible.

Yoke Nut

Brass material, high intensity, small frictional coefficient, corrosion proof and long service life.

Handwheel

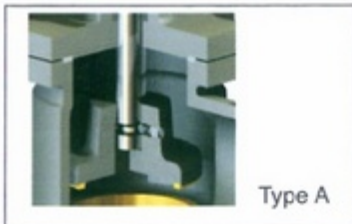
High strengthen design, safe and credible.

Washer

High quality carbon steel, better performance.

Nut

High quality carbon steel, better performance.



Type A

Type A
For shut-off medium only.

Type B
Both for shut-off and automatic preventing reverse flow of work media.



Type B

◆ Application :

As shut-off valves, GLOBE valve are used for Industry, Powerstation, Flue gas purification plant, process technology, gas supply, vapour facilities, thermal oil applications, recycling facilities, vacuum facilities, ammonia, hot water, heating technology, district heating, cooling and freezing systems, general plant manufacturing, steam systems.

Medium : Steam, gas, hot water, thermal fluids, hot oil, process water, vacuum facilities, ammonia etc.

◆ Normal Features:

1. Optimised cavity design, full port, low flow resistance.
2. Outside screw and yoke construction.
3. Stem nut is firmly seated in yoke bonnet head or on antifriction bearings.
4. Deep stuffing box and soft graphite packing can supply safety and long service sealing.

◆ Service conditions:

Normal : Temperature from -10°C to 120°C for Brass seat.

Temperature from -10°C to 200°C for Stainless Steel seat.

◆ Materials & Specifications

Item No.	Part Name	Material	Specification	
1	Body	Cast Iron	GG25	ASTM A126B
		Ductile Iron	GGG50	ASTM A536
2	Seat Ring	Brass	Brass	ASTM B16
		Bronze	Bronze	ASTM B62
		Stainless Steel	20Cr13	SS410
3	Disc Ring	Brass	Brass	ASTM B16
		Bronze	Bronze	ASTM B62
4	Disc	Cast Iron	GG25	ASTM A126B
		Ductile Iron	GGG50	ASTM A536
		Stainless Steel	20Cr13	SS410
5	Ball	Stainless Steel	Stainless Steel	Stainless Steel
6	Stem	Stainless Steel	20Cr13	SS416
		Brass	Brass	ASTM B16
7	Bonnet Gasket	Graphite+Steel	Graphite+Steel	Graphite+Steel
8	Bonnet	Cast Iron	GG25	ASTM A126B
		Ductile Iron	GGG50	ASTM A536
9	Packing	Graphite	Graphite	Graphite
10	Gland Follower	Ductile Iron	GGG50	ASTM A536
11	Stem Nut	Brass	Brass	ASTM B16
12	HandWheel	Ductile Iron	GGG50	ASTM A536

Fig. J4101



Features:

- ※ Outside Screw and Yoke
- ※ Bolted Bonnet
- ※ Rising Stem
- ※ Brass Trim
- ※ Flanged Ends
- ※ Renewable Seat and Disc

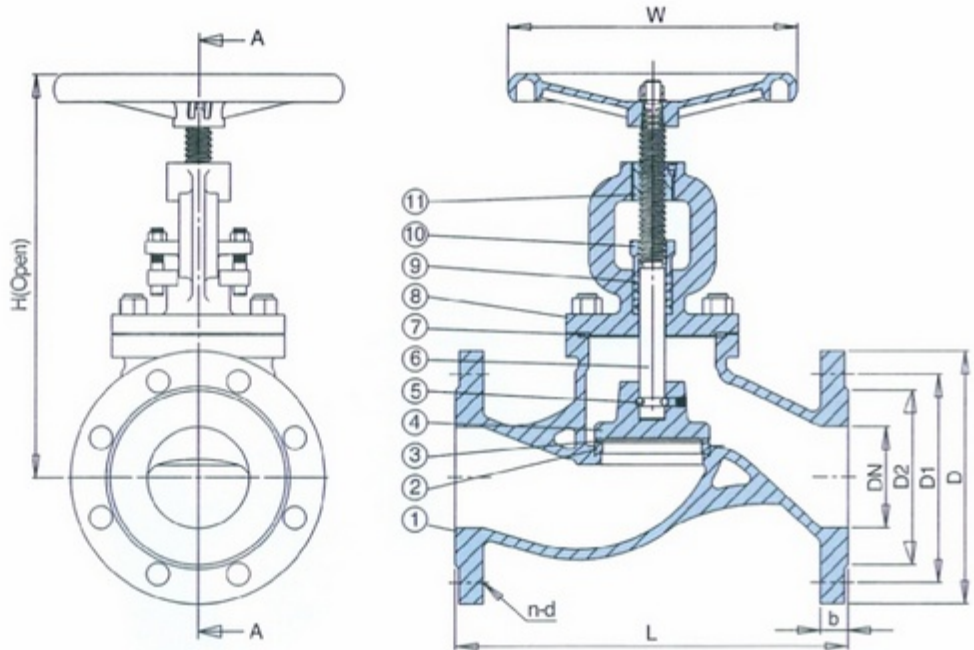
BASIC DESIGN STANDARDS	
Basic Design	DIN 3356
Face to Face	DIN 3202-F1
Flanges	DIN 2533 PN16
Testing	DIN 3230

PRESSURE TEST TO DIN 3230			
DN	Pressure Rating (PN)	Hydro-Test Pressure(Mpa)	
		Body	Seat
15-300	10	1.5	1.1
15-300	16	2.4	1.76

※ Specific Characteristic according to Customer's request



DIN 3356 Straight Globe Valve



▲ FREEZING WEATHER PRECAUTION:

Subsequent to testing a piping system, valves should be left in opened position for completing drainage.

▲ DIMENTIONS(mm)

Size	L	D	D1	D2	b	n-d	H(open)	W	W.T(kg)
DN15	130	95	65	45	14	4-14	200	80	3.4
DN20	150	105	75	58	16	4-14	220	120	4.7
DN25	160	115	85	68	16	4-14	225	120	5.1
DN32	180	140	100	78	18	4-18	250	120	7.6
DN40	200	150	110	88	18	4-18	270	160	9.5
DN50	230	165	125	102	20	4-18	290	200	13.7
DN65	290	185	145	122	20	4-18	320	200	18.5
DN80	310	200	160	138	22	8-18	365	200	22.1
DN100	350	220	180	158	24	8-18	410	240	34
DN125	400	250	210	188	26	8-18	460	240	47.8
DN150	480	285	240	212	26	8-22	525	280	65.9
DN200	600	340	295	268	30	12-22	685	360	128.8
DN250	730	405	355	320	32	12-26	830	400	196
DN300	850	460	410	378	32	12-26	925	450	245

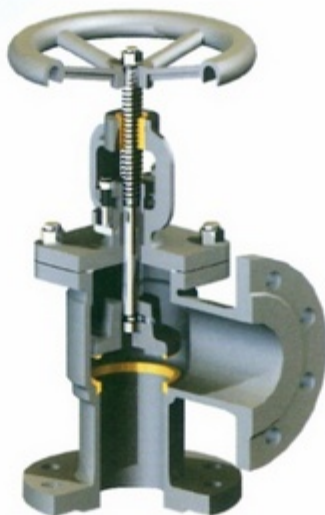
DIN 3356 Angle Globe Valve

▲ CAST IRON GLOBE VALVES

Cast Iron Globe Valves for use in commercial and industrial applications. Typical services include: hot and cold water, HVAC, steam, gas and other general utility services.

▲ MATERIAL LIST

No.	Part Name	Material
1	Body	GG25
		GGG50
2	Seat Ring	Brass
		Bronze
		Stainless Steel
3	Disc Ring	Brass
		Bronze
		Stainless Steel
4	Disc	GG25
		GGG50
5	Ball	Stainless Steel
		GGG50
6	Stem	20Cr13
		Brass
7	Bonnet Gasket	Graphite+Steel
8	Bonnet	GG25
		GGG50
9	Packing	Graphite
10	Gland Follower	GGG50
11	Stem Nut	Brass
12	HandWheel	GGG50



Features:

- ※ Angle Patten
- ※ Outside Screw and Yoke
- ※ Bolted Bonnet
- ※ Rising Stem
- ※ Brass Trim
- ※ Flanged Ends
- ※ Renewable Seat and Disc

BASIC DESIGN STANDARDS

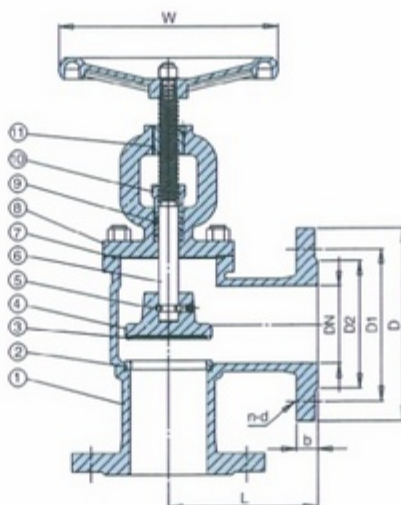
Basic Design	DIN3356
Face to Face	DIN3202-F32
Flanges	DIN2533 PN16
Testing	DIN 3230

▲FREEZING WEATHER PRECAUTION:

Subsequent to testing a piping system, valves should be left in opened position for completing drainage.

▲ DIMENTIONS(mm)

Size	L	D	D1	D2	b	n-d	H(open)	W	W.T(kg)
DN15	90	95	65	45	14	4-14	200	80	3.5
DN20	95	105	75	58	16	4-14	220	120	4.2
DN25	100	115	85	68	16	4-14	225	120	5.1
DN32	105	140	100	78	18	4-18	250	120	7.3
DN40	115	150	110	88	18	4-18	270	160	9
DN50	125	165	125	102	20	4-18	290	200	14.6
DN65	145	185	145	122	20	4-18	320	200	19.8
DN80	155	200	160	138	22	8-18	365	200	23.6
DN100	175	220	180	158	24	8-18	410	240	31.4
DN125	200	250	210	188	26	8-18	460	240	46
DN150	225	285	240	212	26	8-22	525	280	58.4
DN200	275	340	295	268	30	12-22	685	360	113.8
DN250	325	405	355	320	32	12-26	830	400	143.6
DN300	375	460	410	378	32	12-26	925	450	176.5



PRESSURE TEST TO DIN 3230

DN	Pressure Rating (PN)	Hydro-Test Pressure(Mpa)	
		Body	Seat
15-300	10	1.5	1.1
15-300	16	2.4	1.76

※ Specific Characteristic according to Customer's request



CAST IRON GLOBE VALVE

Fig. J4110



Features:

- ✦ Outside Screw and Yoke
- ✦ Bolted Bonnet
- ✦ Rising Stem
- ✦ Brass Trim
- ✦ Flanged Ends
- ✦ Renewable Seat and Disc

BASIC DESIGN STANDARDS	
Basic Design	MSS SP-85
Face to Face	ANSI B16.10
Flanges	ANSI B16.1
Testing	MSS SP-85

PRESSURE TEST TO MSS SP-85

✦ Working Pressure NonShook(psi)

Size	Saturated Steam	Cold Water, Oil, Gas
1.5" -12"	125	200

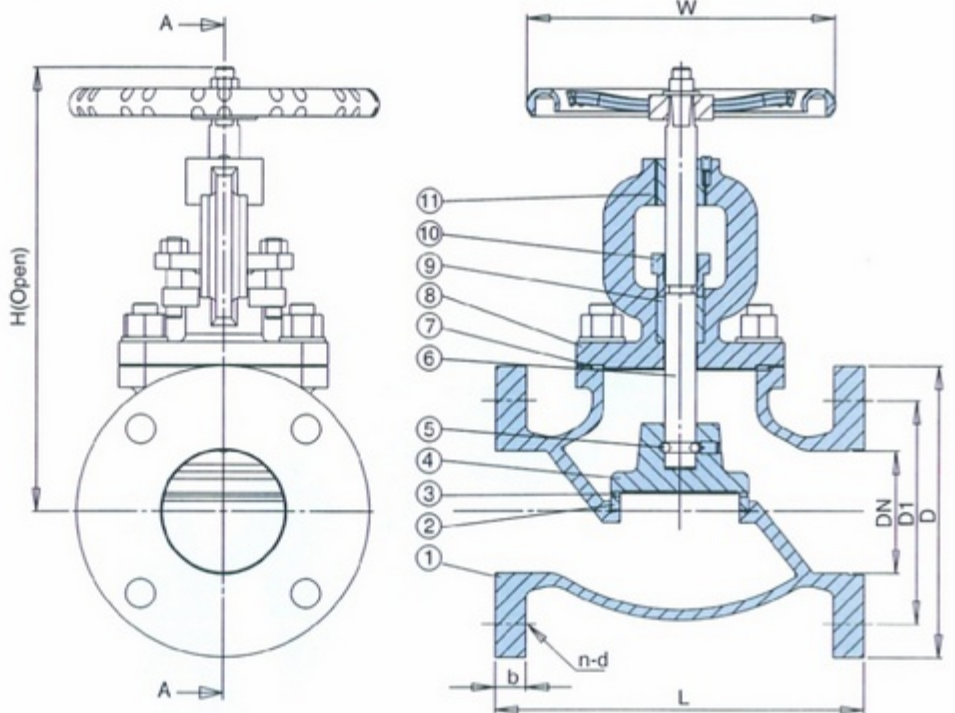
✦ Test Pressure (psi)

Size	Shell (Water)	Seat (Water)
1.5" -12"	350	220

✦ Specific Characteristic according to Customer's request



Class125 Straight Globe Valve



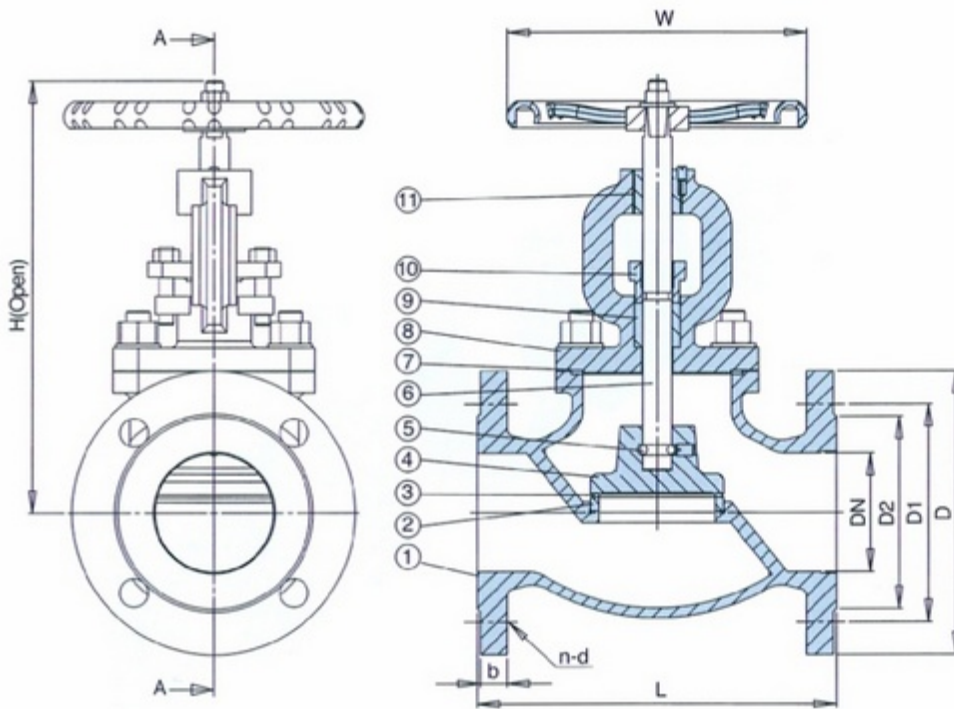
▲ FREEZING WEATHER PRECAUTION:

Subsequent to testing a piping system, valves should be left in opened position for completing drainage.

▲ DIMENTIONS(mm)

Size		L	D	D1	b	n	d	H(open)	W	W.T(kg)
1.5"	in	6.5	5	3.88	0.56	4	0.62	10.63	6.3	10
	mm	165.1	127	98.6	14.2		16	270	160	
2"	in	8.0	6	4.75	0.62	4	0.75	11.42	7.9	12
	mm	203.2	152	120.7	15.8		19	290	200	
2.5"	in	8.5	7	5.50	0.69	4	0.75	12.60	7.9	16
	mm	215.9	178	139.7	17.5		19	320	200	
3"	in	9.5	7.5	6.00	0.75	4	0.75	14.37	7.9	20
	mm	241.3	191	152.4	19		19	365	200	
4"	in	11.5	9	7.50	0.94	8	0.75	16.14	9.4	31.6
	mm	292.1	229	190.5	23.9		19	410	240	
5"	in	13	10	8.50	0.94	8	0.88	18.11	9.4	40.6
	mm	330.2	254	215.9	23.9		22	460	240	
6"	in	14	11	9.50	1.00	8	0.88	20.67	11	50.3
	mm	355.6	279	241.3	25.4		22	525	280	
8"	in	19.5	13.5	11.75	1.12	8	0.88	26.97	14.2	109.4
	mm	495.3	343	298.5	28.5		22	68.5	360	
10"	in	24.5	16	14.25	1.19	12	1.00	32.68	15.7	180
	mm	622.3	406	362	30.2		25	830	400	
12"	in	27.5	19	17.00	1.25	12	1.00	36.42	17.7	230
	mm	698.5	483	431.8	31.8		25	925	450	

BS5152 Straight Globe Valve



Features:

- ✦ Outside Screw and Yoke
- ✦ Bolted Bonnet
- ✦ Rising Stem
- ✦ Brass Trim
- ✦ Flanged Ends
- ✦ Renewable Seat and Disc

BASIC DESIGN STANDARDS

Basic Design	BS 5152
Face to Face	BS 5152
Flanges	BS 4504 PN16
Testing	BS 6755

▲ FREEZING WEATHER PRECAUTION:

Subsequent to testing a piping system, valves should be left in opened position for completing drainage.

▲ DIMENSIONS(mm)

Size	L	D	D1	D2	b	n-d	H(open)	W	W.T(kg)
DN40	165	150	110	88	18	4-19	270	160	10
DN50	203	165	125	102	20	4-19	290	200	12
DN65	216	185	145	122	20	4-19	320	200	16
DN80	241	200	160	138	22	8-19	365	200	20
DN100	292	220	180	158	24	8-19	410	240	31.6
DN125	330	250	210	188	26	8-19	460	240	40.6
DN150	356	285	240	212	26	8-23	525	280	50.3
DN200	495	340	295	268	30	12-23	685	360	109.4
DN250	622	405	355	320	32	12-28	830	400	180
DN300	698	460	410	378	32	12-28	925	450	230

PRESSURE TEST TO BS 6755

DN	Pressure Rating (PN)	Hydro-Test Pressure(Mpa)	
		Body	Seat
40-300	16	2.4	1.76

✦ Specific Characteristic according to Customer's request.



Fig. J41101



Features:

- ※ Outside Screw and Yoke
- ※ Bolted Bonnet
- ※ Rising Stem
- ※ Brass Trim
- ※ Flanged Ends
- ※ Renewable Seat and Disc

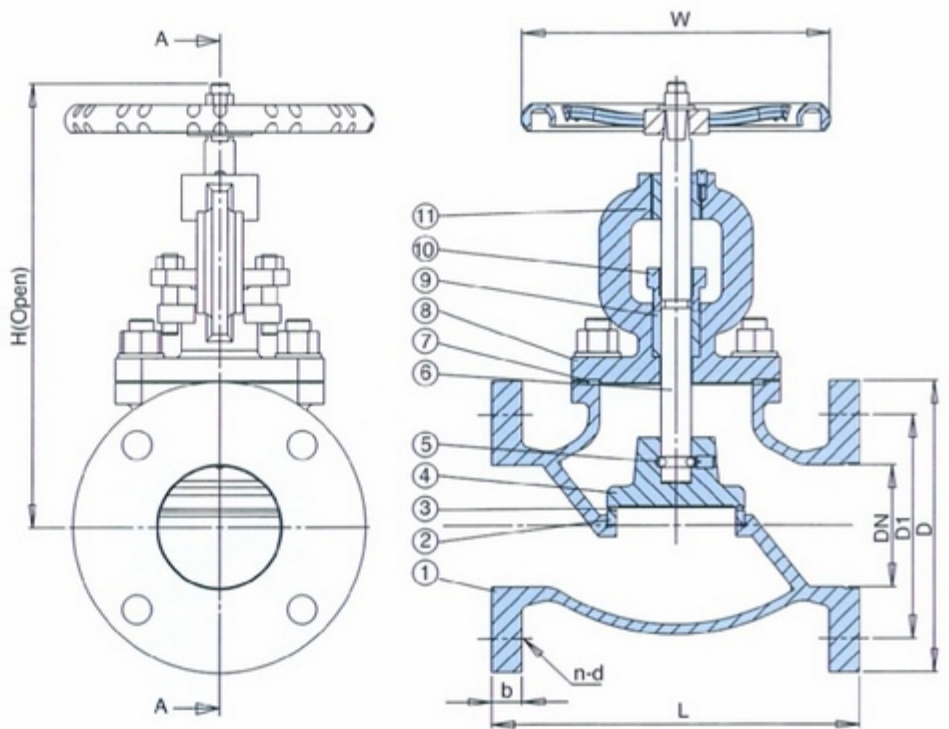
BASIC DESIGN STANDARDS	
Basic Design	JIS B2041
Face to Face	JIS B2002
Flanges	JIS B2212
Testing	JIS B2003

PRESSURE TEST TO JIS B2003			
DN	Pressure Rating	Hydro-Test Pressure(Mpa)	
		Body	Seat
40-300	10K	21.0	15.4

※ Specific Characteristic according to Customer's request



JIS B2041 Straight Globe Valve



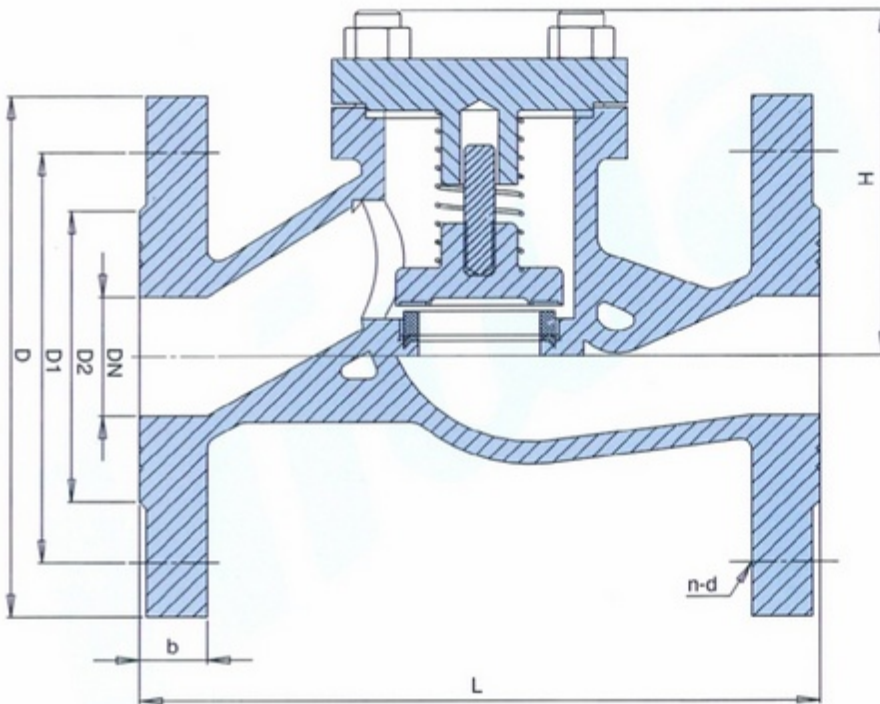
▲ FREEZING WEATHER PRECAUTION:

Subsequent to testing a piping system, valves should be left in opened position for completing drainage.

▲ DIMENTIONS(mm)

Size	L	D	D1	b	n-d	H(open)	W	W.T(kg)
DN40	165	140	105	20	4-19	270	160	10
DN50	203	155	120	20	4-19	290	200	12
DN65	216	175	140	22	4-19	320	200	16
DN80	241	185	150	22	8-19	365	200	20
DN100	292	210	175	24	8-19	410	240	31.6
DN125	330	250	210	24	8-23	460	240	40.6
DN150	356	280	240	26	8-23	525	280	50.3
DN200	495	330	290	26	12-23	685	360	109.4
DN250	622	400	355	30	12-25	830	400	180
DN300	698	445	400	32	16-25	925	450	230

DIN STOP-CHECK VALVE



▲ FREEZING WEATHER PRECAUTION:

Subsequent to testing a piping system, valves should be left in opened position for completing drainage.

▲ DIMENSIONS(mm)

Size	L	D	D1	D2	b	n-d	H
DN15	130	95	65	45	14	4-14	73
DN20	150	105	75	58	16	4-14	83
DN25	160	115	85	68	16	4-14	85
DN32	180	140	100	78	18	4-18	92
DN40	200	150	110	88	18	4-18	97
DN50	230	165	125	102	20	4-18	102
DN65	290	185	145	122	20	4-18	121
DN80	310	200	160	138	22	8-18	149
DN100	350	220	180	158	24	8-18	162
DN125	400	250	210	188	26	8-18	183
DN150	480	285	240	212	26	8-22	214
DN200	600	340	295	268	30	12-22	274
DN250	730	405	355	320	32	12-26	310
DN300	850	460	410	378	32	12-26	357



APPLICATIONS:

Steam, natural gas, cold water, hot water and pressurized hot water installations, fluids without acidic or alkaline properties, LPG, chemical fluids, compressed air etc.

BASIC DESIGN STANDARDS

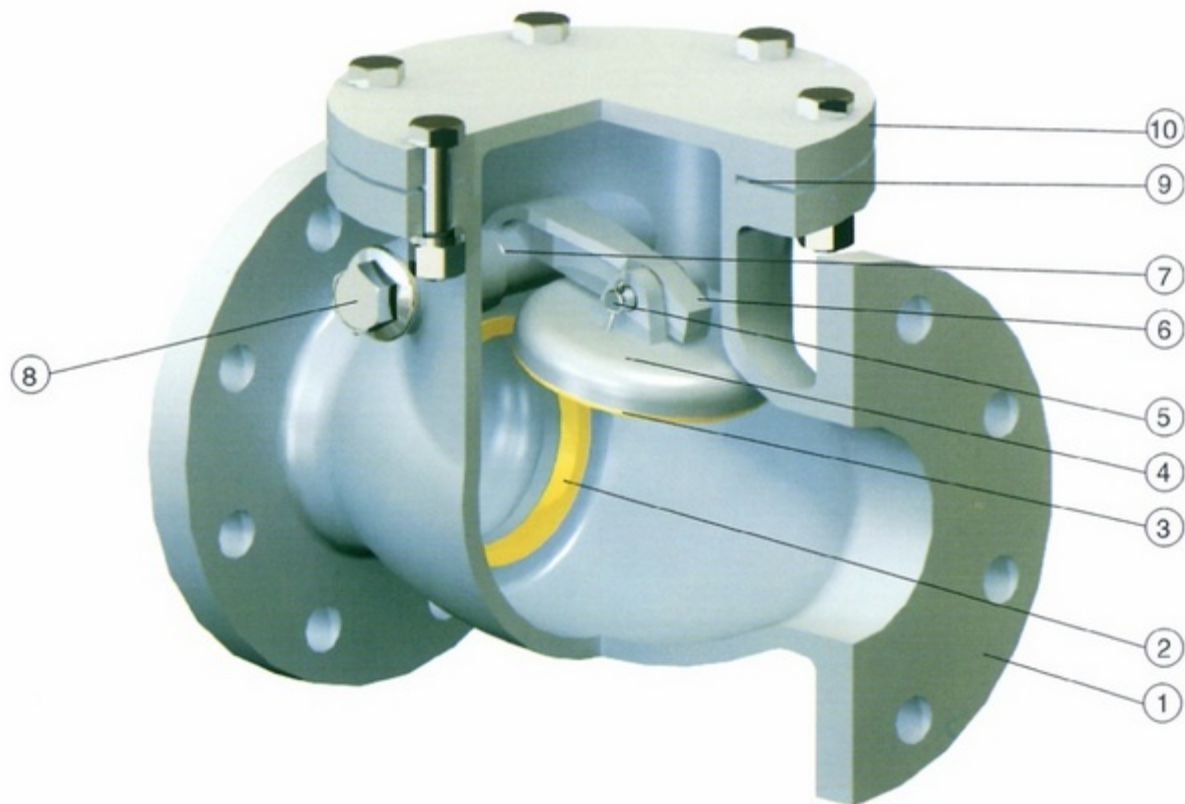
Face to Face	DIN 3202-F1
Flanges	DIN 2533 PN16
Testing	DIN 3230

PRESSURE TEST TO DIN 3230

DN	Pressure Rating (PN)	Hydro-Test Pressure(Mpa)	
		Body	Seat
15-300	10	1.5	1.1
15-300	16	2.4	1.76

※ Specific Characteristic according to Customer's request





Bolt and Nut

Galvanized bolt and nut, pretty and incorrosion.

Gasket

Non-asbestos material is exclusively used.

Body

Bodies are of cast iron with flanges cast as unit with the body. Wall thicknesses are designed to fulfill corresponding standards for strength and stiffness, which ensures fulfillment of tightness conditions.

Hinge

Ductile Iron material, long time service life.

Hinge pin

Stainless steel material, good incorrosion characteristic

Disc ring

Main material of disc ring from brass, bronze and 13 Cr & rubber, disc ring is pressed into the disc, also they can be seal-welded. And disc ring can be replaced easily too.

Body ring

Main material of body ring from brass, bronze and 13 Cr, body rings in all size are all pressed into body and can be replaced easily.

Plug

Galvanized steel plug, pretty and incorrosion.

O ring

NBR, EPDM, PTFE O ring are all available.



Type A

Disc Connection:

Type A. Nut connection between disc and hinge: the abrasion in disc surface is very homogeneous .

Type B. Pin connection between disc and hinge: simple in construction, easy to maintenance .



Type B

◆ Application :

Swing check valves are pipeline valves which can automatically preventing reverse flow of working media. Working medium can be water, non-aggressive liquids, steam, oil or oil products, air, gas. Also it can be used in the following fields of industry: water supply, power supply including nuclear applications, petrochemical and chemical industries, gas manufacturer ect.

◆ Normal Features:

1. Valve shall have a full port.
2. Fusion bonded epoxy coated, internal and external.
3. Suitable for Vertical & Horizontal Installation
4. Replaceable seat and disc
5. In-line service

◆ Service conditions:

Normal : Temperature from -10°C to 120°C for Brass or EPDM seat.

Temperature from -10°C to 80°C for NBR seat.

◆ Materials & Specifications

Item No.	Part Name	Material	Specification	
1	Body	Cast Iron	GG25	ASTM A126B
		Ductile Iron	GGG50	ASTM A536
2	Seat Ring	Brass	Brass	ASTM B16
		Bronze	Bronze	ASTM B62
3	Disc Ring	Brass	Brass	ASTM B16
		Bronze	Bronze	ASTM B62
		NBR/EPDM	NBR/EPDM	NBR/EPDM
4	Disc	Cast Iron	GG25	ASTM A126B
		Ductile Iron	GGG50	ASTM A536
5	Pin	Stainless Steel	20Cr13	SS 416
6	Hinge	Cast Iron	GG25	ASTM A126B
		Ductile Iron	GGG50	ASTM A536
7	Hinge Pin	Stainless Steel	20Cr13	SS 410
8	Plug	Zinc Steel		
9	Bonnet Gasket	Graphite+Steel	Graphite+Steel	Graphite+Steel
		NBR	NBR	NBR
10	Bonnet	Cast Iron	GG25	ASTM A126B
		Ductile Iron	GGG50	ASTM A536

Fig. H4486



Features:

- ※ Full Port
- ※ Solid and Resilient Disc
- ※ Bolted Cover
- ※ Replaceable Seat and Disc

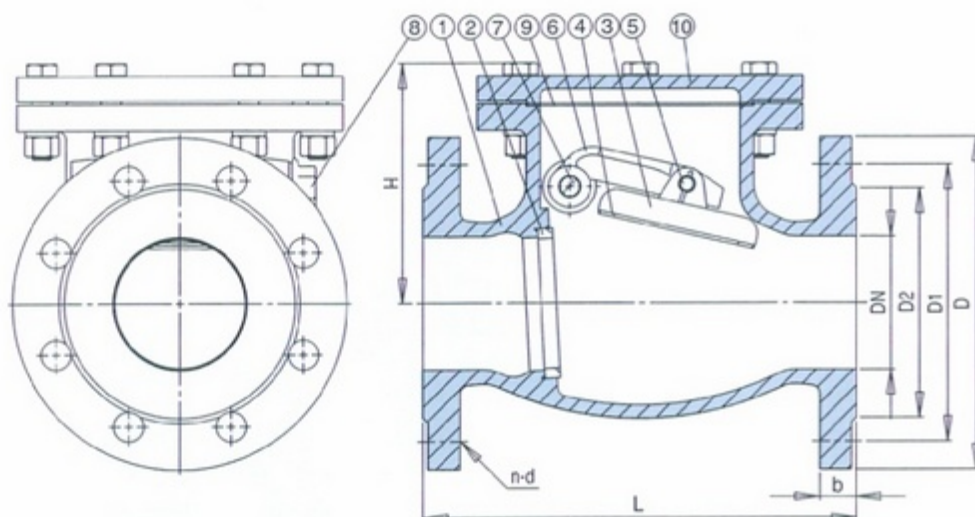
BASIC DESIGN STANDARDS	
Face to Face	DIN 3202-F6
Flanges	DIN 2533 PN16
Testing	DIN 3230

PRESSURE TEST TO DIN 3230			
DN	Pressure Rating (PN)	Hydro-Test Pressure(Mpa)	
		Body	Seat
40-600	10	1.5	1.1
40-400	16	2.4	1.76

※ Specific Characteristic according to Customer's request



DIN 3202 F6 Swing Check Valve



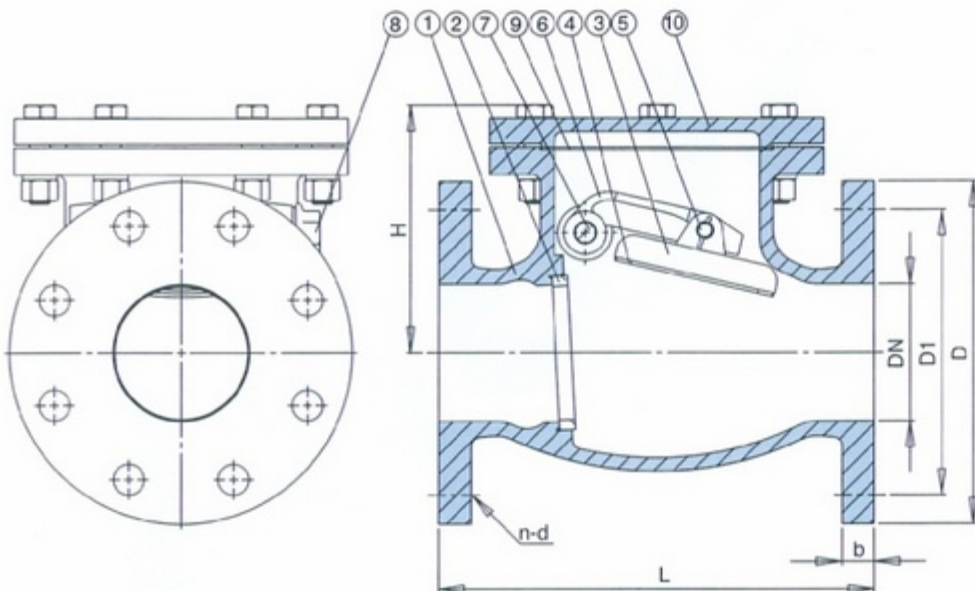
▲ FREEZING WEATHER PRECAUTION:

Subsequent to testing a piping system, valves should be left in opened position for completing drainage.

▲ DIMENTIONS(mm)

Size	L	D	D1	D2	b	n-d	H	W.T(kg)
DN40	200	150	110	88	18	4-18	110	8.7
DN50	230	165	125	102	20	4-18	130	13.4
DN65	290	185	145	122	20	4-18	140	17.7
DN80	310	200	160	138	22	8-18	150	20.8
DN100	350	220	180	158	24	8-18	160	29.3
DN125	400	250	210	188	26	8-18	190	47
DN150	480	285	240	212	26	8-22	210	67
DN200	600	340	295	268	30	8-22	250	118.7
DN250	730	405	355	320	32	12-22	310	171.9
DN300	850	460	410	378	32	12-22	340	232.5
DN350	980	520	470	438	36	16-22	390	300
DN400	1100	580	525	490	38	16-26	420	460
DN450	1200	640	585	548	40	20-26	470	580
DN500	1250	715	650	610	42	20-26	670	700
DN600	1450	840	770	725	48	20-30	750	780

Class 125 Swing Check Valve



Features:

- Full Port
- Solid and Resilient Disc
- Bolted Cover
- Replaceable Seat and Disc

▲ FREEZING WEATHER PRECAUTION:

Subsequent to testing a piping system, valves should be left in opened position for completing drainage.

▲ DIMENSIONS

Size		L	D	D1	b	n	d	H	W.T(kg)
1.5	in	6.5	5	3.88	0.56	4	0.62	4.3	10
	mm	165.1	127	98.6	14.2		16	110	
2	in	8.0	6	4.75	0.62	4	0.75	5.1	13
	mm	203.2	152	120.7	15.8		19	130	
2.5	in	8.5	7	5.5	0.69	4	0.75	5.5	18
	mm	215.9	178	139.7	17.5		19	140	
3	in	9.5	7.5	6	0.75	4	0.75	5.9	20
	mm	241.3	191	152.4	19		19	150	
4	in	11.5	9	7.5	0.94	8	0.75	6.3	38.3
	mm	292.1	229	190.5	23.9		19	160	
5	in	13.0	10	8.5	0.94	8	0.88	7.5	55
	mm	330.2	254	215.9	23.9		22	190	
6	in	14.0	11	9.5	1	8	0.88	8.3	65.3
	mm	355.6	279	241.3	25.4		22	210	
8	in	19.5	13.5	11.75	1.12	8	0.88	9.8	97
	mm	495.3	343	298.5	28.5		22	250	
10	in	24.5	16	14.25	1.19	12	1	12.2	180
	mm	622.3	406	362	30.2		25	310	
12	in	27.5	19	17	1.25	12	1	13.4	237
	mm	698.5	483	431.8	31.8		25	340	
14	in	31.0	21	18.75	1.38	12	1.12	15.4	300
	mm	787.4	533	476.3	35		29	390	
16	in	36.0	23.5	21.25	1.44	16	1.12	16.5	420
	mm	914.4	597	539.8	36.6		29	420	

BASIC DESIGN STANDARDS

Basic Design	MSS SP-71
Face to Face	ANSI B16.10
Flanges	ANSI B16.1
Testing	MSS SP-71

PRESSURE TEST TO MSS SP-70

■ Working Pressure NonShook(psi)

Size	Saturated Steam	Cold Water, Oil, Gas
1.5" -12"	125	200
14" -16"	100	150

■ Test Pressure (psi)

Size	Shell (Water)	Seat (Water)
1.5" -12"	350	220
14" -16"	265	165

※ Specific Characteristic according to Customer's request



Fig. H44102

CAST IRON SWING CHECK VALVE



Features:

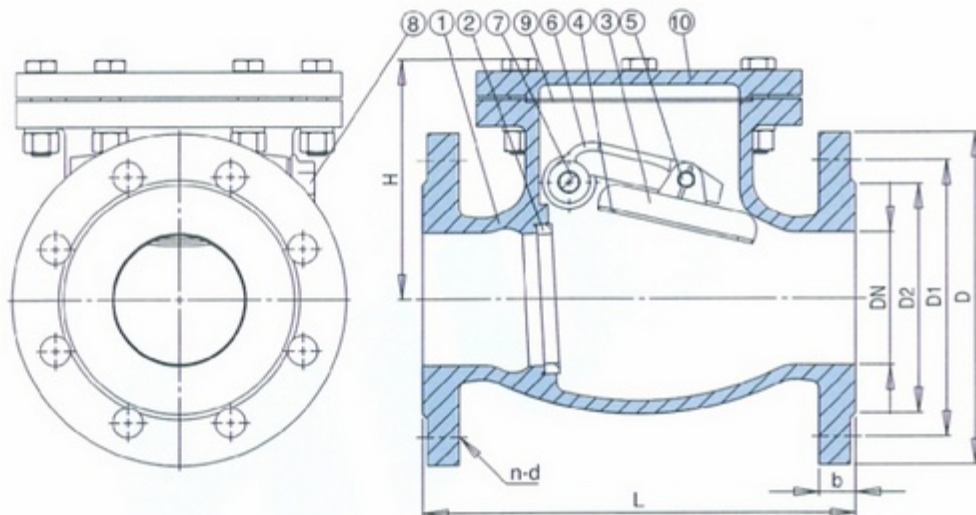
- ※ Full Port
- ※ Solid and Resilient Disc
- ※ Bolted Cover
- ※ Replaceable Seat and Disc

BASIC DESIGN STANDARDS	
Basic Design	BS 5153
Face to Face	BS 5153
Flanges	BS 4504 PN16
Testing	BS 6755

PRESSURE TEST TO BS 6755			
DN	Pressure Rating (PN)	Hydro-Test Pressure(Mpa)	
		Body	Seat
40-400	10	1.5	1.1
40-300	16	2.4	1.76

※ Specific Characteristic according to Customer's request

BS5153 Swing Check Valve



▲ FREEZING WEATHER PRECAUTION:

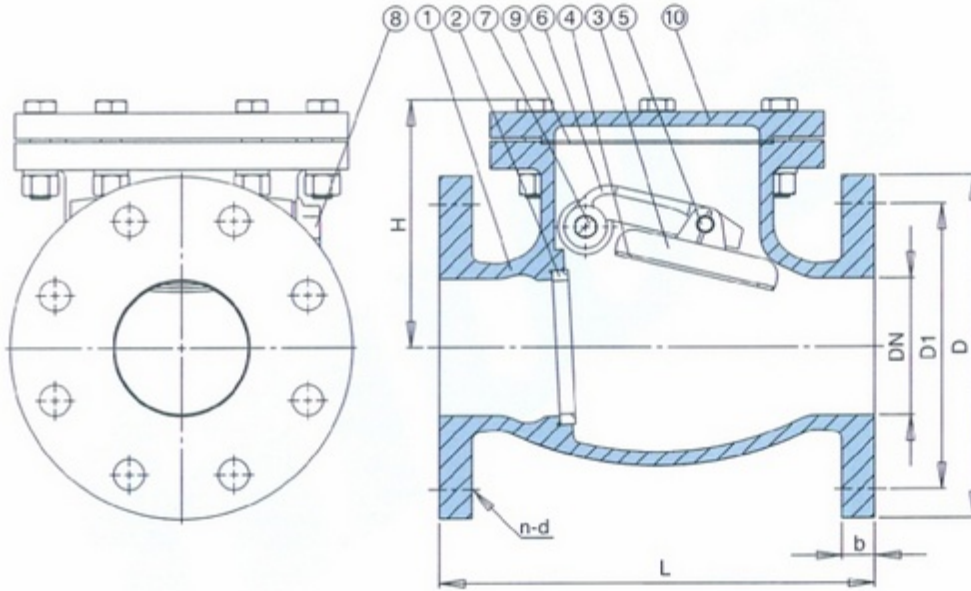
Subsequent to testing a piping system, valves should be left in opened position for completing drainage.

▲ DIMENTIONS(mm)

Size	L	D	D1	D2	b	n-d	H	W.T(kg)
DN40	165	150	110	88	18	4-19	110	10
DN50	203	165	125	102	20	4-19	130	13
DN65	216	185	145	122	20	4-19	140	18
DN80	241	200	160	138	22	8-19	150	20
DN100	292	220	180	158	24	8-19	160	38.3
DN125	330	250	210	188	26	8-19	190	55
DN150	356	285	240	212	26	8-23	210	65.3
DN200	495	340	295	268	30	12-23	250	97
DN250	622	405	355	320	32	12-28	310	180
DN300	698	460	410	378	32	12-28	340	237
DN350	787	520	470	438	36	16-28	390	300
DN400	914	580	525	490	38	16-31	420	420



JIS B2045 Swing Check Valve



Features:

- Full Port
- Solid and Resilient Disc
- Bolted Cover
- Replaceable Seat and Disc

BASIC DESIGN STANDARDS

Basic Design	JIS B2045
Face to Face	JIS B2002
Flanges	JIS B2212
Testing	JIS B2003

▲ **FREEZING WEATHER PRECAUTION:**

Subsequent to testing a piping system, valves should be left in opened position for completing drainage.

▲ **DIMENSIONS(mm)**

Size	L	D	D1	b	n-d	H	W.T(kg)
DN40	165	140	105	20	4-19	110	10
DN50	203	155	120	20	4-19	130	13
DN65	216	175	140	22	4-19	140	18
DN80	241	185	150	22	8-19	150	20
DN100	292	210	175	24	8-19	160	38.3
DN125	330	250	210	24	8-23	190	55
DN150	356	280	240	26	8-23	210	65.3
DN200	495	330	290	26	12-23	250	97
DN250	622	400	355	30	12-25	310	180
DN300	698	445	400	32	16-25	340	237

PRESSURE TEST TO JIS B2003

DN	Pressure Rating	Hydro-Test Pressure(Mpa)	
		Body	Seat
40-300	10K	21.0	15.4

※ Specific Characteristic according to Customer's request



Fig. C4000



Service Applications:

- Municipal Water Systems
- Industrial Class HVAC-Liquid Service
- Industrial Piping Systems
- Irrigation Systems

Pressure/Temperature Rating

- Maximum Temperature Rating, 150 ° F(65)°C
- FLANG, ANSI B16.1

Additional Ordering Option:

- The Globe Style Check Valve is designed so that a butterfly valve may be used downstream without the use of a space flange or spool piece.

※ Specific Characteristic according to Customer's request



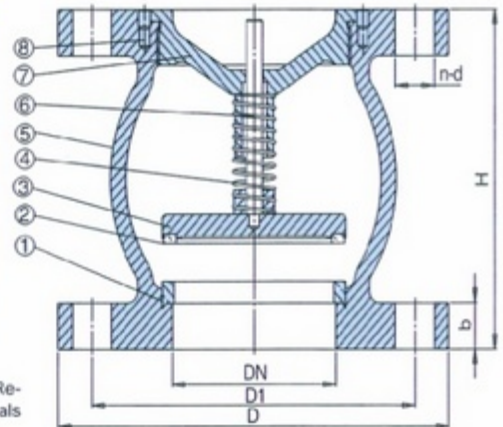
Silent Check Valve

Globe Silent Check Valve shall be fully automatic, spring loaded and double guided. The valve shall open as the pump starts, and close just prior to flow reversal upon pump outage. In addition, the Globe Style Check Valve is designed so that a butterfly valve may be used downstream without the use of a space flange or spool piece.

▲ Material List

Item	Part Name	Material
1	Seat	BRASS/BRONZE
2	Disc Ring	BRASS/NBR
3	Disc	Cast Iron
4	Spring	Stainless Steel
5	Body	Cast Iron
6	Shaft	Stainless Steel
7	Cover	Cast Iron
8	Screw	Carbon Steel

▲ Consult factory for optional construction materials. Resilient sealing of BUNA-N or VITON available. Materials and Prices Subject to Change Without Notice.



▲ SPECIAL MAINTENANCE NOTE:

The Globe Style Silent Check Valve should never be inspected by only removing the valve inlet flange piping. If this is done, seat damage to the valve or personal injury to the inspector may occur. If the valve must be serviced, it should be isolated and the line pressure relieved on both sides of the valve.

▲ DIMENTIONS

DN		H	D	D1	b	n	d
2"	mm	100.00	152	120.7	15.8	4	19
	in	3.94	5.98	4.75	0.62		0.75
2.5"	mm	120.00	178	139.7	17.5	4	19
	in	4.72	7.01	5.50	0.69		0.75
3"	mm	140.00	191	152.4	19	4	19
	in	5.51	7.52	6.00	0.75		0.75
4"	mm	170.00	229	190.5	23.9	8	19
	in	6.69	9.02	7.50	0.94		0.75
5"	mm	200.00	254	215.9	23.9	8	22
	in	7.87	10.00	8.50	0.94		0.87
6"	mm	230.00	279	241.3	25.4	8	22
	in	9.06	10.98	9.50	1.00		0.87
8"	mm	288	343	298.5	28.5	8	22
	in	11.34	13.50	11.75	1.12		0.87
10"	mm	354	406	362	30.2	12	25
	in	13.94	15.98	14.25	1.19		0.98
12"	mm	410	483	431.8	31.8	12	25
	in	16.14	17.00	16.14	1.25		0.98

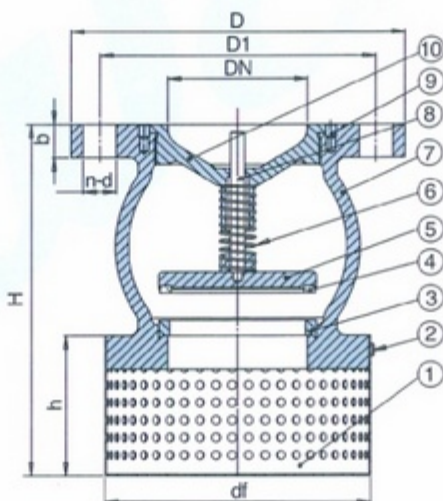
Foot Valve

Foot Valve shall be installed on the pump suction to prevent the pump column from draining upon pump shutdown. The valve shall be silent operating and normally closed. A center guided disc with a brass or buna-N seat which shall provide a drip tight seal. Minimum flow area perpendicular to the direction of flow thru the valve shall be equal to the pipe area. The inlet shall be fitted with a stainless steel screen with a clear opening adequate to provide 3 to 4 times the area of the pipe.

▲ Material List

Item	Part Name	Material
1	Screen	SS304
2	Screw	Carbon Steel
3	Seat	BRASS/BRONZE
4	Disc Ring	BRASS/NBR
5	Disc	Cast Iron
6	Spring	ASTM A276
7	Body	Cast Iron
8	Shaft	SS410
9	Screw	Carbon Steel
10	Cover	Cast Iron

▲ Consult factory for optional construction materials. Resilient sealing of BUNA-N or VITON available. Materials and Prices Subject to Change Without Notice.



▲ DIMENSIONS(mm)

DN		H	D	D1	h	df	b	n	d
2"	mm	147.40	152	120.7	63.2	140.00	15.8	4	19
	in	5.80	5.98	4.75	2.49	5.51	0.62		
2.5"	mm	172.50	178	139.7	70.00	140.00	17.5	4	19
	in	6.79	7.01	5.50	2.76	5.51	0.69		
3"	mm	197.00	191	152.4	76	170.00	19	4	19
	in	7.76	7.52	6.00	2.99	6.69	0.75		
4"	mm	241.10	229	190.5	95.60	170.00	23.9	8	19
	in	9.49	9.02	7.50	3.76	6.69	0.94		
5"	mm	271.70	254	215.9	95.60	200	23.9	8	22
	in	10.70	10.00	8.50	3.76	8.00	0.94		
6"	mm	306.20	279	241.3	101.60	220	25.4	8	22
	in	12.06	10.98	9.50	4.00	8.66	1.00		
8"	mm	373.5	343	298.5	114.00	280	28.5	8	22
	in	14.70	13.50	11.75	4.49	11.02	1.12		
10"	mm	444.6	406	362	120.80	320	30.2	12	25
	in	17.50	15.98	14.25	4.76	12.60	1.19		
12"	mm	505	483	431.8	127.20	420	31.8	12	25
	in	8.76	17.00	19.88	5.01	16.54	1.25		



Service Applications:

- Maintains pump prime upon pump outage

Features:

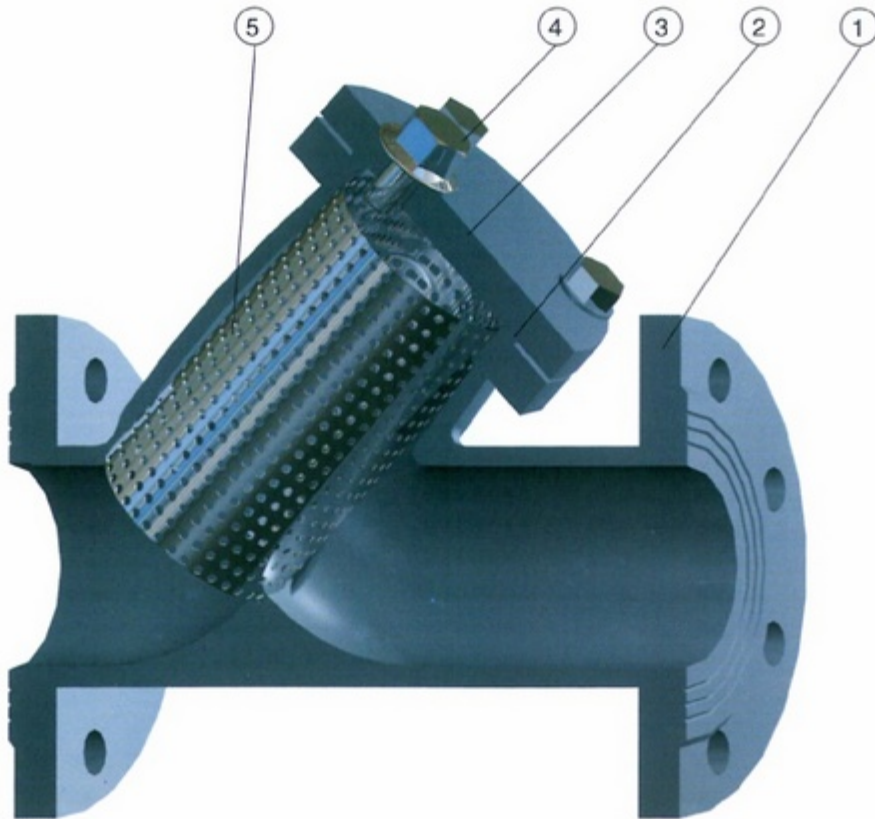
- Seating design provides positive shut-off at all pressure ranges without additional loading on the seat
- Heavy duty stainless steel screening with flow area 3 times that of pipe area.
- Silent operation resulting from design of disc, stroke and linear closing characteristics.
- Full flow area
- Rugged construction for long life

Pressure/Temperature Rating

- Maximum Temperature Rating: 150 ° F (65) ° C
- FLANG: ANSI B16.1

※ Specific Characteristic according to Customer's request





Cover
Cast Iron

Gasket
Graphite Steel Compound Graphite gasket, good performance and long service life.

Body
Cast Iron

Bolt & Nut
galvanized bolt, pretty and incorrosion.

plug
galvanized plug, pretty and incorrosion.

Screen
SS304 Perforated and Mesh screen are all available.

Screen



Woven Wire Type

Woven wire mesh screens are available in both lined and unlined types. Most fine mesh screens require a perforated screen to support a fine wire cloth. This design is very widely used in higher pressures, higher velocity flow and large size Y strainer. Unsupported mesh screens are available for lower pressures. Service.



Perforated type

Hole sizes range from 0.20" to 1/2" as standard.

Thickness

Standard gauge of screen material ranges from 22 to 11 depending on hole size. Special thicknesses for drilled holes are available. Perforated metal should be no smaller than 1/2 the metal thickness. Perforated screens are easy to clean. Less susceptible to clogging than fine mesh designs.

◆ Screen Options :

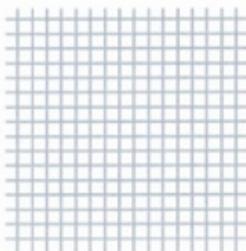
An extremely important consideration in the selection of strainer is the size of the perforation or mesh used in the making of the screen. And strainers should provide maximum size of solids that can be passed. The following selection guide charts will help in the selection of the appropriate screen. Screen opening should be approximately 2/3 to 1/2 of maximum allowable solids size. Standard perforated 304 stainless steel are spot welded along the seam for maximum strength. Different size perforations and meshes are available in stainless steel to meet specific media requirements. If the media is not indicated, screens for water will be supplied.

◆ Perforated Sheet Metal Size



Perf.Hole		Opening	Perf.Hole		Opening
mm	in	%	mm	in	%
1.55	0.062(1/16)	37	1.14	0.045(3/64)	36
3	0.125(1/8)	40	0.80	0.031(1/32)	28

◆ Wire Mesh Size



Mesh	Dia.of Wire	Width of Opening	Opening
	mm	mm	%
21	0.4	0.8	46
12	0.87	1.2	42
10	1	1.6	40

◆ Screen Cleaning

A Y-strainer screen can be cleaned by removing the plug in the bushing, cap or bolted cover allowing the strainer to drain the loose material inside the screen. If a blow-off valve is connected to the strainer it can be opened to achieve the same result as the above. The Y-strainer screen can also be cleaned by removing the bushing, cap or cover to access the screen element.

Care should be taken in cleaning screens. After removing a screen, it should be soaked in a cleaning solution or cleaned by using a brush. Do not allow trapped material in the screen to harden, as it will be difficult to remove. A regular cleaning schedule is recommended to avoid screens from becoming clogged.

Fig. S101F



Features:

- With one machined seat & blow-off cover & gasket design, Hiwa Y strainer is easy to renew the screen
- Low pressure drop streamlined design
- May be installed in vertical or horizontal pipeline

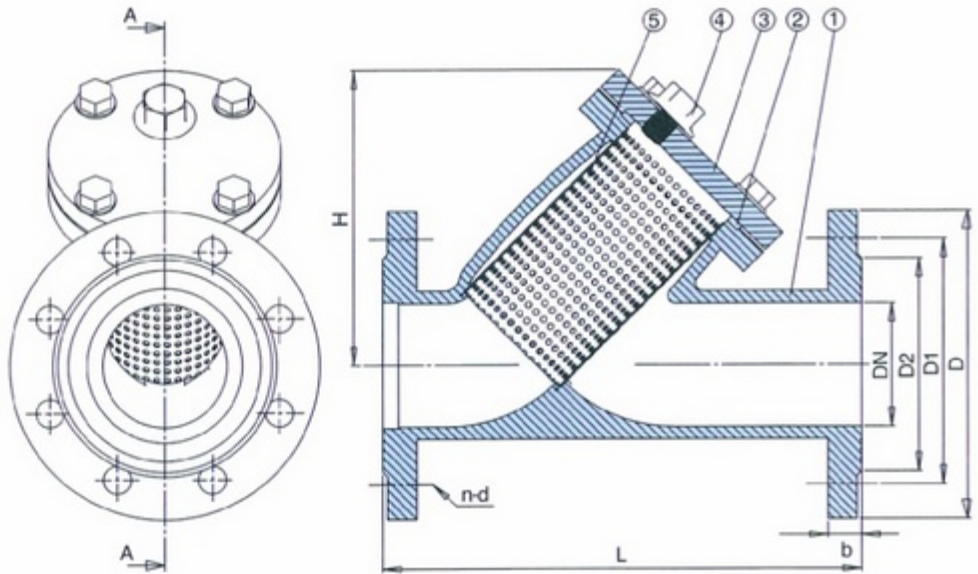
BASIC DESIGN STANDARDS	
Face to Face	DIN 3202-F1
Flanges	DIN 2533 PN 16
Testing	DIN 3230

PRESSURE TEST			
DN	Pressure Rating (PN)	Hydro-Test Pressure(Mpa)	
		Body	Seat
15-500	10	1.5	1.1
15-400	16	2.4	1.76

※ Specific Characteristic according to Customer's request



DIN Y strainer



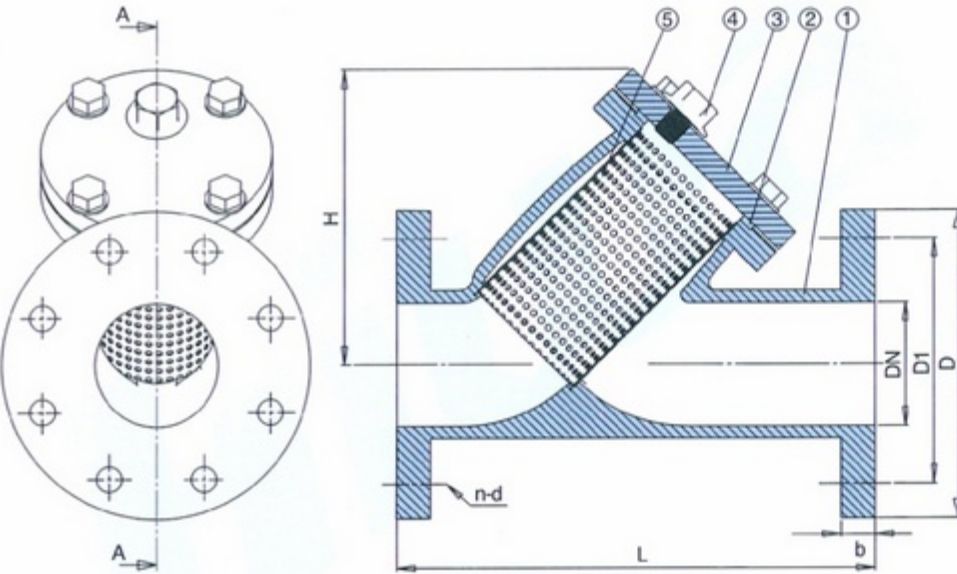
Applications:

Hiwa strainers are suitable for use in a variety of fluid systems such as air, chemical, gas, oil or water lines ect. for the protection of valves, pumps, compressors and other equipment.

DIMENSIONS(mm)

Size	L	D	D1	D2	b	n-d	H	W.T(kg)
DN15	130	95	65	45	14	4-14	65	1.7
DN20	150	105	75	58	16	4-14	70	2.3
DN25	160	115	85	68	16	4-14	80	3.2
DN32	180	140	100	78	18	4-18	90	5
DN40	200	150	110	88	18	4-18	135	6.5
DN50	230	165	125	102	20	4-18	150	8.7
DN65	290	185	145	122	20	4-18	160	12
DN80	310	200	160	138	22	8-18	200	19
DN100	350	220	180	158	24	8-18	240	27
DN125	400	250	210	188	26	8-18	290	40
DN150	480	285	240	212	26	8-22	330	58
DN200	600	340	295	268	30	12-22	380	86
DN250	730	405	355	320	32	12-26	480	127
DN300	850	460	410	378	32	12-26	550	200
DN350	980	520	470	438	36	16-26	680	290
DN400	1100	580	525	490	38	16-30	780	385
DN450	1200	640	585	548	40	20-30	830	520
DN500	1250	715	650	610	42	20-33	910	780

ANSI Y strainer



Applications:

Hiwa strainers are suitable for use in a variety of fluid systems such as air, chemical, gas, oil or water lines ect. for the protection of valves, pumps, compressors and other equipment.

DIMENSIONS

Size		L	D	D1	b	n	d	H	W.T(kg)
1.5	in	7.9	5	3.88	0.56	4	0.62	5.3	6.5
	mm	200	127	98.6	14.2		16	135	
2	in	8.9	6	4.75	0.62	4	0.75	5.9	9.6
	mm	225.4	152	120.7	15.8		19	150	
2.5	in	10.7	7	5.5	0.69	4	0.75	6.3	12.3
	mm	273.0	178	139.7	17.5		19	160	
3	in	11.5	7.5	6	0.75	4	0.75	7.9	16.9
	mm	292.0	191	152.4	19		19	200	
4	in	13.9	9	7.5	0.94	8	0.75	9.4	28.1
	mm	352.4	229	190.5	23.9		19	240	
5	in	16.4	10	8.5	0.94	8	0.88	11.4	40
	mm	416.0	254	215.9	23.9		22	290	
6	in	18.5	11	9.5	1	8	0.88	13	48.9
	mm	470.0	279	241.3	25.4		22	330	
8	in	21.4	13.5	11.75	1.12	8	0.88	15	82.3
	mm	543.0	343	298.5	28.5		22	380	
10	in	26	16	14.25	1.19	12	1	18.9	127.3
	mm	660.4	406	362	30.2		25	480	
12	in	30	19	17	1.25	12	1	21.7	200
	mm	762.0	483	431.8	31.8		25	550	
14	in	37.3	21	18.75	1.38	12	1.12	26.8	290
	mm	946.3	533	476.3	35		29	680	
16	in	42.5	23.5	21.25	1.44	16	1.12	30.7	385
	mm	1079.0	597	539.8	36.6		29	780	



Features:

- With one machined seat & blow-off, cover & gasket design, Hiwa Y strainer is easy to renew the screen
- Low pressure drop streamlined design
- May be installed in vertical or horizontal pipeline

BASIC DESIGN STANDARDS	
Flanges	ANSI B16.1

PRESSURE TEST

- Working Pressure NonShook(psi)

Size	Saturated Steam	Cold Water, Oil, Gas
1.5" -16"	125	200

- Test Pressure (psi)

Size	Shell (Water)	Seat (Water)
1.5" -16"	350	220

- Specific Characteristic according to Customer's request



Fig. S103F



Features:

- With one machined seat & blow-off, cover & gasket design, Hiwa Y strainer is easy to renew the screen
- Low pressure drop streamlined design
- May be installed in vertical or horizontal pipeline

BASIC DESIGN STANDARDS

Flanges	BS 4504 PN 16
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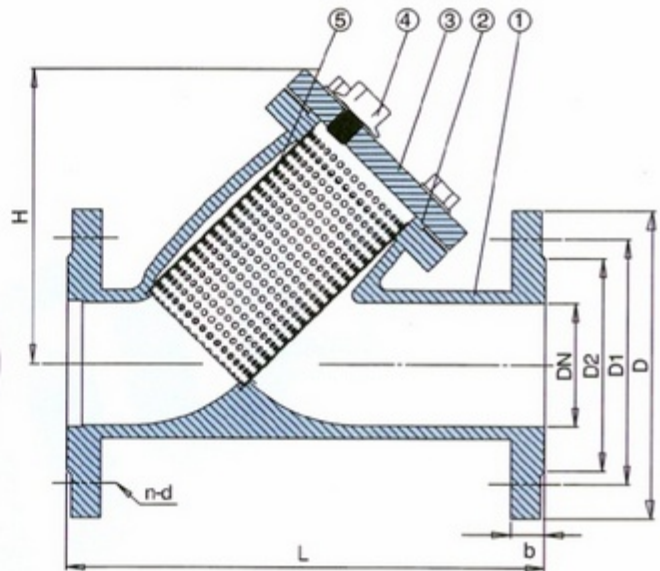
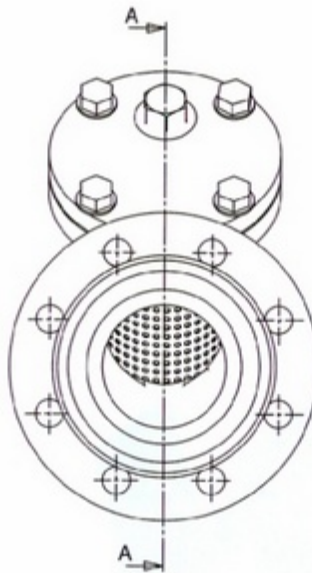
PRESSURE TEST

DN	Pressure Rating (PN)	Hydro-Test Pressure(Mpa)	
		Body	Seat
40-400	10	1.5	1.1
40-400	16	2.4	1.76

※ Specific Characteristic according to Customer's request



BS Y Strainer



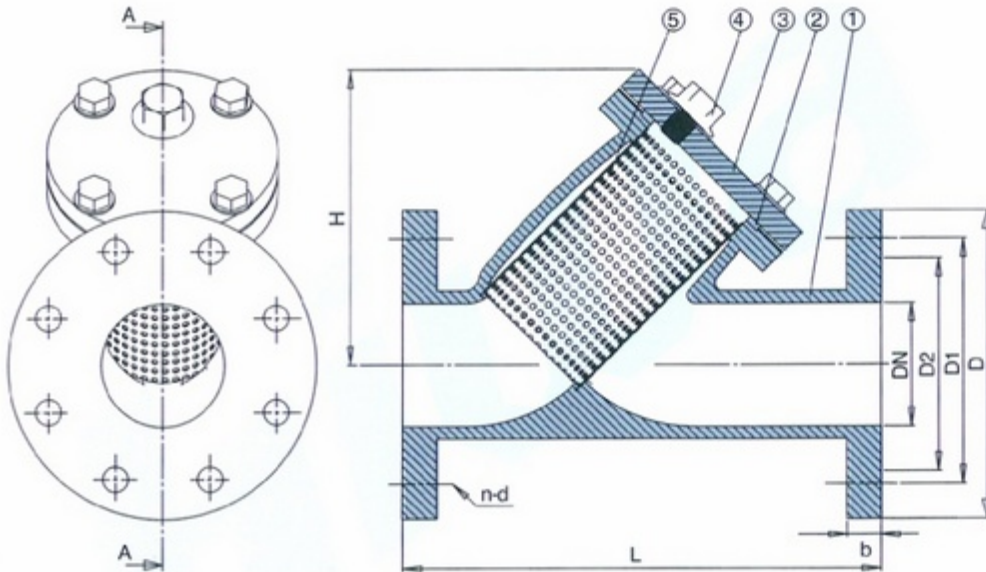
Applications:

Hiwa strainers are suitable for use in a variety of fluid systems such as air, chemical, gas, oil or water lines ect. for the protection of valves, pumps, compressors and other equipment.

DIMENSIONS(mm)

Size	L	D	D1	D2	b	n-d	H	W.T(kg)
DN40	200	150	110	88	18	4-19	135	6.5
DN50	225	165	125	102	20	4-19	150	9.6
DN65	273	185	145	122	20	4-19	160	12.3
DN80	292	200	160	138	22	8-19	200	16.9
DN100	352	220	180	158	24	8-19	240	28.1
DN125	416	250	210	188	26	8-19	290	40
DN150	470	285	240	212	26	8-23	330	48.9
DN200	543	340	295	268	30	12-23	380	82.3
DN250	660	405	355	320	32	12-28	480	127.3
DN300	762	460	410	378	32	12-28	550	200
DN350	946	520	470	438	36	16-28	680	290
DN400	1079	580	525	490	38	16-31	780	385

JIS Y strainer



Applications:

Hiwa strainers are suitable for use in a variety of fluid systems such as air, chemical, gas, oil or water lines ect. for the protection of valves, pumps, compressors and other equipment.

DIMENSIONS(mm)

Size	L	D	D1	b	n-d	H	W.T(kg)
DN40	200	140	105	20	4-19	135	6.5
DN50	225	155	120	20	4-19	150	9.6
DN65	273	175	140	22	4-19	160	12.3
DN80	292	185	150	22	8-19	200	16.9
DN100	352	210	175	24	8-19	240	28.1
DN125	416	250	210	24	8-23	290	40
DN150	470	280	240	26	8-23	330	48.9
DN200	543	330	290	26	12-23	380	82.3
DN250	660	400	355	30	12-25	480	127.3
DN300	762	445	400	32	16-25	550	200
DN350	946	490	445	36	16-28	680	290
DN400	1079	560	510	38	16-31	780	385

Features:

- With one machined seat & blow-off, cover & gasket design, Hiwa Y strainer is easy to renew the screen
- Low pressure drop streamlined design
- May be installed in vertical or horizontal pipeline

BASIC DESIGN STANDARDS	
Flanges	JIS B2212

PRESSURE TEST			
DN	Pressure Rating	Hydro-Test Pressure(Mpa)	
		Body	Seat
40-400	JIS 10K	21.0	15.4

※ Specific Characteristic according to Customer's request

