GNTV LYV®

LIANGYI

Product picture album

ZHEJIANG LIANGYI VALVE CO., LTD.

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ZHEJIANG LIANGYI VALVE CO., LTD.

The future of science and
technology manufacturing quality

ABOUTUS

LYV VALVE is a professional manufacturer and suppliers specialized in valve manufacturing, including gate, check, globe and ball valve in accordance with API, DIN,BS and JIS with various materials. Our products have been sold to worldwide, including USA, European countries, South American, South Asia, Middle East and Africa. LYV VALVE has ISO 9001:2000, API 6D-1452, API 607 Fire- Safety, CE, TS and other quality management system certification or international product certification; the workshop is stringent to a modern ERP system enterprise system management implementation.

The products are including the ball valve, gate valve, globe valve, check valve, butterfly valve, plug valve, strainers and other valves, which several hundred kinds of size and type. It can conform to the international design and manufacture standards, like: API , ANSI, DIN, GOST, JIS Chinese GB standard, and customer’ s requirement.

Pressure Range: Class 125 ~ Class 2500, PN0.6 Mpa~ PN42.0Mpa
Size Range: NPS 1/2 ~ NPS 48, DN1/2~ DN1200
Opeartion type: Manual, Gearbox, Chain Wheel, Pneumatic, Electronic, Hydraulic-Pneumatic，etc
Connection: Flanged, Butt-Weld, Socket-Weld, NPT (threaded), Wafer, etc
Material (Casting): WCB, WCC, LCB, LCC, LC1, LC2, LC3, CF8, CF3,CF8M, CF3M, CF8C, CN7M, CA15, C5, WC5, WC6, WC9, 4A, 5A, 6A, Monel, Ti 2,
Material (Forging): A105N, LF1, LF2, LF3, F304, F304L, F316, F316L, F11, F22, F6a, F321, F347, F51, F53, F55, Inconel, etc.

LYV always places the product quality and customers’ requirement on the most important position and strives to better serve our valued customers. We work to bring interests both to our customers and ourselves. We respect and treasure employees’ hard working and share the value with them that created by the whole team. We conform to the latest standards and emphasize on managerial, technical and technological innovation. We are looking forward to working with more customers worldwide and create more value together. Our vividly decorated catalogs as well as extensively detailed website enable interested customers to instantly find their target. Our web-based customer support system allows our customer to access your detailed data within no time. Besides, we provide value-added services to meet the satisfaction of our customers after purchasing our products.

LYV VALVE today has over 14,000 square meters manufacturing facilities and over 100 employees. Through its conviction to provide only the finest quality products and services to match the request of customers, LYV VALVE has now established itself as a serious player in valve business. The company has expanded its scope in terms of corporate culture as well as technical expertise. With an extensive network of sales, service and distribution in worldwide we can offer in time delivery of various needs for customers.LYV VALVE can respond to customers' requests faster and more efficiently ever and become one of your best partners for your needs.

The main product series produced by the company:
1. Ball valves: Trunnion Mounted Ball Valves, Floating type Ball Valves, Forged Steel Ball Valves, Cast Steel Ball Valve, High-Temperature and Hard-sealing Ball Valve, Low -Temperature and Cryogenic Ball valve, Fully-Welded Buried Ball Valve, DBB(Double Block and Double Bleed Valve) type- big size ball valves, DBB(Double Block and Double Bleed Valve) type- Instrument Ball valve, Instrument Process interface Valve, Mono-Flange Valve, Mud Ball Valve, many kinds of non-standard Ball Valves, etc.
2. Gate Valves
3. Globe Valves
4. Check Valves
5. Butterfly valves
6. Plug Valve
7. Strainer

Enterprise honor

OUR BUSINESS PHILOSOPHY

To achieve mutual benefit and win-win business relationship,

LYV offers a most perfect technical

solution to our business partner with high-standard product quality.

We believe that LYV is fully capable of providing more satisfactory products

and service to the customers with the experienced

and professional team.

Sincerely hope to establish a long-term trade partnership with domestic

and foreign merchants, create brilliant future together.

GNTV LYV®

Enterprise production

With high-precision CNC machining center and testing instruments, grinding technology and strict quality management system.

“LIANGYI” The high quality of products comes from its advanced production methods and continuous innovation.

Excellent equipment deduces excellent quality

GNTV LYV®

Enterprise production

With high-precision CNC machining center and testing instruments, grinding technology and strict quality management system.

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Test

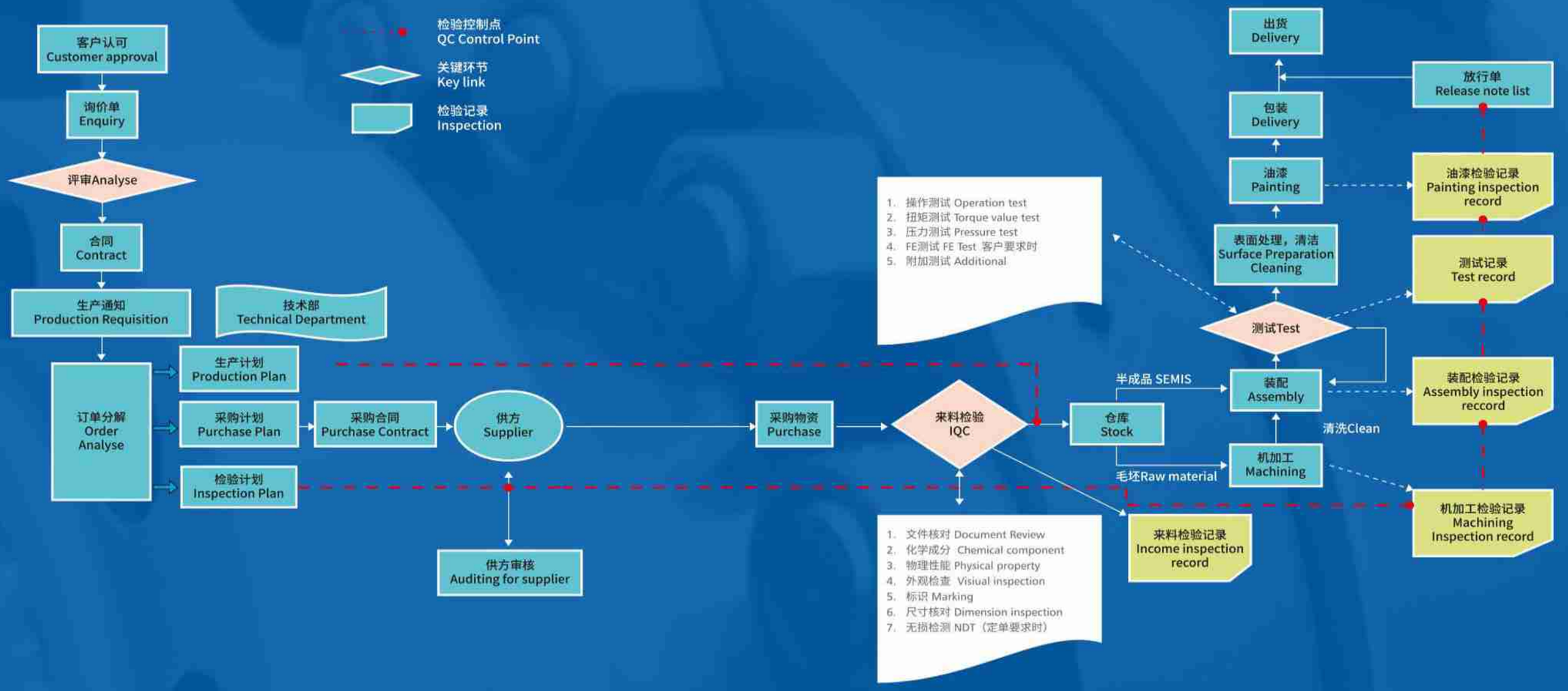




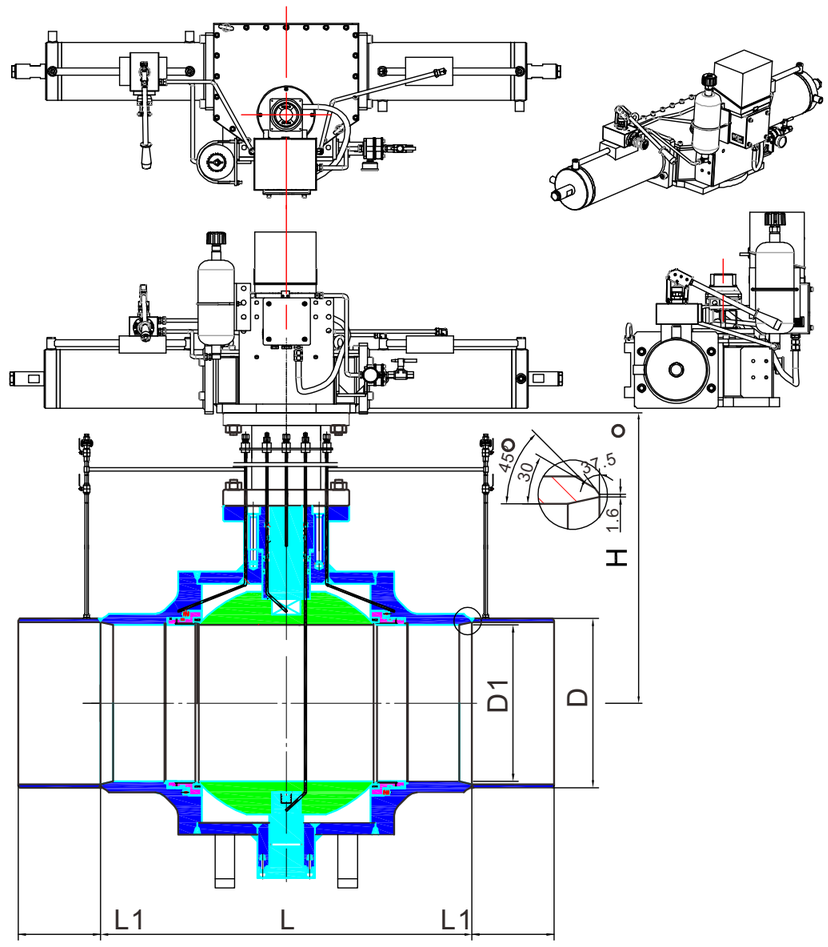
Production Equipment


Pressure Test

PROCESS CONTROL
流程控制

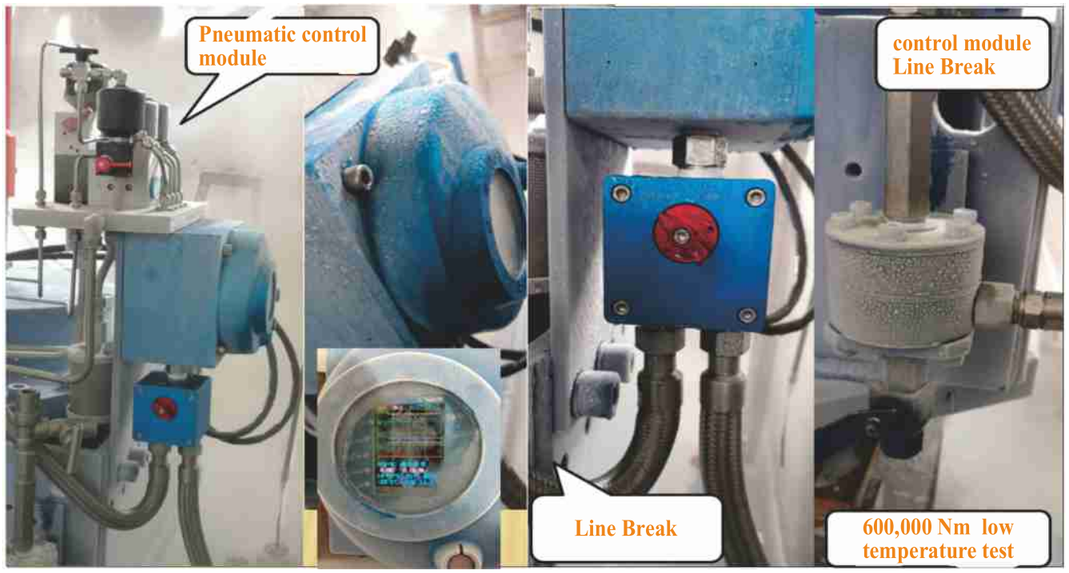


ZHEJIANG LIANGYI VALVE



600Lb BW	40''	2337	1016	976	800~3500	500	21400
	36''	2083	914	874	800~3500	500	16200
	24''	1397	610	589	800~3500	500	4900
	20''	1194	508	487	800~3500	500	3100
	18''	1092	457	436	800~3500	300	2500
	16''	991	406.4	385	800~3500	300	1860
	14''	889	355.6	334	800~3500	300	1350
	12''	838	323.8	303	800~3500	300	1120
	10''	787	273	252	800~3500	300	715
	8''	660	219.1	201	800~3500	300	480
	6''	559	168.3	150	800~3500	300	277
	4''	432	114.3	100	800~3500	300	142
Class	NPS	L	D	D1	H	L1	Weiqht (kg)

Product Test



GNTV LYV®

Introduction of Parts and Components

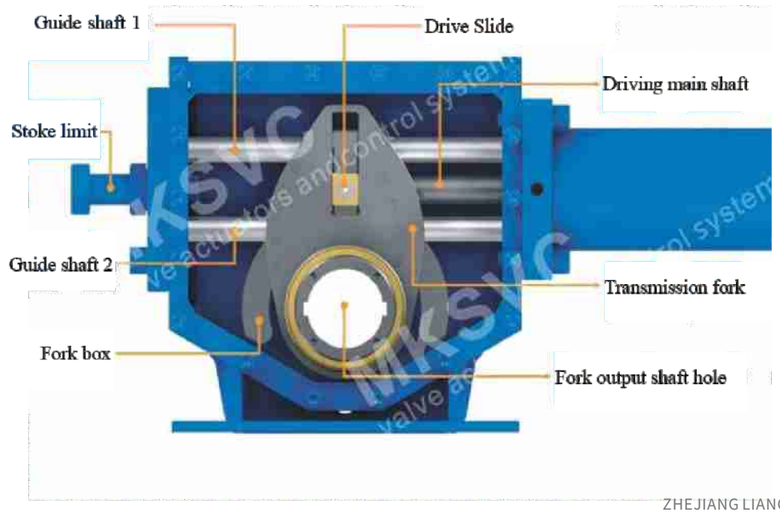
Innovatively designed fork-type drive transmission case body

A paralleled, double-orientating shaft is built inside, equipped with modularized transmission guide block and a complete fork-type design

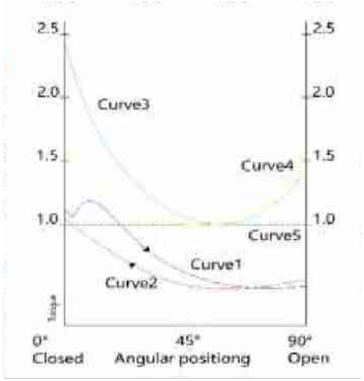
In traditional fork-type boxes, parts involved in the transmission mechanism is rather simple, so the movement of the pneumatic / hydraulic cylinder produces violent shakes. When the spindly piston output shaft extends out of the end face of the hydraulic cylinder to push the driving block, the shaft easily suffer rigid deformation and is susceptible to lateral force. Without set movement trajectory, the guide block and the driving block may also experience loss of couple, as the force fails to act on the geometrical center, resulting in low transmission efficiency and undermining the smoothness of the thrust output, motion stabilization of the actuator, the reliability of operation, as well as the overall safety of the actuator. The traditional connection mode between the block and the cylinder shafts reduces coupling stiffness and fitting efficiency. Yet, the DG series fork-type transmission box overthrows the traditional concept, and is equipped with the original modularized transmission with a paralleled, double orientating shaft inside which is invented by Mikenson and the first in this sector.

The innovation centers on the set movement trajectory of driving block which prevents the deformation of piston shaft, reduces the generation of heat and shake to a maximum level, and avoids transmission loss and lateral force. 100% zero loss transmission of thrust output is theoretically possible within the hydraulic cylinder (air cylinder or spring cylinder) The transmission efficiency and movement smoothness improve greatly.

Such design also improves the overall transmission efficiency and transmission performance of the fork-type box, reflected by smoother and more reliable transmission, easier and more efficient assembly. All are attributed to the special design of the DG series' paralleled, double orientating fork-type transmission case.



Torque output curves of fork-type actuators in different situations



Comments:

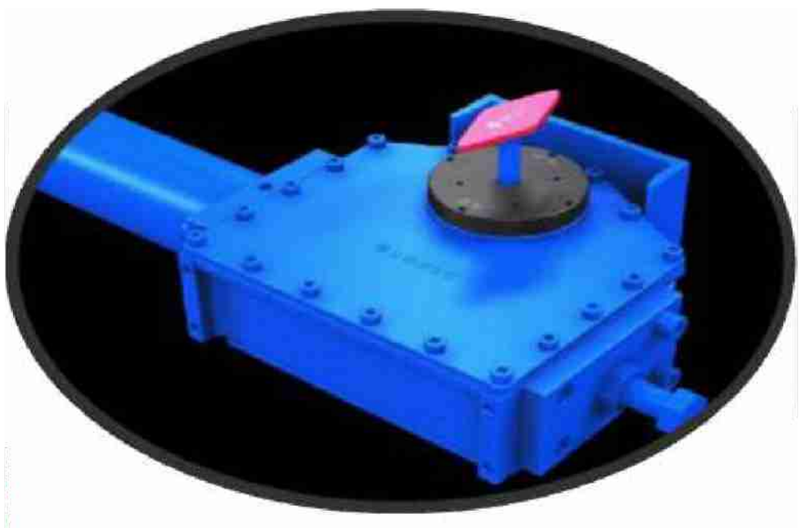
Curve1 Torque Curve as the Valve Opens
Curve 2 Torque Curve as the Valve is Closed
Curve 3 Actual Torque Curve of Fork-type (asymmetric design)
Curve 4 Actual Torque Curve of Fork-type (symmetric design)
Curve 5 Actual Torque Curve of Fork-type (constant torque)

The output angle of the actuator:

The actuator rotates within a full range of 85°-95°,
The regulating screw rod at the switch is used to ad just the full open/ shut position of the valve.

In order to enhance torque of the output shaft of the fork-type transmission case, the strength and rigidity of the shaft must be improved. Compared with the traditional fork-type, the DG series features a complete fork-type design, which improves the stress conditions faced by the output shaft. Meanwhile the more uniform bearing structure effectively reduces deformation. We maximally improve the strength of torque output and the transmission load of the output shaft of the fork-type.

Such design also improves the overall transmission efficiency and transmission performance of the fork-type box, reflected by smoother and more reliable transmission, easier and more efficient assembly. All are attributed to the special design of the DG series' paralleled, double orientating fork-type transmission case.



GNTV LYV®

DGOA Double Guide Gas-over-oil Actuator

（Max Output Torque 600,000 Nm)

Gas-over-oil Actuator_It is s a kind of self operated actuation mechanism, with the pressure generated by the medium of the pipes themselves, the valve could be droved to operate, opening or closing. The pneumatic hydraulic actuators have the advantages of simple operation principle, safe and reliable controllability, strong environmental adaptability which are adapted to all-weather conditions outdoor.

This product uses pipeline natural gas as its driving gas source. According to its high pressure design, the pneumatic hydraulic system enters the air storage tank and high pressure pneumatic control valve group directly without depression. Under the effect of control signal, high pressure controlled gas enters relative gas/liquid circuits, taking advantage of the principle of equal pressure transmission of liquid media, the gas and liquid synchronizes and operates the hydraulic oil gas tank of the valve driving device, thus controls the valve.

Technical specifications:

1. Gas supply : (0.4-16Mpa)
2. Medium: Air, nitrogen or non acid gases (purified natural gas)
3. Output torque: 50-600,000Nm
4. Manual hydraulic manual pump (hydraulic manual installation with independent testing function is available)
5. Environment: Standard range: -40 to 100℃ (-20 to 210℉) Optional range: -55 to 150℃ (-65 to 300℉)
6. Actuation structure IP grade IP68 All-weather outdoor； Communication ports: USB/RS232/485
7. Explosive-proof grade: Exd IIC T4/T6
8. Stainless steel gas control box: Protection grade IP65
9. Electric accessories: Solenoid valve, limit switch, position transmitter, junction box
10. Applicable valve type: 90°rotary motion, Long distance natural gas pipeline ball valve emergency cut-off, ESD cut-off

Features:

- Patented design of parallel, double-orientating fork-type transmission box could provide relatively higher open torque for stroke of valve.
- The parallel, double-orientating rods could sustain horizontal load and support the piston connection rod.
- Composite structure bearings provide reliable, smooth and steady operation, thus extend the service life of the actuator.
- The piston bearing reduces the friction between the piston and the cylinder wall, and makes the cylinder becoming self-lubricating.
- The clad layer on the guiding rod is high strength and anti-corrosion, and reduce the friction to them minimum level.
- The cylinder wall is in highly anti-corrosion and reliable.
- Internal guiding connection rod design makes the structure of cylinder more compact.
- Whole sealing, all weather protective carbon steel shell is solid and reliable, the internal coating is anti-corrosion.
- The external limit bolt can be precisely adjusted in the full range of 90±5°.
- Low hysteresis and rapid response enhances usage under regulative operation condition.
- Provides asymmetric and symmetric fork-type, fitting for valves with different feature.
- A special coating makes the devices could be used on offshore platform and in highly corrosive environment.
- Provides Special actuation for usage under acid gas.

Optional function control module :

- Electronic monitoring tube rupture control system PLPG2010
- High and low pressure monitoring and high/low voltage cut-off control
- ESD emergency cut-off, onsite reset
- Partial distance testing, online active ball valve
- False operation prevention designed handle and high voltage, integration module
- Control system overall insulation, prevent cathodic protection current from running off
- Valve position transponder provides the electricity location and location indication of the valve
- Safety decompression valve and filter decompression valve
- Integrated insulated filtering tubing joint, online cleaning with pressure

Gas-over-oil Actuator_ball valve: Widely used in petroleum, natural gas long distance transportation pipes. As the emergency cut-off or rescue device of tube rupture (with tube rupture emergency cut-off system), it can automatically monitor the pressure of tubes and close the valve. It is very important in aspects such as long distance transportation pipelines and chemical hazardous article tube transportation. Automatically cutting-off long distance transportation tubes during emergency situations such as rupture, leakage and explosion caused by abnormal reasons such as road work, earth quake and fire hazard, can reduce risk of accidents and avoid disasters from expanding.

Creatively designed specialized, integrated, multi-functional, cartridge hydraulic hand pump

multi-functional hydraulic hand pump which is rotary and allows synchronized self-locking is our company's patented product, of which we have several proprietary intellectual property rights.

Mikenson's researchers stress a customer-centric philosophy when designing the hand pump. The innovations around the control module of the entire actuator start off enhancing convenience and safety of operation. Main advantages are:

- The operating handle can rotate in 360 degree at the horizontal plane, facilitating operation.
- The piston within the pump body enables synchronized self-locking of hand pump, which effectively protects the plunger and improves operation safety.
- The handle can be inserted into the pump holder from three locations, making it more user-friendly in terms of operation positions and mod
- The piston within the pump body enables synchronized self-locking of hand pump, which effectively protects the plunger and improves operation safety.
- Operation space is largely saved, combined with the detachable handle, leading to less space usage when assembling and smaller sizes when packaging.
- The advantage becomes more salient when adopted at pipelines where equipment and plants are

During assembling, debugging, and in other circumstances where no power is available, it functions as auxiliary power to operate the hand pump and open/close the valve.

The combination of the manual pump and a directional control valve creates an on-spot hydraulic manual switch for the valve.

The directional control valve has three positions: “Remote/Automatic”, “Open”, and “Shut”.

When “Remote/Automatic” is selected, the manual pump doesn't work. When the directional valve is placed on “Open” or “Shut” , the valve can be opened or closed by the hand pump.

Torque generated by manual pump output is far larger than the torque generated by the maximum pressure of actuator, please use carefully when the valve torque abnormally increases.

Special Function Design: Low failure rate control system, the actuator output is completely disabled during local operation and system function test. We re-design the hydraulic output circuit to prohibit the actuator output. The use of fully isolated structure circuit and the system switch enable the uncorrelated switching of hydraulic manual and automatic states.

It is developed according to the on-site use features of the pneumatic-hydraulic actuator field. When the selector valve is placed in the "TEST" position, the actuator’s (remote signals, ESD signals, etc.) hydraulic circuit output is completely isolated from the hydraulic source of the drive cylinder, and the motive source can not operate the valve through the actuator circuit. On-site hydraulic and pneumatic operations are completely separated, without any accidents, with higher safety.

Main functions:

For long-term non-action valve pipeline valves, this function can test the function of the actuator online and control the system parameters without operating the valve

This function can effectively prevent the emergency switch-off of the main line valve during the initial operation with abnormal pressure fluctuation or during the operation of pipelines and pigging

When the pipeline valve is repaired online, this function can effectively prohibit the remote signal

Line break PLPG 2010 uses special processes, and is designed according to Explosion-Proof Grade Exd IIC and Protection Grade IP68 standard, with high-strength electrical protective box. The window is made of explosion-proof glass resisting impact and pressure, with high strength, the overall pressure bearing of the control box housing is greater than 220psi. It can adapt to all-weather outdoor, temperature, vibration, flammable gas and other harsh environments, and make sure that the electronic control unit we provide is as safe and secure as a whole.

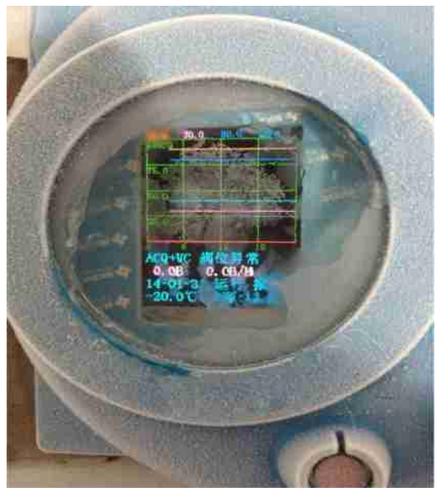
We've changed the installation mode and spatial layout of the control unit's parameter setting buttons, to improve overall safety and outdoor protection of the control box. We use non-embedded, anti-collision Hall-style button, which not only extends the mechanical life of the button greatly, and effectively prevents accidental misuse, but also improves the accuracy of parameter settings.

Line break PLPG 2010 has the following characteristics:

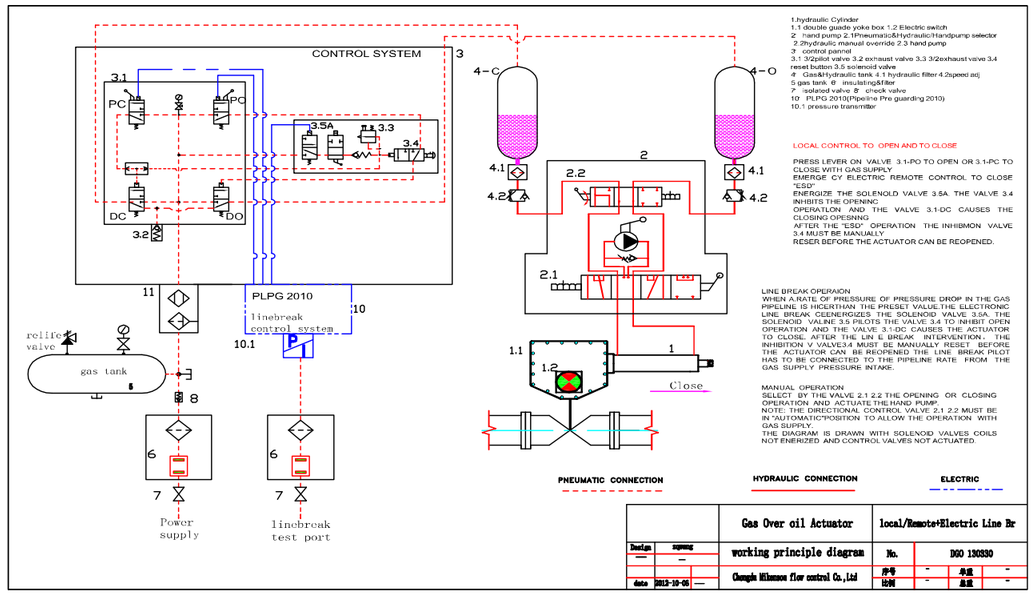
- It’s powered by micro-power motherboard and battery;
- There are a variety of power supply options, supporting external power supply and solar power
- It has various function menus and parameters are all in Chinese and English subtitles, easy to read and manage
- It adopts color OLED low temperature display screen: support -40℃low temperature display, and all-weather, multi-angle viewing
- When diagnosing the parameter anomaly, the screen automatically uses red alarm prompt, clearly visible
- It supports curve / graph display: can automatically analyze and generate pressure curve, and analyze the trend of event data
- It automatically records the pipelines’ high, low pressure, pressure drop rate extreme value, and provides reference for parameter setting
- It has over-pressure drop rate alarm, to provide real-time monitoring for remote monitoring of pressure drop rate and control valve room
- It supports hot-drawing USB data port; data communication port RS422 / 485. Local, remote computer communication
- It adopts Exd IIC T6 high-stability pressure sensor. Pressure measurement and cntrol accuracy reaches 0.1%
- Its control button is non-embedded, waterproof, explosion-proof, anti-touch, safe, reliable, long service life
- The electrical system has anti-surge design and anti-electromagnetic interference design
- Design for preventing current loss: the control unit’s grounding circuit is independent, and is electrically isolated from the actuator
- The electrical control box’s housing has all-weather outdoor, explosion-proof design; the installation design of the control unit and battery independent explosion-proof box

Line break PLPG 2010 electronic monitoring system:

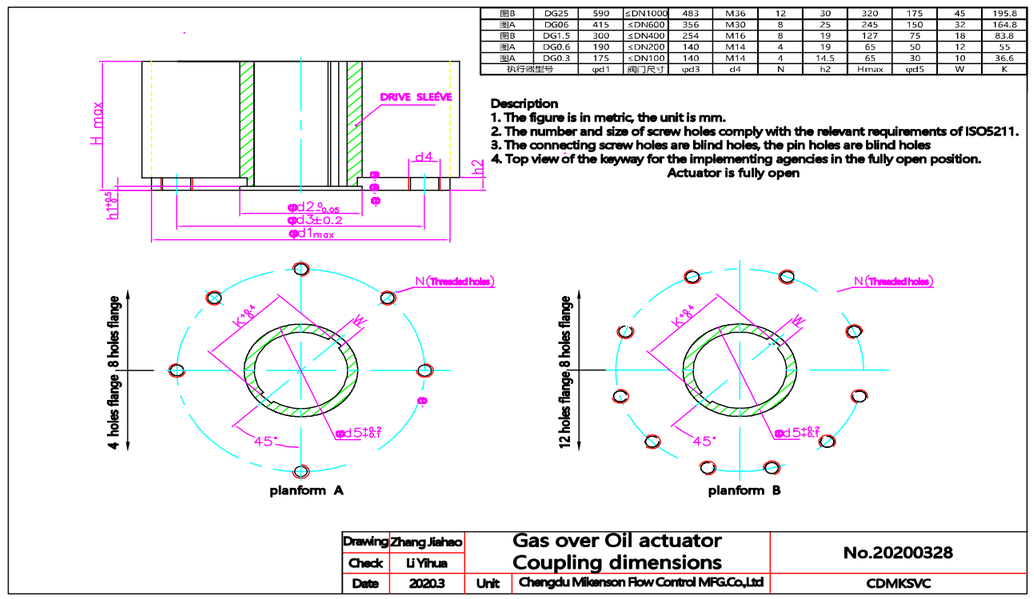
Ambient temperature: -46℃~+80℃
Monitoring pressure: 0-300bar
Pressure drop rate: 0.1-20bar/min
High / low pressure setting: 0-300bar
Sampling period: 1s/4s/8s/16s, optional
Duration of action: 0-150s
Pressure signal: 4-20mA
Control output: solenoid valve 24v DC
Valve action delay: 0-999s
Interface: USB, RS 485
Explosion-proof grade: Exd IIC T4
Protection grade: Ip65
Control accuracy: 0.5%
Battery power supply: 2x3.6v
Power: 12v / 24v DC



Gas over oil Actuator working principle diagram

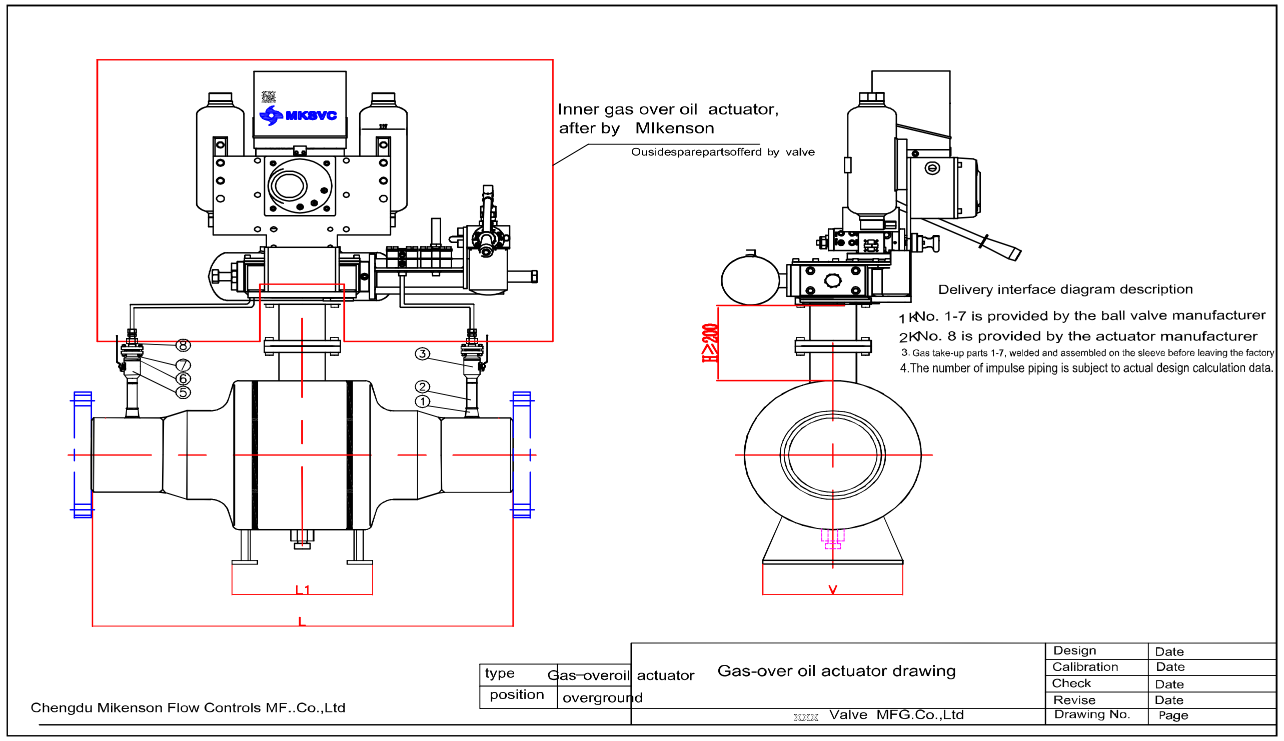


Actuator and valve connection dimension drawing

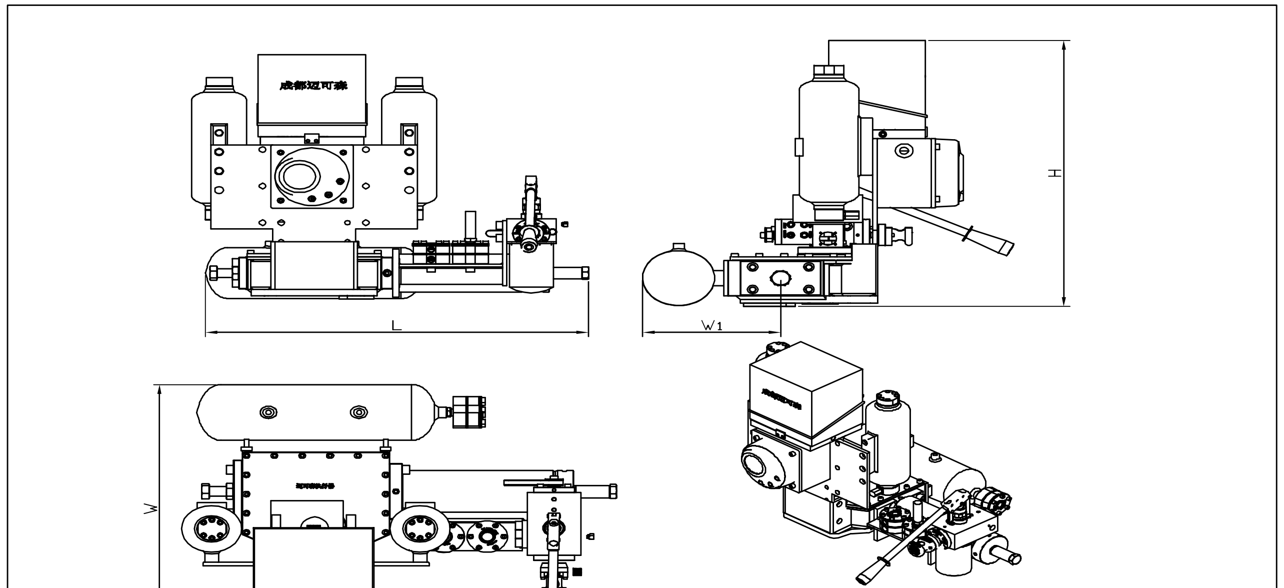


图B	DG25	590	≤DN1000	483	M36	12	30	320	175	45	195.8
图A	DG06	415	≤DN600	356	M30	8	25	245	150	32	164.8
图B	DG1.5	300	≤DN400	254	M16	8	19	127	75	18	83.8
图A	DG0.6	190	≤DN200	140	M14	4	19	65	50	12	55
图A	DG0.3	175	≤DN100	140	M14	4	14.5	65	30	10	36.6
执行机构型号		qd1	阀门尺寸	qd3	d4	N	h2	Hmax	qd5	W	K

Gas over oil Actuator drawing and Installation instruction



Gas over oil Actuator drawing for model



Model	L	B	W1	H	Weight Kg
DG025S	2293	1469	1230	1470	980
DG006S	1478	1246	893	823	610
DG01.5S	1185	898	551	721	210
DGQA0.6	897	727	459	598	150
DG00.3S	535	378	261	521	80

DG	zqwang	Overall Dimensions	No.	MKSVC 20200403
CK	-			
date	202004	Chengdu Mikenson Flow Controls MFG.Co.,Ltd		

Application Examples

Application Examples

Application Examples

After-sales service

The company’s products are widely used in the emergency shutdown and automatic protection of oil, natural gas pipeline and other main valves□Through many years of long-term practical application, its stable performance, reliable quality and the company's high-quality after-sales service have been recognized and trusted by users.

We provide customers with convenient pre-sales and after-sales services, including but not limited to installation, assembly, commissioning and driving of Mikenson’s actuator and control unit. We can quickly respond to and promptly deal with any kind of complex issues of different types of valves and actuators encountered in the operation. We help customers enhance safe driving ability and operational confidence of fluid control products. Mikenson Company has a production base and a spare part warehouse for commonly used products in Chengdu. We have our own service center and a mature after-sales service team, supporting 24/7 service response and technical support.

Service, debugging

Application Examples

GNTV LYV®

Committed to the manufacture and development of reducing ball valves. reduced bore

BALL VALVE SERIES

ZHEJIANG LIANGYI VALVE

FLOATING BALL VALVE

Product Introduction

Can produce a certain displacement and press tightly on the sealing surface of the outlet end to ensure that the outlet end is sealed.

The floating ball valve has a simple construction and good sealing, but the load of ball bearing working medium is all transferred to the outlet seal ring.Therefore, it is necessary to consider whether the sealing ring material can withstand the working load of the ball medium.The ball may be deflected by higher pressures.

Structural Features

Fioating soft seal stainless steel ball valves are used in a variety of PN16-PN64 pipelines and cut off or connect the medium in the pipeline.It can be used for water, steam, oil, liquefied gas, natural gas, coal gas, acetic acid, oxidizing medium, urea and other media in different materials.

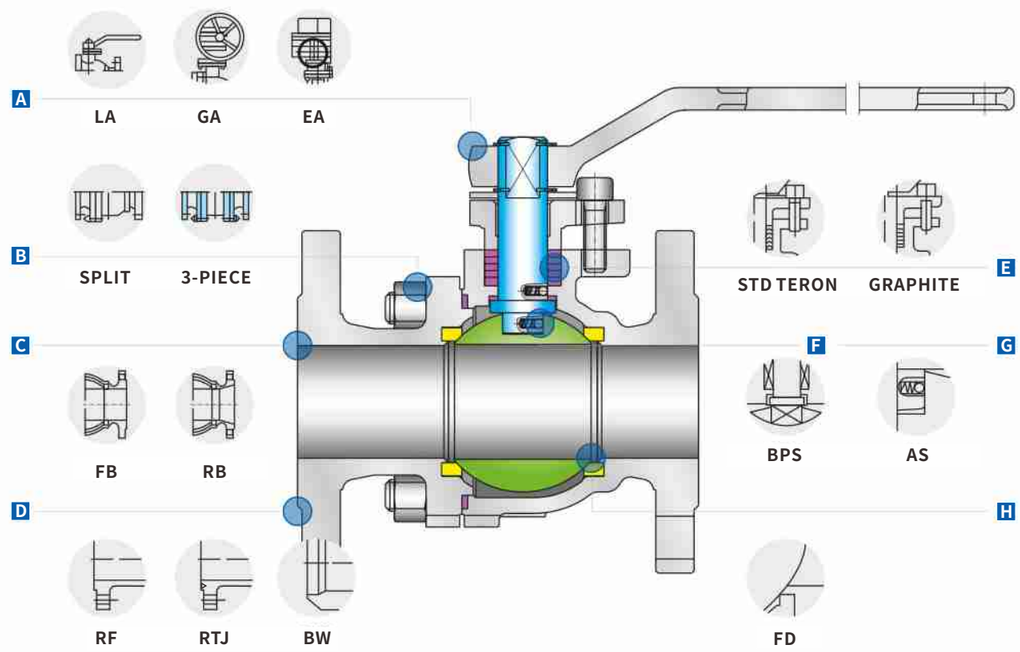
a.In a variety of valves, the ball valve has the minimum flow resistance.When Full bore ball valve opening, the ball channel, valve body channel and Connection pipe is equal and into a diameter, the medium can flow through almost no resistance.

b.The ball valve can be fully closed and fully opened by rotating 90。quickly.Compared with gate valves and globe valves of the same specifications, ball valves are small in size, light in weight and convenient for piping installation.

GNTV LYV®

FLOATING BALL VALVE

Structure Order



A	Operating	Extended lever for easy operation.Also available with gearing, motor actuator, pneumatic or hydraulic actuators for more diffcult services.
B	BODY&BONNET	Split or 3-piece, split body&bonnet for 12“&Small Disassembles easily for repair or replacement of intermal components.Buttwelding end for piping flexibility
C	BORE	Full Bore or Reduced Bore.Full-bore design provides exceptional flow control.
D	End Connections	A choice of Flanged, RTJ flanged or Buttwelding end for piping flexibility
E	Packing	STD Packing Multiple V-TEFLON packing, combined with live loading, maintains packing compression under high-cycle and severe service applications.Graphite packing use situatior for high-temperature.
F	BPS	Blow-out Proof Stem.A pressure-safe stem shoulder design that protects against failure under excess pressure.
G	AS	Anti Static.A metallic contact is always granted between ball and stem/body to discharge eventual statics build-op during service.
H	FD	Fire Durable.Designed to API607 or BS6755 to grant their operation suitability in case of fire.Secondary metal-to-metal seal acts as backup ifprimary seal is destroyed by fire.Valves ordered for compliance with APL607 will be provided withgraphite packing and gaskets.

FLOATING BALL VALVE

Design Specifications

Design standards	Structure length	Fiange connection size	Test and inspection	Pressure rate-temperature
API608	DIN3202	DIN2501	API598	ASMEB16.34

Test pressure

PN	Max temperature Working Pressure rate	CaseTest Pressure rate	Gas Seals test Pressure rate	High-Pressure rate sealing Test Pressure rate
1.6	1.6	2.4	0.6	1.76
2.5	2.5	3.8	0.6	2.75
4.0	4.0	6.0	0.6	4.4
6.4	6.4	9.6	0.6	7.1
10.0	10.0	15.0	0.6	11.0
Class 150	2.0	3.0	0.6	2.2
Class 300	5.0	7.5	0.6	5.5
Class 600	10.0	15.0	0.6	11.0
Class 900	15.0	3.0	0.6	16.5
Class 1500	25.0	7.5	0.6	27.5
Class 2500	41.5	15.0	0.6	45.8

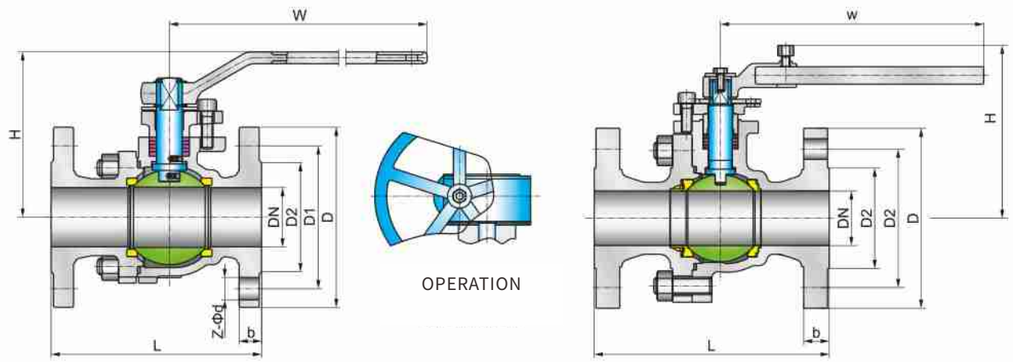
Materials of Main Parts

Part Name	Material name					
Valve Body	A351 CF8C	ZG0Cr18Ni10Ti	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
Cap	A351 CF8C	ZG0Cr18Ni10Ti	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
Sphere	A182 F347	A182 F321	A182 F304	A182 F316	A182 F304L	A182 F316L
Valve Seat	PTFE/STL	PTFE/STL	PTFE/STL	PTFE/STL	PTFE/STL	PTFE/STL
Stem	A182 F347	A182 F321	A182 F304	A182 F316	A182 F304L	A182 F316L
Gasket	PTFE/304+ Graphite	PTFE/304+ Graphite	PTFE/304+ Graphite	PTFE/304+ Graphite	PTFE/304+ Graphite	PTFE/304+ Graphite
Bolt	A193 B8	A193 B8	A193 B8	A193 B8M	A193 B8	A193 B8M
Nut	A194 8	A194 8	A194 8	A194 8M	A194 8	A194 8M
Proper Temperature	Soft seal-196-250°C Hard seal-196-425°C					
Applicable Medium	Nitric acid type weak corrosive medium					

GNTV LYV®

FLOATING BALL VALVE

Q41/341/641/941F/HY



Main External Dimensions

unit:mm

DN	L	D	D1	D2	b	Z-Φd	H	W	KG
	Q41F-16C	Q41F-16P	Q641F-16C	Q641F-16P		Q941F-16C	Q941F-16P		
15	115	95	65	45	16	4-Φ14	78	130	2.2
20	120	105	75	58	18	4-Φ14	84	130	2.8
25	125	115	85	68	18	4-Φ14	95	160	3.7
32	130	140	100	78	18	4-Φ18	150	160	4.4
40	140	150	110	88	18	4-Φ18	150	180	5.5
50	150	165	125	102	20	4-Φ18	170	200	7.3
65	170	185	145	122	20	4-Φ18	195	240	11.7
80	180	200	160	138	20	8-Φ18	215	240	13.4
100	190	220	180	158	20	8-Φ18	250	280	15.7
125	325	250	210	188	22	8-Φ18	265	300	32.5
150	350	285	240	212	24	8-Φ22	270	300	42.5
200	400	340	295	268	26	12-Φ22	330	350	70
250	450	405	355	320	30	12-Φ26	450	400	157

FLOATING BALL VALVE

O41/341/641/941F/HY

Main External Dimensions

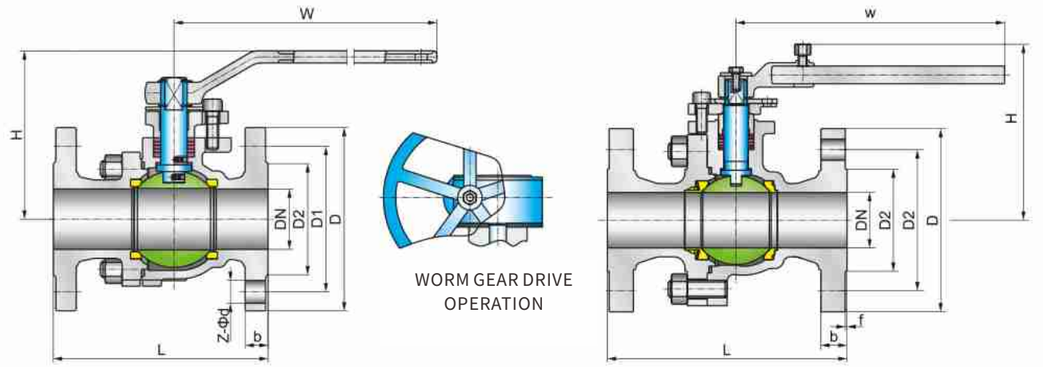
unit:mm

DN	L	D	D1	D2	b	Y	Z-Φd	H	W	Weight (kg)
		Q41F-25	Q41F-25P	Q641F-25	Q64F-25P	Q941F-25	Q941F-25P			
15	115	95	65	45	16	-	4-Φ14	103	130	2.2
20	120	105	75	58	18	-	4-Φ14	112	130	2.8
25	125	115	85	68	18	-	4-Φ14	123	160	3.7
32	130	140	100	78	18	-	4-Φ18	150	160	4.4
40	140	150	110	88	18	-	4-Φ18	156	180	5.5
50	150	165	125	102	20	-	4-Φ18	172	200	7.3
65	170	185	145	122	22	-	8-Φ18	197	240	11.7
80	180	200	160	138	22	-	8-Φ18	222	240	13.4
100	190	235	190	162	24	-	8-Φ22	253	280	15.7
125	325	270	220	188	26	-	8-Φ26	275	300	32.5
150	350	300	250	218	28	-	8-Φ26	286	300	42.5
200	400	360	310	278	30	-	12-Φ26	340	350	70
250	450	425	370	335	32	-	12-Φ30	470	400	157
	Q41F-40	Q41F-40P	Q341F-40	Q341F-40P	Q641F-40	Q641F-40P	Q941F-40P			
15	115	95	65	45	16	-	4-Φ14	103	103	2.2
20	120	105	75	58	18	-	4-Φ14	112	112	2.8
25	125	115	85	68	18	-	4-Φ14	123	123	3.7
32	130	140	100	78	18	-	4-Φ18	150	150	4.4
40	140	150	110	88	18	-	4-Φ18	156	156	5.5
50	150	165	125	102	20	-	4-Φ18	172	172	7.3
65	170	185	145	122	22	-	8-Φ18	197	197	11.7
80	180	200	160	138	24	-	8-Φ18	222	222	13.4
100	190	235	190	162	24	-	8-Φ22	253	253	15.7
125	325	270	220	188	26	-	8-Φ26	275	275	32.5
150	350	300	250	218	28	-	8-Φ26	286	286	42.5
200	400	375	320	285	34	-	12-Φ30	340	340	70
250	450	450	385	345	38	-	12-Φ33	470	470	160

GNTV LYV®

FLOATING BALL VALVE

Q41/341/641/941F/HY

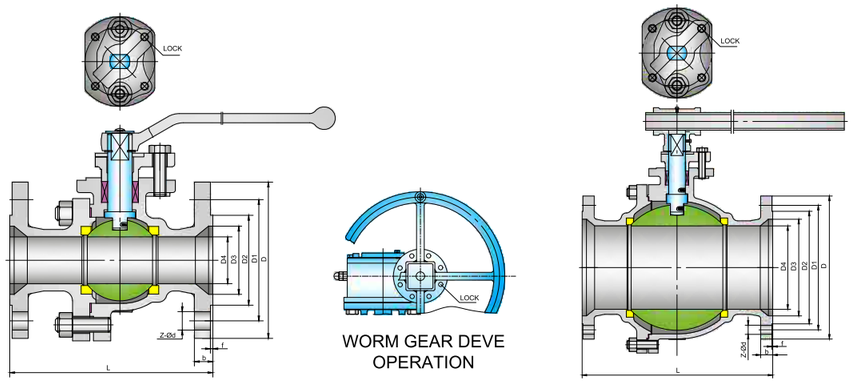


Main External Dimensions

unit:mm

DN	DN/in	L	D	D1	D2	f	b	Z-Φd	H	W	Weight (kg)
					Class150						
15	1/2	108	90	60.3	34.9	2	8	4-Φ16	188	120	2
20	3/4	117	100	69.9	42.9	2	8.9	4-Φ16	202	120	3
25	1	127	110	79.4	50.8	2	9.6	4-Φ16	225	140	3.5
32	11/4	140	115	88.9	63.5	2	11.2	4-Φ16	252	160	5
40	11/2	165	125	98.4	73	2	12.7	4-Φ16	277	180	7
50	2	178	150	120.7	92.1	2	14.3	4-Φ19	323	200	9.5
65	21/2	190	180	139.7	104.8	2	15.9	4-Φ19	347	240	16
80	3	203	190	152.4	127	2	17.5	4-Φ19	383	240	20
100	4	229	230	190.5	157.2	2	22.3	8-Φ19	457	280	31
150	6	394	280	241.3	215.9	2	23.9	8-Φ22.5	635	300	78
200	8	457	345	298.5	269.9	2	27	8-Φ22.5	762	350	155
					300Lb						
15	1/2	140	95	66.7	35	2	12.7	4-Φ16	155	140	2.5
20	3/4	152	115	82.6	43	2	14.3	4-Φ19	160	140	4
25	1	165	125	88.9	50.8	2	15.9	4-Φ19	189	160	5
32	11/4	178	135	98.4	63.5	2	17.5	4-Φ19	216	180	8
40	11/2	190	155	114.3	73	2	19.1	4-Φ22.5	250	200	10
50	2	216	165	127	92	2	20.7	8-Φ19	330	220	13
65	21/2	241	190	149.2	104.8	2	23.9	8-Φ22.5	368	250	20
80	3	282	210	168.3	127	2	27	8-Φ22.5	400	300	26
100	4	305	255	200	157.2	2	30.2	8-Φ22.5	473	300	43
150	6	403	320	269.9	215.9	2	35	12-Φ22.5	711	400	98
					Class600						
15	1/2	165	95	66.7	34.9	7	14.3	4-Φ16	155	160	4
20	3/4	190	115	82.6	42.9	7	15.9	4-Φ19	160	190	5.5
25	1	216	125	88.9	50.8	7	17.5	4-Φ19	186	200	7
32	11/4	229	135	98.4	63.5	7	20.7	4-Φ19	216	220	10
40	11/2	241	155	114.3	73	7	22.3	4-Φ22.5	250	240	14
50	2	292	165	127	92.1	7	25.4	8-Φ19	375	280	20
65	21/2	330	190	149.2	104.8	7	28.6	8-Φ22.5	425	320	33
80	3	356	210	168.3	127	7	31.8	8-Φ22.5	475	350	45
100	4	432	275	215.9	157.2	7	38.1	8-Φ25.5	568	400	75

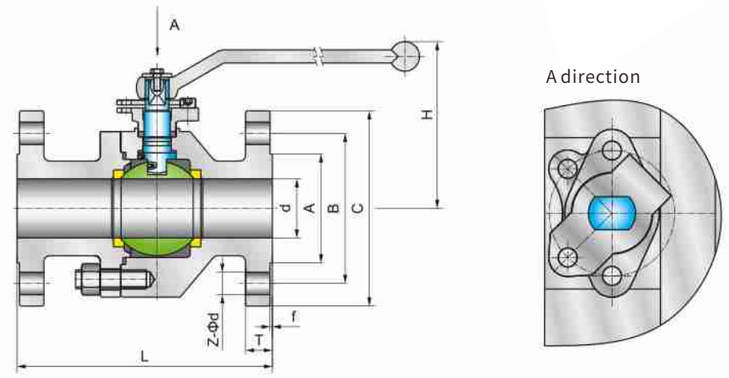
FLOATING BALL VALVE



NPS	L	D	D1	D2	D3	D4	b	f	Z-Φd	Weight (kg)
Class 150Lb										
10×8"	533	405	362.0	323.8	252	201	30.6	2	12-Φ25.4	150
8×6"	457	345	298.5	269.9	201	150	29.0	2	8-Φ22.2	92
6×4"	394	280	241.3	215.9	150	100	25.9	2	8-Φ22.2	42
4×3"	229	230	190.5	157.2	100	76	24.3	2	8-Φ19.1	26
3×2"	203	190	152.4	127.0	76	49	19.5	2	4-Φ19.1	13
2×11/2"	178	150	120.7	92.1	49	38	16.3	2	4-Φ19.1	8.5
11/2×11/4"	165	125	98.4	73.0	38	32	14.7	2	4-Φ15.9	5.5
1×3/4"	127	110	79.4	50.8	25	19	11.6	2	4-Φ15.9	3
3/4×1/2"	117	100	69.9	42.9	19	13	10.9	2	4-Φ15.9	2.5
1/2×3/8"	108	90	60.3	34.9	13	10	10.0	2	4-Φ15.9	1.9
NPS	L	D	D1	D2	D3	D4	b	f	Z-Φd	Weight (kg)
Class 300Lb										
8×6"	502	380	330.2	269.9	201	150	41.7	2	12-Φ25.4	120
6×4"	403	320	269.9	215.9	150	100	37.0	2	12-Φ22.2	61
4×3"	305	255	200.0	157.2	100	76	32.2	2	8-Φ22.2	37
3×2"	283	210	168.3	127.0	76	49	29.0	2	8-Φ22.2	20
2×11/2"	216	165	127.0	92.1	49	38	22.7	2	8-Φ19.1	11
11/2×11/4"	190	155	114.3	73.0	38	32	21.1	2	4-Φ22.2	9
1×3/4"	165	125	88.9	50.8	25	19	17.9	2	4-Φ19.1	4.5
3/4×1/2"	152	115	82.6	42.9	19	13	16.3	2	4-Φ19.1	3
1/2×3/8"	140	95	66.7	34.9	13	10	14.7	2	4-Φ15.9	2.3
Class 600Lb										
4×3"	432	275	215.9	157.2	100	76	38.1	7	8-Φ25.4	55
3×2"	356	210	168.3	127.0	76	49	31.8	7	8-Φ22.2	30
2×11/2"	292	165	127.0	92.1	49	38	25.4	7	8-Φ19.1	16
11/2×11/4"	241	155	114.3	73.0	38	32	22.3	7	4-Φ22.2	12
1×3/4"	216	125	88.9	50.8	25	19	17.5	7	4-Φ19.1	6
3/4×1/2"	190	115	82.6	42.9	19	13	15.9	7	4-Φ19.1	5
1/2×3/8"	165	95	66.7	34.9	13	10	14.3	7	4-Φ15.9	3.5

FLOATING BALL VALVE

Forged steel Q41/341/641/941F/H/Y



Main External Dimensions

unit:mm

NPS	Φd	L	H	W	A	B	C	T	f	n-Φ	KG
Class150											
1/2"	15	108	82	125	35	60.5	90	11.6	2	4-16	3
3/4"	20	117	84	125	43	70	100	13.2	2	4-16	4
1"	25	127	92	145	51	79.5	110	14.5	2	4-16	5.5
1-1/4"	31	140	100	180	63.5	89	115	16	2	4-16	7.5
1-1/2"	38	165	106	180	73	98.5	125	17.5	2	4-16	10
2"	49	178	115	180	92	120.7	150	19.5	2	4-19	15

NPS	Φd	L	H	W	A	B	C	T	f	n-Φ	KG
Class300											
1/2"	15	140	82	125	35	66.5	95	14.7	2	4-16	4
3/4"	20	152	84	125	43	82.5	115	16.3	2	4-19	6
1"	25	165	92	155	51	89	125	17.9	2	4-19	8
1-1/4"	31	178	100	180	63.5	98.5	135	19.5	2	4-19	12
1-1/2"	38	190	106	180	73	114.5	155	21.1	2	4-22	15
2"	49	216	115	180	92	127	165	22.7	2	8-19	20

NPS	Φd	L	H	W	A	B	C	T	f	n-Φ	KG
Class600											
1/2"	15	165	82	125	35	66.5	95	21.5	7	4-16	7
3/4"	20	190	84	125	43	82.5	115	23	7	4-19	7.7
1"	25	216	92	155	51	89	125	24.5	7	4-19	11
1-1/4"	31	229	100	180	63.5	98.5	135	28	7	4-19	17
1-1/2"	38	2410	106	180	73	114.5	155	29.5	7	4-22	20.5
2"	49	292	115	180	92	127	165	32	7	8-19	28

TRUNNION BALL VALVE

Product Introduction

Fixed ball valve, is a new generation of high-performance ball valve, suitable for long distance pipeline and general industrial pipeline, its strength, safety, resistance to harsh environment and other special considerations in the design, suitable for a variety of corrosive and non-corrosive media.Compared with the floating ball valve, it works, the fluid pressure in front of the sphere of all is passed to the bearing force, will not make a sphere to the seat to move, so the seat will not bear too much pressure, so the fixed ball valve torque is small, the seat of the small deformation, stable sealing performance, long service life, applicable to high pressure, large diameter.Advanced spring-loaded pre-seat assembly with self-tightening features for upstream sealing.Each valve has two seats and can be sealed in each direction, so the installation has no flow restriction and is bidirectional.This valve is generally installed horizontally.

Structural Features

1. Operation: ball bearings supported by the up and down, to reduce friction, eliminate the pressure as imports to promote the formation of the sphere and the great seal sealed seat load caused by excessive torque.

2. Sealing performance and reliable: PTFE elastic material embedded in stainless steel valve seat ring, the metal spring seat no end, to ensure adequate preload ring, valve sealing surface in the course of friction loss When the valve under the action of the spring to ensure good sealing performance.

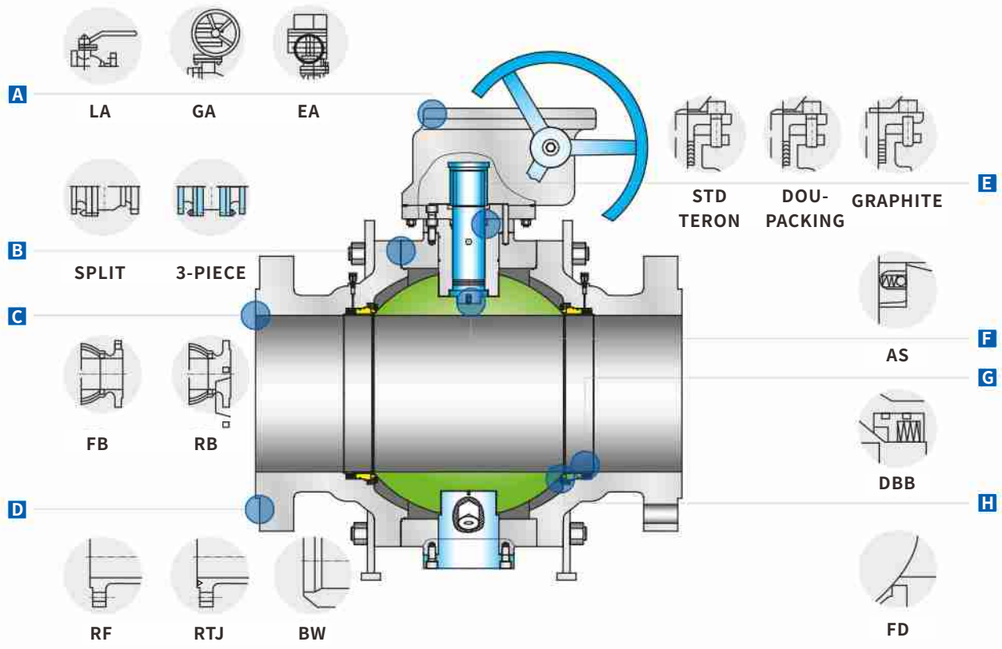
3. Fire structure: In order to prevent the sudden appearance of heat or fire to burn PTFE seals, large leak occurred, and contribute to the fire, the fire ball and set the seal ring between the valve seat, in the ring when burned, under the action of the spring force will quickly push the ball valve seat seal ring, the formation of metal to metal seal, play a certain degree of sealing effect. The fireproof experiment conforms to API 6FA and the API 607 standard requests.

4. Automatic pressure relief function: When the valve is in a stagnant medium pressure in the cavity increased over the spring preload, the seat back from the ball, to the effect of automatic pressure relief, pressure relief valve seat after automatically reset.

GNTV LYV®

TRUNNION BALL VALVE

Structure Order



A	Operating	Extended lever for easy operation.Also available with gearing, motor actuator, pneumatic or hydraulic actuators for more diffcult services.
B	BODY&BONNET	Split or 3-piece, split body&bonnet for 12“&Small Disassembles easily for repair or replacement of intermal components.Buttwelding end for piping flexibility
C	BORE	Full Bore or Reduced Bore.Full-bore design provides exceptional flow control.
D	End Connections	A choice of Flanged, RTJ flanged or Buttwelding end for piping flexibility
E	Packing	STD Packing Multiple V-TEFLON packing, combined with live loading, maintains packing compression under high-cycle and severe service applications.Graphite packing use situatior for high-temperature.
F	AS	Anti Static. A metallic contact is always granted between ball and stem/body to discharge eventual statics build-op during service
G	DDB	Double Block & Bleed, The body cavity is isolated when the ball is in either fully closed of fully opened positionThe medium entrapped in it can easily be bled to avoid over pressure.
H	FD	Fire Durable.Designed to API607 or BS6755 to grant their operation suitability in case of fire.Secondary metal-to-metal seal acts as backup ifprimary seal is destroyed by fire.Valves ordered for compliance with APL607 will be provided withgraphite packing and gaskets.

TRUNNION BALL VALVE

Design Specifications

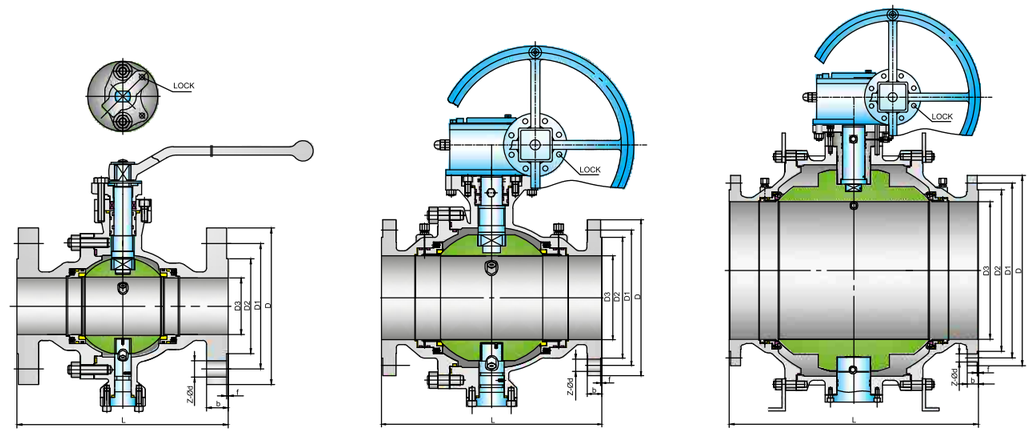
Design standards	Structure length	Fiange connection size	Test and inspection	Pressure rate-temperature
API6D	ASMEB.16.10	ASMEB.16.5	Ap598	ASMEB.16.34

Test pressure

PN	Max temperature Working Pressure rate	CaseTest Pressure rate	Gas Seals test Pressure rate	High-Pressure rate sealing Test Pressure rate
Class150	2.0	3.0	0.6	2.2
Class300	5.0	7.5	0.6	5.5
Class600	10.0	15.0	0.6	11.0
Class900	15.0	3.0	0.6	16.5
Class1500	25.0	7.5	0.6	27.5
Class2500	41.5	15.0	0.6	45.8

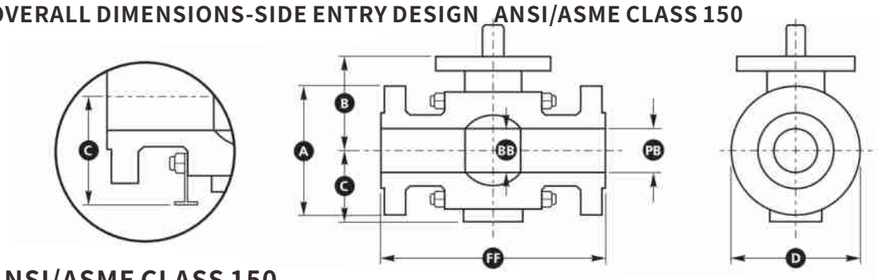
GNTV LYV®

BODY TRUNNION MOUNTED BALL VALVE IN CAST STEEL



NPS	L	D	D1	D2	D3	D4	b	f	Z-Φd	Weight (kg)
				Class 150Lb						
24×20"	1067	815	749.3	692.2	589	487	48.1	2	20-∅34.9	1650
20×16"	914	700	635.0	584.2	487	385	43.3	2	20-∅31.8	920
18×14"	864	635	577.9	533.4	436	334	40.1	2	16-∅31.8	700
16×12"	762	595	539.8	469.9	385	303	37.0	2	16-∅28.6	510
14×10"	686	535	476.3	412.8	334	252	35.4	2	12-∅28.6	330
12×10"	610	485	431.8	381.0	303	252	32.2	2	12-∅25.4	300
10×8"	533	405	362.0	323.8	252	201	30.6	2	12-∅25.4	185
8×6"	457	345	298.5	269.9	201	150	29.0	2	8-∅22.2	120
6×4"	394	280	241.3	215.9	150	100	25.9	2	8-∅22.2	50
4×3"	229	230	190.5	157.2	100	76	24.3	2	8-∅19.1	34
3×2"	203	190	152.4	127.0	76	49	19.5	2	4-∅19.1	20
2X1.5"	178	150	120.7	92.1	49	38	16.3	2	4-∅19.1	14
NPS	L	D	D1	D2	D3	D4	b	f	z-∅d	Weight (kg)
				Class 300Lb						
24×20"	1143	915	812.8	692.2	589	487	70.3	2	24-∅41.3	2160
20×16"	991	775	685.8	584.2	487	385	64.0	2	24-∅34.9	1230
18×14"	914	710	628.6	533.4	436	334	60.8	2	24-∅34.9	840
16×12"	838	650	571.5	469.9	385	303	57.6	2	20-∅34.9	650
14×10"	762	585	514.5	412.8	334	252	54.4	2	20-∅31.8	420
12×10"	648	520	450.8	381.0	303	252	51.3	2	16-∅31.8	380
10×8"	568	445	387.4	323.8	252	201	48.1	2	16-∅28.6	230
8×6"	502	380	330.2	269.9	201	150	41.7	2	12-∅25.4	150
6×4"	402	320	269.9	215.9	150	100	37.0	2	12-∅22.2	80
4×3"	305	255	200.0	157.2	100	76	32.2	2	8-∅22.2	40
3×2"	283	210	168.3	127.0	76	49	29.0	2	8-∅22.2	30
2×1.5"	216	165	127.0	92.1	49	38	22.7	2	8-∅19.1	18
NPS	L	D	D1	D2	D3	D4	b	f	z-∅d	Weight(kg)
				Class 600Lb						
24×20"	1397	940	838.2	692.2	589	487	101.6	7	24-∅50.8	3700
20×16"	1194	815	723.9	584.2	487	385	88.9	7	24-∅44.5	2300
18×14"	1092	745	654.0	533.4	436	334	82.6	7	20-∅44.5	1550
16×12"	991	685	603.2	469.9	385	303	76.2	7	20-∅41.3	990
14×10"	889	605	527.0	412.8	334	252	69.9	7	20-∅38.1	740
12×10"	838	560	489.0	381.0	303	252	66.7	7	20-∅34.9	670
10×8"	787	510	431.8	323.8	252	201	63.5	7	16-∅34.9	440
8×6"	660	420	349.2	269.9	201	150	55.6	7	12-∅31.8	260
6×4"	559	355	292.1	215.9	150	100	47.7	7	12-∅28.6	130
4×3"	432	275	215.9	157.2	100	76	38.1	7	8-∅25.4	82
3×2"	356	210	168.3	127.0	76	49	31.8	7	8-∅22.2	38
2×1.5"	292	165	127.0	92.1	49	38	25.4	7	8-∅19.1	27

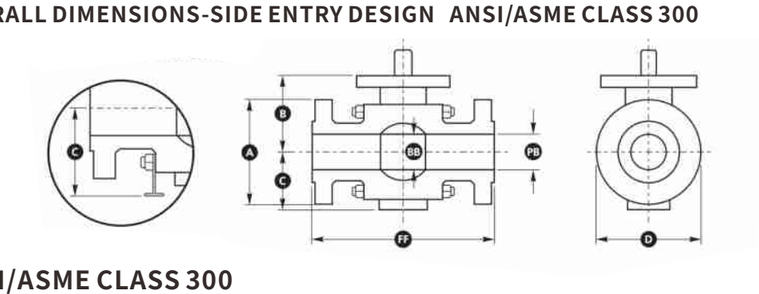
TRUNNION MOUNTED BALL VALVES
OVERALL DIMENSIONS-SIDE ENTRY DESIGN ANSI/ASME CLASS 150



ANSI/ASME CLASS 150

SIZE in.	(mm)	FF			BB	PB	A	B	C	D	Weight (kg)
		RF	RTJ	WE							
2×11/2	(50×40)	7.0(178)	7.5(190)	8.5(216)	1.5(38)	2.0(51)	6.0(152)	3.7(95)	3.9(100)	5.7 (145)	17
2	(50)	7.0(178)	7.5(190)	8.5(216)	2.0(51)	2.0(51)	6.0(152)	4.1(105)	3.9(100)	6.0 (153)	19
3×2	(80×50)	8.0(203)	8.5(216)	11.1(283)	2.0(51)	3.0(77)	7.5(191)	4.1(105)	3.9(100)	6.0 (153)	25
3	(80)	8.0(203)	8.5(215)	11.1(283)	3.0(77)	3.0(77)	7.5(191)	6.1(155)	4.9(125)	7.4 (187)	34
4×3	(100×80)	9.0(229)	9.5(241)	12.0(305)	3.0(77)	4.0(102)	9.0(229)	6.1(155)	4.9(125)	7.4 (187)	44
4	(100)	9.0(229)	9.5(241)	12.0(305)	4.0(102)	4.0(102)	9.0(229)	7.9(200)	6.3(160)	9.0 (230)	35
6×4	(150×100)	15.5(394)	16.0(406)	18.0(457)	4.0(102)	6.0(152)	11.0(279)	7.9(200)	6.3(160)	9.0 (230)	80
6	(150)	15.5(394)	16.0(406)	18.0(457)	6.0(152)	6.0(152)	11.0(279)	9.8(250)	7.2(185)	12.0 (305)	145
8×6	(200×150)	18.0(457)	18.5(470)	20.5(521)	6.0(152)	8.0(203)	13.5(343)	9.8(250)	7.3(186)	12.0 (305)	174
8	(200)	18.0(457)	18.5(470)	20.5(521)	8.0(203)	8.0(203)	13.5(343)	10.9(278)	8.7(222)	15.4 (390)	245
10×8	(250×200)	21.0(533)	21.5(546)	22.0(559)	8.0(203)	10.0(254)	16.0(406)	10.9 (278)	8.7(222)	15.4 (390)	275
10	(250)	21.0(533)	21.5(546)	22.0(559)	10.0(254)	10.0(254)	16.0(406)	12.7 (323)	11.0(280)	18.4 (467)	400
12×10	(300×250)	24.0(610)	24.5(622)	25.0(635)	10.0(254)	12.0(305)	19.9(483)	12.7 (323)	11.0(280)	18.4 (467)	450
14×10	(350×250)	27.0(686)	27.5(698)	30.0(762)	10.0(254)	13.3(337)	21.0(535)	12.7 (323)	11.0(280)	18.4 (467)	480
12	(300)	24.0(610)	24.5(622)	25.0(635)	12.0(305)	12.0(305)	19.9(483)	13.4 (340)	11.9(303)	21.3 (540)	700
14×12	(350×300)	26.9(685)	27.5(698)	30.0(762)	12.0(305)	13.3(337)	21.0(535)	13.4 (340)	11.9(303)	21.3 (540)	750
16×12	(400×300)	30.0(762)	30.5(775)	33.0(838)	12.0(305)	15.2(387)	23.4(595)	13.4 (340)	11.9(303)	21.3 (540)	800
14	(350)	27.0(686)	27.5(698)	30.0(762)	13.3(337)	13.3(337)	21.0(535)	14.8(375)	13.0(330)	23.9 (607)	950
16×14	(400×350)	30.0(762)	30.5(775)	33.0(838)	13.3(337)	15.2(387)	23.4(595)	14.8(375)	13.0(330)	23.9 (607)	1000
16	(400)	30.0(762)	30.5(775)	33.0(838)	15.2(387)	15.2(387)	23.4(595)	16.1(410)	14.0(355)	26.6 (675)	1210
18×16	(450×400)	34.0(864)	34.5(876)	36.0(941)	15.2(387)	17.2(438)	25.0(635)	16.1(410)	14.0 (355)	26.6 (675)	1300
20×16	(500×400)	36.0(914)	36.5(927)	39.0(991)	15.2(387)	19.3(438)	27.6(700)	16.1(410)	14.0 (355)	26.6(675)	1400
18	(450)	34.0(864)	34.5(876)	36.0(914)	17.2(438)	17.2(438)	25.0(635)	17.3(440)	15.4 (390)	29.6(753)	1700
20×18	(500×450)	36.0(914)	36.5(927)	39.0(991)	17.2(438)	19.3(489)	27.6(700)	17.3(440)	15.4 (390)	29.6(753)	1800
20	(500)	36.0(914)	36.5(927)	39.0(991)	19.3(489)	19.3(489)	27.6(700)	19.5(495)	16.9 (430)	33.3(845)	2000
24×20	(600×500)	42.0(1067)	42.5(1079)	45.0(1143)	19.3(489)	23.3(591)	32.1(815)	19.5(495)	16.9 (430)	33.3(845)	2160
22	(550)	39.0(991)	-	43.0(1092)	21.3(540)	21.3(540)	29.5(750)	20.7(525)	18.7 (475)	36.6(930)	2500
24	(600)	42.0(1067)	42.5(1079)	45.0(1143)	23.3(591)	23.3(591)	32.1(815)	23.0(585)	20.5 (520)	39.8(1010)	3200
30×24	(750×600)	51.0(1295)	-	55.0(1397)	23.3(591)	29.0(737)	38.8(985)	23.0(585)	20.5 (520)	39.8(1010)	3500
26	(650)	45.0(1143)	-	49.0(1245)	25.0(635)	25.0(635)	34.3(870)	24.8(630)	22.0 (560)	42.1(1070)	4200
28	(700)	49.0(1244)	-	53.0(1347)	27.0(686)	27.0(686)	36.4(925)	25.4(645)	25.6 (650)	44.9 (1140)	5300
30	(750)	51.0(1295)	-	55.0(1397)	29.0(736)	29.0(736)	38.8(985)	27.2(690)	27.6 (700)	48.0 (1220)	6500
36×30	(900×750)	60.0(1524)	-	68.0(1728)	29.0(736)	34.5(876)	46.0(1170)	27.2(690)	27.6 (700)	48.0 (1220)	7000
32	(800)	53.9(1371)	-	60.0(1524)	30.7(781)	30.7(781)	41.7(1060)	29.1(740)	29.3 (745)	51.6 (1310)	7700
34	(850)	58.0(1473)	-	64.0(1626)	32.8(832)	32.8(832)	43.7(1110)	29.9(760)	30.5 (775)	54.3 (1380)	8800
36	(900)	60.0(1524)	-	68.0(1728)	34.5(876)	34.5(876)	46.0(1170)	31.9(810)	31.7 (805)	56.7 (1440)	9900
40	(1000)	69.0(1753)	-	77.0(1956)	38.5(978)	38.6(978)	50.8(1290)	35.2(895)	35.4 (900)	63.4 (1610)	12700
42	(1050)	73.0(1855)	-	82.0(2083)	40.2(1022)	40.2(1022)	53.0(1345)	37.4(950)	36.8 (935)	66.3(1683)	15000
48	(1200)	84.0(2134)	-	94.0(2388)	46.0(1168)	46.0(1168)	59.4(1510)	43.1(1095)	42.1 (1070)	76.0(1930)	18000
56	(1400)	98.0(2489)	-	98.0(2489)	54.5(1384)	54.5(1384)	68.3(1735)	51.2(1300)	49.2 (1250)	89.5 (2273)	34120

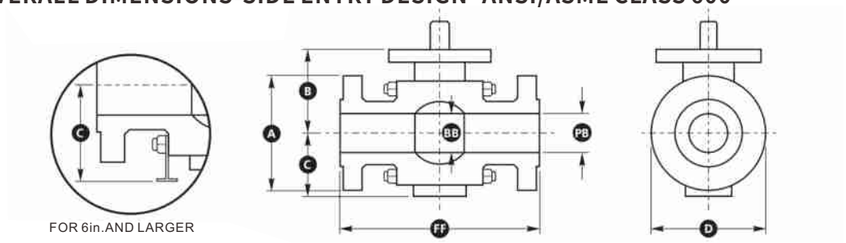
TRUNNION MOUNTED BALL VALVES
OVERALL DIMENSIONS-SIDE ENTRY DESIGN ANSI/ASME CLASS 300



ANSI/ASME CLASS 300

SIZE in.	(mm)	FF			BB	PB	A	B	C	D	Weight (kg)
		RF	RTJ	WE							
2×11/2	(50×40)	8.5(216)	9.1(232)	8.5(216)	1.5(38)	2.0(51)	6.5(165)	3.7 (95)	3.9 (100)	5.7 (145)	20
2	(50)	8.5(216)	9.1(232)	8.5(216)	2.0(51)	2.0(51)	6.5(165)	4.1 (105)	3.9 (100)	6.0 (153)	24
3×2	(80×50)	11.1(283)	11.7(298)	11.1(283)	2.0(51)	3.0(77)	8.3(210)	4.1 (105)	3.9 (100)	6.0(153)	32
3	(80)	11.1(283)	11.7(298)	11.1(283)	3.0(77)	3.0(77)	8.3(210)	6.1 (155)	4.9 (125)	7.4(187)	43
4×3	(100×80)	12.0(305)	12.6(321)	12.0(305)	3.0(77)	4.0(102)	10.0(254)	6.1 (155)	4.9 (125)	7.4(187)	60
4	(100)	12.0(305)	12.6(321)	12.0(305)	4.0(102)	4.0(102)	10.0(254)	7.9 (200)	6.3 (160)	9.0(230)	89
6×4	(150×100)	15.9(403)	16.5(419)	18.0(457)	4.0(102)	6.0(152)	12.5(318)	7.9 (200)	6.3 (160)	9.0(230)	110
6	(150)	15.9(403)	16.5(419)	18.0(457)	6.0(152)	6.0(152)	12.5(318)	9.8 (250)	8.0 (203)	12.0(305)	170
8×6	(200×150)	19.8(502)	20.4(517)	20.5(521)	6.0(152)	8.0(203)	15.0(381)	9.8 (250)	8.0 (203)	12.0(305)	200
8	(200)	19.8(502)	20.4(517)	20.5(521)	8.0(203)	8.0(203)	15.0(381)	10.9 (278)	9.1 (232)	15.4(390)	270
10×8	(250×200)	22.4(568)	23.0(584)	22.0(559)	8.0(203)	10.0(254)	17.5(445)	10.9 (278)	9.1 (232)	15.4(390)	330
10	(250)	22.4(568)	23.0(584)	22.0(559)	10.0(254)	10.0(254)	17.5(445)	13.1 (333)	11.7 (298)	18.8(477)	460
12×10	(300×250)	25.5(648)	26.1(664)	25.0(635)	10.0(254)	12.0(305)	20.5(520)	13.1 (333)	11.7 (298)	18.8(477)	500
14×10	(350×250)	30.0(762)	30.6(778)	30.0(762)	10.0(254)	13.3(337)	23.0(585)	13.1 (333)	11.7 (298)	18.8(477)	550
12	(300)	25.5(648)	26.1(664)	25.0(635)	12.0(305)	12.0(305)	20.5(520)	14.2 (360)	13.1 (333)	21.3 (540)	750
14×12	(350×300)	30.0(762)	30.2(768)	30.0(762)	12.0(305)	13.3(337)	23.0(585)	14.2 (360)	13.1 (333)	21.3 (540)	800
16×12	(400×300)	33.0(838)	33.2(854)	33.0(838)	12.0(305)	15.2(387)	25.6(650)	14.2 (360)	13.1 (333)	21.3 (540)	850
14	(350)	30.0(762)	30.6(778)	30.0(762)	13.3(337)	13.3(337)	23.0(585)	15.6 (395)	13.8 (350)	24.8 (630)	1000
16×14	(400×350)	33.0(838)	33.2(854)	33.0(838)	13.3 (337)	15.2(387)	25.6(650)	15.6 (395)	13.8 (350)	24.8 (630)	1080
16	(400)	33.0(838)	33.2(854)	33.0(838)	15.2 (387)	15.2(387)	25.6(650)	17.0 (433)	15.7 (398)	27.5 (698)	1430
18×16	(450×400)	36.0(914)	36.6(930)	36.0(914)	15.2 (387)	17.2(438)	28.0(710)	17.0 (433)	15.7 (398)	27.5 (698)	1500
20×16	(500×400)	39.0(991)	39.8(1010)	39.0(991)	15.2(387)	19.3(489)	30.5(775)	17.0 (433)	15.7 (398)	27.5 (698)	1580
18	(450)	36.0(914)	36.6(930)	36.0(914)	17.2 (438)	17.2(438)	28.0 (710)	18.1 (460)	16.1 (410)	30.3 (770)	1790
20×18	(500×450)	39.0(991)	39.8(1010)	39.0(991)	17.2 (438)	19.3(489)	30.5 (775)	18.1 (460)	16.1 (410)	30.3 (770)	1870
20	(500)	39.0(991)	39.8(1010)	39.0(991)	19.3 (489)	19.3(489)	30.5 (775)	19.9 (505)	18.5 (470)	33.7 (855)	2400
24×20	(600×500)	45.0(1143)	45.9(1165)	45.0(1143)	19.3(489)	23.3(591)	36.0 (915)	19.9 (505)	18.5 (470)	33.7 (855)	2600
22	(550)	43.0(1092)	43.9(1114)	43.0(1092)	21.3(540)	21.3(540)	33.1 (840)	20.9 (530)	19.1 (485)	37.0 (940)	2980
24	(600)	45.0(1143)	45.9(1165)	45.0(1143)	23.3(591)	23.3(591)	36.0 (915)	23.2 (590)	21.7 (550)	40.4 (1025)	3550
30×24	(750×600)	55.0(1397)	56.0(1422)	55.0(1397)	23.3(591)	29.0(736)	42.9 (1090)	23.2 (590)	21.7 (550)	40.4 (1025)	3900
26	(650)	49.0(1245)	50.0(1270)	49.0(1245)	25.0(635)	25.0(635)	38.2 (970)	25.0 (635)	23.0 (585)	42.7 (1085)	4300
28	(700)	53.0(1346)	54.0(1372)	53.0(1346)	27.0(686)	27.0(686)	40.7 (1035)	25.4 (645)	26.4 (670)	45.3 (1150)	5600
30	(750)	55.0(1397)	56.0(1422)	55.0(1397)	29.0(736)	29.0(736)	42.9 (1090)	27.6 (700)	28.7 (730)	48.8 (1240)	6800
36×30	(900×750)	68.0(1727)	69.1(1756)	68.0(1727)	29.0(736)	34.4(876)	50.0 (1270)	27.6 (700)	28.7 (730)	48.8 (1240)	7500
32	(800)	60.0(1524)	61.1(1553)	60.0(1524)	30.7(781)	30.7(781)	45.3 (1150)	29.5 (750)	30.3 (770)	52.0 (1320)	8100
34	(850)	64.0(1626)	65.1(1654)	64.0(1626)	32.8(832)	32.8(832)	47.4 (1205)	30.1 (765)	31.5 (800)	54.8 (1393)	9300
36	(900)	68.0(1727)	69.1(1756)	68.0(1727)	34.5(876)	34.5(876)	50.0 (1270)	31.9 (810)	32.5 (825)	57.1 (1450)	10500
40	(1000)	77.0(1956)	-	77.0(1956)	38.6(978)	38.6(978)	48.8 (1240)	35.6 (905)	36.2 (920)	63.8 (1620)	13500
42	(1050)	82.0(2083)	-	82.0(2083)	40.2(1022)	40.2(1022)	50.8 (1290)	37.8 (960)	37.6 (955)	66.5 (1690)	16000
48	(1200)	85.4(2170)	-	85.4(2170)	46.0(1168)	46.0(1168)	57.7 (1465)	43.3 (1100)	43.5 (1105)	76.5(1943)	20000
56	(1400)	108.0(2743)	-	108.0(2743)	54.5(1384)	54.5(1384)	67.3 (1710)	51.2 (1300)	50.2 (1275)	89.8(2280)	38170

TRUNNION MOUNTED BALL VALVES
OVERALL DIMENSIONS-SIDE ENTRY DESIGN ANSI/ASME CLASS 600

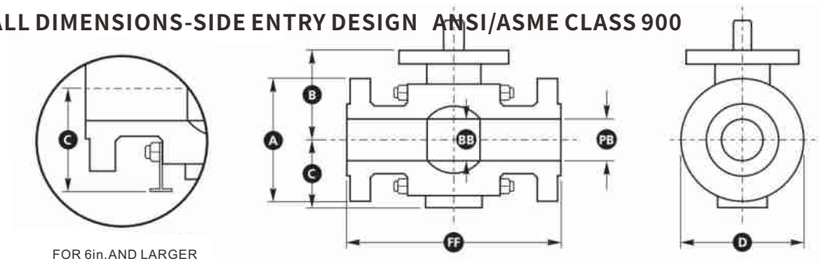


FOR 6in.AND LARGER

ANSI/ASME CLASS 600

SIZE in.	(mm)	FF RF	FF RTJ	FF WE	BB	PB	A	B	C	D	Weight (kg)
2×11/2	(50×40)	11.5 (292)	11.6 (295)	11.5 (292)	1.5(38)	2.0(51)	6.5 (165)	3.7 (95)	3.9 (100)	5.7 (145)	28
2	(50)	11.5 (292)	11.6 (295)	11.5 (292)	2.0(51)	2.0(51)	6.5 (165)	4.1 (105)	3.9 (100)	6.3 (160)	35
3×2	(80×50)	14.0 (356)	14.1 (359)	14.0 (356)	2.0(51)	3.0(77)	8.3 (210)	4.1 (105)	3.9 (100)	6.3 (160)	46
3	(80)	14.0 (356)	14.1 (359)	14.0(356)	3.0(77)	3.0(77)	8.3 (210)	6.5 (165)	5.1 (130)	7.5 (190)	80
4×3	(100×80)	17.0 (432)	17.1 (435)	17.0 (432)	3.0(77)	4.0(102)	10.7 (273)	6.5 (165)	5.1 (130)	7.5 (190)	95
4	(100)	17.0 (432)	17.1 (435)	17.0 (432)	4.0(102)	4.0 (102)	10.7 (273)	8.3 (210)	6.4 (162)	9.2 (234)	140
6×4	(150×100)	22.0 (559)	22.1 (562)	22.0 (559)	4.0(102)	6.0 (152)	14.0 (356)	8.3 (210)	6.4 (162)	9.2 (234)	190
6	(150)	22.0 (559)	22.1 (562)	22.0 (559)	6.0(152)	6.0 (152)	14.0 (356)	10.0 (253)	8.0 (203)	12.0 (305)	277
8×6	(200×150)	26.0 (660)	26.1 (664)	26.0 (660)	6.0(152)	8.0 (203)	16.5 (419)	10.0 (253)	8.0 (203)	12.0 (305)	326
8	(200)	26.0 (660)	26.1 (664)	26.0 (660)	8.0(203)	8.0 (203)	16.5 (419)	11.4 (290)	10.1 (257)	15.9 (405)	480
10×8	(250×200)	31.0 (787)	31.1 (791)	31.0 (787)	8.0(203)	10.0 (254)	20.1 (510)	11.4 (290)	10.1 (257)	15.9 (405)	600
10	(250)	31.0 (787)	31.1 (791)	31.0(787)	10.0(254)	10.0 (254)	20.1 (510)	13.1 (333)	12.2 (310)	19.3 (490)	715
12×10	(300×250)	33.0 (838)	33.1 (841)	33.0(838)	10.0(254)	12.0 (305)	22.0 (560)	13.1 (333)	12.2 (310)	19.3 (490)	800
14×10	(350×250)	35.0 (889)	35.1 (892)	35.0(889)	10.0(254)	13.3 (337)	23.8 (605)	13.1 (333)	12.2 (310)	19.3 (490)	900
12	(300)	33.0 (838)	33.1 (841)	33.0(838)	12.0(305)	12.0 (305)	22.0 (560)	15.0 (380)	13.8 (350)	22.8 (580)	1120
14×12	(350×300)	35.0 (889)	35.1 (891)	35.0(889)	12.0(305)	13.3 (337)	23.8 (605)	15.0 (380)	13.8 (350)	22.8 (580)	1200
16×12	(400×300)	39.0 (991)	39.1 (994)	39.0(991)	12.0(305)	15.2(387)	27.0 (685)	15.0 (380)	13.8 (350)	22.8 (580)	1280
14	(350)	35.0 (889)	35.1 (892)	35.0(889)	13.3(337)	13.3(337)	23.8 (605)	15.6 (395)	14.2 (360)	24.8 (630)	1350
16×14	(400×350)	39.0 (991)	39.1 (994)	39.0(991)	13.3(337)	15.2(387)	27.0 (685)	15.6 (395)	14.2 (360)	24.8 (630)	1430
16	(400)	39.0 (991)	39.1 (994)	39.0(991)	15.2(387)	15.2(387)	27.0 (685)	17.0 (433)	16.3 (413)	27.6 (702)	1860
18×16	(450×400)	43.0 (1092)	43.1 (1095)	43.0(1092)	15.2(387)	17.2(438)	29.3 (745)	17.0 (433)	16.3 (413)	27.6 (702)	1930
20×16	(500×400)	47.0 (1194)	47.2 (1200)	47.0(1194)	15.2(387)	19.3(489)	32.1 (815)	17.0 (433)	16.3 (413)	27.6 (702)	2000
18	(450)	43.0 (1092)	43.1 (1095)	43.0(1092)	17.2(438)	17.2(438)	29.3 (745)	18.5 (470)	16.9 (430)	30.5 (775)	2400
20×18	(500×450)	47.0 (1194)	47.2 (1200)	47.0(1194)	17.2(438)	19.3(489)	32.1 (815)	18.5 (470)	16.9 (430)	30.5 (775)	2500
20	(500)	47.0 (1194)	47.2 (1200)	47.0(1194)	19.3(489)	19.3(489)	32.1 (815)	19.9 (505)	19.3 (490)	34.0 (863)	3100
24×20	(600×500)	55.0 (1397)	55.4 (1406)	55.0(1397)	19.3(489)	23.3(591)	37.0 (940)	19.9 (505)	19.3 (490)	34.0 (863)	3300
22	(550)	51.0 (1296)	51.4 (1305)	51.0(1296)	21.3(540)	21.3(540)	34.3 (870)	21.5 (545)	20.1 (510)	37.4 (950)	4000
24	(600)	55.0 (1397)	55.4 (1406)	55.0(1397)	23.3(591)	23.3(591)	37.0 (940)	23.4 (595)	22.4 (570)	40.6 (1030)	5000
30×24	(750×600)	65.0 (1651)	65.5 (1664)	65.0(1651)	23.3(591)	29.0(736)	44.5 (1130)	23.4 (595)	22.4 (570)	40.6 (1030)	5300
26	(650)	57.0 (1448)	57.5 (1460)	57.0(1448)	25.0(635)	25.0(635)	40.0 (1015)	25.0 (635)	24.4 (620)	43.0 (1093)	6000
28	(700)	61.0 (1549)	61.5 (1562)	61.0(1549)	27.0(686)	27.0(686)	42.3 (1075)	26.2 (665)	27.2 (690)	46.0 (1170)	7500
30	(750)	65.0 (1651)	65.5 (1664)	65.0(1651)	29.0(736)	29.0(736)	44.5 (1130)	28.0 (710)	29.5 (750)	49.4 (1255)	9300
36×30	(900×750)	82.0 (2083)	82.6 (2098)	82.0(2083)	29.0(736)	34.5(876)	51.8 (1315)	28.0 (710)	29.5 (750)	49.4 (1255)	10000
32	(800)	70.0 (1778)	70.6 (1794)	70.0(1778)	30.7(781)	30.7(781)	47.0 (1195)	29.7 (755)	30.7 (780)	52.2 (1327)	11000
34	(850)	76.0 (1930)	76.6 (1946)	76.0(1930)	32.8(832)	32.8(832)	49.0 (1245)	30.7 (780)	32.1 (815)	55.3 (1405)	13300
36	(900)	82.0 (2083)	82.6 (2098)	82.0(2083)	34.5(876)	34.5(876)	51.8 (1315)	32.1 (815)	33.1 (840)	57.7 (1465)	15600
40	(1000)	92.0 (2337)	92.0 (2337)	92.0(2337)	38.6(978)	38.6(978)	52.0 (1320)	36.0 (915)	37.0 (940)	64.6 (1640)	20800
42	(1050)	96.0 (2437)	96.0 (2437)	96.0(2437)	40.2(1022)	40.2 (1022)	55.3 (1405)	38.2 (970)	38.6 (980)	67.7 (1720)	23000
48	(1200)	100.0 (2540)	100.0 (2540)	100.0(2540)	46.0(1168)	46.0 (1168)	62.8 (1595)	43.5 (1105)	44.1 (1120)	77.6 (1970)	27000
56	(1400)	116.1 (2949)	116.1 (2949)	116.1(2949)	54.5(1384)	54.5 (1384)	73.0 (1855)	51.2 (1300)	50.8 (1290)	90.7 (2305)	47490

TRUNNION MOUNTED BALL VALVES
OVERALL DIMENSIONS-SIDE ENTRY DESIGN ANSI/ASME CLASS 900

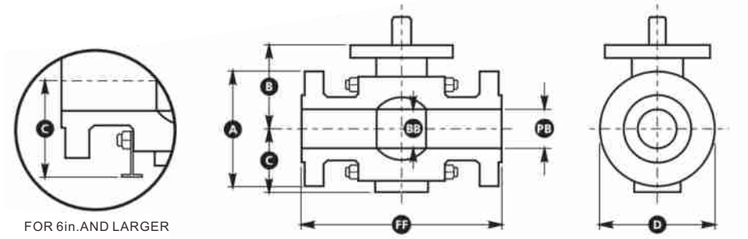


FOR 6in.AND LARGER

ANSI/ASME CLASS 900

SIZE in.	(mm)	FF RF	FF RTJ	FF WE	BB	PB	A	B	C	D	Weight (kg)
2×11/2	(50×40)	14.5(368)	14.6 (371)	14.5 (368)	1.5 (38)	2.0 (51)	8.5 (216)	4.1 (105)	4.1 (105)	5.9 (150)	56
2	(50)	14.5(368)	14.6 (371)	14.5 (368)	2.0 (51)	2.0 (51)	8.5 (216)	4.1 (105)	4.1 (105)	6.3 (160)	75
3×2	(80×50)	15.0 (381)	15.1 (384)	15.0 (381)	2.0 (51)	3.0 (77)	9.5 (241)	4.1 (105)	4.1 (105)	6.3 (160)	83
3	(80)	15.0 (381)	15.1 (384)	15.0 (381)	3.0 (77)	3.0 (77)	9.5 (241)	6.5 (165)	5.1 (130)	7.5 (190)	100
4×3	(100×80)	18.0 (457)	18.1 (460)	18.0 (457)	3.0 (77)	4.0 (102)	11.5 (292)	6.5 (165)	5.1 (130)	7.5 (190)	120
4	(100)	18.0 (457)	18.1 (460)	18.0 (457)	4.0 (102)	4.0 (102)	11.5 (292)	8.3 (210)	6.6 (167)	9.3 (237)	160
6×4	(150×100)	24.0 (610)	24.1 (613)	24.0 (610)	4.0 (102)	6.0 (152)	15.0 (381)	8.3 (210)	6.6 (167)	9.3 (237)	225
6	(150)	24.0 (610)	24.1 (613)	24.0 (610)	6.0 (152)	6.0 (152)	15.0 (381)	10.2 (260)	8.3 (210)	12.6 (320)	350
8×6	(200×150)	29.0 (737)	29.1 (740)	29.0 (737)	6.0 (152)	8.0 (203)	18.5 (470)	10.2 (260)	8.3 (210)	12.6 (320)	485
8	(200)	29.0 (737)	29.1 (740)	29.0 (737)	8.0 (203)	8.0 (203)	18.5 (470)	11.6 (295)	10.5 (266)	16.5 (420)	645
10×8	(250×200)	33.0 (838)	33.1 (841)	33.0 (838)	8.0 (203)	10.0 (254)	21.5 (545)	11.6 (295)	10.5 (266)	16.5 (420)	800
10	(250)	33.0 (838)	33.1 (841)	33.0 (838)	10.0 (254)	10.0 (254)	21.5 (545)	13.6 (345)	13.0 (330)	20.3 (515)	1000
12×10	(300×250)	38.0 (965)	38.1 (968)	38.0 (965)	10.0 (254)	12.0 (305)	24.0 (610)	13.6 (345)	13.0 (330)	20.3 (515)	1200
14×10	(350×250)	40.5(1029)	40.9(1038)	40.5(1029)	10.0 (254)	12.8 (324)	25.2 (640)	13.6 (345)	13.0 (330)	20.3 (515)	1300
12	(300)	38.0 (965)	38.1 (968)	38.0 (965)	12.0 (305)	12.0 (305)	24.0 (610)	15.4 (390)	15.0 (380)	23.8 (605)	1500
14×12	(350×300)	40.5(1029)	40.9(1038)	40.5(1029)	12.0 (254)	12.8 (324)	25.2 (640)	15.4 (390)	15.0 (380)	23.8 (605)	1700
16×12	(400×300)	44.5(1130)	44.9(1140)	44.5(1130)	12.0 (254)	14.8 (375)	27.8 (705)	15.4 (390)	15.0 (380)	23.8 (605)	1800
14	(350)	40.5(1029)	40.9(1038)	40.5(1029)	12.8 (324)	12.8 (324)	25.2 (640)	15.7 (400)	14.6 (370)	25.2 (640)	1900
16×14	(400×350)	44.5(1130)	44.9(1140)	44.5(1130)	12.8 (324)	14.8 (375)	27.8 (705)	15.7 (400)	14.6 (370)	25.2 (640)	2100
16	(400)	44.5(1130)	44.9(1140)	44.5(1130)	14.8 (375)	14.8 (375)	27.8 (705)	17.3 (440)	17.1 (435)	28.1 (715)	2600
18×16	(450×400)	48.0(1219)	48.5(1232)	48.0(1219)	14.8 (375)	16.7 (425)	30.9 (785)	17.3 (440)	17.1 (435)	28.1 (715)	2850
20×16	(500×400)	52.0(1321)	52.5(1333)	52.0(1321)	14.8 (375)	18.6 (473)	33.7 (855)	17.3 (440)	17.1 (435)	28.1 (715)	3000
18	(450)	48.0(1219)	48.5(1232)	48.0(1219)	16.7 (425)	16.7 (425)	30.9 (785)	19.0 (482)	19.7 (500)	31.5 (800)	3100
20×18	(500×450)	52.0(1321)	52.5(1333)	52.0(1321)	16.7 (425)	18.6 (473)	33.7 (855)	19.0 (482)	19.7 (500)	31.5 (800)	3300
20	(500)	52.0(1321)	52.5(1333)	52.0(1321)	18.6 (475)	18.6 (473)	33.7 (855)	20.9 (530)	19.7 (500)	35.4 (900)	4300
24×20	(600×500)	61.0(1549)	61.7(1568)	61.0(1549)	18.6 (475)	22.5 (571)	40.9(1040)	20.9 (530)	19.7 (500)	35.4 (900)	4700
22	(550)	-	-	-	-	-	-	-	-	-	-
24	(600)	61.0(1549)	61.7(1568)	61.0(1549)	22.5 (571)	22.5 (571)	40.9(1040)	24.2 (615)	24.8 (630)	41.7(1060)	7100
30×24	(750×600)	74.0(1880)	74.9(1902)	74.0(1880)	22.5 (571)	28.1 (714)	48.4(1230)	24.2 (615)	24.8 (630)	41.7(1060)	7500
26	(650)	65.0(1651)	65.9(1674)	65.0(1651)	24.4 (619)	24.4 (619)	42.8(1085)	25.6 (650)	25.6 (650)	44.1(1120)	9600
28	(700)	69.0(1753)	69.9(1775)	69.0(1753)	26.3 (667)	26.3 (667)	46.0(1170)	26.4 (670)	28.0 (710)	48.4(1230)	12000
30	(750)	74.0(1880)	74.9(1902)	74.0(1880)	28.1 (714)	28.1 (714)	48.4(1230)	28.5 (725)	30.7 (780)	51.2(1300)	15000
36×30	(900×750)	90.0(2286)	91.1(2315)	90.0(2286)	28.1 (714)	33.7 (857)	57.5(1460)	28.5 (725)	30.7 (780)	51.2(1300)	16000
32	(800)	80.0(2032)	80.9(2054)	80.0(2032)	30.0 (762)	30.0 (762)	51.8(1315)	30.9 (785)	31.9 (810)	53.5(1360)	18000
34	(850)	85.0(2159)	86.1(2188)	85.0(2159)	31.9 (810)	31.9 (810)	54.9(1395)	31.7 (805)	33.5 (850)	57.9(1470)	21000
36	(900)	90.0(2286)	91.1(2315)	90.0(2286)	33.7 (857)	33.7 (857)	57.5(1460)	33.3 (845)	35.4 (900)	60.2(1530)	24000

TRUNNION MOUNTED BALL VALVES
OVERALL DIMENSIONS-SIDE ENTRY DESIGN ANSI/ASME CLASS1500,2500



FOR 6in.AND LARGER

ANSI/ASME CLASS 1500

SIZE in.	(mm)	FF			BB	PB	A	B	C	D	Weight (kg)
		RF	RTJ	WE							
2×11/2	(50×40)	14.5 (368)	14.6 (371)	14.5 (368)	1.5 (38)	2.0 (51)	8.5(216)	4.1 (105)	4.1(105)	5.9(150)	60
2	(50)	14.5 (368)	14.6 (371)	14.5 (368)	2.0 (51)	2.0 (51)	8.5 (216)	4.1 (105)	4.1(105)	6.3(160)	80
3×2	(80×50)	18.5 (470)	18.6 (473)	18.5 (470)	2.0 (51)	3.0 (77)	10.5 (267)	4.1 (105)	4.1(105)	6.3(160)	100
3	(80)	18.5 (470)	18.6 (473)	18.5 (470)	3.0 (77)	3.0 (77)	10.5 (267)	6.5 (165)	5.1(130)	7.5(190)	150
4×3	(100×80)	21.5 (546)	21.6 (549)	21.5 (546)	3.0 (77)	4.0 (102)	12.2 (311)	6.5 (165)	5.1(130)	7.5(190)	180
4	(100)	21.5 (546)	21.6 (549)	21.5 (546)	4.0 (102)	4.0 (102)	12.2 (311)	8.5 (215)	6.6(167)	9.6(245)	250
6×4	(150×100)	27.8 (705)	28.0 (711)	27.8 (705)	4.0 (102)	5.7 (146)	15.5 (394)	8.5 (215)	6.6(167)	9.6(245)	340
6	(150)	27.8 (705)	28.0 (711)	27.8 (705)	5.7 (146)	5.7 (146)	15.5 (394)	10.2 (260)	9.1(230)	13.6(345)	520
8×6	(200×150)	32.8 (832)	33.1 (841)	32.8 (832)	5.7 (146)	7.6 (194)	19.0 (483)	10.2 (260)	9.1(230)	13.6(345)	670
8	(200)	32.8 (832)	33.1 (841)	32.8 (832)	7.6 (194)	7.6 (194)	19.0 (483)	11.8 (300)	11.2(285)	17.7(450)	845
10×8	(250×200)	39.0 (991)	39.4 (1000)	39.0 (991)	7.6 (194)	9.5 (241)	23.0 (585)	11.8 (300)	11.2(285)	17.7(450)	1000
10	(250)	39.0 (991)	39.4 (1000)	39.0 (991)	9.5 (241)	9.5 (241)	23.0 (585)	14.4 (365)	13.8(350)	21.9(555)	1600
12×10	(300×250)	44.5 (1130)	45.1 (1146)	44.5 (1130)	9.5 (241)	11.4 (289)	26.6 (675)	14.4 (365)	13.8(350)	21.9(555)	1800
14×10	(350×250)	49.5 (1257)	50.2 (1276)	49.5 (1257)	9.5 (241)	12.5 (317)	29.5 (750)	14.4 (365)	13.8(350)	21.9(555)	2000
12	(300)	44.5 (1130)	45.1 (1146)	44.5 (1130)	11.4 (289)	11.4 (289)	26.6 (675)	16.5 (420)	16.7(423)	28.0(710)	2000
14×12	(350×300)	49.5 (1257)	50.2 (1276)	49.5 (1257)	11.4 (289)	12.5 (317)	29.5 (750)	16.5 (420)	16.7(423)	28.0(710)	2200
16×12	(400×300)	54.5 (1384)	55.4 (1406)	54.5 (1384)	11.4 (289)	14.3 (362)	32.5 (825)	16.5 (420)	16.7(423)	28.0(710)	2400
14	(350)	49.5 (1257)	50.2 (1276)	49.5 (1257)	12.5 (317)	12.5 (317)	29.5 (750)	17.3 (440)	16.9(430)	30.3(770)	2800
16×14	(400×350)	54.5 (1384)	55.4 (1406)	54.5 (1384)	12.5 (317)	14.3 (362)	32.5 (825)	17.3 (440)	16.9(430)	30.3(770)	3000
16	(400)	54.5 (1384)	55.4 (1406)	54.5 (1384)	14.3 (362)	14.3 (362)	32.5 (825)	18.9 (480)	19.7(500)	33.5(850)	3800
18×16	(450×400)	60.5 (1537)	61.4 (1559)	60.5 (1537)	14.3 (362)	16.0 (407)	36.0 (916)	18.9 (480)	19.7(500)	33.5(850)	4100
20×16	(500×400)	65.5 (1664)	66.4 (1686)	65.5 (1664)	14.3 (362)	18.0 (457)	38.8 (985)	18.9 (480)	19.7(500)	33.5(850)	4400
18	(450)	60.5 (1537)	61.4 (1559)	60.5 (1537)	16.0 (407)	16.0 (407)	36.0 (916)	21.7 (550)	23.6(600)	38.6(980)	5000
20×18	(500×450)	65.5 (1664)	66.4 (1686)	65.5 (1664)	16.0 (407)	18.0 (457)	38.8 (985)	21.7 (550)	23.6(500)	38.6(980)	5300
20	(500)	65.5 (1664)	66.4 (1686)	65.5 (1664)	18.0 (457)	18.0 (457)	38.8 (985)	24.4 (620)	25.6(650)	40.2(1020)	6500
24×20	(600×500)	80.4 (2043)	81.5 (2071)	80.4 (2043)	18.0 (457)	21.0 (534)	46.1 (1170)	24.4 (620)	25.6(650)	40.2(1020)	6900
22	(550)	-	-	-	-	-	-	-	-	-	-
24	(600)	80.4 (2043)	81.5 (2071)	80.4 (2043)	21.0 (534)	21.0 (534)	46.1 (1170)	27.6 (700)	28.3(720)	50.8(1290)	10000

SIZE in.	(mm)	FF			BB	PB	A	B	C	D	Weight (kg)
		RF	RTJ	WE							
2×11/2	(50×40)	17.8 (451)	17.9 (454)	17.8 (451)	1.5 (38.0)	1.8 (44.5)	9.3 (235)	4.5 (115)	4.1(105)	5.9(150)	90
2	(50)	17.8 (451)	17.9 (454)	17.8 (451)	1.8 (44.5)	1.8 (44.5)	9.3 (235)	4.7 (120)	4.9(125)	6.7(170)	120
3×2	(80×50)	22.8 (578)	23.0 (584)	22.8 (578)	1.8 (44.5)	2.5 (63.5)	12.0 (305)	4.7 (120)	4.9(125)	6.7(170)	200
3	(80)	22.8 (578)	23.0 (584)	22.8 (578)	2.5 (63.5)	2.5 (63.5)	12.0 (305)	6.9 (175)	7.9(200)	9.4(240)	280
4×3	(100×80)	26.5 (673)	26.9 (683)	26.5 (673)	2.5 (63.5)	3.6 (89)	14.0 (356)	6.9 (175)	7.9(200)	9.4(240)	350
4	(100)	26.5 (673)	26.9 (683)	26.5 (673)	3.6 (89)	3.6 (89)	14.0 (356)	8.9 (225)	9.1(230)	13.0(330)	400
6×4	(150×100)	36.0 (914)	36.5 (927)	36.0 (914)	3.6 (89)	5.2 (133)	19.0 (483)	8.9 (225)	9.1(230)	13.0(330)	600
6	(150)	36.0 (914)	36.5 (927)	36.0 (914)	5.2 (133)	5.2 (133)	19.0 (483)	10.2 (260)	9.8(250)	17.7(450)	1000
8×6	(200×160)	40.2 (1022)	40.9 (1038)	40.2 (1022)	5.2 (133)	7.1 (181)	21.7 (550)	10.2 (260)	9.8(250)	17.7(450)	1200
8	(200)	40.2 (1022)	40.9 (1038)	40.2 (1022)	7.1 (181)	7.1 (181)	21.7 (550)	15.0 (380)	13.4(340)	24.6(625)	1400
10×8	(250×200)	50.0 (1270)	50.9 (1292)	50.0 (1270)	7.1 (181)	8.9 (226)	26.6 (675)	15.0 (380)	13.4(340)	24.6(625)	1800
10	(250)	50.0 (1270)	50.9 (1292)	50.0 (1270)	8.9 (226)	8.9 (226)	26.6 (675)	17.7 (450)	16.7(425)	29.5(750)	2600
12×10	(300×250)	56.0 (1422)	56.9 (1445)	56.0 (1422)	8.9 (226)	10.5 (267)	29.9 (760)	17.7 (450)	16.7(425)	29.5(750)	3000
12	(300)	56.0 (1422)	56.9 (1445)	56.0 (1422)	10.5 (267)	10.5 (267)	29.9 (760)	20.3 (515)	18.9(480)	34.6(880)	3600

DBB VALVE

Product Introduction

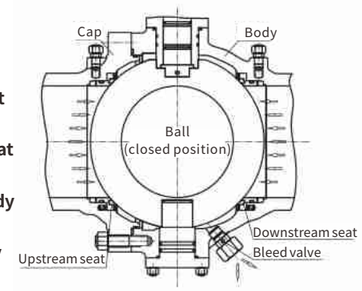
Double ball valve is two ball core in the same body used at the same time, can meet the same place need two outlet requirements, and each outlet can be independently controlled, with simple structure, easy to operate the characteristics, can be widely used in the pipeline, especially on the gas pipeline. When the pipe needs to be cut off, the dual ball valve only needs to turn one of the balls to cut off the pipe, and the other ball will only operate after the ball ‘s seat seal assembly has failed. It can also move the two spheres alternately to make the service life of the product longer and achieve double safety and double cutting effect on the pipeline. The two high pressure ball valves are formed in one body, which eliminates the need to temporarily debug the flow center line of the two ball valves during installation, and also reduces one connection point and one leakage point in the direct series installation of the two high pressure ball valves, making it safe and reliable.

Structural Features

The Double Block and Bleed Ball Valve require two isolation in one line and a bleed function. It is applied to control the flow between the two ‘ball valves ‘ cavity in order to block the downstream pipeline in a safety way. The double block is playing the role of venting the pressure safety during maintenance by a valve stead of two bolted valves.

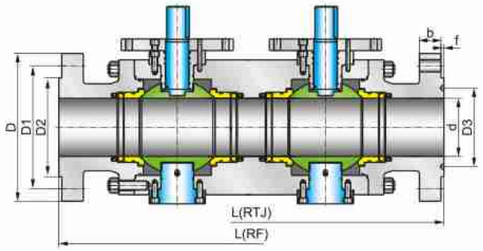
Double Block and Bleed (DBB)

When the valve is closed and the middlecavity is emptiedthrough the discharge valve, the upstream and downstream seats willindependently block the fluid at the inlet andoutlet to realize double block function.Another function of the discharge device isthat the valve seat can be checked if there isany leakage during the test. In addition, thedeposits inside the body can be washed anddischarged through the discharge device toreduce damage to the seat by impurities inthe medium.



Double Block and Bleed Function

DBB VALVE



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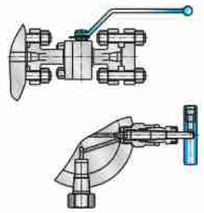
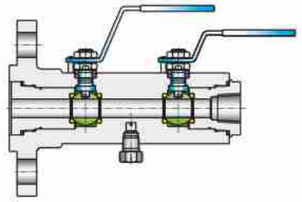


Different excretory solutions



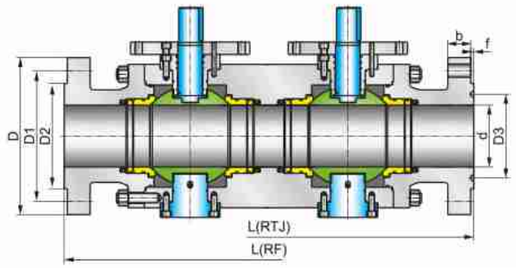
Floating

Main External Dimensions

unit:mm

Nominal Diameter		d	Flanged		Butt welding	Raised face flange							H	H1	weight
NPS	DN		L(RF)	L(RFJ)	L(BW)	D	D1	D2	D3	f	b	N-Φd			(Kg)
Class 150															
2"	**50**	50	356	369	394	150	120.5	92	-	2	14.5	4-Φ19	93	88	△
3"	**80**	75	457	470	537	190	152.5	127	-	2	17.5	4-Φ19	118.5	117	△
4"	**100**	100	502	514	578	230	190.5	157	-	2	22.5	8-Φ19	143.5	137	△
6"	**150**	150	787	799	850	280	241.5	216	-	2	24	8-Φ22	203	178.5	△
8"	**200**	201	902	915	966	345	298.5	270	-	2	27	8-Φ22	248	235	△
10"	**250**	252	991	1004	1017	405	362	324	-	2	29	12-Φ25	294	288	△
12"	**300**	303	1130	1142	1155	485	432	381	-	2	30.5	12-Φ25	345	330	△
14"	**350**	334	1245	1258	1321	535	476	413	-	2	33.5	12-Φ29	377	360	△
16"	**400**	385	1372	1385	1448	595	540	470	-	2	35	12-Φ29	418	400	△
Class 300															
2"	**50**	50	394	410	394	165	127	92	-	2	21	8-Φ19	93	88	△
3"	**80**	75	495	510	485	210	168.5	127	-	2	27	8-Φ22	118.5	117	△
4"	**100**	100	568	584	568	255	200	157	-	2	30.5	8-Φ22	143.5	137	△
6"	**150**	150	826	842	826	320	270	216	-	2	35	12-Φ22	208	178.5	△
8"	**200**	201	991	1007	991	380	330	270	-	2	40	12-Φ25	248	235	△
10"	**250**	252	1054	1070	1054	445	387.5	324	-	2	46.5	16-Φ29	294	288	△
12"	**300**	303	1194	1210	1194	520	451	381	-	2	49.5	16-Φ32	345	330	△
14"	**350**	334	1346	1362	1346	585	514.5	413	-	2	52.5	20-Φ32	377	360	△
16"	**400**	385	1473	1489	1473	650	571.5	470	-	2	56	20-Φ32	423	345	△
Class 600															
2"	**50**	50	470	473	470	165	168.5	92	-	2	26	8-Φ19	107	91.5	△
3"	**80**	75	610	613	613	210	127	127	-	2	32	8-Φ22	140	119	△
4"	**100**	100	762	765	765	275	216	157	-	2	38.5	8-Φ25	164	150	△
6"	**150**	150	978	981	978	355	292	216	-	7	48	12-Φ29	224	208	△
8"	**200**	201	1143	1147	1143	420	349	270	-	7	56	12-Φ32	272	248	△
10"	**250**	252	1372	1376	1372	510	432	324	-	7	64	16-Φ35	318	303	△
12"	**300**	303	1448	1451	1448	560	489	381	-	7	67	20-Φ35	355	341	△
14"	**350**	334	1549	1552	1549	605	527	413	-	7	70	20-Φ39	390	370	△
16"	**400**	385	1778	1781	1778	685	603	470	-	7	77	20-Φ41	400	415	△

DBB VALVE



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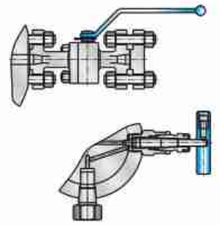
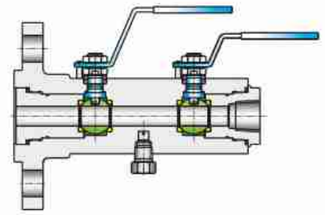


Different excretory solutions



Floating

Main External Dimensions

unit:mm

Nominal Diameter		d	Flanged		Butt welding	Raised face flange							H	H1	weight
NPS	DN		L(RF)	L(RFJ)	L(BW)	D	D1	D2	D3	f	b	N-Φd			(Kg)
Class 900															
2"	**50**	50	610	613	610	215	165	124	95.25	7.92	38.5	8-Φ25	126.5	105	△
3"	**80**	75	660	683	660	240	190.5	156	123.83	7.92	38.5	8-Φ25	150	130	△
4"	**100**	100	826	829	826	280	235	181	149.23	7.92	45	8-Φ32	172.5	158	△
6"	**150**	150	1054	1057	1054	380	317.5	241	211.12	7.92	56	12-Φ32	230	210	△
8"	**200**	201	1295	1298	1295	470	393.5	308	269.88	7.92	64	12-Φ39	290	255	△
10"	**250**	252	1473	1475	1473	545	470	362	323.85	7.92	70	16-Φ39	330	316	△
12"	**300**	303	1651	1654	1651	610	533.5	419	381	7.92	79.5	20-Φ39	366	351	△
14"	**350**	334	1880	1889	1880	640	559	467	419.1	11.13	86	20-Φ42	415	376	△
16"	**400**	373	1930	1940	1930	705	616	524	469.9	11.13	89	20-Φ45	452	421	△
Class 1500															
2"	**50**	50	610	613	610	215	165	124	95.25	7.92	38.5	8-Φ25	126.5	105	△
3"	**80**	75	826	829	826	265	203.2	168	136.53	7.92	48	8-Φ32	166	149	△
4"	**100**	100	965	968	965	310	241.3	194	181.93	7.92	54	8-Φ35	219	178	△
6"	**150**	144	1232	1238	1232	385	317.5	248	211.14	9.53	83	12-Φ39	268	234	△
8"	**200**	192	1448	1457	1448	435	393.7	318	269.88	11.13	92	12-Φ45	305	270	△
10"	**250**	239	1778	1787	1778	585	482.6	371	323.85	11.13	108	12-Φ51	358	336	△
12"	**300**	287	2083	2099	2083	675	571.5	438	381	14.27	124	16-Φ54	414	395	△
14"	**350**	315	2286	2305	2286	750	635	489	491.1	15.88	134	16-Φ60	471	441	△
16"	**400**	360	2422	2445	2422	825	704.8	546	469.9	17.48	146.5	16-Φ67	498	456	△
Class 2500															
2"	**50**	42	762	762	762	235	171.4	133	101.6	7.92	51	8-Φ29	149	123	△
3"	**80**	62	1029	1153	1029	305	228.6	168	127	9.53	67	8-Φ35	215	171	△
4"	**100**	87	1143	1562	1143	355	273	203	157.18	11.13	76.5	8-Φ42	245	206	△
6"	**150**	131	1549	1559	1549	485	368.3	279	228.6	12.7	108	8-Φ54	306	265	△
8"	**200**	179	1880	1896	1880	550	438.2	340	279.4	14.27	127	12-Φ54	361	336	△

ZHEJIANG LIANGYI VALVE

GATE VALVE SERIES

CAST STEEL GATE VALVE

Product Introduction

Gate valves are linear valves that typically have a parallel closure element perpendicular to the process flow, that is, it slides into the flow layer and closes. The simplicity of the gate valve 's structure and its extensive use for general purpose and varying temperature and pressure conditions make it one of the most common valves in use today. It is specially designed for thin slurry containing solids, particles and powders and for freezing or vacuum operation, and is easy to maintain and disassemble. Gate valves are fire safe in nature and are often prescribed for fire safe operation. Therefore, it is widely used in petroleum, chemical industry, chemical fertilizer, oil field, electric power and other industries.

Structural Features

Flanged ends cast steel gate valve are used to cut or connect the pipe media under nominal pressure between PN 1.6-25.0MPaworking temperatures between-29-600°C, in oil industry, chemical industry fossil-fired power plants

The main structure features include:

1.Sensible products structure, reliable sealing. Excellent performance and good looking

2.Cobalt base alloy welded sealing surface, which is wearing resistant, erosion proof, abrasion proof and long-lived

3. The surface and the adjusting media of the valve shaft are nitrogenized so that it is erosion and abrasion resistant

4. There is no backward sealing structure in the valve, so the sealing id reliable

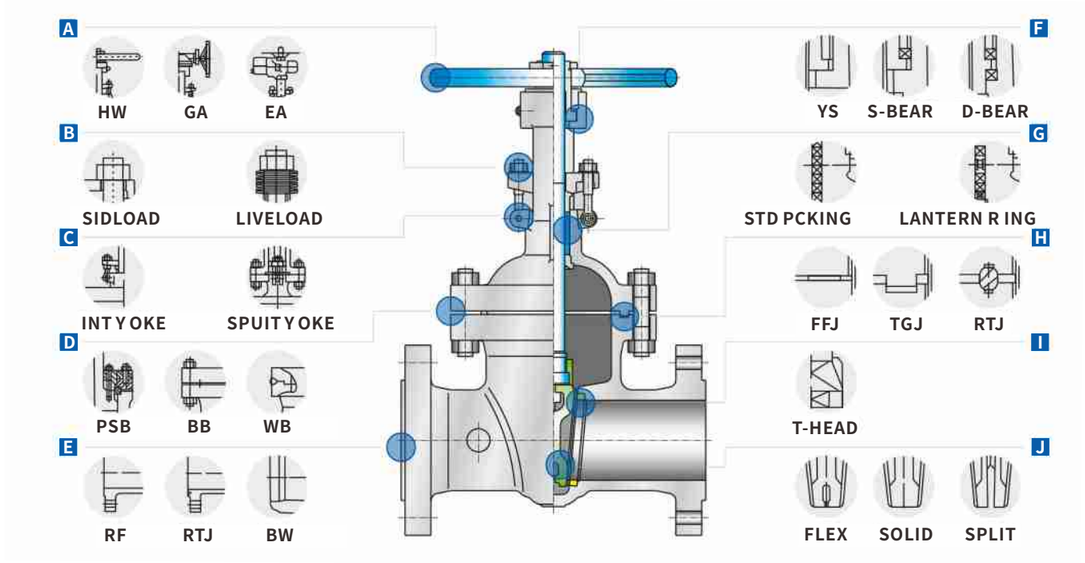
5. The material of the filling and the flange size can be chosen and matched according to the applications and the requirements of the use 's. That can satisfies all kinds of working requirements.

Material Range

Standard body/bonnet materials include nine grades of carbon, low alloy and stainless steels. For special apolications they can be supplied in other gardes of alloy and stainless steel. There 's a full range of trim materials to match any service.Optional packing and gasket materials are available for a full range of service conditions.

CAST STEEL GATE VALVE

Structure Order



A	Operating	Large hand wheels for easy operation. Also available with gean-ring，motor actuators，pneumatic or hydraulic actuators for more diffcult services.
B	Live Load Packing	In services requiring frequent cycling or with high pressure/temperature variations，live loading extends the service life bet-ween maintenanceperiods by requining less frequent packing gland adJu-stments Belleville springs are employed to provide constant packing gland stress
C	OS&Y	Outside Screw and Yoke. Cast steel gate valve yoke. Integral with bonnet for 150Lb-8“，300Lb-8“，600Lb-8“，900Lb-4“ & small.
D	BB	Bolted bonnet. Welding bonnet and pressure seal bonnet in services requining frequent cycling or with high pressure/temperature variations
E	End Connections	A choice of Flanged，RTJ flanged or Butt welding end for piping flexibility.
F	Yoke sleeve	Extra long thread engagement between yoke sleeve and stem provide long thread life. Valves of sizes larger than 150Lb-12“ 300Lb-10“，600Lb-6“，900Lb/1500Lb / 2500Lb-4“ are regularly provided with roll bearing yokes
G	Lantern Ring and Double Packing set	Lantern ring with leak off fitting connection and double packing stack is optionally available for critical services.
H	Body-to-Bonnet joint	A flat face gasket joint is used in the150Lb valves. A male and female joint is used in 300Lb to 600Lb valves. Ring joint is used in the body tobonnet connection in 900Lb & higher rated valves.
I	Stem	All wedge gate valves are provided with upset forged T-headstems. By forging the T-head，the stem at the stem-wedge connection is stregthended. This design also allows the wedge to self-alingn，eliminating the possibility of bent stem jamming the wedge.
J	Body-to-Bonnet joint	Integral guide rib faces assure selfcentering of wedge. Flexible wedge gate valve has a one-piece，twin-disc wedge，which is designed so thateach half flexes independently. Available in solid，flex split and His desigans.

CAST STEEL GATE VALVE
API

Design specifications

Design standards	Structure length	Fiange connection size	Test and inspection
API 600,API6D	ASME B 16.10	ASME B 16.5	API 598

Notes: The sizes of serial valve connecting flange can be designed according to customers ‘requirements

Products specification

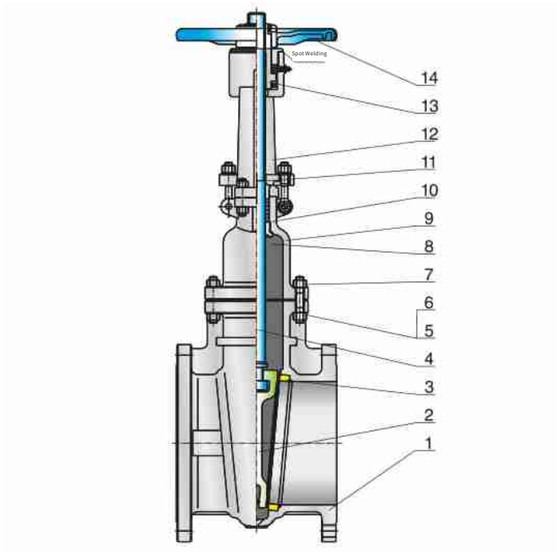
Pressure rate	Operation type & structue type	Connecting type	Nominl size
150	Hand-operated & Bolted bonnet construction	Fianged ends	2"~60"
300			2"~56"
600			2"~48"
900			2"~36"
150	Electric of Gear operation & Bolted bonnet construction	Flanged ends	14"~48"
300			14"~48"
600			6"~48"
900			3"~16"
1500			3"~16"
900	Hand-operated & Pressure seal construction	Flanged ends	2"~36"
1500			2"~30"
2500			2"~24"
900	Hand-operated & Pressure seal constructior	Butt welding ends	2"~36"
1500			2"~30"
2500			2"~24"
900	Electric or Gear operation & Pressureseal canstuction	Flanged ends	3"~20"
1500			3"~20"
2500			6"~8"
900	Electric or Gear operation & Pressureseal canstuction	Butt welding ends	3"~20"
1500			3"~20"
2500			6"~8"

Technical Specification

Pressure rate	Shell test pressure	Sealing test pressure	Temperature	Suitable medium
150	3.0	2.2	⩽600°C	Water oil & gas
300	7.5	5.5		
600	15	11		
900	22.5	16.5		
1500	38.3	28.1		
2500	63.83	46.81		

CAST STEEL GATE VALVE

API



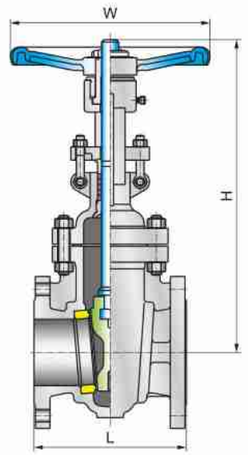
Materials of Main Parts

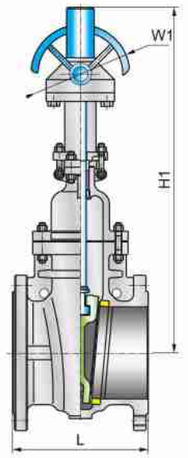
NO	Part name	Material
1	Body	ASTM 352 LCB ASTM A995 4A 5A 6A ASTM A494 CW-6MC ASTM A494 CU5MCUC ASTM A494 M35-1
2	Wedge	ASTM A216-WCB ASTM A217-WC6,WC9,C5 ASTM A351-CF8,CF8M,CF,CF3M
3	Seat	ASTM A105 ASTM A182-F11,F22,F5,F304, F316,F304L,F316L
4	Stem	ASTM A182 Gr.F6a ASTM A182 F22 ASTM A182-F304,F316,F321,F304L,F316L
5	Stud	ASTM A193-B7,A320-B8,A193-B8M
6	Nut	ASTM A1942H,A194-8,A194-8M
7	Gasket	Graphite & stainless steel
8	Back seat	ASTM A182 Gr.F6a ASTM A182 F22 ASTM A182-F304,F316,F321,F304L,F316L
9	Bonnet	ASTM A216-WCB ASTM A217-WC6,WC9,C5 ASTM A351-CF8,CF8M,CF3,CF3M
10	Packing	Graphite
11	Giand cover	ASTM A182 Gr.F6a ASTM A351-CF8,CF8M,CF3,CF3M
12	Gland flange	ASTM A216-WCB ASTM A351-CF8,CF3,CF3M
13	Yoke nut	Copper alloy
14	Hand wheel	ASTM A47-32510

GNTV LYV®

CAST STEEL GATE VALVE

API



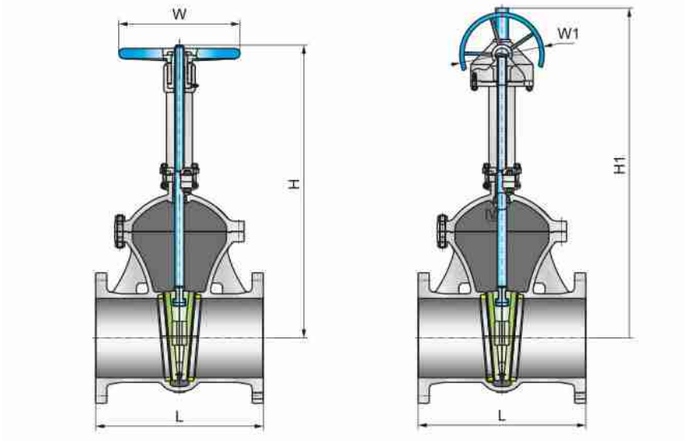


Main External Dimensions

Size	Hand operated				Gear operated				
	L	H	W	Weight	L	H1	W1	Gear actuator	Weight
	Z(5)40Y-150Lb(C.P.R.L.I.S.H.V)								
2	178	360	200	18	-	-	-	-	-
2-1/2	190	410	200	25	-	-	-	-	-
3	203	440	250	32	-	-	-	-	-
4	229	500	250	47	-	-	-	-	-
5	254	580	300	71	-	-	-	-	-
6	267	660	300	75	-	-	-	-	-
8	292	775	350	116	-	-	-	-	-
10	330	925	400	175	-	-	-	-	-
12	356	1100	450	254	-	-	-	-	314
14	381	1295	500	360	381	1651	310	BA-0	400
16	406	1435	600	464	406	1879	460	BA-1	500
18	432	1626	650	570	432	2184	460	BA-1	610
20	457	1829	650	750	457	2431	610	BA-2	820
24	508	2175	700	-	508	2873	610	BA-2	1160
26	558	2235	750	-	558	3086	610	BA-2	1550
28	610	2310	750	-	610	3327	610	BA-2	1900
30	610	2695	800	-	610	3606	610	BAA-3	2200
32	-	-	-	-	660	3708	610	BAA-3	2500
36	-	-	-	-	711	3924	610	BAA-3	3400

CAST STEEL GATE VALVE

API



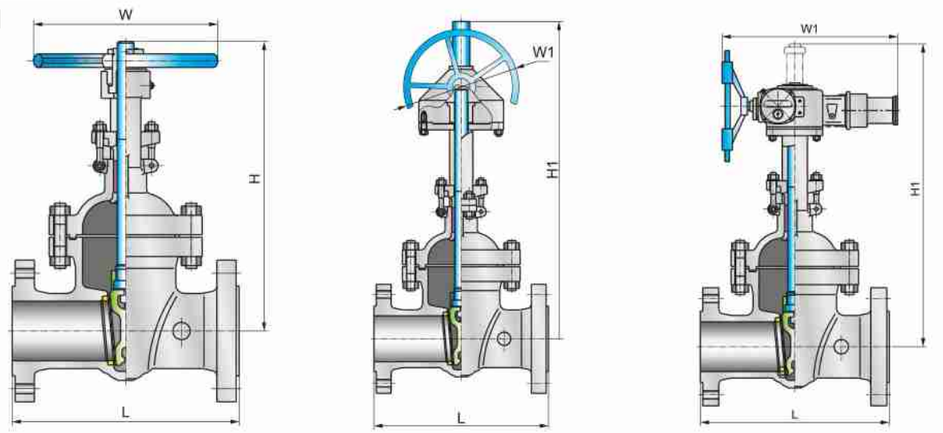
Main External Dimensions

Z(5)40Y-300Lb(C.P.R.L.I.S.H.V)

Size	Hand operated				Gear operated				
	L	H	W	Weight	L	H1	W1	Gear actuator	Weight (kg)
2	216	380	200	25	-	-	-	-	-
2-1/2	241	410	250	35	-	-	-	-	-
3	283	450	250	45	-	-	-	-	-
4	305	530	300	70	-	-	-	-	-
5	381	700	300	100	-	-	-	-	-
6	403	730	350	120	-	-	-	-	-
8	419	820	400	193	-	-	-	-	-
10	457	1010	450	300	-	-	-	-	-
12	502	1130	500	435	-	-	-	-	468
14	762	1489	600	700	762	1790	460	BA-1	780
16	838	1580	650	950	838	1968	460	BA-1	1030
18	914	2017	700	-	914	2273	610	BA-2	1290
20	991	2228	700	-	991	2482	610	BA-2	1650
24	1143	2650	750	-	1143	3054	610	BA-2	2660
26	-	-	-	-	1245	3219	610	BA-2	3000
28	-	-	-	-	1346	3378	610	BAA-3	3310
30	-	-	-	-	1397	3530	610	BAA-3	4000

CAST STEEL GATE VALVE

API



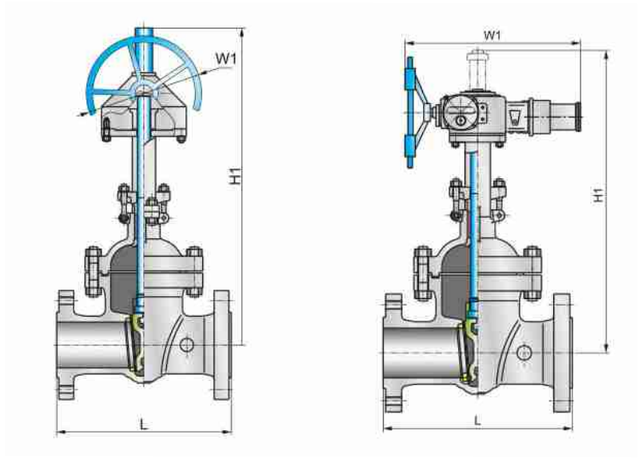
Main External Dimensions

Z(5.9)40Y-600Lb(C.P.R.L.I.S.H.V)

Size	Hand operated				Gear operated					Electric			
	L1/L2	H	W	Weight	L1/L2	H1	W1	Gear actuator	Weight	L1/L2	H2	Torque (NM)	Weight (kg)
2	292/295	425	250	32	-	-	-	-	-	292/295	550	200	-
2-1/2	330/333	485	300	42	-	-	-	-	-	330/333	600	200	135
3	356/359	510	300	60	-	-	-	-	-	356/359	660	300	194
4	432/435	610	400	100	-	-	-	-	-	432/435	780	300	223
5	508/601	700	450	160	-	-	-	-	-	505/601	850	400	296
6	559/562	820	500	220	559/562	840	310	BA-0	250	559/562	990	600	385
8	660/664	920	600	375	660/664	930	310	BA-0	410	660/664	1130	900	541
10	787/791	1080	600	-	787/791	1150	460	BA-1	691	787/791	1360	1200	816
12	838/841	1220	650	-	834/841	1220	460	BA-1	1000	838/841	1520	1800	1090
14	889/892	1473	700	-	889/892	1380	610	BA-2	1205	889/892	1730	2500	1560
16	991/994	1651	800	-	991/994	1435	610	BA-2	1587	991/994	1840	3500	1950
18	1092/1095	1727	800	-	1092/1095	1915	610	BA-2	1965	1092/1095	2370	5000	2390
20	1194/1200	2019	800	-	1194/1200	2095	610	BAA-3	2450	1194/1200	2600	8000	2580
24	-	-	-	-	1397/1406	2155	610	BAA-3	3000	1397/1406	3160	12000	4190

CAST STEEL GATE VALVE

API



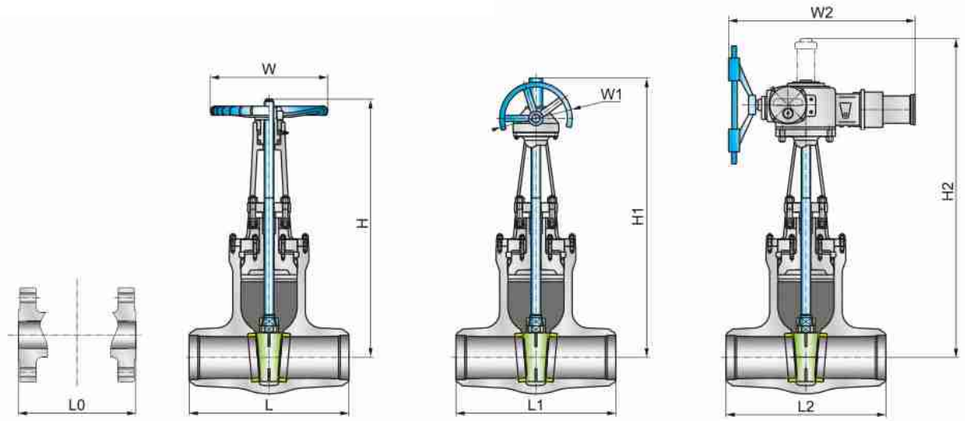
Main External Dimensions

Size	Hand operated				Gear operated					Electric			
	L1/L2	H	W	Weight	L1/L2	H1	W1	Gear actuator	Weight	L1/L2	H2	Torque (NM)	Weight (kg)
Z(5.9)40Y-900Lb(C.P.R.L.I.S.H.V)													
2	368/371	540	300	75	-	-	-	-	-	-	-	-	-
2-1/2	419/422	555	350	110	-	-	-	-	-	-	-	-	-
3	381/384	625	350	123	-	-	-	-	-	381/384	910	300	300
4	457/460	730	400	180	-	-	-	-	-	457/460	1020	450	325
6	610/613	860	600	360	610/613	895	460	BA-1	390	610/613	1060	900	570
8	737/740	930	600	-	737/740	1070	460	BA-1	620	737/740	1150	1200	885
10	838/841	1090	650	-	838/841	1290	610	BA-2	900	838/841	1320	1800	1300
12	965/968	1245	700	-	965/968	1540	610	BA-2	1345	965/968	1580	2500	1870
14	-	-	-	-	1029/1038	1620	610	BAA-3	1605	1029/1038	1660	3500	2370
16	-	-	-	-	1130/1140	1730	610	BAA-3	2300	1130/1140	1780	5000	3010
Z(5.9)40Y-1500Lb(C.P.R.L.I.S.H.V)													
3	470/473	165	165	-	-	-	-	-	165	-	-	-	△
4	546/549	246	246	-	-	-	-	-	246	-	-	-	△
-	-	-		-	-	-	-	-	-	-	-	-	△
6	705/711	-		-	832/841	1600	460	BA-1	520	-	-	-	△
8	832/841	-		-	-	-	-	-	910	-	-	-	△
10	911/1000	-		-	-	-	-	-	2115	-	-	-	△
12	1130/1146	-		-	-	-	-	-	3145	-	-	-	△
14	1257/1276	-		-	-	-	-	-	3950	-	-	-	△
16	1384/1407	-		-	-	-	-	-	5950	-	-	-	△

GNTV LYV®

CAST STEEL GATE VALVE

API Pressure Sealed

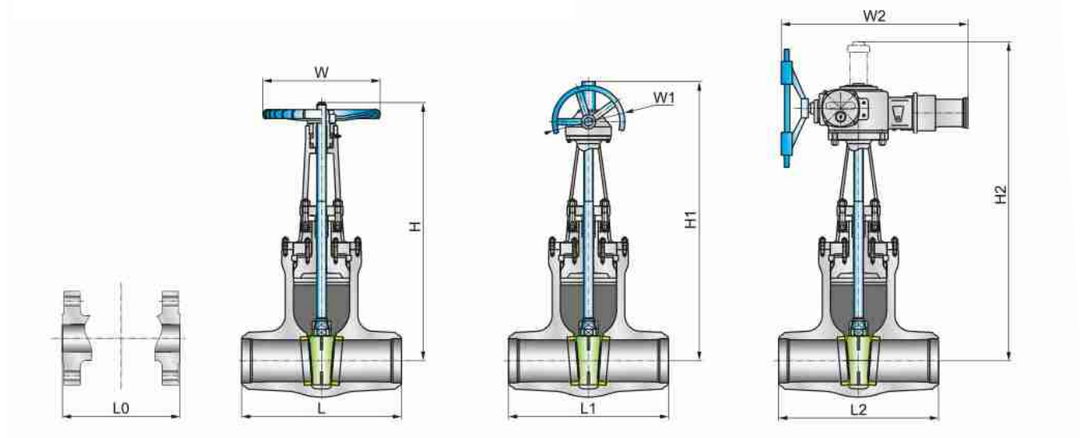


Main External Dimensions

Size	Hand operated				Gear operated					Electric			
	L0	H	W	Weight	L0	H1	W1	Gear actuator	Weight	L0	H2	Torque (NM)	Weight
ZP(5.9)40Y-900Lb(C.P.R.L.I.S.H.V) (Fianged ends) (RTJ)													
2	371	550	250	88	-	-	-	-	-	-	-	-	-
3	384	605	350	105	-	-	-	-	-	384	975	300	142
4	460	750	400	140	-	-	-	-	-	460	1200	450	204
6	613	840	500	300	613	895	460	BA-1	350	613	1280	900	356
8	-	-	-	-	740	1370	460	BA-1	530	740	1372	1200	530
10	-	-	-	-	841	1495	610	BA-2	950	841	1495	1800	950
12	-	-	-	-	968	1830	610	BA-2	1400	968	1830	2500	1400
14	-	-	-	-	1038	2145	610	BA-2	2010	1038	2144	3500	1800
16	-	-	-	-	1140	2405	610	BAA-2	2700	1140	2406	5000	3000
20	-	-	-	-	1334	2750	610	BAA-2	4400	1334	2800	6500	3800
ZP(5.9)60Y-900Lb(C.P.R.L.I.S.H.V) (Butt welding ends)													
2	216	550	250	68	-	-	-	-	-	-	-	-	–
3	305	605	350	85	-	-	-	-	-	305	975	300	135
4	356	750	400	102	-	-	-	-	-	356	1200	450	202
6	508	840	500	200	508	895	460	BA-1	280	508	1280	900	293
8	-	-	-	-	660	1370	460	BA-1	460	660	1372	1200	472
10	-	-	-	-	787	1495	610	BA-2	820	787	1495	1800	844
12	-	-	-	-	914	1830	610	BA-2	1150	914	1830	2500	1184
14	-	-	-	-	991	2145	610	BA-2	1500	991	2144	3500	1579
16	-	-	-	-	1092	2405	610	BAA-2	2100	1092	2406	5000	2136
20	-	-	-	-	1320	2750	610	BAA-2	3400	1320	2800	6500	3485
Pipe thickness	2"~6"SCH120,8"~20"SCH100												

CAST STEEL GATE VALVE

API Pressure Sealed



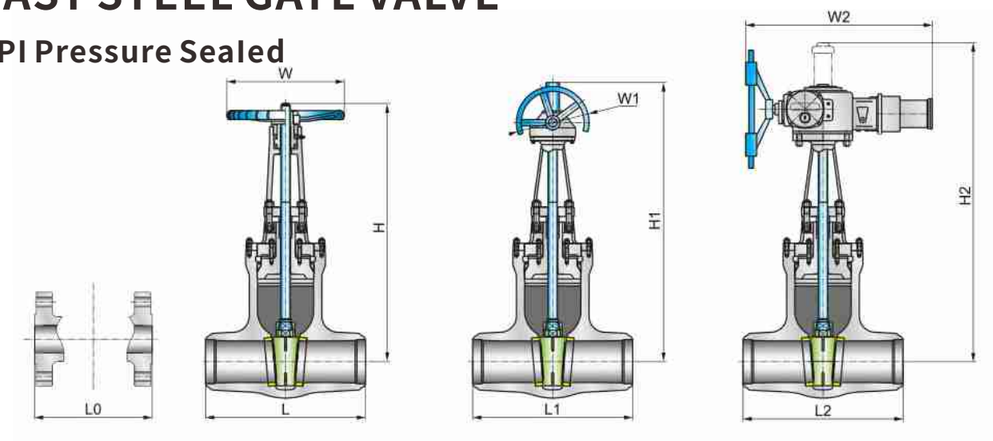
Main External Dimensions

Size	Hand operated				Gear operated					Electric			
	L0	H	W	Weight	L0	H1	W1	Gear actuator	Weight	L0	H2	Torque (NM)	Weight
ZP(5.9)40Y-1500Lb(C.P.R.L.I.S.H.V)(Fianged ends)(RTJ)													
2	371	590	300	100	-	-	-	-	-	-	-	-	-
3	473	711	350	130	-	-	-	-	-	473	736	450	210
4	549	774	450	200	-	-	-	-	-	549	831	450	290
6	-	-	-	-	711	1170	610	BA-2	544	711	1054	1800	560
8	-	-	-	-	841	1370	610	BA-2	825	841	1422	1800	980
10	-	-	-	-	1000	1655	610	BA-2	1375	1000	1714	1800	1470
12	-	-	-	-	1146	1810	610	BA-2	2085	1146	1905	2500	2220
14	-	-	-	-	1276	1981	610	BAA-2	2940	1276	1990	8000	2970
16	-	-	-	-	1407	2108	610	BAA-2	3790	1407	2210	12000	3900
20	-	-	-	-	1684	2387	610	BAA-2	5130	1686	2432	20000	5250
ZP(5.9)60Y-1500Lb(C.P.R.L.I.S.H.V)Butt welding ends													
2	216	550	-	89	-	-	610	-	-	-	-	-	-
3	305	620	-	110	-	-	610	-	-	305	736	450	185
4	406	750	-	180	-	-	610	-	-	406	831	450	268
6	-	-	-	-	559	1170	610	BA-2	370	559	1054	1800	472
8	-	-	-	-	711	1370	610	BA-2	610	711	1422	1800	754
10	-	-	-	-	864	1655	610	BA-2	1300	864	1714	1800	1411
12	-	-	-	-	991	1810	610	BA-2	2000	991	1905	2500	2133
14	-	-	-	-	1067	1981	610	BAA-2	2900	1067	1990	8000	2912
16	-	-	-	-	1194	2108	610	BAA-2	3490	1194	2210	12000	3516
20	-	-	-	-	1473	2387	610	BAA-2	4800	1473	2432	20000	4922
Pipe thickness	2"~4"SCH160,6"~20"SCH120												

GNTV LYV®

CAST STEEL GATE VALVE

API Pressure Sealed



Main External Dimensions

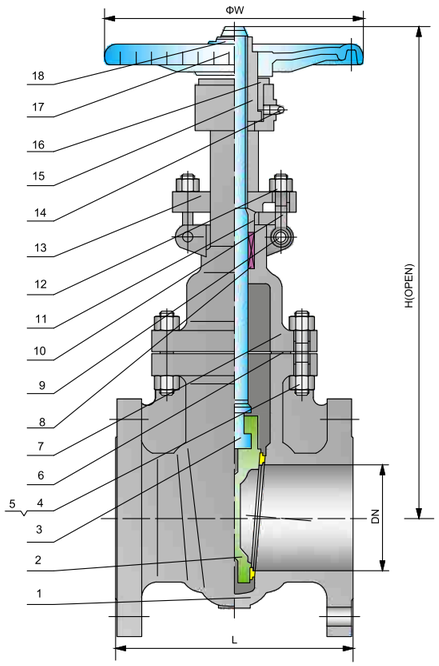
Size	Hand operated				Gear operated					Electric			
	L0	H	W	Weight	L0	H1	W1	Gear actuator	Weight	L0	H2	Torque (NM)	Weight
ZP(5.9)40Y-2500Lb(C.P.R.L.I.S.H.V)(Fianged ends)(RTJ)													
2	454	570	450	185	-	-	-	-	-	-	-	-	315
3	584	596	500	215	-	-	-	-	-	584	654	500	445
4	683	698	600	335	-	-	-	-	-	683	781	500	970
6	-	-	-	-	927	876	610	BAA-2	890	927	977	1800	1520
8	-	-	-	-	1038	1493	610	BAA-2	1420	1038	1523	1800	2630
10	-	-	-	-	1292	1600	610	BAA-2	2560	1292	1645	1800	3823
12	-	-	-	-	1445	1752	610	BAA-2	3740	1445	1802	2700	2700
ZP(5.9)60Y-2500Lb(C.P.R.L.I.S.H.V)Butt welding ends													
2	279	505	450	97	-	-	-	-	-	-	-	-	-
3	368	596	500	135	368	654	610	BA-2	203	368	683	500	199
4	457	698	600	215	457	781	610	BA-2	305	457	806	500	294
6	-	-	-	-	610	977	610	BAA-2	650	610	1024	1800	664
8	-	-	-	-	762	1493	610	BAA-2	900	762	1508	1800	924
10	-	-	-	-	914	1600	610	BAA-2	1600	914	1620	1800	1674
12	-	-	-	-	1041	1752	610	BAA-2	2300	1041	1790	2700	2312
Pipe thickness	2"~6"SCH120,8"~20"SCH100												

DIN RISING STEM GATE VALVE F4 SERIES

(PN4,PN6,PN10,PN16)

MAIN PARAMETER SPECICATION

Design and manufacture:DIN3352
Face to face：DIN3202-F4,EN558-1
End flange Dimensions:DIN2543,EN1092-1
Pressure test:DIN3230,EN12266-1



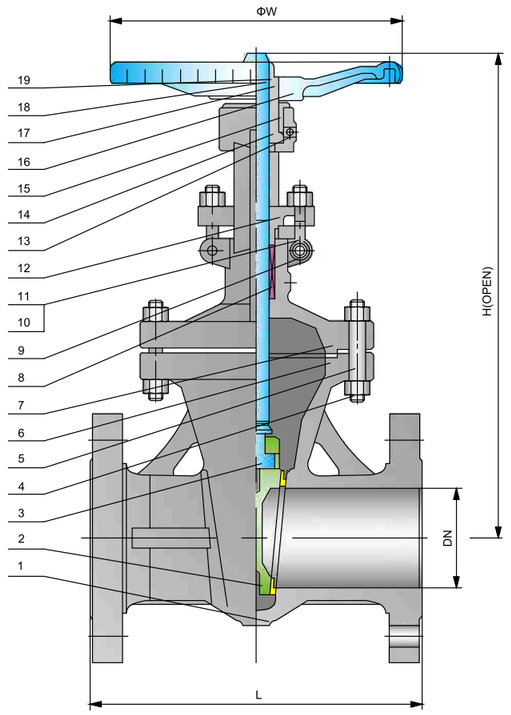
MAIN PART MATERIAL

No	PartName	Material
1	Body	GS-C25+13Cr1.0619
2	Disc	GS-C25+13Cr
3	Stem	A182 F6
4	Nut	A194 2H
5	Bolt	A193 B7
6	Gasket	SS+Graphite
7	Bonnet	GS-C25
8	Packing	Graphite
9	Pin	Carbon Steel
10	Gland Eyebolt	A193 B7
11	Gland	A182 F6
12	Nut	A194 2H
13	Gland Flange	GS-C25
14	Nipple	Brass
15	Stem Nut	copper Alloy
16	Retaining Nut	Carbon Steel
17	Hang Wheel	A536
18	Nut	Carbon Steel

Dimensions and Weights

DN	40	50	65	80	100	125	150	200	250	300	350	400	500	600	700	800	900	1000	1200	1500
L	140	150	170	180	190	200	210	230	250	270	290	310	350	390	430	470	510	550	630	790
H	395	400	435	515	595	725	780	980	1150	1380	1550	1745	2120	2520	3050	3280	3720	4200	5000	6300
W	180	200	220	250	280	300	300	350	400	450	500	550	600	700	-	-	-	-	-	-
Kg	12	18	23	30	42	56	77	105	155	195	245	355	517	852	1110	2631	-	2726	-	-

DIN RISING STEM GATE VALVE SERIES



MAIN PARAMETER SPECIFICATION

Design and manufacture:DIN3352
Face to face:DIN3202-F5,EN558-1
End flange Dimensions:DIN2543(PN16),DIN2544(PN25),
DIN2545(PN40),EN1092-1
Pressure test:DIN3230,EN12266-1

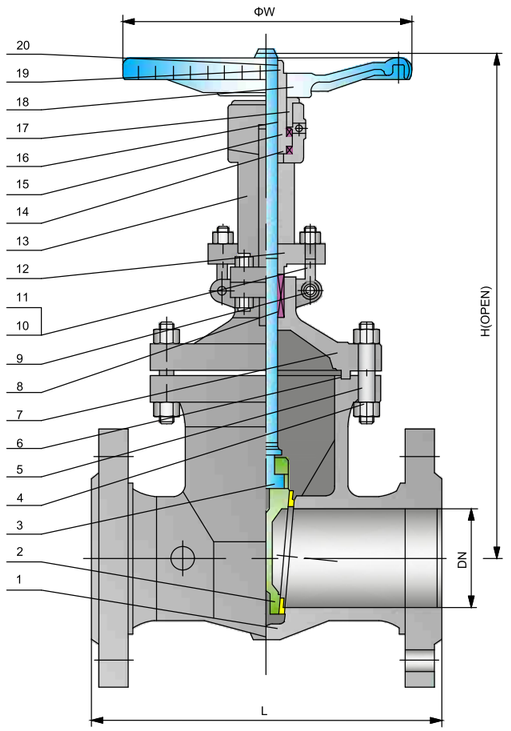
MAIN PART MATERIAL

NO	Part Name	Matenal
1	Body	GS-C25+13Cr1.0619
2	Wedge	GS-C25+13Cr
3	Stem	A182 F6
4	Nut	A192 2H
5	Bolt	A193 B7
6	Gasket	Graphite
7	Bonnet	GS-C25
8	Packing	Graphite
9	Pin	Carbon Steel
10	Gland Eyebolt	A193 B7
11	Nut	A194 2H
12	Gland	GS-C25
13	Nipple	Brass Copper
14	Stem Nut	Alloy
15	Retaining Nut	Carbon Steel
16	Hand Wheel	A536
17	Nane Plate	Stainless Steel
18	Nut	Carbon Steel
19	Grub Screw	Carbon Steel

Dimensions and Weights

PML	PN	DN	40	50	65	80	100	125	150	200	250	300	350	400	500	600	700	800	900	1000
F5	16	L	240	250	270	280	300	325	350	400	450	500	550	600	700	800	900	1000	1100	1200
		H	296	361	380	418	488	531	638	758	906	1058	1215	1392	1676	1900	-	-	-	-
		W	200	200	220	250	280	300	360	360	400	450	500	500	600	680	-	-	-	-
		Weight(KG)	16	21	27	33	45	65	88	163	230	300	405	513	1045	1275	1685	-	-	-
	25	L	240	250	270	280	300	325	350	400	450	500	550	600	700	800	900	1000	1100	1200
		H	296	362	383	418	496	606	674	766	111	1067	1223	1400	1676	1900	2590	2819	2997	3302
		W	180	200	220	250	280	300	300	350	400	450	500	550	700	800	-	-	-	-
		Weight(KG)	17	21	27	36	48	65	95	176	249	315	441	528	941	1400	-	-	-	-
F7	40	L	240	250	290	310	350	400	450	550	650	750	850	950	1150	1350	1550	1750	1950	2150
		H	323	364	389	418	489	541	657	824	985	1183	1312	1458	1658	1976	2641	2857	3048	3358
		W	200	200	250	250	300	300	360	400	450	500	600	600	650	750	-	-	-	-
		Weight(KG)	16	21	28	39	51	70	103	200	300	480	606	850	1350	1609	-	-	-	-

DIN RISING STEM GATE VALVE SERIES



MAIN PARAMETER SPECIFICATION

Design and manufacture:DIN3352
Face to face:DIN3202-F7,EN558-1
End flange Dimensions:DIN2546(PN63),DIN2547(PN100),
DIN2548(PN160),EN1092-1
Pressure test:DIN3230,EN12266-1

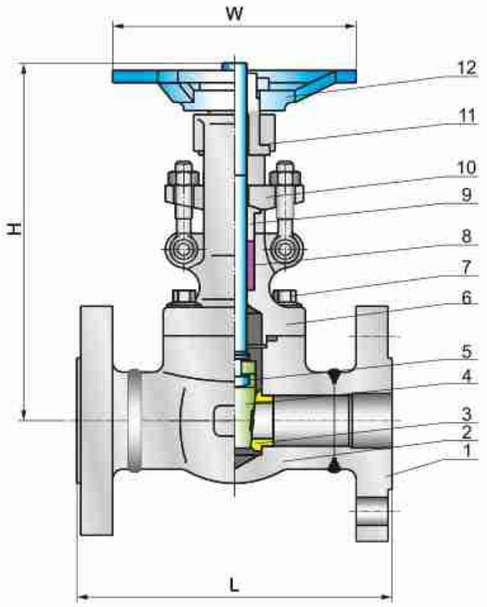
Standard Material Specifications

NO	Part Name	Matenal
1	Body	GS-C25+13Cr
2	Wedge	GS-C25+13Cr
3	Stem	A182 F6
4	Nut	A194 2H
5	Bolt	A193 B7
6	Gasket	Graphite
7	Bonnet	GS-C25
8	Packing	Graphite
9	Pin	Carbon Steel
10	Gland Eyebolt	A193 B7
11	Nut	A194 2H
12	Gland	GS-C25
13	Yoke	GS-C25
14	Bearings	Alloy Steel
15	Nipple	Brass
16	Stem Nut	Copper Alloy
17	Retaining Nut	Carbon Steel

Dimensions and Weights

PML	PN	DN	40	50	65	80	100	125	150	200	250	300	350	400	500	600
F7	63	L	240	250	290	310	350	400	450	550	650	750	850	950	1150	1350
		H	350	364	389	418	489	541	657	824	985	1183	1312	1458	2260	2720
		W	180	200	250	250	300	300	360	400	450	500	600	600	800	900
		Weight(KG)	-	38	44	52	88	108	182	215	364	512	764	-	-	-
	100	L	240	250	290	310	350	400	450	550	650	750	750	950	-	-
		H	360	490	540	573	675	744	800	890	1050	1208	1710	1920	-	-
		W	320	200	250	280	300	360	450	500	650	700	650	700	-	-
		Weight(KG)	-	33	49	60	94	142	197	356	600	958	1135	-	-	-
F2	160	L	260	300	360	390	450	525	600	750	-	-	-	-	-	-
		H	395	612	677	686	751	868	997	1224	-	-	-	-	-	-
		W	320	350	400	400	500	550	660	750	-	-	-	-	-	-
		Weight(KG)	-	73	110	141	185	320	462	711	-	-	-	-	-	-

FORGED STEEL GATE VALVE



Design Specifications

Construction type	BB-BG-OS&Y(WB-BG-OS&Y)
Operation type	Hand-operated
Design standard	AP1602,BS5352
Face to face	ASME B16.10
Fianged ends	ASME B16.5
Test&inspection	API 598

Materials of Main Parts

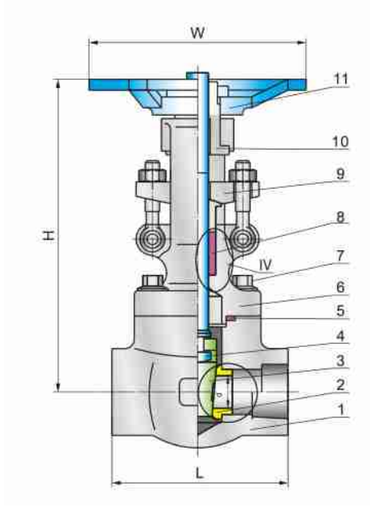
NO	Part name	Material
1	Flange	ASTM A105 ASTM A182-F11,F22,F5 ASTM A182-F304,F316,F304L,F316L
2	Body	ASTM A105 ASTM A182-F11,F22,F5 ASTM A182-F304,F316,F304L,F316L
3	Seat	ASTM A182 Gr.F6a ASTM A182-F11,F22,F5 ASTM A182-F304,F316,F304L,F361L
4	Wedge	ASTM A182 Gr.F6a ASTM A182-F11,F22,F5 ASTM A182-F304,F316,F304L,F361L
5	Stem	ASTM A182 Gr.F6a ASTM A182-F22 ASTM A182-F304,F316,F304L,F361L
6	Gasket	Graphite & stainless steel
7	Bonnet	ASTM A105 ASTM A182-F11,F22,F5 ASTM A182-F304,F316,F304L,F316L
8	Bolt	ASTM A193-B7,A320-B8,A193-B8M
9	Packing	Graphite
10	Gland cover	ASTM A105 ASTM A182-F11,F22,F5 ASTM A182-F304,F316,F304L,F316L
11	Gland flange	ASTM A105 ASTM A182-F304,F316
12	Yoke nut	410(13Cr)
13	Hand wheel	ASTM A47-32510

Main External Dimensions

Model		Z3(F.R.J)Y-(C.P.R)						Z6(F.R.J)Y-(C.P.R)					
Pressure rate		150						300					
Size	mm	15	20	25	32	40	50	15	20	25	32	40	50
	in	1/2	3/4	1	1/4	11/2	2	1/2	3/4	1	11/4	11/2	2
L (mm)	RF	108	117	127	140	165	203	152.5	178	203	216	228.5	266.5
	RTJ	119	130	140	153	178	216	163.5	191	216	229	241	282
H①(mm)		170	170	205	225	254	292	170	170	205	225	254	292
W(mm)		100	100	125	160	160	180	100	100	125	160	160	180
Weight (Kg)		2.5	3.2	5.0	7.0	10	13.5	3.8	5.0	7.0	9.3	11.6	15.2

Model		Z6(F.R.J)Y-(C.P.R)					
Pressure rate		600					
Size	mm	15	20	25	32	40	50
	in	1/2	3/4	1	11/4	11/2	2
L (mm)	RF	165	190.5	216	229	241	292
	RTJ	163.5	190.5	216	229	241	295
H①(mm)		170	170	205	225	254	292
W(mm)		100	100	125	160	160	180
Weight (Kg)		4.0	5.2	7.7	10.5	14.4	19.2

FORGED STEEL GATE VALVE



Design Specifications

Construction type	BB-BG-OS&Y(WB-BG-OS&Y)
Operation type	Hand-operated
Design standard	AP1602,BS5352
Thread ends	ASME B1.20.4
Socket welded ends	ASME B16.11
Test&inspection	API 598

Materials of Main Parts

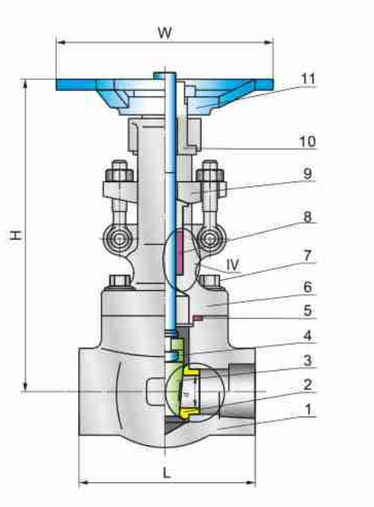
NO	Part name	Material
1	Body	ASTM A105 ASTM A182-F11,F22,F5 ASTM A182-F304,F316,F304L,F316L
2	Seat	ASTM A182 Gr.F6a ASTM A182-F11,F22,F5 ASTM A182-F304,F316,F304L,F361L
3	Wedge	ASTM A182 Gr.F6a ASTM A182-F11,F22,F5 ASTM A182-F304,F316,F304L,F361L
4	Stem	ASTM A182 Gr.F6a ASTM A182-F22 ASTM A182-F304,F316,F304L,F361L
5	Gasket	Graphite & stainless steel
6	Bonnet	ASTM A105 A182 Gr.F6a,ASTM A182 F22 ASTM A182-F304,F316,F304L,F316L
7	Bolt	ASTM A193-B7,A320-B8,A193-B8M
8	Packing	Graphite
9	Gland flange	ASTM A105 ASTM A182-F304,F316
10	Yoke nut	410(13Cr)
11	Hand wheel	ASTM A47-32510

Main External Dimensions

Model		Z-(C.I.H.V.P.R.S.L)						
Pressure rate		800						
Size	mm(in) Reduced bore	15 (1/2)	20 (3/4)	25 (1)	32 (1-1/4)	40 (1-1/2)	50 (2)	-
	mm(in) Full bore	10 (3/8)	15 (1/2)	20 (3/4)	25 (1)	32 (1-1/4)	40 (1-1/2)	10 (3/8)
L(mm)		80	92	111	120	120	140	80
H①(mm)		160	165	192	220	245	285	160
W(mm)		100	100	125	160	160	180	100
Weight (Kg)		1.9	2.2	3.2	5.2	5.8	8.2	1.9

GNTV LYV®

FORGED STEEL GATE VALVE



Design Specifications

Construction type	BB-BG-OS&Y(WB-BG-OS&Y)
Operation type	Hand-operated
Design standard	API602,BS5352
Thread ends	ASME B1.20.4
Socket welded ends	ASME B16.11
Test&inspection	API 598

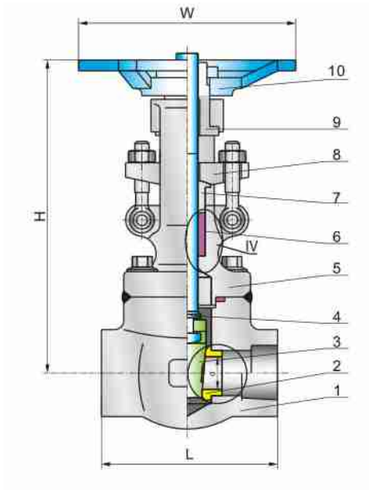
Materials of Main Parts

NO.	Part name	Material
1	Body	ASTM A105 ASTM A182-F11,F22,F5 ASTM A182-F304,F316,F304L,F316L
2	Seat	ASTM A182 Gr.F6a ASTM A182-F11,F22,F5 ASTM A182-F304,F316,F304L,F361L
3	Wedge	ASTM A182 Gr.F6a ASTM A182-F11,F22,F5 ASTM A182-F304,F316,F304L,F361L
4	Stem	ASTM A182 Gr.F6a ASTM A182-F22 ASTM A182-F304,F316,F304L,F361L
5	Gasket	Graphite&stainless steel
6	Bonnet	ASTM A105 A182 Gr.f6a,ASTM A182 F22 ASTM A182-F304,F316,F304L,F316L
7	Bolt	ASTM A193-B7,A320-B8,A193-B8M
8	Packing	Graphite
9	Gland flange	ASTM A105 ASTM A182-F304,F316
10	Yoke nut	ASTM A105 ASTM A182-F304,F316
11	Hand wheel	ASTM A47-32510

Main External Dimensions

Model		Z15S(T)Y-(C.I.H.V.P.R.S.L)						
Pressure rate		1500						
Size	mm(in) Reduced bore	15 (1/2)	20 (3/4)	25 (1)	32 (1-1/4)	40 (1-1/2)	50 (2)	-
	mm(in) Full bore	10 (3/8)	15 (1/2)	20 (3/4)	25 (1)	32 (1-1/4)	40 (1-1/2)	50 (2)
L(mm)		111	111	120	120	140	170	180
H①(mm)		203	203	216	235	275	320	368
W(mm)		125	125	160	160	180	200	250
Weight (Kg)		3.5	3.8	5.5	7.0	9.5	18.0	24.5

FORGED STEEL GATE VALVE



Design Specifications

Construction type	WB-BG-OS&Y
Operation type	Hand-operated
Design standard	API602,BS5352
Thread ends	ASME B1.20.1
Socket welded ends	ASME B16.11
Test&inspection	API 598

Materials of Main Parts

NO.	Part name	Material
1	Body	ASTM A105 ASTM A182-F11,F22,F5 ASTM A182-F304,F316,F304L,F316L
2	Seat	ASTM A182 Gr.F6a ASTM A182-F11,F22,F5 ASTM A182-F304,F316,F304L,F361L
3	Wedge	ASTM A182 Gr.F6a ASTM A182-F11,F22,F5 ASTM A182-F304,F316,F304L,F361L
4	Stem	ASTM A182 Gr.F6a ASTM A182-F22 ASTM A182-F304,F316,F304L,F361L
5	Bonnet	ASTM A105 A182 Gr.F6a,ASTM A182 F22 ASTM A182-F304,F316,F304L,F316L
6	Packing	Graphite
7	Gland cover	ASTM A182 Gr.F6a ASTM A182-F11,F22,F5 ASTM A182-F304,F316,F304L,F361L
8	Gland flange	ASTM A105 ASTM A182-F304,F316
9	Yoke nut	410(13Cr)
10	Hand wheel	ASTM A47-32510

Main External Dimensions

Model		Z25SFAS(T)Y-(C.I.H.V.P.R.S.L)						
Pressure rate		2500						
Size	mm(in) Reduced bore	15 (1/2)	20 (3/4)	25 (1)	32 (1-1/4)	40 (1-1/2)	50 (2)	-
	mm(in) Full bore	10 (3/8)	15 (1/2)	20 (3/4)	25 (1)	32 (1-1/4)	40 (1-1/2)	50 (2)
L(mm)		111	120	120	140	172	210	230
H①(mm)		185	215	245	276	276	340	405
W(mm)		125	140	160	160	180	200	240
Weight (Kg)		5.2	5.5	7.4	9.5	9.8	19.5	29

GLOBE VALVE SERIES

ZHEJIANG LIANGYI VALVE

CAST STEEL GLOBE VALVE

Product Introduction

The closing part (disc) moves linearly along the center line of the valve seat, which is mainly used to connect or cut off the medium in the pipeline;when opening and closing, the disc stroke is small, the opening and closing time is short, and the valve height is small;Compared with the gate valve, the stop valve has a simpler structure and is more convenient to manufacture and maintain.The sealing surface is not easy to wear, scratch, and has good sealing performance and long life;the handwheel rotates clockwise to close;the stainless steel stop valve is suitable for various corrosive media pipelines, and the alloy steel stop valve is suitable for high temperature steam, Oil product pipeline.

Structural Features

Flanged connection globe valves are used to cut or connect the pipe media under pressures between PN1.6-16.0MPa working temperatures between-29-550C, in oil industry, chemical industry. pharmaceutical, fertilizer, and power industry.

Main structural features

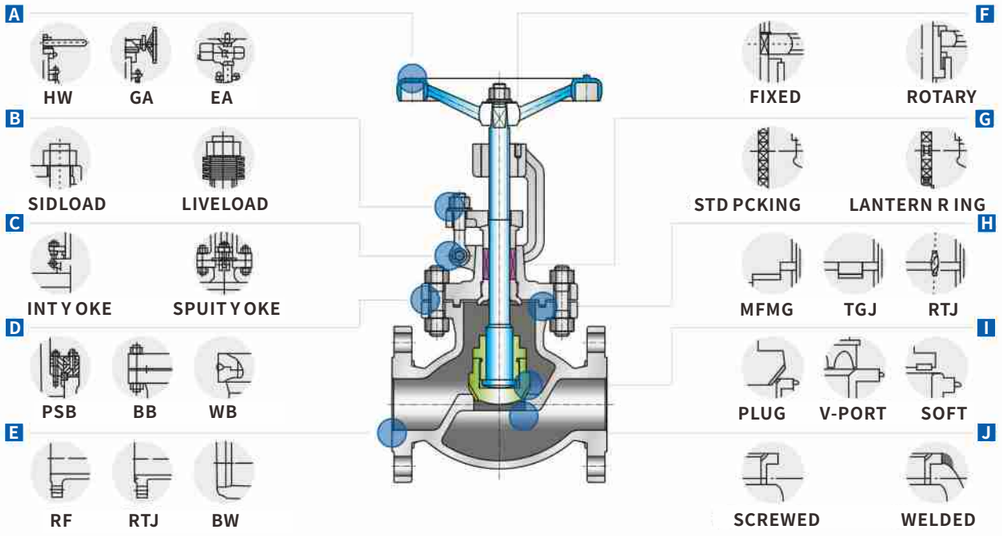
1. Sensible products structure, reliable sealing.Excellentperformance and good looking
2. Cobalt base alloy welded sealing surface, which is wearingresistant, erosion proof, abrasion proof and long-lived
3. The surface and the adjusting media of the valve shaft arenitrogenized so that it is erosion and abrasion resistant
4. There is no backward sealing structure in the valve, so thesealing id reliable
5. The material of the fillings and the flange sizes can be chose and matched according to the applications and the requi-rements of the users.That can satisfies all kinds of working requirements.

Material Range

Standard body/bonnet materials include nine grades of carbon, low alloy and stainless steels.For special apolications they can be supplied in other gardes of alloy and stainless steel.There ‘s a full range of trim materials to match any service.Optional packing and gasket materials are available for a full range of service conditions.

CAST STEEL GLOBE VALVE

Structure Order



A	Operating	Large hand wheels for easy operation.Also available with gean-ring, motor actuators, pneumatic or
B	Live Load Packing	In services requiring frequent cycling or with high pressure/temperature variations, live loading extends the service life between maintenance periods packing gland adjustments.Belleville spring are employed to provide constant packing gland stress.
C	OS&Y	Outside screw and yoke.Cast steel globe valve yoke integral with bonnet for 10& and smaller.
D	BB	Bolted bonnet.Welding bonnet and pressure seal bonnet in services requiring frequent cycling or with high pressure/temperature variations.
E	End Connections	A choice of Flanged, RTJ flanged or Butt welding end for piping flexibility.
F	Yoke Sleeve	Fumished in aluminum bronze to reduce operating torque.Most size furnished with ball bearing yoke sleeves.
G	Lantern Ring andDouble Packing set	Lantern ring with leak off fitting connection and double packing stack is optionally available for critical services.
H	Body-to-Bonnet joint	A flat face gasket joint is used in the150Lb valves.A male and female joint is used in 300Lb to 600Lb valves.Ring joint is used in the body to bonnet connection in 900Lb higher rated valves.
I	Stem	Tplug disc is stem guided on all size.Disc has a differentialangle.front.the seat.to providea line contact for maximum seating.The bottom of v-port disc is fuided by the body seat ring for maximum disc stability in throttling applications, the soft teflon ring is excellentfor lower temperature service where tight shut off required.
J	Disc	Separate heavy duty, full ported rings for easy maintenance Screwed or welded connection into body

CAST STEEL GLOBE VALVE

API

Design specifications

Design standards	Structure length	Fiange connection size	Test and inspection
ASME B16.34,BS1873,API623	ASME B16.10	ASME B16.5	API 598

Notes: The sizes of serial valve connecting flange can be designed according to customers 'requirements

Products specification

Pressure rate	Connecting Type	ominal diameter size
Class150	Flanged ends	1/2"-16"
Class300		1/2"-16"
Class600		2"-10"
Class900		2"-10"
Class900		2"-4"
Class1500		2"-4"
Class2500		2"-4"
Class900	Flanged ends	4"-10"
Class1500		4"-10"
Class2500		4"-8"
Class900	Butt-welding ends	4"-10"
Class1500		4"-10"
Class2500		4"-8"

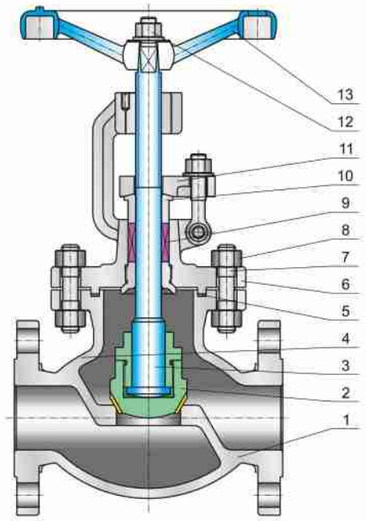
Technical Specification

Mpa Nominal pressure	Mpa Shell test pressure	Mpa Sealing test pressure	Temperature	Suitable medium
150	3.0	2.0	⩽600℃	Water oil&gas
300	7.5	5.5		
600	15	11		
900	22.5	16.5		
1500	38.3	28.1		
2500	63.83	46.81		

GNTV LYV®

CAST STEEL GLOBE VALVE

ANSI

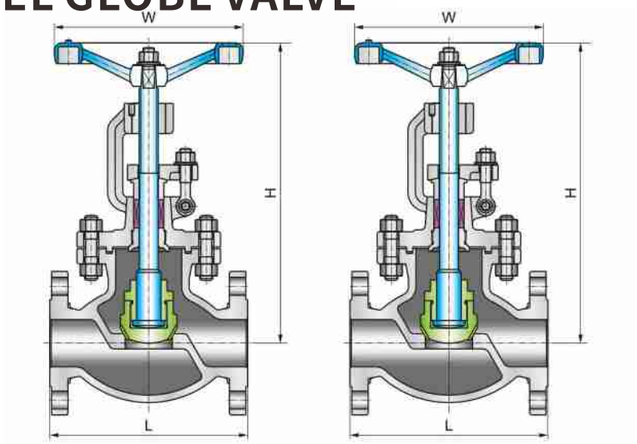


Materials of Main Parts

NO.	Part name	Material
1	Body	ASTM 352 LCB ASTM A995 4A,5A,6A ASTM A494 CW-6MC ASTM A494 CU5MCUC ASTM A494 M35-1
2	Disc	ASTM A182 Gr.F6a,ASTM A182 F22 ASTM A182-F304,F316,F321,F304L,F316L
3	Stem	ASTM A182 Gr.F6a,ASTM A182 F22 ASTM A182-F304,F316,F321,F304L,F316L
4	Flat cover	ASTM A182 Gr.F6a,ASTM A182 F22 ASTM A182-F304,F316,F321,F304L,F316L
5	Gasket	Graphite&stainless steel
6	Bonnet	ASTM A216-WCB ASTM A217-WC6,WC9,C5 ASTM A351-CF8,CF8M,CF3,CF3M
7	Stud	ASTM A193-B7,A320-B8,A193-B8M
8	Nut	ASTM A194-2H,A192-8,A194-8M
9	Packing	Graphite
10	Gland cover	ASTM A182 Gr.F6a ASTM A182-F304,F316,F321,F304L,F316L
11	Gland flange	ASTM A216-WCB ASTM A351-CF8,CF8M,CF3,CF3M
12	Yoke nut	Copper alloy
13	Hand wheel	ASTM A47-32510

CAST STEEL GLOBE VALVE

ANSI

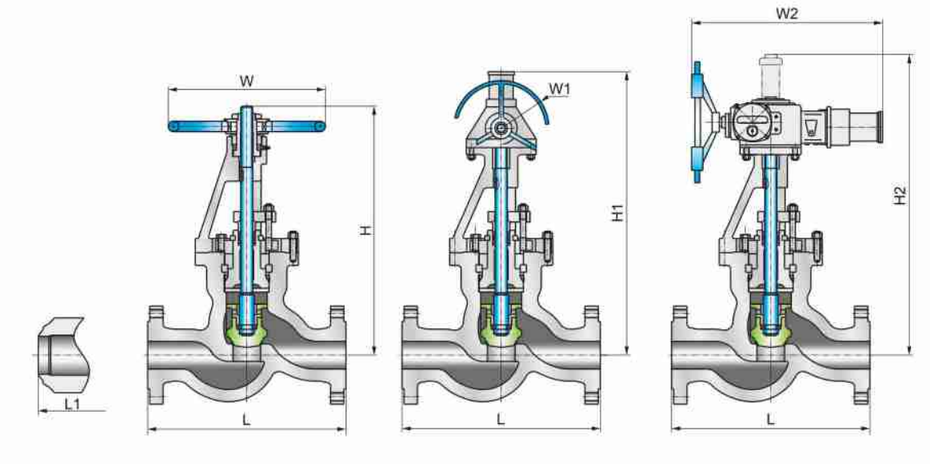


Main External Dimensions

Size									
mm	in	L	H	W	Weight(kg)	L	H	W	Weight(kg)
		J41Y-150Lb(C.P.R.L.S.H.I.V)				J41Y-300Lb(C.P.R.L.S.H.I.V)			
15	1/2	108	241	125	-	152	241	125	-
20	3/4	117	241	125	-	178	241	125	-
25	1	127	242	125	-	203	283	160	-
32	11/4	140	280	160	-	216	320	200	-
40	11/2	165	286	160	-	229	322	200	-
50	2	203	368	200	20	267	399	200	27
65	21/2	216	387	220	22	292	438	250	38
80	3	241	400	280	34	318	450	280	51
100	4	292	457	300	50	356	584	355	76
150	6	356	609	355	90	444	660	450	149
200	8	495	698	450	150	559	762	450	274
250	10	622	762	500	295	622	850	500	475
300	12	698	876	500	395	711	1085	500	724G
350	14	787	990	600	610	762	1187	600	774
400	16	914	1104	600	670	864	1450	600	1030G
		J41Y-600Lb(C.P.R.L.S.H.I.V)				J41Y-900Lb(C.P.R.L.S.H.I.V)			
50	2	295	430	180	32	372	569	320	105
65	21/2	334	480	250	41	442	569	320	110
80	3	359	508	250	60	384	635	350	120
100	4	435	635	350	102	461	774	450	200
150	6	562	914	450	261	613	1040	600	410
200	8	664	1016	500	434	740	1330	720	790
250	10	791	1219	600	588	842	1560	760	1300

CAST STEEL GLOBE VALVE

ANSI Pressure Sealed

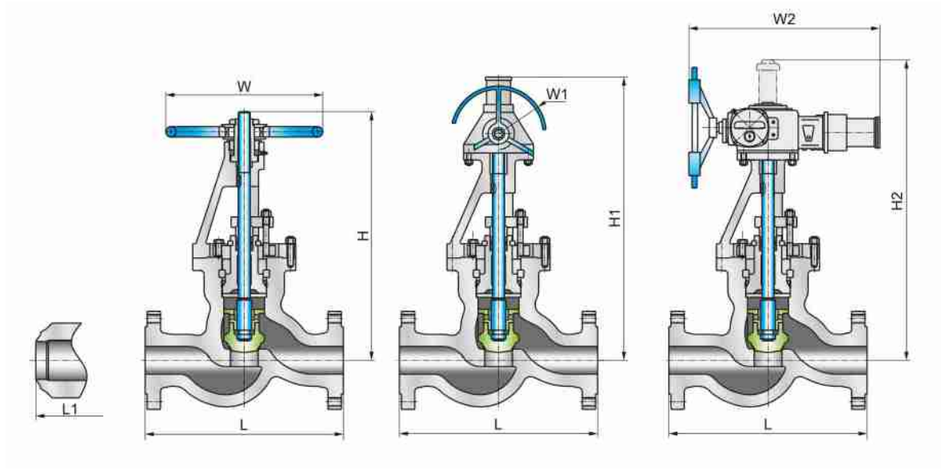


Main External Dimensions

Size		Flanged	Butt welding	Hand operated			Gear operated				Electric			
mm	in	L	L1	H	W	Weight	H1	W1	Gear actuator	Weight	H2	W2	Torque (NM)	Weight
J (5.9) 41AY-1500Lb (C.P.R.Ll.S.H.V) Flanged J (5.9) 61AY-1500Lb (C.P.R.Ll.s.H.V) Butt welding														
50	2	371	368	535	400	130	-	-	-	-	-	-	-	-
65	21/2	422	419	670	500	175	-	-	-	-	-	-	-	-
80	3	473	470	838	500	245	-	-	-	-	-	-	-	-
100	4	549	546	1193	560	350	900	460	BA-1	370	880	809	1200	505
150	6	711	704	-	-	-	1280	610	BA-2	720	1135	863	1800	855
200	8	841	831	-	-	-	1615	610	BA-2	1370	1495	863	2500	1628
250	10	1000	990	-	-	-	2170	610	BA-2	1675	1960	863	2500	1933
Pipe thickness				SCG120										

CAST STEEL GLOBE VALVE

ANSI Pressure Sealed

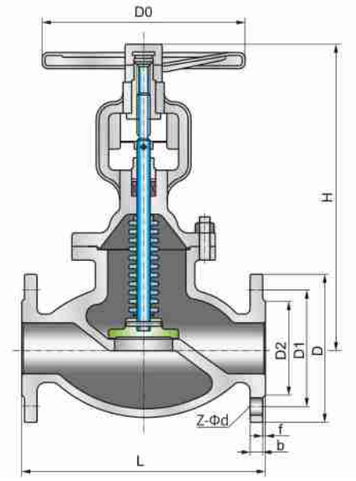


Main External Dimensions

Size		Flanged	Butt welding	Hand operated			Gear operated				Electric			
mm	in	L	L1	H	W	Weight	H1	W1	Gear actuator	Weight	H2	W2	Torque (NM)	Weight
J (5.9) 41AY-2500Lb (C.P.R.Ll.S.H.V) Flanged J (5.9) 61AY-2500Lb (C.P.R.Ll.s.H.V) Butt welding														
50	2	454	451	650	500	180	-	-	-	-	-	-	-	-
65	21/2	514	508	840	560	250	-	-	-	-	-	-	-	-
80	3	584	578	990	600	350	-	-	-	-	-	-	-	-
100	4	683	673	1210	680	580	1090	610	BA-2	615	1090	863	1800	870
150	6	927	814	-	-	-	1470	610	BA-2	990	1470	1470	2500	1248
200	8	1038	1022	-	-	-	1735	610	BA-2	1620	1735	1735	3000	2050
Pipe thickness							SCG120							

BELLOW SEAL GLOBE VALVE

WJ41Y

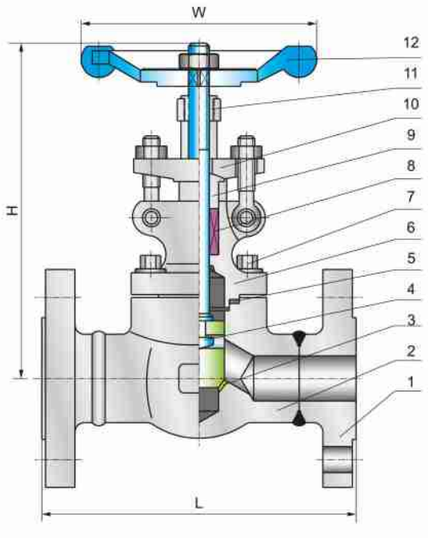


Main External Dimensions

unit:mm

DN	L	D	D1	D2	D6	b-f	f2	Z-Φd	H	D0	Weight (kg)
PN16											
15	130	95	65	45	/	14-2	/	4-14	245	120	4.0
20	150	105	75	55	/	14-2	/	4-14	265	120	4.5
25	160	115	85	65	/	14-2	/	4-14	270	140	6.0
32	180	135	100	78	/	16-2	/	4-18	285	160	7.5
40	200	145	110	85	/	16-3	/	4-18	300	180	10
50	230	160	125	100	/	16-3	/	4-18	355	220	13
65	290	180	145	120	/	18-3	/	4-18	415	240	18
80	310	195	160	135	/	20-3	/	8-18	425	280	21.5
100	350	215	180	155	/	20-3	/	8-18	470	280	32.5
125	400	245	210	185	/	22-3	/	8-18	500	350	48
150	480	280	240	210	/	24-3	/	8-23	570	350	68
200	600	335	295	265	/	26-3	/	12-23	680	450	110
PN25											
15	130	95	65	45	/	16-2	/	4-14	245	120	4.0
20	150	105	75	55	/	16-2	/	4-14	265	120	4.5
25	160	115	85	65	/	16-2	/	4-14	270	140	6.0
32	180	135	100	78	/	18-2	/	4-18	285	160	7.5
40	200	145	110	85	/	18-3	/	4-18	300	180	10
50	230	160	125	100	/	20-3	/	4-18	355	220	13
65	190	180	145	120	/	22-3	/	8-18	415	240	18
80	310	195	160	135	/	22-3	/	8-18	425	280	21.5
100	350	230	190	160	/	24-3	/	8-23	470	280	32.5
125	400	270	220	188	/	28-3	/	8-26	500	350	55
150	480	300	250	218	/	30-3	/	8-26	570	350	73.5
200	600	360	310	278	/	34-3	/	12-26	680	450	114

FORGED STEEL GLOBE VALVE



Design Specifications

Construction type	BB-BG-OS&Y(WB-BG-OS&Y)
Operation type	Hand-operated
Design standard	ASMEB16.34,BS5352,API 602
Face to face	ASME B16.10
Flanged ends	ASME B16.5
Test&inspection	API 598

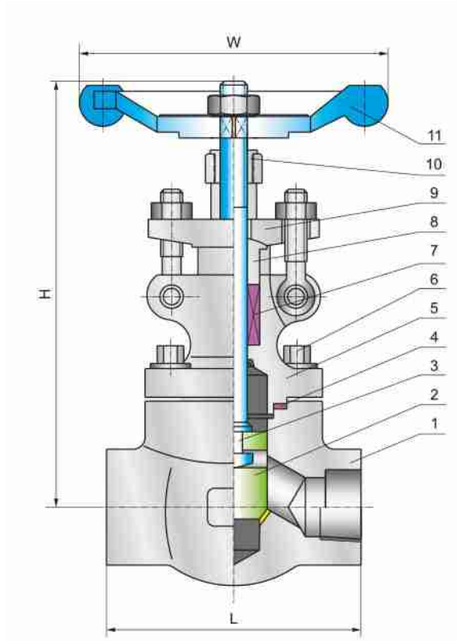
Materials of Main Parts

NO.	Part name	Material
1	Flange	ASTM A105 ASTM A182-F11,F22,F5 ASTM A182-F304,F316,F304L,F316L
2	Body	ASTM A105 ASTM A182-F11,F22,F5 ASTM A182-F304,F316,F304L,F316L
3	Seat	ASTM A182Gr.F6a, ASTM A182 F22 ASTM A182-F304,F316,F304L,F316L
4	Stem	ASTM A182Gr.F6a, ASTM A182 F22 ASTM A182-F304,F316,F304L,F316L
5	Gasket	Graphite&stainless steel
6	Bonnet	ASTM A105 ASTM A182-F11,F22,F5 ASTM A182-F304,F316,F304L,F316L
7	Bolt	ASTM A193-B7,A320-B8,A193-B8M
8	Packing	Graphite
9	Gland cover	ASTM A182Gr.F6a, ASTM A182-F11,F22,F5 ASTM A182-F304,F316,F304L,F316L
10	Gland flange	ASTM A105 ASTM A182-F304,F316
11	Yoke nut	410(13Cr)
12	Hand wheel	ASTM A47-32510

Main External Dimensions

Model		J1(F.R.J)Y-(C.P.R)						J3(F.R.J)Y-(C.P.R)						J6(F.R.J)Y-(C.P.R)					
Pressure rate		150						300						600					
Size	mm	15	20	25	32	40	50	15	20	25	32	40	50	15	20	25	32	40	50
	in	1/2	3/4	1	1/4	11/2	2	1/2	3/4	1	11/4	11/2	2	1/2	3/4	1	11/4	11/2	2
L (mm)	RF	108	117	127	140	165	203	52.5	178	203	216	228.5	266.5	165	190.5	216	229	241	292
	RTJ	119	130	140	153	178	216	163.5	191	216	229	241	282	163.5	190.5	216	229	241	295
H①(mm)		170	170	205	225	254	292	170	170	205	225	254	292	170	170	205	225	254	292
W(mm)		100	100	125	160	160	180	100	100	125	160	160	180	100	100	125	160	160	180
Weight (Kg)		2.5	3.2	5.2	7.8	10.3	15	3.8	5.2	7.5	9.5	13	172	4	5.5	8.5	10.5	15	23

GNTV LYV®
FORGED STEEL GLOBE VALVE



Design Specifications

Construction type	BB-BG-OS&Y(WB-BG-OS&Y)
Operation type	Hand-operated
Design standard	ASMEB16.34,BS5352,API 602
Face to face	ASME B16.10
Flanged ends	ASME B16.5
Test&inspection	API 598

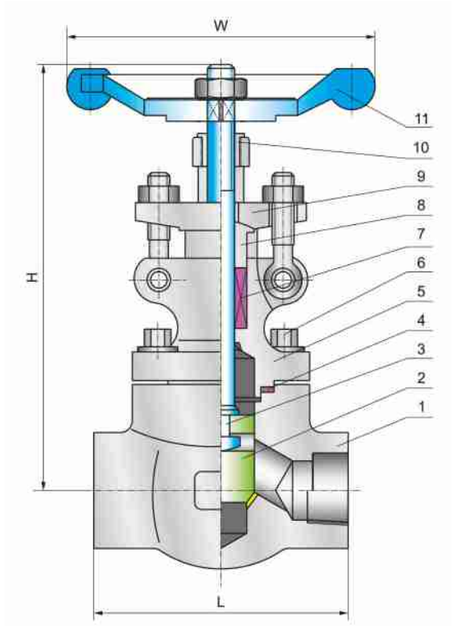
Materials of Main Parts

NO.	Part name	Material
1	Flange	ASTM A105 ASTM A182-F11,F22,F5 ASTM A182-F304,F316,F304L,F316L
2	Body	ASTM A105 ASTM A182-F11,F22,F5 ASTM A182-F304,F316,F304L,F316L
3	Seat	ASTM A182Gr.F6a, ASTM A182 F22 ASTM A182-F304,F316,F304L,F316L
4	Stem	ASTM A182Gr.F6a, ASTM A182 F22 ASTM A182-F304,F316,F304L,F316L
5	Gasket	Graphite&stainless steel
6	Bonnet	ASTM A105 ASTM A182-F11,F22,F5 ASTM A182-F304,F316,F304L,F316L
7	Bolt	ASTM A193-B7,A320-B8,A193-B8M
8	Packing	Graphite
9	Gland cover	ASTM A182Gr.F6a, ASTM A182-F11,F22,F5 ASTM A182-F304,F316,F304L,F316L
10	Gland flange	ASTM A105 ASTM A182-F304,F316
11	Yoke nut	410(13Cr)
12	Hand wheel	ASTM A47-32510

Main External Dimensions

Model		J8S(T)Y-(C.I.H.V.P.R.S.L)						
Pressure rate		800						
Size	mm(in) Reduced bore	15(1/2)	20(3/4)	25(1)	32(1-1/4)	40(1-1/2)	50(2)	-
	mm(in) Full bore	10(3/8)	15(1/2)	20(3/4)	25(1)	32(1-1/4)	40(1-1/2)	50(2)
L(mm)		80	92	111	120	152	178	178
H①(mm)		170	170	205	225	254	292	330
W(mm)		100	100	125	160	160	180	240
Weight (Kg)		1.9	2.2	3.2	5.2	7.0	11	15.8

FORGED STEEL GLOBE VALVE



Design Specifications

Construction type	BB-BG-OS&Y(WB-BG-OS&Y)
Operation type	Hand-operated
Design standard	ASMEB16.34,BS5352,API 602
Face to face	ASME B1.20.1
Flanged ends	ASME B16.11
Test&inspection	API 598

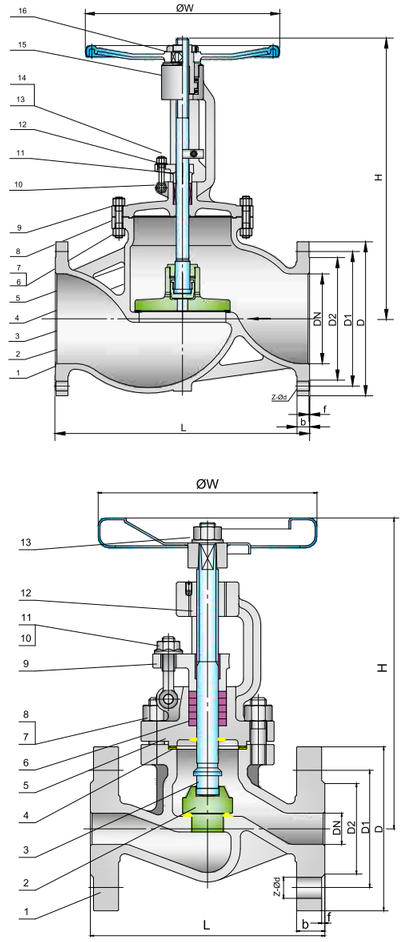
Materials of Main Parts

NO.	Part name	Material
1	Body	ASTM A105 ASTM A182-F11,F22,F5 ASTM A182-F304,F316,F304L,F316L
2	Disc	ASTM A182Gr.F6a, ASTM A182-F11,F22,F5 ASTM A182-F304,F316,F304L,F316L
3	Stem	ASTM A182Gr.F6a, ASTM A182 F22 ASTM A182-F304,F316,F304L,F316L
4	Gasket	Graphite&stainless steel
5	Bonnet	ASTM A105 ASTM A182-F11,F22,F5 ASTM A182-F304,F316,F304L,F316L
6	Bolt	ASTM A193-B7,A320-B8,A193-B8M
7	Packing	Graphite
8	Gland cover	ASTM A105 ASTM A182-F11,F22,F5 ASTM A182-F304,F316,F304L,F316L
9	Gland flange	ASTM A105 ASTM A182-F304,F316
10	Yoke nut	410(13Cr)
11	Hand wheel	ASTM A47-32510

Main External Dimensions

Model		J15S(T)Y-(C.I.H.V.P.R.S.L)						
Pressure rate		1500						
Size	mm(in) Reduced bore	15(1/2)	20(3/4)	25(1)	32(1-1/4)	40(1-1/2)	50(2)	-
	mm(in) Full bore	10(3/8)	15(1/2)	20(3/4)	25(1)	32(1-1/4)	40(1-1/2)	50(2)
L(mm)		111	111	120	152	172	220	230
H①(mm)		205	205	240	258	290	336	428
W(mm)		125	125	160	160	160	180	234
Weight (Kg)		4.5	4.3	6.8	8.5	12.6	19.2	30

DIN GLOBE VALVE F1 SERIES
(PN16,PN25,PN40)



MAIN PARAMETER SPECIFICATION

Design and manufacture:DIN3356
Face to face:DIN3202-F1,EN558-1
End flange Dimensions:DIN2543(PN16),DIN2544(PN25),
DIN2545(PN40),EN1092-1
Pressure test:DIN3230,EN12266-1

MAIN PART MATERIAL

No	PartName	Material
1	Body	GS-C25+13Cr
2	Disc	A105+13Cr
3	Stem	A182 F6
4	Disc Nut	A105
5	Bolt	A193 B7
6	Nut	A194 2H
7	Gasket	Graphite
8	Bonnet	GS-C25
9	Packing	Graphite
10	Pin	Carbon Steel
11	Bolt	A193 B7
12	Gland	GS-C25
13	Nut	A194 2H
14	Stem Nut	Bronze
15	Hang Wheel	A105
16	Nut	A194 2H

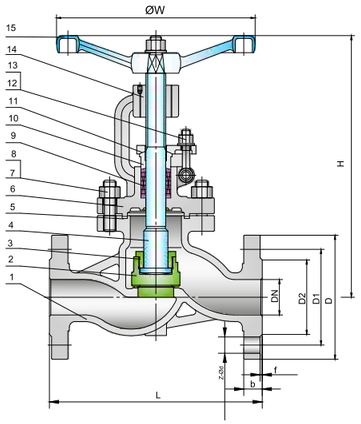
Dimensions and Weights

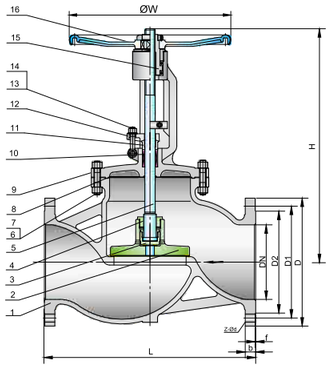
DN		15	20	25	32	40	50	65	80	100	125	150
L		130	150	160	180	200	230	290	310	350	400	480
H		210	230	250	275	300	325	385	410	455	510	560
W	PN16	120	120	140	160	180	200	220	250	300	350	400
	PN25	120	120	160	160	200	200	220	250	300	350	400
	PN40	120	120	160	160	200	240	280	320	360	400	450
Weight(kg)	PN16	4.0	5.0	7.0	9.0	14	20	26	34	45	71	70
	PN25	4.0	5.0	7.0	9.0	14	22	29	35	47	72	88
	PN40	4.0	5.0	7.0	9.0	15	24	30	35	48	72	95

DIN GLOBE VALVE F2 SERIES

(PN63)

Gate Valve,Globe Valve,Plug vALVE,Check Valve,Butterfly Valve,
Power Station Valve,Oilfield Dedicated Valve,Y-Strainer





MAIN PARAMETER SPECIFICATION

Design and manufacture:DIN3356
Face to face:DIN3202-F2,EN558-1
End flange Dimensions:DIN2546,EN1092-1
Pressure test:DIN3230,EN12266-1

MAIN PART MATERIAL

No	PartName	Material
1	Body	GS-C25+13Cr
2	Disc	A105+13Cr
3	Stem	A182 F6
4	Disc Nut	A105
5	Bolt	A193 B7
6	Nut	A194 2H
7	Gasket	Graphite
8	Bonnet	GS-C25
9	Packing	Graphite
10	Pin	Carbon Steel
11	Bolt	A193 B7
12	Gland	GS-C25
13	Nut	A194 2H
14	Stem Nut	Bronze
15	Hang Wheel	A105
16	Nut	A194 2H

Dimensions and Weights

DN	15	20	25	32	40	50	65	80	100	125	150
L	210	230	230	260	260	300	340	380	430	500	550
H	210	230	250	275	300	325	385	410	455	510	560
W	120	120	140	160	180	200	220	250	300	350	400
Weight (kg)	8	10	12	16	17	27	40	52	75	130	160

BELLOW SEAL GLOBE VALVE

WJ41Y

Application

The bellows globe valve is suitable for the pipelines of various working conditions in the petroleum, chemical, pharmaceutical, fertilizer, and electric power industries with a nominal pressure of PN16~40 and a working temperature of-29-425C to cut off or connect the regulating pipeline medium.

Structural Features

1. **The product structure is reasonable, the sealing is reliable, the performance is excellent, and the appearance is beautiful;**
2. **The sealing surface is welded with Co-based cemented carbide, which is wear-resistant, corrosion-resistant, good in friction resistance and long in service life;**
3. **The stem is quenched and tempered and the surface is nitridated, with good corrosion resistance and friction resistance;**
4. **Double sealing, more reliable performance;**
5. **The material of the parts, flanges, and butt-welding end dimensions can be reasonably selected according to actual working conditions or user requirements to meet various engineering needs.**
6. **The spool can be made into cut-off type and adjustable type as required.**

Technical Specification

Mpa Nominal pressure	Mpa Shell test pressure	Mpa Sealing test pressure	Temperature	Suitable medium
1.6	24	1.76	⩽425℃	Water oil&gas
2.5	3.8	2.8		
4.0	6.0	4.4		

Materials of Main Parts

NO.	Part name	Materials						
		WCB	WC6	WC9	CF8	CF8M	CF3	CF3M
	Body	WCB	WC6	WC9	CF8	CF8M	CF3	CF3M
	Disc	25+13Cr	20Cr1MoV	25Cr2MoV	0Cr18Ni9	1Cr18Ni12Mo2Ti	00Cr19Ni10	00Cr18Ni12Mo2Ti
	Pin	25	1Cr13	20Cr1MoV	0Cr18Ni9	1Cr18Ni12Mo2Ti	00Cr19Ni10	00Cr18Ni12Mo2Ti
	Stem	1Cr13	20Cr1MoV +Nitriding	20Cr2MoV +Nitriding	0Cr18Ni9	0Cr18Ni12Mo2Ti	00Cr19Ni10	00Cr18Ni12Mo2Ti
	Bellows assembly	0Cr18Ni9Ti	0Cr18Ni9Ti	0Cr18Ni9Ti	0Cr18Ni9	0Cr18Ni12Mo2	00Cr19Ni10	00Cr18Ni12Mo2Ti
	Gasket	316 Clip Flexible Graphite/PTFE						
	Bonnet	WCB	WC6	WC9	CF8	CF8M	CF3	CF3M
	Stud	350rMo-A	35CrMov	42CrMoV	1Cr17Ni12	0Cr18Ni12Mo2Ti		
	Nut	45#	45#	35CrMoV	0Cr17Ni12Ti	0Cr18Ni12Mo2Ti		
	Packing	Flexible graphite carbon fiber+304 steel wire						
	Gland flange	WCB	WCB	WCB	CF8	CF8M	CF8M	
	Yoke nut	QAL9-4						
	Hand wheel	WCB QT400-18						

ZHEJIANG LIANGYI VALVE

CHECK VALVE SERIES

SWING CHECK VALVE

Product Introduction

Swing check valves are designed to prevent backflow of media in piping.Swing check valve belongs to the automatic valve class, the opening and closing parts rely on the force of flowing media to open or close by themselves.Check valves are only used for one-way flow of media in the pipeline to prevent media backflow, in order to prevent accidents.

Structural Features

Flanged Butt-welding ends shing check valves are used in pipes under pressures between PN1.6-16.0MPa, Class150-900Lb, working temperatures between-29-570C.They are used in industries include oil, chemistry.pharmaceutical, fertilizer, and power generation to prevent the backward flux of the media.Main structural features:

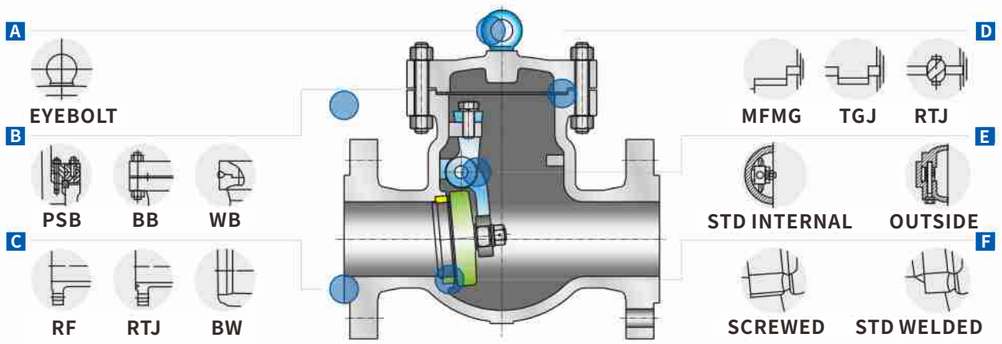
1. Rational structure, reliable sealing, excellent performance, pretty appearance.
2. Cobalt base alloy welded sealing surface, anti-wearing, erosion-proof abrasion-proof and longer use life.
3. Inside-set bolt-bearing structure reduces leakage and reliable use.
4. Under pressures rating equal to or greater than 216.0 MPa, Class1500, the valve belly, self-tightening structure offers a tighter sealing for a higher medium pressure.
5. Different parts materials and different sizes for flange, butt-welding are available for sensible combination according to different working facts and customers ‘requirements.

Material Range

Standard body/bonnet materials include nine grades of carbon, low alloy and stainless steels.For special apolications they can be supplied in other gardes of alloy and stainless steel.There ‘s a full range of trim materials to match any service.Optional packing and gasket materials are available for a full range of service conditions.

SWING CHECK VALVE

Structure Order

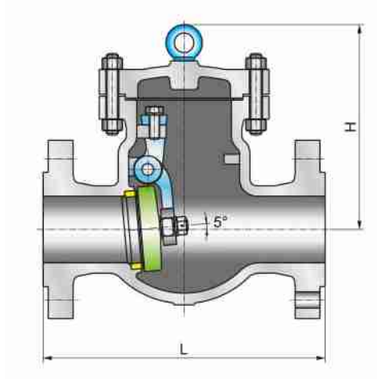


HCU

A	Eyebolt	For150Lb-8“, 300Lb-8“, 600Lb-6“, 900Lb-8“/1500Lb/2500Lb-4“&over
B	BC	Bolted cover.welded cover and pressure seal bonnet in services requiring frequtnt cycling or with high pressure/temperature variations.
C	End Connections	A choice of Flanged, RTJ flanged or Butt welding end for piping flexibility.
D	Body-to-Bonnet joint	A male and female joint or tongue and groove joint is used 150Lb to 600Lb valves.Ring joint is used in the body to cover connection in 900Lb&higher rated valves
E	End Connections	All extemal hinge pin swing check valves 12“and smaller are availble with an optional outside lever and weight, internal hinge available with all swing check valves.
F	Seat Rings	Seoarate heavy duty, full ported rings for easy maintenance.Screwed or welded connection into body.
	HCU	This design can be used to either dampen or assist closing of the check valve disc depending on orientation.by using the hydraulic control unit to buffer action the disc, the valve opens at lower flow rates.

GNTV LYV®

SWING CHECK VALVE

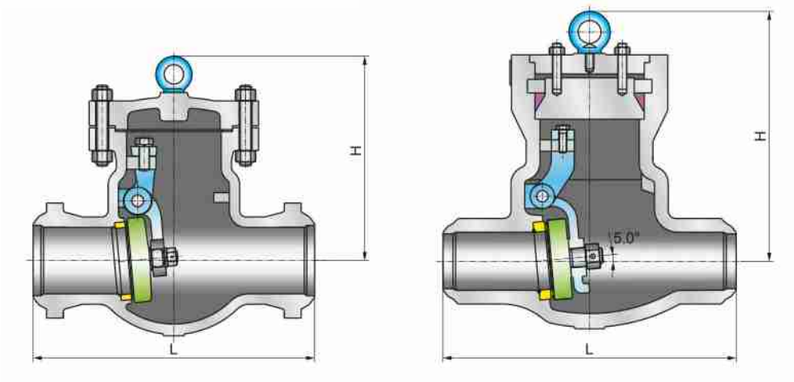


Main External Dimensions

Model		H44Y-150Lb(C.P.R.L.I.S.H)											
Pressure rate		150											
Size	mm	50	65	80	100	150	200	250	300	350	400	450	500
	in	2	21/2	3	4	4	8	10	12	14	16	18	20
L(mm)		203	216	241	292	292	495	622	699	787	864	978	978
H(mm)		165	182	195	208	208	295	350	405	446	493	515	540
Weight (Kg)		13	21	23	40	65	112	170	275	385	442	630	760
Model		H44Y-300Lb(C.P.R.L.I.S.H)											
Pressure rate		300											
Size	mm	50	65	80	100	150	200	250	300	350	400	450	500
	in	2	21/2	3	4	6	8	10	12	14	16	18	20
L(mm)		267	292	318	356	444	533	622	711	838	864	978	1016
H(mm)		175	186	212	238	302	362	392	440	460	530	582	615
Weight (Kg)		20	32	45	70	104	176	254	390	587	688	1000	1200
Model		H44Y-600Lb(C.P.R.L.I.S.H)											
Pressure rate		600											
Size	mm	50	65	80	100	150	200	250	300	350	400		
	in	2	21/2	3	4	6	8	10	12	14	16		
L(mm)		295	334	359	435	562	664	791	842	892	991		
H(mm)		200	219	232	282	330	378	452	575	590	635		
Weight (Kg)		32	42	61	112	205	385	575	775	982	1056		

SWING CHECK VALVE

Pressure Sealed

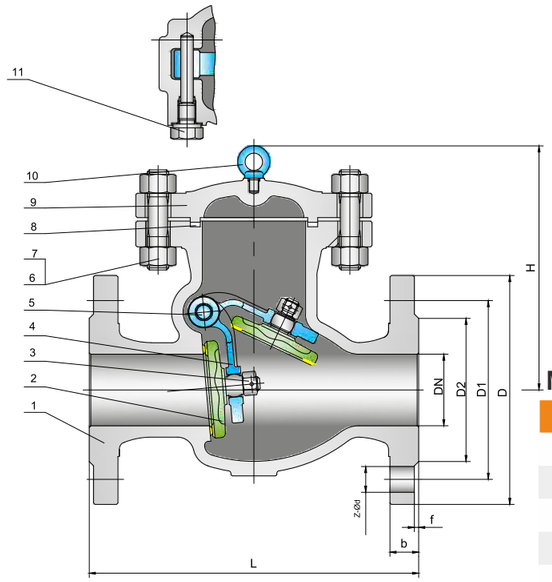


Main External Dimensions

Model		H64Y-600Lb(C.P.R.L.I.S.H)												
Pressure rate		600												
Size	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
	in	2	21/2	3	4	6	8	10	12	14	16	18	20	24
L(mm)		292	330	356	432	559	660	787	838	889	991	1092	1194	1397
H(mm)		225	240	254	279	368	393	457	584	609	685	736	762	889
Weight (Kg)		29	35	48	67	110	205	325	480	600	800	1490	1675	2300
Pipe thickness (mm)		SCH120												
Model		H64Y-900Lb(C.P.R.L.I.S.H)												
Pressure rate		900												
Size	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
	in	2	21/2	3	4	6	8	10	12	14	16	18	20	24
L(mm)		368	419	381	457	610	737	838	965	1029	1130	1219	1549	549
H(mm)		225	240	254	279	381	533	558	609	736	762	863	939	1066
Weight (Kg)		48	65	70	100	245	425	675	900	1125	1600	2000	2700	3500
Pipe thickness (mm)		SCH120												
Model		H64Y-1500Lb(C.P.R.L.I.S.H)												
Pressure rate		1500												
Size	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
	in	2	21/2	3	4	6	8	10	12	14	16	18	20	24
L(mm)		368	419	470	546	705	832	991	1130	1257	1384	1537	1664	1943
H(mm)		225	240	254	279	405	567	585	630	750	787	885	960	1120
Weight (Kg)		48	65	90	115	250	470	800	1350	1800	2200	2600	2700	4100
Pipe thickness (mm)		SCH160												
Model		H64Y-2500Lb(C.P.R.L.I.S.H)												
Pressure rate		2500												
Size	mm	50	65	80	100	150	200	250	300					
	in	2	21/2	3	4	6	8	10	12					
L(mm)		451	508	578	673	914	1022	1270	1422					
H(mm)		225	249	254	279	420	570	1010	1160					
Weight (Kg)		80	102	120	220	540	920	1692	2296					
Pipe thickness (mm)		SCH160												

DIN SWING CHECK VALVE F1 AND F6 SERIES

Gate Valve, Globe Valve, Plug Valve, Check Valve, Butterfly Valve,
Power Station Valve, Oilfield Dedicated Valve.Y-Strainer.



MAIN PART MATERIAL

NO	Part name	Material
1	Body	GS-C25+13Cr
2	Disc	GS-C25+13Cr
3	Pin	Corbon Steel
4	Nut	A194 2H
5	Hnge	GS-C25
6	Pin	A182 F6
7	Gasket	Graphite
8	Bolt	A193 B7
9	Nut	A194 2H
10	Bonnet	GS-C25
11	Hcok Screw	Corbon Steel

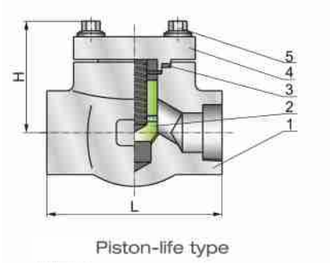
MAIN PARAMETER SPECIFICATION

Design and manufacture:DIN3840
Face to face:DIN3202-F6.EN558-1
End flange Dimensions:DIN2543 (PN16) .DIN2544 (PN25)
DN2545PN40) .EN1092-1
Pressure test:DIN3230.EN12266-1

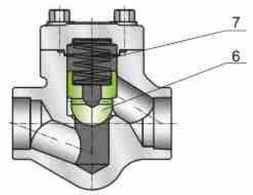
Dimensions and Weights

PN	DN	40	50	65	80	100	125	150	200	250	300	350	400	500	600
16	L	180	200	240	260	300	350	400	500	600	700	800	900	1100	1300
	H	129	147	161	178	190	265	285	345	394	420	456	526	628	740
	WEIGHT(kg)	11	15	19	26	35	48	70	104	190	280	-	-	-	-
25	L	180	200	240	260	300	350	400	500	600	700	800	900	1100	1300
	H	129	147	161	178	190	265	285	345	395	420	460	522	622	740
	WEIGHT(kg)	12	17	23	31	45	62	95	182	297	389	620	934	1330	-
40	L	200	230	290	310	350	400	480	600	730	850	980	1100	1250	1450
	H	129	147	161	178	190	265	285	332	395	420	460	522	622	760
	WEIGHT(kg)	10.5	15	21	28	40	58	77	-	-	-	-	-	-	-

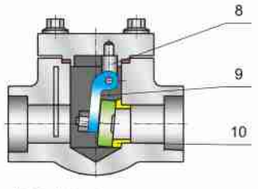
FORGED STEEL CHECK VALVE



Piston-life type



Ball type



Swing type

Design specifications

Construction type	BC-SWING.BC-PISTON-LIFT
Design standard	ASME B16.34, BS 5352, API 602
Face to face	ASME B1.20.1
Hanged ends	ASME B16.11
Test & inspection	API 598

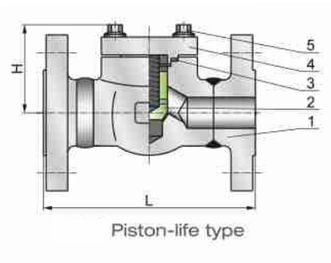
Materials of Main Parts

NO	Part name	Material
1	Body	ASTM A105 ASTM A182-F11.F22.F5 ASTM A182-F304, F316, F304L, F316L
2	Disc	ASTM A182 Gr.F6a ASTM A182-F11.F22.F5 ASTM A182-F304, F316, F304L, F316L
3	Gasket	Graphite&stainless steel
4	Bonnet	ASTM A105 ASTM A182-F11, F22.F5 ASTM A182-F304, F316, F304L, F316L
5	Bolt	ASTMA193-B7, A320-B8, A193-B8M
6	Ball	ASTM A182 Gr.F6a ASTM A182-F11.F22.F5 ASTM A182-F304, F316, F304L, F316
7	Spring	AIS19260.AISI 6150 ASTM A182-F304, F316, F304L, F316L
8	Pin	ASTM A182 GR.F6a, ASTM A182 F22 ASTM A182-F304, F316, F304L, F316L
9	Arm	ASTM A105 ASTM A182-F11, F22.F5 ASTM A182-F304, F316, F304L, F316L
10	Seat	ASTM A182 Gr.F6a. ASTM A182-F11.F22.F5 ASTM A182-F304, F316, F304L, F316L

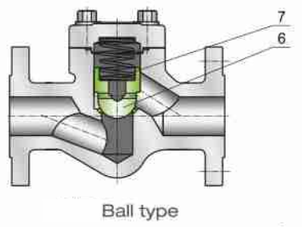
Main External Dimensions

Model		H8S (T) Y- (C.I.H.V.P.R.S.L) Swing type						
Pressure rate		800						
Size	mm (in) Reduced bore	15(1/2)	20(3/4)	25 (1)	32(1-1/4)	40 (1-1/2)	50 (2)	
	mm (in) Full bore	10(3/8)	15(1/2)	20 (3/4)	25(1)	32(1-1/4)	40 (1-1/2)	50 (2)
L(mm)		80	92	111	120	120	140	172
H(mm)		61	61	78	85	103	119	132
Weight (Kg)		1.6	1.8	2.54	3.5	4.5	7.3	9.8
Model		H8S (T) Y- (C.I.H.V.P.R.S.L) Piston-life type, Ball type						
Pressure rate		800						
Size	mm (in) Reduced bore	15(1/2)	20(3/4)	25 (1)	32(1-1/4)	40(1-1/2)	50 (2)	
	mm (in) Full bore	10(3/8)	15(1/2)	20 (3/4)	25(1)	32(1-1/4)	40 (1-1/2)	50 (2)
L(mm)		80	92	111	120	152	172	200
H(mm)		61	61	78	85	103	119	132
Weight (Kg)		1.2	1.4	2.5	3.9	5.5	8.9	12.5

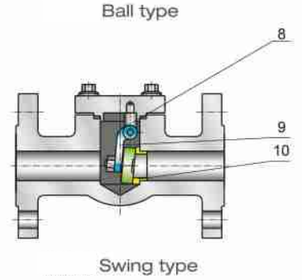
FORGED STEEL CHECK VALVE



Piston-life type



Ball type



Swing type

Design specifications

Construction type	WAFER-TYPE
Design standard	API 602
Face to face	ASME B16.10
Hanged ends	ASME B16.5
Test & inspection	API 598

Materials of Main Parts

NO	Part name	Material
1	Body	ASTM A105 ASTM A182-F11.F22.F5 ASTM A182-F304, F316, F304L, F316L
2	Disc	ASTM A182 Gr.F6a ASTM A182-F11.F22.F5 ASTM A182-F304, F316, F304L, F316L
3	Gasket	柔性石墨+不锈钢Graphite&stainless steel
4	Bonnet	ASTM A105 ASTM A182-F11, F22.F5 ASTM A182-F304, F316, F304L, F316L
5	Bolt	ASTMA193-B7, A320-B8, A193-B8M
6	Ball	ASTM A182 Gr.F6a ASTM A182-F11.F22.F5 ASTM A182-F304, F316, F304L, F316
7	Spring	AIS19260.AISI 6150 ASTM A182-F304, F316, F304L, F316L
8	Pin	ASTM A182 GR.F6a, ASTM A182 F22 ASTM A182-F304, F316, F304L, F316L
9	Arm	ASTM A105 ASTM A182-F11, F22.F5 ASTM A182-F304, F316, F304L, F316L
10	Seat	ASTM A182 Gr.F6a. ASTM A182-F11.F22.F5 ASTM A182-F304, F316, F304L, F316L

Main External Dimensions

Model		H1 (F.R.J) Y- (C.P.R)					
Pressure rate		150					
Size	mm (in) Reduced bore	15(1/2)	20(3/4)	25 (1)	32(1-1/4)	40(1-1/2)	50(2)
	mm (in) Full bore	108	117.5	127	140	165	203
L(mm)		119	130	140	153	175	216
H(mm)		60	60	76	85	103	118
Weight (Kg)		2.2	2.8	4.5	7.0 (8.2)	8.0(8.9)	13
Model		H3 (F.R.J) Y- (C.P.R)					
Pressure rate		300					
Size	mm (in) Reduced bore	15(1/2)	20(3/4)	25 (1)	32 (1-1/4)	40(1-1/2)	50(2)
	mm (in) Full bore	152.5	178	203	216	228.5	266.5
L(mm)		163.5	191	216	229	241	282
H(mm)		60	60	76	85	103	118
Weight (Kg)		3	4.8	5.5	(8.8)	(9.8)	(13.5)
Model		H6 (F.R.J) Y- (C.P.R)					
Pressure rate		600					
Size	mm (in) Reduced bore	15(1/2)	20(3/4)	25 (1)	32 (1-1/4)	40(1-1/2)	50(2)
	mm (in) Full bore	165	191	216	229	241	292
L(mm)		163.5	190.5	216	229	241	295
H(mm)		60	60	76	85	103	118
Weight (Kg)		2.8	5	6.5	(9.5)	11	(15.5)

WAFER TYPE DUAL DISC SWING CHECK VALVE

Product Introduction

Wafer type dual disc swing check valve is used for clean pipeline and industrial, environmental protection, water treatment, high-rise building water supply and drainage pipeline, to prevent the reverse flow of media.The check valve adopts the clamping type, the butterfly plate is two semicirons, and the spring is used to force the return, the sealing surface can be the body surfacing wear-resistant material or rubber lining, the use range is wide, the sealing is reliable.

Structural Features

Water type dual disc swing check valve are used in all kinds of pipes under the pressure of PN1.6-16.0MPa.Class 150-900 and working temperatures between-196-425C.They are mainly used to prevent the reverse flux of the media.

Main structural features:

1. Short length, small volume and light weight.
2. Either soft sealing material or hard sealing material can be applied for the sealing surface according to different working conditions, both of which promise a perfect sealing effect.
3. With a small starting pressure, the valve discs can be fully opened under a very small pressure difference.
4. Fast discs closing and small water hammer pressure.
5. Convenient installation and applicability on both level and vertical pipes.
6. Different materials for the parts, sizes and forms of the valves surfaces are available for free combination according to the working facts and the customer ‘s requirements.

Material Range

Standard body/bonnet materials including nine grades of carbon, low alloy and stainless steels.For special apolications they can be supplied in other gardes of alloy and stainless steel.There ‘s a full range of trim materials to match any service.Optional packing and gasket materials are available for a full range of service conditions.

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WAFER TYPE DUAL DISC SWING CHECK VALVE

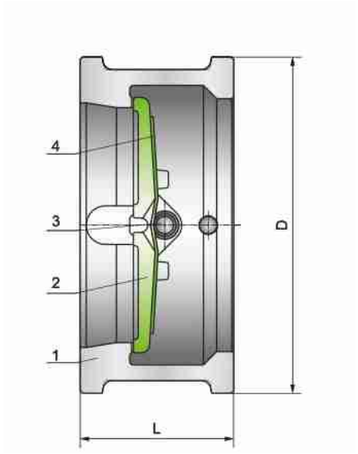
Products specification

Class rating	Nominal diameter size
1.0MPa	50-600mm
1.6MPa	50-600mm
2.5MPa	50-600mm
4.0MPa	50-400mm
6.3MPa	50-300mm
10.0MPa	50-300mm
16.0MPa	50-200mm
Class150	2"-60"
Class300	2"-56"
Class600	2"-48"
Class900	2"-36"

Technical Specification

Pressure rate	GB(PN)							ANSI(Class)			
	1.0	1.6	2.5	4.0	6.3	10.0	16.0	150	300	600	900
Shell testpressure	1.5	2.4	3.75	6.0	9.45	15.0	24.0	3.0	7.5	15	22.5
Sealing testpressure	1.1	1.76	2.75	4.4	6.93	11.0	17.6	2.5	5.5	11	16.5
Temperature	⩽600℃ (Different materials for different operating temperature)										
Suitable medium	Water, oil, gas and corrosive medium										

WAFER TYPE DUAL DISC SWING CHECK VALVE



Class150, 300

Design Specifications

Construction type	WAFER-TYPE
Design standard	GB/T 12224
Face to face	JB/T8937
Hanged ends	JB/8937
Test & inspection	GB/23480

Notes:The sizes of serial valve connecting flange can be designed according to customer' s requirements.

Materials of Main Parts

NO	Part name	Material
1	Body	WCB CF8,CF8M,CF3,CF3M
2	Disc	WCB CF8,CF8M,CF3,CF3M
3	Pin	1Cr13,2Cr13,1Cr18Ni9Ti, 0Cr18Ni12Mo2Ti
4	Spring	4Cr13,60Si2Mn,1Cr18Ni9Ti, 0Cr18Ni12Mo2Ti

Main External Dimensions

Model		H76H(W.Y)-10C(P.R.S.L)													
Pressure rate		1.0MPa													
Size	mm	50	65	90	100	125	150	200	250	300	350	400	450	500	600
L(mm)		60	67	73	73	86	98	127	146	181	184	191	203	219	222
H(mm)		109	129	144	164	194	220	275	330	380	440	492	542	597	698
Weight (Kg)		2	3	4.2	6.2	7.5	11.5	20.2	31	48.2	72.5	104.5	151	180	300
Model		H76H(W.Y)-16C(P.R.S.L)													
Pressure rate		1.6MPa													
Size	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600
L(mm)		60	67	73	73	86	98	127	146	181	184	191	203	219	222
H(mm)		109	129	144	164	194	220	275	332	387	447	498	558	620	734
Weight (Kg)		2	3	4.2	6.2	7.5	11.5	20.2	32	51	73	108	160	200	320
Model		H76H(W.Y)-16C(P.R.S.L)													
Pressure rate		2.5MPa													
Size	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600
L(mm)		60	67	73	73	86	98	127	146	181	184	191	203	219	222
H(mm)		109	129	144	170	197	227	287	343	403	460	518	568	624	734
Weight (Kg)		2	3	4.2	6.2	9	12.5	23	40	55	82	118	212	240	412

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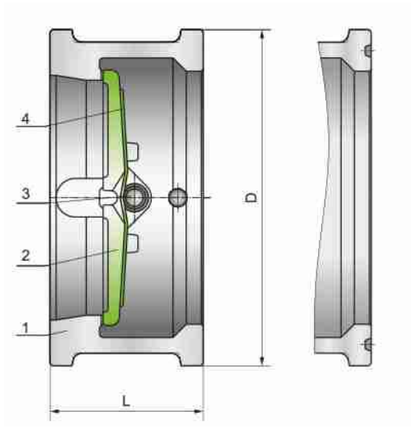
WAFER TYPE DUAL DISC SWING CHECK VALVE



PN4.0,6.4MPa

PN⩾10.0MPa

Design Specifications

Construction type	WAFER-TYPE
Design standard	GB/T 12224
Face to face	JB/T8937
Hanged ends	JB/8937
Test & inspection	GB/T 26480

Notes:The sizes of serial valve connecting flange can be designed according to customer' s requirements.

Materials of Main Parts

NO	Part name	Material
1	Body	WCB CF8,CF8M,CF3,CF3M
2	Disc	WCB CF8,CF8M,CF3,CF3M
3	Pin	1Cr13,2Cr13,1Cr18Ni9Ti, 0Cr18Ni12Mo2Ti
4	Spring	4Cr13,60Si2Mn,1Cr18Ni9Ti, 0Cr18Ni12Mo2Ti

Main External Dimensions

Model		H76H(W.Y)-40C(P.R.S.L)													
Pressure rate		4.0MPa													
Size	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600
L(mm)		60	67	73	73	86	98	127	146	181	222	232	-	-	-
H(mm)		109	129	144	170	197	227	293	355	420	478	549	-	-	-
Weight (Kg)		3.5	5	7.2	9.3	16	18	30	52	87	121	162	-	-	-
Model		H76H(W.Y)-63C(P.R.S.L)													
Pressure rate		6.3MPa													
Size	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600
L(mm)		60	67	73	79	105	136	165	213	229	-	-	-	-	-
H(mm)		115	140	150	177	213	250	313	364	424	-	-	-	-	-
Weight (Kg)		3.5	5	7.2	12	22	34	48	77	112	-	-	-	-	-
Model		H76H(W.Y)-100C(P.R.S.L)									H76H(W.Y)-160C(P.R.S.L)						
Pressure rate		10.0MPa									16.0MPa						
Size	mm	50	65	80	100	125	150	200	250	300	50	65	80	100	125	150	200
L(mm)		60	67	73	73	105	136	165	213	229	70	83	83	102	110	159	206
H(mm)		122	147	157	183	220	260	324	394	458	143	163	178	210	249	282	358
Weight (Kg)		4	6	8	12	21	34	48	77	112	7	10	15	25	30	43	55

AXIAL FLOW TYPE CHECK VALVE

Product Introduction

Axial flow check valve not only has the function of general check valve, but also adopts the exquisite sealing technology to make the valve reach zero leakage.The unique venturi streamline channel design has the advantages of small flow resistance, good flow state, fast response to medium pressure change, small external size and so on.It is the preferred valve for general industrial use and pipeline use, especially suitable for the export of oil pump and natural gas compressor.

Structural Features

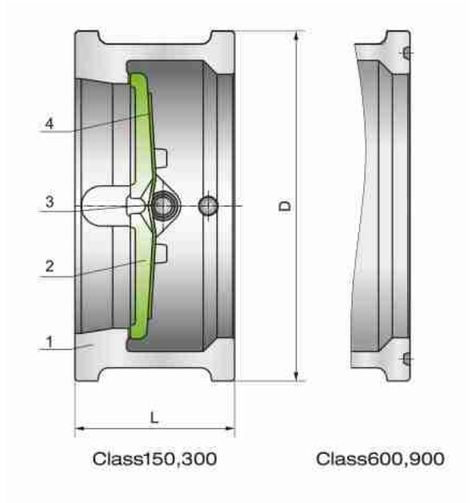
The axial flow check valve is applied to prevent the medium from flowing back for pipelines with working conditions as petrpressure class 150Lb-600Lb (PN2.0-10.0MPa) and working temperature
-46, 350C in such oleum, chemical engineering and natural gas. It mainly has the following structural features:

1. The product is featured by its reasonable structure, reliable seal, excellent performance and attractive appearance.
2. The valve ‘s disc and seat sealing surfaces adopt overlay welding of cobalt-base alloy or a combination of non-metal andmetal seal, featuring stable performance and a long service life.
3. Its end connection adopts welding end or flange connection, and the user can select a connection mode as required bypipelines to meet various engineering needs.
4. It adopts a streamline design, featuring low noise, energy saving and being environment-friendly, and the medium has asmall pressure loss when passing through the valve.
5. It has a long service life, no seizure in opening/closing and reliable running.
6. It adopts low-pressure sealing and opening.
7. It has zero leakage, unparalleled by traditional check valves.

Material Range

Standard body/bonnet materials include nine grades of carbon, low alloy and stainless steels.For special apolications they can be supplied in other gardes of alloy and stainless steel.There ‘s a full range of trim materials to match any service.Optional packing and gasket materials are available for a full range of service conditions.

WAFER TYPE DUAL DISC SWING CHECK VALVE



Design specifications

Construction type	WAFER-TYPE
Design standard	API594
Face to face	ASME B16.10/API 594
Hanged ends	ASMEB16.5
Test & inspection	API 598

Notes:The sizes of serial valve connecting fiange can be designed according to customer ‘s requirements.

Materials of Main Parts

NO	Part name	Material
1	Body	ASTM A216-WCB ASTMA351-CF8. CF8M.CF3.CF3M
2	Disc	ASTM A216-WCB ASTMA351-CF8, CF8M, CF3, CF3M
3	Pin	ASTM A182 Gr.F6a ASTM A182 F22 ASTM A182-F304, F316, F321, F304L, F316L
4	Spring	AISI9260.AISI6150 ASTM A182-F304, F316, F321, F304L, F316L

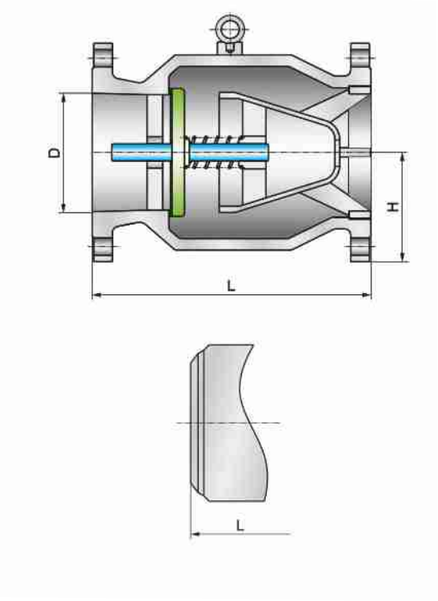
Main External Dimensions

Model		H76Y-150Lb (C.P.R.S.L)													
Pressure rate		150													
Size	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600
	in	2	21/2	3	4	5	6	8	10	12	14	16	18	200	24
L(mm)		60	67	73	73	86	98	127	146	181	184	191	203	219	222
H(mm)		103	122	135	173	196	222	279	339	409	450	514	549	606	717
Weight (Kg)		2	3.2	4	6	9	12	22	38	54	80	118	210	240	410

Model		H76Y-300Lb (C.P.R.S.L)										
Pressure rate		900										
Size	mm	50	65	80	100	125	150	200	250	300	350	400
	in	2	21/2	3	4	5	6	8	10	12	14	16
L(mm)		60	67	73	73	86	98	127	146	181	222	232
H(mm)		110	129	148	180	215	250	307	361	422	485	539
Weight (Kg)		3.5	5	7	10	18.5	19	33	54	88	128	169

Model		H76Y-600Lb (C.P.R.S.L)											H76Y-900Lb (C.P.R.S.L)					
Pressure rate		600											900					
Size	mm	50	65	80	100	125	150	200	250	300	350	400	50	65	80	100	150	200
	in	2	21/2	3	4	5	6	8	10	12	14	16	2	21/2	3	4	6	8
L(mm)		60	67	73	79	105	136	165	213	229	273	305	70	83	83	102	159	206
H(mm)		110	129	148	192	240	265	319	399	456	489	562	142	164	167	205	288	358
Weight (Kg)		3.5	5	7	12	22.5	35	45	77	110	135	163	6.5	9	14	24	43	56

AXIAL FLOW TYPE CHECK VALVE



Design specifications

Construction type	轴流式Axial flow type
Design standard	API 6D GB/T19672 GB/T21387
Face to face	API 6D GB/T19672
End dimensions	ASMEB16.25 ASME B16.5 GB/T9113HG/T20592
Test & inspection	API 6D API 598 GB/T26480

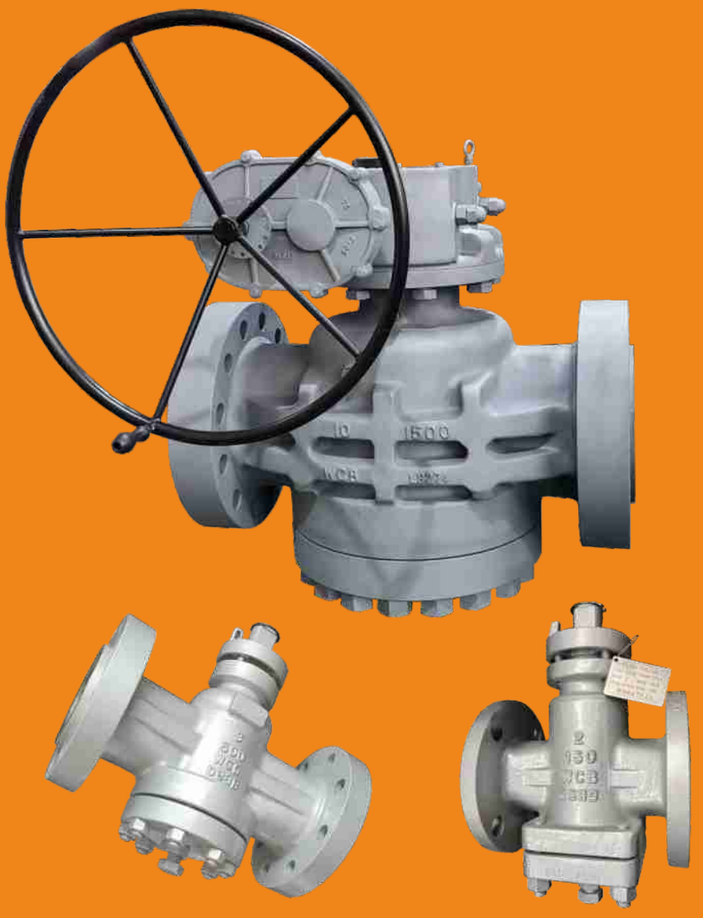
Materials of Main Parts

NO	Part name	Material
1	Body	WCB LCB CF8 CF8M
2	Disc	A105LF2A516Gr.70
3	Spring	60Si2Mn Inconel X-750
4	Guide sleeve	304 316
5	Bearing	304+PTFE 316+PTFE

Main External Dimensions

size		D	L-BW	L-RF	L-RTJ	H	Weight (kg)
In	mm						
PN2.0MPa (CIass150)							
2	50	49	203	203	216	102	△
3	80	74	241	241	254	128	△
4	100	100	292	292	305	160	△
6	150	150	356	356	368	200	△
8	200	201	495	495	508	255	△
10	250	252	622	622	635	308	△
12	300	303	699	699	711	348	△
14	350	334	787	787	800	360	△
16	400	385	864	864	876	410	△
18	450	436	978	978	991	430	△
20	500	487	978	978	991	492	△
22	550	538	1067	1067	1080	505	△
24	600	589	1295	1295	1305	570	△
26	650	633	1295	1295	1308	618	△
28	700	684	1448	1448	1461	692	△
30	750	735	1524	1524	1357	800	△
32	800	779	1778	1778	1794	804	△
34	850	830	1930	1930	1946	817	△
36	900	874	1965	1965	1981	945	△
40	1000	976	2159	2159	2175	980	△
42	1050	1020	2261	2261	2277	1110	△
48	1200	1166	2566	2566	2582	1265	△

PLUG VALVE



PRESSURE BALANCE GREASE INJECTION PLUG VALVE

Product Introduction

The pressure balance grease injection plug valve is applied to control the medium flowing for pipelines with pressure class150Lb-900Lb (PN2.0-16.0MPa) and working temperature -46~180C in such working conditions as petroleum, chemicalengineering and natural gas.

Structural Features

1. The product is featured by its cast steel valve body, pressure balance type, upside down mounting plug structure andgrease injection sealing;
2. The valve body ‘s inner cavity and plug, as sealing surfaces, are provided with precision finishing through match andmanual grinding;
3. 3.The seal surfaces are treated with special friction-reducing/high abrasion resistant coating;
4. A stem extension device can be provided if it ‘s required to bury the product for use, and the grease injection device andaccessory structures can be extended through built-in pipelines;
5. An optional ON/OFF position locking device is available;
6. The actuator connecting port is manufactured as per IS05211, and many actuating modes, pneumatic, electric orpneumatic-hydraulic, are optional for users.

Materials of Main Parts

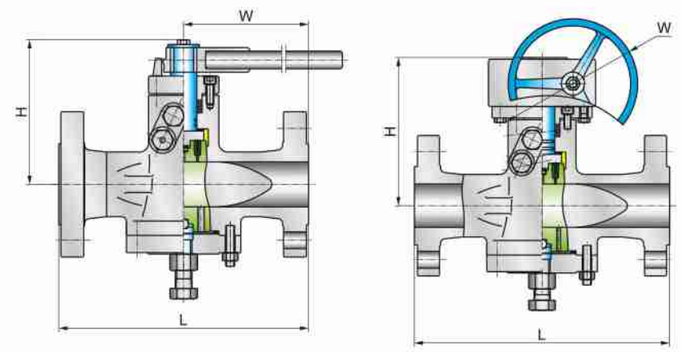
Part name	Material
Body	WCB, LCB, CF8, CF3, CF8M, CF3M
Bonnet	A105, LF2.F304, F304L, F316, F316L
Plug	QT500, WCB, CF8, CF3, CF8M, CF3M
Stem	F6a, F304, F304L, F316, F316L

Technical Specification

Construction type	Pressure balanced
Design standard	API 6D GB/T19672 GB/T22130
Face to face	API 6D GB/T19672
End dimensions	ASMEB16.25 ASME B16.5 GB/T9113 HG/T20592
Test inspection	API 6D API 598 GB/T13927

GNTV LYV®

PRESSURE BALANCE GREASE INJECTION PLUG VALVE

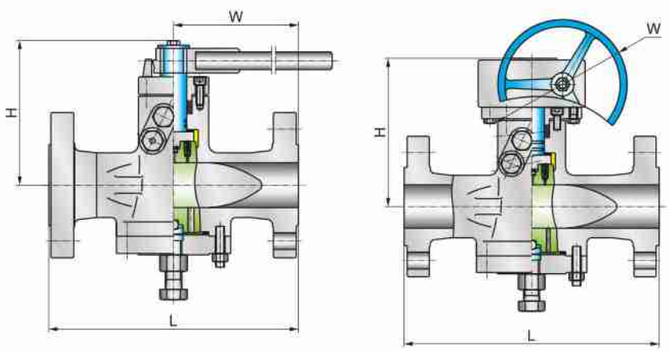


⩾4"for worm gear drive

Main External Dimensions

Size		L-BW	L-RF	L-RTJ	H	w	Weight (kg)
In	mm						
		(Class150)					
1	25	203	127	140	185	500	11
1-1/2	40	229	165	178	210	600	14
2	50	267	178	190	215	600	16
2-1/2	65	305	190	203	250	820	20
3	80	330	203	216	270	820	29
4	100	356	229	241	300	300	48
6	150	394	267	406	365	320	98
8	200	457	292	470	400	320	125
10	250	559	330	546	450	350	171
12	300	635	356	622	510	380	230
14	350	686	381	699	590	380	370

PRESSURE BALANCE GREASE INJECTION PLUG VALVE



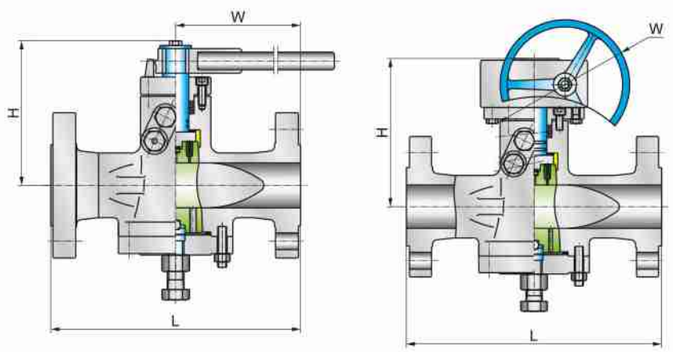
⩾4"for worm gear drive

Main External Dimensions

Size		L-BW	L-RF	L-RTJ	H	w	Weight (kg)
In	mm						
(Class300)							
1	25	203	165	178	185	500	14
1-1/2	40	229	190	203	210	600	19
2	50	267	216	232	215	820	21
2-1/2	65	305	241	257	250	1000	28
3	80	330	283	298	270	1000	34
4	100	356	305	321	300	300	57
6	150	457	403	419	365	320	130
8	200	521	419	435	400	320	190
10	250	559	457	473	450	350	255
12	300	635	502	518	510	380	380
14	350	762	762	778	590	380	560

GNTV LYV®

PRESSURE BALANCE GREASE INJECTION PLUG VALVE



⩾4"for worm gear drive

Main External Dimensions

Size		L-BW	L-RF	L-RTJ	H	w	Weight (kg)
In	mm						
(Class600)							
1	25	216	216	216	185	500	17
1-1/2	40	241	241	241	210	600	22
2	50	292	292	295	215	820	27
2-1/2	65	330	330	333	250	1000	33
3	80	356	356	359	270	1000	42
4	100	432	432	435	300	300	91
6	150	559	559	562	365	320	210
8	200	660	660	664	400	320	320
10	250	787	787	791	450	350	660
12	300	938	838	841	510	380	920
14	350	889	889	892	590	380	1250

BUTTERFLY BAMPER

TRIPLE OFFSET BUTTERFLY VALVE

Product Introduction

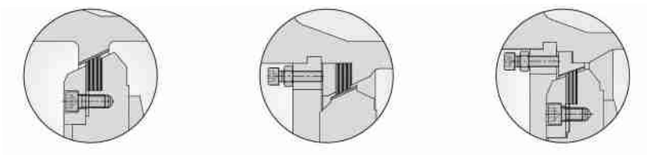
The triple offset butterfly valve has an extra unique angular eccentricity on the basis of double offset,which completely eliminates all friction between the seat and the sealing ring when opening to 90°,It has an obvious price performance ratio compared to gate valve and ball valve especially under some high pressure, high temperature and low temperature conditions.Furthermore, it's widely used on industrial pipelines, such as metallurgy, electric power, petrochemical engineering, water supply/drainage and municipal constructions for regulating flow and shutting off fluids.

Structural Features

1. Seal with elastic metal steel in the interlayer enables the valve to have zero leakage performance.
2. The friction-free design of right-angle rotation is realized by a unique triple offset design.There is no friction between the seat and seal ring when the valve opening from 0 to 90 degrees, which eliminates the possibilities of wear and leakage and prolongs the service life of the valve.
3. Torque seal can meet the requirement of two-way zero leakage in long-term operation of the valve.The switch life of the valve allows five hundred thousand times.
4. All-metal structure with zero leakage performance makes the valve has essential fire safety characteristics
5. The butterfly valve adopts precision casting process, including the body and the disk.This process has many advantages comparing with steel plate coiling process, the most important of which is that the overall strength of the valve is high, and the cost of it is also higher than that of the coiling process.
6. The external blow-out proof stem is safe and reliable and complies with the requirements of API 609.
7. The type of the variety of packing structure can meet the requirements of different working conditions.

Seal Structure Type

Materials ofthe Seal Rings:SS+Graphite/PTFE/Full Metal



Seal Ring On The Disk | Seal Ring On The Body | Seal Ring With Replaceable Seat Structure

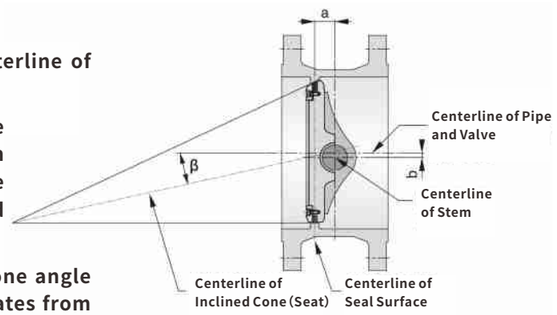
TRIPLE OFFSET BUTTERFLY VALE

Design Principle

1st offset a:The stem deviates from the centerline of the sealing surtace

2nd offset b:The stem deviates from the pipe and the centerline of the valve, both of which are designed to reduce friction between the seat and the sealing ring when opening and closing.

3rd-offset β:The centerline of the inclined cone angle created-by the seal surface of the valve deviates from the pipe and the centerline of the valve



1. **Geometrically, the seat is completely detached from the seal ring throughout the opening and closing.This unique offset design not only makes the best of cam effect, but also completely eliminates friction so that there is no friction between seat and sealing ring when opening to 90, eliminating the possibilities of wear and leakage.**

2. **The characteristics of the contact between seat and seal ring are optimized.The contact angle of most gate valves is 3 to 6, which is in the range of locking taper, resulting in high sealing torque and opening torque.**

3. **The contact angle of the valve is larger than the locking taper range, and the possibility of being stuck is excluded from the geometric shape, which ensures that the torque required for the switch will not change greatly throughout the ser vice life of the valve.**

Design Specifications

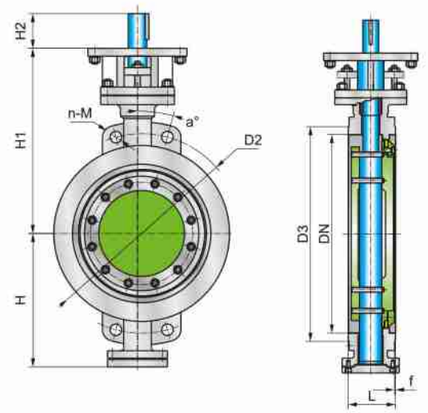
Design Criteria	Flange Standard	Face-to-face Length Standard	Test Standard
JB/T 8527	GB/T 9113	GB/T 12221	GB/T 13927
EN593	EN1092	EN558	EN12266-1
API 609	ASME B 16.5 ASME B 16.47B	API 609 ASME B 16.10	API 598

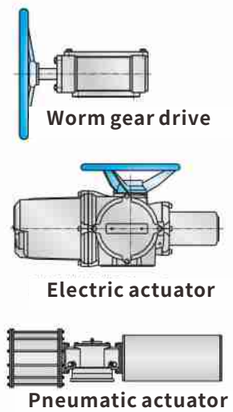
Specification Range

Size Range	Pressure Range	Temperature Range	Connection	Material Range
DN50-DN4000	1500LB以内	-196-700°C	Wafer, Lug. Double Falnge, Butt-welded	All Metal Material

TRIPLE OFFSET BUTTERFLY VALVE

Wafer





Main External Dimensions unit:mm

DNin (mm)	L	D2	D3	f	a°	n-M	IS05211	Nm	Weight	CV	H	H1	H2
PN10													
DN50	43	125	99	/	45	4-Φ18	F07	26	5.3	58	72	178	40
DN65	46	145	118	/	45	4-Φ18	F07	30	6.3	109	80	189	40
DN80	64	160	132	/	22.5	4-Φ18	F07	50	8.3	165	95	199	40
DN100	64	180	156	/	22.5	4-Φ18	F07	80	11.1	318	110	209	40
DN125	70	210	184	/	22.5	4-Φ18	F10	120	15.1	648	165	250	60
DN150	76	240	211	/	22.5	4-Φ22	F10	240	20	932	185	270	60
DN200	89	295	260	/	22.5	4-Φ22	F12	480	28.2	1970	225	310	60
DN250	114	350	312	/	15	4-Φ22	F12	760	40.7	2689	260	345	60
DN300	114	400	370	4	15	4-Φ20	F14	850	58.5	3930	290	395	80
DN350	127	460	429	4	11.25	4-Φ20	F16	1800	80.7	5290	338	455	80
DN400	140	515	470	4	11.25	4-Φ24	F16	2000	103.8	7726	375	490	90
DN450	152	565	520	4	9	4-Φ24	F16	2509	128.8	9856	405	520	90
DN500	152	620	570	5	9	4-Φ24	F16	3200	169.5	12180	435	550	100
DN600	154	725	682	5	9	4-Φ27	F25	6350	247.6	19800	476	632	125
DN700	165	840	794	5	7.5	4-Φ27	F25	6800	376.3	27600	520	670	150
DN800	190	950	901	5	7.5	4-Φ30	F25	10050	499.5	35800	578	706	150
DN900	203	1050	1001	5	6.428	4-Φ30	F25	12500	667.4	45600	650	795	150
DN1000	216	1160	1112	5	6.428	4-Φ33	F35	20000	838.4	65320	720	885	150
DN1200	254	1380	1328	5	5.625	4-Φ36	F35	30000	1259.8	96000	860	1020	150

TRIPLE OFFSET BUTTERFLY VALVE

Wafer

Main External Dimensions

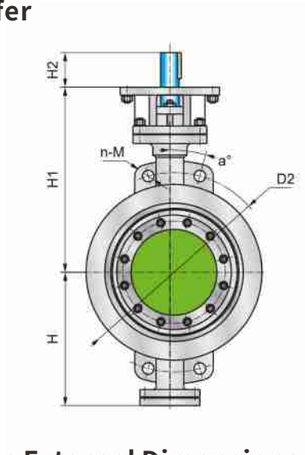
unit:mm

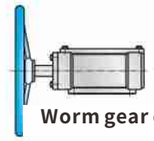
DNin (mm)	L	D2	D3	f	a°	n-M	ISO5211	Nm	Weight	CV	H	H1	H2
PN16													
DN50	43	125	99	/	45	4-Φ18	F07	26	5.3	58	72	178	40
DN65	46	145	118	/	45	4-Φ18	F07	30	6.3	109	80	189	40
DN80	64	160	132	/	22.5	4-Φ18	F07	60	8.3	165	95	199	40
DN100	64	180	156	/	22.5	4-Φ18	F07	100	11.1	318	110	209	40
DN125	70	210	184	/	22.5	4-Φ18	F10	240	15.1	648	165	250	60
DN150	76	240	211	/	22.5	4-Φ22	F10	340	20	932	185	270	60
DN200	89	295	260	3	15	4-Φ20	F12	720	28.2	1970	225	310	60
DN250	114	355	312	/	15	4-Φ26	F12	950	40.7	2689	260	345	60
DN300	114	410	365	4	15	4-Φ24	F14	1300	58.5	3930	290	395	80
DN350	127	470	429	4	11.25	4-Φ24	F16	2200	80.7	5290	338	455	80
DN400	140	525	470	4	11.25	4-Φ27	F16	2340	103.8	7726	375	490	90
DN450	152	585	520	4	9	4-Φ27	F16	3300	128.8	9856	405	520	90
DN500	152	650	570	5	9	4-Φ30	F25	5000	169.5	12180	435	565	100
DN600	154	770	720	5	9	4-Φ33	F25	7000	247.6	19800	480	640	125
DN700	165	840	794	5	7.5	4-Φ33	F25	11000	376.3	27600	520	670	150
DN800	190	950	901	5	7.5	4-Φ36	F30	16000	499.5	35800	578	706	150
DN900	203	1050	1001	5	6.428	4-Φ36	F30	22000	667.4	45600	650	790	150
DN1000	216	1170	1112	5	6.428	4-Φ39	F35	28000	838.4	65320	720	885	150
DN1200	254	1390	1328	5	5.625	4-Φ45	F35	37000	1259.8	96000	860	1020	180
Pn25													
DN50	43	125	99	/	45	4-Φ18	F07	40	5.4	58	72	178	40
DN65	46	145	118	/	22.5	4-Φ18	F07	50	6.8	109	80	189	40
DN80	64	160	132	/	22.5	4-Φ18	F07	90	8.5	165	95	199	40
DN100	64	190	156	/	22.5	4-Φ22	F07	150	12.4	318	110	209	40
DN125	70	220	184	/	22.5	4-Φ26	F10	320	17	648	165	250	60
DN150	76	250	211	/	22.5	4-Φ26	F10	500	21.7	932	185	270	60
DN200	89	310	274	3	15	4-Φ24	F12	1020	35.1	1970	225	310	60
DN250	114	370	312	3	15	4-Φ30	F12	1300	51.6	2689	260	345	60
DN300	114	430	389	4	11.25	4-Φ27	F14	1800	76	3930	290	395	80
DN350	127	490	429	4	11.25	4-Φ30	F16	3200	103.5	5290	338	455	80
DN400	140	550	503	4	11.25	4-Φ33	F16	3600	137.9	7726	375	490	90
DN450	152	600	520	4	9	4-Φ33	F25	5200	163.1	9856	405	535	90
DN500	152	660	570	5	9	4-Φ33	F25	6200	190.5	12180	435	565	100
DN600	154	770	720	5	9	4-Φ36	F25	10600	256.8	19800	480	640	125
DN700	165	875	820	5	7.5	4-Φ39	F30	18000	473.7	27600	520	690	150
DN800	190	990	928	5	7.5	4-Φ45	F35	30000	633.3	35800	585	815	150
DN900	203	1090	1028	5	6.428	4-Φ45	F35	38000	849.4	45600	650	830	150
DN1000	216	1210	1140	5	6.428	4-Φ52	F35	42000	1048.5	65320	720	915	180
DN1200	254	1420	1350	5	5.625	4-Φ52	F40	58000	1637.6	96000	860	1090	180

GNTV LYV®

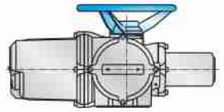
TRIPLE OFFSET BUTTERFLY VALVE

Wafer





Worm gear drive



Electric actuator

Pneumatic actuator

Main External Dimensions

unit:mm

DN in (mm)	L	D2	D3	f	a°	n-M	ISO5211	Nm	Weight	CV	H	H1	H2
Class 150													
2"	43	120.7	92.1	/	/	/	F07	26	6	58	65	160	40
2.5"	46	139.7	104.8	/	/	/	F07	32	6.4	109	85	167	40
3"	48	152.4	127	/	/	/	F07	80	7.1	165	85	197	40
4"	54	190.5	157.2	/	/	/	F07	142	10.9	318	107	204	40
5"	57	215.9	185.7	/	/	/	F10	264	15.7	648	138	237	50
6"	57	241.3	215.9	/	/	/	F10	362	22.6	932	147	272	60
8"	64	298.5	269.9	/	/	/	F12	785	33.4	1970	185	307	60
10"	71	362	323.8	/	/	/	F14	1080	42.1	2689	215	354	60
12"	81	431.8	381	2	15	4-7/8-9UNC	F14	1510	63.1	3930	252	395	60
14"	92	476.3	412.8	2	15	4-1-8UNC	F16	2458	94.6	5290	287	445	80
16"	102	539.8	469.9	2	11.25	4-1-8UNC	F25	2850	124.7	7726	317	490	90
18"	114	577.9	533.4	2	11.25	4-11/8-8UN	F25	4536	144	9856	342	507	90
20"	127	635	584.2	2	9	4-11/8-8UN	F25	6200	179	12180	372	575	90
22"	154	692.2	641.4	2	9	4-11/4-8UN	F25	7300	298.1	15625	409	575	120
24"	154	749.3	692.2	2	9	4-11/4-8UN	F25	8240	381.1	19800	439	605	120
26"	165	744.5	711	2	5	8-3/4-10UNC	F30	10380	391	23850	510	645	120
28"	165	795.3	762	2	4.5	8-3/4-10UNC	F30	11682	392.8	27600	536	680	120
30"	190	846.1	813	2	4.09	8-3/4-10UNC	F30	14340	493.6	33700	580	710	150
32"	190	900.1	864	2	3.75	8-3/4-10UNC	F30	17856	587.7	35800	581	705	150
34"	203	957.3	921	2	4.5	8-7/8-9UNC	F30	23345	688.2	40400	636	825	150
36"	203	1009.6	972	2	4.09	8-7/8-9UNC	F30	27200	750.6	45600	675	850	150
38"	203	1070	1022	2	4.5	8-1-8UNC	F35	31000	856	50560	675	855	150
40"	216	1120.8	1080	2	4.09	8-1-8UNC	F35	32000	1044.4	56000	725	885	150
42"	216	1171.6	1130	2	3.75	8-1-8UNC	F35	34000	1184.5	61800	777	952	180
44"	254	1222.4	1181	2	3.461	8-1-8UNC	F35	36000	1225	67800	786	965	180
48"	254	1335.1	1289	2	3.75	8-11/8-8UN	F40	45400	1499.9	82500	847	1020	180
52"	279	1436.7	1391	2	3.461	8-11/8-8UN	F40	56000	1836.6	104336	896	1080	180
56"	279	1543	1492	2	3	8-11/8-8UN	F40	70500	2132.2	121000	980	1205	200
60"	318	1662.1	1600	2	3.461	8-11/8-4UN	F40	86000	2841.5	160380	995	1225	200

TRIPLE OFFSET BUTTERFLY VALVE

Wafer

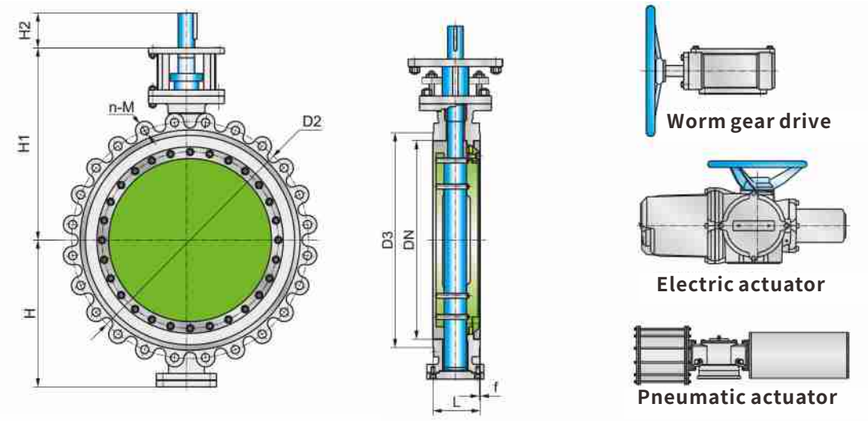
Main External Dimensions

unit:mm

DN in (mm)	L	D2	D3	f	a°	n-M	ISO5211	Nm	Weight	CV	H	H1	H2
Class 300													
2"	43	127	92.1	/	/	/	F07	78	7.8	58	65	160	40
2.5"	46	149.2	104.8	/	/	/	F07	88	8.7	109	85	167	40
3"	48	168.3	127	/	/	/	F07	144	9.8	165	100	207	40
4"	54	200	157.2	/	/	/	F07	258	15.4	318	120	222	45
5"	59	235	185.7	2	22.5	4-3/4-10UNC	F10	412	24	648	165	272	60
6"	59	269.9	215.9	2	15	4-3/4-10UNC	F12	798	41.5	682	185	292	60
8"	73	330.2	269.9	2	15	4-7/8-9UNC	F14	1960	52.9	1230	215	345	80
10"	83	387.4	323.8	2	11.25	4-1-8UNC	F16	2270	89.8	2370	252	400	80
12"	92	450.8	381	2	11.25	4-11/8-8UN	F16	2780	134.2	3520	282	440	85
14"	117	515.4	412.8	2	9	4-11/8-8UN	F25	5680	189.8	4782	330	485	90
16"	133	571.5	469.9	2	9	4-11/4-8UN	F25	7800	256.6	6280	365	510	90
18"	149	628.6	533.4	2	7.5	4-11/4-8UN	F25	8956	343	7980	405	550	120
20"	159	685.8	584.2	2	7.5	4-11/4-8UN	F30	11518	403.8	10800	435	580	120
22"	181	743	641.4	2	7.5	4-11/2-8UN	F30	15800	498.15	13030	480	610	150
24"	181	812.8	692.2	2	7.5	4-11/2-8UN	F30	18393	592.5	16180	515	645	150
26"	229	803.3	737	2	5.625	8-11/4-8UN	F35	24000	575.6	19327	575	700	150
28"	229	857.2	787	2	5	8-11/4-8UN	F35	27478	648.8	22410	600	725	180
30"	229	920.8	845	2	5	8-13/8-8UN	F35	38971	788.1	27090	635	765	180
32"	241	977.9	902	2	5.625	8-11/2-8UN	F40	41150	921.8	33050	665	855	180
34"	241	1031.9	953	2	5	8-11/2-8UN	F40	48200	1369.3	37320	686	880	180
36"	241	1089	1010	2	5.625	8-15/8-8UN	F40	53700	1481.1	42090	712	920	180
38"	241	1139.8	1060	2	5	8-15/8-8UN	F40	63000	1304.1	47000	764	950	200
40"	300	1190.6	1114	2	4.5	8-15/8-8UN	F40	68370	2005.3	48964	784	980	200
42"	300	1244.6	1168	2	5	8-13/4-8UN	F40	75400	2406.3	53700	809	985	200
44"	300	1295.4	1219	2	4.5	8-13/4-8UN	F40	82650	2887.6	62500	839	1010	200
48"	360	1416	1327	2	4.5	8-17/8-8UN	F48	108000	3465.1	69350	916	1090	200.
Class 600													
2"	54	127	92.1	7	22.5	4-5/8-11UNC	F07	162	21.5	42	82.5	190	40
2.5"	54	149.2	104.8	7	22.5	4-3/4-10UNC	F07	208	24.3	72	95	210	40
3"	54	168.3	127	7	22.5	4-3/4-10UNC	F10	340	26.7	107	100	227	40
4"	64	215.9	157.2	7	22.5	4-7/8-9UNC	F12	633	27.2	250	120	242	60
5"	78	266.7	185.7	7	22.5	4-1-8UNC	F12	960	56.2	416	188	282	60
6"	78	292.1	215.9	7	15	4-1-8UNC	F16	1630	66.5	600	210	345	60
8"	102	349.2	269.9	7	15	4-11/8-8UN	F16	3540	87.8	1079	245	380	80
10"	117	431.8	323.8	7	11.25	4-11/4-8UN	F25	5462	182.8	1708	287	440	90
12"	140	489	381	7	9	4-11/4-8UN	F25	6018	206.4	2620	315	475	90
14"	155	527	412.8	7	9	4-13/8-8UN	F25	10913	297.8	4062	357	510	120
16"	178	603.2	469.9	7	9	4-11/2-8UN	F30	15757	370.7	5292	401	570	150
18"	200	654	533.4	7	9	4-15/8-8UN	F35	19805	565.2	7395	437	615	150
20"	216	723.9	584.2	7	7.5	8-15/8-8UN	F35	25808	659.7	9320	543	670	150
22"	232	777.7	641.4	7	7.5	8-13/4-8UN	F40	40258	715.1	12260	560	705	180
24"	232	838.2	692.2	7	7.5	8-17/8-8UN	F40	44799	894.9	13578	597	735	180

TRIPLE OFFSET BUTTERFLY VALVE

Lug



Main External Dimensions

unit:mm

DN in (mm)	L	D2	D3	f	n-M	ISO5211	Nm	Weight	CV	H	H1	H2
Class 150												
2"	43	120.7	92.1	2	4-5/8-11UNC	F07	26	6	58	65	160	40
2.5"	46	139.7	104.8	2	4-5/8-11UNC	F07	32	11.9	109	85	167	40
3"	48	152.4	127	2	4-5/8-11UNC	F07	80	13.8	165	85	197	40
4"	54	190.5	157.2	2	8-5/8-11UNC	F07	142	18.3	318	107	204	40
5"	57	215.9	185.7	2	8-3/4-10UNC	F10	264	29.5	648	138	237	50
6"	57	241.3	215.9	2	8-3/4-10UNC	F10	362	39.6	932	147	272	60
8"	64	298.5	269.9	2	8-3/4-10UNC	F12	785	42.6	1970	185	307	60
10"	71	362	323.8	2	12-7/8-9UNC	F14	1080	59.4	2689	215	354	60
12"	81	431.8	381	2	12-7/8-9UNC	F14	1510	94.2	3930	252	395	60
14"	92	476.3	412.8	2	12-1-8UNC	F16	2458	137.8	5290	287	445	80
16"	102	539.8	469.9	2	16-1-8UNC	F25	2850	167.4	7726	317	490	90
18"	114	577.9	533.4	2	16-11/8-8UN	F25	4536	216	9856	342	507	90
20"	127	635	584.2	2	20-11/8-8UN	F25	6200	283.2	12180	372	575	90
22"	154	692.2	641.4	2	20-11/4-8UN	F25	7300	395.3	15625	409	575	120
24"	154	749.3	692.2	2	20-11/4-8UN	F25	8240	446	19800	439	605	120
26"	165	744.5	711	2	36-3/4-10UNC	F30	10380	647.3	23850	510	645	120
28"	165	795.3	762	2	40-3/4-10UNC	F30	11682	719.1	27600	536	680	120
30"	190	846.1	813	2	44-3/4-10UNC	F30	14340	933.7	33700	580	710	150
32"	190	900.1	864	2	48-3/4-10UNC	F30	17856	1183.8	35800	581	705	150
34"	203	957.3	921	2	40-7/8-9UNC	F30	23345	1357.3	40400	636	825	150
36"	203	1009.6	972	2	44-7/8-9UNC	F30	27200	1462.8	45600	675	850	150
38"	203	1070	1022	2	40-1-8UNC	F35	31000	1693.4	50560	675	855	150
40"	216	1120.8	1080	2	44-1-8UNC	F35	32000	1936.8	56000	725	885	150
42"	216	1171.6	1130	2	48-1-8UNC	F35	34000	2336.9	61800	777	952	180
44"	254	1222.4	1181	2	52-1-8UNC	F35	36000	2486.7	67800	786	965	180
48"	254	1335.1	1289	2	44-11/8-8UN	F40	45400	2938.1	82500	847	1020	180

TRIPLE OFFSET BUTTERFLY VALVE

Double Flange

Main External Dimensions

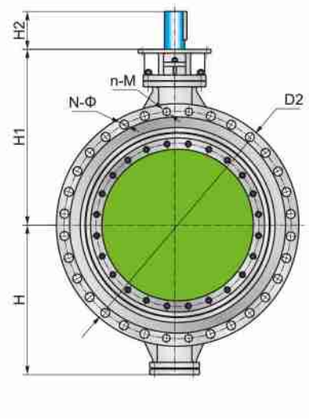
unit:mm

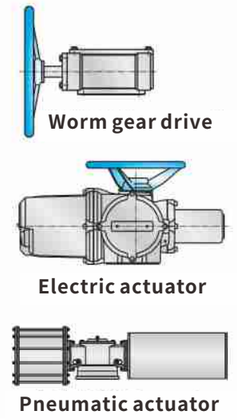
DN in(mm)	L	D1	D2	D3	n-Φ	n-M	b	f	ISO5211	Nm	Weight	CV	H	H1	H2
PN 10															
DN50	108	165	125	99	4-Φ18	/	20	3	F07	26	10	58	82.5	178	40
DN65	112	185	145	118	4-Φ18	/	20	3	F07	30	12	109	92.5	189	40
DN80	114	200	160	132	8-Φ18	/	20	3	F07	50	15	465	100	199	40
DN100	127	220	180	156	8-Φ18	/	22	3	F07	80	19	318	110	209	40
DN125	140	250	210	184	8-Φ18	/	22	3	F10	120	28.5	648	165	250	60
DN150	140	285	240	211	8-Φ22	/	24	3	F10	240	36	932	185	270	60
DN200	152	340	295	266	8-Φ22	/	24	3	F12	480	53	1970	225	310	60
DN250	165	395	350	319	12-Φ22	/	26	3	F12	760	67	2689	260	345	60
DN300	178	445	400	370	12-Φ22	/	26	4	F14	850	96	3930	280	375	80
DN350	190	505	460	429	16-Φ22	/	26	4	F16	1800	119	5290	315	430	80
DN400	216	565	515	480	16-Φ26	/	26	4	F16	2000	164	7726	345	465	80
DN450	222	615	565	530	20-Φ26	/	28	4	F16	2509	174	9856	370	505	90
DN500	229	670	620	582	20-Φ26	/	28	4	F16	3200	217	12180	410	525	100
DN600	267	780	725	682	20-Φ30	/	30	5	F25	6350	330	19800	440	605	125
DN700	292	895	840	794	24-Φ30	/	30	5	F25	6800	425	27600	528.5	670	150
DN800	318	1015	950	901	24-Φ33	/	32	5	F25	10050	594	35800	580	730	150
DN900	330	1115	1050	1001	28-Φ33	/	34	5	F25	12500	716	45600	650	790	150
DN1000	410	1230	1160	1112	28-Φ36	/	34	5	F35	20000	945	65320	720	885	150
DN1200	470	1455	1380	1328	32-Φ39	/	38	5	F35	30000	1440	96000	830	1000	150
DN1400	530	1675	1590	1530	36-Φ42	/	42	5	F40	45000	2174	139700	980	1185	180
DN1600	600	1915	1820	1750	40-Φ48	/	46	5	F40	75000	2773	176000	1055	1325	250
DN1800	670	2115	2020	1950	44-Φ48	/	50	5	F48	100000	3690	250000	1155	1430	250
DN2000	540	2325	2230	2150	48-Φ48	/	54	5	F48	130000	5140	360000	1250	1520	250
PN 16															
DN50	108	165	125	99	4-Φ18	/	20	3	F07	26	10	58	82.5	178	40
DN65	112	185	145	118	4-Φ18	/	20	3	F07	30	12	109	92.5	189	40
DN80	114	200	160	132	8-Φ18	/	20	3	F07	60	15	165	100	199	40
DN100	127	220	180	156	8-Φ18	/	22	3	F07	100	22	318	110	209	40
DN125	140	250	210	184	8-Φ18	/	22	3	F10	240	32	648	165	250	60
DN150	140	285	240	211	8-Φ22	/	24	3	F10	340	38	932	185	270	60
DN200	150	340	295	266	12-Φ22	/	24	3	F12	720	53	1970	225	310	60
DN250	165	405	355	319	12-Φ26	/	26	3	F12	950	72	2689	260	345	60
DN300	178	460	410	370	12-Φ326	/	28	4	F14	1300	103	3930	290	395	80
DN350	190	520	470	429	16-Φ26	/	30	4	F16	2200	132	5290	338	455	80
DN400	216	580	525	480	16-Φ30	/	32	4	F16	2340	167	7726	375	490	90
DN450	222	640	585	548	20-Φ30	/	34	4	F16	3300	207	9856	370	505	90
DN500	229	715	650	609	20-Φ33	/	36	4	F25	5000	243	12180	435	565	100
DN600	267	840	770	720	20-Φ36	/	38	5	F25	7000	367	19800	486	635	125
DN700	292	910	840	794	24-Φ36	/	40	5	F25	11000	452	27600	529	670	150
DN800	318	1025	950	901	24-Φ39	/	42	5	F30	16000	649	35800	580	730	150
DN900	330	1125	1050	1001	28-Φ39	/	44	5	F30	22000	776	45600	650	790	150
DN1000	410	1255	1170	1112	28-Φ42	/	46	5	F35	28000	1040	65320	720	885	150
DN1200	470	1485	1390	1328	32-Φ48	/	52	5	F35	37000	1606	96000	843	1035	180
DN1400	530	1685	1590	1530	36-Φ48	/	58	5	F40	58000	264	139700	980	1185	180
DN1600	600	1930	1820	1750	40-Φ56	/	64	5	F48	105000	3160	176000	1110	1335	250
DN1800	670	2130	2020	1950	44-Φ56	/	68	5	F48	156000	4428	250000	1155	1430	250
DN2000	540	2345	2230	2150	48-Φ62	/	70	5	F60	210000	5472	360000	1275	1545	250

GNTV LYV®

TRIPLE OFFSET BUTTERFLY VALVE

Double Flange





Main External Dimensions

unit:mm

DN in(mm)	L	D1	D2	D3	n-Φ	n-M	b	f	ISO5211	Nm	Weight	CV	H	H1	H2
Class 150															
2"	108	150	120.7	92.1	4-Φ19.1	/	19.5	2	F07	26	11.2	58	75	160	40
2.5"	112	180	139.7	104.8	4-Φ19.1	/	22.7	2	F07	32	14.3	109	90	172	40
3"	114	190	152.4	127	4-Φ19.1	/	24.3	2	F07	80	17	165	95	197	40
4"	127	230	190.5	157.2	8-Φ19.1	/	24.3	2	F07	142	26.9	318	115	204	40
5"	140	255	215.9	185.7	8-Φ22.2	/	24.3	2	F10	264	32.9	648	138	260	50
6"	140	280	241.3	215.9	8-Φ22.2	/	25.9	2	F10	362	38.1	932	147	272	60
8"	152	345	298.5	269.9	8-Φ22.2	/	29	2	F12	785	67.7	1970	185	307	60
10"	165	405	362	323.8	8-Φ25.4	4-7/8-9UNC	30.6	2	F14	1080	88.2	2689	215	355	60
12"	178	485	431.8	381	8-Φ25.4	4-7/8-9UNC	32.2	2	F14	1510	126.9	3930	252	395	60
14"	190	535	476.3	412.8	8-Φ28.6	4-1-8UNC	35.4	2	F16	2458	162.5	5290	287	440	80
16"	216	595	539.8	469.9	12-Φ28.6	4-1-8UNC	37	2	F25	3850	216.5	7726	317	490	90
18"	222	635	577.9	533.4	12-Φ31.8	4-11/8-8UN	40.1	2	F25	4536	254.2	9856	342	507	90
20"	229	700	635	584.2	16-Φ31.8	4-11/8-8UN	43.3	2	F25	6200	323.4	12180	372	535	90
22"	267	750	692.2	641.4	16-Φ34.9	4-11/4-8UN	46.5	2	F25	7300	395.8	15625	409	575	120
24"	267	815	749.3	692.2	16-Φ34.9	4-11/4-8UN	48.1	2	F25	8240	416.5	19800	439	605	120
26"	292	785	744.5	711	36-Φ22.2	/	41.8	2	F30	10380	433.9	23850	510	645	120
28"	292	835	795.3	762	40-Φ22.2	/	45	2	F30	11682	515.6	27600	536	680	120
30"	318	885	846.1	813	44-Φ22.2	/	45	2	F30	14340	581.1	33700	580	710	150
32"	318	940	900.1	864	48-Φ22.2	/	46.6	2	F30	17856	705.5	35800	581	705	150
34"	330	1005	957.3	921	40-Φ25.4	/	49.7	2	F30	23345	813.2	40400	636	825	150
36"	330	1055	1009.6	972	44-Φ25.4	/	52.9	2	F30	27200	940.7	45600	675	850	150
38"	410	1125	1070	1022	40-Φ28.6	/	54.5	2	F35	31000	1042.2	50560	675	855	150
40"	410	1175	1120.8	1080	44-Φ28.6	/	56.1	2	F35	32000	1289.1	56000	725	885	150
42"	410	1225	1171.6	1130	48-Φ28.6	/	59.3	2	F35	34000	1369.5	61800	777	952	180
44"	470	1275	1222.4	1181	52-Φ28.6	/	60.9	2	F35	36000	1440	67800	786	965	180
48"	470	1390	1335.1	1289	44-Φ31.6	/	65.6	2	F40	45400	1882	82500	847	1020	180
52"	530	1495	1436.7	1391	52-Φ31.8	/	70.4	2	F40	56000	2180.8	104336	896	1080	180
56"	530	1600	1543	1492	60-Φ31.8	/	73.6	2	F40	70500	2620	121000	941	1175	200
60"	530	1725	1662.1	1600	52-Φ34.9	/	76.7	2	F40	86000	3324	160380	995	1225	200

TRIPLE OFFSET BUTTERFLY VALVE

Double Flange

Main External Dimensions

unit:mm

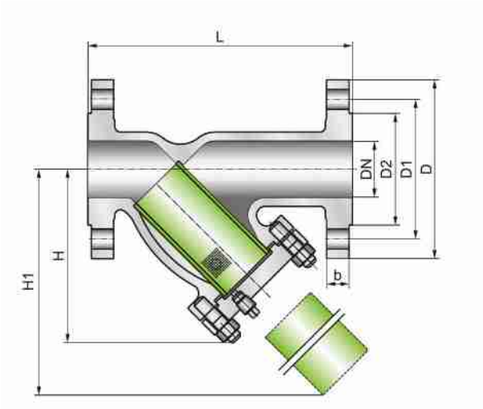
DN in(mm)	L	D1	D2	D3	n-Φ	n-M	b	f	ISO5211	Nm	Weight	CV	H	H1	H2
						Class 300									
2"	108	165	127	92.1	4-Φ19.1	4-5/8-11UNC	22.7	2	F07	78	16	58	82.5	160	40
2.5"	112	190	149.2	104.8	4-Φ22.2	4-3/4-10UNC	25.9	2	F07	88	21.9	109	95	172	40
3"	114	210	168.3	127	4-Φ22.2	4-3/4-10UNC	29	2	F07	144	24.9	165	105	207	40
4"	127	255	200	157.2	4-Φ22.2	4-3/4-10UNC	32.2	2	F07	258	46.2	318	127.5	222	45
5"	140	280	235	185.7	4-Φ22.2	4-3/4-10UNC	35.4	2	F10	412	60	648	170	272	60
6"	140	320	269.9	215.9	8-Φ22.2	4-3/4-10UNC	37	2	F12	798	93.3	682	190	292	60
8"	152	380	330.2	269.9	8-Φ25.4	4-7/8-9UNC	41.7	2	F14	1960	172.8	1230	230	345	80
10"	165	445	387.4	323.8	12-Φ28.6	4-1-8UNC	48.1	2	F16	2270	200.5	2370	260	400	80
12"	178	520	450.8	381	12-Φ31.8	4-11/8-8UN	51.3	2	F16	2780	269.5	3520	300	440	85
14"	190	585	514.4	412.8	16-Φ31.8	4-11/8-8UN	54.4	2	F25	5680	365.8	4782	330	485	90
16"	216	650	571.5	469.9	16-Φ34.9	4-11/4-8UN	57.6	2	F25	7800	451.1	6280	365	510	90
18"	222	710	628.6	533.4	20-Φ34.9	4-11/4-8UN	60.8	2	F25	8956	617.7	7980	405	550	120
20"	229	775	685.8	584.2	20-Φ34.9	4-11/4-8UN	64	2	F30	11518	739.6	10800	440	600	120
22"	267	840	743	641.4	20-Φ41.3	4-11/2-8UN	67.1	2	F30	15800	866.2	13030	480	610	150
24"	267	915	812.8	692.2	20-Φ41.3	4-11/2-8UN	70.3	2	F30	18393	902.8	16180	520	675	150
26"	292	865	803.3	737	24-Φ34.9	8-11/4-8UN	89.4	2	F35	24000	992.8	19327	575	745	150
28"	292	920	857.2	787	28-Φ34.9	8-11/4-8UN	89.4	2	F35	27478	1102	22410	600	780	180
30"	318	990	920.8	845	28-Φ38.1	8-13/8-8UN	94.1	2	F35	38971	1130	27090	635	812	180
32"	318	1055	977.9	902	24-Φ41.3	8-11/2-8UN	103.6	2	F40	41150	1402	33050	665	895	180
34"	330	1110	1031.9	953	28-Φ41.3	8-11/2-8UN	103.6	2	F40	48200	1636	37320	686	930	180
36"	330	1170	1089	1010	24-Φ44.5	8-15/8-8UN	103.6	2	F40	53700	2128.7	42090	712	950	180
38"	410	1220	1139.8	1060	28-Φ44.5	8-15/8-8UN	111.6	2	F40	63000	2381.9	47000	764	950	200
40"	410	1275	1190.6	1114	32-Φ44.5	8-15/8-8UN	116.3	2	F40	68370	2669.5	48964	784	960	200
44"	470	1385	1295.4	1219	32-Φ47.6	8-13/4-8UN	127.5	2	F40	82650	2907.2	62500	839	1010	200
48"	470	1510	1416	1327	32-Φ50.8	8-17/8-8UN	129	2	F48	108000	3794	69350	916	1090	250
52"	530	1615	1517.6	1429	40-Φ50.8	8-17/8-8UN	143.3	2	F48	123000	4552.2	81847	972	1150	250
56"	530	1765	1651	1537	28-Φ60.3	8-21/4-8UN	154.4	2	F48	156000	5859	94390	1087	1270	290
60"	530	1880	1763.7	1651	32-Φ60.3	8-21/4-8UN	151.3	2	F60	210000	6390.9	108400	1145	1370	290

Y TYPE FILTER

ZHEJIANG LIANGYI VALVE

Y-STRAINER

API GL41W-150LB~600LB



Design Specifications

Design and Manufacture	Face to Face Dimensions	Flange connection size	Pressure rate Temperature Ratings	Test and inspection
JIS B2071 B2081	JIS B2002	JIS B2212 B2214	JIS B2017 B2081	JIS B2003
ANSI B16.34	ANSI B16.34	ANSI 16.5	ANSI B16.34	ANSI 598

Main External Dimensions

unit:mm

NPS	DN	L	D	D1	n-Φd	D2	b	f	weight (kg)
				150LB					
1/2"	15	130	90	60.3	4-16	35	11.6	2	2.9
3/4"	20	150	100	64.9	4-16	43	13.2	2	3.6
1"	25	160	110	79.4	4-16	51	14.7	2	5
1¼"	32	180	115	88.9	4-16	64	16.3	2	6.8
1½"	40	200	125	98.4	4-16	73	17.9	2	8.5
2"	50	203	150	120.7	4-19	92	14.5	2	10.5
2½"	65	216	180	139.7	4-19	105	22.7	2	11.5
3"	80	241	190	152.4	4-19	127	24.3	2	15.5
4"	100	292	230	190.5	8-19	157	24.3	2	25
				300LB					
1/2"	15	152	95	66.7	4-16	35	14.7	2	4
3/4"	20	178	115	82.6	4-19	43	16.3	2	5.1
1"	25	203	125	88.9	4-19	51	17.9	2	7.2
1¼"	32	216	135	98.4	4-19	64	19.5	2	9
1½"	40	229	155	114.3	4-22	73	21.1	2	12.4
2"	50	267	165	127	8-19	92	22.7	2	15.5
2½"	65	292	190	144.2	8-22	105	25.9	2	18
3"	80	318	210	168.3	8-22	127	29	2	28
4"	100	356	255	200	8-22	157	32.2	2	42.5

BASKET STRAINER

SRB

Product Introduction

The structure of SBR basket through filter mainly includes connecting pipe, barrel, filter basket, flange, flange cover and fastener, etc.Also known as basket filters and through filters.It is usually connected directly to the pipeline of the mechanical equipment to intercept impurities in the fluid and ensure the normal operation of the mechanical equipment.

Structural Features

SBR basket through-through filter is directly connected to the pipe for use.In the production process, the flow will flow through the filter through the pipeline, and the liquid will first pass through the bucket and then enter the filter basket.The fluid will flow out from the gap of the basket until the outlet of the filter is discharged.The solid impurity particles in the fluid will be blocked by the filter basket and separated from the fluid to complete the filtration.After the filter is used for a period of time, solid impurities will accumulate in the filter basket.At this time, as long as the screw plug at the bottom of the main pipe is unscrewed, the liquid in the direct filter is removed, the flange is removed, the filter basket is cleaned and then reloaded, the impurities can be cleaned.

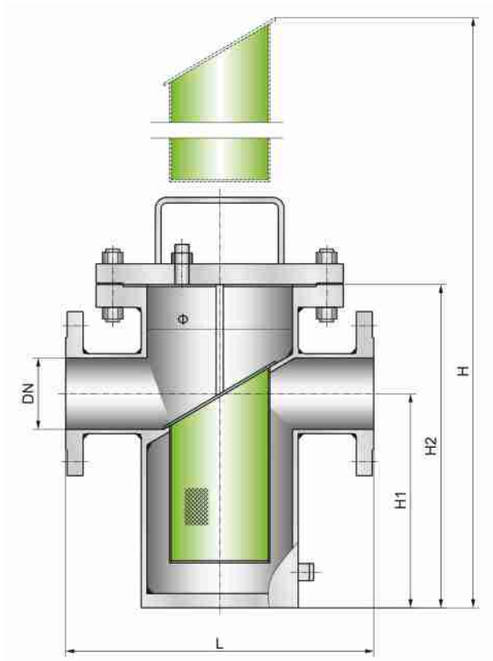
1. High filtering precision, can be configured according to customer requirements of the filter mesh fineness.
2. Simple working principle, not complex structure, easy to install, dismantle and maintain.
3. Less wearing parts, no consumables, low operating and maintenance costs, simple operation and management.
4. Stabilize the production process, protect instruments and equipment, and maintain the safety and stability of production.
5. 5.The core part of the filter is the filter core, which is composed of the filter frame and stainless steel wire mesh.

Materials of Main Parts

Shell material	Cast iron	Carbon steel	Stainless steel
Shell material	Stainless steel		
Filter frame filter material	Oil-resistant asbestos,flexible,PTFE		
Working temperature (℃)	0~+200	-29~+425	⩽200
Nominal pressure (MPa)	0.6~6.4(150Lb,300Lb)		
Filter accuracy (mesh/in)	10-300		
Connection method	Flange,butt welding		

BASKET STRAINER

SRB



Main External Dimensions

unit:mm

	Sizes		L	Do	Staight through type		High-low type			Weight
	DN	in	(mm)	(mm)	H(mm)	H1(mm)	H(mm)	H1(mm)	H2(mm)	KG
PN16/25/40 CLASS 150/300	50	2"	260	108	300	170	330	120	220	25
	65	2-1/2"	330	133	360	220	400	170	280	32
	80	3"	340	159	400	250	450	180	320	45
	100	4"	400	219	470	300	540	220	390	78
	150	6"	500	273	620	400	710	290	510	108
	200	8"	560	325	730	485	850	345	625	158
	250	10"	660	426	850	560	990	400	720	170
	300	12"	750	478	1050	700	1180	450	850	216
	350	14"	800	478	1160	780	1310	500	950	275
	400	16"	850	530	1240	810	1420	510	1010	-
	450	18"	900	530	1320	860	1490	520	1050	-
	500	20"	1050	630	1410	910	1590	550	1110	-
	600	24"	1380	730	1580	1020	1790	600	1250	-