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Liquid Cooling Industry Valve Catalog

FLOWX VALVE

ENTERPRISE PROFILE

FLOWXVALVES.R.L originates from Rome, Italy, carrying forward exquisite European craftsmanship and consistent high quality. Upholding the principle of "Quality First", the company is dedicated to delivering comprehensive, thoughtful one-stop solutions for automated control valves. Founded in 2000, we have been focusing on the R&D, manufacturing, sales and service of automated control valves.

Our product range includes butterfly valves, ball valves, control valves, general-purpose valves, actuators and accessories. The products have obtained a series of certifications such as BV, TUV, CCS, DNV, ATEX, API 607, CE and ISO9001. Supported by reliable product quality and complete after-sales service, our products are widely adopted in industries including new energy, fine chemicals, municipal engineering and biopharmaceuticals.

Currently, Flowx has more than 500 employees in China. We operate a 25,000-square-meter manufacturing base in Jinshan, Shanghai. In addition, the new FV intelligent factory covering an area of 59,000 square meters has been put into operation. Internationally, we maintain offices in Vietnam and Indonesia, and are establishing offices in more countries. We have built a distribution network covering over ten countries.



Company Mission:

Making the world fall in love with Flowx valves.



Company Vision:

To ensure our customers enjoy excellence and peace of mind, and to become the best automatic control valve company.



Company Values:

Customer First, Strive to Be Number One, Embrace Change, Value Relationships and Loyalty.



59000
Room area (m²)

3500+
Customer

50+
Countries of Sale

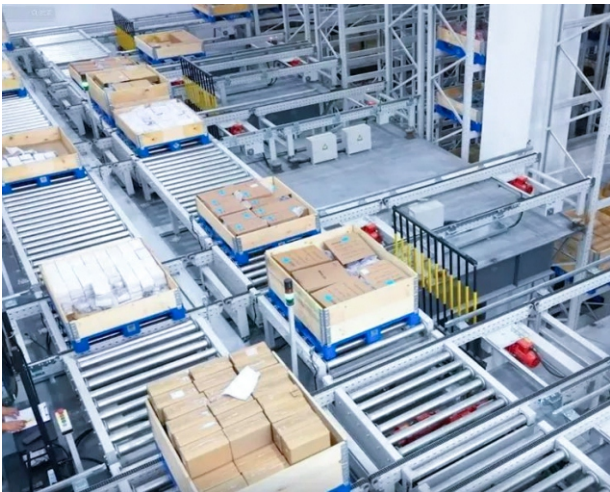


Smart Manufacturing Workshop

To meet the requirements for our products from both domestic and international markets, we have implemented automated and standardized production workflows within our manufacturing workshops. Meanwhile, the company consistently adheres to the tenet that "Quality is the life of an enterprise". We keep improving product quality inspection methods and have established a first-class industry quality supervision and inspection body. Equipped with advanced production processes and equipment, we maintain consistent and stable product quality.

Automated High-bay Warehouse

The factory features an automated high-bay warehouse. With a storage height of 21 meters and 17 levels, it has 6,776 storage locations. Four stacker cranes are installed inside the warehouse. Integrated with MES, WMS (Warehouse Management System) and WCS (Warehouse Control System), the warehouse supports automated inbound and outbound operations. It connects to the ERP system for real-time data exchange to realize intelligent material management. • Molds are stored centrally and sorted. The system tracks mold service life and sends proactive alerts to ensure scheduled mold maintenance and improve product quality. • WMS and WCS enable accurate tracking of materials and molds. • The integration between WMS and ERP improves the accuracy and timeliness of production planning, supporting efficient product delivery.



Corporate Qualifications

Pioneering and Progressive, Striving for Excellence

We value our brand built through years of dedication and cherish every hard-earned honor.

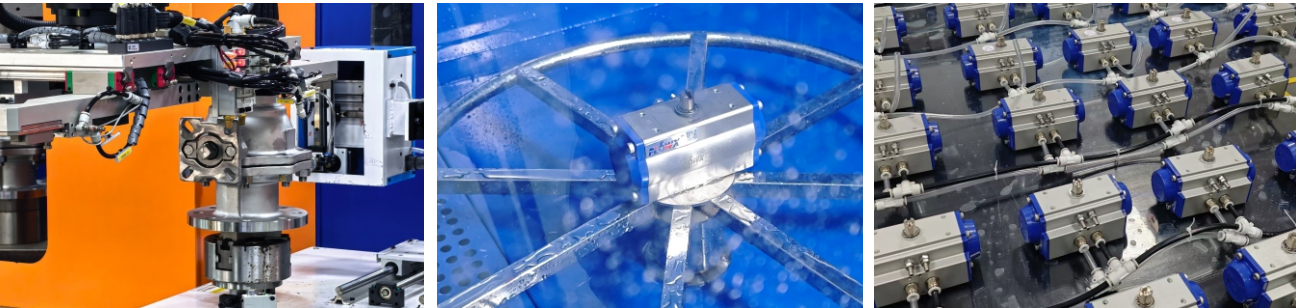
Flowx valves including ball valves, butterfly valves, control valves, globe valves, gate valves, limit switches and solenoid valves have obtained TUV SIL (Safety Integrity Level) certification. TUV fire safety certification applies to soft-seated ball valves, metal-seated ball valves, eccentric butterfly valves, globe valves and control valves. For external leakage at valve packing areas, TUV Rheinland ISO 15848 certification covers ball valves, globe valves and control valves. To meet special requirements of the food and pharmaceutical sectors, Flowx has upgraded its sanitary valves and obtained the 3A certification recognized by the US FDA.



Product Development

In addition to conventional mechanical, material and physical inspection methods, Flowx Valves is building a new laboratory for automated control valves. With comprehensive product testing and data collection, the company will further refine, optimize and iterate its existing product lines to consistently deliver competitive finished products and services to customers.

- Multi-functional low-temperature load test system (ambient and operating temperature down to -196°C)
- Multi-functional high-temperature load test system (operating temperature up to 425°C)
- Fatigue life test system for powder service conditions
- Fatigue test system for slurry service conditions
- Control valve flow test system for sizes up to DN300
- Low-flow test system (minimum Cv value of 0.001)



Prompt Response & Professional Efficiency

We maintain substantial inventory of ball valves, butterfly valves, control valves and knife gate valves to respond to customers' delivery requirements promptly. With our own foundry, we can meet requirements for special sizes or materials within shortened manufacturing lead times.

- Delivery for large projects: 30 to 45 calendar days
- Standard products: 10 to 15 calendar days
- Consumable parts such as regular seats, packing and valve stems: 5 to 7 calendar days



Superior Performance



Reliable Quality



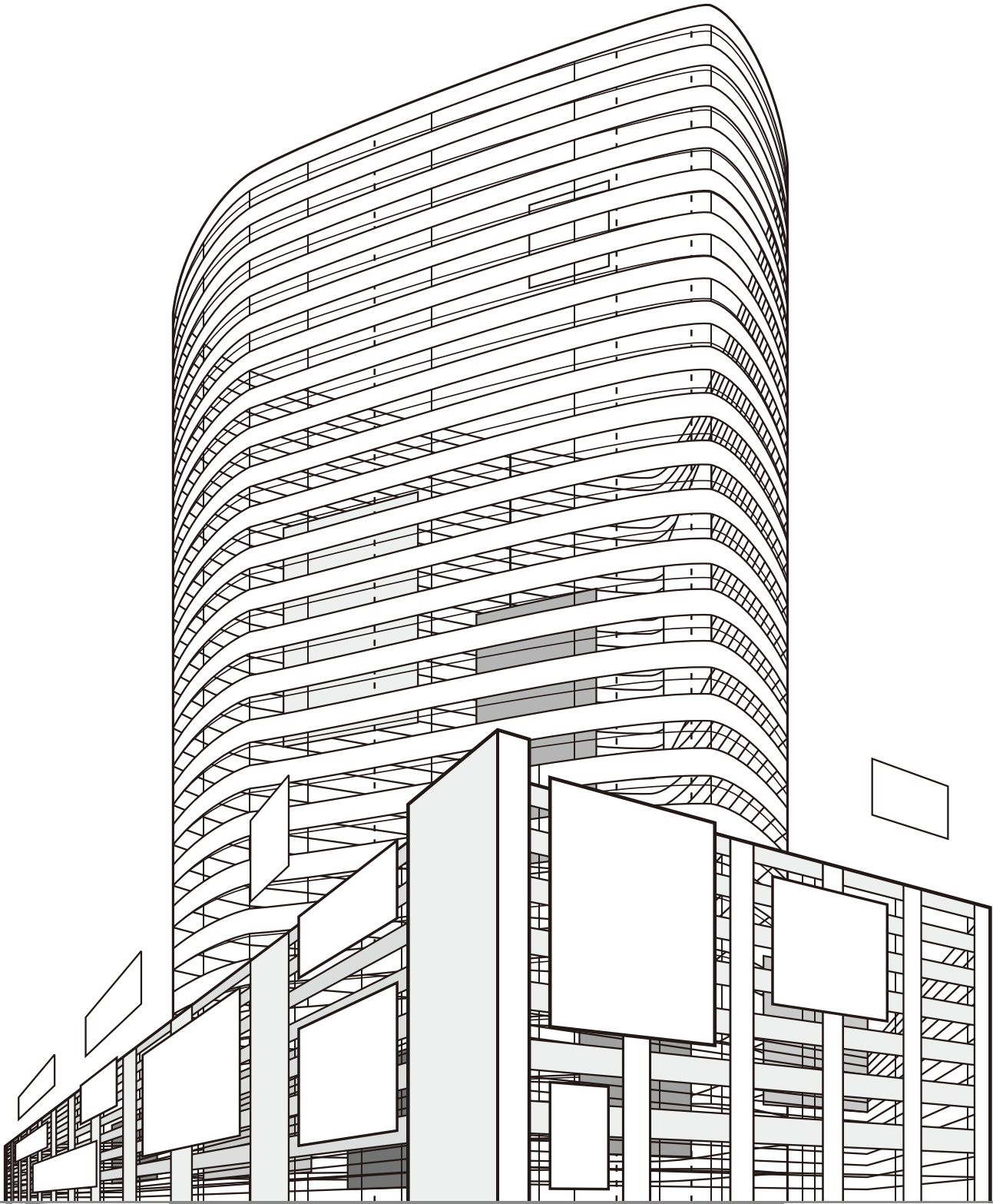
On-Time Delivery



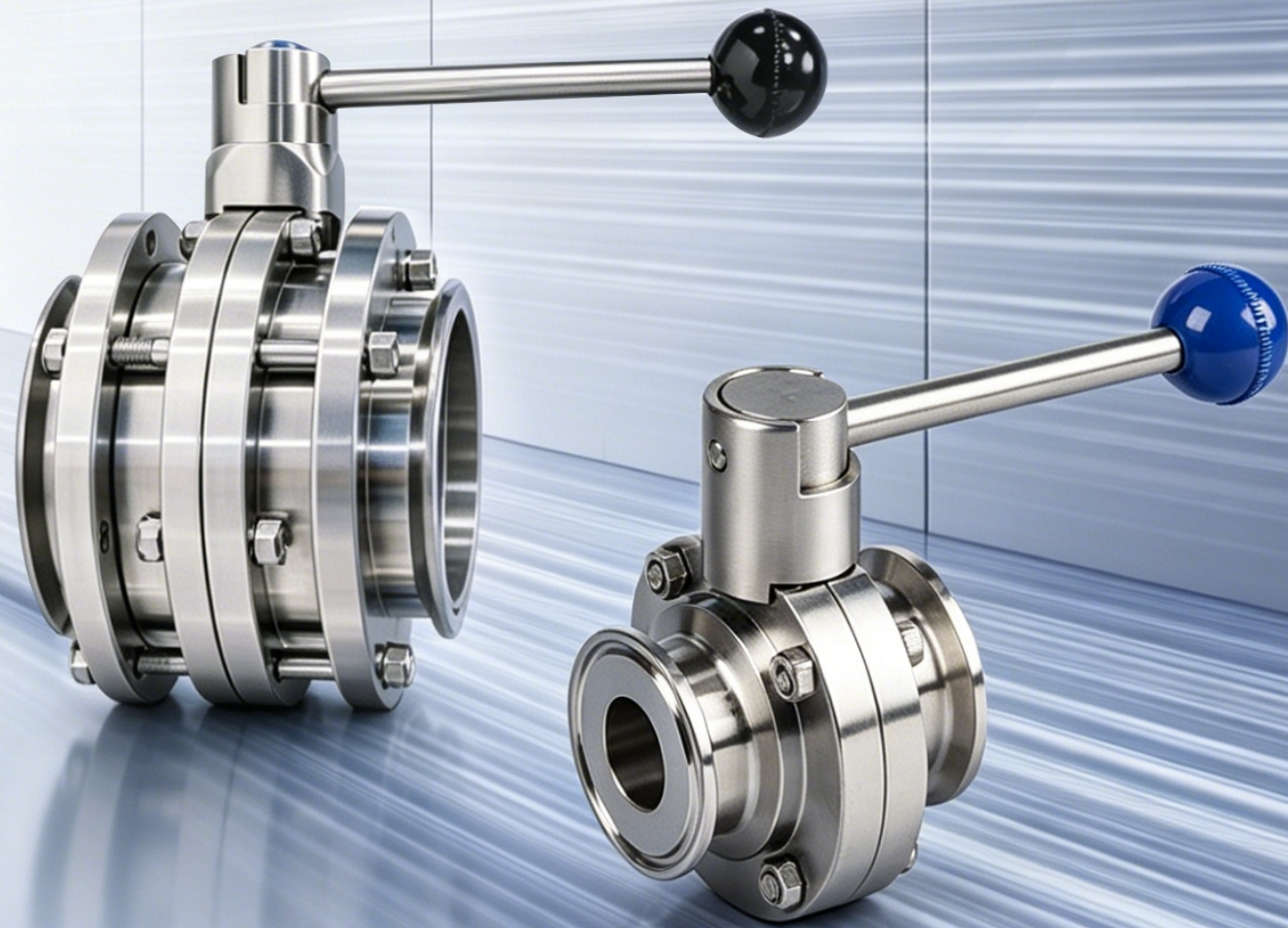
High-Quality Service

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BUTTERFLY VALVE SERIES



"Aortic Valve" for Data Center Cooling Systems

Liquid cooling butterfly valves are key components for energy conservation and consumption reduction. They also serve as core hubs to secure thermal safety and optimize space layout of the system, and are critical for improving overall operating efficiency. Featuring compact structure, low flow resistance, cost-effective performance and precise regulation, liquid cooling butterfly valves are a preferred option for high-flow loops in liquid cooling systems.

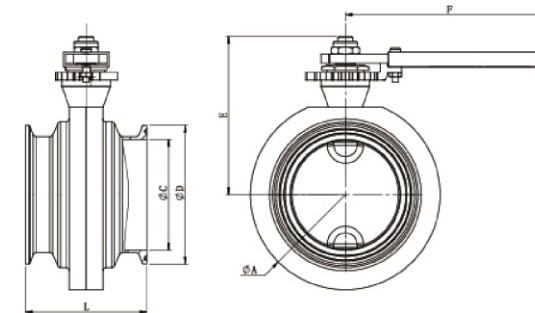
Monobloc Butterfly Valve

Product Overview

- Adopting a monobloc welded construction to eliminate external leakage risks associated with conventional bolted connections
- Triple sealing design
- Reliable and durable, with zero external leakage over a ten-year service life
- Easy maintenance, low operating torque, degreased and oil-free

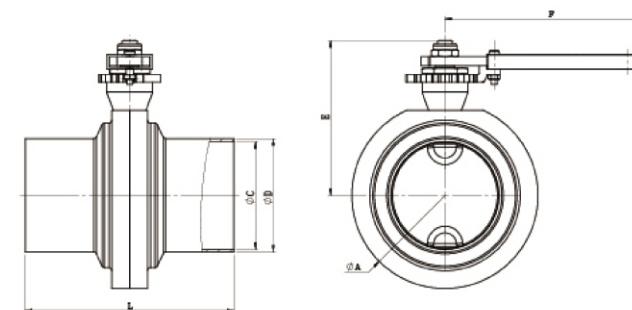


Overall Dimensions



Clamp Quick-install Monobloc Butterfly Valve ●●●

SIZE	L	ΦD	ΦC	E	F	ΦA
2"	76	64	47	88	95	93
2.5"	84	77.5	70	95	97	110
3"	84	91	83	104	138	125
4"	82	119	100	126	138	155



Technical Specifications

Nominal Pressure	PN10/PN16
Temperature Range	-40°C~100°C
Connection Standard	Clamp:ASME BPE Welded:DIN 11850/ASME
Test Standard	BPEGB/T 13927/API598
Media	Water, liquids with ethylene glycol or propylene glycol concentration ≤50%

Main Component Materials

Part Name	Material
Valve Body	Stainless Steel
Self-lubricating Bushing	PTFE
Seal Ring	EPDM
Disc	Stainless Steel
Stuffing Box	Stainless Steel
Flat Gasket	PTFE
Sealing Ring	Stainless Steel
O-ring	EPDM
Wave Spring	EPDM
Compression Nut	Stainless Steel
Handle	Stainless Steel
Nut	Stainless Steel

Welded Monobloc Butterfly Valve ●●●

	SIZE	L	ΦD	ΦC	E	F	ΦA
Handle	1"	120	50.8	47.5	88	95	93
	2.5"	120	63.5	60.2	95	97	110
	3"	140	76.2	72.2	104	138	125
	4"	140	104	100	126	138	155
	5"	200	129	125	156	186	190
Gear Operator	6"	240	152.4	146.8	275	138	208
	8"	320	203.2	197.6	296	140	295

Two-piece Butterfly Valve

Two-piece Butterfly Valve

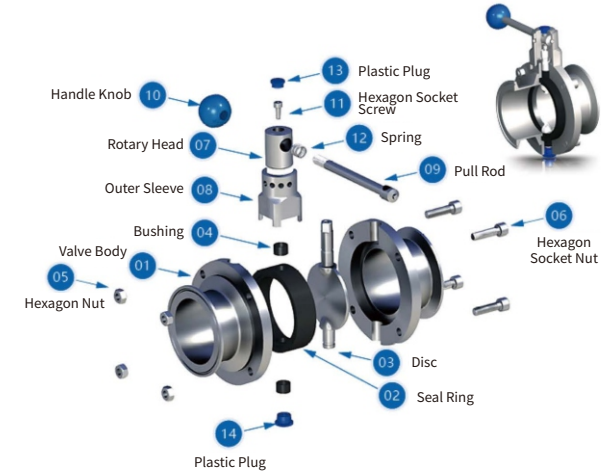
Product Overview

Stainless steel butterfly valves are used to shut off or open the flow of media in pipelines. Welded or sanitary clamp connection options are available, suitable for liquid cooling, water supply and drainage and other sectors.

- Low flow resistance
- Fast opening and closing
- Low operating torque
- Compact size and light weight

Technical Specifications

Nominal Pressure	PN10
Temperature Range	-20°C~100°C
Design Standard	GB/T12238-2008
Connection Standards	3A Standard
Test Standards	GB/T13927-2022
Media	Liquids, gases, oil products, food media and various highly corrosive chemical media



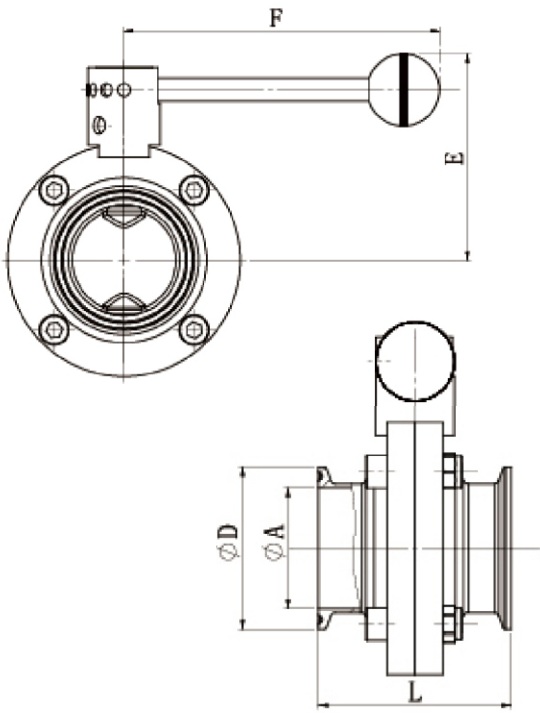
Working Principle

- (1) Butterfly valves can be remotely controlled via actuators or manually operated by handles.
- (2) The actuator converts the axial movement of a piston into 90° rotation of the valve shaft to control pipeline fluid and perform opening/closing functions. There are three types of pneumatic actuator units.
- (3) Standard types: Normally Open (NO), Normally Closed (NC), Air/Air (A/A). The duckbill-style multi-position handle for manual operation can mechanically lock the valve at 12 opening or closing positions via 15-point adjustment to regulate media flow. The pull-rod handle features 3 multi-position settings to mechanically lock the valve at 3 opening or closing positions for media flow regulation.

Main Component Materials

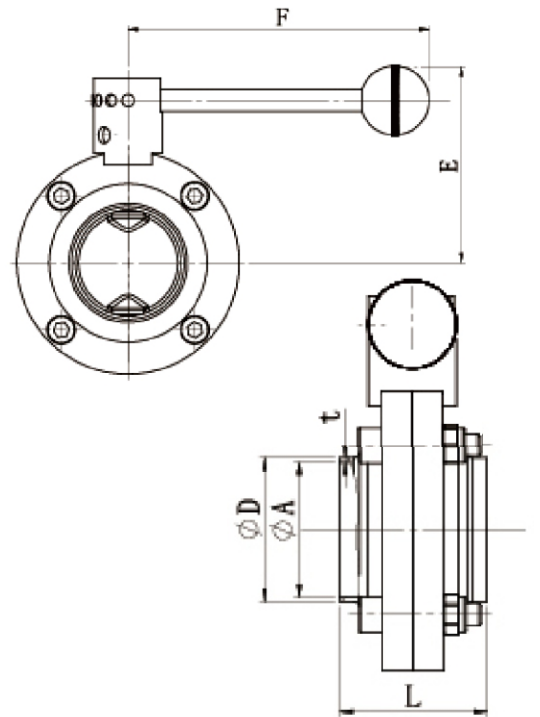
Part Name	Material
Butterfly Valve Body	Stainless Steel
Self-lubricating Bushing	PTFE
Seal Ring	EPDM
Disc	Stainless Steel
Handle	Stainless Steel
Hexagon Socket Bolt	Stainless Steel
Self-locking Nut	Stainless Steel

Dimensions



Clamp Quick-install Two-piece Butterfly Valve ●●●

SIZE	L	ΦD	ΦC	E	F
1/2"	66	25.2	9.4	70	135
3/4"	66	25.2	15.8	75	135
1"	68	50.5	22.1	75	135
1.25"	68	20.5	28.5	75	135
1.5"	70	50.5	34.8	80	135
2"	76	64	47.5	90	135
2.5"	84	77.35	60.2	95	150
3"	84	91	72.9	102	150
4"	92	119	97.4	120	160



Welded Two-piece Butterfly Valve ●●●

SIZE	L	ΦD	ΦC	E	F	t
1/2"	50	12.7	9.4	70	135	1.65
3/4"	50	19.1	15.8	75	135	1.65
1"	50	25.4	22.1	75	135	1.65
1.25"	50	31.8	28.5	75	135	1.65
1.5"	50	38.1	34.8	80	135	1.65
2"	50	50.8	47.5	90	135	1.65
2.5"	56	63.5	60.2	95	150	1.65
3"	56	76.2	72.9	102	150	1.65
4"	60	101.6	97.4	120	160	2.1

Three-piece Butterfly Valve

Product Overview

Stainless steel butterfly valves are used to shut off or open media flow in pipelines. Welded or sanitary clamp connection options are available, suitable for liquid cooling, water supply and drainage and other applications.

- Low flow resistance
- Easy maintenance
- Low operating torque
- Degreased and oil-free

Main Component Materials

Part Name	Material
Valve Body	Stainless Steel
Bushing	PTFE
Butterfly Disc	Stainless Steel
Butterfly Valve Seal	EPDM / Silicone
Clamp Cover	Stainless Steel
Square / Cylindrical Handle	Stainless Steel
Hexagon Socket Cap Screw	Stainless Steel
Lock Nut	Stainless Steel
Hexagon Cap Screw	Stainless Steel
13SRU Union U-gasket	EPDM / Silicone

Dimensions

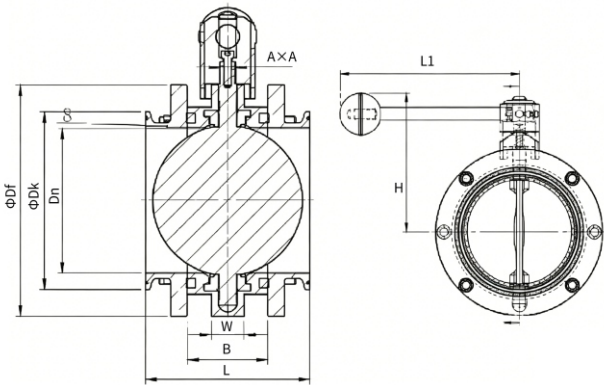
Clamp Quick-install Three-piece Manual Butterfly Valve, ISO ●●●

SIZE	Dn	Dk	Df	L	L1	H	A×A	W	B
19	15.8	34	78	110	135	80	8x8	20	54
25	21.8	50.5	78	110	135	80	8x8	22	54
32	28.6	50.5	78	110	135	80	8x8	22	54
38	34.8	50.5	85	110	135	85	8x8	22	54
51	47.8	64	100	110	135	95	8x8	22	54
63	60.3	77.5	110	110	160	100	10x10	22	54
76	72.9	91	125	110	160	110	10x10	22	54
102	97.6	115	155	110	160	130	10x10	22	54
133	129	145	185	140	192	145	14x14	26	70
159	153	183	215	140	219	160	14x14	26	70
219	213.9	233.5	285	160	295	195	14x14	36	80



Technical Specifications

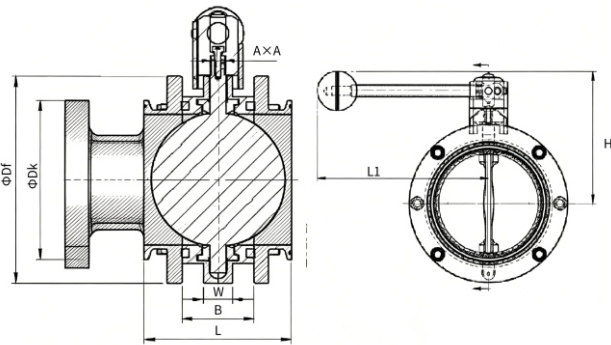
Nominal Pressure	PN10/PN16
Temperature Range	-40°C~100°C
Connection Standard	Clamp:ASME BPE Welded:DIN 11850/ASME
Test Standard	BPEGB/T 13927/API598
Media	Water, liquids with ethylene glycol or propylene glycol concentration ≤50%



Three-piece Butterfly Valve

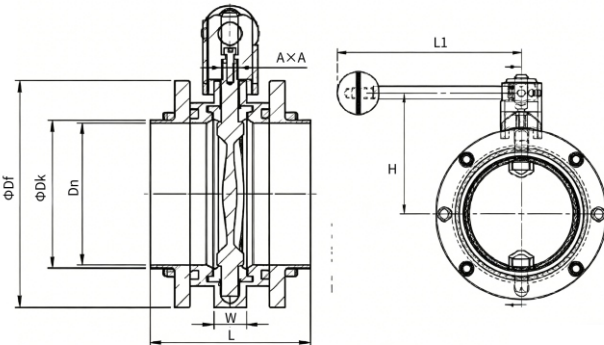
Clamp Quick-install Three-piece Manual Butterfly Valve, 3A ●●●

SIZE	Dn	Dk	Df	L	L1	H	A×A	W	B
0.75"	15.8	25.2	78	110	135	80	8x8	20	20
1"	22.1	50.5	78	110	135	80	8x8	22	22
1.25"	28.5	50.5	78	110	135	80	8x8	22	22
1.5"	34.8	50.5	85	110	135	85	8x8	22	22
2"	47.5	64	100	110	135	95	8x8	22	22
2.5"	60.2	77.5	110	110	160	100	10x10	22	22
3"	72.9	91	125	110	160	110	10x10	22	22
4"	97.4	119	155	110	160	130	10x10	22	22
5"	129	145	185	140	192	145	14x14	26	26
6"	146.5	167	215	140	219	160	14x14	26	26
8"	198	217.1	285	160	295	195	14x14	36	36
10"	248	268.5	325	160	315	215	14x14	36	36



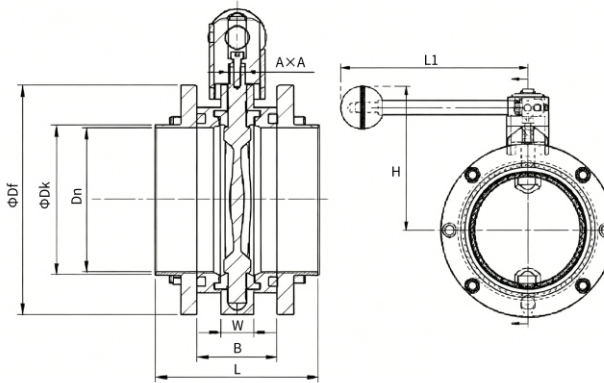
Welded Three-piece Manual Butterfly Valve, ISO ●●●

SIZE	Dn	Dk	Df	L	L1	H	A×A	W	B
19	15.8	19	78	110	135	80	8x8	20	54
25	21.8	25	78	110	135	80	8x8	22	54
32	28.6	31.8	78	110	135	80	8x8	22	54
38	34.8	38	85	110	135	85	8x8	22	54
51	47.8	51	100	110	160	95	8x8	22	54
63	60.3	63.5	110	110	160	100	10x10	22	54
76	72.9	76.1	125	110	160	110	10x10	22	54
102	97.6	101.6	155	110	160	130	10x10	22	54
133	129	133	185	140	192	145	14x14	26	70
159	153	159	215	140	219	160	14x14	26	70
219	213.9	219.1	285	160	295	195	14x14	36	80

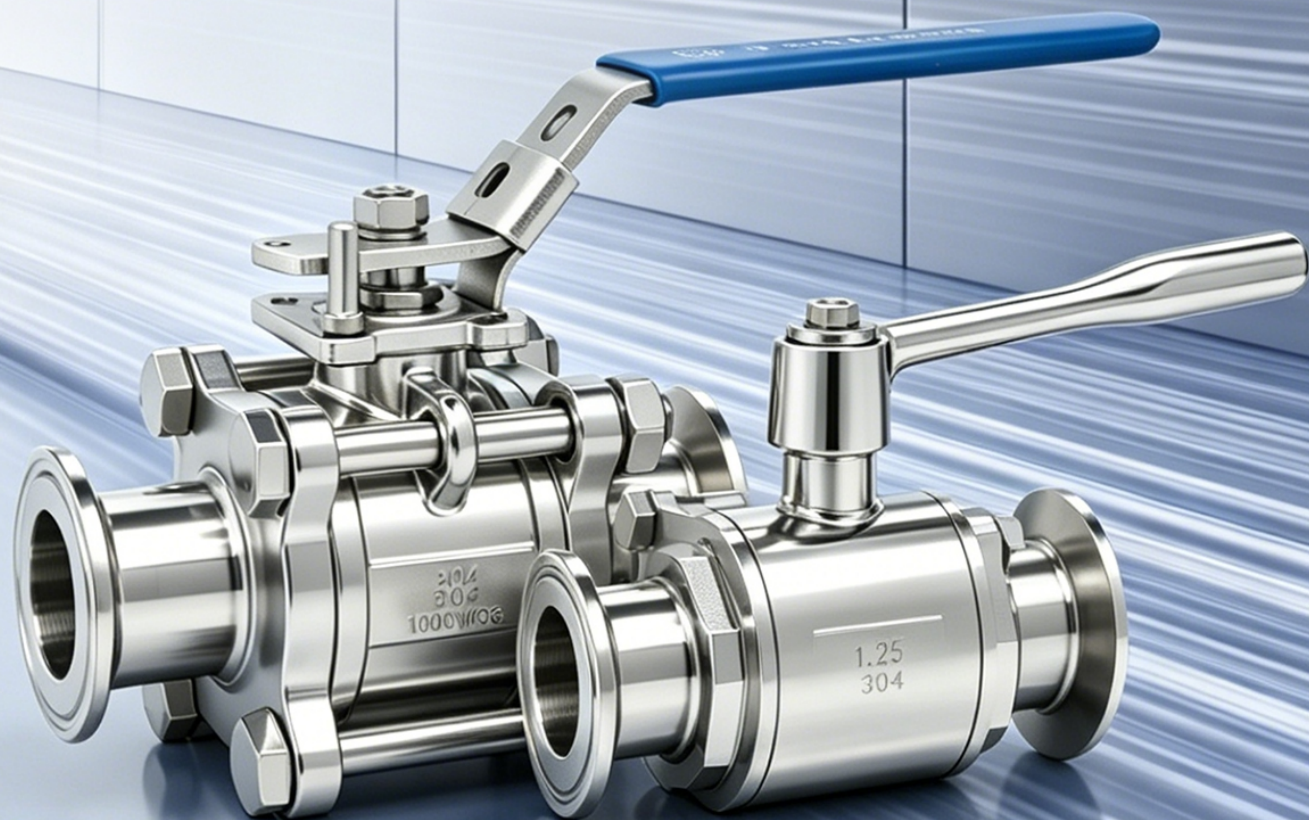


Welded Three-piece Manual Butterfly Valve, 3A ●●●

SIZE	Dn	Dk	Df	L	L1	H	A×A	W	B
0.75"	15.8	19.1	78	110	135	80	8x8	20	54
1"	22.1	25.4	78	110	135	80	8x8	22	54
1.25"	28.5	31.8	78	110	135	80	8x8	22	54
1.5"	34.8	38.1	85	110	135	85	8x8	22	54
2"	47.5	50.8	100	110	135	95	8x8	22	54
2.5"	60.2	63.5	110	110	160	100	10x10	22	54
3"	72.9	76.2	125	110	160	110	10x10	22	54
4"	97.4	101.6	155	110	160	130	10x10	22	54
5"	129	133	185	140	192	145	14x14	26	70
6"	146.5	152.4	215	140	219	160	14x14	26	70
8"	198	203.2	285	160	295	195	14x14	36	80
10"	248	254	325	160	315	215	14x14	36	80



BALL VALVE SERIES



The System's "Precision Temperature Control Hub" and "Safety Gatekeeper"

With high-precision flow regulation capability, it ensures thermal safety of chips under dynamic load conditions. Meanwhile, its interlocking structure and low flow resistance design deliver zero-leakage protection and high energy efficiency for the system. It serves as a core component to guarantee stable operation and fast delivery of liquid cooling infrastructure.

Clamp Straight-through Monobloc Ball Valve

Product Overview

Features: Monobloc forged construction, straight-through design with no dead zones. Reduces risks of valve body leakage. The full-bore ball passage matches pipeline diameter for linear media flow, with no stagnation and no cross-contamination. It effectively solves the material accumulation issue common in conventional ball valves, and delivers excellent corrosion resistance and clean performance.

Applications: Suitable for liquid cooling, water supply and drainage and other fields.

- Low flow resistance
- Monobloc forging reduces valve body leakage risks
- Triple sealing design with stable sealing performance to maintain zero external leakage over a ten-year service life
- Material offers excellent corrosion resistance and clean characteristics
- Easy operation
- Degreased and oil-free

Main Component Materials

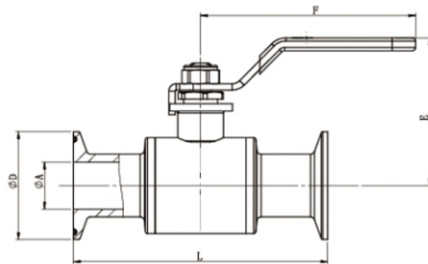
Part Name	Material
Ball Valve Bonnet	Stainless Steel
Ball	Stainless Steel
Seat	PTFE
Ball Valve Body	Stainless Steel
Stem Gasket	PTFE
Valve Stem	Stainless Steel
O-ring	EPDM
Packing	PTFE
Wave Spring	Stainless Steel
Compression Nut	Stainless Steel
Lock Nut	Stainless Steel
Handle	Stainless Steel

Basic Parameters

Nominal Pressure	1MPa
Temperature Range	-40°C~100°C
Connection Standards	GB/T 12224-2015
Test Standards	GB/T 13927-2022
Media	Water, liquids with ethylene glycol or propylene glycol concentration ≤50%

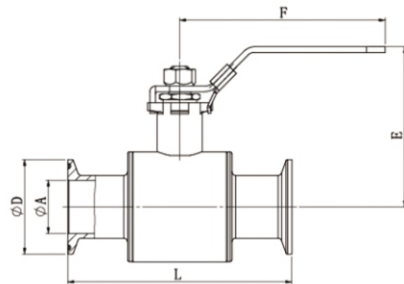


Dimensions



Quick-install Monobloc Straight-through Ball Valve (Without Clamp) ●●●

DN	L	ΦD	ΦA	H	F
1"	120	50.5	22.1	69	100



Quick-install Monobloc Straight-through Ball Valve (With Clamp) ●●●

DN	L	ΦD	ΦA	E	F
1.25"	120	50.5	28.1	85.5	110

Three-piece Manual Ball Valve

Three-piece Manual Ball Valve

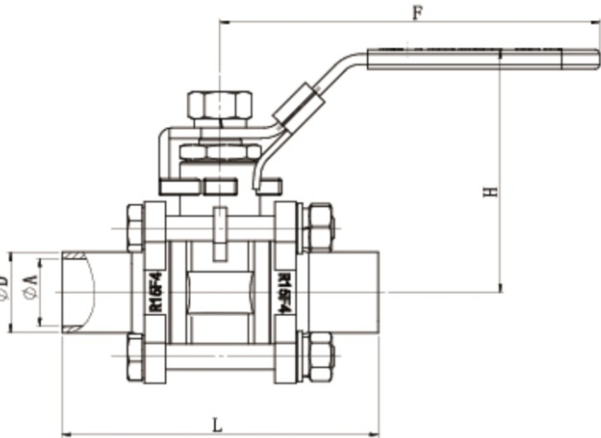
Product Overview

Sanitary three-piece ball valve features simple and convenient operation.The valve stem rotates 90° via handle or actuator to open and close the valve.The valve body is made of stainless steel and the gasket seat uses PTFE for high cleanliness and environmental friendliness.

It adopts full coverage actuation design, no media stagnation and high cleanliness, meeting CIP/SIP cleaning and sterilization requirements.Temperature rating up to 180°C, pressure rating up to 10 bar.

Welded or sanitary clamp connection options are available, suitable for liquid cooling, water supply and drainage and other applications.

- Low flow resistance
- Simple structure
- Easy maintenance
- Easy operation
- Degreased and oil-free



Basic Parameters

Nominal Pressure	PN10
Temperature Range	-40°C~120°C
Connection Standards	ASME B16.34-2023
Test Standards	GB/T 13927-2022
Media	Water, liquids with ethylene glycol or propylene glycol concentration ≤50%

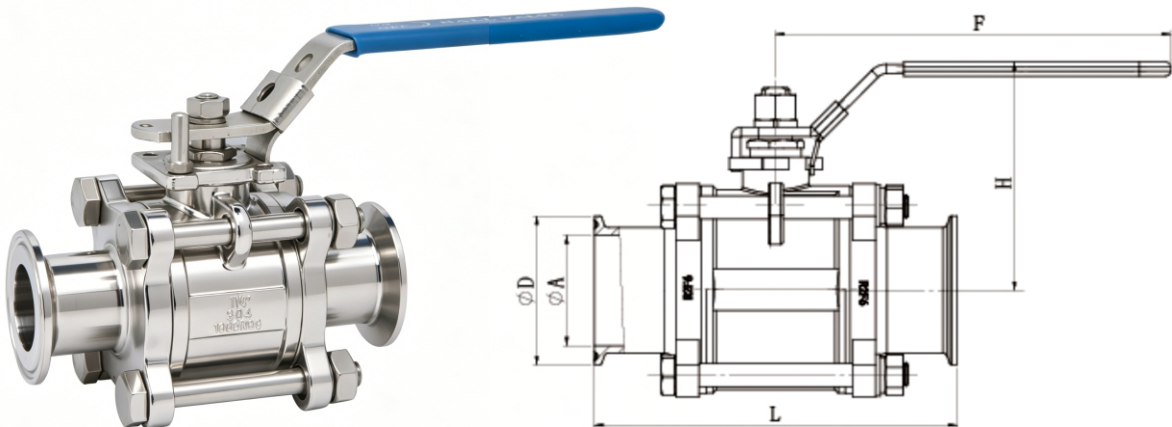
Main Component Materials

Part Name	Material
Ball Valve Bonnet	Stainless Steel
O-ring	EPDM
Seat	PTFE
Ball	Stainless Steel
Ball Valve Body	Stainless Steel
Bolt	Stainless Steel
Flat Gasket	Stainless Steel
Spring Washer	Stainless Steel
Hexagon Nut	Stainless Steel
Valve Stem	PTFE
Stem Gasket	EPDM
O-ring	PTFE
Packing	Stainless Steel
Compression Nut	Stainless Steel
Spring Washer	Stainless Steel
Hexagon Nut	Plastic
Handle	Stainless Steel

Dimensions

Welded Three-piece Manual Ball Valve

SIZE	L	ΦD	ΦA	H	F
DN15	75	19.1	16.1	57.5	90
DN25	90	25.4	22.4	67.5	105



Three-piece Sanitary Clamp Manual Ball Valve ●●●

	DN	L	ΦD	ΦA	E	F
3A	1/2"	90	25.2	9.4	60.5	130
	3/4"	102	25.2	15.8	64.5	130
	1"	114	50.5	22.1	78	170
	1.25"	125	50.5	28.5	87	170
	1.5"	138	50.5	34.8	98	173
	2"	156	64	47.5	107	173
	2.5"	170	77.5	60.2	130	223
	3"	197	91	72.9	153	335
	4"	242	119	97.4	69	335
DIN	DN15	90	34	15	60.5	130
	DN20	102	34	19	64.5	130
	DN25	114	50.5	25	78	170
	DN32	125	50.5	31	87	170
	DN40	138	50.5	37	98	173
	DN50	156	64	49	107	173
	DN65	170	91	66	130	223
	DN80	197	106	81	153	335
	DN100	242	119	100	169	335

Three-piece Electric Ball Valve

Three-piece Electric Ball Valve

Product Overview

Modern liquid cooling valves feature intelligence and easy maintenance. They are often equipped with electric actuators and sensors, support communication protocols such as Modbus, and can link with BMS/EMS systems to realize remote monitoring, automatic adjustment and predictive maintenance.

Welded or sanitary clamp connection options are available, suitable for liquid cooling, water supply and drainage and other applications.

- Low flow resistance
- Easy maintenance
- Reliable sealing performance
- Easy operation
- Long service life
- Space-saving

Basic Parameters

Nominal Pressure	0-1.6MPa
Temperature Range	-40°C~100°C
Design Standard	GB/T12224-2015
Connection Standard	ASME BPE/DIN 11850
Test Standard	GB/T 13927-2022
Working Media	Water, liquids with ethylene glycol or propylene glycol concentration ≤50%
Actuator Model	CTF-002
Operating Voltage	AC220V
Motor Power	14W
Rated Current	150mA
Output Torque	20NM
Switching Time	16S
Optional Valve Sizes	UPVC (DN15-40) Stainless Steel(DN15-40) Butterfly Valve(DN40-50)
Optional Valve Materials	UPVC, CPVC, Cast Steel, Cast Iron, Stainless Steel

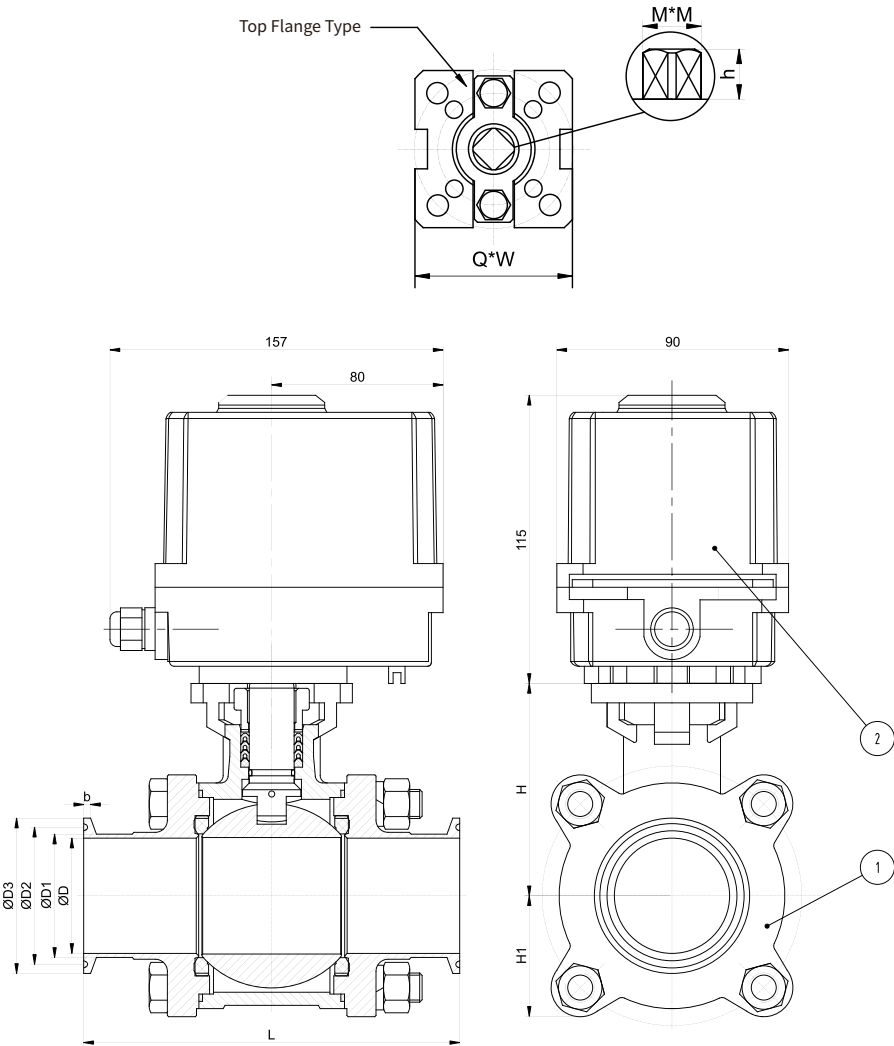
Main Component Materials

Part Name	Material
Valve Body	Stainless Steel
Bonnet	Stainless Steel
Valve Core	Stainless Steel
Seat	PTFE
Valve Stem	Stainless Steel
Gland	Stainless Steel
Packing	PTFE
O-ring	FKM
Bolt & Nut	Stainless Steel
Bonnet Seal Ring	PTFE
Electric Actuator	-



Actuator Overall Dimension Drawing

Three-piece Electric Ball Valve (Clamp) ●●●



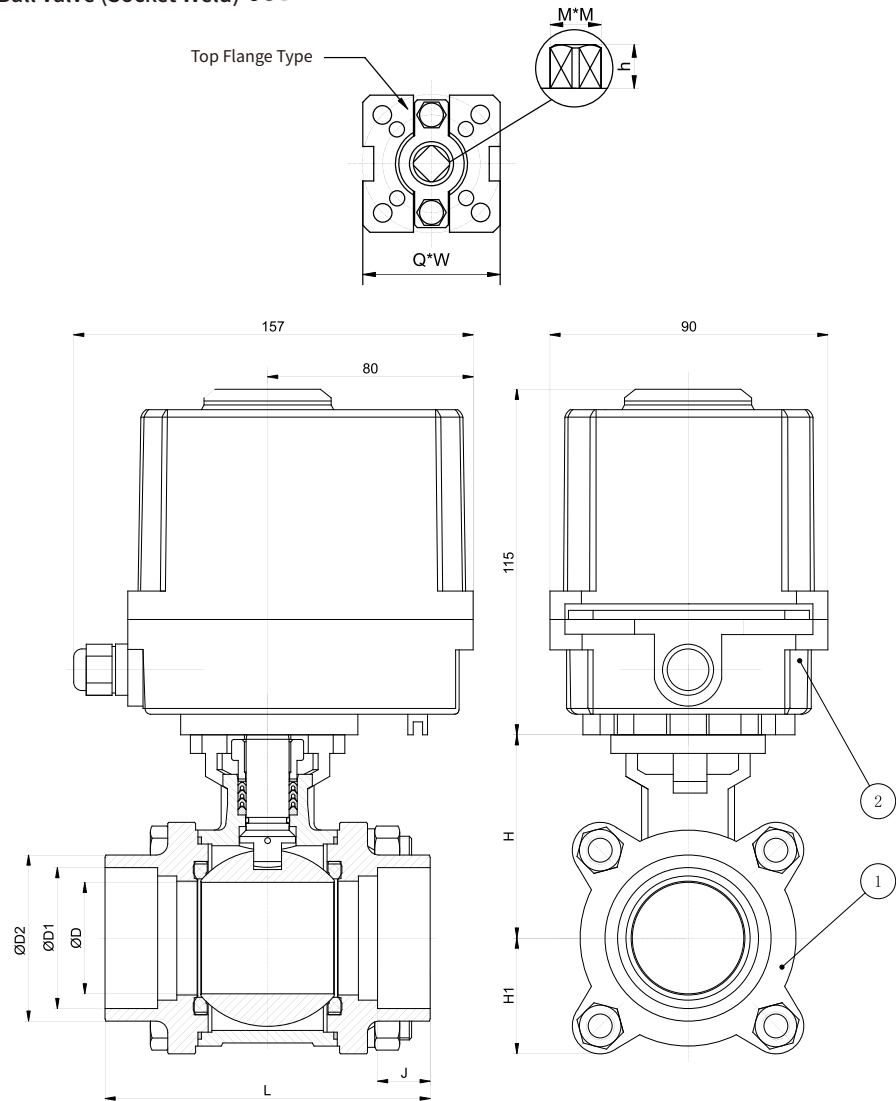
NPS	ΦD			L	b		ΦD1			ΦD2		ΦD3		H1	H	M*M*h	Q*W	Top Flange Type	Torque /Nm
	ISO	DIN	3A		ISO/DIN	3A	ISO	DIN	3A	ISO/DIN	3A	ISO/DIN	3A						
0.5	9.7	16	9.4	90	2.85	3.63	12.7	20	12.7	27.5	20.32	34	25	32	46	9*9*9	50*50	F03/F05	11
0.75	22.4	20	15.75	100	2.85	3.63	25.4	24	19.05	27.5	20.32	34	25	33	47.5	9*9*9	50*50	F03/F05	13
1	22.6	26	22.1	115	2.85	2.85	25.6	30	25.4	43.5	43.5	50.5	50.5	41.25	60	11*11*11	51*55	F04/F05	17
1.25	31.3	32	28.5	125	2.85	2.85	34.3	36	31.8	43.5	43.5	50.5	50.5	49.5	64	11*11*11	51*55	F04/F05	23
1.5	35.6	38	34.8	140	2.85	2.85	38.6	42	38.1	43.5	43.5	50.5	50.5	59.03	80	14*14*15	66.5*72	F05/F07	26

*Parameters not listed above can be customized.

Three-piece Electric Ball Valve

Actuator Overall Dimension Drawing

Three-piece Electric Ball Valve (Socket Weld) ●●●



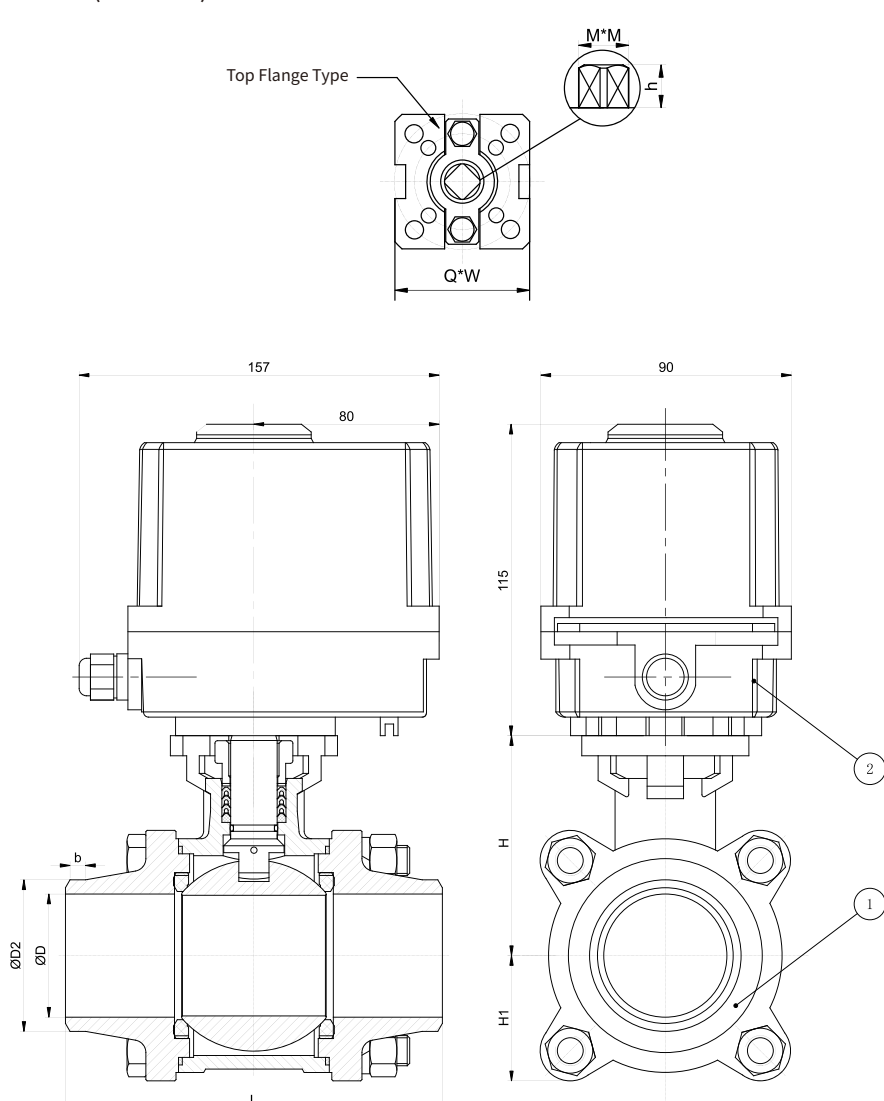
NPS	ΦD	L	J	ΦD1		ΦD2	H1	H	M*M*h	Q*W	Top Flange Type	Torque /Nm
				(Series A)	(Series B)							
0.5	15	75	10	22.5	19	28	32	46	9*9*9	50*50	F03/F05	11
0.75	20	90	11	27.5	26	34	33	47.5	9*9*9	50*50	F03/F05	13
1	25	100	13	34.5	33	41	41.25	60	11*11*11	51*55	F04/F05	17
1.25	32	110	14	43.5	39	52	49.5	64	11*11*11	51*55	F04/F05	23
1.5	38	125	16	49.5	46	58.5	59.03	80	14*14*15	66.5*72	F05/F07	26

*Parameters not listed above can be customized.

Three-piece Electric Ball Valve

Actuator Overall Dimension Drawing

Three-piece Electric Ball Valve (Butt Weld) ●●●



NPS	ΦD	L	b	ΦD2		H1	H	M*M*h	Q*W	Top Flange Type	Torque /Nm
				(Series A)	(Series B)						
0.5	15	75	6	21.3	18	32	46	9*9*9	50*50	F03/F05	11
0.75	20	90	6	26.9	25	33	47.5	9*9*9	50*50	F03/F05	13
1	25	100	6	33.7	32	41.25	60	11*11*11	51*55	F04/F05	17
1.25	32	110	6	42.4	38	49.5	64	11*11*11	51*55	F04/F05	23
1.5	38	125	7	48.3	45	59.03	80	14*14*15	66.5*72	F05/F07	26

*Parameters not listed above can be customized.

Three-piece Pneumatic Ball Valve

Three-piece Pneumatic Ball Valve

Product Overview

Intelligent & Easy Maintenance. Modern liquid cooling valves are often equipped with electric actuators and sensors, supporting communication protocols such as Modbus. They can link with BMS/EMS systems to realize remote monitoring, automatic regulation and predictive maintenance. The product mainly consists of pneumatic actuator, 3-piece valve body, ball, sealing seat, valve stem and other core components. Powered by compressed air, it drives the ball to rotate 90° for fast on-off and switching of pipeline media.

Application:

Suitable for liquid cooling, water treatment, environmental protection, power, food & pharmaceutical, papermaking and other industries.

Features:

- Split 3-piece structure for easy disassembly and maintenance
- Ultra-low flow resistance with excellent flow capacity
- Double sealing design for reliable zero-leakage operation
- Pneumatic actuation for efficient and stable opening & closing
- Premium materials for wide working condition adaptability
- High compatibility and flexible installation



Basic Parameters

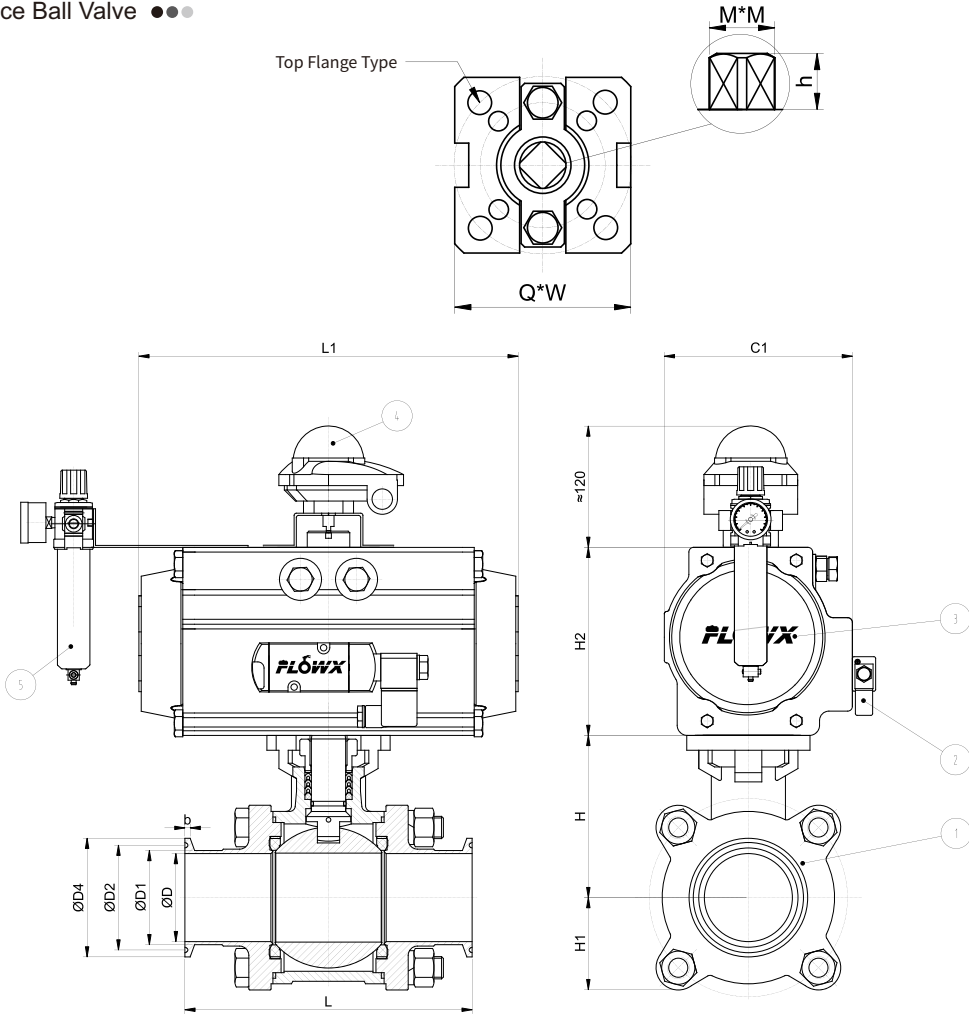
Max. Pressure	10bar
Air Supply Pressure	5bar4bar6bar
Air Connector Type	Ferrule for rigid tube, push-in for flexible hose
Design Standard	GB/T12237-2021
Test Standard	GB/T26480-2011
Face-to-Face Dimension	DIN2852-1984
Clamp Connection	ISO2852-1993, 3A, DIN

Main Materials

Part Name	Material
Valve Body	Stainless Steel
Bonnet	Stainless Steel
Valve Plug	Stainless Steel
Valve Seat	PTFE/PEEK
Valve Stem	Stainless Steel
Gland	Stainless Steel
Packing	PTFE
O-ring	FKM
Bolts & Nuts	Stainless Steel
Bonnet Gasket	PTFE

Actuator Outline Drawing

ISO Three-Piece Ball Valve ●●●



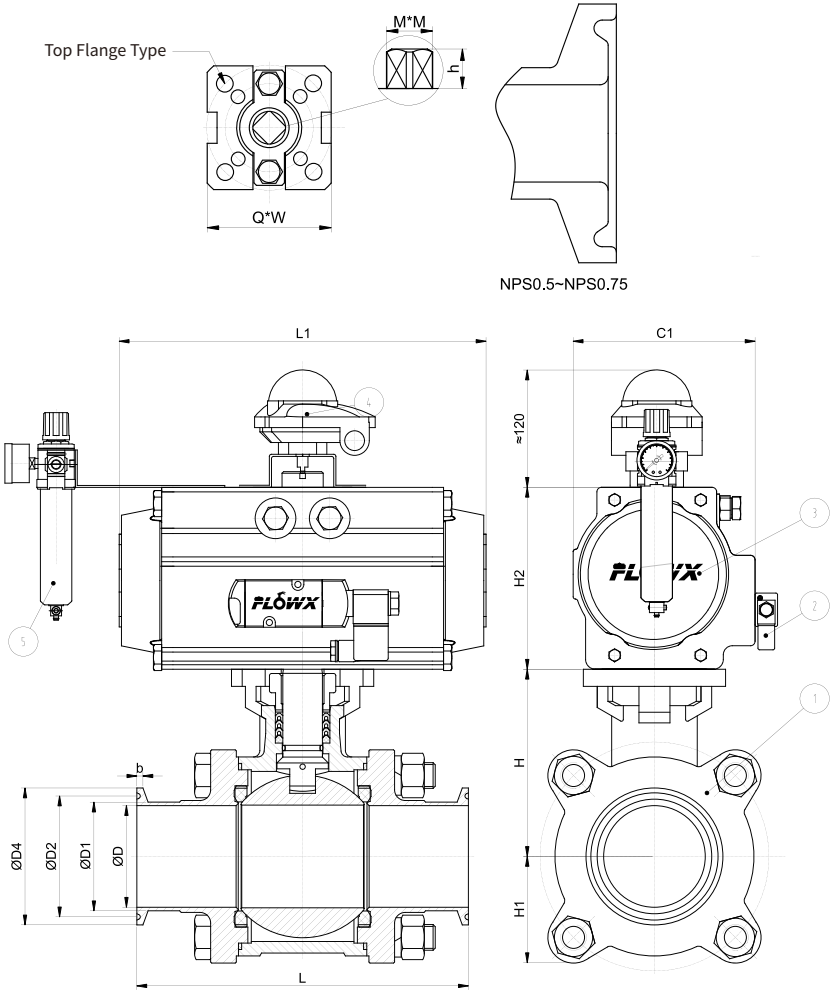
NPS	ΦD (ISO2852)	L	b	ΦD1	ΦD2	ΦD4	H1	H	M*M*h	Q*W	Top Flange Type	Single Acting				Double Acting			
												Actuator Reference Model	L1	C1	H2	Actuator Reference Model	L1	C1	H2
0.5	9.7	90	2.85	12.7	27.5	34	32	46	9*9*9	50*50	F03/F05	SR063	167	88	88	DA050	147	72	72
0.75	22.4	100	2.85	25.4	27.5	34	33	47.5	9*9*9	50*50	F03/F05	SR063	167	88	88	DA050	147	72	72
1	22.6	115	2.85	25.6	43.5	50.5	41.25	60	11*11*11	51*55	F04/F05	SR063	167	88	88	DA050	147	72	72
1.25	31.3	125	2.85	34.3	43.5	50.5	49.5	64	11*11*11	51*55	F04/F05	SR075	184	100	100	DA050	147	72	72
1.5	35.6	140	2.85	38.6	43.5	50.5	59.03	80	14*14*15	66.5*72	F05/F07	SR075	184	100	100	DA063	167	88	88
2	48.6	155	2.85	51.6	56.5	64	65.5	87.5	14*14*15	66.5*72	F05/F07	SR088	210	109	109	DA063	167	88	88
2.5	60.3	170	2.85	64.1	70.5	77.5	80.25	115	17*17*17	95*95	F07/F10	SR092	262	117	117	DA088	210	109	109
3	72.9	200	2.85	76.7	83.5	91	88	122	17*17*17	95*95	F07/F10	SR125	301	155	155	DA092	262	117	117
4	97.6	240	2.85	102.5	110	119	111.5	158	22*22*23	115*115	F10/F12	SR125	301	155	155	DA100	268	133	133

*Parameters not listed above can be customized.

Three-piece Electric Ball Valve

Actuator Outline Drawing

3A Three-Piece Ball Valve ●●●



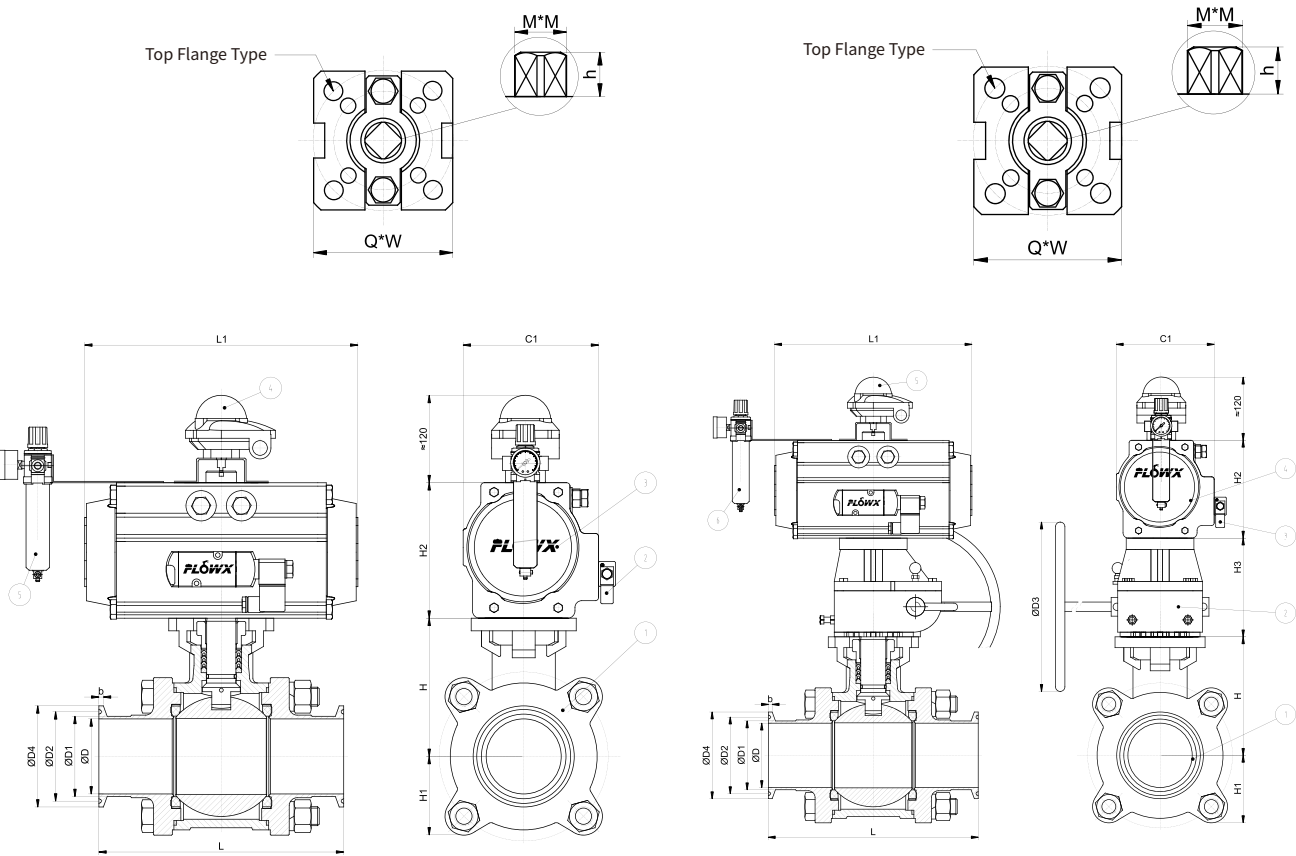
NPS	ΦD (3A)	L	b	ΦD1	ΦD2	ΦD4	H1	H	M*M*h	Q*W	Top Flange Type	Single Acting				Double Acting			
												Actuator Reference Model	L1	C1	H2	Actuator Reference Model	L1	C1	H2
0.5	9.4	90	3.63	12.7	20.32	25	32	46	9*9*9	50*50	F03/F05	SR063	167	88	88	DA050	147	72	72
0.75	15.75	100	3.63	19.05	20.32	25	33	47.5	9*9*9	50*50	F03/F05	SR063	167	88	88	DA050	147	72	72
1	22.1	115	2.85	25.4	43.5	50.5	41.25	60	11*11*11	51*55	F04/F05	SR063	167	88	88	DA050	147	72	72
1.25	28.5	125	2.85	31.8	43.5	50.5	49.5	64	11*11*11	51*55	F04/F05	SR075	184	100	100	DA050	147	72	72
1.5	34.8	140	2.85	38.1	43.5	50.5	59.03	80	14*14*15	66.5*72	F05/F07	SR075	184	100	100	DA063	167	88	88
2	47.5	155	2.85	50.8	56.5	64	65.5	87.5	14*14*15	66.5*72	F05/F07	SR088	210	109	109	DA063	167	88	88
2.5	60.2	170	2.85	63.5	70.5	77.5	80.25	115	17*17*17	95*95	F07/F10	SR092	262	117	117	DA088	210	109	109
3	72.9	200	2.85	76.2	83.5	91	88	122	17*17*17	95*95	F07/F10	SR125	301	155	155	DA092	262	117	117
4	97.4	240	2.85	101.6	110	119	111.5	158	22*22*23	115*115	F10/F12	SR125	301	155	155	DA100	268	133	133

*Parameters not listed above can be customized.

Three-piece Electric Ball Valve

Actuator Outline Drawing

DIN Three-Piece Ball Valve ●●●



NPS	ΦD (DIN32676)	L	b	ΦD1	ΦD2	ΦD4	H1	H	M*M*h	Q*W	Top Flange Type	Single Acting				Double Acting						
												Actuator Reference Model	L1	C1	H2	Actuator Reference Model	L1	C1	H2	Clutch Model	ΦD3	H3
0.5	16	90	2.85	20	27.5	34	32	46	9*9*9	50*50	F03/F05	DA050	147	72	72	SR063	167	88	88	KH-1-2	180	105
0.75	20	100	2.85	24	27.5	34	33	47.5	9*9*9	50*50	F03/F05	DA050	147	72	72	SR063	167	88	88	KH-1-2	180	105
1	26	115	2.85	30	43.5	50.5	41.25	60	11*11*11	51*55	F04/F05	DA050	147	72	72	SR063	167	88	88	KH-1-2	180	105
1.25	32	125	2.85	36	43.5	50.5	49.5	64	11*11*11	51*55	F04/F05	DA050	147	72	72	SRO75	184	100	100	KH-1-2	180	105
1.5	38	140	2.85	42	43.5	50.5	59.03	80	14*14*15	66.5*72	F05/F07	DA063	167	88	88	SRO75	184	100	100	KH-1-2	180	105
2	50	155	2.85	54	56.5	64	65.5	87.5	14*14*15	66.5*72	F05/F07	DA063	167	88	88	SRO88	210	109	109	KH-2	200	110
2.5	66	170	2.85	70	83.5	91	80.25	115	17*17*17	95*95	F07/F10	DA088	210	109	109	SR092	262	117	117	KH-2	200	110
3	81	200	2.85	85	97	106	88	122	17*17*17	95*95	F07/F10	DA092	262	117	117	SR125	301	155	155	KH-3	280	130
4	100	240	2.85	104	110	119	111.5	158	22*22*23	115*115	F10/F12	DA100	268	133	133	SR125	301	155	155	KH-3	280	130

*Parameters not listed above can be customized.

Double Female Mini Ball Valve

Product Overview

Function: Stainless steel ball valves are used to cut off or connect the medium in pipelines. Threaded connection is adopted for fast and convenient assembly.

Application: Suitable for liquid cooling, water supply and drainage and other fields.

Product Features:

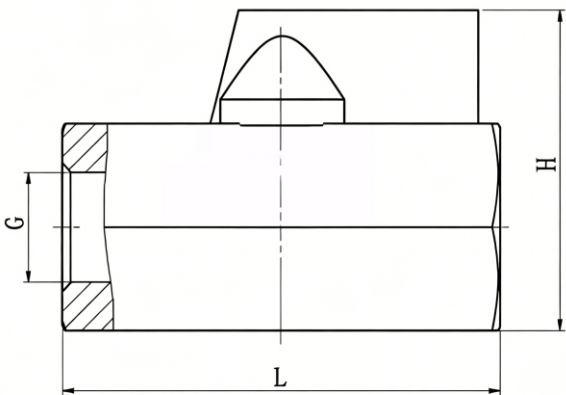
- Low flow resistance
- Simple structure, compact size, light weight
- Easy maintenance
- Low operating torque
- Degreased & oil-free

Basic Parameters

Nominal Pressure	PN10
Temperature Range	-40°C~120°C
Connection Standards	GB/T12237-2021
Test Standards	JB/T9092-1999
Media	Water, liquids with ethylene glycol or propylene glycol concentration ≤50%

Main Component Materials

Part Name	Material
Valve Body	Stainless Steel
Body Seat	PTFE
Ball	Stainless Steel
Bonnet Seat	PTFE
Flat Gasket	Stainless Steel
Male Thread Bonnet	Stainless Steel
Stem Washer	PTFE
Valve Stem	Stainless Steel
O-ring	EPDM
Handle	Plastic
Screw	Stainless Steel



Dimensions

SIZE	DN	L	G1	H
1/8"	DN6	42	1/8	39
1/4"	DN8	42.5	3/8	39
3/8"	DN10	47	3/8	39
1/2"	DN15	48	1/2	43
3/4"	DN20	55.5	3/4	50.5
1"	DN25	67	1	57

Male and Female Mini Ball Valve

Product Overview

Function: Stainless steel ball valves are used to cut off or connect the medium in pipelines. Threaded connection is adopted for fast and convenient assembly.

Application: Suitable for liquid cooling, water supply and drainage and other fields.

Product Features:

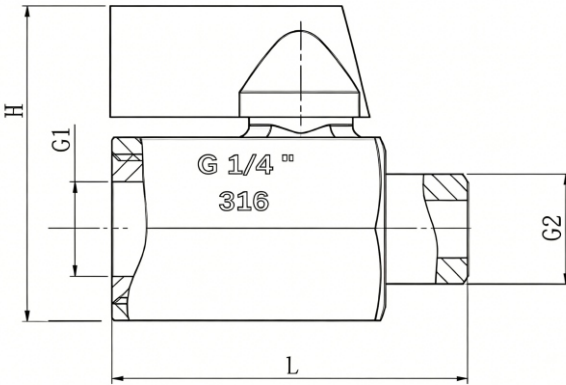
- Low flow resistance
- Simple structure, compact size, light weight
- Easy maintenance
- Low operating torque

Basic Parameters

Nominal Pressure	PN10
Temperature Range	-40°C~120°C
Connection Standards	GB/T12237-2021
Test Standards	JB/T9092-1999
Media	Water, liquids with ethylene glycol or propylene glycol concentration ≤50%

Main Component Materials

Part Name	Material
Valve Body	Stainless Steel
Body Seat	PTFE
Ball	Stainless Steel
Bonnet Seat	PTFE
Flat Gasket	Stainless Steel
Male Thread Bonnet	Stainless Steel
Stem Washer	PTFE
Valve Stem	Stainless Steel
O-ring	EPDM
Handle	Plastic
Screw	Stainless Steel



Dimensions

SIZE	DN	L	G1	G2	H
1/8"	DN6	42	1/8	1/8	39
1/4"	DN8	42.5	3/8	3/8	39
3/8"	DN10	47	3/8	3/8	39
1/2"	DN15	48	1/2	1/2	41
3/4"	DN20	55.5	3/4	3/4	50
1"	DN25	67	1	1	55

CHECK VALVE SERIES



The Liquid Cooling Check Valve, the System's “Anti-reverse Flow Guardian”

It opens and closes automatically by fluid pressure to force one-way flow of coolant. It effectively prevents backflow upon pump shutdown, protects pump equipment and eliminates water hammer risks. It is a critical passive component ensuring the safety and stability of liquid cooling loops.

Sanitary Check Valve

Product Overview

Stainless steel check valves automatically open and close the disc by medium flow to prevent backflow. Welded or sanitary clamp connections are available for liquid cooling, water supply & drainage and HVAC systems.

Sanitary lift check valves have a vertically sliding disc and are normally installed horizontally. High-pressure small-bore versions can use a ball disc. Their body is similar to globe valves and interchangeable, with relatively high flow resistance. Guide sleeves on the disc and bonnet allow free movement: medium thrust opens the disc in forward flow, while the disc drops by gravity onto the seat to stop reverse flow when flow ceases.

Straight-through lift check valves have medium passages perpendicular to the seat, while vertical lift check valves have aligned passages and lower flow resistance.

- Low flow resistance
- Simple structure, compact size, light weight
- Convenient maintenance

Technical Specifications

Nominal Pressure	PN10/PN16
Temperature Range	-20°C~120°C
Connection Standard	Clamp:ASME BPE
	Welded:DIN 11850/ASME
Test Standard	BPEGB/T 13927/API598
Media	Water, liquids with ethylene glycol or propylene glycol concentration ≤50%

Main Component Materials

Part Name	Material
Bonnet	Stainless Steel
Check Valve Disc	Stainless Steel
Valve Body	Stainless Steel
Spring	Stainless Steel
Valve Core	Stainless Steel
Gasket	EPDM
Clamp	Stainless Steel



Welded Type



Clamp Quick-install Type



Monobloc Type

Sanitary Check Valve

Sanitary Check Valve

Dimensions

Clamp Quick-install Check Valve (3A) ●●●

SIZE	ΦD	ΦA	L
1/2"	9.4	25.2	76
3/4"	15.8	25.2	76
1"	22.1	50.5	103
1.5"	34.8	50.5	101
2"	47.5	64	112
2.5"	60.2	77.5	125
3"	72.9	91	125
4"	97.4	119	132

Clamp Quick-install Check Valve (DIN) ●●●

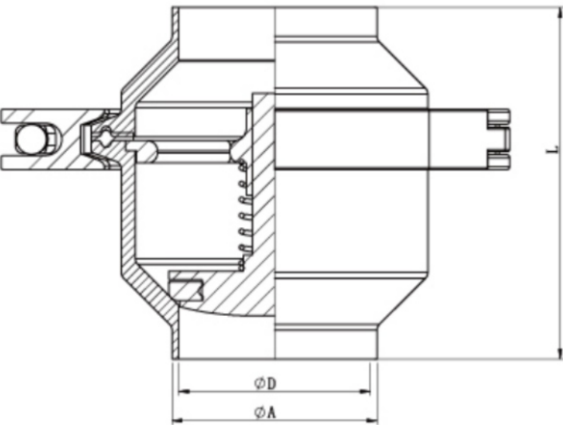
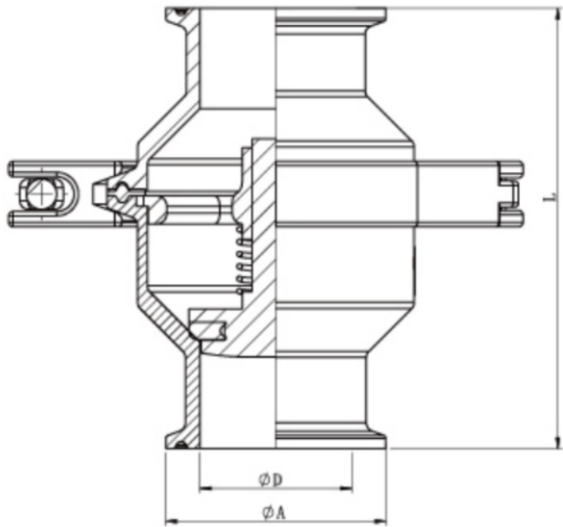
SIZE	ΦD	ΦA	L
DN15	15	34	76
DN20	19	34	76
DN25	25	50.5	103
DN40	37	50.5	101
DN50	49	64	112
DN65	66	91	125
DN80	81	106	125
DN100	100	119	132

Welded Check Valve (3A) ●●●

SIZE	ΦD	ΦA	L
1/2"	9.4	12.7	74
3/4"	15.8	19.1	74
1"	22.1	25.4	77
1.5"	34.8	38.1	77
2"	47.5	50.8	87
2.5"	60.2	63.5	99
3"	72.9	76.2	99
4"	97.4	101.6	100

Welded Check Valve (DIN) ●●●

SIZE	ΦD	ΦA	L
DN15	15	18	74
DN20	19	22	74
DN25	25	28	77
DN40	37	40	77
DN50	49	52	87
DN65	66	70	99
DN80	81	85	99
DN100	100	104	100



Clamp Quick-install Monobloc Check Valve (3A) ●●●

SIZE	ΦD	ΦA	L
1/2"	9.4	25.2	74
3/4"	15.8	25.2	74
1"	22.1	50.5	99
1.5"	34.8	50.5	97
2"	47.5	64	110
2.5"	60.2	77.5	120
3"	72.9	91	120
4"	97.4	119	125

Clamp Quick-install Monobloc Check Valve (DIN) ●●●

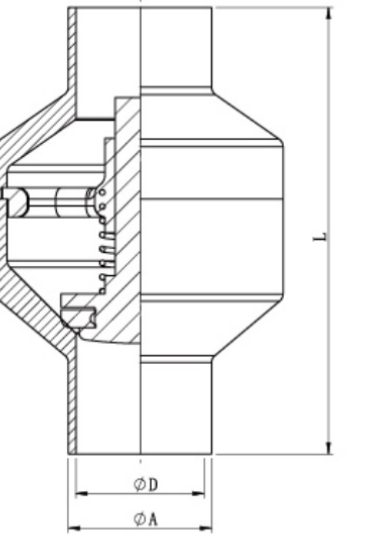
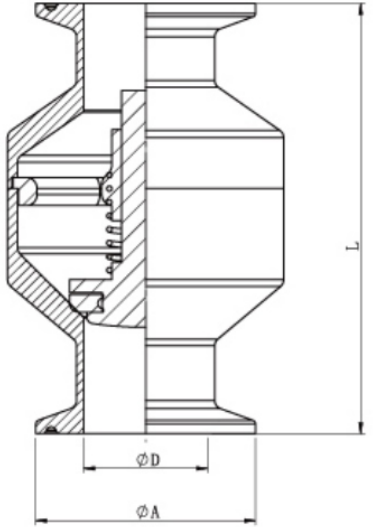
SIZE	ΦD	ΦA	L
DN15	15	34	74
DN20	19	34	74
DN25	25	50.5	99
DN40	37	50.5	97
DN50	49	64	110
DN65	66	91	120
DN80	81	106	120
DN100	100	119	125

Welded Monobloc Check Valve (3A) ●●●

SIZE	ΦD	ΦA	L
1/2"	9.4	12.7	72
3/4"	15.8	19.1	72
1"	22.1	25.4	77
1.5"	34.8	38.1	77
2"	47.5	50.8	87
2.5"	60.2	63.5	99
3"	72.9	76.2	99
4"	97.4	101.6	100

Welded Monobloc Check Valve (DIN) ●●●

SIZE	ΦD	ΦA	L
DN15	15	18	72
DN20	19	22	72
DN25	25	28	77
DN40	37	40	77
DN50	49	52	87
DN65	66	70	99
DN80	81	85	99
DN100	100	104	100



Sanitary Y-strainer

Product Overview

The liquid cooling filter acts as the “kidney” of the system.

It removes metal debris, particulate contaminants and dirt from the coolant to prevent pipeline blockage and sealing surface wear, ensuring fluid cleanliness and smooth circulation. It is a key component for long-term stable system operation and extended equipment service life.

The filter can effectively filter impurities in piping systems and guarantee normal operation of pumps, instruments, servers and other equipment. It is widely used in data center cooling systems, water supply and drainage systems and gas pipeline systems.

- Effective filtration performance
- Simple structure, easy to install
- Easy maintenance
- Protect other equipment
- Simple operation
- Cost-saving

Technical Specifications

Nominal Pressure	PN10
Temperature Range	-40°C~120°C
Test Standard	DIN 11850-2009/ISO 1127-2018
Test Standard	GB/T 14382-2017
Media	Gas, liquid, oil and others

Main Component Materials

Part Name	Material
Y-strainer Cover	Stainless Steel
Gasket	EPDM
Cover Nut	Stainless Steel
Y-strainer Body	Stainless Steel
Filter Cartridge	Stainless Steel
O-ring	EPDM



Clamp Quick-install Type



Welded Type

Sanitary Y-strainer

Dimensions

ISO Clamp Quick-install Y-strainer ●●●

SIZE	ΦA	ΦD	t	L	C	B
0D19	34	15.8	1.5	170	45	112
0D25	50.5	21.8	1.5	170	45	112
0D32	50.5	28.6	1.5	175	51	112
0D38	50.5	34.8	1.5	205	63	132
0D51	64	47.8	1.5	15	76	152
0D57	77.5	53.8	2	225	89	187
0D63	77.5	60.3	2	275	89	187
0D76	91	72.9	2	310	102	207
0D89	106	84.9	2	340	114	237
0D102	130	97.6	2	390	133	273

DIN Clamp Quick-install Y-strainer ●●●

SIZE	ΦA	ΦD	t	L	C	B
DN20	34	20	1.5	170	45	89
DN25	50.5	26	1.5	170	45	92
DN32	50.5	32	1.5	175	51	95
DN40	50.5	38	1.5	205	63	130
DN50	64	50	1.5	215	76	133
DN65	91	66	2	275	102	161
DN80	106	81	2	340	114	205
DN100	119	100	2	390	133	244

ISO Welded Y-strainer ●●●

SIZE	ΦA	ΦD	t	L	C	B
0D19	19	15.8	1.5	170	45	112
0D25	24	21.8	1.5	170	45	112
0D32	31.8	28.6	1.5	175	51	112
0D38	38	34.8	1.5	205	63	132
0D51	51	47.8	1.5	15	76	152
0D57	57	53.8	2	225	89	187
0D63	63.5	60.3	2	275	89	187
0D76	76.1	72.9	2	310	102	207
0D89	88.9	84.9	2	340	114	237
0D102	101.6	97.6	2	390	133	273
0D114	114.3	110.3	2	410	168	285

DIN Welded Y-strainer ●●●

SIZE	ΦA	ΦD	t	L	C	B
DN20	23	20	1.5	170	45	89
DN25	29	26	1.5	170	45	92
DN32	35	32	1.5	175	51	95
DN40	41	38	1.5	205	63	130
DN50	53	50	1.5	215	76	133
DN65	70	66	2	275	102	161
DN80	85	81	2	340	114	205
DN100	104	100	2	390	133	244
DN125	129	125	2	410	168	265

