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Datasheet

Electric ball valve

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## Datasheet

### Electric flanged ball valve(HL type)

Electric Ball Valve is a kind of valve for 90° rotation, with the characteristics of fine sealing performance, large flow capability, small flow resistant coefficient, simple structure and long service life. The valve passage is equal to the connecting pipe, and the medium can nearly flow through it without the loss.

By connected with electric actuator, the valve is widely applicable for the working fields such as petroleum, chemical industry, metallurgy, paper making, power station etc. It can control not only the medium like the air, liquid and steam, but also the medium containing the fibers.

#### Applications

- Petroleum
- Chemical industry
- Metallurgy
- Paper making
- Power station



#### Features

- Small flow resistance
- Effective frictional torque reduction, balanced shaft operation
- Good-sealing valve seat
- Durable packing sealing, enhanced sealing under pressure
- Long service life

#### Electric flanged ball valve

#### Principle

An electric flanged ball valve mainly consists of a valve body, a ball, valve seats, a stem, an electric actuator, and flange connections.

When an opening signal reaches the electric actuator, its motor starts rotating. This rotation is

transmitted through the gear - reduction mechanism, which boosts the torque and then transfers it to the stem, causing the stem to turn the ball. As the ball rotates, the hole in it gradually aligns with the valve body's flow passage, opening the valve for unhindered medium flow. Conversely, upon receiving a closing signal, the motor rotates in the opposite direction. The gear - reduction mechanism once again adjusts the rotational speed and torque, and the stem rotates the ball to a position where the hole moves out of alignment with the flow passage, closing the valve. The valve seats then form a tight seal against the ball, preventing medium leakage.

Parameters	
Nominal diameter DN(mm)	DN15~DN250
Nominal pressure	PN1.0/1.6/2.5/4.0/6.4MPa
Applicable medium	Water、Petroleum、Nitric Acids、Acetic Acids、Slurries、Viscosity fluid and so on
Suitable temperature	-40℃~+80℃(PTFE/PPL Sealing)-40℃~+350℃(Metal Sealing)
Leakage	Fit for the standard of ANSI B16.104
Rotary angle	90°
Body material	WCB,304,316
Seat materials	PTFE(Normal Temp.),Special PPL(High Temp.)、Metal Sealing(High Temp.)

SIZE	Item	Nominal pressure	A	B	C	H	L	D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	nXO
DN15	HL-05	1.6MPa	137	160	103	203	130	95	65	45	4X14
DN20	HL-05		137	160	103	209	140	105	75	55	4X14
DN25	HL-05		137	160	103	223	150	115	85	65	4X14
DN32	HL-05		137	160	103	243	165	135	100	78	4X18
DN40	HL-10		145	208	124	276	180	145	110	85	4X18
DN50	HL-10		145	208	124	289	200	160	125	100	4X18
DN65	HL-20		170	258	148	332	220	180	145	120	4X18
DN80	HL-20		170	258	148	356	250	195	160	135	8X18
DN100	HL-50		170	258	148	383	280	215	180	155	8X18
DN125	HL-100		184	280	159	467	320	245	210	185	8X18
DN150	HL-100		184	280	159	511	360	280	240	210	8X23
DN200	HL-200		184	280	159	609	400	355	295	265	12X23

**Datasheet****Wafer type flanged Ultra thin Italian ball valve**

Wafer flanged Ultra-thin ball valve with short length, light weight, easy installation, saving material and other significant advantages. In addition, valve seat's seal is reliable and easy to open and close by adopting elastic seal structure. Possible to operate reliably as the fire-resistant structure with good sealing in case of fire accident. Anti-static structure supplied according to use needs. The 90 positioning plate with hole can be used for lock according to customer's needs to avoid incorrect operation.

**Applications**

- Water
- Steam
- Oil
- Nitric acid
- Acetic acid
- Oxidizing media
- Urea

**Features**

- Short in length, light in weight, convenient for installation, and material - saving
- The valve seat offers reliable sealing and easy opening and closing
- With a fire-resistant structure, it features excellent sealing performance.
- Providing anti-static structure
- Misoperation can be avoided

**Wafer type flanged Ultra thin Italian ball valve****Principle**

The wafer type flanged ultra - thin Italian ball valve operates based on a relatively straightforward yet efficient principle. This valve consists of a valve body, a spherical ball with a through - hole, valve seats, a stem, and an actuation mechanism.

When the valve needs to be opened, the actuation mechanism (which can be manual, electric, pneumatic, etc.) rotates the stem, which in turn rotates the ball. As the ball rotates, the through - hole in it aligns with the flow path of the valve body, allowing the fluid to flow through the valve with minimal resistance due to the smooth spherical surface and well - designed flow path. When closing, the actuation mechanism rotates the ball in the opposite direction so that the solid part of the ball blocks the flow path. The valve seats, often made of materials with good sealing properties, form a tight seal against the ball to prevent any leakage.

The wafer - type flanged design makes it easy to install between two pipeline flanges, and its ultra - thin structure saves space. This Italian - made valve combines high - quality manufacturing and precise engineering to ensure reliable and efficient flow control in various piping systems.

Parameters						
The type of valve	Power	End connection	Structure shape	Valve seat	Nominal pressure (MPa)	Valve body
Ball valve	9-electromat ion	Wafer	two way with Floating bal	F-PTFE H-Alloy steel PPL	1.6 2.5 4.0 6.4	as below material code
Nominal diameter DN(mm)	15-200					
Materials/code name	C		P		R	
Main Parts	Valve Body	WCB		ZG1Cr18Ni9Ti	ZG0Cr18Ni12Mo2Ti	
	Valve Disc	2Cr13		ZG1Cr18Ni9Ti	ZG0Cr18Ni12Mo2Ti	
	Valve Stem	2Cr13		1Cr18Ni9Ti	0Cr18Ni12Mo2Ti	
	O-ring	RPTFE,Alloy stee				
	Packing	PTFE,flexible graphite				
Applicable Operating Condition	Applicable medium	Water,steam,oils		nitrose	acetic acid	
	Suitable temperature	-28°C~300°C				
Control method	On-off type/Modulating type					
Action type	Shut-off/regulation					
Electric actuator	Item	HL series				
	Power supply	DC24V、AC24V、AC110V、AC220V、AC380V				

SIZE	Item	Nominal pressure	A	B	C	H	L	D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	nXM
DN20	HL-05	1.6MPa	137	160	103	162	38	55	75	105	4XM12
DN25	HL-05		137	160	103	167	42	65	85	115	4XM12
DN32	HL-05		137	160	103	180	50	78	100	135	4XM16
DN40	HL-05		137	160	103	187	62	85	110	145	4XM16
DN50	HL-10		145	208	124	216	72	100	125	160	4XM16
DN65	HL-20		170	258	148	248	95	120	145	180	4XM16
DN80	HL-20		170	258	148	267	118	135	160	195	8XM16
DN100	HL-50		170	258	148	280	140	155	180	215	8XM16
DN125	HL-50		148	258	148	305	195	185	210	245	8XM16
	HL-100		184	280	159	316	195	185	210	245	8XM16
DN150	HL-100		148	208	159	375	225	210	240	280	8XM20

**Datasheet****Electric flanged three-way ball valve**

The electric flanged three-way ball valve is compact, light, and convenient to maintain. The valve is powered by 220V single-phase AC and receives signals from the control system. A reversible single-phase gear reducer can be driven by switching single-phase power to switch the pipeline as required. The L-pattern three-way valve can achieve flow direction switching in the pipeline and can also connect or disconnect two perpendicular ports. The T-pattern three-way valve not only can switch the flow direction but also mix the mediums of three ways. It is possible to disconnect any one way so that the other two ways can be connected to flexibly control the flow direction of the medium. These valves are suitable for pipelines in water supply, petrochemical industry, metallurgy, mining, textile, energy, paper making, food, and steel piping systems.

**Applications**

- Water supply
- Petrochemical industry
- Metallurgy
- Mining, textile
- Energy
- Paper making
- Food
- Steel piping systems

**Features**

- Compact, open and close rapidly, running smooth
- Good seal performance
- Multi-function
- Easy maintenance

**Electric flanged three-way ball valve****Principle**

Electric three-way ball valve includes L-pattern and T-pattern, flow direction shown as below. L-pattern

can connect the perpendicular two ways to switch the flow direction, but T-pattern can connect three ways or two ways to mix the mediums or switch the flow direction both. Normally, L-pattern is adopted, but T-pattern is optional according to customers' requests.

Parameters	
Nominal diameter DN(mm)	DN15~DN100
Nominal pressure	PN1.6、2.5、4.0、6.4MPa
End connection	thread end connection,weld end connection
Valve body materia	WCB、CF8、CF8M、CF3M
Valve ball	2Cr13、304、316
Seal Packing	PTFE、flexible graphite
Rotate angle	0-90°
Enclosure protection	IP-67
Environmental humidity	≤95%
Suitable temperature	-25~70℃

SIZE		Item	H	L
mm	inch			
15	1/2"	HL-5	193	72
20	3/4"	HL-5	184	84
25	1	HL-5	193	91
32	1 1/4"	HL-5	198	116
40	1 1/2"	HL-5	206	135
50	2	HL-10	234	146
65	2 1/2"	HL-20	266	199
80	3"	HL-20	304	237
15	1/2"	HL-5	193	72
20	3/4"	HL-5	184	84
25	1	HL-5	193	91
32	1 1/4"	HL-5	198	116
40	1 1/2"	HL-5	206	135
50	2	HL-10	234	146
65	2 1/2"	HL-20	266	199
80	3"	HL-20	304	237
32	1 1/4"	HL-5	198	116

## Datasheet

### Electric threaded ball valve

The electric threaded ball valve with an integrated structure can be driven by input signals (4-20mA DC, 0-10V DC, or 1-5V DC) or a single-phase power supply. It features small volume, high flow capacity, high regulation precision, good sealing, and light weight, among other characteristics. The valve is widely used in food, environmental protection, light industry, petroleum, paper, chemicals, teaching and research equipment, and electric power industries within industrial automation control systems.

#### Applications

- Food
- Environmental protection
- Light industry
- Petroleum
- Paper
- Chemicals
- Teaching and research equipment
- Electric power industries



#### Features

- Thread and butt welded connection ball valve can be divided into 1-piece, 2-piece, 3-piece
- Reasonable structure, beautiful shape
- Reliable sealing, convenient opening and closing
- The valve stem adopts a bottom-mounted inverted sealing structure
- Comply with international standards

#### Electric threaded ball valve

#### Principle

The Electric Threaded Ball Valve operates by using an electric actuator to rotate a ball within the valve body. The ball has a bore that, when aligned with the pipeline, allows fluid to flow through (open

position), and when rotated 90 degrees, blocks the flow (closed position). The actuator, powered by input signals or single-phase power, provides the necessary torque for this rotation. The valve's threaded design ensures easy installation and a secure connection to the pipeline. High-performance sealing materials ensure tight shut-off, and the sealing effectiveness improves with increased medium pressure. This valve is widely used in various industries for precise flow control and automation.

Parameters								
Nominal diameter DN(mm)		DN10~DN100						
Nominal pressure		PN1.6/2.5/6.4MPa						
End connection		thread			Butt welded			
Main Parts	Valve body、 valve cap	WCB	CF8(304)	CF8M(316)	WCB	CF8(304)	CF8M(316)	
	Valve ball、 valve stem	2Cr13	304	316	2Cr13	304	316	
	O-ring、 Packing	RPTFE、 PPL						
Applicable Operating Condition	Applicable medium	Water、 steam、 oils	Nitricacid and other corrosive medium	Nitricacid and other corrosive medium	Water、 steam、 oils	Nitricacid and other corrosive medium	Nitricacid and other corrosive medium	
	Suitable temperature	-29℃~180℃(RPTFE)、 -29℃~300℃(PPL)						

Electric threaded bal valve (standard type)dimensions

SIZE		Item	H	L
mm	inch(G)			
20	3/4°	HL-5	196	85
25	1"		200	90
32	1 1/4°		210	112
40	1 1/2"	HL-10	258	120
50	2"		252	145
65	2 1/2°	HL-20	279	170
80	3"		332	200
100	4"	HL-50	387	263

## Datasheet

### Electric sanitary ball valve

Our valve is a top - notch solution for fluid control in various industries. Constructed from high - grade materials like 304, 304L, 316, and 316L, it offers strong corrosion resistance. With the ability to withstand big temperature differences (operating from - 10°C to + 150°C) and handle a normal pressure of 16MPa at a working pressure of 1.0Mpa, it ensures reliable performance in diverse environments. It features high precision, thanks to a polishing treatment that meets strict surface precision requirements. The valve comes with seal rings made of EPDM, NBR, and PTFE, providing excellent sealing for different media. Ideal for applications in food, beverage, pharmaceutical, dairy, beer, and chemical industries, it can effectively control the flow of gas, liquid, and steam.

#### Applications

- Water supply
- Food
- Beverage
- Pharmaceutical
- Dairy
- Beer
- Chemicals



#### Features

- Small flow resistance
- Good seal performance
- Wide application range
- Small size,any positions installation,convenient installation,easy transportation and store
- Service life long
- High reliability

#### Electric sanitary ball valve

#### Principle

The Electric Sanitary Ball Valve operates by utilizing an electric actuator to control the rotation of a spherical ball within the valve body. The ball features a bore that, when aligned with the pipeline,

permits fluid to pass through (open position), and when rotated 90 degrees, obstructs the flow (closed position). The actuator, driven by input signals or single-phase power, generates the necessary torque to rotate the ball. Designed with sanitary standards in mind, the valve ensures smooth, crevice-free surfaces to prevent contamination, making it ideal for industries requiring high hygiene levels, such as food, beverage, and pharmaceuticals. High-quality sealing materials provide a tight shut-off, and the valve's precision control allows for efficient flow regulation in automated systems.

Parameters	
Item	Q981F-10P
Nominal diameter	DN15-DN150、1"-6"□中 12.7-中 152.4
End connection	Clamp,weld,thread,flange
Actuator	Electric actuator
Material	304,304L,316,316L adopted
Main performance	Big Temperature difference withstand;norma pressure 16MPa; strong corrosion resistance;precision;
Quality	Polishing treatment to meet surface precision requirements
Seal ring	EPDM、NBR、PTFE
Working pressure	1.0Mpa
Working temperature	-10°C+150°C

SIZE	Item	D	D1	L	H	K	C	E	F	G
019	HL-05	50.5	16	99	45	9	137	84	164	125
025	HL-05	50.5	22	115	50	9	137	84	164	125
032	HL-05	50.5	29	124	51	9	137	84	164	125
038	HL-05	50.5	35	140	64	9	137	84	164	125
045	HL-05	64	41	148	67	9	137	84	164	125
051	HL-10	64	48	164	70	11	145	98	208	156
057	HL-10	77.5	52	169	74	11	145	98	208	156
063	HL-10	77.5	59	175	80	11	145	98	208	156
076	HL-10	91	72	200	100	14	145	98	208	156
089	HL-20	106	84	235	107	14	170	124	258	196
0102	HL-20	119	98	315	122	14	170	124	258	196

## Datasheet

### Electric PVC ball valve

The PVC Electric Ball Valve adopts double union and flange connections, allowing for easy installation without the need for special tools. It features a compact structure, anti-abrasion properties, quick detachability, and ease of repair and maintenance. The body material is health-friendly, non-toxic, corrosion-resistant, and lightweight, making it suitable for a wide range of applications. These include water and raw water piping systems, drainage and sewage piping systems, saltwater and seawater piping systems, acid and chemical solution systems, and various other industries.

#### Applications

- Water and raw water piping systems
- Drainage and sewage piping systems
- Salt water and sea water piping systems
- Acid and chemical solution systems



#### Features

- Thread and butt welded connection ball valve can be divided into 1-piece, 2-piece, 3- piece
- Reasonable structure, beautiful shape
- Reliable sealing, convenient opening and closing
- The valve stem adopts a bottom-mounted inverted sealing structure
- Comply with international standards

#### Electric PVC ball valve

#### Principle

The Electric PVC Ball Valve operates by using an electric actuator to control the rotation of a ball within the valve body. The ball has a bore that, when aligned with the pipeline, allows fluid to flow through

(open position), and when rotated 90 degrees, blocks the flow (closed position). The actuator, powered by input signals or single-phase power, provides the necessary torque for this rotation. Designed with double union and flange connections, the valve ensures easy installation and maintenance without special tools. Its PVC construction offers corrosion resistance, lightweight, and non-toxic properties, making it suitable for various applications such as water, drainage, sewage, and chemical systems. The valve's compact structure and efficient design enable precise flow control in automated systems.

Parameters	
Nominal diameter DN(mm)	DN15~DN100
End connection	Double Union, Flange
Valve body material	UPVC(-10°C~+70°C)、CPVC(-40°C~+95°C)、RPP(-14°C~+100°C)、PVDF(-40°C~+140°C)
Bore material	UPVC(-10°C~+70°C)、CPVC(-40°C~+95°C)、RPP(-14°C~+100°C)、PVDF(-40°C~+140°C)
Sealing material	PTFE、EPDM、NBR
Applicable medium	PVC chemical solvent compatible food industry

SIZE mm	Item	Ø	A	L	H
DN25	HL-5	32	21.5	121	207
DN32		40	26.5	137	211
DN40		50	31	161	242
DN50		63	37.5	195	268
DN65		75	43.5	226	296
DN80	HL-10	90	51	289	320
DN100		110	61	342	352

## Datasheet

### Electric PVC 3 way ball valve

This electric ball valve is a highly versatile and practical solution for various fluid - control applications. It features two distinct structure patterns: the 3 - way L - pattern and the 3 - way T - pattern. The 3 - way L - pattern is ideal for applications where fluid needs to be redirected between two different flow paths, allowing for selective diversion. Meanwhile, the 3 - way T - pattern offers more complex flow - control capabilities, enabling fluid to be mixed, split, or redirected in multiple directions, providing greater flexibility in pipeline systems. This valve is suitable for use with a wide range of applicable media. It is compatible with PVC chemical solvents, making it a reliable choice for chemical processing industries where the handling of corrosive and reactive substances is common. Moreover, it meets the requirements of the food industry, ensuring that it can be safely used in processes involving food production, storage, and distribution, maintaining high - level hygiene standards.

In terms of temperature tolerance, this valve can operate effectively within a temperature range of - 15°C to + 135°C. This wide temperature adaptability allows it to be used in diverse environments, whether it's in cold storage facilities or high - temperature industrial processes. Overall, this electric ball valve combines multiple functional features and wide - ranging adaptability, making it an excellent option for fluid - control tasks in different industries.

#### Applications

- PVC chemical solvent compatible food industry



#### Features

- Easy to install, convenient to operate
- Comply with export standards
- Suitable for the frequent operation, open and close quickly, lightweight
- Fullbore design, high flow capacity, small fluid resistance.
- Small size, light weight, and low cost
- Good seal performance.
- No vibration, low noise.

**Electric PVC 3 way ball valve**

Parameters	
Nominal diameter DN(mm)	DN15-DN50
Nominal pressure	PN1.0MPa
End connection	Double union
Valve body material	PVC
Valve seat	PTFE
Valve Ball	UPVC、CPVC、PP
Structure pattern	3 way L-pattern,3way T-pattern
Suitable temperature	-15~+135℃
Nominal pressure	PN1.0MPa

SIZE mm	Item	D1	D2	H	H1	L
DN15	HL-5	53	20	207	33	142
DN20		63	25	227	43	162
DN25		70	32	227	43	175
DN32		85	40	263	56	233
DN40		101	50	263	56	244
DN50		121.5	63	279	64	283

## Electric wafer V-pattern ball valve

The electric V-type regulating ball valve does not require an external servo driver. It only needs to input (4-20mADC, 0-10VDC or 1-5VDC) signals and a single-phase power supply to adjust parameters such as pressure, flow, temperature, and liquid level. The metal seal on the valve core and the V-shaped incision rotate in the opposite direction to generate shear force, cut off the fiber, and avoid jamming accidents. It has the characteristics of large flow capacity, high adjustment accuracy, good sealing, and light weight. Except for small-caliber, angular, and triangular uses, it is the best choice to replace imported products. It is particularly suitable for media such as slurry and fiber, as well as the regulation of fine suspended matter. It is widely used in industrial automation control systems such as papermaking, sugar making, petroleum, chemical industry, and metallurgy.

### Applications

- Frozen pipes
- The fluids containing fibers
- Slurry type fluids



### Features

- Light weight, low material cost, more cheaper than the linear control valve with the same flow capacity.
- Integrated valve body has no effects for pressure, pipe and bolts as without any joints
- Durable, strong sealing
- High accuracy
- Automatically clean

### Electric wafer V-pattern ball valve

Parameters			
Nominal diameter DN(mm)		DN25-DN250	
Nominal pressure		PN1.6~6.4MPa	
Nominal pressure	Strength test	PN2.4~9.6MPa	
	Seal test	PN1.76~7.0MPa	
Materials/code name		C	P
Main Parts	Valve Body	WCB	304
	Valve Ball		316
	Valve Stem	Stainless Steel	
	O-ring	PTFE、stainless steel、cemented carbide	
	Packing	PTFE,flexible graphite	
Applicable Operating Condition	Applicable medium	Water,steam,oils	nitrose
	Suitable temperature	-28~400℃	-28~500℃
End connection		wafer type meet JB79-59 standard	

SIZE		Item	D2	H2	H1	L
mm	inch					
25	1"	HL-5	68	313	81	50
32	1 1/4"		76	316	86	60
40	1 1/2"	HL-10	84	341	90	60
50	2"		100	353	93	75
65	2.5"	HL-20	118	390	108	100
80	3"		132	411	123	100
100	4"	HL-50	158	421	138	115
125	5"	HL-100	184	454	148	129
150	6"		216	503	170	160
200	8"	HL-200	268	534	200	200
250	10"		326	596	240	240

**Datasheet****Electric flanged V-type ball valve**

Electric V-type adjustable ball valve can be driven to realize the regulation of pressure, flow, temperature, liquid level and other parameters by input (4-20mA DC, 0-10VDC or 1-5VDC) signals and single-phase power without addition servo drives. The shearing force is generated by the reverse rotation of metal seal and V-cut on the valve spool which can cut off the fibers to avoid stuck accident, with the characters of large flow capacity, high regulation precision, good sealing and light weight, etc. The best choice to replace the import products except for the applications of the small diameter, angular and triangle, particularly suitable for the medium of the slurries and fibers, and the regulation of small suspended solids. Widely used in paper manufacturing, sugar, petroleum, chemical, metallurgical and other industrial automation control systems.

**Applications**

- Paper manufacturing
- Sugar industry
- Petroleum industry
- Chemical industry
- Metallurgical industry

**Features**

- Compact structure, small size, vertical horizontal installation
- Excellent regulation characteristics
- The maximum flow volume
- High mechanical performance, small start torque, excellent sensitivity
- Perfect performance, long service life.

**Electric flanged V-type ball valve****Principle**

An Electric flanged V-type ball valve operates based on a simple yet effective principle. It consists of a

ball with a V-shaped notch that rotates within the valve body. When the electric actuator receives a signal, it drives the ball to rotate. In the open position, the V-shaped notch aligns with the pipeline, allowing the fluid to flow through with relatively low resistance. As the ball rotates, the V-shaped opening gradually closes, restricting the flow of the fluid. The degree of rotation of the ball can be precisely controlled by the electric actuator, enabling accurate regulation of the flow rate, making it suitable for applications where precise flow control is required, such as in chemical processes, water treatment plants and various industrial systems.

Parameters	
Valve Body form	casting Straight ball valve
Nominal pressure	DN25~DN250mm
Valve body material	WCB、CF8、CF8M、CF3M
V-pattern valve ball	WCB,CF8,CF8M,CF3M (hardened treatment)
Valve stem material	2Cr13、304、316、316L
Valve seat	V-type PTFE packing,asbestos packing,graphite packing
Valve bore form	With a V-shape ball
Nominal pressure	PN1.6/2.5/4.0/6.4MPa
End connection	Flanged
Flowrate characteristics	Approximate equal percentage
Suitable temperature	-28℃~400℃

SIZE		Item	D2	D1	H2	H1	L	n-0
mm	inch		1.6MPa	1.6MPa				1.6MPa
25	1"	HL-5	115	85	394	81	102	4-014
32	1 1/4"		140	100	402	86	102	
40	1 1/2"	HL-10	150	110	431	90	114	4-018
50	2"		165	125	446	93	124	
65	2.5"	HL-20	185	145	498	108	145	8-018
80	3"		200	160	534	123	165	
100	4"	HL-50	220	180	559	138	194	8-018
125	5"	HL-100	250	210	602	148	194	
150	6"		285	240	673	170	229	8-023
200	8"	HL-200	340	295	734	200	243	12-023
250	10"		405	355	836	240	297	12-025

**Datasheet****Electric lined Fluorine ball valve**

Q941F46 series electric lined fluorine ball valve is designed for various corrosive mediums of automatic control, widely used in petroleum, chemical industry, dyeing, pesticide, acid making and other industries, the best choices of anti-corrosion valve equipment.

Q941F4 series electric ball valve with fluorine lined, the high strength and smooth appearance valve body made by Investment casting, All parts contacting with the liquid are fluorine, so it can be used in any concentration corrosive liquid that temperature in the range of -50~+180°C for a long time.

**Applications**

- Petroleum
- Dyeing
- Chemical industry
- Pesticide
- Acid making

**Features**

- Corrosion resistance
- With perfect soft seal performance for valve seat.
- Small size, lightweight, simple structure, easy installation and maintenance.
- Small flow resistance

**Electric lined Fluorine ball valve****Principle**

The valve features a ball made of appropriate materials and lined with fluorine - a material known for its

excellent chemical resistance. When the electric actuator receives an electrical signal, it drives the rotation of the ball. In the open state, the passage through the ball is aligned with the pipeline, facilitating unobstructed fluid flow. As the electric actuator commands the ball to rotate, the ball gradually blocks the flow path. This rotation can be precisely controlled, enabling the regulation of the fluid flow rate. The fluorine lining not only protects the inner components of the valve from corrosion but also ensures smooth operation, making this type of valve highly suitable for handling corrosive fluids in industries like chemical manufacturing, pharmaceuticals, and electroplating.

### Parameters

Applicable medium	Sulfuric acid,hydrofluoric acid,phosphoric acid,chlorine,alkali,aqua regia and any other highly corrosive mediums.
Design specifications	Apply for standards of GB12233,GB12235,ANSIB 16.34.

SIZE		Item	D1	D	H1	L
mm	inch					
15	1/2°	HL-05	65	95	208	140
20	3/4°		75	105	210	140
25	1		85	115	220	150
32	1 1/4		100	140	225	165
40	1 1/2	HL-10	110	150	278	180
50	2		125	165	289	200
65	2 1/2	HL-20	145	185	333	220
80	3°		160	200	351	250
100	4	HL-50	180	220	369	280
125	5°	HL-100	210	250	423	320
150	6°		240	285	449	360
200	8"	HL-200	295	340	487	400

## Datasheet

### Applications

- Petroleum
- Chemical
- Metallurgy
- Papermaking
- Power stations



### Features

- Smallflow resistance
- Operation balance.
- Good sealing performance
- Long service life

**Electric flanged ball valve**

### Principle

The electric flanged ball valve is a reliable component for fluid control in pipelines. Its operation is powered by an electric actuator. When an electrical signal is received, the actuator converts electrical energy into mechanical torque. This torque is then transferred to the valve stem.

The valve stem is connected to a ball with a bore in the middle. When the valve is commanded to open, the electric actuator rotates the valve stem, which in turn rotates the ball. As the ball rotates to a position where its bore aligns with the pipeline, fluid can flow freely through the valve, encountering minimal resistance.

Conversely, when the valve needs to be closed, the actuator rotates the stem in the opposite direction. The ball then turns until its solid part blocks the pipeline, preventing the fluid from passing through. The flanged connections on both ends of the valve ensure a secure and leak - proof installation to the

pipeline, enabling the electric flanged ball valve to effectively control the start, stop, and regulation of fluid flow in various industrial applications.

## Electric flanged ball valve (LQ)

The electric ball valve is a 90° rotating valve with good sealing performance, large flow, small flow resistance coefficient, simple structure and long service life. The valve channel is equal to the connecting pipe, and the medium flows through almost without loss. This valve is connected with an electric actuator and is widely used in industrial and mining enterprises such as petroleum, chemical, metallurgy, papermaking, power stations, etc. It can not only control air, liquid, steam and other media, but also media containing fibers.

Parameters	
Nominal diameter DN(mm)	DN15~DN250
Nominal pressure	PN1.0/1.6/2.5/4.0/6.4MPa
Applicable medium	Water、 Petroleum、 Nitric Acids、 Acetic Acids、 Slurries、 Viscosity fluid and so on
Suitable temperature	-40℃~+80℃ (PTFE/PPL Sealing)-40℃~+350℃ (Metal Sealing)
Leakage	meet the standard of ANSI B16.104
Rotary angle	90°
Body material	WCB,304,316
Seat materials	PTFE(Normal Temp.),Special PPL(High Temp.), Metal Sealing(High Temp.)

SIZE		Item	D1 1.6MPa	H2	H1	L	n-O 1.6MPa
mm	inch						
15	1/2"	LQ1-6	65	297	48	130	4-014
20	3/4"		75	303	53	140	
25	1"		85	331	57	150	
32	1 1/4"	LQ1-10	100	351	67	165	4-018
40	1 1/2"		110	396	77	180	
50	2"	LQ2-20	125	443	80	200	8-018
65	2 1/2"	LQ2-24	145	505	90	220	
80	3"	LQ3-50	160	527	98	250	
100	4"	LQ3-50	180	583	107	280	8-023
125	5"	LQ4-110	210	708	122	320	
150	6"		240	697	140	360	

200	8"	LQ4JS-200	295	850	177	400	12-023
250	10"	LQ4JS-250	355	866	212	450	12-025

## Datasheet

### Electric three-way ball valve flanged

The electric flange three-way ball valve has a compact structure, light weight and easy maintenance. The valve is powered by 220V single-phase AC power, receives signals from the control system, and can drive the reversible single-phase gear reducer by switching the single-phase power to switch the pipeline as needed. The L-type three-way valve can switch the flow direction in the pipeline, and can also connect or disconnect the two vertical ports. The T-type three-way valve can not only switch the flow direction, but also mix the three-way media with each other, disconnect any one way, and connect the other two ways, flexibly control the flow direction of the medium, and is suitable for pipelines such as water supply, petrochemical, metallurgy, mining, textile, energy, papermaking, food, and steel pipeline systems.

#### Applications

- water supply
- Petrochemical
- Metallurgy
- Mining
- Textile
- Energy
- Papermaking
- Food
- steel pipeline systems



#### Features

- Compact, open and close rapidly, running smooth
- Good seal performance
- Multi-function
- Easy maintenance

**Electric three-way ball valve flanged**

#### Principle

Electric three-way ball valve includes L-pattern and T-pattern, L-pattern can connect the perpendicular two ways to switch the flow direction, but T pattern can connect three ways or two ways to mix the

mediums or switch the flow direction both, Normally L pattern adopted, but T pattern optional according to customers requested.

Parameters	
Nominal diameter DN(mm)	DN15~200mm
Nominal pressure	PN1.6、2.5、4.0、6.4MPa
End connection	Flange type, Threaded type
Body material	WCB、CF8、CF8M、CF3M
Valve ball	2Cr13、304、316
Seal Packing	PTEF、flexible graphite
Rotate angle	0-360°
Enclosure protection	IP-67
Environmental humidity	≤95%
Suitable temperature	-25~70℃

SIZE		Item	D1	D2	H	L	n-0
mm	inch		1.6MPa				1.6MPa
15	1/2	LQ1-6	65	95	280	140	4-14
20	3/4°	LQ1-6	75	105	300	160	4-14
25	1	LQ1-6	85	115	311	180	4-14
32	1 1/4	LQ1-6	100	135	341	200	4-18
40	1 1/2	LQ1-10	110	145	377	220	4-18
50	2	LQ1-10	125	160	402	240	4-18
65	2 1/2	LQ2-20	145	180	448	260	4-18
80	3°	LQ2-24	160	195	468	280	8-18
100	4	LQ3-50	180	215	517	320	8-18
125	5°	LQ4-110	210	245	557	380	8-18
150	6	LQ4JS-200	240	280	661	440	8-23
200	8°	LQ4JS-250	295	335	697	550	12-23

## Datasheet

### Electric threaded ball valve

Electric threaded ball valve with integrated structure can be driven by input(4-20mA DC, 0-10VDC or 1-5 VDC) signals or single-phase power supply, with the characters of small volume, high flow capacity, high regulation precision, good sealing, and light weight, etc. The valve is widely used in food, environmental protection, light industry, petroleum, paper, chemicals, teaching and research equipment, and electric power industries of industrial automation control systems.

#### Applications

- Food
- Environmental protection
- Light industry
- Petroleum
- Paper
- Chemicals
- Teaching and research equipment
- Electric power industry



#### Features

- Reasonable structure, beautiful shape
- Seat reliable and easy to close and open

**Electric threaded ball valve**

#### Principle

The electric threaded ball valve is a practical device for fluid control. It operates with the help of an electric actuator. When an electrical signal is received by the actuator, it converts the electrical energy

into mechanical movement. This mechanical force is then transferred to the valve stem.

The valve stem is firmly connected to a ball that has a hole through its center. The valve has threaded ends, which make it easy to install in a pipeline system. When the valve is commanded to open, the electric actuator rotates the valve stem. As the stem turns, the ball rotates as well. Once the hole in the ball aligns with the pipeline, fluid can flow freely through the valve with minimal resistance.

On the contrary, when the valve needs to close, the actuator rotates the stem in the opposite direction. This causes the ball to turn until its solid part blocks the pipeline, preventing the fluid from passing through. In this way, the electric threaded ball valve can accurately control the start, stop, and regulation of fluid flow in various applications, especially in small - scale or low - pressure pipeline systems where threaded connections are preferred.

Parameters								
Nominal diameter DN(mm)		DN10~DN100						
Nominal pressure		PN1.6/2.5/6.4MPa						
End connection		thread			Butt welded			
Main Parts	Valve body、 valve cap	WCB	CF8(304)	CF8M(316)	WCB	CF8(304)	CF8M(316)	
	Valve ball、 valve stem	2Cr13	304	316	2Cr13	304	316	
	O-ring、 Packing	RPTFE、 PPL						
Applicable Operating Condition	Applicable medium	Water、 steam、 oils	Nitricacid and other corrosive medium	Nitricacid and other corrosive medium	Water、 steam、 oils	Nitricacid and other corrosive medium	Nitricacid and other corrosive medium	
	Suitable temperature	-29℃~180℃(RPTFE)、 -29℃~300℃(PPL)						
	Suitable temperature	-29℃~180℃(RPTFE)、 -29℃~300℃(PPL)						

SIZE	Item	A	L	H	
mm					
DN25		32	21.5	121	327
DN32		40	26.5	137	331
DN40	LQ1-6	50	31	161	362
DN50		63	37.5	195	388
DN65		75	43.5	226	414
DN80	LQ1-10	90	51	289	457
DN100		110	61	342	489

## Datasheet

### Electric threaded ball valve

Electric threaded ball valve with integrated structure can be driven by input(4-20mA DC, 0-10VDC or 1-5 VDC) signals or single-phase power supply, with the characters of small volume, high flow capacity, high regulation precision, good sealing, and light weight, etc. The valve is widely used in food, environmental protection, light industry, petroleum, paper, chemicals, teaching and research equipment, and electric power industries of industrial automation control systems.

#### Applications

- Food
- Environmental protection
- Light industry
- Petroleum
- Paper
- Chemicals
- Teaching and research equipment
- Electric power industries



#### Features

- Convenient man-machine interface
- Reasonable structure, beautiful shape
- The elastic sealing structure makes the seat reliable and easy to close and open
- Comply with international standard ISO platform

**Electric threaded ball valve**

#### Principle

The electric threaded ball valve is a practical and efficient device for controlling fluid flow in piping systems. It functions primarily with the aid of an electric actuator. When an electrical signal is sent to

the actuator, it converts electrical energy into mechanical motion. This mechanical energy is then transmitted to the valve stem.

The valve stem is connected to a ball that has a hole in the middle. The valve features threaded ends, which make it easy to install in pipelines. When the valve is set to open, the electric actuator rotates the valve stem. As the stem turns, the ball rotates as well. Once the hole in the ball aligns with the pipeline, fluid can flow freely through the valve, encountering minimal resistance.

Conversely, when the valve needs to close, the actuator rotates the stem in the opposite direction. The ball then turns until its solid part blocks the pipeline, halting the fluid flow. Thanks to its straightforward yet effective working principle, the electric threaded ball valve can precisely control the on - off and regulation of fluid in different applications, especially in small - scale or low - pressure systems where threaded connections are commonly used.

Parameters								
Nominal diameter DN(mm)		DN10~DN100						
Nominal pressure		PN1.6/2.5/6.4MPa						
End connection		thread			Butt welded			
Main Parts	Valve body、 valve cap	WCB	CF8(304)	CF8M(316)	WCB	CF8(304)	CF8M(316)	
	Valve ball、 valve stem	2Cr13	304	316	2Cr13	304	316	
	O-ring、 Packing	RPTFE、 PPL						
Applicable Operating Condition	Applicable medium	Water、 steam、 oils	Nitricacid and other corrosive medium	Nitricacid and other corrosive medium	Water、 steam、 oils	Nitricacid and other corrosive medium	Nitricacid and other corrosive medium	
	Suitable temperature	-29℃~180℃(RPTFE)、 -29℃~300℃(PPL)						

SIZE		Item	H	L
mm	inch(G)			
20	3/4"	LQ1-6	316	85
25	1"		320	90
32	1 1/4"		330	112
40	1 1/2"		351	120
50	2"	LQ1-10	362	145
65	2 1/2"	LQ2-16	401	170
80	3"	LQ2-24	472	200
100	4"	LQ3-50	547	263

## Datasheet

### Electric sanitary ball valve

The Q981F - 10P is a top - notch electric ball valve engineered to meet diverse industrial needs. This valve is available in a wide range of sizes, spanning from DN15 to DN150 (equivalent to 1" - 6" or 12.7mm - 152.4mm). Such a broad size selection allows it to be seamlessly integrated into various pipeline systems, regardless of whether they are small - scale setups or large - scale industrial networks.

One of the remarkable features of this valve is its multiple end - connection options. It can be connected using clamps, which offer quick and easy installation; welding, providing a permanent and leak - proof joint; threading, suitable for simple and small - sized pipelines; or flanges, ensuring a secure and stable connection in high - pressure applications.

Powered by an electric actuator, the Q981F - 10P enables precise and efficient control of fluid flow. The actuator responds promptly to electrical signals, facilitating seamless operation.

The valve is crafted from high - quality materials, including 304, 304L, 316, and 316L stainless steels. These materials endow the valve with exceptional corrosion resistance, making it suitable for handling aggressive chemicals, acids, and other corrosive substances. It can withstand large temperature differences, with a working temperature range from - 10°C to + 150°C, and a normal pressure rating of 16MPa while operating at a working pressure of 1.0Mpa. This means it can perform reliably in harsh environments with fluctuating temperature and pressure conditions.

The seal rings are made from different materials such as EPDM, NBR, and PTFE. Each material offers unique sealing properties, allowing the valve to achieve excellent sealing performance and prevent leakage, even when handling various media.

The Q981F - 10P finds extensive applications in multiple industries. It is ideal for the food and beverage industry, where hygiene and corrosion resistance are crucial. In the pharmaceutical, dairy, and beer industries, its precise flow control and high - quality construction ensure product integrity. Additionally, it can be used in chemical processing plants to handle different gases, liquids, and steam, making it a versatile choice for fluid control in various industrial processes.

#### Applications

- Food
- Beverage
- Pharmaceutical
- Dairy
- Beer and chemicals



#### Features

- Small flow resistance
- Good seal performance

Electric sanitary ball valve

- Service life long
- High reliability
- Small size

### Principle

The electric sanitary ball valve is a key component in hygienic fluid - handling systems. It operates based on the action of an electric actuator. When an electrical signal is sent to the actuator, it transforms electrical energy into mechanical movement. This mechanical force is then transferred to the valve stem.

The valve stem is connected to a ball with a central bore. In sanitary applications, the valve is designed to meet strict cleanliness and sterility requirements. When the valve is commanded to open, the electric actuator rotates the valve stem, causing the ball to turn. As the ball rotates until its bore aligns with the pipeline, fluid can flow smoothly through the valve. The smooth internal surfaces of the valve prevent the accumulation of contaminants.

Conversely, when the valve needs to close, the actuator rotates the stem in the opposite direction. The ball then turns until its solid part blocks the pipeline, halting the fluid flow. The tight - fitting seal between the ball and the valve seat ensures that there is no leakage, which is essential for maintaining the purity of the fluid in industries such as food, beverage, and pharmaceuticals. Through this mechanism, the electric sanitary ball valve can precisely control the start, stop, and regulation of fluid flow in a hygienic environment.

Parameters	
Item	Q981F-10P
Size	DN15-DN150、1° -6"□中 12.7-中 152.4
End connection	Clamp,weld,thread,flange
Actuator	Electric actuator
material	304,304L,316,316L adopted
Main performance	Big Temperature difference withstand;normal pressure 16MPa; strong corrosion resistance;precision
quality	polishing treatment to meet surface precision requirements
seal ring	EPDM、NBR、PTFE
working pressure	1.0Mpa
working temperature	-10℃+150℃
Suitable medium	Gas,liquid,Steam

SIZE	Item	D	D1	L	H	K	A	B	C	E
019	LQ1-10	50.5	16	99	45	9	157	223	167	48
025	LQ1-10	50.5	22	115	50	9	157	223	167	48
032	LQ1-10	50.5	29	124	51	9	157	223	167	48
038	LQ1-10	50.5	35	140	64	9	157	223	167	48
045	LQ1-10	64	41	148	67	9	157	223	167	48
051	LQ1-10	64	48	164	70	11	157	223	167	48
057	LQ1-10	77.5	52	169	74	11	157	223	167	48
063	LQ2-24	77.5	59	175	80	11	206	250	197	76
076	LQ2-24	91	72	200	100	14	206	250	197	76
089	LQ2-24	106	84	235	107	14	206	250	197	76
0102	LQ3-35	119	98	315	122	14	222	315	208	76

## Datasheet

### Electric wafer V-pattern ball valve

Electric V-type adjustable ball valve can be driven to realize the regulation of pressure, flow, temperature, liquid level and other parameters by input (4-20mA DC, 0-10VDC or 1-5VDC) signals and single-phase power without addition servo drives. The shearing force is generated by the reverse rotation of metal seal and V-cut on the valve seat which can cut off the fibers to avoid stuck accident, with the characters of large flow capacity, high regulation precision, good sealing, and light weight etc. The best choice to replace the import products except for the applications of the small diameter, angular and triangle, particularly suitable for the medium of the slurries and fibers, and the regulation of small suspended solids. Widely used in paper manufacturing, sugar, petroleum, chemical, metallurgical and other industrial automation control systems.

#### Applications

- Paper manufacturing
- Sugar, petroleum
- Chemical
- Metallurgical



#### Features

- Light weight, low material cost, cheaper
- Integrated valve body has no effects for pressure, pipe and bolts as without any joints
- The V-type valve body can ensure the accuracy of control
- The shearing force created between the V-cut and valve seat have self-cleaning function to prevent the stuck

#### Electric wafer V-pattern ball valve

#### Principle

The electric wafer V - pattern ball valve is a highly efficient device for fluid control. It is driven by an

electric actuator. When an electrical signal is received, the actuator converts electrical energy into mechanical torque. This torque is then transferred to the valve shaft.

The valve shaft is connected to a V - shaped ball. In the valve's operation, when it is commanded to open, the electric actuator rotates the valve shaft, causing the V - shaped ball to turn. As the ball rotates, the V - notch on the ball gradually aligns with the flow path of the pipeline. The unique V - pattern design allows for a linear flow characteristic. As the ball opens more, the flow rate of the fluid through the valve increases proportionally, providing precise control over the flow.

When closing the valve, the actuator rotates the shaft in the opposite direction. The V - shaped ball turns until it blocks the pipeline, effectively stopping the fluid flow. The wafer - type design enables easy installation between two flanges in the pipeline system. This electric wafer V - pattern ball valve is widely used in applications where accurate flow regulation, such as in chemical, petrochemical, and water treatment industries, is required.

Parameters				
Nominal diameter DN(mm)		DN25-DN250		
Nominal pressure		PN1.6~6.4MPa		
Nominal pressure	Strength test	PN2.4~9.6MPa		
	Seal test	PN1.76~7.0MPa		
Materials/code name		C	P	R
Main Parts	Valve Body	WCB	304	316
	Valve Ball			
	Valve Stem	Stainless Steel		
	O-ring	PTFE、stainless steel、cemented carbide		
	Packing	PTFE,flexible graphite		
Applicable Operating Condition	Applicable medium	Water,steam,oils	nitrose	acetic acid
	Suitable temperature	-28~400℃	-28~500℃	
End connection		wafer type meet JB79-59 standard		

SIZE		Item	D2	H2	H1	L
mm	inch					
25	1"	LQ1-6	68	514	81	50
32	1 1/4"		76	522	86	60
40	1 1/2"	LQ1-10	84	551	90	60
50	2"		100	566	93	75

65	2.5"	LQ2-20	118	628	108	100
80	3"	LQ3-35	132	694	123	100
100	4"	LQ3-50	158	719	138	115
125	5"	LQ4-80	184	792	148	129
150	6"	LQ4-110	216	863	170	160
200	8"	LQ4JS-200	268	1024	200	200
250	10"	LQ4JS-250	326	1126	240	240

## Datasheet

### Electric flanged V-type ball valve

Electric V-type adjustable ball valve can be driven to realize the regulation of pressure, flow, temperature, liquid level and other parameters by input (4-20mADC, 0-10VDC or 1-5VDC) signals and single-phase power without addition servo drives. The shearing force is generated by the reverse rotation of metal seal and V-cut on the valve spool which can cut off the fibers to avoid stuck accident. with the characters of large flow capacity, high regulation precision, good sealing. and light weight,etc.The best choice to replace the import products except for the applications of the small diameter,angular and triangle,particularly suitable for the medium of the slurries and fibers,and the regulation of small suspended solids.Widely used in paper manufacturing,sugar,petroleum,chemical,metallurgical and other industrial automation control systems.

#### Applications

- Paper manufacturing
- Sugar
- Petroleum
- Chemical
- Metallurgical



#### Features

- Compact structure, small size, vertical horizontal installation
- Excellent regulation characteristics
- High maximum volume and small friction characters
- Double bearing structure with high mechanical performance and small start torque to ensure the excellent sensitivity
- High performance metal seal

#### Electric flanged V-type ball valve

#### Principle

The electric flanged V - type ball valve is a sophisticated piece of equipment designed for precise fluid

control. Its operation is powered by an electric actuator. When an electrical signal is sent to the actuator, it converts the electrical energy into mechanical movement. This mechanical force is then transmitted to the valve stem.

The valve stem is connected to a V - shaped ball. When the valve needs to be opened, the electric actuator rotates the valve stem, causing the V - shaped ball to turn. As the ball rotates, the V - notch on the ball starts to align with the fluid flow path in the pipeline. The unique V - shape of the ball provides an excellent flow - control characteristic. As the ball opens further, the flow area between the V - notch and the valve seat gradually increases, allowing the fluid to pass through. The relationship between the ball's rotation angle and the flow rate is approximately linear, enabling accurate regulation of the fluid flow.

Conversely, when the valve is required to close, the actuator rotates the stem in the opposite direction. The V - shaped ball rotates until it presses firmly against the valve seat, completely blocking the fluid flow. The flanged design of the valve ensures a secure and leak - proof connection to the pipeline, making it suitable for high - pressure and high - flow applications in industries such as oil and gas, chemical processing, and power generation. This electric flanged V - type ball valve offers reliable and precise control of fluid flow in various industrial processes.

Parameters	
Valve Body form	casting Straight ball valve
Nominal diameter	DN25~DN250mm
Valve body material	WCB、CF8、CF8M、CF3M
V-pattern valve ball	WCB,CF8,CF8M,CF3M (hardened treatment)
Valve Stem material	2Cr13、304、316、316L
Valve seat	V-type PTFE packing,asbestos packing,graphite packing
Valve bore form	With a V-type ball
Nominal pressure	PN1.6/2.5/4.0/6.4MPa
End connection	Flanged
Flowrate characteristics	Approximate equal percentage
Suitable temperature	-28℃~400℃

SIZE		Item	D2 1.6MPa	D1 1.6MPa	H2	H1	L	n-O 1.6MPa
mm	inch							
25	1	LQ1-6	115	85	514	81	102	4-014
32	1 1/4		140	100	522	86	102	
40	1 1/2	LQ1-10	150	110	551	90	114	4-018

50	2"		165	125	566	93	124	
65	2.5°	LQ2-20	185	145	628	108	145	
80	3"	LQ3-35	200	160	694	123	165	8-018
100	4"	LQ3-50	220	180	719	138	194	
125	5"	LQ4-80	250	210	792	148	194	
150	6"	LQ4-110	285	240	863	170	229	8-023
200	8"	LQ4JS-200	340	295	1024	200	243	12-023
250	10	LQ4JS-250	405	355	1126	240	297	12-025

## Datasheet

### Electric lined Fluorine ball valve

Q941F46 series electric lined fluorine ball valve is designed for various corrosive mediums of automatic control, widely used in petroleum, chemical industry, dyeing, pesticide, acid making and other industries, the best choices of anti-corrosion valve equipment. Q941F46 series electric ball valve with fluorine lined, the high strength and smooth appearance valve body made by Investment casting, All parts contacting with the liquid are fluorine, so it can be used in any concentration corrosive liquid that temperature in the range of  $-50\sim+180^{\circ}\text{C}$  for a long time.

#### Applications

- Petroleum
- Chemical industry
- Dyeing
- Pesticide
- Acid making



#### Features

- Corrosion resistance
- With perfect soft seal performance for valve seat
- Small size, light weight, simple structure, easy installation and maintenance
- Small flow resistance

**Electric lined Fluorine ball valve**

#### Principle

The electric lined fluorine ball valve is a specialized valve designed for handling highly corrosive fluids. Its operation is centered around an electric actuator. When an electrical signal is received by the

actuator, it transforms electrical energy into mechanical motion. This mechanical force is then transferred to the valve stem.

The valve stem is connected to a ball, and the interior of the valve body is lined with fluorine - based materials. Fluorine lining provides excellent chemical resistance, protecting the valve from the corrosive effects of the media. When the valve is commanded to open, the electric actuator rotates the valve stem, causing the ball to turn. As the ball rotates to a position where the bore in the ball aligns with the pipeline, the corrosive fluid can flow through the valve with relatively low resistance. The fluorine lining ensures that the valve body and other internal components are not damaged by the corrosive nature of the fluid.

When it comes to closing the valve, the actuator rotates the stem in the opposite direction. The ball then turns until its solid part blocks the pipeline, preventing the fluid from passing through. The tight - fitting seal between the ball and the fluorine - lined seat effectively stops the flow and prevents leakage. This way, the electric lined fluorine ball valve can accurately control the start, stop, and regulation of corrosive fluids in various industrial applications, such as in the chemical, pharmaceutical, and electroplating industries.

Parameters	
Applicable medium	sulfuric acid,hydrofluoric acid,phosphoric acid,chlorine,alkali,aqua regia and any other highly corrosive mediums
Design specifications	apply for standards of GB12233,GB12235,ANSIB 16.34

SIZE		Item	D1	D	H1	L
mm	inch					
15	1/2°	LQ1-10	65	95	328	140
20	3/4°		75	105	330	140
25	1		85	115	340	150
32	1 1/4		100	140	345	165
40	1 1/2		110	150	377	180
50	2		125	165	388	200
65	2 1/2	LQ2-20	145	185	446	220
80	3°		160	200	464	250
100	4	LQ3-50	180	220	536	280
125	5°	LQ4-110	210	250	628	320
150	6°		240	285	643	360
200	8°	LQ4JS-200	295	340	785	400