



Ball valve with F46 valve seat

Product description

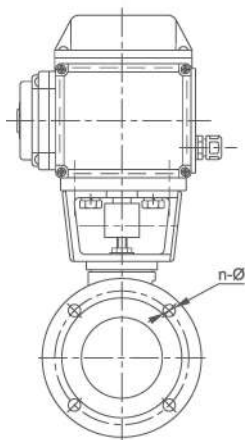
F46 ball valve with F46 valve seat is designed for automatic open and close of various corrosive medium pipeline. It is widely used in petroleum, chemical industry, dyeing, pesticide, acid making and other industries. It is the best choices of anti-corrosion valve equipment.

The valve seat of F46 series motorized ball valve adopts F46 material. It has high strength and smooth appearance for casting of valve body. All the parts contacting with the liquid are F46, so it can be used in any concentrations in the range of $-50^{\circ}\text{C} \sim 180^{\circ}\text{C}$ for a long time

Performance parameters

Applicable medium: sulfuric acid, hydrofluoric acid, phosphoric acid, chlorine, alkali, aqua regia and any other highly corrosive medium

Design specifications: apply for standards of GB12233, GB12235, ANSI B16.34



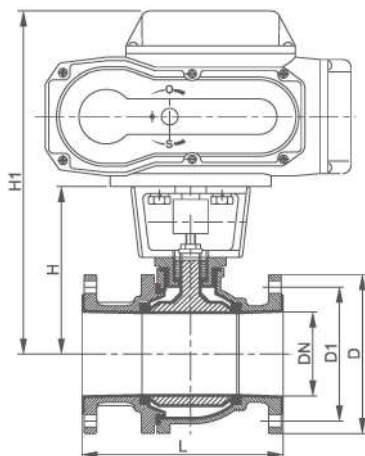
Features

1. Corrosion resistance: the valve body contacted with liquid are coated with F46 about 2.5–3mm thick F46, with a strong corrosion resistance.
2. Perfect performance for valve seat with soft seal.
3. Small size, light weight, simple structure, easy installation and maintenance.
4. Small Flow resistance

Appearance size of motorized ball valve with F46 valve seat

SIZE		Item	D1	D	H1	L	n-Ø
mm	inch						
15	1/2"	HK-05	65	95	208	140	4-Ø14
20	3/4"		75	105	210	140	4-Ø14
25	1"		85	115	220	150	4-Ø14
32	1 1/4"		100	140	225	165	4-Ø18
40	1 1/2"	HK-10	110	150	278	180	4-Ø18
50	2"		125	165	289	200	4-Ø18
65	2 1/2"	HK-20	145	185	333	220	4-Ø18
80	3"		160	200	351	250	8-Ø18
100	4"	HK-50	180	220	369	280	8-Ø18
125	5"	HK-100	210	250	423	320	8-Ø18
150	6"		240	285	449	360	8-Ø23
200	8"	HK-200	295	340	487	400	12-Ø23

Note: Above table size is not with standard parts, there may be some changes in the data due to product innovation and improved technology, the specific details please consult salesman.



Introduction

Fluorine lined ball valve is in the conventional ball valve and ball Structure lined with teflon, so that the media and valve body isolation, antiseptic effect. The valve has more and more close closure function, sealing performance is reliable. Applicable to any concentration of acid, alkali, salt and oxidative extrusion, reducing agent, organic solvents and other media.

Pneumatic Actuator

Double acting	Air to open, air to close, air supply failure to keep the current position
Single Acting N/C	Air to open, interrupt air to close, air failure to close
Single Acting N/O	Air to close, interrupt air to open, air failure to open
Optional accessory	Reversing solenoid valve, limit switch box, air filter reducing valve, positioner, handle manual, lock up valve

Technical Parameters

Body		Valve components	
Nominal Size	DN15~DN400	Seat Material	PTFE: -30℃~180℃
Body Material	Cast Iron	Core Material	Stainless Steel
Connection Type	Flange (GB/ANSI/DIN/JIS)	Stem Material	Stainless Steel
Pressure Rating	1.6, 2.5, 4.0, 6.4MPa	Applicable Medium	Water, Liquids, Gas, Oil, Powder, Steam, Acid-base Corrosive Medium.
Structure type	Floating ball core		

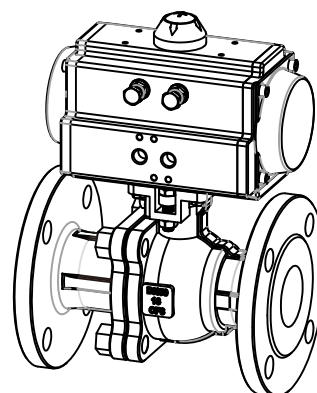
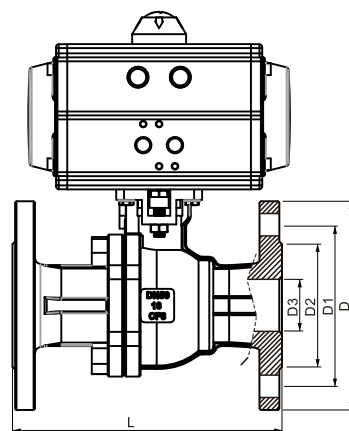
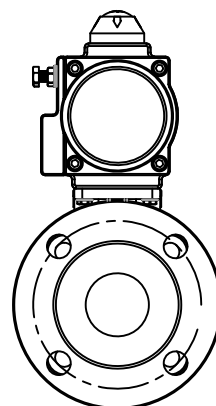
Qutine Size drawing

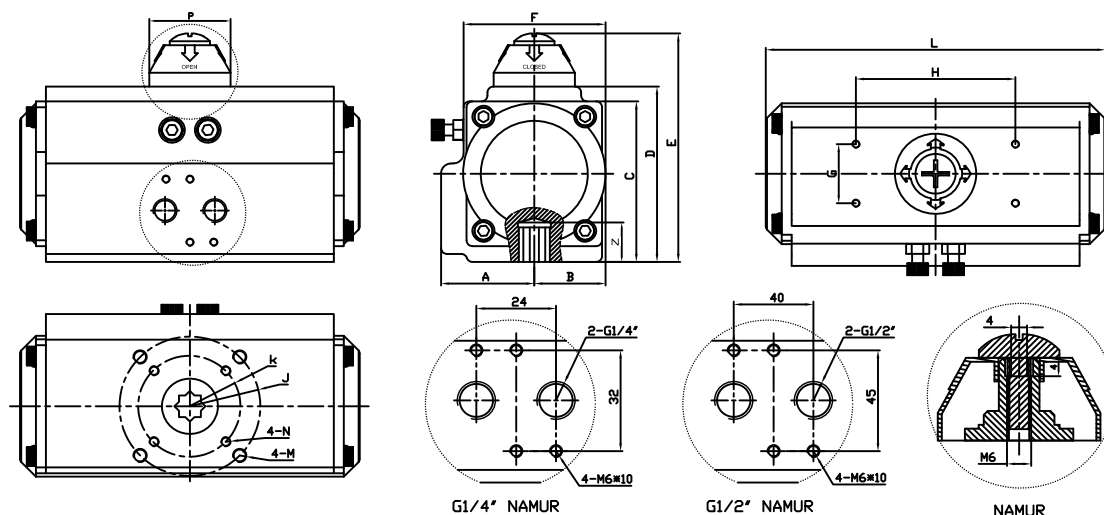
UNIT: mm

MEDLE	DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200
G	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	5"	6"	8"
D3	15	20	25	30	40	50	65	80	100	125	150	200
D2	45	55	65	78	85	100	120	135	155	185	210	265
D1	65	75	85	100	110	125	145	160	180	210	240	295
D	95	105	115	135	145	160	180	195	215	245	280	335
L	140	140	150	165	180	200	220	250	280	320	360	400
b	14	16	16	18	18	20	20	22	22	24	24	26
n-φd	4-φ14	4-φ14	4-φ14	4-φ18	4-φ18	4-φ18	4-φ18	8-φ18	8-φ18	8-φ18	8-φ28	8-φ23

Maintenance

- Tightening the seal between the valve and the actuator:
Remove the four bolts underneath the actuator. Separate the actuator from the valve.
Tighten the nut on the top of the valve body.
Place the actuator back on the valve and screw everything back into place.
- Tightening the seals between the valve and the inlet/outlet ports:
Remove the torque bolts and check for any debris or damage to the gaskets.
Use a torque wrench or other consistent method of tightening the torque bolts to reconnect the inlet and outlet ports.





Introduction

1. Operating media: Dry or lubricated air, or the non-corrosive gases The maximum particle diameter must less than 30 μm
2. Air supply pressure: The minimum supply pressure is 2.5 Bar The maximum supply pressure is 8 Bar
3. Operating temperature: Standard: $-20^{\circ}\text{C} \sim +80^{\circ}\text{C}$ Low temperature: $-35^{\circ}\text{C} \sim +80^{\circ}\text{C}$ High temperature: $-15^{\circ}\text{C} \sim \text{M50}^{\circ}\text{C}$
4. Travel adjustment: Have adjustment range of $\pm 5^{\circ}$ for the rotation at 0° and 90°

Qutline Size drawing

MODEL	A	B	C	D	E	F	G	H	J	K	N	M	L	P	Z	Air Hole
AT52	30	42.5	65.5	72.4	92.5	50.5	30	80	Ø36	Ø50	M6×8	M6×10	150	42	14	NAMUR G1/4"
AT63	36	47	81	88.5	98.5	69.5	30	80	Ø50	Ø70	M6×10	M8×13	171	42	18	NAMUR G1/4"
AT75	42.5	53	93	100	120	78	30	80	Ø50	Ø70	M6×10	M8×13	186	42	18	NAMUR G1/4"
AT83	46.5	57	98.5	109.7	129.5	86	30	80	Ø50	Ø70	M6×10	M8×13	206	42	21	NAMUR G1/4"
AT92	50	58	106	117	137	90	30	80	Ø50	Ø70	M6×10	M8×13	265	42	21	NAMUR G1/4"
AT105	57.5	64	122.5	135	155	104.5	30	80	Ø70	Ø102	M8×13	M10×16	272	42	27	NAMUR G1/4"
At125	67.5	74.5	145.5	157	177	120.5	30	80	Ø70	Ø102	M8×13	M10×16	304	60	27	NAMUR G1/4"
AT140	75.5	75.5	161	174	194	125	30	80	Ø102	Ø125	M10×16	M12×20	395	60	32	NAMUR G1/4"
AT160	87	87	184	198	228	143	30	80	Ø102	Ø125	M10×16	M12×20	462	60	32	NAMUR G1/4"
AT190	103	103	216	232	262	172	30	130	Ø102	Ø140	M10×16	M16×25	520	85	40	NAMUR G1/4"
AT210	113	113	235.5	257	287	194	30	130	Ø102	Ø140	M10×16	M16×25	538	85	40	NAMUR G1/4"
AT240	130	130	235.5	292	322	230	30	130		Ø165		M20×30	592	90	50	NAMUR G1/4"
AT270	147	147	235.5	331	361	253	30	130		Ø165		M20×30	713	90	50	NAMUR G1/2"
AT300	161	168	235.5	354	384	290	30	130	Ø165	Ø215	M20×30	M20×30	771	90	50	NAMUR G1/2"

Common faults and inspection, troubleshooting

Failure Phenomenon	Inspection Items	Solution
Pneumatic Valve Can Not Move	The electromagnetic valve is normal, Coil is burned, electromagnetic valve Is stuck being stolen	Solenoid valve replacement, Replacement coils, remove stolen Property.
	A separate air supply pneumatic Actuator test check seals and Whether the cylinderis damaged.	Replace a bad ring and cylinder.
	There are impurities in the spool Valve stuck.	Remove impurities, replace Damaged parts.
	the handle in a manual hand motor location.	Interchange
Slow Motion, Crawling	Supply pressure is not enough.	The increase of gas supply pressure(0.4–0.7mpa)
	Pneumatic actuator outputtorque is Too small.	Increase the pneumatic actuator Production.
	The valve spool or valve assembly too tight.	Re-assembly adjustments.
	Air supply pipe plug, flow is toosmall.	Exclude plug, replace the filter cartridge.
Reply Devices Without Signal	power line short circuit or open circuit.	Maintenance of power lines.
	reply within the cam position is not accurate.	Adjust the cam to the correct location
	Micro switch damaged.	Replacement micro switch

SOLENOID VALVE



ELECTRIC VALVE



PNEUMATIC VALVE



SPECIALIZED FLUID CONTROL VALVE MANUFACTURER

COVNA Headquarter:

Building C, Longchang Micro-Chuangyuan, No. 26 Hantang Street,
Dongcheng District, Dongguan City, China, 523000

E-mail: sales@covnavalve.com

Tel: 86-769-22456666 22763199

Fax: 86-769-22825120

www.covnavalve.com

www.covnaactuator.com