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EKO-TRADING CO., LIMITED



Diaphragm Valves

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Y52 Diaphragm Valves

TECHNICAL ADVANTAGES



Options:

- Normally Closed (NC)
- Spring-Assist Closed (SAC)
- Spring-Assist Open (SAO)
- Limit Stop (LS)
- Position Indicator (PI)
- Signal Switch (SS)
- Solenoid
- Liquid Level Control (LLC)

* Normally closed valve configurations are NOT recommended when used with corrosive fluids

** Valves are NOT recommended for use with any aromatic, hydrocarbon-based media.

Low Pressure Loss – Y-pattern diaphragm valve, with large seat opening and high lift disc permits higher flow rates at lower pressure loss than other comparable valves.

Separate Diaphragm Chambers – Separate diaphragm chambers protect the valve diaphragm from the flow stream. This allows the diaphragm to be replaced without disrupting service.

Long Diaphragm Life – Pre-formed, stress-relieved diaphragm minimizes fatigue, maximizes valve responsiveness and diaphragm lifetime.

Corrosion Resistant – All internal parts in contact with media are made of composite materials*. Seals are ethylene propylene for better chemical resistance**.

Adaptable to a Wide Variety of Control Devices.

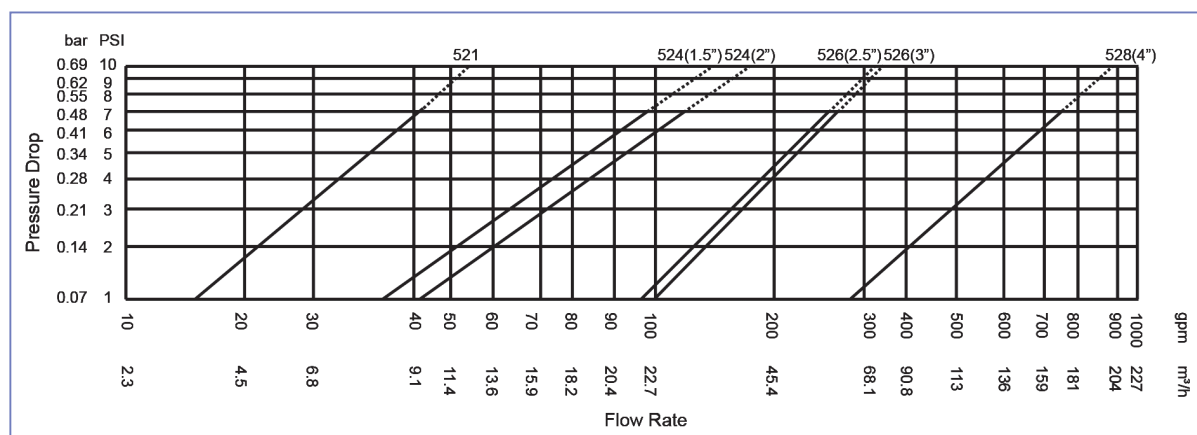
Valve is operated by introducing either hydraulic or pneumatic pressure.

Standard - Normally Open Diaphragm Valve (NO).

TECHNICAL CHARACTERISTICS

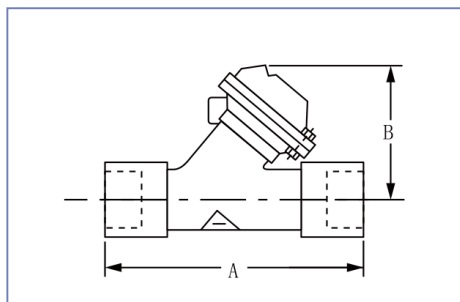
- Working Pressure: 1-8 bar (15-115 psi)
- Working Temperature: 4-50 °C (40-122 °F)
- Fatigue test: 100000 times
- Burst pressure test: ≥ 4 times of max. service pressure

PERFORMANCE DATA



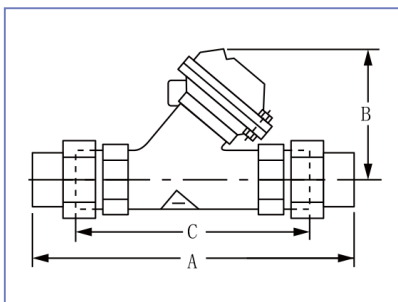
DIMENSIONS

Female Socket Weld End Connectors



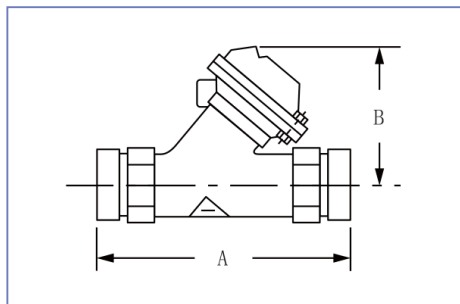
Valve model	Pipe size	Units	A	B
Y521	1"	inches	6,30	3,43
		mm	160,00	87,00
Y524	1,5"	inches	8,35	5,35
		mm	212,00	136,00
	2"	inches	10,24	5,35
		mm	260,00	136,00

Union End Connectors



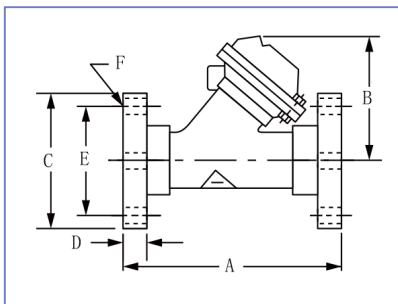
Valve model	Pipe size	Units	A	B	C
Y521	1"	inches	9,06	4,06	/
		mm	230,00	103,10	/
Y524	2"	inches	12,32	5,06	8,78
		mm	313,00	128,50	223,00

Grooved Prepared for Coupling End Connectors



Valve model	Pipe size	Units	A	B
Y524	2"	inches	7,87	5,06
		mm	200,00	128,50
Y526	3"	inches	12,60	8,69
		mm	320,00	220,70

Flanged End Connectors



Valve model	Pipe size	Standard	Units	A	B	C	D	E	F
Y526	2,5"	DIN	inches	11,22	8,69	7,28	0,87	5,71	0,71
			mm	285,00	220,70	185,00	22,00	145,00	18,00
		ANSI	inches	11,22	8,69	7,28	0,87	5,49	0,71
			mm	285,00	220,70	185,00	22,00	139,50	18,00
	3"	DIN	inches	12,52	8,69	7,87	0,87	6,30	0,71
			mm	318,00	220,70	200,00	23,00	160,00	18,00
Y528		ANSI	inches	12,52	8,69	7,87	0,87	6,00	0,71
			mm	318,00	220,70	200,00	23,00	152,50	18,00
	4"	DIN	inches	12,20	9,37	8,66	0,91	7,09	0,71
			mm	310,00	238,00	220,00	23,00	180,00	18,00
		ANSI	inches	12,20	9,37	8,66	0,91	7,50	0,71
			mm	310,00	238,00	220,00	23,00	190,50	18,00

NORMALLY CLOSED DIAPHRAGM VALVE (NC) (OPTION)



Feature:

Closing valve: the pressure control source is connected with the upper control chamber, the diaphragm pushes the valve seat through the valve stem, thereby cutting off the water to close the valve.

Opening valve: the pressure control source is connected with the lower control chamber, the pressure in the upper and lower chambers of the diaphragm is balanced, and water pushes the valve stem through its own pressure, so that cavity is easily formed and water is passed.

SPRING-ASSIST CLOSED DIAPHRAGM VALVE (SAC)



Feature:

A compression spring is mounted on the lower chamber of the diaphragm, and the spring seat is used to assist the valve seat to be upward, thereby assisting in opening the valve.

SPRING-ASSIST OPEN DIAPHRAGM VALVE (SAO)



Feature:

A compression spring is mounted on the lower chamber of the diaphragm, and the spring seat is used to assist the valve seat to be upward, thereby assisting in opening the valve.

LIMIT STOP DIAPHRAGM VALVE (LS)



Feature:

By adjusting the height of the adjustment knob, the valve seat is opened to achieve the purpose of controlling the flow of water.

POSITION INDICATOR DIAPHRAGM VALVE (PI)



Feature:

When the valve is opened, the plunger is pushed upward by the valve piston, and only the rod is exposed, which indicates the opening of the valve.

When the valve is closed, the piston moves down. The indicator lever is reset by the return spring.

SIGNAL SWITCH DIAPHRAGM VALVE (SS)



Feature:

Signal switch (normally open type): the control pressure source (the water source or air source pressure is equal to or greater than the inlet water pressure) connects to the upper control chamber of the diaphragm. When the upper chamber is pressurized (pressure is greater than 0.1MPa), the valve is closed, and the pressure switch is touched. The point is closed. When the upper chamber pressure is released, the valve opens and the pressure switch contacts open.

Signal switch (normally closed type): the control pressure source (the water source or air source pressure is equal to or greater than the incoming water pressure) connects to the control chamber of the diaphragm. When the upper chamber is pressurized (pressure is greater than 0.1MPa), the valve is closed, and the pressure switch is touched. The point is broken. When the upper pressure is released, the valve opens and the pressure switch contacts close.

Applicable voltage: AC220V/110V/48V, DC24V/12V

Max. power: 100W, 24W

Max. operating current: 500mA

Output form: dry contact

Switch form: normally open/normally closed.

SOLENOID DIAPHRAGM VALVE



Feature:

A solenoid valve is installed on the signal port of the bonnet, and the control of the pressure source signal is controlled by the power switch of the electromagnetic valve to achieve the purpose of controlling the diaphragm valve switch.

LIQUID LEVEL CONTROL DIAPHRAGM VALVE (LLC)

**Feature:**

The adjustment knob of the diaphragm valve is controlled by a stainless steel ball valve to achieve the purpose of controlling the diaphragm valve switch.

BACKWASH VALVE



Also known as two-position three-way valve, it has two models of 2" and 3".

Made from reinforced polyamide (PA) material, sturdy and durable.

A special molding process is used to enhance the strength of rubber diaphragm and length of service life.

Grooved end connection for easy operation.

Simple structure, light weight and extremely low failure rate.