

Angle Type



Up-right Globe Type



Pistek Valve (BALEM 431)

Special Features

- Operates hydraulically independent from any external power sources and controls high and low levels in a storage tank by utilizing the line static and dynamic pressure.
- The incorporation of a control shaft in the valve bonnet allows the rate of flow through the valve to be set a pre-determined flow and also acts as a mechanical shut off feature.
- Closing speed of the valve can be controlled by an integral needle valve on the valve bonnet.
- The valve is easy to maintain and install due to it's simple design.

Pistek Valve (Balem 431) is a float operated hydraulic liquid level control valve suitable for tanks and reservoirs. It's working principal is controlling flow with a modulating float pilot valve, alternatively a Balem 511 can be adjusted up to 900mm on/off differential.

The body is coated by epoxy to prevent contamination of the liquid, and has excellent thermal resistance. The valve is extremely easy to maintain as no special tools or skills are required.

Patents • Patented to Korea.

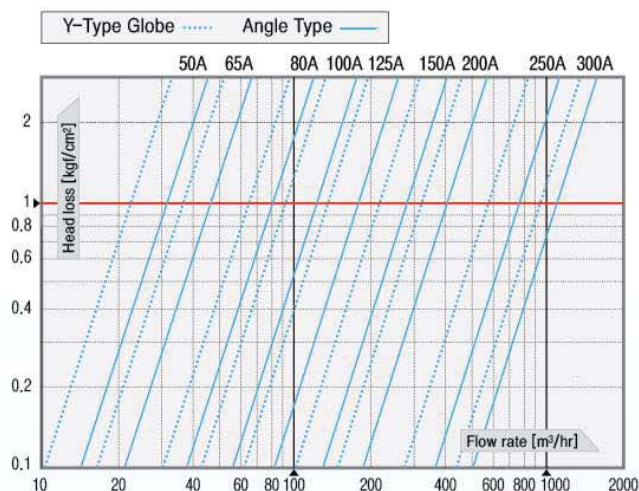
Applications

- Substitution for under ground / roof top, low water level ball float control valves.
- Substitution for high and low levels control mechanical valves and electrodes.
- Various types of oil tank float control valves.

Model	Size	Materials	Pattern
431	50-300A	2F : GCD 450	A-Angle
		4F : STS 304 (Order Made)	Y-Type Globe

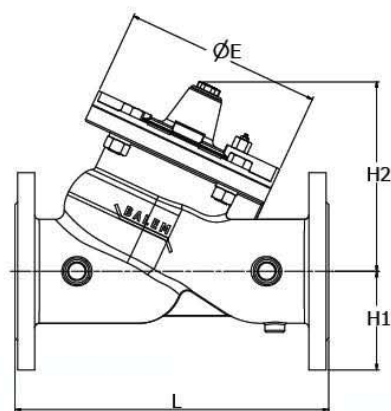
Specifications	Pistek Valve (BALEM 431)								
Model No.	431-050	431-065	431-080	431-100	431-125	431-150	431-200	431-250	431-300
Size	50A(2")	65A(2½")	80A(3")	100A(4")	125A(5")	150A(6")	200A(8")	250A(10")	300A(12")
Operating Pressure	0.05~0.98 MPa (0.5~10kgf/cm ²)								
Testing Pressure	1.72 MPa (17.5kgf/cm ²)								
Pilot Valve	Female threaded : KSPT ½ / (Optional : NPT)								
Media	Water, Oil Temperature : 0℃ ~ 80℃								

Flow Chart

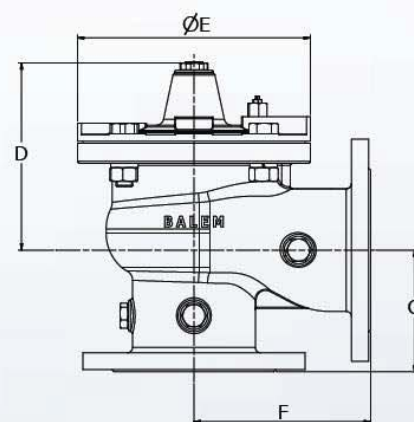


Size(mm)	D	ØE	F	G	L	ØE	H1	H2
50A	129	137	124	80	230	135	78	140
65A	140	154	136	90	290	154	88	164
80A	155	180	155	100	310	180	100	163
100A	177	220	167	115	350	220	110	194
125A	225	260	187	128	375	260	125	240
150A	253	305	211	146	480	305	143	274
200A	311	380	260	175	600	380	175	349
250A	369	455	300	210	610	455	205	414
300A	430	490	330	240	700	545	230	495

Dimensions



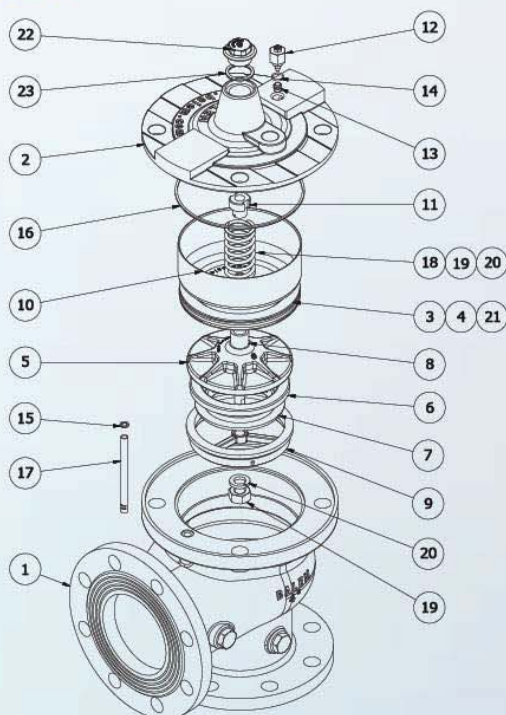
▲ Y-Type Globe



▲ Angle Type

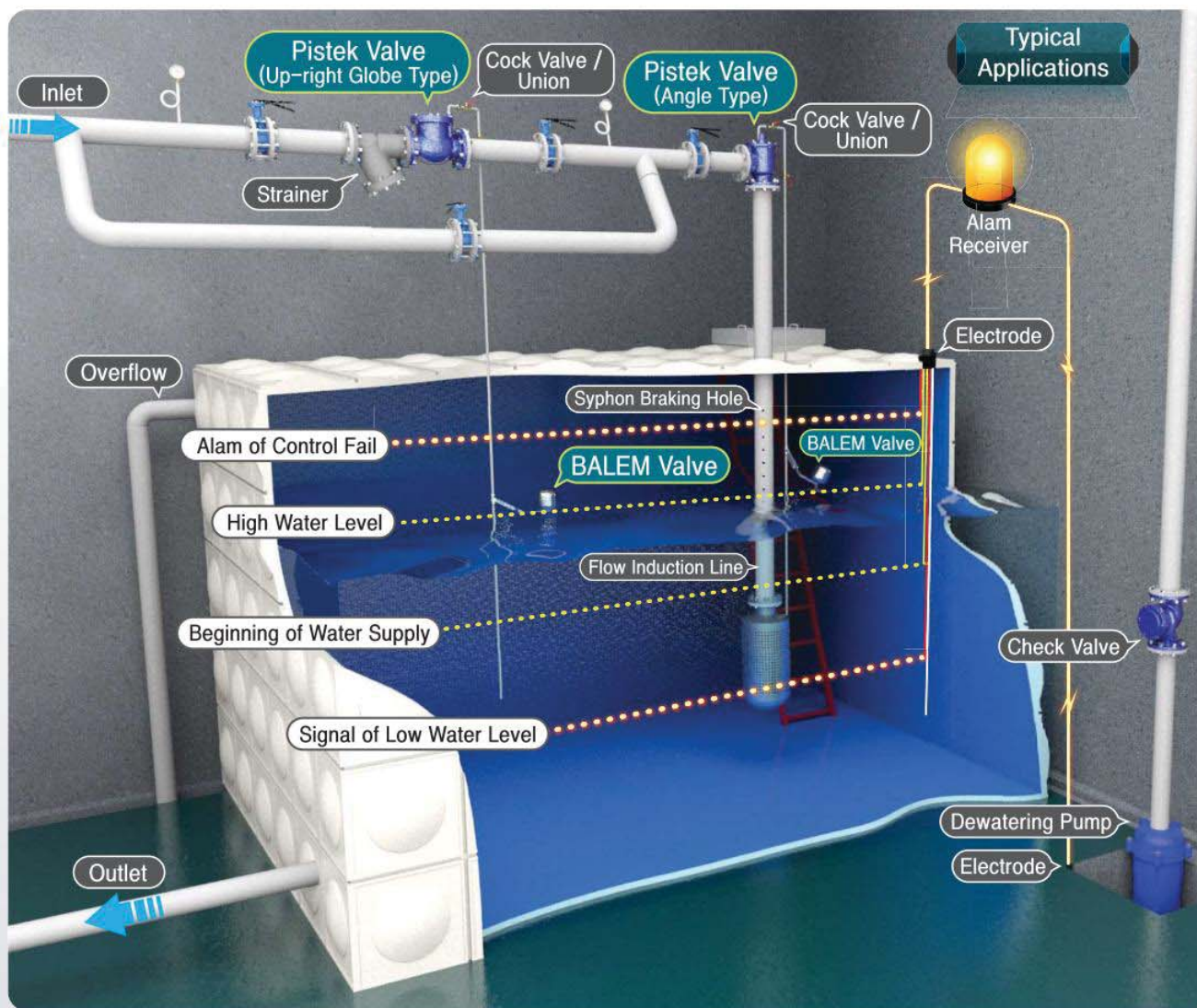
Pistek Valve (BALEM 431)

【 Materials 】



No.	Components	Materials	
		Standard	Optional
1	Body	Ductile Iron	SSC 13
2	Cover	Ductile Iron	SSC 13
3	Piston	SSC 13	
4	Quadr-Ring	Silicone Rubber	
5	Disc	SSC 13	
6	Disc Seal	N.B.R	
7	Disc Washer	STS 304	
8	Shaft	STS 304	
9	Seat Ring	SSC 13	
10	Cylinder Liner	STS 304	
11	Shaft Guide	Brass	STS 304
12	Needle Assembly	Brass	STS 304
13	Sleeve	Brass	STS 304
14	O-Ring(S12)	N.B.R	
15	O-Ring(P9)	N.B.R	
16	O-Ring	N.B.R	
17	Tube	STS 304	
18	Spring	STS 304	
19	Nut	STS 304	
20	Spring Washer	STS 304	
21	Piston Ring	P.T.F.E	
22	Plug Cover	STS 304	
23	O-Ring	N.B.R	

Standard Piping Diagram



- ⦿ A syphon braking hole must be provided to prevent water hammering when opening/closing the valve.



Installation Tips!

1. Refer to the standard piping diagram when installing the valve.
2. Prior to installing, flush the pipeline to remove any contaminants inside.
3. It is strongly recommended to use a pilot valve made by Balem to secure a perfect operation of the valve.
4. A strainer should be installed ahead of the valve, and opening/closing speed of the valve can be adjusted by speed controller during the trial run observing the field conditions.
5. Turn the speed controller screw clockwise to lower the valve closing speed, and turn the screw counter-clockwise to increase the closing speed.
6. An alarm receiver should be installed in the control room to prevent an overflow caused by any other reason except our valve.
7. If the valve is used on high pressure, install a pressure reducing valve and automatic air vent valve to prevent water hammering and noise.
8. Never connect a butterfly valve directly to inlet side of the valve.
9. Install a ball valve and union joint near the valve on the pilot line for easy check and maintenance.
10. The flow induction line of the main valve and pilot valve should be corrosion resistant and a syphon braking hole (minimum 8.0 mm in diameter) must be provided to prevent siphonage.
11. If you install bigger size valve than supply pipe line or two valves in parallel lines, there can happen malfunction in a valve.
12. When you select valve, Please must check operating pressure and flow chart.