

**Parts**

**Test**

No.	Parts name	Material	Standard	Grade	Nominal Pressure	PN10	PN16	PN25
1	Cover	Ductile iron	BS 2789	500/7	Shell Pressure	15 bars	24 bars	37.5 bars
2	Spring	Stainless steel	BS 970 - part 1	420S37	Seat Pressure	11 bars	17.6 bars	27.5 bars
3	Disc	Brass or cast steel	BS 1400 / BS1769	AB1	Max .Temp	70 °C		
4	Diaphragm	Reinforced Synthetic Rubber	BS 2494	EPDM				
5	Stem	Stainless steel / cast steel	BS 970 - part 1	420S37				
6	Disc	Ductile iron or brass / cast steel	BS 1400 / BS1769	AB1				
7	Seal	Reinforced Synthetic Rubber	BS 2494	EPDM				
8	Body	Ductile iron	BS 2789	500/7				
9	Seal disc	Gunmetal	BS 1400	LG2				
10	Float	Stainless Steel	BS 970 - part 1	420S37				

**Designs**

1	Flange face to face according to ANSI B16.10 / BS 1868 / ISO 5752 - 10
2	Flange drilled according to BS 4504 / DIN2501, PN10 / PN16 / PN25
3	Inspection and test according to BS 6755
4	Internal and external coating by fusion bonded epoxy powder 250 micron thickness

**Dimensions**

Unit : mm

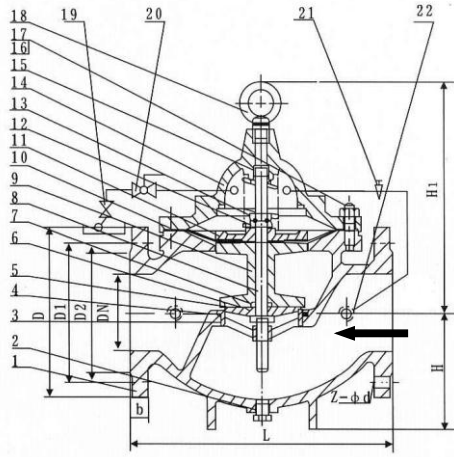
DN	L	H	Dimensions of Flange (PN10 / PN16 / PN25)			
			Dia. of flange	Nos. of hole	Dia. of hole	P.C.D.
			PN10 / PN16 / PN25	PN10 / PN16 / PN25	PN10 / PN16 / PN25	PN10 / PN16 / PN25
50	205	305	165 / 165 / 165	4 / 4 / 4	18 / 18 / 18	125 / 125 / 125
65	216	312	185 / 185 / 185	4 / 4 / 8	18 / 18 / 18	145 / 145 / 145
80	260	354	200 / 200 / 200	8 / 8 / 8	18 / 18 / 18	160 / 160 / 160
100	292	457	220 / 220 / 235	8 / 8 / 8	18 / 18 / 22	180 / 180 / 190
125	330	517	250 / 250 / 270	8 / 8 / 8	18 / 18 / 26	210 / 210 / 220
150	356	575	285 / 285 / 300	8 / 8 / 8	22 / 22 / 26	240 / 240 / 250
200	500	730	340 / 340 / 360	8 / 12 / 12	22 / 22 / 26	295 / 295 / 310
250	605	810	395 / 405 / 425	12 / 12 / 12	22 / 26 / 30	350 / 355 / 370
300	698	1030	445 / 460 / 485	12 / 12 / 16	22 / 26 / 30	400 / 410 / 430
350	787	1095	505 / 520 / 555	16 / 16 / 16	22 / 26 / 33	460 / 470 / 490
400	914	1150	565 / 580 / 620	16 / 16 / 16	26 / 30 / 36	515 / 525 / 550
450	978	1165	615 / 640 / 670	20 / 20 / 20	26 / 30 / 36	565 / 585 / 600

**Operation Principles**

Float valve uses in industrial and mining enterprise, water tank at high rise building, pool, water tower for automated water supply system. The valve is normally open when water supply flow into main valve, it flows through to needle valve(21), fill-up bonnet, ball valve(20) and float valve(19) then to water tank. When bonnet pressure is low the diaphragm push-up by inlet water pressure, the valve is in open mode and water supply continue flow into water tank. When water level at preset level, float valve is closed, bonnet pressure increased cause the diaphragm push-down and valve is in close mode.

**Parts**

This unit is consist of float valve as a main valve, needle valve, float valve and strainer. The detail schematic diagram as below :

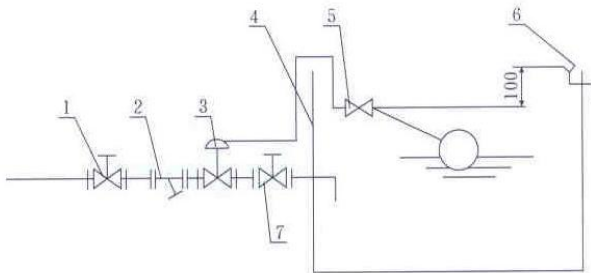


Schematic Diagram ← Water Flow Direction

1	Body	12	Nut
2	Plug Screw	13	Spring
3	Seat	14	Bonnet
4	O Ring	15	Regulated Cover
5	O Ring	16	Nut
6	O-Ring Seal	17	Bolt
7	O Ring	18	Ball Valve
8	Stem	19	Float Valve
9	Valve Disk	20	Ball Valve
10	Diaphragm	21	Needle Valve
11	Diaphragm Pressing Plate	22	Strainer

**Installation and Tunning**

1. The appropriate installation method of float valve is installed at pipe line inlet pool/water tank. Bonnet facing top. It must to ensure there is no debris inside the pipe, valve must be installed at the correct direction according to the arrow mark on valve body. Pressure reducing valve after installation onto pipe the mechanical strain stress must not exert on valve body and internal valve parts.
2. Install the valves in this sequence : before float valve is gate valve and Y-strainer; after float valve install a gate valve for easy maintainance and repair.
3. Open the ball valve of float valve, then slowly open gate valve before it, float valve will supply water to water tank.
4. Close the ball valve of float valve, main valve will close as bonnet's pressure increased. If there is debris on the valve disc, main valve will not close properly.
5. As the water continue supply to the water tank, lift-up the float ball to close the float valve. Water supply will be cut-off if float valve is in good condition.
6. The strainer must be clean regularly .



Float valve installation diagram

1	Resilient seat gate valve
2	Filter (Y-strainer)
3	Float valve
4	Water tank
5	Float ball
6	Overflow pipe
7	Resilient seat gate valve