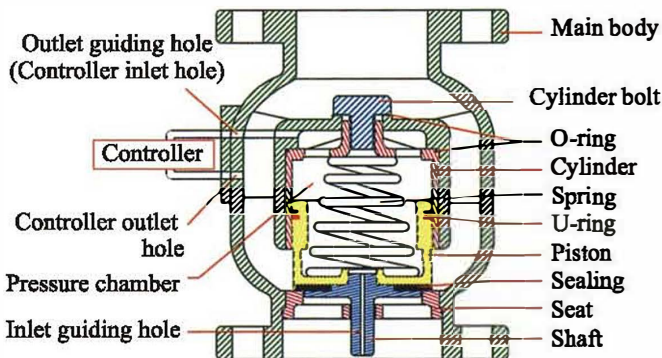




# MULTI-FUNCTION AUTO-CONTROL VALVE

- ▶ Controller is fixed directly and designed of non-controller conduit. It reduces the damage of the controller conduit while transporting the equipment.
- ▶ Controller is designed to be quickly screw fastened, enabling fast and easy installation.
- ▶ The valve body can match with all types of controller without technical conversion, and all kinds of control valves can be formed.
- ▶ Cylinder design is adopted for the valve body structure, making the valve applicable to low and high pressure in both vertical and horizontal positions.
- ▶ Straight flow path is designed inside valve body. The large flow can reduce the malfunctions caused by impure water and effectively decrease turbulence and related bad effects.
- ▶ The valve body is shaped and formed as whole. Small volume, lightweight, and easy installation. Simple and elegant appearance.
- ▶ Professional manufacturers, best quality, and reasonable price.



▶ Patent Number : 135517

Part Name	Materials				
	Cast Iron	Ductile Iron	Bronze	SS 304	SS 316
Main body	Cast Iron	Ductile Iron	Bronze	SS 304	SS 316
Cylinder bolt	Cast Iron	Ductile Iron	Brass	SS 304	SS 304
O-ring	NBR	NBR	NBR	NBR	NBR / Viton
Cylinder	Bronze	Bronze	Bronze	SS 304	SS 316
Spring	SS 304	SS 304	SS 304	SS 304	SS 304
U-ring	NBR	NBR	NBR	NBR	NBR / Viton
Piston	Bronze	Bronze	Bronze	SS 304	SS 316
Sealing	NBR	NBR	NBR	NBR	NBR / Viton
Seat	Bronze	Bronze	Bronze	SS 304	SS 316
Shaft	Bronze	Bronze	Bronze	SS 304	SS 316
Controller	Brass	Brass	Brass	SS 304	SS 304

1. Applied conditions: Fluid & Air

2. Applied temperature: -15° ~ 80°C

3. Connection ends: Available for all international standards

4. Materials of valve body: Cast Iron, Ductile Iron, Bronze & Stainless Steel

The valve body of main valve becomes functional by an inlet-guiding hole. This hole transfers pressure to pressure chamber. When enough pressure accumulates in the pressure chamber, it generates pushing force that makes the piston close to valve seat and generates the closing motion. There is another outlet guiding hole inside the pressure chamber. When the hole is open, pressure in pressure chamber dissipates and valve gate is pushed open by incoming water pressure.

● Stock Items

Size	Flange End			
	Cast Iron	Ductile Iron	Bronze	Stainless Steel
2"	●	●	●	●
2.5"	●	●	●	●
3"	●	●	●	●
4"	●	●	●	●
5"	●	●	●	●
6"	●	●	●	●
8"	●	●	●	●
10"	●	●	●	●
12"	●	●	●	●
14"		●	●	●

( 1 kgf/cm<sup>2</sup> = 14.2 psi )

Working Pressure		Test Pressure	
Cast Iron	: 12 kgf/cm <sup>2</sup>	Cast Iron	: 21 kgf/cm <sup>2</sup>
Ductile Iron	: 20 kgf/cm <sup>2</sup>	Ductile Iron	: 30 kgf/cm <sup>2</sup>
Bronze	: 12 kgf/cm <sup>2</sup>	Bronze	: 21 kgf/cm <sup>2</sup>
Stainless Steel	: 25 kgf/cm <sup>2</sup>	Stainless Steel	: 38 kgf/cm <sup>2</sup>

● Stock Items

Thread End			
Size	Cast Iron	Bronze	Stainless Steel
1.5"		●	●
2"	●	●	

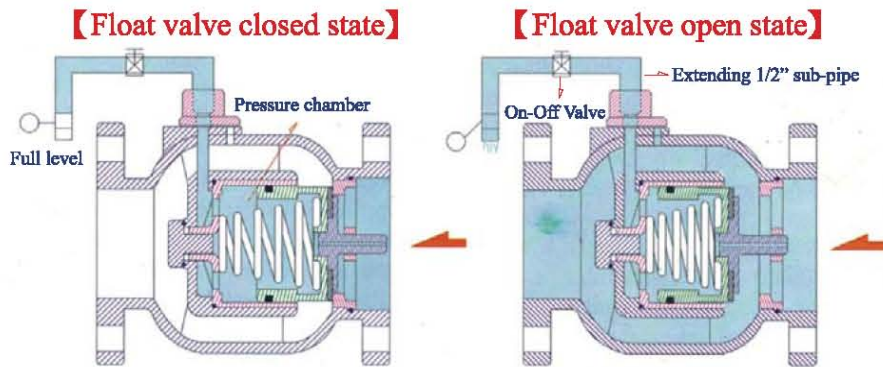
◎Production Size: 1.5"~ 56"



# F L O A T V A L V E



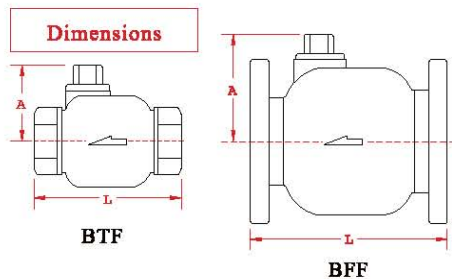
Float valve uses a sub-valve (float valve switch) to control the main valve. When the water level elevates to the full water level set by sub-valve (float valve switch), the sub-valve (float valve switch) closes and the back pressure chamber inside the main valve accumulates pressure rapidly, which reversely pushes the piston valve to close. By this mechanism, the float valve can thus control the water level. In order to save space inside the pool and for easy maintenance, it is recommended to install the float valve outside the pool.



⊙ At full water level, pressure accumulates in the pressure chamber and pushes the gate reversibly.

⊙ At low water level, pressure in pressure chamber dissipates, and water pressure inside the pipe pushes the gate open.

- ▶ The working pressure should be greater than 0.3 kgf/cm<sup>2</sup> and gate fully open with 1.5 kgf/cm<sup>2</sup>, please check the pressure before installation.
- ▶ Please remove impurities or metal dusts inside the pipe thoroughly. If possible, please add filter to prevent pipe blocking.
- ▶ Vertical and horizontal installation is acceptable. Avoid upside-down installation under insufficient flow.
- ▶ Float ball size is 4", and the connection end is 1/2" PT Thread (Max. Pressure 10 kgf/cm<sup>2</sup>).



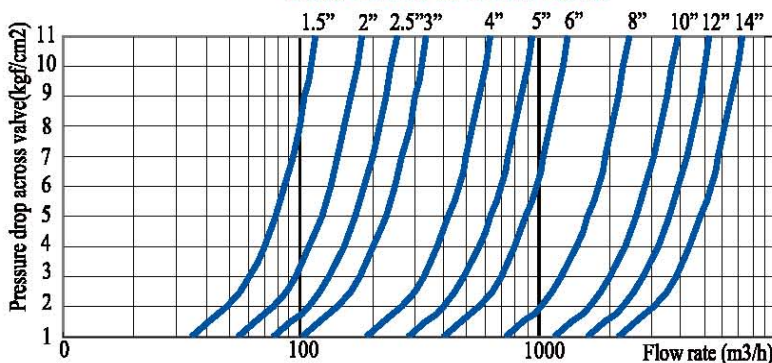
(Thread end)

Item No	Size	L(mm)	A(mm)	Weight(kg)	CV
BTF-40	1.5"	120	75	3	48
BTF-50	2"	200	95	8	75

(Flange end)

Item No	Size	L(mm)	A(mm)	Weight(kg)	CV
BFF-50	2"	190	95	12	75
BFF-65	2.5"	210	100	14	105
BFF-80	3"	225	115	19	140
BFF-100	4"	250	127	26	260
BFF-125	5"	280	150	37	390
BFF-150	6"	310	165	50	550
BFF-200	8"	420	205	94	1000
BFF-250	10"	470	240	150	1600
BFF-300	12"	530	275	200	2200
BFF-350	14"	600	320	280	3000

**Flow Chart of Float Valve**



⊙ Production Size: 1.5" ~ 56"