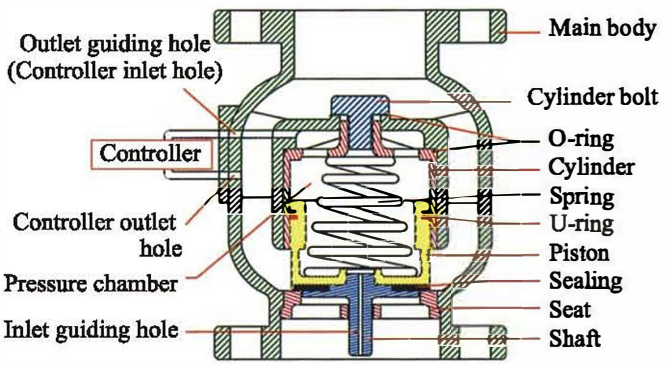
# MULTI-FUNCTION AUTO-CONTROL VALVE

- 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 | | | | |
|---|---|---|---|---|---|
| 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

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

( 1 kgf/cm² = 14.2 psi )

| Working Pressure | | Test Pressure | |
|---|---|---|---|
| Cast Iron | : 12 kgf/cm² | Cast Iron | : 21 kgf/cm² |
| Ductile Iron | : 20 kgf/cm² | Ductile Iron | : 30 kgf/cm² |
| Bronze | : 12 kgf/cm² | Bronze | : 21 kgf/cm² |
| Stainless Steel | : 25 kgf/cm² | Stainless Steel | : 38 kgf/cm² |

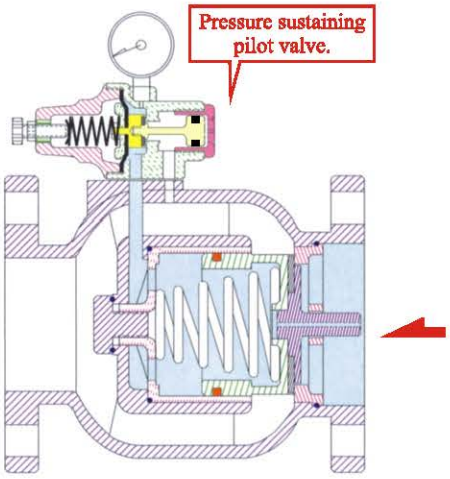
● Stock Items

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

◎Production Size: 1.5"~ 56"

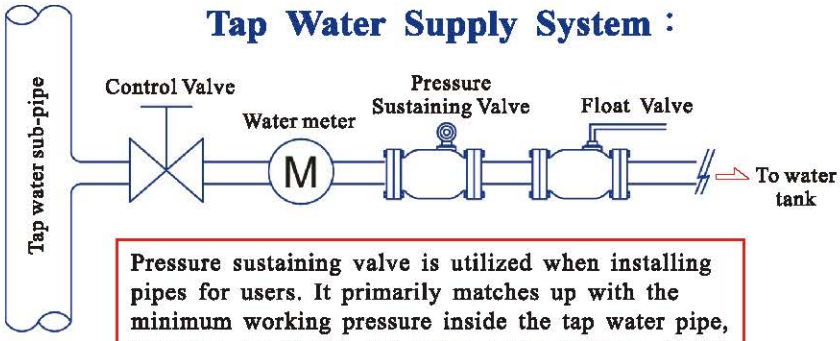
# PRESSURE SUSTAINING VALVE

- Pressure sustaining valve is utilized when installing pipes for users. It primarily matches up with the minimum working pressure inside the tap water pipe, balancing up-stream and down-stream pressure during normalcy and emergency, and maintains constant pressure inside the pipe.
- Pressure sustaining valve can sustain the maximum working pressure inside the pipe when installed in water supply areas.
- Pressure adjusting range : 0.3～4 kgf/cm$^2$
  ( 1 kgf /cm$^2$= 14.2 psi ) 2～8 kgf/cm$^2$



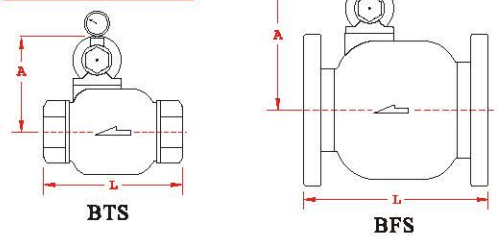

- The working pressure should be greater than 0.3 kgf/cm$^2$ and gate fully open with 1.5 kgf/cm$^2$, please check the pressure before installation.

## Tap Water Supply System :




Pressure sustaining valve is utilized when installing pipes for users. It primarily matches up with the minimum working pressure inside the tap water pipe, balancing up-stream and down-stream pressure during normalcy and emergency, and maintains constant pressure inside the pipe.

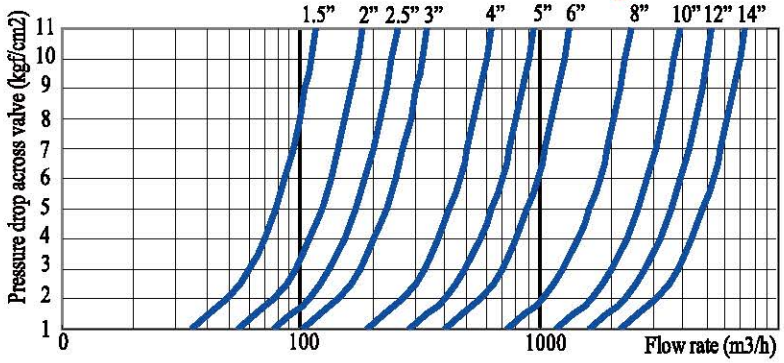
Dimensions




(Thread end)

| Item No | Size | L(mm) | A(mm) | Weight(kg) | CV |
|---|---|---|---|---|---|
| BTS-40 | 1.5" | 120 | 110 | 3 | 48 |
| BTS-50 | 2" | 200 | 125 | 9 | 75 |

## Flow Chart of Pressure Sustaining Valve




(Flange end)

| Item No | Size | L(mm) | A(mm) | Weight(kg) | CV |
|---|---|---|---|---|---|
| BFS-50 | 2" | 190 | 130 | 12 | 75 |
| BFS-65 | 2.5" | 212 | 140 | 14 | 105 |
| BFS-80 | 3" | 225 | 155 | 19 | 140 |
| BFS-100 | 4" | 250 | 165 | 26 | 260 |
| BFS-125 | 5" | 284 | 180 | 37 | 390 |
| BFS-150 | 6" | 310 | 215 | 50 | 550 |
| BFS-200 | 8" | 420 | 235 | 94 | 1000 |
| BFS-250 | 10" | 470 | 280 | 152 | 1600 |
| BFS-300 | 12" | 535 | 310 | 202 | 2200 |
| BFS-350 | 14" | 600 | 350 | 285 | 3000 |

◎Production Size: 1.5" ~ 56"