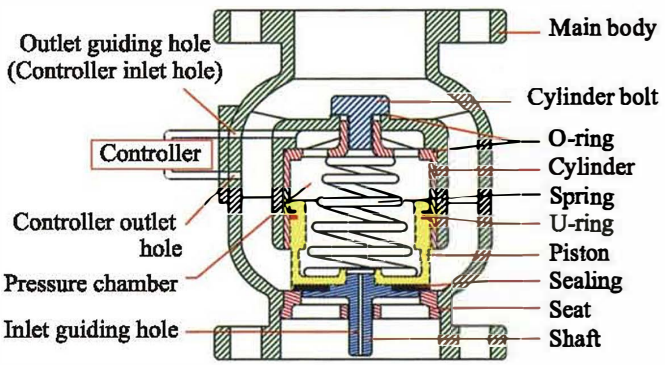
MULTI-FUNCTION AUTO-CONTROL VALVE

- 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

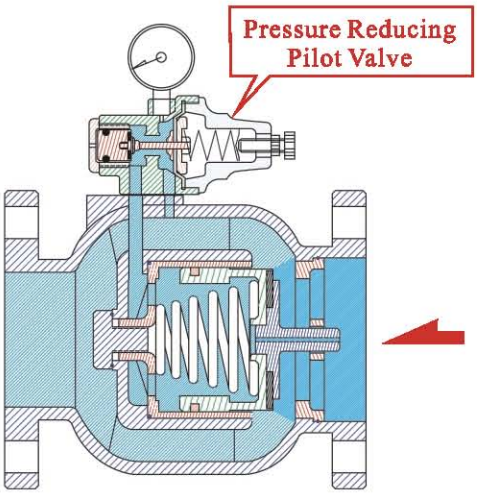
● Stock Items

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

◎Production Size: 1.5"~ 56"

PRESSURE REDUCING VALVE

- Pressure reducing valve can prevent pipeline breakage due to high pressure.
- Pressure reducing valve is installed in water supply pipeline and maintains the setting outlet pressure in main valve, regardless of the different inlet pressure.
- Pressure reducing valve can be installed in water supply, air conditioning and fire control systems to maintain the setting outlet pressure.



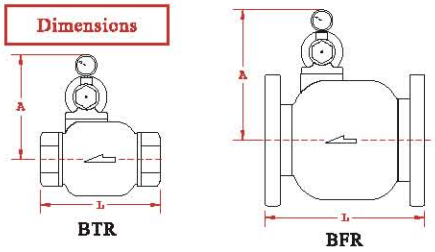
The pressure reducing valve uses a sub-valve (pressure reducing pilot valve) to control the main valve. When the outlet pressure reaches the setting range of pressure reducing pilot valve, the pilot valve will automatically sense the outlet pressure and adjust the pressure of the back pressure chamber in the main valve, so the valve gate can be opened and consequently maintains the outlet pressure.

- Pressure Adjusting Range : 1 ~ 7 kgf/cm^2
  (1 kgf/cm^2 = 14.2 psi) 4 ~ 12 kgf/cm^2

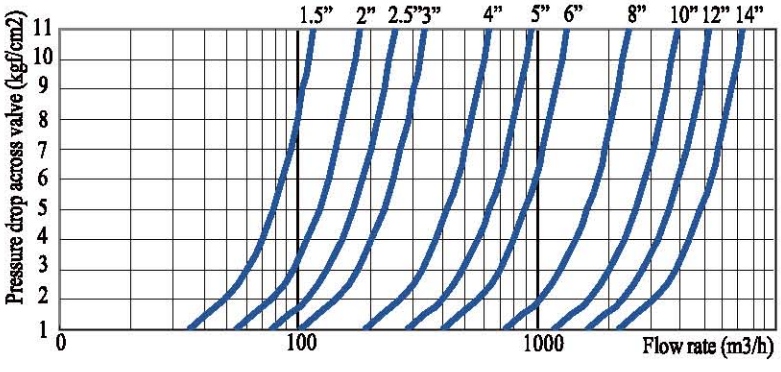
◎Special order can be arranged for higher pressure adjustment range.

- The pressure meter on the pilot valve shows the outlet pressure. When the outlet opens, the value of the pressure meter is lower.
- When the outlet is used for large flow and the gate generates quick-close motion, the pilot valve will slowly respond to the main valve to close the gate. Under this situation, the outlet pressure gets a little higher, and a tiny pressure reducing valve can be added.

Dimensions



Flow Chart of Pressure Reducing Valve



(Thread end)

Item No	Size	L(mm)	A(mm)	Weight(kg)	CV
BTR-40	1.5"	120	170	3	48
BTR-50	2"	200	190	9	75

(Flange end)

Item No	Size	L(mm)	A(mm)	Weight(kg)	CV
BFR-50	2"	190	180	12	75
BFR-65	2.5"	210	185	14	105
BFR-80	3"	225	200	19	140
BFR-100	4"	250	222	26	260
BFR-125	5"	280	235	37	390
BFR-150	6"	310	260	50	550
BFR-200	8"	420	300	94	1000
BFR-250	10"	470	335	152	1600
BFR-300	12"	530	370	202	2200
BFR-350	14"	600	415	285	3000

◎Production Size: 1.5" ~ 56"