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SHINWOOVALVE

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FLOW INNOVATIONS
SINCE 1977

2016. 05 Awarded 2016 Outstanding Patent Grand Award by The Korea Times
(Differential Flow Regulating Valve with Detachable Body & Actuator)

2013. 10 Completed spin-off from SVC Inc. under the name of Shinwoo Valve Co., Ltd

2011. 01 Company name changed to SVC Inc.

2002. 12 Selected as a Technological Blu-Chip Company by Korean Technology Finance Corporation

2002. 09 Acquired Capacity Certification for Safety Relief Valve by NBBI of USA

2001. 09 Initiated the operation of Dalian factory in China

2001. 05 Entered into ODM agreement with Nexus Valve of USA for automatic flow balancing valves

1997. 02 Acquired ISO-9001 Certificate (QSC 70400)

1995. 05 Founded Shinwoo Valve Technology R&D Institute

1994. 01 Entered into a technical license agreement with ITT Bell & Gossett Corporation of USA as a licensor
(Manufacturing techniques for automatic flow balancing valves)

1984. 06 Technical cooperation agreement with ITT Hoffman Corporation of USA for regulating valves and steam traps

1977. 07 Shinwoo Industry Inc. founded

1 LEVEL CONTROL / PRESSURE REGULATING VALVES


Level Control Valve
P 1-2


Level Control Valve (8"~24")
P 3-7


Pressure Reducing Valve
P 8-9


Pressure Reducing Valve
(Stainless Steel)
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Multi-Functional
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P 11


Pressure Reducing Valve
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2 VALVES FOR HVAC / WATER SUPPLY SYSTEM


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Differential Pressure
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Check Valve
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SWV-11B, 12B

LEVEL CONTROL VALVE

- **Size :** 1 ½" ~ 6"
- **Applicable Fluid :** Water, Oil
- **Inlet Pressure :** Max. 10 bar
- **Operating Temperature :** Max. 80℃ (Option : Max. 120 ℃)
- **Min. Opening Pressure :** 0.5 bar
- **End Connections :**
  SWV-11B : PT Screwed
  SWV-12B : Flanged
- **Hydrostatic Test :** 15 bar- 3 min.
- **Material_Body, Cover :** Cast Iron
- **Material_Trim :** Bronze, Stainless Steel
- **Material_Diaphragm, Disc :** NBR

※ Valve for over 20 bar is produced on a per order basis.

Features

- No outside tubing : Convenient for handling and insulation
- Reinforced diaphragm : Extended service life
- Integrated diaphragm and disc : Tight shut-off and easy maintenance
- Screen filter : Prevents malfunction caused by foreign matters
- Built-in by-pass : Manual operation possible during malfunctions or blackouts
- Corrosion proof coating : Suitable for drinking water lines [optional]

SWV-S11B, S12B, SWV-F11B, F12B, SWV-FS11B, FS12B

LEVEL CONTROL VALVE

SWV-S11B, S12B

Unlike the traditional designs that require outside copper tubing, all of the product's functions, including those to control the closing time and the precise level of water, are built into the design as a built-in type.
This advance in design not only increases the product's overall robustness, but also makes it more convenient to maintain and install. This valve is especially suitable for applications with automatic supplying and draining facilities on water tanks and reservoirs that are operated by electrodes. Since the manual by-pass valve comes installed, the valve can be easily opened or closed even during black outs or solenoid valve malfunctions.

Solenoid Valve
• **Inlet Pressure :** 0.3~10.0 bar
• **Operating Temperature :** Max. 80 ℃ (Option : Max. 120 ℃)
• **Power Supply :** AC220V 60Hz
• **Power Consumption :** 14W
• **Material_Body :** Forged Brass • **Material_Trim :** Stainless Steel • **Material_Diaphragm, Disc :** NBR

Level Control Valve with Solenoid

SWV-F11B, F12B

This is a fully self-acting level control valve; there is no need for electric power or auxiliary power supply. This valve controls the water level of the tank and reservoir by operating the opening and closing of the main valve through the buoyancy of a float (float can be purchased and installed separately).

Level Control Valve with Float

SWV-FS11B, FS12B

The float will close safely in case the solenoid malfunctions (float can be purchased and installed separately).

Level Control Valve with Solenoid and Float

SWV-11, 12, 22

LEVEL CONTROL VALVE

- **Size :**
  2″ ~ 24″
- **Applicable Fluid :**
  Water, Oil
- **Inlet Pressure :**
  SWV-11, 12 : Max. 10 bar
  SWV-22 : Max. 20 bar
- **Operating Temperature :**
  Max. 80 °C (Option : Max. 120 °C)
- **Min. Opening Pressure :**
  0.5 bar
- **End Connections :**
  SWV-11: PT Screwed
  SWV-12, 22 : Flanged
- **Hydrostatic Test :**
  SWV-11, 12 : 15 bar- 3min.
  SWV-22 : 30 bar- 3min.
- **Material_Body, Cover :**
  SWV-11, 12 : Cast Iron / **SWV-22 :** Cast Steel
- **Material_Trim :** Bronze, Stainless Steel
- **Material_Diaphragm, Disc :** NBR

※ Valve for over 20 bar is produced on a per order basis.

Features

- Large flow area : Less pressure drop
- Reinforced diaphragm : Extended service life
- NBR disc : Tight shut-off
- Disc and diaphragm available in various materials : Applicable even in severe conditions
- Speed control valve : Opening or closing speeds can be adjusted to prevent water hammer
- Serviceable in-line : Function change, repair or replacement of parts can be performed on site without removing the valve from the line
- Stainless steel tubing : Durable and resistant to corrosion

SWV-S12, S22, SWV-F12, F22, SWV-FS12, FS22

LEVEL CONTROL VALVE

SWV-S12, S22

Since the solenoid valve is installed on the main valve, opening and closing of the valve can be remotely controlled, thereby delivering outstanding performance in controlling the water level. This valve is especially suitable for applications with automatic supplying and draining facilities on water tanks and reservoirs that are operated by electrodes. Even in the case of solenoid valve malfunction or blackouts, there is no need to open and close the block valves as it is possible to manually operate the level control valve using a built-in by-pass valve.

Solenoid Valve
• **Max. Pressure :** 0.3~10.0 bar
• **Operating Temperature :** Max. 80 °C (Option : Max. 120 °C)
• **Power Supply :** AC220V 60Hz
• **Material_Body, Cover :** Forged Brass • **Material_Trim :** Stainless Steel • **Material_Diaphragm, Disc :** NBR

Level Control Valve with Solenoid

SWV-F12, F22

This is a fully self-acting level control valve; there is no need for electric power or auxiliary power supply. It controls the water level of the tank and reservoirs by operating the opening and closing of the main valve through the buoyancy of a float (float can be purchased and installed separately).

Level Control Valve with Float

SWV-FS12, FS22

The float will close safely in case the solenoid malfunctions (float can be purchased and installed separately).

Level Control Valve with Solenoid and Float

SWV-P12, P22

PRESSURE REDUCING VALVE

Pressure Reducing Valve

SWV-P12, P22

Pressure Pilot

- **Inlet Pressure :**
  SWV-P12 : Max. 10 bar
  SWV-P22 : Max. 20 bar
- **Operating Temperature :**
  Max. 80°C (Option : Max. 120°C)
- **Control Range 2″~ 8″ :**
  Max. 8 bar
- **Control Range 10″~ 24″ :**
  Max. 7 bar
- **Turndown Ratio :**
  5:1
- **Material_Body, Cover :** Stainless Steel
- **Material_Trim :** Brass, Stainless Steel
- **Material_Diaphragm :** NBR

※ Valve for over 20 bar is produced on a per order basis.

A diaphragm-type pressure reducing pilot is installed on the main valve, maintaining constant outlet pressure regardless of the variation of the inlet flow and pressure. Since this is a pilot operated valve, the capacity is relatively larger than the direct acting type valves. As the springs per each of the controlled pressure range are densely subdivided, minute pressure adjustments are possible. In addition, pressure adjustments due to changes in operation condition can easily be performed on site.

SWV-R12, R22

PRESSURE RELIEF VALVE

Pressure Relief Valve

SWV-R12, R22

Relief Pilot

- **Inlet Pressure :**
  SWV-R12 : Max. 10 bar
  SWV-R22 : Max. 20 bar
- **Operating Temperature :**
  Max. 80°C (Option : Max. 120°C)
- **Control Range 2″~ 8″ :**
  Max. 8 bar
- **Control Range 10″~ 24″ :**
  Max. 4.5 bar
- **Pressure Diviation :**
  ±10%(or±0.3 bar)
- **Material_Body, Cover :** Stainless Steel
- **Material_Trim :** Brass, Stainless Steel
- **Material_Diaphragm :** NBR

※ Valve for over 20 bar is produced on a per order basis.

This valve has a function to maintain the inlet pressure through a diaphragm type relief pilot installed on the main valve. When the flow of water inside a pipe that holds large amount of water is blocked or if the consumption is suddenly reduced, the pressure inside the pipe will build up rapidly, causing water hammer or breakage of the pipe; moreover, this would create high resistance against the impeller of the pump, possibly resulting in power loss and shortening the life span of the pump. In order to solve this problem, the valve and the by-pass piping are installed around the pump, allowing excessive pressure to be relieved.

Since this is a pilot acting type valve, the capacity is relatively larger than the direct acting type valves.

SWV-DP11, DP12, DP22

DIFFERENTIAL PRESSURE VALVE (PILOT TYPE)

SWV-DP11, DP12, DP22

Differential Pressure Pilot

- **Inlet Pressure :**
  SWV-DP11,12 : Max. 10 bar
  SWV-DP22 : Max. 20 bar
- **Operating Temperature :**
  Max. 80°C (Option : Max. 120°C)
- **Control Range :**
  0.5~3.0 bar, 3.1~8.0 bar
- **Material_Body, Spring Case :** Stainless Steel
- **Material_Trim :** Brass, Stainless Steel
- **Material_Diaphragm, Disc :** NBR

A differential pressure valve (pilot type) is installed on the main valve, detecting differential pressure of inlet and outlet. This valve is especially suitable for HVAC system of mid-rise and high-rise buildings. It protects pump from overload and other troubles by maintaining consistent differential pressure. Since this is a pilot operated valve, the capacity is relatively larger than the directing acting type valves. The difference from relief valve is that this valve is generally used in closed systems for maintaining consistent differential pressure.

Features

- Densely subdivided pressure setting range : Precise operation and increased capacity
- Easy to change differential pressure on site
- Stainless spring for enhanced corrosion resistance
- Spring tested over a million times for long-term use without alteration
- NBR disc prevents leakage
- Special material used for diaphragm is sustainable under high pressure.

SWR-P11, P12, P12H

PRESSURE REDUCING VALVE

- **Size :** 1″ ~ 6″
- **Applicable Fluid :** Water, Air
- **Inlet Pressure :** Max. 10 bar
- **Operating Temperature :**
  Max. 80 °C (Option : Max. 120 °C)
- **Min. Opening Pressure :** **SWR-P11, P12 :** 0.5 bar / **SWR-P12H :** 3.0 bar
- **Control Range :**

	SWR-P11	SWR-P12	SWR-P12H
1″	0.5~3.0 bar 3.1~7.0 bar (7.1~10.0 bar-1″)	0.5~4.0 bar 4.1~7.0 bar	
1 ¼″ ~ 1 ½″			7.1~10.0 bar
2″ ~ 3″			
4″ ~ 6″		0.5~3.0 bar	3.1~4.0 bar 4.1~8.0 bar 8.1~10.0 bar

- **Min. Flow Rate :** 5% of rated flow rate
- **Turndown Ratio :** 5:1
- **End Connection :** **SWR-P11 :** PT Screwed
  SWR-P12 , P12H : Flanged
- **Hydrostatic Test :** 15 bar- 3min.
- **Material_Body, Cover :** Cast Iron
- **Material_Trim :** Stainless Steel, Cast Bronze, Brass

A pressure reducing valve designed for balanced supply of water (air) to each floor of mid and high-rise buildings. SWR-P12 eliminates the need for a middle tank, saving installation space as well as construction cost. Developed for water and air, this direct acting valve responds quickly and operates stably with less pressure deviation due to its balanced structure.

Features

- Direct acting type : Quick and accurate operation
- Streamlined flow passage : Low pressure drop and reduced noise
- Balanced trim : Stable operation and increased capacity
- Integrated seat and guide : Easy maintenance
- Densely subdivided springs : Precise operation and increased capacity
- Reinforced diaphragm : Extended service life
- NBR disc : Drip-tight shut-off

SWR-P22, P22H

PRESSURE REDUCING VALVE

- **Size :** 1″ ~ 6″
- **Applicable Fluid :** Water, Air
- **Inlet Pressure :** Max. 20 bar
- **Operating Temperature :** Max. 80 °C (Option : Max. 120 °C)
- **Min. Opening Pressure :** **SWR-P22 :** 0.5 bar / **SWR-P22H :** 3.0 bar
- **Control Range :**

	SWR-P22	SWR-P22H
1″	0.5~3.0bar 3.1~5.0bar 5.1~7.0bar (7.1~10.0 bar-1″)	
1 ¼″ ~ 3″		7.1~10.0 bar (10.1~15.0bar)
4″ ~ 6″	0.5~3.0bar	3.1~4.0 bar 4.1~8.0 bar 8.1~12.0 bar (12.1~15.0bar)

- **Min. Flow Rate :** 5% of rated flow rate
- **Turndown Ratio :** 5:1
- **End Connection :** Flanged
- **Hydrostatic Test :** 30 bar- 3min.
- **Material_Body, Cover :** Cast Steel
- **Material_Trim :** Stainless Steel, Cast Bronze, Brass

A pressure reducing valve designed for balanced supply of water (air) to each floor of high-rise buildings from elevated water tanks, city-wide waterworks, and other high pressure water supply systems. SWR-P22 eliminates the need for a middle tank, saving installation space as well as construction cost. Developed specifically for high pressure applications, this sturdy direct acting valve responds quickly and operates stably with less pressure deviation due to its balanced structure.

Features

- Direct acting type : Quick and accurate operation
- Streamlined flow passage : Low pressure drop and reduced noise
- Balanced trim : Stable operation and increased capacity
- Integrated seat and guide : Easy maintenance
- Densely subdivided spring : Precise operation and increased capacity
- Reinforced diaphragm : Extended service life
- NBR disc : Drip-tight shut-off

SWR-SP

PRESSURE REDUCING VALVE (STAINLESS STEEL)

- **Size :** 1″ ~ 2″
- **Applicable Fluid :** Water
- **Inlet Pressure :** Max. 10 bar
- **Operating Temperature :** Max. 80 °C
- **Min. Opening Pressure :** 0.5 bar
- **Control Range :** 0.5 ~ 2.0 bar, 2.1 ~7.0 bar
- **End Connections :** PT Screwed
- **Hydrostatic Test :** 15 bar- 3min.

Built of quality stainless steel, PRV SWR-SP is extremely resistant to corrosion and erosion, making it suitable for reducing high pressure generated by elevated water tanks or pumps to necessary levels for use. It is suitable for mid and high-rise buildings, apartments, industrial factories, water works, and any other piping systems where high pressure is found.

Features

- Stainless Steel material : Resistant to corrosion
- Wide and thin designed diaphragm, coil spring suitable for excellent regulation
- NBR disc : excellent seat tightness
- Less stem vibration with top guide
- Control bolt at the top : Easy to control pressure on site
- Disc stays tightly attached to disc holder : No disc vibration due to fast flow velocity
- Optimal opening area size and microscopic screen net
- Easy maintenance & repair : Simply open upper case to access all internal parts for easy repair & exchange
- Product reliability is proven through rigorous heat tolerance and durability tests (80°C, 80hr, +100,000 times)
- Direct acting type : Quick and sensitive operation

SCR-P22H

MULTI-FUNCTIONAL PRESSURE REDUCING VALVE

Multi-Functional Pressure
Reducing Valve with Relief Valve
SCR-R22H

- **Size :** 4″, 5″, 6″
- **Applicable Fluid :** Water
- **Inlet Pressure :** Max. 20 bar
- **Operating Temperature :** Max. 80 °C (Option : 120°C)
- **Min. Opening Pressure :** 0.5 bar
- **Control Range (SCR-P22H) :**
  3.1 ~ 4.0 bar, 4.1~8.0 bar, 8.1 ~ 12.0 bar (12.1~15.0 bar)
- **Control Range (SCR-R22H(with Relief Valve)) :**
  0.5 ~3 bar, 3~8 bar, 8 ~ 11 bar, 11 ~ 14 bar, 14 ~ 17 bar
- **Min. Flow Rate :** 5% of rated flow rate
- **End Connections :**
  SCR-P22H : Flanged
  SCR-R22H (with Relief Valve) : PT Screwed
- **Hydrostatic Test :**
  SCR-P22H : 30 bar- 3min.
  SCR-R22H (with Relief Valve) : 30 bar- 1.5times of design pressure
- **Material_Body, Cover :** Cast Steel
- **Material_Trim :** Brass, Cast Bronze, Stainless Steel
- **Material_Diaphragm :** NBR

Multi-Functional PRV for Water SCR-P22H integrates a pressure reducing valve, strainer, manual valves and pipes into a single structure for dramatic savings in material and labor costs, especially for welding. This innovative valve design also significantly reduces the weight of the piping installation assembly and installation space for more efficient installation and maintenance.

Features

- Multiple functions : PRV, shut-off valve(primary side), shut-off valve(secondary side), strainer, by-pass valve, and backdraft prevention check valve in one
  - Material and labor cost saving
  - Space saving
  - Reduction in weight
- Direct acting : Quick and precise operation
- Streamlined flow passage : Low head loss and reduced noise
- Balanced trim : Stable operation and increased capacity
- Multi-Functional PRV : In case secondary pressure increases, pressure is released through built-in relief valve without separate installation

SWP-WO1, WO1A, WO1B, WSO1

PRESSURE REDUCING VALVE

- **Size :**
  ½″ ~ ¾″
- **Applicable Fluid :**
  Water
- **Inlet Pressure :**
  Max. 10 bar
- **Operating Temperature :**
  Max. 80 °C
- **Control Range :**
  0.5~4.0 bar, 4.1~6.0 bar
- **Min. Opening Pressure :**
  0.5 bar
- **Min. Flow Rate :**
  5% of rated flow rate
- **End Connections :**
  PT Screwed
- **Hydrostatic Test :**
  17.5 bar
- **Material_Body :** Cast Brass
- **Material_Seat :** STS304
- **Material_Diaphragm :** EPDM

Pressure Reducing Valve SWP protects equipment and pipe lines by maintaining the pressure of water supply regardless of floor level within high-rise buildings and apartments. The valve is a diaphragm type direct acting PRV with an outstanding control ability to prevent troubles that may occur due to unbalance in supplied flow rate.

Features

- Various types and end connections : Suitable for any applications
- Cast brass body : Optimal for drinking water line
- Integral check valve : Blocks backward flow, preventing malfunction [Model:SWP-N01B]
- Control bolt at the top : Easy to control pressure on site (No required special tool)
- Wide and thin designed diaphragm, coil spring suitable for excellent regulation
- Stainless steel seat : Resistant to corrosion by fast flow velocity
- Disc stays tightly attached to disc holder : No disc vibration due to fast flow velocity
- Optimal opening area size and microscopic screen net
- Easy maintenance & repair : Simply open upper case to access all internal parts for easy repair & exchange
- Internal flow passage of body is optimized by flow passage analysis
- Product reliability is proven through rigorous heat tolerance and durability tests (80°C, 80hr, +100,000 times)

SBV-WG1, SBV-WG2, SBV-WL1

BUTTERFLY VALVE

- **Size :**
  1 ½″ ~ 20″ (Gear Type)
  1 ½″ ~ 6″ (Lever Type)
- **Operation type :**
  SBV-WG1, WG2 : Gear Type
  SBV-WL1: Lever Type
- **Applicable Fluid :** Water, Air, Sludge, Wastewater
- **Inlet Pressure :**
  SBV-WG1 : Max. 10 bar
  SBV-WG2, WL1 : Max. 20 bar
- **Operating Temperature :** -20°C ~ 100°C
- **End Connections :** Wafer (Flanged)
- **Material_Body :** Ductile Cast Iron (Cast Steel, Stainless Steel)
- **Material_Disc :** Stainless Steel
- **Material_Seat :** EPDM(NBR, Teflon, Viton)

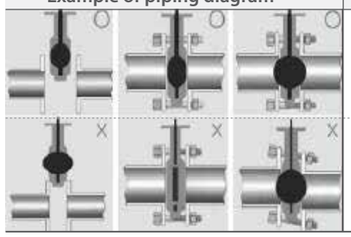
※ Valve for over 20″ is produced on a per order basis

Butterfly Valve SBV is an on/off valve installed at the transportation pipeline of hot and cold water supply, drinking water, sewage control, wastewater treatment, fire prevention, HVAC, and other related systems to open or close the fluid flow by rotating a circular disc within the valve body. SBV's compact, lightweight build and short surface distances allow easier installation compared to other similar products.

Features

- **Functional features:**
  1. An integrated body and seat structure (smart seat type) :
     Reduced possibility of change and leakage compared to the cross-sectional shape of omega type
  2. An application of integrated O-Ring structure and U-Packing for both ends of the disc : No chance of leakage from outside
- **Structural features:**
  1. Streamlined disc shape : Decreases flow resistance of fluid
  2. Du-Bearing installed for both sides of stream : Guarantees smooth operation with durability and lubricity

Installation Instructions

Example of piping diagram	Description
	Mating pipe flanges should be kept well apart to allow free access for the valve. Disk in the same position (slightly open) when flange bolts are inserted will ensure that no distortion of the seat takes place on final tightening. Before evenly tightening the flange bolts see that the valve is centralized and then if possible, fully open with care to ensure the disk does not foul the internal bore of the pipe.
	Mating flanges are too close to allow access for the valve and the disk in the wrong position. Disk again is in the wrong position (closed) and this will firstly distort the seat on installation and secondly cause excessive torque in initial operation. If the valve is not centralized between the adjoining pipe flanges this will result in excessive torque, damage to the disk and eventual leakage.

SAC-11N

AUTOMATIC FLOW BALANCING VALVE

- **Size :** ½″ ~ 2″
- **Applicable Fluid :** Water
- **Inlet Pressure :** Max. 10 bar
- **Operating Temperature :** Max. 120°C
- **Control Range :** 0.2 ~ 3.0 bar (for normal application),
- **Min. Flow Rate :** 5% of rated flow rate
- **End Connections :** PT Screwed
- **Hydrostatic Test :** 15 bar- 3min.
- **Material_Body, Cover :** Cast Brass
- **Material_Trim :**
  ½″ ~ 1″ _ Brass, Stainless Steel (Engineering Plastic)
  1 ¼″ ~ 2″ _ Brass, Stainless Steel

Like Automatic Flow Balancing Valve SAC, Automatic Flow Balancing Valve SAC-11N balances the differential pressure for constant flow rate and saves valuable space with its built-in strainer. Maintenance is made easier as there is no need to detach valves for the replacement of nozzle cartridges, and SAC-11N's body is made out of bronze to accommodate usage with drinking water.

Features

- Precisely machined nozzle : Maintain flow rate within ±5% of designated flow rate
- Built-in strainer : Prevents malfunction caused by foreign matters
- Easy maintenance : Nozzles can be easily replaced on site
- Various connecting methods : Suitable for any site conditions
- Factory tested : All valves are tested extensively for reliable operation

Flow Rate Selection Table (LPM)

Size	For normal application (0.2 ~ 3.0 bar)
½″ , ¾″	2~13
1″	5~35
1 ¼″	5~83
1 ½″ , 2″	30~100

SAC-11, 12, 22

AUTOMATIC FLOW BALANCING VALVE

- **Size :** 1 ½″ ~ 6″
- **Applicable Fluid :** Water
- **Inlet Pressure :**
  SAC-11, 12 : Max. 10 bar
  SAC-22 : Max. 20 bar
- **Operating Temperature :** Max. 120 ℃
- **Control Range :** 0.2~3.0 bar
- **Min. Flow Rate :** 5% of rated flow rate
- **End Connections :**
  SAC-11 : PT Screwed
  SAC-12, 22 : Flanged
- **Hydrostatic Test :**
  SAC-11, 12 : 15 bar- 3min.
  SAC-22 : 30 bar- 3min.
- **Material_Body, Cover :**
  SAC-11, 12 : Cast Iron
  SAC-22 : Cast Steel
- **Material_Trim :** Cast Bronze, Brass, Stainless Steel

Piping configurations for certain HVAC, heat exchanger, or filter systems require constant flow rate for optimum performance. However, it can be difficult to maintain constant differential pressure - consequently, constant flow rate - due to varying conditions of pipes and pumps. Automatic Flow Balancing Valve SAC not only balances the differential pressure to maintain constant flow rate, but also saves valuable space with its built-in strainer. As there is no need to detach the valves for replacement of nozzle cartridges, maintenance is made much easier than before.

Features

- Precisely machined nozzle : Maintain flow rate within ±5% of designated flow rate
- Built-in strainer : Prevents malfunction caused by foreign matters
- Easy maintenance : Nozzles can be easily replaced on site
- Factory tested : All valves are tested extensively for reliable operation

Flow Rate Selection Table

Control Range : 0.2~3.0 bar

Size	1 ½″ , 2″	2 ½″	3″	4″	5″	6″
Flow(LPM)	30~265	200~500	300~670	400~1100	600~1800	900~2,450

SAB-12, 22

AUTOMATIC FLOW BALANCING VALVE

- **Size :**
  8″ ~ 16″
- **Applicable Fluid :** Water
- **Inlet Pressure :**
  SAB-12 : Max. 10 bar
  SAB-22 : Max. 20 bar
- **Operating Temperature :**
  Max. 120 ℃
- **Control Range :**
  0.4~3.0 bar of rated flow rate
- **Flow Rate Deviation :**
  ±5%
- **End Connections :**
  Flanged
- **Hydrostatic Test :**
  SAB-12 : 15 bar- 3min.
  SAB-22 : 30 bar- 3min.
- **Material_Body, Cover :**
  SAB-12 : Cast Iron / **SAB-22 :** Cast Steel
- **Material_Trim :** Cast Bronze, Stainless Steel
- **Material_O-Ring/Gasket :** EPDM/ Non-Asbestos

※ Valve for over 16″ is produced on a per order basis.

Piping configurations for certain HVAC, heat exchanger, or filter systems require constant flow rate for optimum performance. However, it can be difficult to maintain constant differential pressure - consequently, constant flow rate - due to varying conditions of pipes and pumps. Automatic Flow Balancing Valve SAB balances the differential pressure to maintain constant flow rate, and it is suitable for large capacity flow systems with pipe diameters exceeding 8″.

Features

- Precisely machined nozzle : Maintain flow rate within ±5% of designated flow rate
- Easy maintenance : Nozzles can be easily replaced on site
- Factory tested : All valves are tested for reliable operation

Flow Rate Selection Table

Size	8″	10″	12″	14″	16″
Flow(LPM)	2000~4000	4000~8000	4000~8000	8000~13000	8000~13000

SATC-11

BALANCING AND TEMPERATURE CONTROL VALVE

- **Size :** ½″ ~ 1″
- **Applicable Fluid :** Water
- **Inlet Pressure :** Max. 10 bar
- **Operating Temperature :** Max. 120 °C
- **Control Range :** 0.2 ~ 3.0 bar
- **Flow Rate Deviation :** ±5% of set flow rate
- **End Connections :** PT Screwed
- **Hydrostatic Test :** 15 bar- 3min.
- **Material_Body/ Cover :** Cast Brass / Forged Brass
- **Material_Screen, Spring, Stem & Spool :** Stainless Steel
- **Material_O-Ring :** EPDM

Motor type actuator

- **Max. Pressure :** Max. 10 bar
- **Differential Pressure :** 3.5 bar
- **Operational Velocity :** 7.5 sec
- **Power Supply :** AC 220V 50/60 Hz
- **Power Consumption :** 6 watt (power consumption on operation)
- **Open / Close Indicator :** Lamp (upper)

Balancing and Temperature Control Valve SATC integrates a balancing valve for maintaining constant flow rate with an on/off type motor actuator for temperature control into a single valve. With its built-in strainer, SATC saves valuable space and allows for easy maintenance as there is no need to detach the valves during the replacement of nozzle cartridges.

Features

- Motor operating method : Fast valve opening and excellent durability for district and central heating
- Multiple functions : Strainer, automatic flow valve and temperature control valve
- Easy maintenance : Nozzles can be easily replaced on site
- Built-in strainer prevents malfunction by foreign matters
- CNC nozzle data : Maintain flow rate within ±5% of designated flow rate, setting is available for customer's required flow
- Factory tested : All valves are tested extensively for reliable operation
- Various models are available for any site conditions
- Lamp Indicator : Easy to check valve operation

Flow Rate Selection Table

Size	Flow (LPM)
½″ , ¾″	2~13
1″	5~25

SDP-12, 22

DIFFERENTIAL PRESSURE REGULATOR

- **Size :** 1″ ~ 12″
- **Applicable Fluid :** Water
- **Inlet Pressure :**
  SDP-12 : Max. 10 bar
  SDP-22 : Max. 20 bar
- **Operating Temperature :**
  Max. 120°C
- **Control Range :**
  1″~6″ : 0.5~1 bar, 1.1~2 bar, 2.1~3 bar
  8″~12″ : 0.5~1.2 bar (Option : over 1.2 bar)
- **End Connections :** Flanged
- **Hydrostatic Test :**
  SDP-12 : 15 bar- 3min.
  SDP-22 : 30 bar- 3min.
- **Material_Body, Bonnet :**
  SDP-12 : Cast Iron
  SDP-22 : Cast Steel
- **Material_Trim :** Stainless Steel
- **Material_Diaphragm :** EPDM

As heating and air conditioning systems tend to become bigger, it becomes crucial to maintain balanced flow rate even when the main pump is located farther away. This problem can be solved by installing Differential Pressure Regulators SDP between the supply line and the return line, which can maintain regular differential pressure and stability in the piping system.

Features

- Eccentric body design : Improved flow passage - low pressure drop and reduced noise
- Built-in pressure gauge : Easy to check the differential pressure and diagnose the system
- Sensing tube [Copper] : Fast and precise Operation
- Balanced trim : Suitable for high differential pressure applications
- Wide range of disc and diaphragm materials available : Suitable for high temperature applications and for various kinds of fluid
- Factory tested : All valves are tested extensively for reliable operation
- Reinforced diaphragm : Enhanced durability

SDP-F12, F22

DIFFERENTIAL PRESSURE AND FLOW REGULATOR

- **Size :** 1″ ~ 12″
- **Applicable Fluid :** Water
- **Inlet Pressure :**
  SDP-F12 : Max. 10 bar
  SDP-F22 : Max. 20 bar
- **Operating Temperature :**
  Max. 120°C
- **Control Range :**
  1″~6″ : 0.3~1 bar, 1.1~2 bar, 2.1~3 bar
  8″~12″ : 0.5~1.2 bar (Option : over 1.2 bar)
- **End Connections :**
  Flanged
- **Hydrostatic Test :**
  SDP-F12 : 15 bar- 3min.
  SDP-F22 : 30 bar- 3min.
- **Material_Body, Cover :**
  SDP-F12 : Cast Iron
  SDP-F22 : Cast Steel
- **Material_Trim :** Stainless Steel
- **Material_Diaphragm :** EPDM

Because one large main pump is responsible for the distribution of flow to each sub-station (such as each floor of an apartment) in central heating systems of large residential complexes and in district heating systems, irregular differential pressure may occur in each district to unbalance and hamper the effectiveness of heating and air conditioning systems despite sufficient heat sources. By installing differential regulators and flow regulators at junctions of primary and secondary valve systems, it is possible to maintain constant differential pressure for constant flow rate.

Features

- Eccentric body design : Improved flow passage - low pressure drop and reduced noise
- Sensing tube [Copper] : Fast and precise Operation
- Balanced trim : Suitable for high differential pressure applications
- EQ%(Equal-Percentage) disc designed for flow characteristic : Excellent flow control
- Built-in pressure gauge : Easy to check the differential pressure and diagnose the system
- Minute control range of differential pressure : Sensitive operation and flow increase
- Reinforced diaphragm : Enhanced durability

TOV-12, 22, 25

TRIPLE DUTY CHECK VALVE

- **Size :** 2″ ~ 24″
- **Applicable Fluid :** Water, Oil
- **Inlet Pressure :**
  TOV-12 : Max. 10 bar / **TOV-22, 25 :** Max. 20 bar
- **Operating Temperature :**
  Max. 80°C (Option : Max. 120°C)
- **Control Range :**
  0.04~0.07 bar
- **End Connections :**
  TOV-12, TOV-22 : Flanged / **TOV-25 :** Grooved Joint
- **Hydrostatic Test :**
  TOV-12 : 15 bar- 3min. / **TOV-22, 25 :** 30 bar- 3min.
- **Material_Body, Cover :**
  TOV-12 : Cast Iron / **TOV-22, 25 :** Cast Steel
- **Material_Trim :** Cast Bronze, Stainless Steel
- **Material_Disc :** NBR
- **Material_Disc Holder :** Steel
- **Material_Spring :** Stainless Steel

A Triple Duty Check Valve TOV is installed at the outlet of a pump and prevents fluid from flowing backward when the pump stops. Its backflow check function protects the pump from water hammering, and it is possible to block fluid flow inside the pipe. Flow can be adjusted through the indicator by controlling the disk, and it can also be induced to the pump by opening the bypass valve when a vacuum effect occurs. Shinwoo Valve's innovative Triple Duty Check Valve design encompasses all functions of a manual blocking valve, balancing valve, and check valve into one for maximum efficiency.

Features

- Three functions in one : Non-slam check valve, shut-off valve, and balancing valve
  - Installation[material and labor] cost saving
  - Space saving
  - Reduction in weight
- Spring loaded disc : Prevents water hammer
- Valve opening adjustment : Enables the control of pump discharge flow rate
- Position indicator : Easy checking of valve opening
- NBR disc : Guarantees tight shut-off and reduces the impact of closure
- Stainless steel spring : Resistant to corrosion
- Built-in by-pass valve : Convenient for drainage
- Vertical or horizontal installation : Suitable for any site conditions
- Streamlined flow passage : Low head loss

TOV-A12, A22, A25

TRIPLE DUTY CHECK VALVE (ANGLE TYPE)

- **Size :** 2″ ~ 24″
- **Applicable Fluid :** Water, Oil
- **Inlet Pressure :**
  TOV-A12 : Max. 10 bar / **TOV-A22, A25 :** Max. 20 bar
- **Operating Temperature :**
  Max. 80°C (Option : Max. 120°C)
- **Control Range :**
  0.04~0.07 bar
- **End Connections :**
  TOV-A12, A22 : Flanged / **TOV-A25 :** Grooved Joint
- **Hydrostatic Test :**
  TOV-A12 : 15 bar- 3min.
  TOV-A22, A25 : 30 bar- 3min.
- **Material_Body, Cover :**
  TOV-A12 : Cast Iron / **TOV-A22, A25 :** Cast Steel
- **Material_Seat/Disc :** Stainless Steel, Cast Bronze/ N.B.R
- **Material_Spring :** Stainless Steel

Check valves are critical for the prevention of backflow into pipes and the protection of pumps from cavitation, especially as piping setups are becoming increasingly complex in the water supply/drainage, cold/hot water processing, and boiler systems of today's buildings and factories. TOV-A is a versatile integrated solution capable of blocking flow path and preventing cavitation via shut-off in case of pump stoppage, removing the pump's vacuum using water collected from the outlet side, regulating flow rates, and more. Because TOV-A has the functionalities of three valves built into one, assembly, disassembly, and maintenance are made much easier with minimum installation time, space, and costs.

Features

- Three different products in one : Non-slam check, shut-off, and balancing function in one valve
- Reduction of required parts : No reducer or elbow pipe necessary
- Two different sizes for suction side and exit side are available
- Convenient repair : Repair can be performed on site without removing the valve from the line
- Streamlined flow passage and low head loss enhance pump efficiency
- Integration of inner spring decreases water hammer
- Valve opening can be adjusted with manual override to adjust and balance fluid flow inside pipe

SSD-11, 22, SSD-21, 22, SSD-25

SUCTION DIFFUSER

- **Size :** 2″ ~ 24″
- **Applicable Fluid :** Water, Oil
- **Inlet Pressure :**
  SSD-11, 12 : Max. 10 bar / **SSD-21, 22, 25 :** Max. 20 bar
- **Operating Temperature :**
  Max. 80°C (Option : Max. 120°C)
- **End Connections :**
  SSD-11, 12, 21, 22
  - 2″: PT Screwed
  - 2 ½″~24″ : Flanged

  SSD-25
  - Inlet : Grooved Joint
  - Outlet : Grooved Joint or Flanged
- **Hydrostatic Test :**
  SSD-11, 12 : 15 bar- 3min. / **SSD-21, 22, 25 :** 30 bar- 3min.
- **Material_Body, Cover :**
  SSD-11, 12 : Cast Iron / **SSD-21, 22, 25 :** Cast Steel
- **Material_Screen :** Stainless Steel
- **Material_Guide Plate :** Stainless Steel
- **Material_O-Ring :** NBR

A suction diffuser installed at the inlet of a pump has been redesigned by Shinwoo to reduce the installation area to only one third of the traditional design. Its internal guide plate not only induces stable fluid flow, but also protects the pump impeller by preventing cavitation. This unique design further enhances durability by coming equipped with a screen that collects and prevents foreign substances from flowing into the pipe.

Features

- Large opening ratio : Guarantees low head loss and increases intervals between filter cleanings
- Full length guide vanes : Provides stable flow and protects pump impeller
- Adjustable support : Height of the suction diffusers can be adjusted with ease
- Drain plug : Convenient for drainage
- Angle shape : Saves space and installation cost
- Vertical or horizontal installation : Suitable for any site conditions

SCV-12, 22

NON SLAM CHECK VALVE

- **Size :** 1 ½" ~ 24"
- **Applicable Fluid :** Water, Oil
- **Inlet Pressure :**
  SVC-12 : Max. 10 bar / **SVC-22 :** Max. 20 bar
- **Operating Temperature :**
  Max. 80°C (Option : Max. 120°C)
- **Control Range :** 0.05~0.1 bar
- **End Connections :** Flanged
- **Hydrostatic Test :**
  SVC-12 : 15 bar- 3min. / **SVC-22 :** 30 bar- 3min.
- **Material_Body, Cover :**
  SVC-12 : Cast Iron / **SVC-22 :** Cast Steel
- **Material_Seat :** Cast Bronze
- **Material_Disc :** NBR
- **Material_Disc Holder :** Steel
- **Material_Spring :** Stainless Steel

Non-slam Check Valve SCV is installed at the discharge side of a pump to prevent backflow with dramatically reduced noise and water hammering effect. It's simple construction makes for easy repair.

Features

- Spring loaded disc : Non-slam closure- no water hammer
- Oversized orifice cylinder : Low head loss
- Built-in by-pass valve : Convenient for drainage
- NBR disc : Guarantees tight shut-off and reduces the impact of closure
- Stainless steel spring : Resistant to corrosion
- Simple configuration : Reduced weight and convenient installation

No.89 (½" , ¾")

AIR VENT

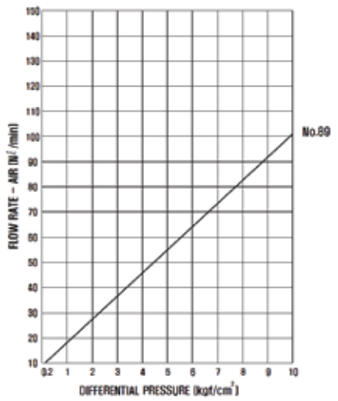
- **Size :**
  ½" ~ ¾"
- **Applicable Fluid :**
  Water
- **Inlet Pressure :**
  Max. 0.3~10 bar
- **Operating Temperature :**
  Max. 80 °C
- **End Connections :**
  PT Screwed
- **Hydrostatic Test :**
  15 bar- 3min.
- **Material_Body/Cover :** Brass
- **Material_Float :** Polypropylene

Automatic Air Vents No. 89 continuously discharges the oxygen from a building's Heating, Ventilation, and Air Conditioning (HVAC) system, water tank, heat exchanger, or severely curved pipeworks to remove the source of corrosion, enhance water flow, and maximize heat transfers.

Features

- EPDM disc : Tight shut-off
- Brass construction : Durable and resistant to corrosion
- Manual cock : Manual operation is possible in case of malfunction
- Built-in check valve : Prevents air from re-entering

Table for Flow Rate (LPM)



(bar) (Nℓ/min)

Pressure	No.89 (½" , ¾")
1	18
1.5	23
2	26
3	38
4	47
5	55
6	63
7	73
8	82
9	92
10	101

Series 600

INVERTED BUCKET TRAP

- **Size :** ½″ ~ 1 ½″
- **Applicable Fluid :** Steam
- **Inlet Pressure :** Max. 10 bar
- **Operating Temperature :** Max. 180 °C
- **Diff. Pressure :** 2 / 4.5 / 8 bar
- **End Connections :** PT Screwed, Flanged
- **Material_Body, Cover :** Cast Iron
- **Material_Seat, Disc :** Stainless Steel
- **Material_Bucket :** Stainless Steel

Series 600 inverted bucket traps are useful for applications requiring rapid discharge of condensates, such as steam and dryer, steam press, paper and fiber manufacturing, food production, and more. The traps are especially effective for inverse draft shaped pipes vulnerable to steam disturbances.

Features

- Stainless steel internals : Resistant to corrosion
- Built-in trainer : Prevents malfunction caused by foreign matters [½″, ¾″, 1″]
- Built-in inlet pipe : Guarantees startup operation (check valve optional)
- Normal open type : No steam or air locking

Table for Discharge Capacity

(Unit : Kg/hr)

Seat type		2 bar			4.5 bar			8 bar			
Diff. Pressure (Delta P, bar)		0.35	1	2	3	4	4.5	5	6	7	8
Size	½″ , ¾″	348	500	612	516	576	610	370	390	430	460
	1″	765	960	1120	835	935	995	675	790	820	880
	1 ¼″ , 1 ½″	1580	1925	2010	1950	2110	2160	2060	2160	2210	2220

※4.5 bar is standard.

Series 550

FLOAT TRAP

- **Size :** ½″ ~ 2″
- **Applicable Fluid :** Steam
- **Inlet Pressure :** Max. 16 bar
- **Operating Temperature :** Max. 220 °C
- **Diff. Pressure :** 4.5 /10 / 14 bar
- **End Connections :** PT Screwed / Flanged
- **Material_Body, Cover :** Ductile Iron
- **Material_Seat, Disc :** Stainless Steel
- **Material_Air Vent :** Bimetal Type
- **Material_Float :** Stainless Steel

Series 500 float traps are useful for heat exchangers, dryers, and other applications where continuous discharge of condensate at high capacity is necessary. The trap guarantees safe and stable operation in a wide pressure range regardless of discharging capacity.

Features

- Wide selection of seat pressure : Precise operation and large capacity
- Stainless steel float : Durable
- Built-in air vent : No air locking
- Stainless steel internals : Extended service life
- Repairable in-line : Easy maintenance

Table for Discharge Capacity

(Unit : Kg/hr)

Seat type		4.5 bar						10 bar					14 bar	
Diff. Pressure (Delta P, bar)		0.35	1	2	3	4	4.5	6	7	8	9	10	12	14
Size	½″ , ¾″	200	320	440	500	550	580	340	370	390	410	430	320	340
	1″, 1 ¼″	900	1450	1800	2150	2450	2570	1300	1400	1500	1600	1700	1200	1300
	1 ½″	2050	3500	5000	6100	6800	7100	5350	5900	6300	6550	6800	4650	4900
	2″	6800	10900	15500	18750	21500	23000	13800	14800	15650	16650	17500	11250	11900

※Standard 4.5 bar

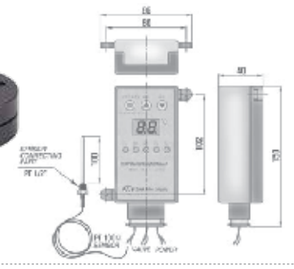
* Horizontal (inlet-left, outlet-right) Installation is the standard.
* Traps for reverse horizontal (inlet-right, outlet-left) installation can be manufactured on a per order basis.
* Traps for vertical installation can be manufactured on a per order basis.

SNT-11, 12, S11, S12

TEMPERATURE CONTROL VALVE

- **Size :** 4" ~ 6" (¾" ~ 3" with built-in condensate separator)
- **Applicable Fluid :** Steam
- **Inlet Pressure :** Max. 7.0 bar
- **Operating Temperature :** Max. 180 ℃
- **Min. Opening Pressure :** 0.5 bar
- **End Connections :** **SNT-11 :** PT Screwed / **SNT-12 :** Flanged
- **Hydrostatic Test :** 15 bar- 3min.
- **Material_Body, Cover :** Cast Iron
- **Material_Trim :** Cast Bronze, Stainless Steel
- **Material_Sensor :** Stainless Steel

※ Condensate Separator (SCS-21, 22) must be installed prior to SNT in order to prevent damage due to condensate
(Condensate Separator of the same size will be offered when purchasing SNT)



Temperature Controller

- **Sensor Type :** PT 100Ω(RTD) (Resistance Temperature Detector)
- **Power Supply :** AC 1Ø 220V (50/60Hz)AC ±10%
- **Temperature Setting Range :** 0℃~200℃
- **Ambient Temperature/Humidity :** 0~60℃ / 80% RH
- **Length of Temperature Sensor :** 100mm
- **Length of Wire :** 2m

Temperature Control Valves are widely used for controlling the temperature of heat exchangers, hot water storage tanks, oil heaters, drying equipment, distilling plants, etc. Temperature Control Valves SNT-11 and 12 utilize electronically operated actuators to adjust the opening and closing of the valves, and they are especially efficient at maintaining the temperature at desired levels to save energy and improve the cost effectiveness of the equipment in use.

Features

- Operated by controller and solenoid pilot valve
  - Very wide temperature setting range (0℃~200℃)
  - Convenient temperature setting
  - Digital display : Easy to check operational status
- PT100Ω temperature sensor
  - Accurate temperature sensing
  - Customizable sensor wire length (optional)
  - Stainless steel protection pipe: Excellent heat and wear resistance
- Built-in Strainer : Prevents malfunction caused by foreign matters
- Bronze or stainless steel internals : Resistant to corrosion

SRP-11, 12, S11, S12

PRESSURE REDUCING VALVE (PISTON)

- **Size :** ¾"~ 8"(¾"~ 3" with built-in condensate separator)
- **Applicable Fluid :** Steam
- **Inlet Pressure :** Max. 10 bar
- **Operating Temperature :** Max. 180 ℃
- **Min. Operating Pressure :** 0.7 bar
- **Control Range :** 0.3~8.0 bar
- **Turndown Ratio :** 10:1
- **Min. Flow Rate :** 5% of rated flow rate
- **End Connections :** **SRP-11 :** PT Screwed / **SRP-12 :** Flanged
- **Hydrostatic Test :** 15 bar- 3min.
- **Material_Body, Bonnet :** Cast Iron
- **Material_Trim :** Stainless Steel, Cast Bronze
- **Material_Diaphragm :** Stainless Steel

※Condensate Separator (SCS-21, 22) must be installed prior to PRV in order to prevent damage due to condensate
(Condensate Separator with the same size will be offered when purchasing SRP)

Pressure Reducing Valve for Steam (Piston) is installed at construction sites, factories, heating systems, and elsewhere to make sure that the pressure of the secondary side remains below the set level regardless of pressure changes in the primary side. This small, lightweight valve is used widely for the control of secondary side pressure because of its self-acting design, which does not require any electric, pneumatic, or hydraulic power supply.

Features

- Minute pressure control range
- Built-in screen : Prevents functional error by foreign matters
- Bronze or stainless steel internals : Resistant to corrosion
- Simplified structure : Decreased pipe weight
- Built-in Condensate Separator : No separate installation required & guarantees trouble-free operation
- Option : Trap and shut-off valve for primary trap installation option available

Series 2002

PRESSURE REDUCING VALVE (DIAPHRAGM)

- **Size :** ½″ ~ 6″
- **Applicable Fluid :** Steam
- **Inlet Pressure :** Max. 16 bar
- **Operating Temperature :** Max. 205 °C
- **Min. Operating Pressure :** 0.5 bar
- **Control Range :**
  - ½″ ~ 6″ : 0.2 ~ 2.0 bar, 2.1 ~ 12.0 bar
- **Turndown Ratio :** 20:1
- **Min. Flow Rate :**
  0.05% of rated flow rate
- **Min. Control Pressure :** Max. 0.2 bar
- **End Connections :** Flanged
- **Material_Body, Dia-case :** Ductile Iron
- **Material_Trim :** Stainless Steel
- **Material_Diaphragm :** Phosphor Bronze

In Pressure Reducing Valves for Steam Series 2002, the main valve and pilot valve are integrated into a single structure for easier handling and maintenance. Their relatively simple design guarantees increased reliability, durability, and precision in their pressure reducing function.

Features

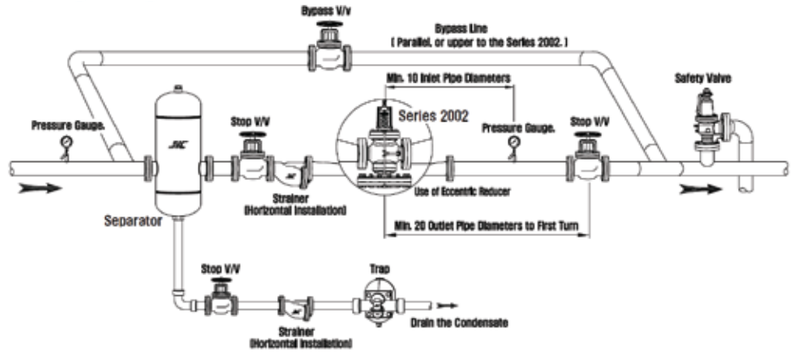
- Double layer Phosphor Bronze diaphragm : Precise and stable operation, extended service life
- Increased flow passage : Less head loss, larger capacity
- Stainless steel internals : Resistant to corrosion
- Built-in Strainer : Prevents malfunction caused by foreign matter
- Packing-less design : Minimizes leakage to atmosphere
- Large turndown ratio : Secondary PRV is not required
- Integrated pilot(up to 4") : Convenient installation and maintenance

Spring Range

	½″ ~ 4″	6″
Black	0.2~2 bar	0.2~2 bar
Yellow	-	1.8~8 bar
Red	-	5~10 bar
Silver	2.1 ~ 12.0 bar	10~20 bar

Cv Table										
Size	½″	¾″	1″	1 ¼″	1 ½″	2″	2 ½″	3″	4″	6″
Cv	5.2	7.4	11	14.5	19.8	32.7	63	79	122	250

Piping Diagram



- Condensate Separator (SCS-21, 22) and Float Trap (S550) installation recommended
- Series 2002 includes Condensate Separator (SCS); Float Trap (S550) should be inquired separately

Piping Installation Instruction

- It is recommended for the PRV to be installed as close to the place of use as possible for sensitive pressure reduction and quality steam. As the primary pipe is smaller, this can also help save piping costs.
- Since steam inside the pipe flows with fast velocity, presence of condensate water with big mass can cause damage to the pressure reducing valve and pipe. Therefore, it is recommended to install the Condensate Separator and Steam Trap prior to the valve.
- If steam loading amount is lower than 25%, two valves with different sizes are recommended to be installed in parallel to prevent erosion and abrasion for the valve. Please contact Shinwoo Valve for questions regarding this issue.
- By-Pass valve must be installed for repair and maintenance on site.

SCS-21, 22

CONDENSATE SEPARATOR

- **Size :**
  ½″ ~ 10″
- **Applicable Fluid :**
  Steam, Compressor Air
- **Inlet Pressure :**
  Max. 20 bar
- **Operating Temperature :**
  Max. 220°C
- **End Connections :**
  SCS-21 : PT Screwed
  SCS-22 : Flanged
- **Hydrostatic Test :**
  30 bar- 3min.
- **Material :**
  Carbon Steel

Condensate Separator SCS maintains the efficiency of piping systems and prevents the malfunction of critical equipment by removing steam, water curtain, and other condensates for smooth supply of dry, saturated steam and compressed air to secondary equipment.

Features

- Baffle design : Excellent moisture removal
- Large internal volume : High capacity, low head loss
- Fixed internal components : Extended service life

SSY-11, 12

STRAINER

- **Size :**
  ½″ ~ 16″
- **Applicable Fluid :**
  Water, Oil, Steam
- **Inlet Pressure :**
  Max. 10 bar
- **Operating Temperature :**
  Max. 80 °C (Option: 220°C)
- **End Connections :**
  SSY-11 : PT Screwed
  SSY-12 : Flanged
- **Hydrostatic Test :**
  15 bar- 3min.
- **Material_Body :** Cast Iron
- **Material_Cover :** Cast Iron
- **Material_Screen :** Stainless Steel

※ Cleaning screen regularly is recommended to prevent pressure loss.
※ Strainer for 30 bar is produce on a per order basis.

Main function of strainers is to prevent high value equipment such as automatic valves, pumps, and etc. from foreign substances by using perforated plates and mesh screens. Different materials, end connections, and screens can be selected depending on the user's environment and need.

SSY-22, SSY-B11, SSY-P2

STRAINER

CAST STRAINER

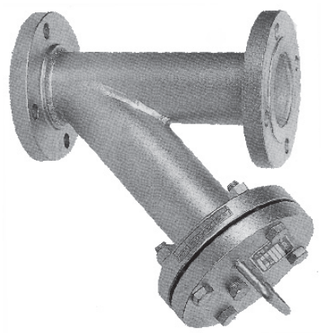
SSY-22

- **Size :** ¾″ ~ 16″
- **Applicable Fluid :** Water, Oil, Steam
- **Inlet Pressure :** Max. 20 bar
- **Operating Temperature :** Max. 220°C
- **End Connections :** Flanged
- **Hydrostatic Test :** 30 bar- 3min.
- **Material_Body :** Cast Steel
- **Material_Cover :** Cast Steel
- **Material_Screen :** Stainless Steel

CAST BRONZE STRAINER

SSY-B11

- **Size :** ½″ ~ 2″
- **Applicable Fluid :** Water. Air
- **Inlet Pressure :** Max. 10 bar
- **Operating Temperature :** Max. 80°C
- **End Connections :** PT Screwed
- **Hydrostatic Test :** 15 bar- 3min.
- **Material_Body :** Cast Bronze
- **Material_Cover :** Forged Brass
- **Material_Screen :** Stainless Steel



FABRICATED STRAINER

SSY-P2

- **Size :** ½″ ~ 20″
- **Applicable Fluid :** Water, Oil
- **Inlet Pressure :** Max. 10 bar / Max. 20 bar
- **Operating Temperature :** Max. 220°C
- **End Connections :** Flanged
- **Hydrostatic Test :** 15 bar- 3min. / 30 bar- 3min.
- **Material_Body :** Steel Pipe, Stainless Steel Pipe
- **Material_Cover :** Carbon Steel, Stainless Steel
- **Material_Screen :** Stainless Steel(STS304)

※Strainer for over 30 bar is produced on a per order basis.

SSY-S11, S12, SSB-22, SDS-22

STRAINER

STAINLESS STEEL STRAINER

SSY-S11, S12 (Stainless Steel)

- **Size :** ½″ ~ 2″ (PT Screwed) , 2″ ~ 6″ (Flanged)
- **Applicable Fluid :** (Portable) Water, Oil, Steam
- **Inlet Pressure :** Max. 10 bar
- **Operating Temperature :** Max. 80°C (Option : 220°C)
- **End Connections :** **SSY-S11 :** PT Screwed / **SSY-S12 :** Flanged
- **Hydrostatic Test :** 10 bar- 3min.
- **Material_Body :** Stainless Steel
- **Material_Cover :** Stainless Steel
- **Material_Screen :** Stainless Steel

BASKET STRAINERS

SSB-22

- **Applicable Fluid :** Water, Oil
- **Inlet Pressure :** Max. 20 bar
- **Operating Temperature :** Max. 220°C
- **End Connections :** Flanged
- **Hydrostatic Test :** 30 bar- 3min.
- **Material_Body, Cover :** Cast Steel
- **Material_Screen :** Stainless Steel (STS304)

※Welded type Basket Strainer (SSB-PB) is produced on a per order basis.

DUPLEX STRAINERS

SDS-22

- **Applicable Fluid :** Water, Oil
- **Inlet Pressure :** Max. 20 bar
- **Operating Temperature :** Max. 80°C (Option : 220°C)
- **End Connections :** Flanged
- **Hydrostatic Test :** 30 bar- 3min.
- **Material_Body, Cover :** Cast Steel, Stainless Steel
- **Material_Screen :** Stainless Steel (STS304)
- **Material_Cock :** Cast Bronze
- **Material_O-Ring :** NBR

※Welded type Duplex Strainer(SDS-P13) is produced on a per order basis.

SSL-11

SAFETY VALVE

LOW LIFT SAFETY VALVE

- **Size :**
  ½″ ~ 2″ (PT Screwed) , 1″ ~ 3″ (Flanged)
- **Applicable Fluid :**
  Water, Steam
- **Inlet Pressure :**
  Max. 10 bar
- **Operating Temperature :**
  For water : Max. 80℃
  For steam : Max. 220℃
- **End Connections:**
  PT Screwed
- **Material_Body, Cover :** Cast Iron
- **Material_Trim :** Stainless Steel
- **Material_Spring :** Carbon Steel

Like Full Lift Type Safety Valve SSL-11, Low Lift Type Safety Valve SSF-12 has been designed, manufactured, and tested to protect lives and facilities by preventing equipment damage and explosion of high capacity pressure vessels or boilers caused by pressure rise within steam, water, or gas piping systems.

Features

- Stainless steel nozzle and disk : Excellent wear and corrosion resistance
- Adjustment ring : Precise operation
- Test lever : For checkup and manual operation

SSF-12

SAFETY VALVE

FULL LIFT SAFETY VALVE

- **Size :**
  ½″ ~ 2″ (PT Screwed) , 1″ ~ 3″ (Flanged)
- **Applicable Fluid :**
  Water, Steam
- **Inlet Pressure :**
  Max. 10 bar
- **Operating Temperature :**
  For water : Max. 180℃
  For steam : Max. 220℃
- **End Connections:**
  Flanged
- **Material_Body, Cover :** Cast Iron
- **Material_Trim :** Stainless Steel
- **Material_Spring :** Carbon Steel

Full Lift Type Safety Valve SSL-11 prevents damage to equipment and explosion of pressure vessels caused by pressure rise within steam, water, or gas piping systems of factories and buildings, guaranteeing safety and reliability.