

NEWEX Controls

HVAC PRODUCTS



Company Introduction



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For standard and/or nonstandard products
welcome your inquiries



Flow Balancing Modulating Valve

SINRO flow balancing modulating valve is widely used on terminal equipments or floor branch pipes, zone main pipes of HVAC system to achieve a flow balancing result. It is ideal for all automatic temperature control applications using chilled or hot water.



DN20~DN50
Forged brass valve



DN65~DN100

Casting iron valve



DN125~DN200

FEATURES & BENEFITS

- **Avoid Flow Extreme Operation**
 - Provides flow balancing function with simple commissioning procedures as compared to pressure-type balancing valve.
 - Improves balanced system with less pump power with/without direct return system.
 - Easy to set flow limit without calculating flow resistance at each point of equipments.
 - Make the performance of individual equipment reach the design capacity without affected by different operation states of other parallel connections.
- **One-piece Design**
 - Propeller-type flow sensor and modulating control ball valve integrated together, provide high precision and equal percentage characteristics.
 - Combines flow rate display and the functions of flow detector, zone valve and balancing valve.
 - One piece design for easy and economical field installation, save a lot of money on initial investment, installation and installing material.
- **Flow Display**
 - Local LCD display of maximum flow rate setting for easy field adjustment and lower balancing labor.
 - Local LCD display of current operating flow rate.
- **Large Closing-off Pressure Range**
 - Between 30~600KPa closing-off pressure, the valve can control the actual flow rate preciously to balance the real-time flow distribution.
 - Avoid the equipment damage caused by over flow.



Flow Balancing Modulating Valve

WORKING PRINCIPLE

Some of the terminal equipments are operated under extreme operating condition. In this situation, the water flow through the valve is always exceed the flow rate expected by the designer. Under such circumstances, the internal controller will take the commanding role to maintain the flow according to the set point value.



Real-time Flow > Max. Flow Setting Point
 — Automatic Flow Balancing

After the flow has been adjusted below the flow set point value. The ball valve will be under the control of the thermostat/controller output signal.



Real-time Flow < Max. Flow Setting Point
 — Modulating Control

EASIER IN INSTALLATION

Other Balancing Valve

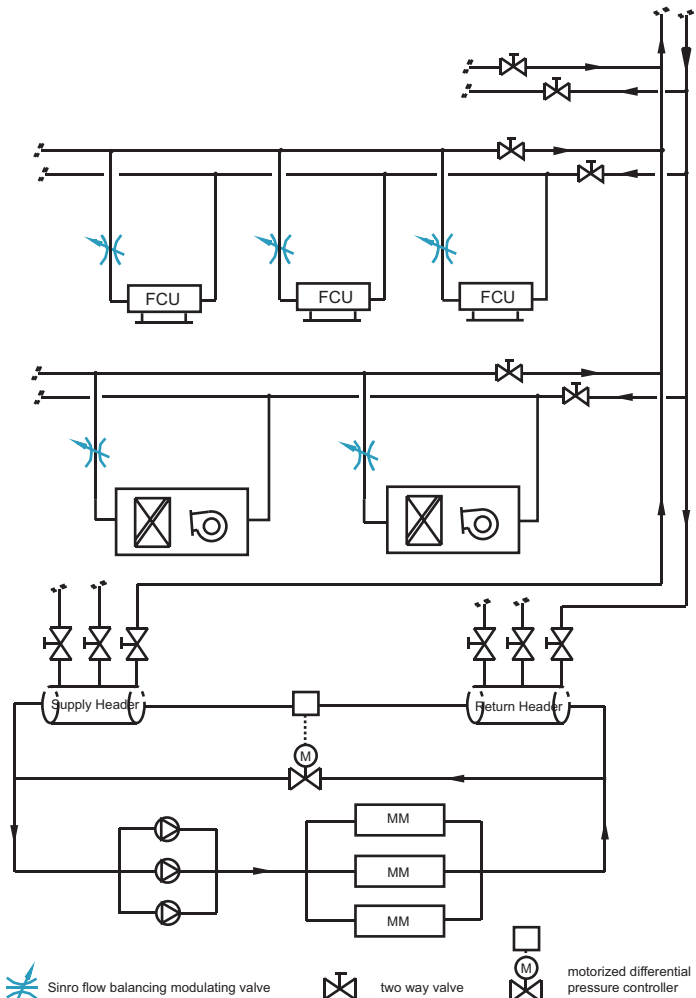


SINRO Flow Balancing Modulating Valve



TYPICAL APPLICATION

SINRO flow balancing modulating valve is designed specifically for terminal equipments, such as fan coil units and air handling units in HVAC system. (please see the drawing below)





Fan Coil Unit with Wireless Control



**ENORMOUS
SAVING**

as much as **80%**

FEATURES & BENEFITS

- No Conduit and Wiring Required
● Less construction labor and material.
- Factory Installation and Tested Valve/Receiver
● More reliable.
- Flexible Thermostat Location
● Avoid waste of early stage design work.
- Single Thermostat Controlling Multiple FCUs
● Less capital investment and future maintenance costs.

Install A FCU with Traditional Controls



Install A FCU with Wireless Controls





Fan Coil Unit with Wireless Control

SPECIFICATION

- Fan Coil Unit
 - Sizes cover 200 CFM to 2400 CFM applications.
 - Available in two-pipe system and four-pipe system.
 - 2~6 rows chilled/heating water coils.
 - With standard and high static pressure models.
- Wireless Control Units
 - Composed of a radio wave thermostat and a receiver.
 - 315 MHz transmitting frequency radio wave.
 - 10 m effective remote distance.
 - Simple to understand user interface control.
 - Large easy-to-read Liquid Crystal Display (LCD) for digital display.
 - Compact touch keys for ease of operation.
 - Built-in return air temperature sensor.
 - Battery powered, no control wiring required.
 - Direct connection of valve actuators.
 - Output relays for direct connection to 3-speed fan to provide reliable performance.
 - Either wall-mount or portable display control unit.



SRJ02
Receiver



SRJ03
Receiver



Matched Valves





NEW

Motorized Ball Valve

Sinro motorized ball valve employs a patented design without the use of a traditional characterized plate and achieves a superior flow curve.

FEATURES & BENEFITS

- Characterized Opening without Traditional Characterized Plate
 - Establishes a flow coefficient (Cv) similar to globe valves.
 - Provides superior rangeability and equal percentage flow characteristics.
 - Material saving.
- High Closing-off Pressure with Low Leakage
 - 6 bar closing-off pressure, PN25 rated body pressure.
 - Leakage less than 0.01% of Kv rating.
- Comprehensive Range
 - Full port or characteristic opening 2-way / bypass 3-way valves.
 - Brass or cast iron valve.
 - ½", ¾", 1", 1¼", 1½", 2", 2½", 3", 4", 5" or 6" valves.
 - BSP, NPSC or Flanged connection types.
 - Actuator can be on/off, floating or 0-10V control.
 - 24VAC, 110VAC, 220VAC, 230VAC, 50/60Hz power supply.



SB03
DN15~DN25



SB04
DN32~DN50



SB05
DN65~DN100



SB06
DN125~DN200



VAV Box

Sinro various air volume box is designed specifically for the HVAC market and is ideal for providing energy-efficient and comfort in-door environment.

FEATURES & BENEFITS

- Minimum 0.8 mm Galvanized Steel for Entire Casing
- Provides rigid construction to reduce shipping and storage damages.
- Precise dimensions to reduce leakage rates.
- Low Leakage
- Less than 1% of maximum specified air volume leakage at 1 kPa inlet static pressure for energy efficient and comfort operation.
- Range of Full Capacities
- 40 ~ 5200 CFM in 11 sizes to meet most of the designer's requirements.
- Special Design
- Self designed and produced air flow sensor for proper quality assurance.
- Factory designed standard multiple outlet unit to suit field requirements.
- Flexible Control Configuration
- Capable of installing and commissioning of pneumatic, electronic, DDC and/or networking controls as required by customers.



Single Duct VAV Box



By-pass VAV Box



Fan Powered VAV Box

Damper Actuator

Sinro damper actuators are from 0.5Nm torque up to 30Nm.

FEATURES & BENEFITS

- 45 dBA Noise Rating
 - Meets audible requirements for open ceiling.
- At least 60,000 Cycles of Operation
 - Extends actuator life due to improved technology.
- Direct Shaft Mount
 - Simplifies installation in any convenient orientation.
- Jumper-Selectable Rotation Direction on Proportional Models and Manual Gear Release
 - Simplifies installation, setup and field adjustments.
- Comprehensive Range
 - Can be ON/OFF, floating or 0-10V control.
 - 24VAC, 110VAC, 220VAC, 230VAC, 50/60Hz power supply.



SRD01
0.5/1Nm



SRD02
2/4/6/8Nm



SRD02
10/15/20/30Nm



SRD03
2/4/6/8/10/15/20/30Nm



SRD05
2/4/6/8/15/20Nm

Thermostat

Mechanical Thermostat

Mechanical Thermostat is suitable for room temperature control of heating, cooling or year-round air-conditioning system.

- Basically come with gas filled bellows sensing.
- Can be with/without ON/OFF switch, 3 speed fan switch, heating/cooling changeover switch.



SRT022YJ



SRT03YJ



SRT03TA



SRT03TB



SRT025



SRT026



SRT04T



SRT027

Electronic Thermostat

Electronic Thermostat is mainly used in central air-conditioning system.

- Work with TSC series temperature sensor.
- With/without LED display, output signals are available in ON/OFF, floating or 0-10V control.
- Can be with/without ON/OFF switch, 3 speed fan switch, heating/cooling changeover switch.



SRE06



SRE07



SRE05



SRT02EA



SRT025E



SRE04



SRT03E



TC8000

Motorized Fan Coil Control Valve

The range of Sinro Motorized Fan Coil Control Valve is very comprehensive.

- Normally open/close 2-way valve or bypass 3-way valves.
- ½", ¾", 1", 1¼" valves, PN16 or PN25.
- BSP, NPSC, Sweat or Inverted Flare connection types.
- Actuator can be on/off, floating or 0-10V control.
- 24VAC, 110VAC, 220VAC, 230VAC, 50/60Hz power supply.
- With or without spring return action.



SR01 Series
ON/OFF Valve (spring return)



SR04 Series
ON/OFF Valve (spring return)



SR05 Series
ON/OFF Valve (spring return)



SR12 Series
ON/OFF Valve (spring return)



SR13 Series
ON/OFF / Floating / 0~10V Valve



SR12P Series
ON/OFF Valve (spring return)
c/w compression fittings



SR2000 Series
ON/OFF Valve (spring return)



SR2010 Series
ON/OFF Valve (spring return)



SR2020 Series
ON/OFF Valve (spring return)

Motorized Globe Valve

Different applications call for different models of valves and actuators.

- Normally open/close 2-way valve or bypass 3-way valves.
- Brass, cast iron or stainless steel valve.
- 1", 1¼", 1½", 2", 2½", 3", 4", 5", 6" or 8" valves.
- Thread (BSP or NPSC) or flanged connection types.
- Actuator can be on/off, floating or 0-10V control.
- 24VAC, 110VAC, 220VAC, 230VAC, 50/60Hz power supply.



VA-2000/VB-4000 series
Stainless Steel Valve Set
DN25~DN50



VA-3000/VB-2010 Series
Cast Iron Valve Set
DN25~DN50



VA-3000/VB-3000 Series
Forged Brass Valve Set
DN25~DN65



VA-7000/VB-7000 Series
Cast Iron Flanged Valve Set
DN65~DN200

Heating Controls

Sinro offers complete range of durable controls suitable for all types of radiator/convector heating systems with or without power supply.

- Actuator can be electrothermal or thermostatic radiator model.
- Normally open/close 2-way valve, bypass 3-way valve, 3-way 4 outlet valve or straight valve, angle valve.
- ½" or ¾" valves, PN15 or PN25.
- 24VAC, 110VAC, 220VAC, 230VAC, 50/60Hz power supply.



VA-1000 Actuator



SRT06X
Electrothermal Actuator



SRT066
Electrothermal Actuator



SRV061S 2-way
Heating Valve



SRV061M 3-way
Heating Valve



SRV061T 3-way 4-port
Heating Valve



SRV051A
Radiator Valve



SRV051B
Radiator Valve



SRT051C Thermostatic
Radiator Controller

Others

Sinro also provides other controls for different applications in HVAC system.



LK01B
Flow Switch
IP54



LK01A
Flow Switch
IP64/IP67



S20
Single Jet Water Meter



ACM320
320 Energy Meter



TZW526
Synchronous motor



TSP-8000
PT Temperature Sensor



TSC-8000
NTC Temperature Sensor



TP-6104-102
PT Temperature Sensor



TSP-7205-102
PT Temperature Sensor