

SPV02 SERIES FLOW BALANCING MODULATING VALVE

DESCRIPTION

SPV02 series flow balancing modulating valve is combined flow sensor and SBV characterized opening flanged ball valve, which has equal percentage flow characteristic. The sizes are from DN65 to DN150. Users can preset the flow limit under maximum Kv rating according to terminal design request even before water running. The valve will be positioned to its optimum operating position according to the signal from the actuator until the preset flow limit is reached and then the preset flow rate limit will be maintained.



SPV02 Series flow balancing modulating ball valve assures that all terminal equipment will perform as specified and HVAC system will operate under accurately and dynamically balanced conditions. Terminal equipment with SPV02 Series flow balancing modulating ball valves will not exceed design flow even after modifications or additions to the system.

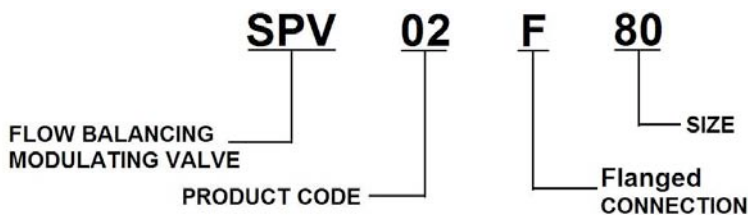
APPLICATION

1. HVAC system, boiler or heating exchange system
2. Chilled water system
3. parallel connection pump system
4. zone heating system
5. Air handlers, fan coils or radiator A/C system

MATERIALS

Impeller: glass-fiber reinforced nylon (PA66)
 Impeller stem: tungsten steel (GF20)
 Bearing: stone bearing
 Sensor housing: PPS
 Valve body: forging grey cast iron
 Ball: stainless steel (202/304)
 Valve stem: stainless steel
 O-ring: NBR
 Valve seat: PTFE + graphite

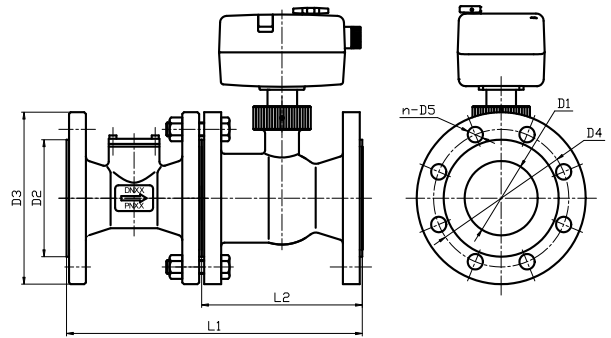
MODEL SELECTION



DIMENSIONS

SIZE	L1	L2	D1	D2	D3	D4	D5	n
DN65	350	190	82	120	185	145	18	4
DN80	350	190	82	136	200	160	18	8
DN100	410	230	100	156	220	180	18	8
DN125	444	254	125	188	250	210	18	8
DN150	457	267	154	210	285	240	22	8

Above dimensions are for PN16 valve bodies. Please see the dimensions of actuator at data sheet of SBA05 and SBA06 actuator.



SPECIFICATIONS

MODEL	SIZE & RATED PRES.		MAXIMUM FLOW SETTING (m ³ /h)	CLOSE OFF PRES. KPa	CONTROL TOLERANCE	MEDIUM	MEDIUM TEMP.
SPV02F65	DN65	PN16/25	12.8~64	600	± 5%	Water or glycol	-10°C~120°C
SPV02F80	DN80	PN16/25	20.4~102				
SPV02F100	DN100	PN16/25	32.6~163				
SPV02F125	DN125	PN16/25	52~260				
SPV02F150	DN150	PN16/25	83.2~416				

FEATURES AND BENEFITS

- Employs Flow Sensor to Limit Maximum Flow.
 - Provides flow balancing function with simple commissioning procedures as compared to pressure-type balancing valve.
 - Better balanced system with less pump power
- One-Piece Design
 - Impeller-type water flow sensor and control ball valve are integrated together as one piece for easy and economical field installation.
- Flow Display
 - Local LCD display of maximum flow rates setting for easy field adjustment and lower balancing labor.
 - Local LCD display of current operating flow rates with analog signal output for remote monitoring
- Characterized Opening
 - Establishes a flow coefficient (Cv) similar to globe valves, eliminating the need for pipe size correction tables when sizing valves
 - Provides superior rangeability and equal percentage flow characteristics.
- Low Torque
 - Facilitates the use of smaller, less expensive direct-mount rotary-motion actuators
 - Extends valve and actuator service life

INSTALLATION

1. Please do not install other equipments near KG balancing modulating valve.
2. Installation position:

The flow balancing modulating valve can be installed on water supply pipe or on return water pipe (only one balancing valve in one pipe loop). For the application in side loop of substation, please install KG balancing modulating valve on low temperature pipe for an easy adjusting. For the balancing valve on header pipe, please install it after water supply pump (pump outlet) to avoid cavitations caused by low pressure.
3. Please install KG flow balancing modulating valve on straight pipe.

Because KG balancing valve is combined with flow rate detector which request smooth flow at valve inlet and outlet, please install KG flow balancing modulating valve on straight pipe, in order to get accurate flow rate.
4. Please notice the balance change between new system and old system.
5. Please do not change the setting point randomly.
6. No need to install globe valve in loops.
7. Please reset KG flow balancing modulating valve when the number of loops is changed.