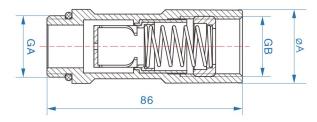


PHF-DL-L Series Dynamic Balancing Valve (Thread Type)

Dynamic balancing valve belongs to self-operated regulating valve. It can maintain flux and differential pressure invariably under the large differential pressure and flux range. It is mainly applied to commercial building central air-conditionings, high-grade residences' water and heating supply, and balanced flow pipe in chemical industry. Its good energy saving effect and high precision automatic control function is highly praised in the industry.

Model Selection Description





Order No.	Model No.	DN	Thread GA	Thread GB	øA	PN	Flow m³/h (under 0.1~0.35MPa pressure)
14074	PHF-DL-20L	DN20	G3/4	G3/4	31	PN16	1.1
14075	PHF-DL-25L	DN25	G1	G1	42.5	PN16	1.1

Structure Principle

The application of dynamic flow balance valve is mainly in the initial adjustment of the system such as the initial distribution of central air conditioning, water and heating supply. It consists of a valve shell and a valve core. The valve core is the hydraulic automatic regulating orifice plate. And the hydraulic automatic regulating orifice plate is composed of a valve liner which can be automatically adjusted by the flow area and a high precision spring. Spring can automatic control the size of the flow area on the gall of the valve based on both ends of the differential pressure automatic control valve to maintain a constant flow of water.

- The differential pressure between the front and back of the balancing valve is less than minimum starting differential pressure.

 In this case, the spring will not be compressed (the gall of the valve has a preload when assemble), the valve is in a static state, the flow area is the largest. And the water flow through the balancing valve increases with the increase of differential pressure at this time
- The differential pressure between the front and back of the balancing valve is within the working range of the calibration

At this time, the top of the gall of the valve under the action of fluid pressure begins to compress spring, the balancing valve gets into the working state. In the working pressure range, if the fluid pressure changes, the curve of excess channel on the gall of the valve will change accordingly. So in this pressure range, no matter how the pressure changes, output end of the water flow will be maintained.

• The differential pressure between the front and back of the balancing valve above the operating range:

In this state, the spring in the inner of the balancing valve will be completely compressed. The water can only flow through a circular hole on both sides of the gall. The flow area will be maintained, and the flow is proportional to the differential pressure, and increases with the increase of the differential pressure.

Product Advantages

No need for system adjustment to save time and shorten the completion date.

No need for same way pipe installation to increase the usable area and space to save the cost of installation and material.

Convenient usage. Separate installation or separate equipment usage will not effect the balance of water system.

Convenient alternation. Water system's partial redesign can't affect other area's water system design and balance.

Save power. Balanced water system makes sure that refrigeration sets(boiler,heat exchanger)and pump is in the best work condition.

Less abrasion and less waste. The product's good design makes sure that the flux will not excess. It can assure all the equipments has good durability to avoid excessive flow damages the brass pipe.

High safety. Water system's automatic balance function avoids the possibility of man-made destructive adjustment.

Installation instructions



This product can be applied to any kinds of motorised valve and ball valve. Make sure that the valves' moving direction is the same as the dynamic balancing valves' arrow. The installation is very easy. You just need to screw up the product and the valve.