



Winning® Heat Pump Freeze Protection Valve Set

Method:

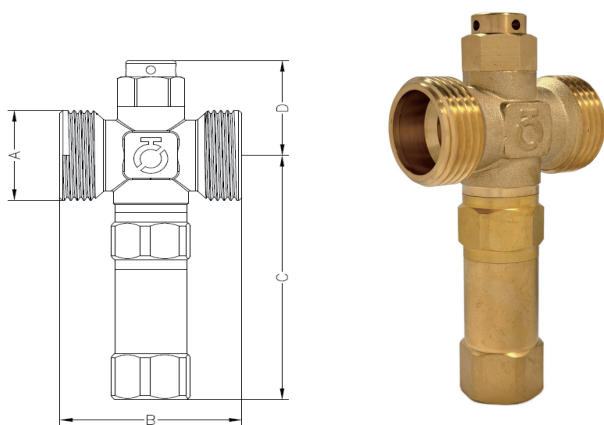
FP15GD-35-JQ series antifreeze valve set can accurately sense the ambient temperature and water temperature, intelligently drain circuit medium-water near 4 °C without electricity power and manual interfere.

Application

Working with monoblock heat pump, the antifreeze valve can automatically judge the operation state of the system. When the system is shut down or power off unexpectedly, the antifreeze mode can be opened in time: when the valve sense the temperature drops to 3°C, the valve will drain water to prevent system freezing.

With the decrease of water temperature, the antifreeze valve can automatically increase the drainage speed, effectively balance the heat loss in the system. The valve will be automatically closed when the water temperature rises to 4 °C.

Dimensions:



A	B	C	D
1"	58	90	35
1 1/4"	58	94	39
1 1/2"	58	97	42

Specifications:

Product Name	Model	Port Size	Body Material	Open/Close Temp (°C)	Working Temperature (°C)	Ambient Temperature (°C)	Maximum Pressure (MPa)	Straight Flow Rate (Gv)	Discharge Flow Rate (Gv)	Net Weight (g)
Freeze Protection Valve Set	FP15G-35 1" JQ	Male 1"	Brass	1~4	0~95	-30~65	1.0	10	1.0	296
Freeze Protection Valve Set	FP15GD-35 1 1/4" JQ	Male 1 1/4"	Brass	1~4	0~95	-30~65	1.0	16	1.0	320
Freeze Protection Valve Set	FP15GD-35 1 1/2" JQ	Male 1 1/2"	Brass	1~4	0~95	-30~65	1.0	25	1.0	340

The Installation of Antifreeze Valve

- 1) It is recommended to install antifreeze valve sets connected with both pipes (flow and return) of outdoor heat ex-changer of the heat pump(as shown in the figure).
- 2) The antifreeze valve shall be installed vertically downward, the one connected with inlet pipe should be installed in the lowest position of the outdoor system.
- 3) The antifreeze valve shall be installed outdoor, at the position that can sense the lowest temperature of the system, and shall not be installed near the heat source which could interfere with proper function.
- 4) In order to avoid the valve draining unexpectedly when the system is running, the water pipeline and antifreeze valve sets are recommended to be covered with the same insulation. When insulating, attention should be paid not block the vacuum breaker on top.
- 5) Do not make any trap connections.
- 6) It is not recommended to connect the drainage pipe behind the antifreeze valve. This may cause the failure of antifreeze due to freeze blocking the drainage pipeline.

Freeze Protection Valve Maintenance

In the event of a malfunction or maintenance, the Freeze Protection Valve (1) can be replaced. An automatic shut-off cock (2) prevents the water from draining while the cartridge is being replaced, thereby keeping the system pressurised.

When maintaining the vacuum breaker(3), remove the breaker cap, clean the internal float and sealing pad, and then reinstall them in order.

