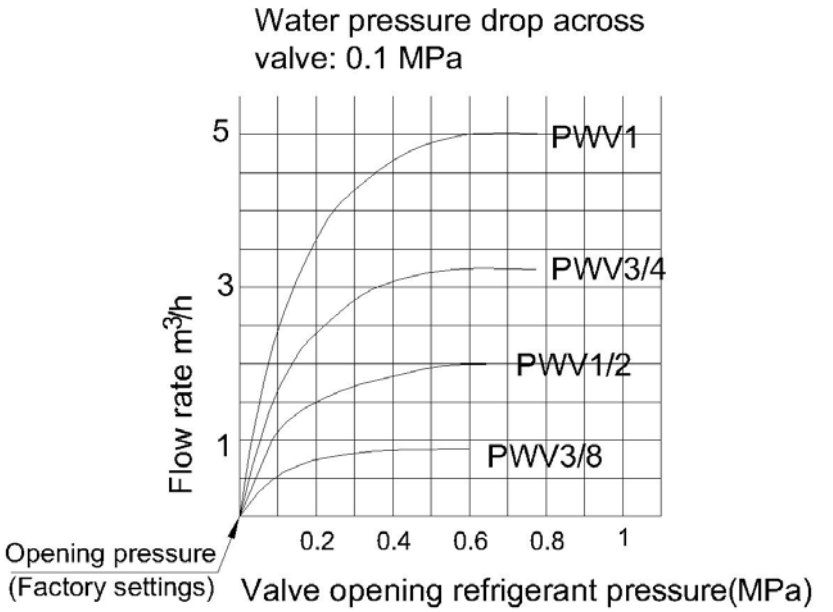
Water valves
PWV、TWV series

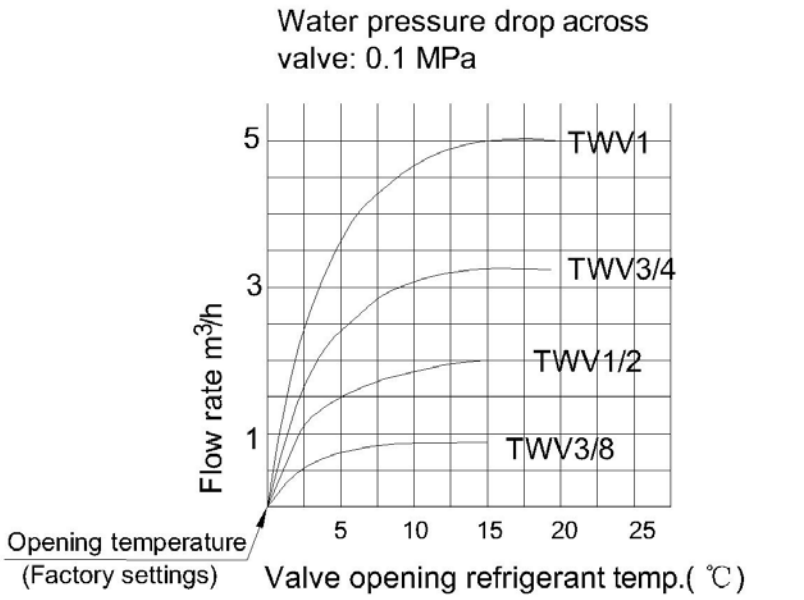
Flow rate chart

PWV series



Valve opening refrigerant pressure means difference between valve opening pressure (factory settings) and actual working pressure.

TWV series



Valve opening refrigerant temp. means difference between valve opening temperature(factory settings) and actual working temperature.

Pressure controlled water valves
PWV series

Introduction

PWV series pressure controlled water valves are usually installed on the inlet of condenser, which can regulate the flow of cooling water according to the change of condensing pressure. When condensing pressure of compressor rises, valve is turned up automatically, so more cooling water enters the condenser to accelerate the condensing of refrigerant. Reversely, when condensing pressure of compressor drops, valve is turned down automatically, so cooling water reduces and the condensing pressure is kept within certain range.

Adjust screw rod at clockwise rotation, the control pressure of the valve increases, inversely, the control pressure decreases.



Type & data

Symbol	Model	Condenser side				Liquid side			Factory setting opening pressure (MPa)	Kv value m^3/h
		Refrigerant	Adjusting range (MPa)	Max. working pressure (MPa)	Max. testing pressure (MPa)	Medium	Max. working pressure (MPa)	Max. Medium temp. (℃)		
Low pressure	PWV3/8	R134a, R22,R407C R404A/507	0.5→1.8	2	2.4	Fresh water	1	60	0.75	0.8
	PWV1/2									2.5
	PWV3/4									3.2
	PWV1									5.0
High pressure	PWV3/8G		0.7→2.3	2.6	3				2	0.8
	PWV1/2G									2.5
	PWV3/4G									3.2
	PWV1G									5.0

Kv value is the flow of water in m^3/h at a pressure drop across valve of 0.1 MPa, ρ = 1000 kg/m^3.

Connection

Model	Condenser side	Liquid side	Dimension(mm)	
			Length(L)	Height(H)
PWV3/8、PWV3/8G	1/4 flare 7/16"-20UNF nut	3/8" flare	100	170
PWV1/2、PWV1/2G	1/4 flare 7/16"-20UNF nut	G1/2	84	204
PWV3/4、PWV3/4G	1/4 flare 7/16"-20UNF nut	G3/4	84	204
PWV1、PWV1G	1/4 flare 7/16"-20UNF nut	G1	100	220

Temperature controlled water valves
TWV series

Introduction



TWV series temperature controlled water valves can be used in refrigeration, machinery, washing and chemicals, etc.

For TWV-F series, when the bulb temperature rises, the valve is closed. Please consult with Shanghai Fengshen Controls for TWV-F series.

TWV series temperature controlled water valve takes outlet temperature of cooling water as signal. Its thermal bulb is inserted into outlet pipe. When the temperature rises, the valve is opened; the temperature reduces, the valve turns down.

Type & data

Model	Adjusting range (℃)	Max. Bulb temp. (℃)	Setting opening temp. (℃)	Bulb size (mm)	Medium	Max. medium temp. (℃)	Max. working pressure (MPa)
TWV30B	0→30	50	10	Φ16×150	Fresh water	60	1
TWV65B	25→65	80	40				
TWV90B	50→90	120	60				

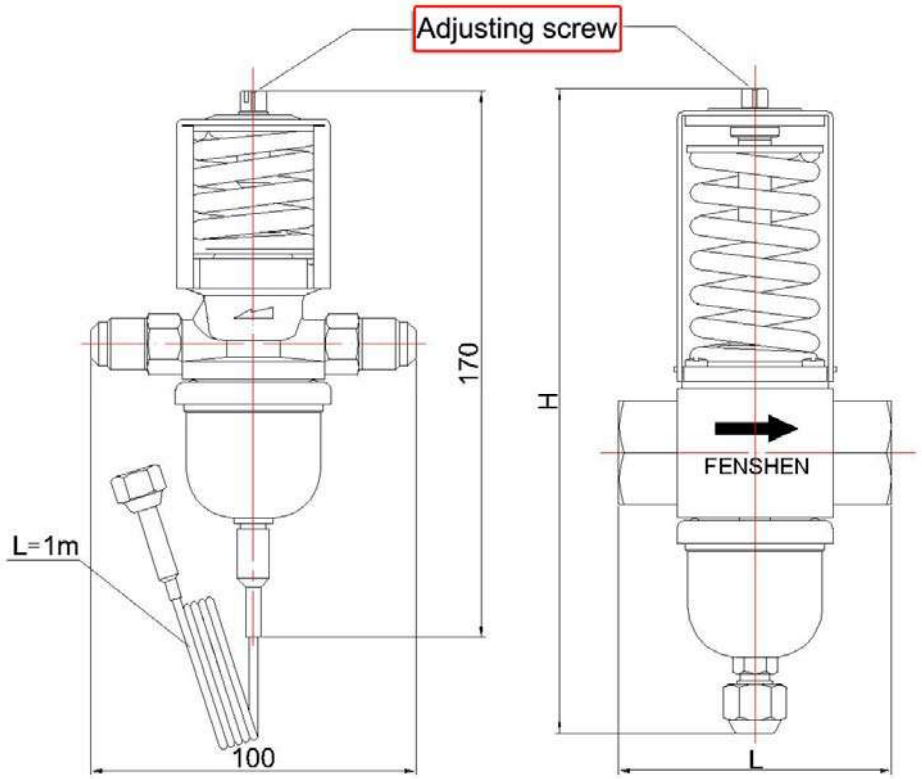
Connection

Model	Connection	Capillary tube (m)	Dimension(mm)		Kv value (m^3/h)
			Length(L)	Height(H)	
TWV30B,TWV65B,TWV90B	3/8" flare	1	100	202	0.8
TWV30B,TWV65B,TWV90B	G1/2	2	84	210	2.5
TWV30B,TWV65B,TWV90B	G3/4	2	84	210	3.2
TWV30B,TWV65B,TWV90B	G1	2	100	226	5.0

Kv value is the flow of water in m^3/h at a pressure drop across valve of 0.1 MPa, ρ = 1000 kg/m^3.

Water valves
PWV、TWV series

PWV series' dimension
（Unit: mm）



TWV series' dimension（Unit: mm）

