TEMPERATURE CONTROLLED WATER VALVES





■ Introduction

The TWV regulating valve uses the cooling water outlet temperature as its signal. Generally, the TWV valve is installed on the inlet pipeline of the cooling water, while its temperature sensor is placed in the cooling water outlet pipeline. During operation, if the temperature detected by the sensor increases, the valve opens wider; conversely, if the temperature decreases, the valve closes. If the TWV regulating valve is installed in a refrigeration system, it gradually opens as the condensing pressure increases, eventually reaching full open.

The TWV regulating valve is suitable for various applications including HVAC systems, heating pipelines, floor radiant heating, central heating systems, refrigeration systems, water supply and drainage systems, and industrial water treatment. In all of these applications, the TWV regulating valve can effectively achieve automatic adjustment and control of water flow, improving heating and cooling efficiency, and contributing to energy savings.

■ Connection

Model	Liquid side	Capillary tube (m)	Dimensions(mm)		Kv value m^3/h
			Length (L)	Height (H)	
TWV30B-3/8，TWV65B-3/8，TWV90B-3/8	3/8"flare	1	100	202	0.8
TWV30B-1/2，TWV65B-1/2，TWV90B-1/2	G1/2" Internal thread	2	84	210	2.5
TWV30B-3/4，TWV65B-3/4，TWV90B-3/4	G3/4" Internal thread		84	210	3.2
TWV30B-1，TWV65B-1，TWV90B-1	G1" Internal thread		100	226	5.0
TWV30B-1 1/4，TWV65B-1 1/4，TWV90B-1 1/4	G1 1/4" Internal thread		130	246	8.0
TWV30B-1 1/2，TWV65B-1 1/2，TWV90B-1 1/2	G1 1/2" Internal thread		130	246	10.0
TWV30B-2，TWV65B-2，TWV90B-2	G2" Internal thread		138	286	20.0

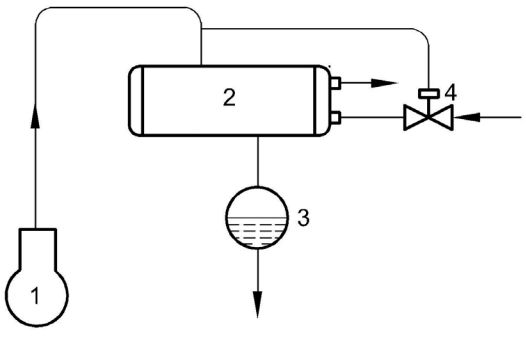
■ Type & data

Series	Adjusting range (℃)	Max. bulb temp (℃)	actory Setting opening temp (℃)	Kv value m^3/h	Medium	Max. medium temp (℃)	Max. working pressure (MPa)
TWV30B-3/8	0 ~ 30	50	10	0.8	Fresh Water, SEA WATER (-SW)	35	1
TWV30B-1/2				2.5			
TWV30B-3/4				3.2			
TWV30B-1				5.0			
TWV30B-1 1/4				8.0			
TWV30B-1 1/2				8.0			
TWV30B-2				8.0			
TWV65B-3/8	20 ~ 70	80	40	0.8		60	
TWV65B-1/2				2.5			
TWV65B-3/4				3.2			
TWV65B-1				5.0			
TWV65B-1 1/4				8.0			
TWV65B-1 1/2				10.0			
TWV65B-2				10.0			
TWV90B-3/8	40 ~ 90	120	60	0.8		90	
TWV90B-1/2				2.5			
TWV90B-3/4				3.2			
TWV90B-1				5.0			
TWV90B-1 1/4				8.0			
TWV90B-1 1/2				10.0			
TWV90B-2				10.0			

■ Installation

1. Temperature controlled water valve is usually installed on the inlet pipe of condenser, flow direction must be the same as the arrow direction marked on the valve body.
2. It is better to install a strainer on the inlet of the valve to remove the unnecessary staff in the pipe.
3. The bulb must be installed on the place where capillary could sense the temperature signal rapidly and accurately.
4. In order to avoid medium leak because of capillary broken, the following points are very impertant:

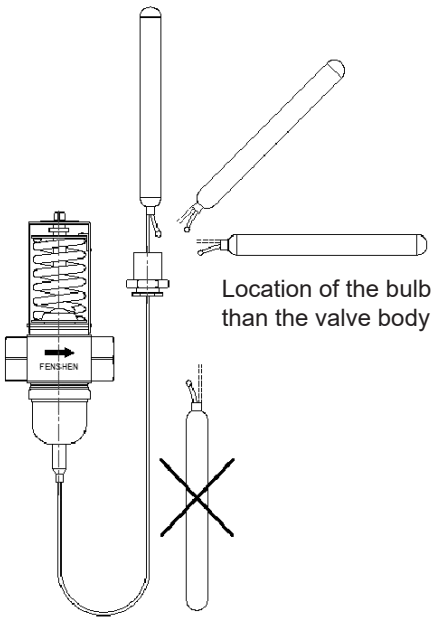
1) Temperature controlled water valve should be installed on the place where amplitude of vibration is less than 1.5 mm.
2) The rest capillary should be turned into an about Φ60 mm circuit and banded on the pipe. Be careful to avoid hanging in the air.
3) The bulb should be installed on the position higher than the water valve body.



1, Compressor 2, Condenser
3, Reservoir 4, Pressure controlled water valves

Typical installation diagram of pressure controlled water valves

■ Location of the bulb



Location of the bulb must be higher than the valve body

■ Dimensions

