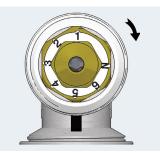
## THERMOSTATIC VALVES WITH PRESETTING



### 1. DESCRIPTION

Thermostatic valves with presetting allow distribution of the water flow to the radiator by means of a shaped body, thereby ensuring an optimum balance of the circuit. The valves are designed for thermostatic head assembly with either an iron connection or an interchangeable connection for copper, plastic and multilayer pipe - both available in 3/8" and 1/2" sizes.

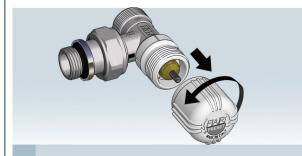
## 2. **REGULATION**



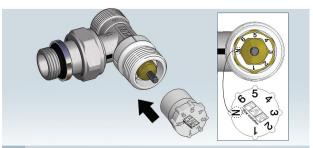
The shape of the adjustment body allows you to set a default value of flow resistance for each of the calibration positions.

The adjustment is made by removing the handle and turning the body so that the setting corresponds to the black reference notch. Settings are from 1 to 6, N indicates 'fully open'.

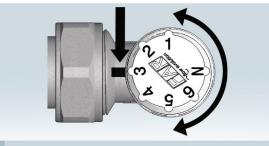
For ease of adjustment we recommend you use the plastic key provided inside the box and follow the steps below.



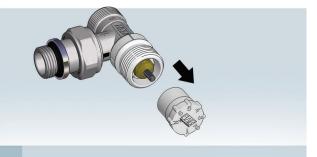
**1.** Unscrew the handle by turning counterclockwise.



Insert the plastic regulation key by matching the letterN to the one on the valve.



Turn the key clockwise or counterclockwise to position the valve at the required setting.



**4.** Remove the key and replace the handle or the thermostatic head.



3.

When sizing the system you should allow for the higher flow resistance and, through the presetting, assign appropriate flow resistance to the other circuits to obtain a balanced heating system.

In using this type of regulation, every link of the system should always have the required flow rates.



The special shape of the body regulates the passage of the fluid to the radiator.

When a thermostatic head is installed, the previous calibration will be maintained.



2.

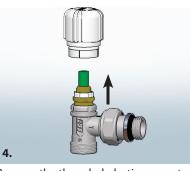
5.

8.

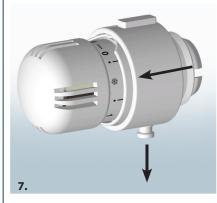
3. THERMOSTATIC HEAD



Unscrew the handle.



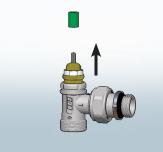
Remove the threaded plastic support.



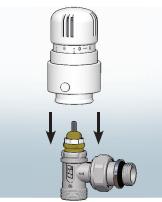
pull the locking key down.



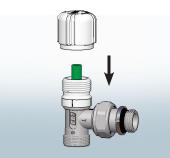
Insert the green extractor onto the steel Screw the handle. pin.



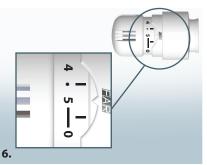
Remove the green extractor from the pin. Set the temperature selector on n°5.

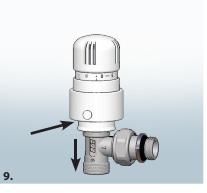


Pull the ring towards the selector and Place the head as shown in the diagram by matching the joints.



3.



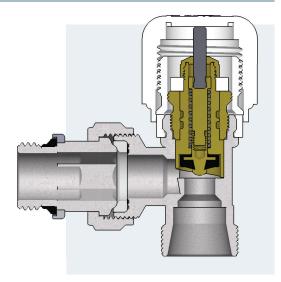


Push the ring towards the valve until the FAR logo is fully visible and press the lock button.

#### 4. **TECHNICAL FEATURES**

Valve body:	CW617N brass		
Shutter:	EPDM		
Body:	CW614N brass		
Spring:	AISI 302 steel		
Pin:	AISI 302 steel		
Handle:	ABS		
Sealing O-rings:	EPDM		
Sealing seat:	HPF		
Union body:	CW617N brass		
Tightening nut union:	CW617N brass		

Nominal pressure:	16 bar
Max. temperature:	100°C
Usable media:	water, water with glycol



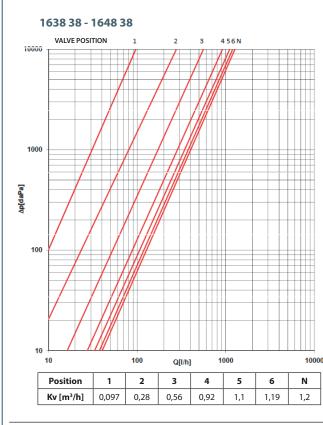
## 5 FLUID DYNAMIC FEATURES

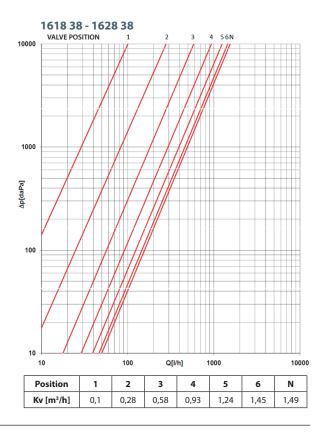
The diagrams show the values of flow resistance in the various calibration positions in manual operation.

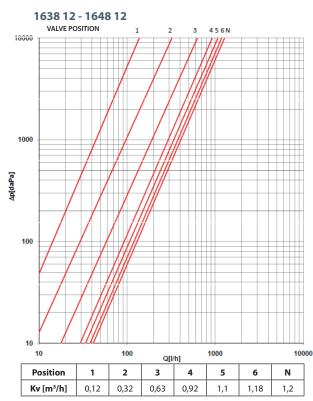
For each presetting position you can see the corresponding values of Kv, defined as the flow rate in m3/h that produces a flow resistance of 1 bar.

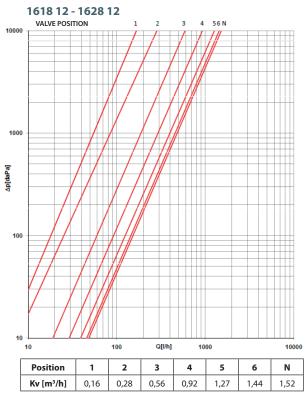
If you want to calculate the flow resistance in an analytical way, the formula to be used is as follows:  $Kv = Q / \sqrt{\Delta p}$ 

where Q is the flow rate flowing in the heating circuit and  $\Delta p$  the pressure difference.





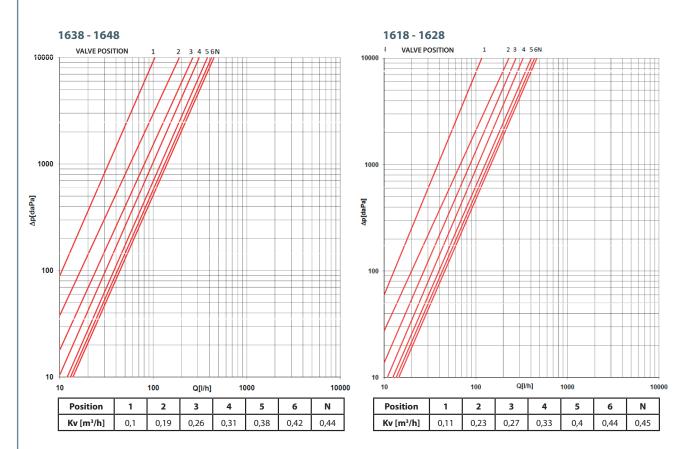




# THERMOSTATIC VALVES WITH PRESETTING

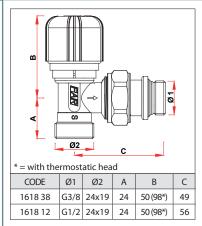
Comparing the Kv values for 3/8 "and 1/2" valves in straight and angled versions you can see that, for the initial adjusting positions, you obtain very similar Kv values, while for completely open positions the angle valves versions have a higher value of Kv.

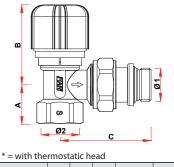
After installing the thermostatic head on the valve, the flow resistance has been recalculated with curves with proportional band to s-2k.



With installation of a thermostatic head for straight and angle versions the values are very close to each other for 3/8 "and 1/2" sizes, as represented on the same graph.

## 6 DIMENSIONAL FEATURES





= with thermostatic field					
CODE	Ø1	Ø2	Α	В	С
1628 38	G3/8	G3/8	20	50 (98*)	49
1628 12	G1/2	G1/2	24	50 (98*)	56

