



THERMOSTATIC REGULATING VALVE

20MM

CALEFFI
Hydronic Solutions



AUTOMATIC BALANCING OF HOT WATER FLOW AND RETURN SYSTEMS

FUNCTION AND FEATURES

- | | |
|---|----------------------------------|
| ■ Easy balancing of recirculating systems | ■ No commissioning required |
| ■ Dynamically balances each circuit | ■ Easy to set return temperature |
| ■ Manual bypass for disinfection | ■ Adjustable 35-65°C |
| ■ Upgradeable to automatic BMS disinfection | ■ Optional temperature gauge |

PRODUCT DETAILS

The thermostatic regulators are used for automatic balancing of the various branches of hot water recirculation circuits, so as to ensure that all parts of the network reach the required temperature, as well as prevent the growth of Legionella and limit heat losses. The recirculation circuits are usually sized according to the flow rate required for each branch, based on the allowed heat loss and the corresponding decrease in temperature along the pipe. Generally speaking, the maximum allowed temperature drop between the point of departure from the heating plant and the point of return to the latter is 5°C.

Temperature Setting

The regulator is supplied with a factory temperature setting of 55°C. The temperature is set at the desired value by turning the upper screw. The graded scale shows the temperatures to which the indicator can be set. After adjustment, screw the black protective cover all the way down to activate thermostatic operation.

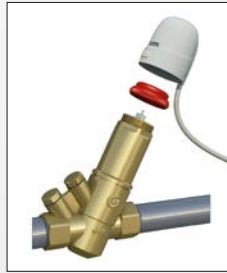
Checking Temperature

The valve body is fitted with threaded connectors, which can be used for pressure/temperature ports to check the temperature reached and the loss of head. Alternatively, an optional temperature gauge can be fitted downstream of the valve.

Bypass Mechanism

The by-pass mechanism operates manually, simply by removing the black protective cover. By installing the thermoelectric actuator it is possible to govern the mechanism automatically.

To ensure that the valve is in the open position while the system is being put into service, the actuator is supplied in a normally open (NO) position, and remains in this position until it is powered up electrically for the first time.



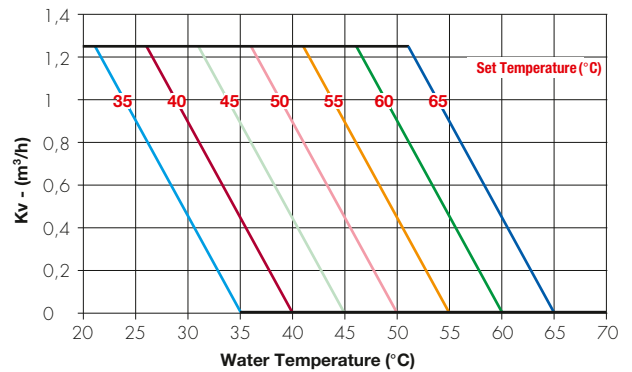
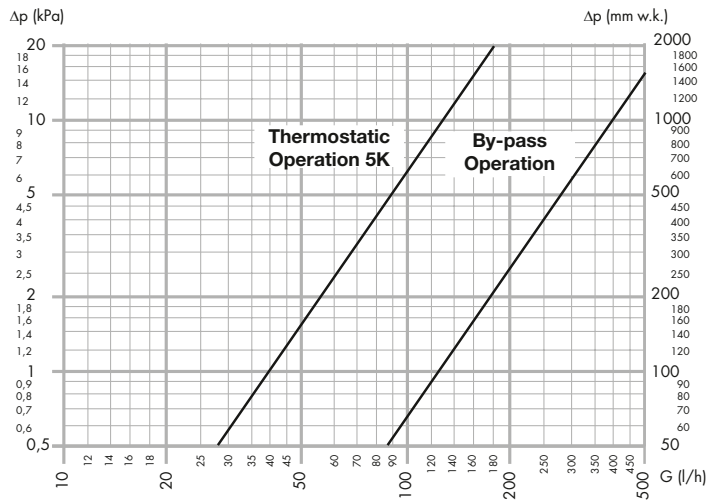
PERFORMANCE

| | |
|------------------------------|---------|
| TEMPERATURE ADJUSTMENT RANGE | 35-65°C |
| TEMPERATURE CONTROL | ± 2°C |
| COLD INLET TEMPERATURE RANGE | 5-30°C |
| MAX WORKING TEMPERATURE | 100°C |
| MAXIMUM WORKING PRESSURE | 1000kPa |
| MAX DIFFERENTIAL PRESSURE | 100kPa |

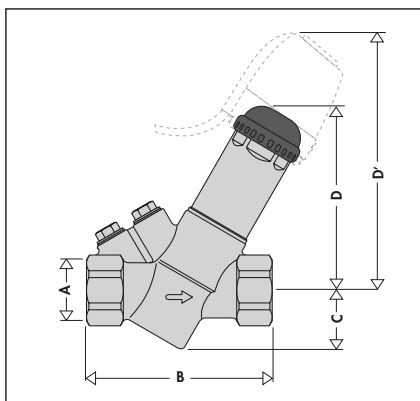
| CODE | DESCRIPTION |
|--------|-----------------------------------|
| 116050 | Thermostatic Balancing Valve 20mm |
| 116002 | Thermoelectric Actuator 230V AC |
| 116004 | Thermoelectric Actuator 24V AC |
| 657050 | Temperature Gauge Fitting |



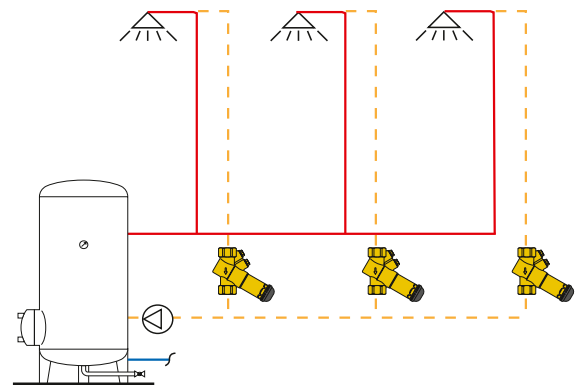
PRESSURE LOSS CHART



DIAGRAM



| | |
|--------|---------|
| CODE | 116050 |
| A | 20mm |
| B | 80 |
| C | 31 |
| D | 97 |
| D' | 132 |
| WEIGHT | 0.56 kg |



All Valve
INDUSTRIES

171013-01