

DESCRIPTION

156

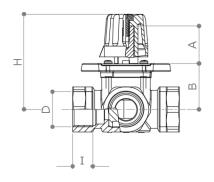
3 ways manual mixing valve F x F x F with shaped rotor for heating and cooling installations, heating plants and heat generators to control the flow temperature to systems terminals.

The mixing valve controls the flow temperature by mixing a high temperature fluid with a low temperature one. Temperature setting is carried out by the specific shaped rotor which opens or closes the inlet ways.

Circular shape rotor.

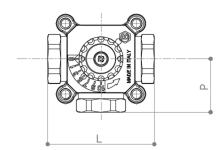
Knob made by ABS.

DIMENSIONS



| D | 1/2" | 3/4" | 1" | 1 ¼" |
|------------|------|------|-----|------|
| Н | 72 | 72 | 72 | 75 |
| I | 15 | 15 | 19 | 17 |
| Α | 28 | 28 | 28 | 28 |
| В | 35 | 35 | 35 | 37 |
| L | 80 | 80 | 82 | 88 |
| Р | 40 | 40 | 41 | 44 |
| Weight [g] | 680 | 740 | 905 | 1275 |

Dimensions in mm



MATERIALS

 Body
 CW617N (UNI EN 12165) CuZn40Pb2

 Rotor
 CW617N (UNI EN 12165) CuZn40Pb2

Numbered plateAluminiumGasketsEPDMKnobABS

TECHNICAL FEATURES

Operating temperature range 0° C (no frost) -110° C

 $\begin{array}{lll} \mbox{Nominal pressure} & \mbox{10 bar} \\ \mbox{Torque} & < 5 \mbox{ Nm} \\ \mbox{Rotation angle} & \mbox{90}^{\circ} \\ \mbox{Leakage} & < 0.1\% \end{array}$

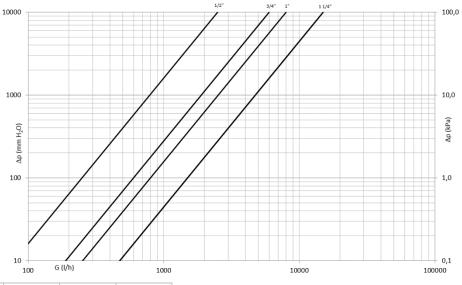
Suitable fluids Water – Water+glycol (max 50%)

RECOMMENDED WORKING TEMPERATURE/PRESSURE LIMITS

10 bar – 110°C – non shock



PRESSURE DROP DIAGRAM

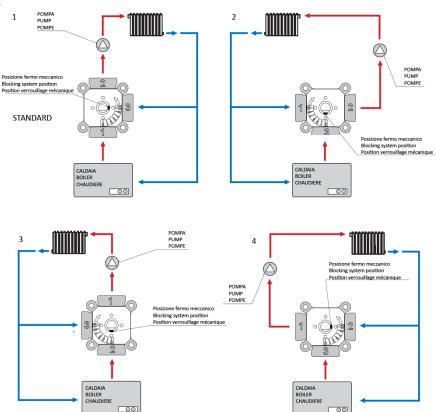


| Dim. | 1/2" | 3/4" | 1" | 1 ¼" |
|------|------|------|----|------|
| Κv | 2.5 | 6 | 8 | 15 |
| PN | 10 | 10 | 10 | 10 |

MIXING VALVE INSTALLATION

Connect the way corresponding to 10 to the low temperature inlet and that one corresponding to 0 to the high temperature inlet. If the installation requirements force to modify the factory set, follow the procedure below:

- 1. Take knob, plate and blocking system away.
- 2. Choose the proper ways to connect the flow, the high temperature inlet and the low temperature one.
- 3. Place the blocking system according to one of the four suggested configuration beside.
- 4. Mount the plate with the value 10 corresponding to the low temperature inlet; tighten fixing screws.
- 5. Insert the knob onto the valve stem and place the indicator between 0 and 10.
- 6. Tighten the screw.





MIXING VALVE CALIBRATION

To set the 3-way valve with plant in working condition (system must be equipped with a thermometer for temperature check) follow the procedure below:

- 1. Set the temperature controller (i.e. thermostatic head) at the required temperature; check of controller accuracy with the thermometer is suggested.
- 2. Set the 3-way valve on position 2.
- 3. Check if the temperature on the flow thermometer is the same of the temperature set on the controller.
 - a. If the temperature is lower, slightly move the 3-way valve towards position 3; repeat the operation until you have the required temperature on the thermometer. With this operation, we decrease the maximum flow from the secondary circuit and we increase the flow from the primary circuit.
 - b. If the temperature is the same, move slightly the 3-way valve towards position 1, until the inlet temperature decrease. With this operation, we increase the maximum flow from the secondary circuit and we decrease the flow from the primary circuit. In this way we increase the system efficiency by increasing the maximum flow on the secondary circuit.

MIXING CURVE

