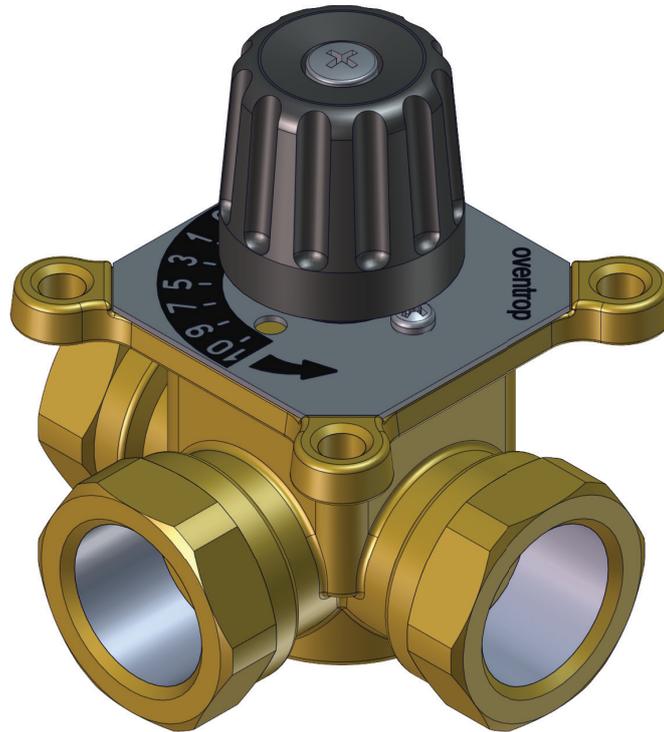




Rp $\frac{3}{4}$  F (Kv 6)

Rp1 F (Kv 12)



#### Description

Oventrop mixing valve with or without actuator are devices that allow the mixing between two fluids (e.g. warm and cold water) to get the desired temperature. They could be used in heating and refreshing installations, in heating plants, in heat generators (hang-wall boilers, wood boilers, heating pumps). The mixing between fluids is obtained through a shaped rotor that regulates the fluid's passage.

#### Technical features

**Min - max. acceptable temperature (peaks):**  
-20 °C (see suitable fluids) – 130 °C

**Min - max. working temperature:**  
0 °C (no frost) – 110 °C

**Max working pressure:** 10 bar

**Rotor's torque:** under 5 Nm

**Rotor's rotation's angle:** 90°

**Leakage:** <0,1%

**Suitable fluids:**  
water for heating installation, glycoled water (max. 50%)

**Installation connection:**  
F threaded connections UNI EN 10226-1  
M threaded connections UNI ISO 228-1

**Test:** UNI EN12266-1 §A.3

#### Materials

**Valve's body:**  
brass UNI EN 12165 CW617N

**Flanges:** brass UNI EN 12165 CW617N

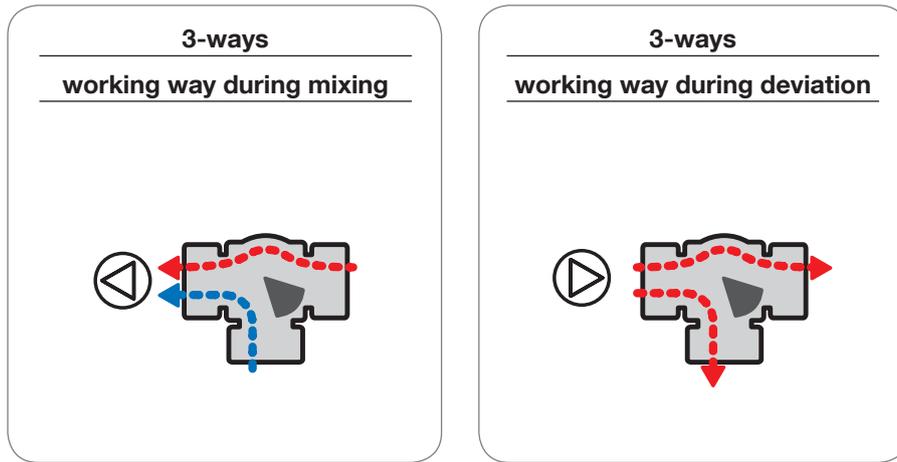
**Rotor:** brass UNI EN 12165 CW617N

**Washers:** EPDM

**Numbered plate:** aluminium

**Handle:** ABS

## Working way

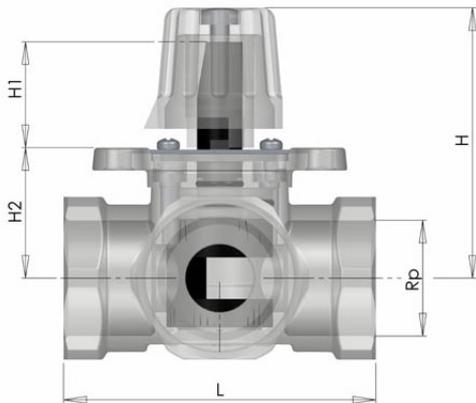


Rotary mixing valve sets the fluid temperature of supply and/or of return. This setting is obtained by mixing a warm fluid at higher temperature with a warm fluid at a lower temperature within the mixing chamber. The mixing is done by a shaped rotor which allows the closure or the opening of fluids' passage bores.

The 3-ways-valve can be used as mixing valve (by setting the installation's temperature before the valve) or as deviator's valve (by setting the installation's flow rate before the valve).

When used as mixing valve, they are normally used to set the supply fluid's temperature to consumer (e.g. weather setting) or to set the inlet boiler temperature (e.g. wood boilers or oil boilers).

## Dimensions



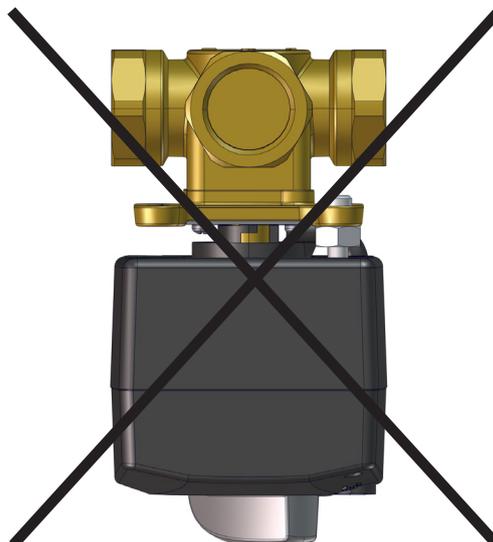
Article code	Rp	Kv	L	H	H1	H2	weight (g)
1350106	3/4" F	6	80	72	28	35	738
1350108	1" F	12	82	72	28	35	882

## Installation

The mixing valve is supplied normally with manual setting handle and closing screw. The valve, apart from being used with actuator to automatically set the temperature, can be installed according to installations' exigences.

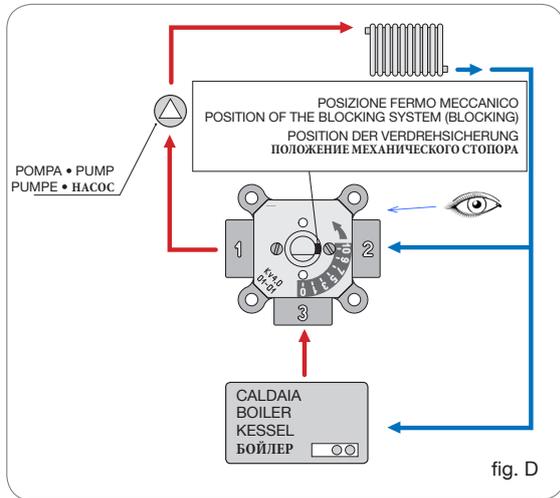
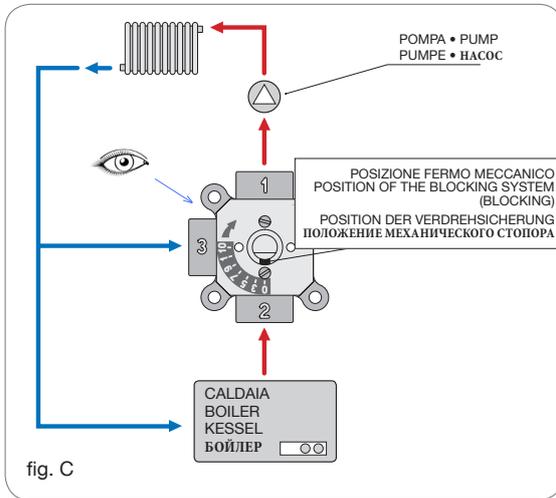
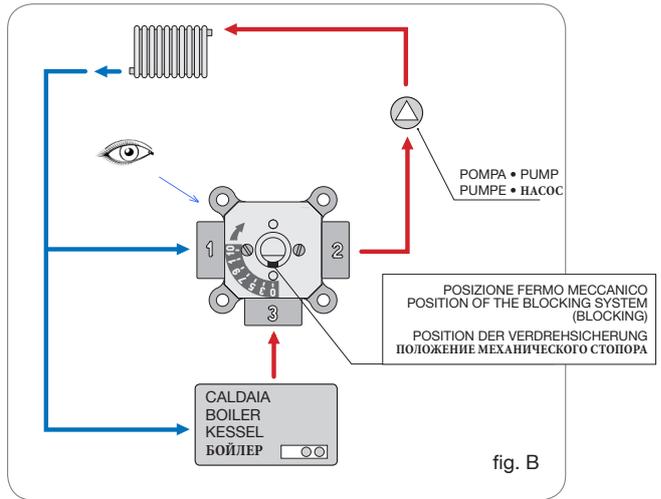
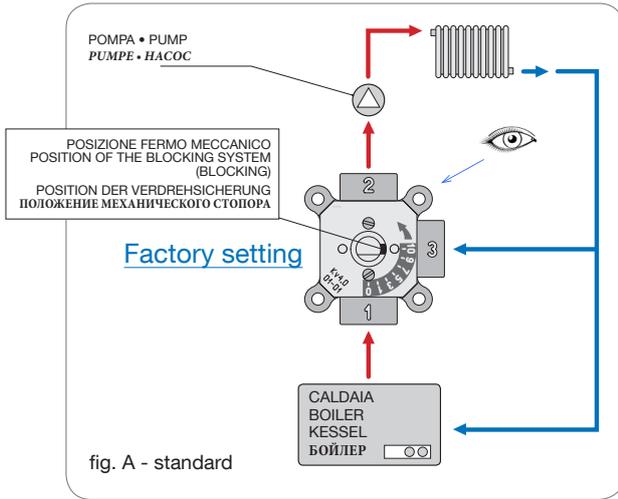
## Positioning

The actuated valve must not be installed according to the following position:



## Configuration

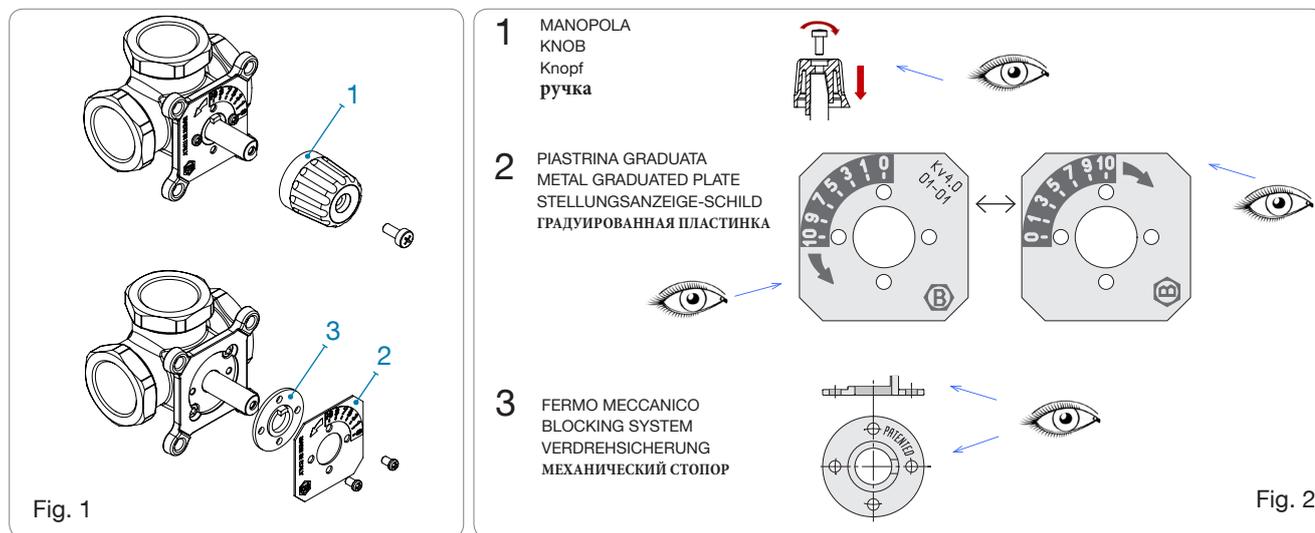
The 3-way mixing valve can be configured to satisfy different installation's needs and are preassembled in factory according to standard configuration as shown in fig. A. Other configurations are shown in fig. B, C, D.



To configure the valve **other than the standard**, it is necessary to disassemble the handle (1) (see fig. 1), the numbered plate (2) and the mechanical stop device (3). The mechanical stop device is used to block the handle at the opening and closing stroke. The numbered plate is normally positioned at no. 10 corresponding with the mixed water highest temperature (see fig. 2). Verify the figure from A to D to choose the desired installation configuration observing the correspondence between printed numbers below the valve and printed numbers in the shown schemes.

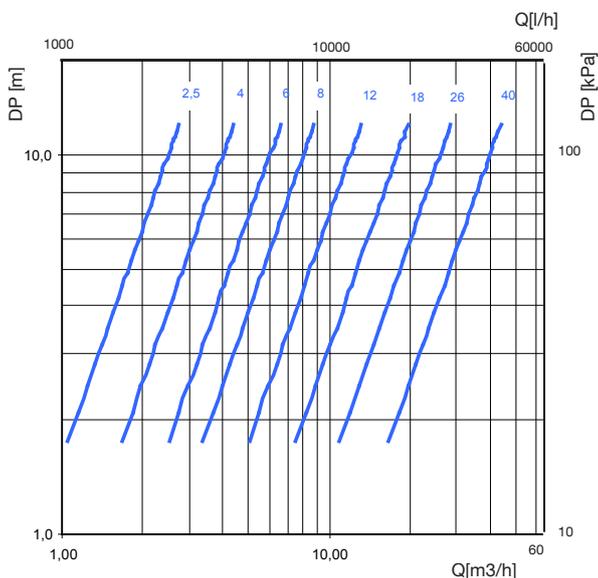
- Insert the mechanical stop (fig. 2) with the tongue position as shown in the chosen configuration of the scheme.
- Insert the numbered plate as shown in the scheme observing the arrow corresponding to no. 10 and screw the two closing screws.
- Insert the handle into the rotor as shown in fig. 2 and position the rotor until the handle indicator is in a position between 0 and 10, before screwing the handle.
- screw the stop screw.

**Note:** It is suggested to modify the valve's configuration before installing it to verify the correct working of the rotor.

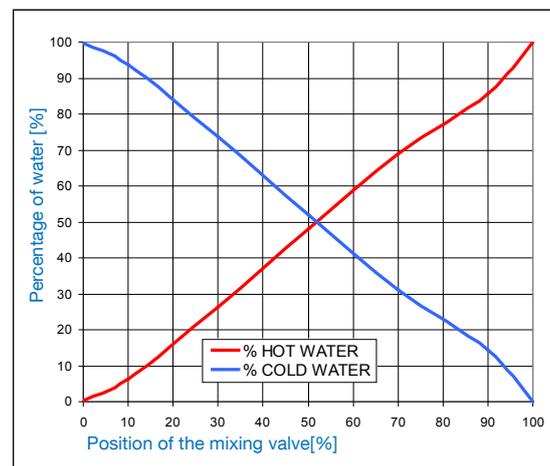


## Diagrams

### Pressure drop



### Mixing curve



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Subject to technical modifications without notice.

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