

4 WAYS THERMOSTATIC MIXING VALVES



art. 630



art. 630/1 - 630/2 - 630/3



art. W51

Description

4 ways thermostatic mixing valves are devices with mixed water on side or central way and are used to regulate the water temperature. They are used in sanitary water plants, heating circuits, in heating plants, in heat generators (hang-wall boilers, wood boilers, heat pumps) and in generic industrial water plants.

Their function is to maintain constant the mixed water temperature sent to consumer even when temperature and pressure at the hot and cold water inlets will vary. The valves can be used as 4ways valves (using the forth way to make water go back to boiler) or as three way valves (using a plug). If a pump is directly connected, the same range of valve but with a running nut on the central port can be considered (art.ref. 630/1, 630/2 and 630/3).

Articles range

- | | |
|----------------|---|
| art. 630 | 4 ways thermostatic mixing valve with mixed water on the side port |
| art. 630/1/2/3 | 4 ways thermostatic mixing valve with mixed water on the side port, running nut pump connection and flat face washer |
| art. W51 | "Octopus" 4 ways thermostatic mixing valve with mixed water on the central port, running nut pump connection and flat face washer |

Technical features

Temperature range: art. 630 = 30÷60 °C
art. W51 = 25÷58 °C

Max. working temperature: 90 °C

Accuracy: ±2 °C

Factory pre-settlement : 45 °C

Working conditions: Hot T = 70 °C
Cold T = 20 °C
Hot and cold water pressure = 0,7 bar

Max static pressure (structure): 10 bar

Flow rate factor: art. 630 = KV 3,5
art. W51 = KV 4,5

Installation's connections: **threaded connections ISO 228/1**
threaded connections UNI EN10226-1

Suitable fluids: **water for thermic installations, glycoled water (max.50%), sanitary water**

Standard: EN1111A

on request: versions with galvanic treatment

Materials

Valve's body: Brass UNI EN 1982 CB753S
Washers: EPDM
Chamber: Brass UNI EN 1982 CB753S
Spring: stainless steel AISI 302
Handle: ABS



EN

TECHNICAL DATA SHEET

rev.
A

ST00072

art. 630

art. 630/1

art. 630/2

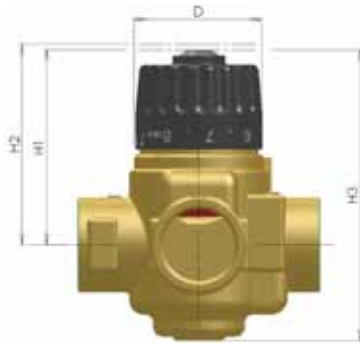
art. 630/3

art. W51

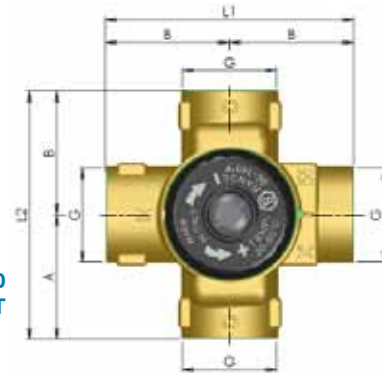
4 WAYS THERMOSTATIC MIXING VALVES

Dimensions

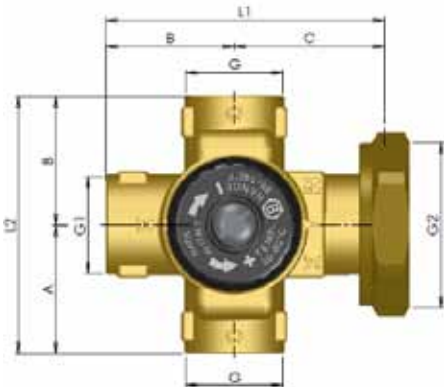
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art. 630/1/T
art. 630/2/T
art. 630/3/T



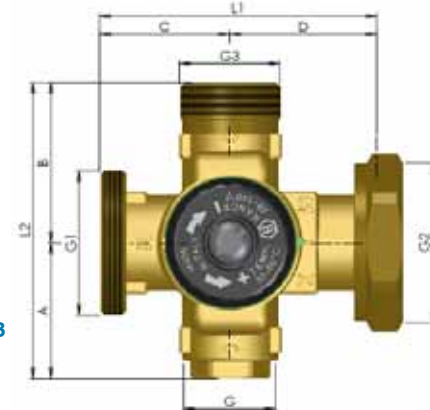
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art. 630/T



art. 630/1/T
art. 630/2/T

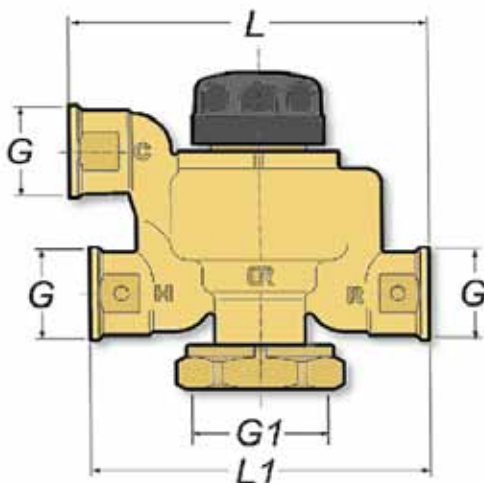


art. 630/3



Code	Plug	G	G1	G2	H1	H2	H3	D	L1	L2	A	B	C	D	Weight	No. Pcs/B	No. Pcs/C
630A20000	-	Rp 3/4"	-	-	67	71.5	98	43	82	82	41	41	-	-	830	1	10
630A200001	-	Rp 3/4"	Rp 3/4"	G 1 1/2	67	71.5	98	43	87	82	41	41	46	-	940	1	10
▶ 630A200002	-	Rp 3/4"	Rp 3/4"	G 1"	67	71.5	98	43	87	82	41	41	46	-	910	1	10
630A20000T	side plug	Rp 3/4"	-	-	67	71.5	98	43	82	90	49	41	-	-	866	1	10
630A200001T	side plug	Rp 3/4"	Rp 3/4"	G 1 1/2	67	71.5	98	43	87	90	49	41	46	-	976	1	10
▶ 630A200002T	side plug	Rp 3/4"	Rp 3/4"	G 1"	67	71.5	98	43	87	90	49	41	46	-	946	1	10
630A200003	side plug	G 1" M	G 1 1/2 M	G 1 1/2	67	71.5	98	43	89	98	45	53	43	46	1068	1	10

▶ On request - Weight (grams) - No. Pcs/B: number of pieces in box, plastic bag - No. Pcs/C: number of pieces in carton



Code	G	G1	L	L1	Weight	No. Pcs/B	No. Pcs/C
W51A20000	G 3/4"	G 1 1/2	127	120	1270	1	12

Weight (grams) - No. Pcs/B: number of pieces in box, plastic bag - No. Pcs/C: number of pieces in carton



EN

TECHNICAL DATA SHEET

rev.
A

ST00072

art. 630

art. 630/1

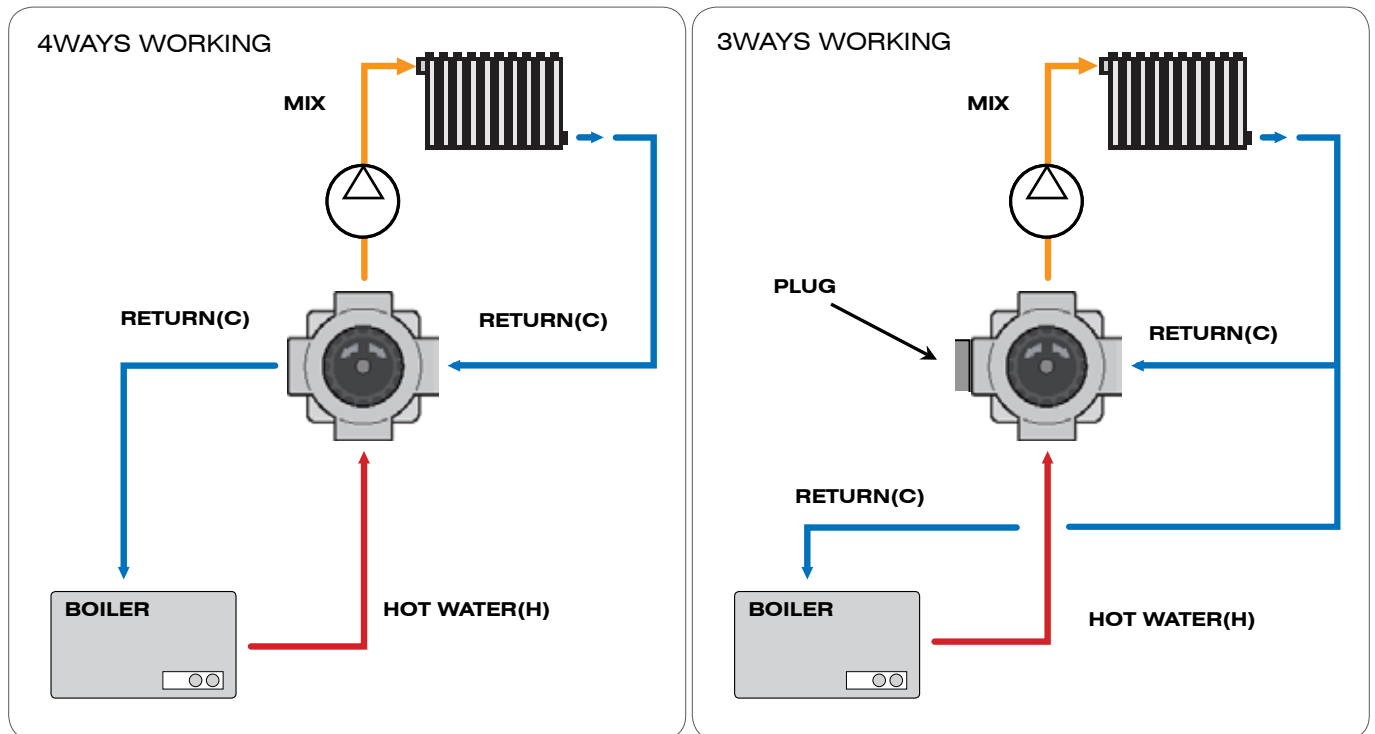
art. 630/2

art. 630/3

art. W51

4 WAYS THERMOSTATIC MIXING VALVES

Working way



Installation

It is suggested, before installing a thermostatic mixing valve, to verify working conditions of the installation, for example pressure and temperature, to guarantee that they are suitable for the thermostatic valve working range.

The installation, where the thermostatic valve will be assembled, must be washed and cleaned before the operation. It is also suggested to assemble suitable strainers at the main inlets. If the installation is not accurately cleaned, debris could influence the correct working and warranty of the product. If the valve will be used in areas with very hard water, it is suggested to install water softener before the valve.

The thermostatic mixing valve can be installed in either horizontal or vertical position.

It is important that the valve has free access for maintenance reasons.

To correctly install it please refer to the directional arrow marked with letters on the valve's body

- H(HOT): hot water inlet
- C(COLD): cold water inlet or return way (or outlet towards boiler)
- MIX: mixed water outlet

Assembling on pipes is done through thread using standard plumbing skills



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Operational instructions and temperature setting

To regularly let the valve operates follow the below instructions:

- Be sure the installation has been cleaned by washing pipes
- The temperature setting must be carried out with a calibrated temperature gauge. To set the temperature, unscrew partially the handle screw, turn the handle clock or anticlockwise untiled the desired temperature has been reached. Once the temperature has been set, block the screw again.
Pay attention: whilst setting the temperature, wait until the temperature gauge is in a steady position before proceeding.

The valve is pre-setted at 45°C. To make an easy setting please refer to scheme 1 (art.ref.630) or scheme 2 (art.ref.W51)

art. 630

Scheme 1
Min – 30 °C
1 – 34 °C
2 – 38 °C
3 – 41 °C
4 – 43 °C
5 – 45 °C
6 – 47 °C
7 – 50 °C
8 – 54 °C
Max – 60 °C

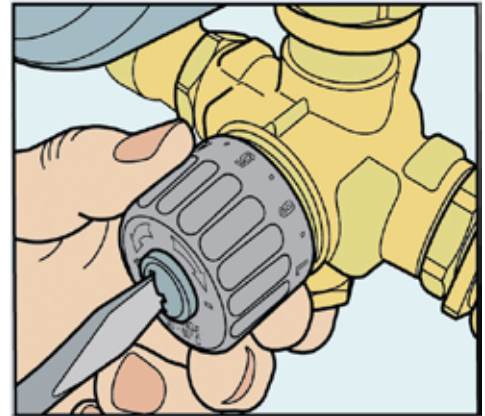
art. W51

Scheme 2
Min – 25 °C
1 – 30 °C
2 – 35 °C
3 – 40 °C
4 – 42 °C
5 – 45 °C
6 – 48 °C
7 – 52 °C
8 – 55 °C
Max – 58 °C

Maintenance

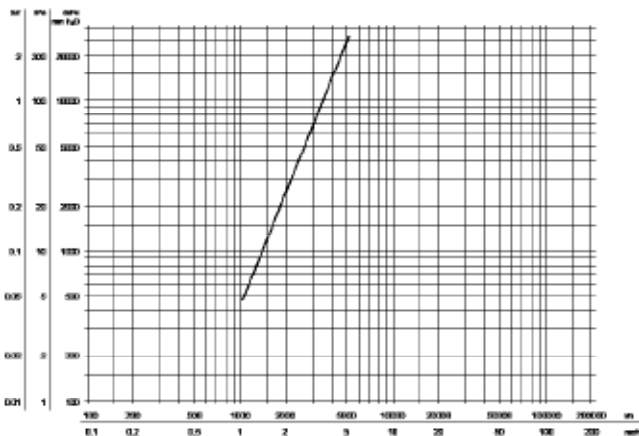
Installation maintenance and the checking of a correct working of the thermostatic mixing valve must be carried on every 12 months or more frequently if necessary. If the mixed water temperature has heavily changed from previous tests, it is suggested to check the working conditions of the installation as indicated in the **installation and operationals instructions section**.

If instructions are not respected, warranty could be no more valid.



Diagrams

art. 630



art. W51

