Technical Data Sheet

Single Pipe Thermostatic Valves

MT

07/03/2018

Function

All 4-way valves are designed so that the heating medium can flow in and out of the heating body through a single connection. These valves must be installed on the bottom connection of the heating body. 4-way thermostatic valves for single pipe systems are designed to:

- Connect the heating body to the single pipe ring tubing, which can be in copper, plastic or PEX-AL-PEX multilayer;
- Allow for room temperature setting by adjusting the inlet flow;
- Intercept the flow so as to allow for maintenance without affecting the functioning of the remaining heating bodies;

Supply an heating body with the equivalent of 35% of the system's total flow rate if coupled with a thermostatic head and with Δt=2K.

Technical data

Max. working pressure:	10 bar
Max. differential pressure:	1 bar
Max. working temperature:	120 °C
Working fluids:	Water in compliance with UNI 8065:1989

Materials

Valve body:	CW 617 N – DW UNI-EN 12165:2016
Obturator:	CW 614 N – DW UNI-EN 12164:2016
Gaskets:	Peroxide cured EPDM
Flat gasket:	FASIT
Knob:	RAL9016 white ABS

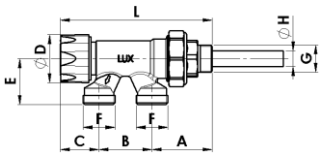
Surface treatment

Nickel-plating

Dimensional Drawings

MT 282

Single pipe valve, thermostatically or electronically controlled, with protection cap. Maximum flow rate to radiator: 35% of ring flow (Δt=2K).
Copper and plastic pipe W24x19”

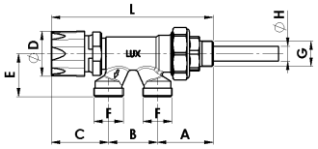


Code	Size	A	B	C	D	E
68010021	DN15 1/2	46	40	30	37	35
68010027	DN20 3/4	46	40	30	37	35

Code	Size	F	G	H	L	M
68010021	DN15 1/2	W24x19	G1/2	12	115	-
68010027	DN20 3/4	W24x19	G3/4	16	115	-

MT 2582

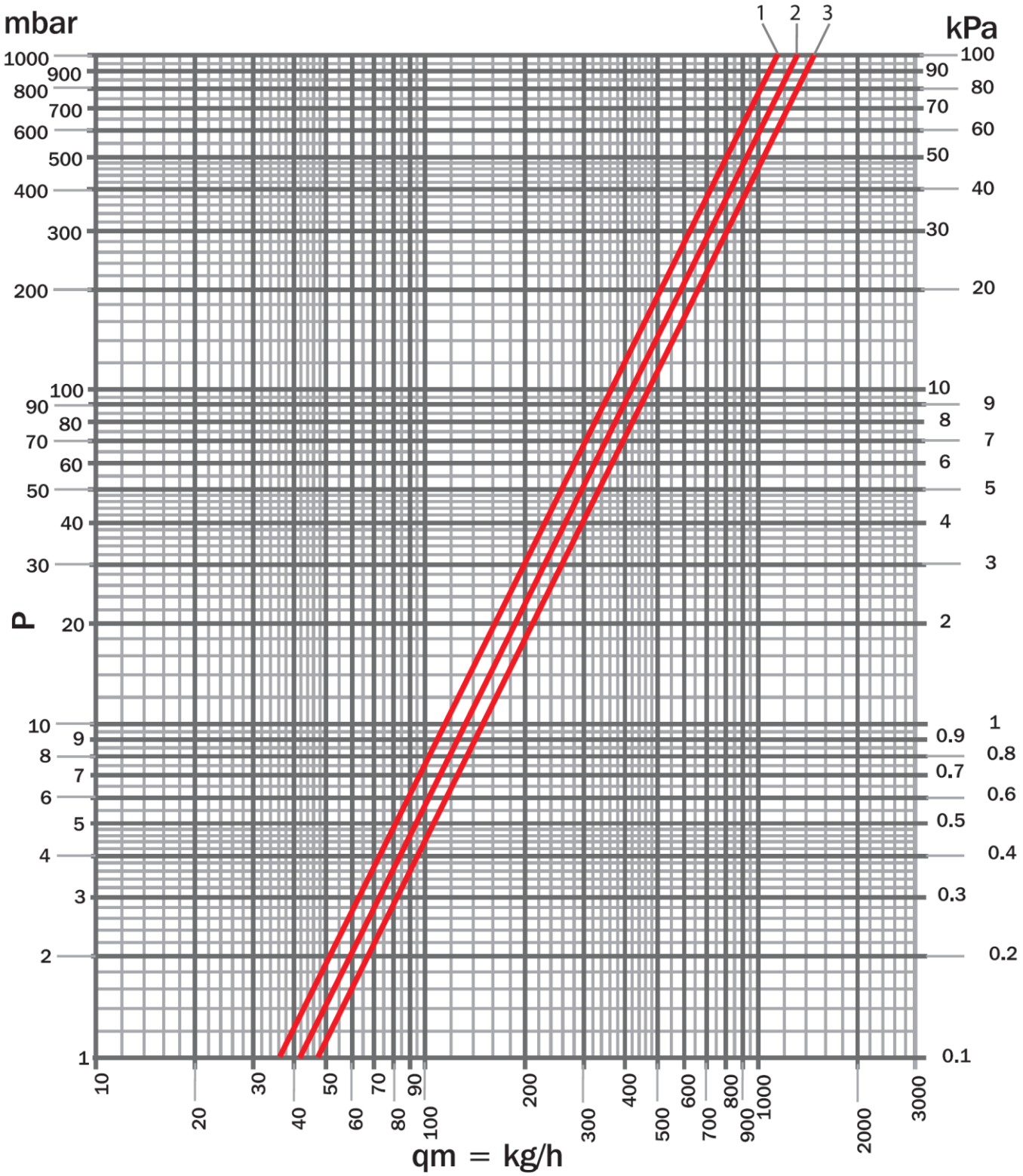
Single pipe valve, thermostatically or electronically controlled, with manual control knob. Maximum flow rate to radiator: 35% of ring flow (Δt=2K).
Copper and plastic pipe W24x19”



Code	Size	A	B	C	D	E
68010121	DN15 1/2	46	40	47	35	35
68010127	DN20 3/4	46	40	47	35	35

Code	Size	F	G	H	L	M
68010121	DN15 1/2	W24x19	G1/2	12	133	-
68010127	DN20 3/4	W24x19	G3/4	16	133	-

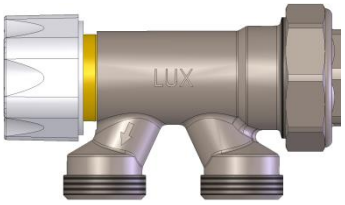
Hydraulic Characteristics



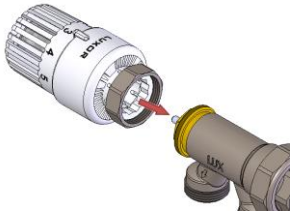
Curve	Kv	RA %	POSITION	Items
1	**1.15**	**0**	**CLOSED**	MT 282 1/2; MT 282 3/4; MT 2582 1/2; MT 2582 3/4
2	**1.30**	**100**	**ALL OPEN**	MT 282 1/2; MT 2582 1/2
3	**1.45**	**100**	**ALL OPEN**	MT 282 3/4; MT 2582 3/4

WORKING INSTRUCTIONS

- The valve may be adjusted by using the ABS knob. Turn clockwise to reduce the flow rate or close the valve. Turn anti-clockwise to increase the flow rate.
- **WARNING:** Once the system has been leak tested, please relieve the pressure. A differential pressure over 1 bar between the inlet and the outlet of the valve may cause the sealing O-ring to be expelled.



The valves must be connected to the system observing the direction indicated by the arrows on the body. In this way, the valves can heat up heating bodies with up to 7-8 elements. Should the flow direction not be respected or should the heating body be composed of more than 8 elements, a M 525 extension must be installed. The extension must then be cut so that the other end is located 10 cm far from the edge of the heating body.



How to install the thermostatic head:

- Remove the protection cap or the manual knob.
- Set the thermostaic head to the maximum value in order to facilitate di installation and screw it onto the valve.
- Set the head to the desired value.

Thermostatic heads must be installed away from the heat streams surrounding the heating body (fig. 1) and direct sunlight (fig. 2). Do not install thermostatic heads under shelves (fig. 3), in a recess (fig. 4) or behind curtains (fig. 5). These kinds of installation are not proper, as they may cause the head to measure temperature values which do not coincide with the actual room temperature.
In order for the system to function properly, it is advisable to install a pressure relief valve between the inlet and the outlet. To avoid excessive noise it is recommended not to use thermostatic valves with ΔP value above 0,2-0,25 bar.

Item Specifications

MT 282

Horizontal thermostatic single pipe valve. Maximum flow rate to radiator: 35% of ring flow with ∆t=2K. Connection for copper, plastic and multilayer pipe, with W24x19 thread, connection to heating body G 1/2 (68010021) and G 3/4 (68010027). AISI316 stainless steel control stem with double O-ring, tightness of the screw guaranteed by a peroxide cured EPDM O-ring. Possibility to replace the O-rings on the control stem without draining the system. Press forged CW617 N UNI-EN 12165-2016 brass valve body with nickel-plated finish and RAL9016 white ABS cap. Max. working temperature 120 °C, max. pressure 10 bar, differential pressure 1 bar.

MT 2582

Horizontal thermostatic single pipe valve. Maximum flow rate to radiator: 35% of ring flow with ∆t=2K. Connection for copper, plastic and multilayer pipe, with W24x19 thread, connection to heating body G 1/2 (68010121) and G 3/4 (68010127). AISI316 stainless steel control stem with double O-ring, tightness of the screw guaranteed by a peroxide cured EPDM O-ring. Possibility to replace the O-rings on the control stem without draining the system. Press forged CW617 N UNI-EN 12165-2016 brass valve body with nickel-plated finish and RAL9016 white ABS knob. Max. working temperature 120 °C, max. pressure 10 bar, differential pressure 1 bar.

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