



DYNAMIC THERMOSTATIC RADIATOR VALVE DYNAMICAL®

CALEFFI
Hydronic Solutions



Heating

Engineered components for modern systems









PCT
INTERNATIONAL
APPLICATION
PENDING

FUNCTION AND FEATURES

- They keep the flow rate through the radiator at a constant value, regardless of the working conditions of the rest of the system.
- The device is combined by a differential pressure regulator and a flow rate pre-setting device.
- Coupled to a thermostatic control head, the device modulates the flow rate according to the room temperature.
- The stabilising action of the Δp regulator allows the thermostatic valves to constantly work with a proper authority and low Δp values.
- Make easy and possible the renovation of existing two-pipe systems with thermostatic valves.
- Benefits of thermal comfort and energy saving, typical of thermostatic regulations, can be now obtained also in systems previously excluded.

PRODUCT RANGE

	CODE	CONN..	PIPE CONN.	TIPOLOGIA
	230302	3/8"	-	angled for steel pipe
	230402	1/2"	-	
	230500	3/4" (*)	-	
	231302	3/8"	-	straight for steel pipe
	231402	1/2"	-	
	231500	3/4" (*)	-	
	232302	3/8"	23 p. 1,5	angled for copper pipe
	232402	1/2"	23 p. 1,5	
	233302	3/8"	23 p. 1,5	straight for copper pipe
	233402	1/2"	23 p. 1,5	
	234302	3/8"		reverse for steel pipe
	234402	1/2"		
	237302	3/8"	23 p. 1,5	reverse for copper, single and multilayer pipes
	237402	1/2"	23 p. 1,5	

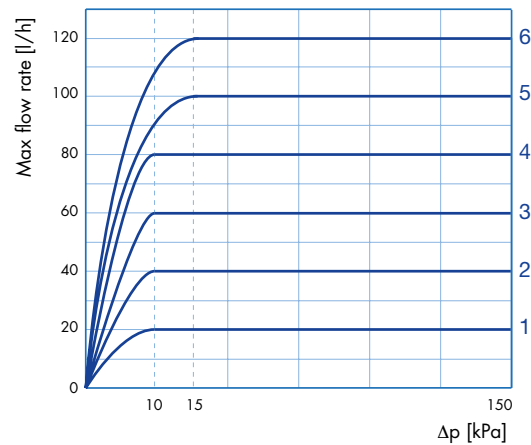
(*) without rubber seal

SETTING

The Δp regulator keeps constant the working pressure difference of both the pre-setting valve and the simple thermostatic valve.

As a consequence, the setting position of the DYNAMICAL® valve can be decided by using diagrams or tables similar to the one below, independently of the upstream pressures.

In order to make the device keep the flow rate constant independently of the system differential pressure conditions, it is necessary that the valve total Δp is within the minimum and the maximum value.



	1	2	3	4	5	6
Max flow rate [l/h]	20	40	60	80	100*	120*
Flow rate(2K) [l/h]	20	40	55	70	80	90

Δp min 10 kPa
* Δp min 15 kPa

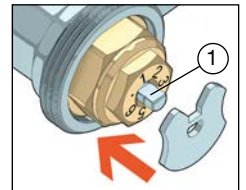
PRE-SETTING OPERATION

Remove the valve knob.

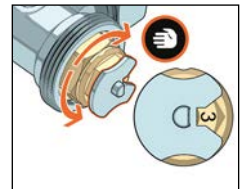


To pre-set the flow rate, place the specific shaped ring.

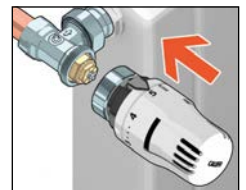
The setting position reference is determined by the orientation of the flat lateral surface (1) of the control stem.



Rotate the control stem to select the desired position.



Remove the setting nut and place the thermostatic control head on the valve.



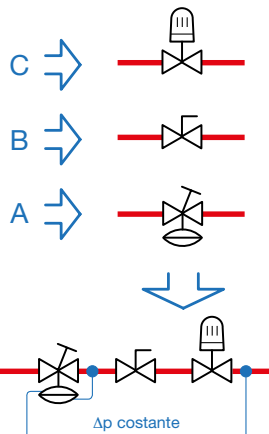
TECHNICAL SPECIFICATIONS

Body's material	brass
Max working pressure	10 bar
Temperature range	5-95°C

OPERATING PRINCIPLE

The DYNAMICAL® valve allows dynamic system balancing and a regulation of the thermal medium independent from the pressure within the radiators of two-pipe heating systems.

- The differential pressure regulator automatically cancels the effect of pressure fluctuation characterising variable flow rate systems and prevents noisy functioning.
- The flow rate pre-setting device makes it possible to directly set the maximum flow rate value, thanks to the combination with the differential pressure regulator.
- Flow rate adjustment according to the room temperature, thanks to the combination with a thermostatic, electronic or thermo-electric control head. The flow rate adjustment is optimised because it is made pressure independent.



REFERENCE DOCUMENTS

230-231-232-233-234-237 series

- Technical brochure 01330



CALEFFI
Hydronic Solutions

0360917GB

WE RESERVE THE RIGHT TO MAKE CHANGES AND IMPROVEMENTS TO THE PRODUCTS AND RELATED DATA IN THIS PUBLICATION, AT ANY TIME AND WITHOUT PRIOR NOTICE.

Caleffi S.p.A. S.R. 229 n. 25 · 28010 Fontaneto d'Agogna (NO) · Italy
Tel. +39 0322 8491 · Fax +39 0322 863723
info@caleffi.com · www.caleffi.com · © Copyright 2017 Caleffi