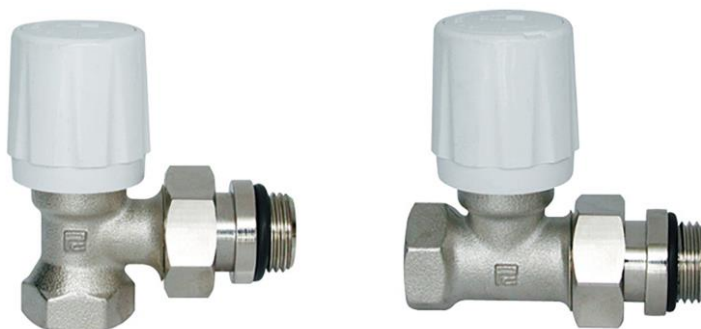


Thermostatic radiator valves with manual control

Art. 110 - 111 - 114 - 115 - 116 - 276



100% MADE IN ITALY 

Function Pintossi+C Thermostatic radiator valves with manual control are equipped with a thermostatic screw and a wheelhandle for opening and closing the valve for the correct control and removal of the radiator from the heating system. Designed and built for **low thermal inertia functioning**.

These valves can be used for the manual control of the fluid, thanks to the precise wheelhandle assembled, but can be converted in thermostatic valves with the easy substitution of the handle with a thermostatic or electrothermal head.

The sealing between the valve and the radiator is guaranteed by **PTM system** (Pintossi soft sealing), which allow a quick and safe installation, without the use of additional sealing materials, like hemp or PTFE ribbon.

They are featured by a quiet functioning, these valves can be installed in every two pipes heating systems, with vertical or horizontal distribution.

Nickel plated.

Product range	Art. 110	3/8" - 1/2" - 3/4"	Angle valve with iron pipe
	Art. 111	3/8" - 1/2" - 3/4"	Straight valve for iron pipe
	Art. 114	3/8" - 1/2"	Angle valve for copper, plastic and multilayer
	Art. 115	3/8" - 1/2"	Straight valve for copper, plastic and multilayer
	Art. 116	1/2"	Reverse valve for copper, plastic and multilayer
	Art. 276	3/4" conical seat	Straight valve for copper, plastic and multilayer

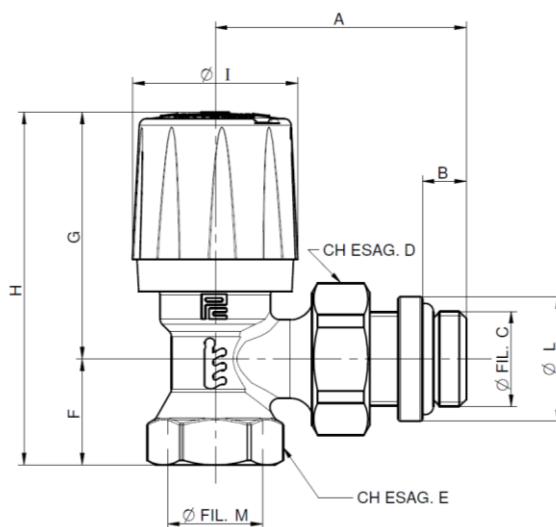
Technical specifications	Fluids:	Water or glycol solutions
	Max. glycole:	30%
	Max. working temp.:	100°C
	Max. working pressure:	10 bar
	Thermostatic head thread:	Ø 26x1,5

Materials

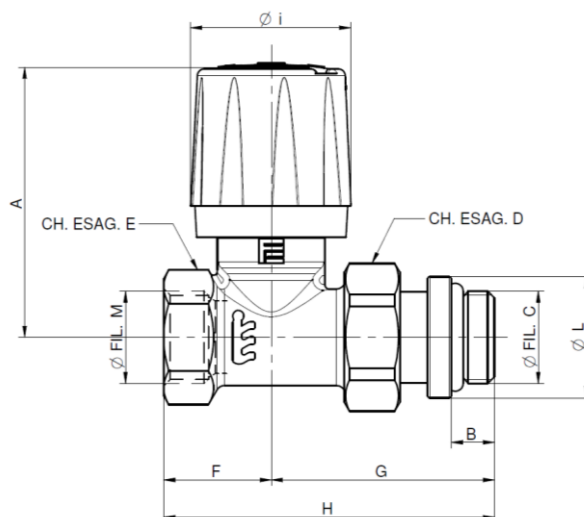
Body:	Brass CW617N
Stem:	Brass CW617N
Screw:	Brass CW617N
Tail and nut:	Brass CW617N
Gaskets:	NBR/EPDM
Wheelhandle:	ABS

Dimensions

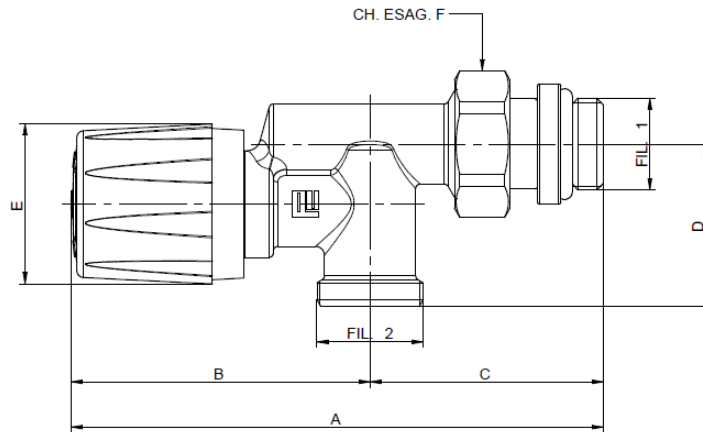
ART.	A	B	C	D	E	F	G	H	I	L	M	KM
110	50	9,5	3/8"	25	21	20	54,5	74,5	36	23	3/8"	
	54,5	9,5	1/2"	30	26	23	53,5	76,5	36	27	1/2"	
	63	10	3/4"	38	31,5	25	52,5	7,5	36	33	3/4"	
114	50	9,5	3/8"	25		20	54,5	74,5	36	23	24X19	
	54,5	9,5	1/2"	30		21	53,5	74,5	36	27	24X19	



ART.	A	B	C	D	E	F	G	H	I	L	M	KM
111	61	9,5	3/8"	25	21	22	47,5	69,5	36	23	3/8"	
	61	9,5	1/2"	30	26	24	50	74	36	36	1/2"	
	61,5	10	3/4"	38	31,5	28	60	88	36	36	3/4"	
115	61	9,5	3/8"	25		23,5	47,5	71	36	36	24X19	
	61	9,5	1/2"	30		23,5	49,5	73	36	36	24X19	
276			3/4"			23,5	23	46,5			24X19	

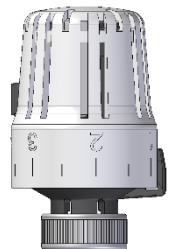


ART.	A	B	C	D	E	F
116	120	67	53	37	36	30



Assembling of the thermostatic head

- 1- Remove the protection cap. Keep the handwheel (or the protection cap) for the possibility of removing the radiator without necessarily empty the heating system
- 2- Adjust the thermostatic head to the maximum opening position.
- 3- Apply the thermostatic control on the valve by matching hexagons, manually tighten the ring nut on the body and pull it with a pipe wrench. The tightening must be easy; otherwise do not use excessive force and repeat operation 2.
- 4- Turn the handle until the desired setting and move the clamps fittings into the slots on the right and left of indicator: left clamp limits the minimum temperature and right clamp the maximum one.



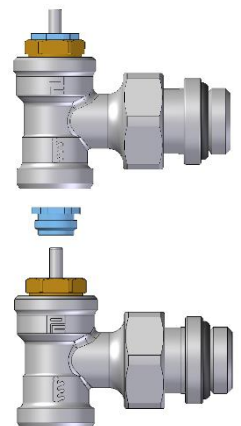
Replacing the screw ring nut

Pintossi+C thermostatic valves are equipped with a thermostatic screw with double seal mounted on the stem, which guarantees an efficient seal even after many years of use. In case of a leak on the part of the screw, and in order to fix the replacement of the complete valve and the emptying of the system, you can decide for the replacement only of the internal sealing ring nut, art.9348.

The replacement operations must be carried out by qualified personnel and only with a system completely switched off and cooled down.

The steps to follow to carry out the replacement are the following:

1. Unscrew the protection cap (for items 100-101-104-105), the manual operating wheelhandle (for items 110-111-114-115-116-276-267-278) or the head thermostatic, according to the used valve configuration;
2. Identify the internal ring nut of the screw, marked in light blue in the image alongside;
3. Unscrew the ring nut using a CH14 spanner;
4. Screw in the new ring nut paying attention to insert it properly in the seat of the screw;
5. Reposition the protection cap, the manual wheelhandle or the thermostatic valve.



Manual adjustment wheelhandle

All thermostatic valves of the series 267-270-284-285 series are supplied with a manual operating wheelhandle art.125.

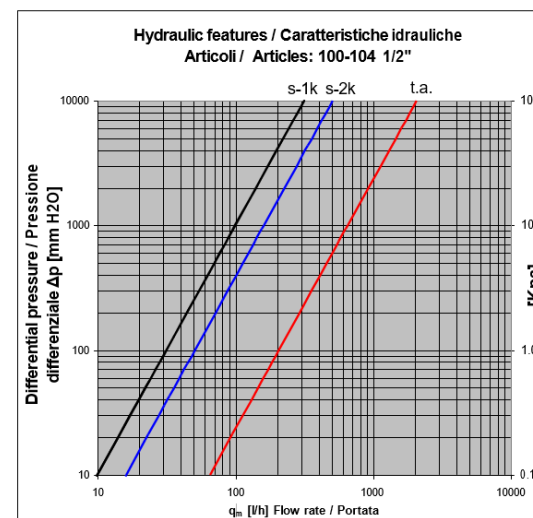
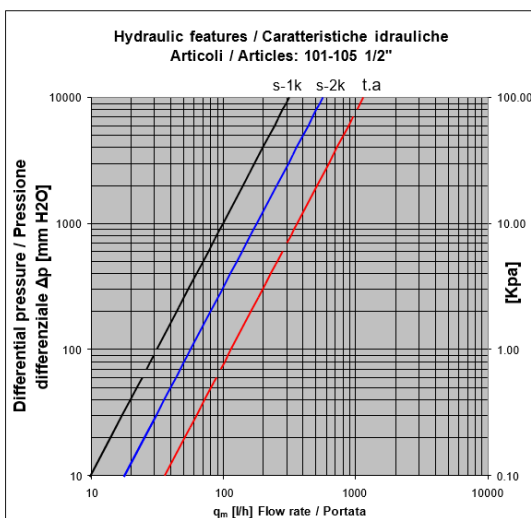
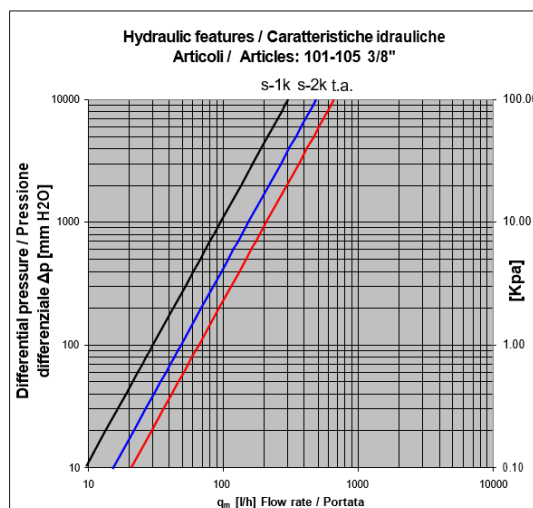
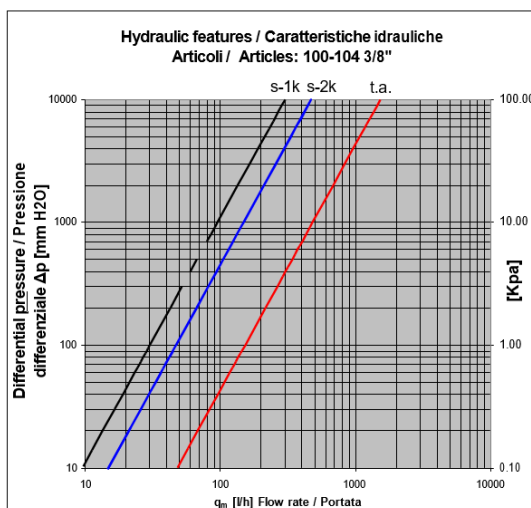
This wheelhandle is made by 3 specific components:

- 1- An **anchoring mechanism** to the valve containing the rotation pin which simplifies the micrometric regulation of the flow;
- 2- An **ergonomic wheelhandle**, for regulating the flow rate to the radiator;
- 3- A **locking plate** of the wheelhandle on the anchoring mechanism, in order to prevent accidental unthreading and tampering.



Head loss diagram

I diagrammi sottostanti indicano le perdite di carico per i vari modelli di valvole che montano la testa termostatica Pintossi+C art. 130. Sono riportate le curve con valvola tutta aperta (t.a.), banda proporzionale 1K (s-1k) e 2K (s-2k).



Summer season

During summer time is recommended to maintain the thermostatic head on position 5 in order to avoid an excessive tight from the control on the thermostatic valve stem.



Fluid characteristics

Reference standard for water treatments in heating systems is Norm UNI 8065:2019 which regulates the parameters that must be observed to avoid scale and corrosion phenomena.

In order to grant product warranty, the fluid characteristics must comply with the rules in force in the country of relevance or at least present features not less to the ones prescribed by the Norm UNI 8065:2019.

In particular, minimum standards necessary but not sufficient to control are the following:

Fluid aspect: Limpid

PH: Between 7 and 8

Iron (FE): < 0,5 mg/kg (< 0,1 mg/kg for steam)

Copper (CU): < 0,1 mg/kg (< 0,05 mg/kg for steam)

Antifreeze: Passivated Propylene Glycol

Conditioning: as indicated by the producer

In any case when using antifreeze and conditioning solutions, is required to control and verify the correct compatibility between these substances and the construction materials stated in Pintossi+C technical datasheet.