

### **DESCRIPTION**

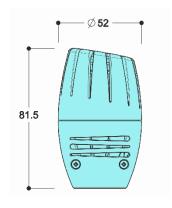
# 107LR

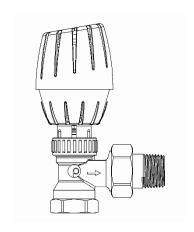
"Oval" thermostatic head with liquid sensor incorporated with temperature locking device and anti-theft device.

For all Pettinaroli thermostatic valves (M28 x 1,5).

Conform to EN 215 standard

# **DIMENSIONS**





### **MATERIALS**

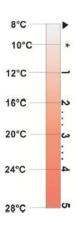
House parts	ABS	
Thermostatic sensor	Liquid	
Spring	AISI 302	
Ring nut	CW614N (DIN 50930 part.6) CuZn39Pb3	
Internal components	POM thermoplastic	
Inner locking ring	PP plastic	
Anti theft device	ABS	

### **FULL RANGE**

106CN	Wax sensor
107L	Liquid sensor
107LHN	Liquid sensor, for Heimeier connection
107LR	Liquid sensor with anti theft device
107LOD	Liquid sensor, for Danfoss connection or similar
107LD	Embedding remote liquid sensor, regulator incorporated
107LKIT	Embedding remote liquid sensor
107LCRO	107L chrome plated
108L	Liquid sensor – EN 215 n° 49 certified
109L	Liquid sensor

# STE0005 rev04 - 13/04/2022

# **TECHNICAL DATA**



The following technical details refer to the actuator mounted on 760P and 761P valves, DN15

Max. differential pressure	0.8 bar
Differential pressure influence (D)	0.25K
Liquid sensor hysteresis (C)	0.40K
Flow temperature influence (W)	0.75K
Response time (Z)	30 minutes
Nominal flow rate 760P (qmN)	155 Kg/h
Nominal flow rate 761P (qmN)	175 Kg/h
Max temperature	110°C
8°C min. setting of the temperature selector	<b>A</b>

$$\Delta P = \left[\frac{Q}{Kv}\right]^2$$

$$Q = Kv * \sqrt{\Delta P}$$

Where

**Q** is the flow rate [m<sup>3</sup>/h]

**Kv** is the flow rate factor [m³/h]

**ΔP** is the pressure drop across the valve [bar]

Angle

$$q_{mNH} = 155 \, kg/h$$
$$a = 0.92$$

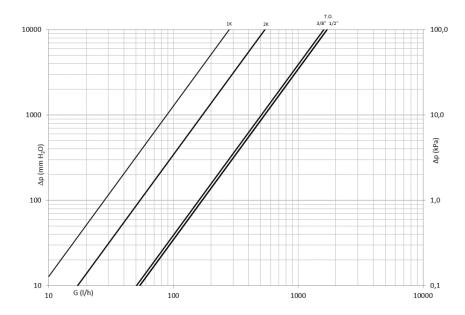
ΔΤ	Kv	
[°C]	3/8"	1/2"
1K	0.28	0.28
2K	0.54	0.54
T.O.	1.60	1.70

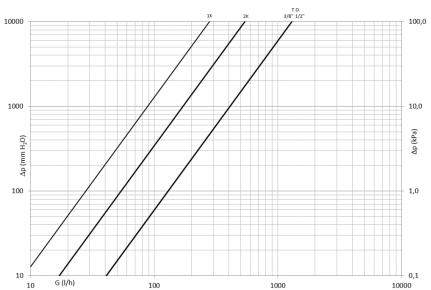
Straight

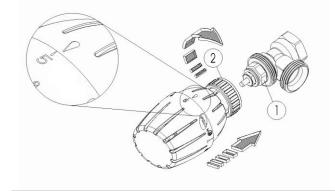
$$q_{mNH} = 175 \, kg/h$$
$$a = 0.81$$

ΔΤ	Kv	
[°C]	3/8"	1/2"
1K	0.28	0.28
2K	0.54	0.54
T.O.	1.30	1.30

T.O.: Total Open



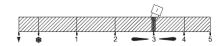


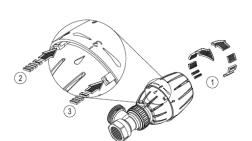


The flow direction has to be in accordance with the arrow on the valve body. The suggested thermostatic head installation is the horizontal position;

- 1. turn the head into position "5"
- insert the hexagon (1) of the headwork into the thermostatic head
- 3. screw the nut (2).

During summer time it is advisable to set the thermostatic head to completely open position "5".



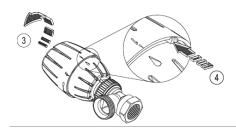


To block temperature to a prefixed value, follow the steps as shown in the figure:

- 1. turn the head into the desired position (1)
- 2. push the temperature locking devices under the handle (2 and 3)







To block temperature to a prefixed range, follow the steps as shown in the figure:

- 1. turn the head to the desired position for the maximum temperature (1)
- 2. push the first locking device under the handle (2)
- 3. turn the head to the desired position for the minimum temperature (3)
- push the second temperature locking device under the handle
   (4)



To install the anti theft device follow the steps as shown in the figure:

- 1. place the two anti theft components (1 and 2) on the head
- 2. tight the two screws



