

Temperature limiter N170M3

Temperature limiter for industrial applications

Technical data sheet



Description

The N170M3 temperature limiter automatically mixes hot and cold water. He is insensitive to scale thank to its internal design which does not present any narrow passage. Equipped with a scald protection with residual flow, the N170M3 is particularly intended for industrial installations.

- High quality regulation thanks to a high sensitivity thermostatic cartridge
- Water saving: the N170M3 allows to optimize and use the capacities of the hot water generator.
- Safety guaranteed by an overheating limiter which prevents accidental damage to the thermostatic cartridge
- Robust



N170M3

Temperature limiter for industrial applications

Reference	DN		Setting range	Min. Flow Rate (L/min)	Weight (Kg)
	mm	"			
2229111N	20	3/4"	32/82°C	11	2,2
2229112N	25	1"	32/82°C	15	2,2
2229113N	32	1"1/4	32/82°C	15	4,3
2229114N	40	1"1/2	32/82°C	19	4,1
2229115N	50	2"	32/82°C	20	4,7

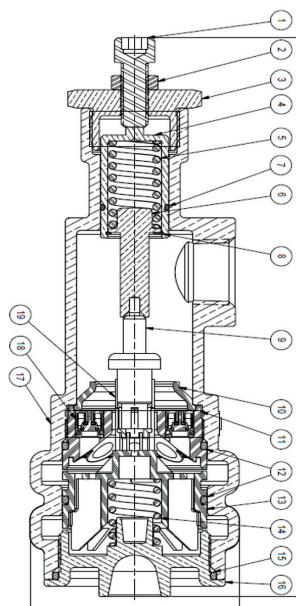
For DN50 : hot water inlet 2" and cold water inlet 1"1/2

Technical features

PN	10
Maxi. dynamic pressure	8,5 bar
Max. hot water temperature	85°C
Max. cold water temperature	3°C
Setting range	See table above
Minimum flow rate	See table above
Max. differential between inlets	1 bar

Nomenclature and materials

N°	Designation	Materials
1	Screw	Stainless steel
2	Hex jam nut	Stainless steel
3	Front cap	Brass
4	Overload housing	Brass
5	Coil spring	Stainless steel
6	Overload insert	Brass
7	O'ring	Elastomer
8	Return ring	Stainless steel
9	Wax motor	
10	Funnel booster	Plastic
11	Funnel	Plastic
12	O'ring	Elastomer
13	Plunger	Plastic
14	Coil spring	Stainless steel
15	O'ring	Elastomer
16	Cap seat	Bronze
17	Body	Bronze
18	Check assembly	Plastic
19	Motor adaptator	Plastic



Application

The N170M3 automatically mixes hot and cold water in collective or industrial installations such as :

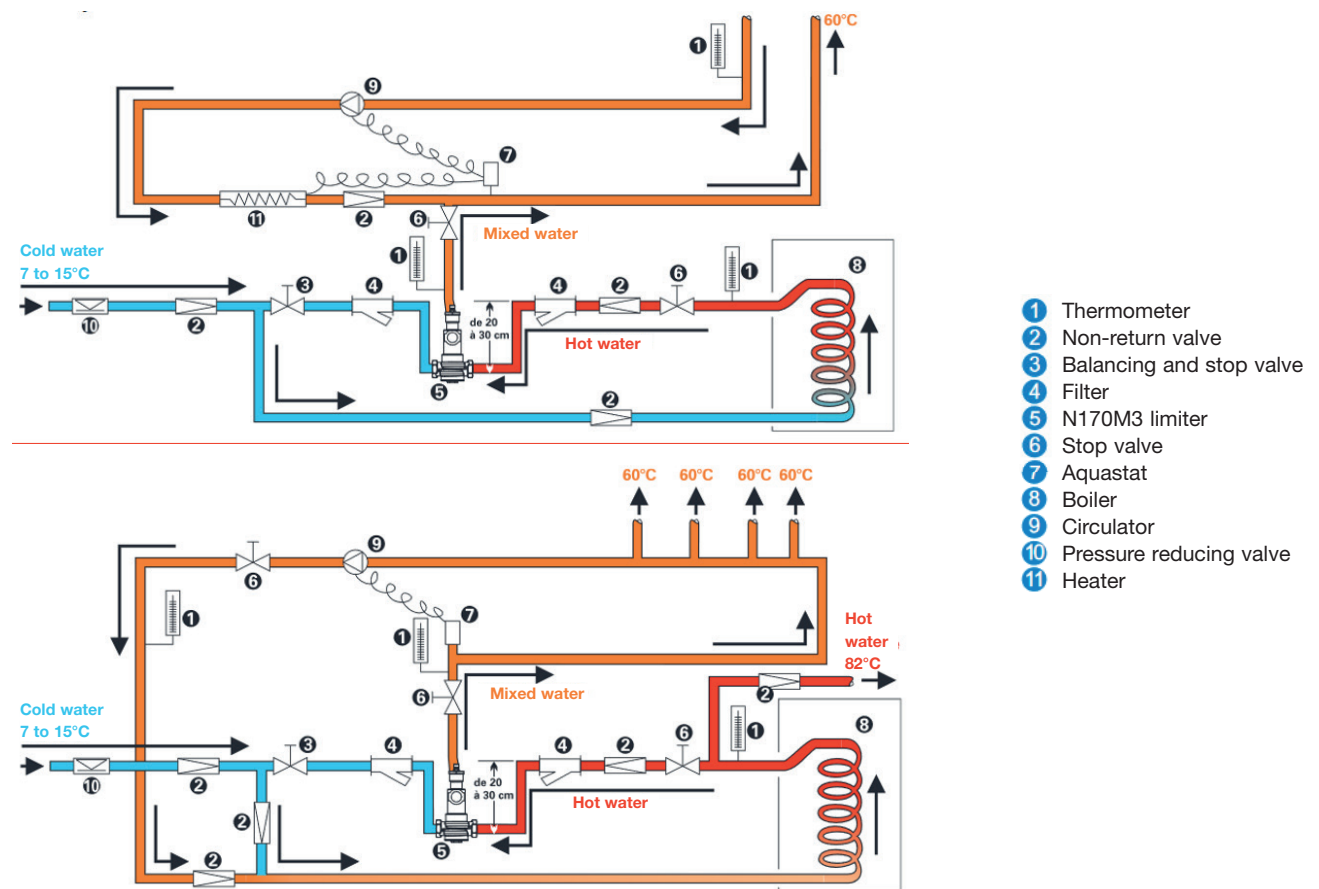
- Washing stations
- Industrial processes
- etc...

Installation

During the installation be careful with the hot and cold water inlets engraved on the body of the mixing valve.

It must be installed with:

- On the cold water inlet: a pressure reducing valve, a non-return valve, a shut-off valve and a filter,
- On the hot water inlet: a thermometer, a shut-off valve, a non-return valve and a filter
- On the mixed water outlet: a thermometer and a shut-off valve



Setting

Setting the temperature in the case of a mixed water loop:

1. Turn off the recirculation pump.
2. Open enough tap points to obtain the minimum flow rate of the N170M3 limiter.
3. Loosen the lock nut. Turn the temperature adjustment screw clockwise to decrease or counterclockwise to increase the mixed water temperature.

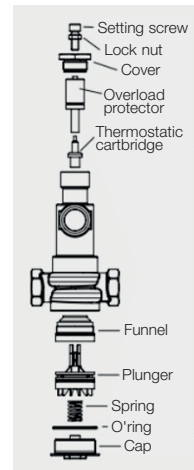
Allow sufficient time for the mixing valve to react before readjusting.

It is recommended to install a temperature control thermometer (at least 1.8m from the limiter) on the mixed water pipe. It should be checked at least once a month under normal operating conditions.

4. When the desired temperature is reached, tighten the locknut. Turn the recirculation pump on and close any open faucets.

Commissioning

- Turn on the cold water supply first to avoid any damage on the thermostat.
- To adjust the temperature of the mixed water, loosen the locknut to release the adjustment screw (located at the top of the limiter).
- Turn the screw clockwise for colder water and counterclockwise for hotter water. Mixed water can only be adjusted using a thermometer placed near the mixer on the mixed water circuit.
- The inertia of the thermometer recommends a few minutes of waiting for an accurate reading of the mixed water temperature.



Repair kits

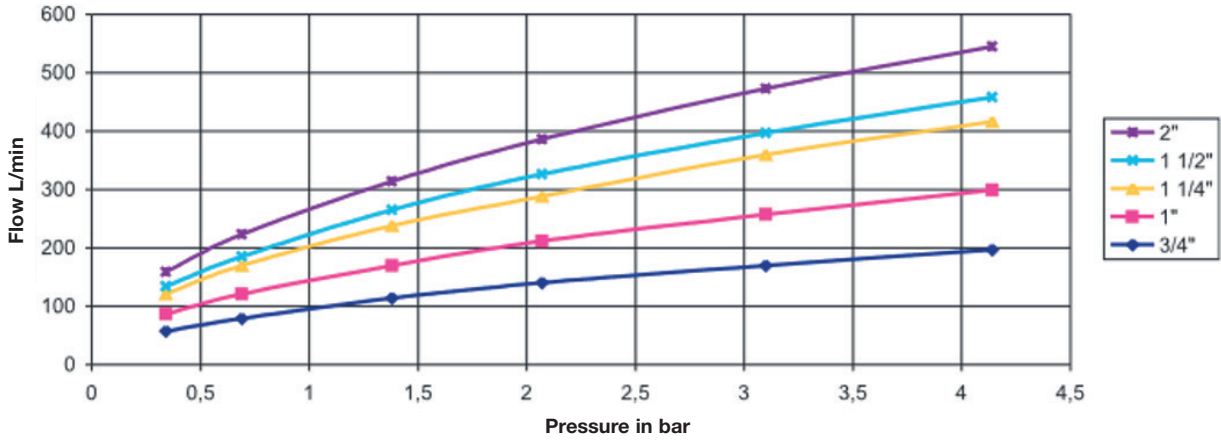
Complete kit for N170M3 limiter

Composed of setting screw, cover, thermostatic cartridge, lock-nut, plunger, spring and O'ring

Ref.	For DN
220887490	3/4"
220887490	1"
220125153	1"1/4
220125153	1"1/2
220125153	2"

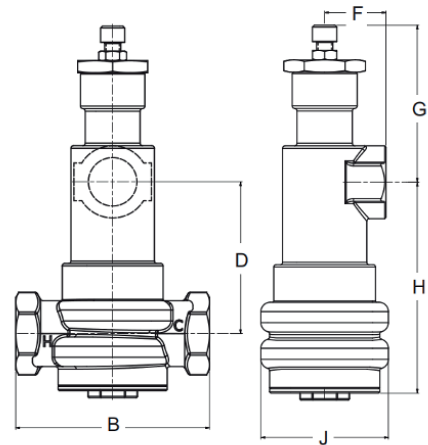
Operating

N170M3 – Headloss chart



Sizing

DN	B (mm)	D (mm)	F (mm)	G (mm)	H (mm)	J (mm)
3/4	114	89	36	92	124	75
1"	116	89	36	92	124	75
1"1/4	154	87	44	94	133	114
1"1/2	154	87	44	94	133	114
2"	164	81	52	98	137	114



The descriptions and photographs contained in this product specification sheet are supplied by way of information only and are not binding. Watts reserves the right to carry out any technical and design improvements to its products without prior notice. Warranty : All sales and contracts for sale are expressly conditioned on the buyer's assent to Watts terms and conditions found on its website at www.watts.com. Watts hereby objects to any term, different from or additional to Socla terms, contained in any buyer communication in any form, unless agreed to in a writing signed by an officer of Watts.



WATTS INDUSTRIES France

1590 avenue d'Orange • CS 10101 Sorgues 84275 VEDENE CEDEX • France
 Tél. +33 (0)4 90 33 28 28 • Fax +33 (0)4 90 33 28 39
contact@wattswater.com • www.wattswater.fr