

Thermostatic Valve

TYPE NTR207

Description

Temperature regulators self-operated, with mixing or diverting function for heating or cooling systems. A temperature regulator is composed by a valve and a thermostatic actuators. Temperature of use maxi : 200°C when ATEX zone.

Four different types :

- Mixing (Y)
- Diverting (Z)
- Balanced mixing (YE)
- Balanced diverting (ZE)



Technical characteristics

Nominal diameter : DN 15 ...100

Nominal pressure : PN16, PN25, PN40

Body material : Acier / Steel 1.0619

Stainless steel 1.4408

Tightness class : Class III , IV ,V ANS I B16104

How to order ?

- Temperature regulator NTR 207 Y, Z, YE ou / or ZE

Nominal diameter DN _____ Pression nominale / Nominal pressure PN_____ Material _____ Kvs = _____m³/h

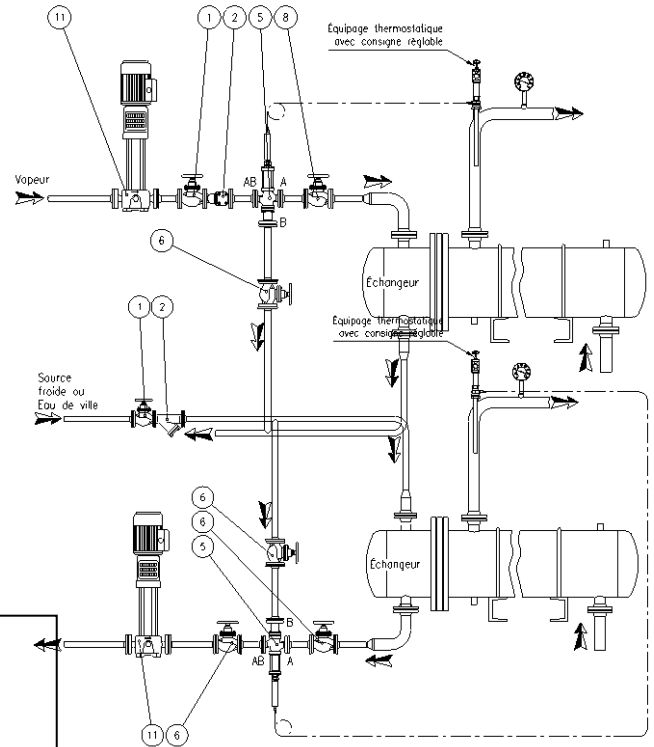
- Thermostatic actuator _____ Set point ____... ____ °C _____
- Capillary lenght ____m (2m standard) Thermo well material_____

Security

All thermostats are equipped with an excess temperature safety device (max 35°C above adjusted set point).

Setting

Set point can be adjusted with a key. The value can be readed on a scale (marking 1 to 8).



Mixing valve Y /YE

AB : Outlet
 A : normally closed
 B : Inlet normally opened closes when temperature rises.

Diverting valve Z /ZE

AB : Inlet
 A : Outlet normally opened
 B : Outlet normally closed . Opens when temperature rises.

Rep.	Désignation
1	Inlet valve
2	Strainer
3	Pump
5	Thermostatic valve
6	Valve

Mounting

Temperature regulator must be installed with the head, receiving the actuator, upside down. The complete length of the thermostatic element must be immersed in the medium.

Max differential pressure

Δp between 2 inlets : Mixing

Δp between 2 outlets : Diverting

- Non balanced valve (Y - Z)

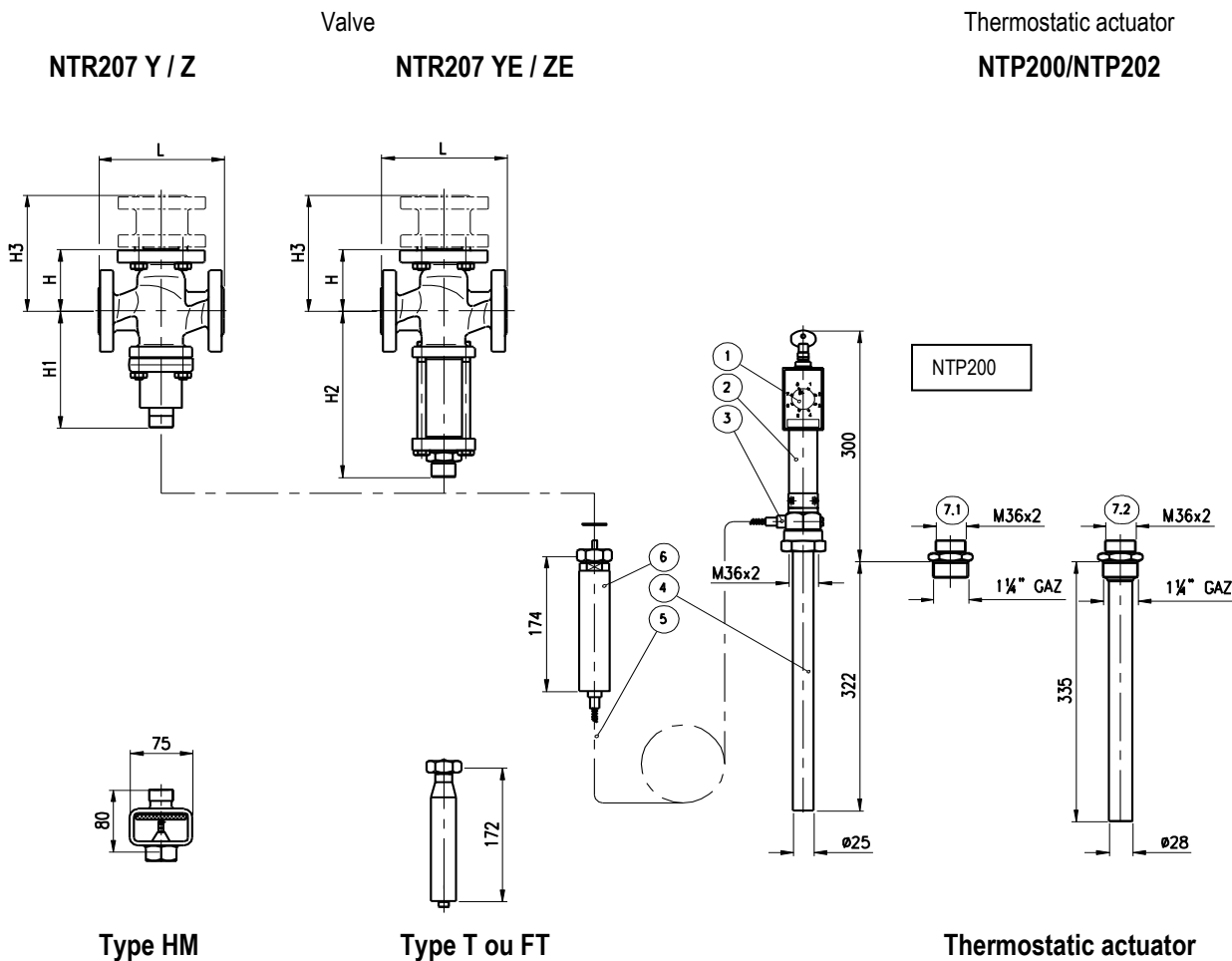
DN →		ΔP (bar)					
		15/20	25	32	40	50	65
Ø Siège	Kvs						
25	8	4.2					
32	15		2.5				
32	18			2.5			
40	26				1.4		
50	32					0.9	
65	59						0.4

- Balanced valve (YE - ZE)

DN →		ΔP (bar)						
		25	32	40	50	65	80	100
Ø Siège	Kvs							
32	15	4.8						
32	18		4.8					
40	26			9.6				
50	32				7.8			
65	59					10.2		
80	75						8.1	
100	102							3

Tightness : Classe III,IV,V ANSI B16-104 (< 0,1 % Kvs)

Dimension



Type HM

Handwheel for manual adjustment
Max pressure : 25 bar
Max temperature : 220°C

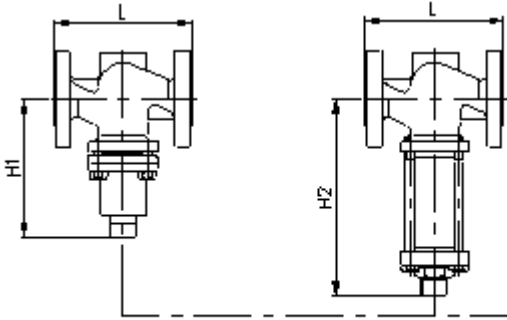
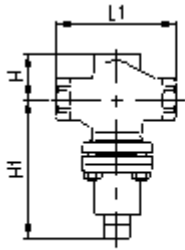
Type T ou FT

T : Extension for temperature up to 300°C
FT : Extension for temperature up to 350°C
Max pressure : 40 bar

Thermostatic actuator

1 = Scale
2 = Safety device
4 = Sensor
5 = Capillary
6 = Actuator
7.1 = Double nipple
7.2 = Thermo well

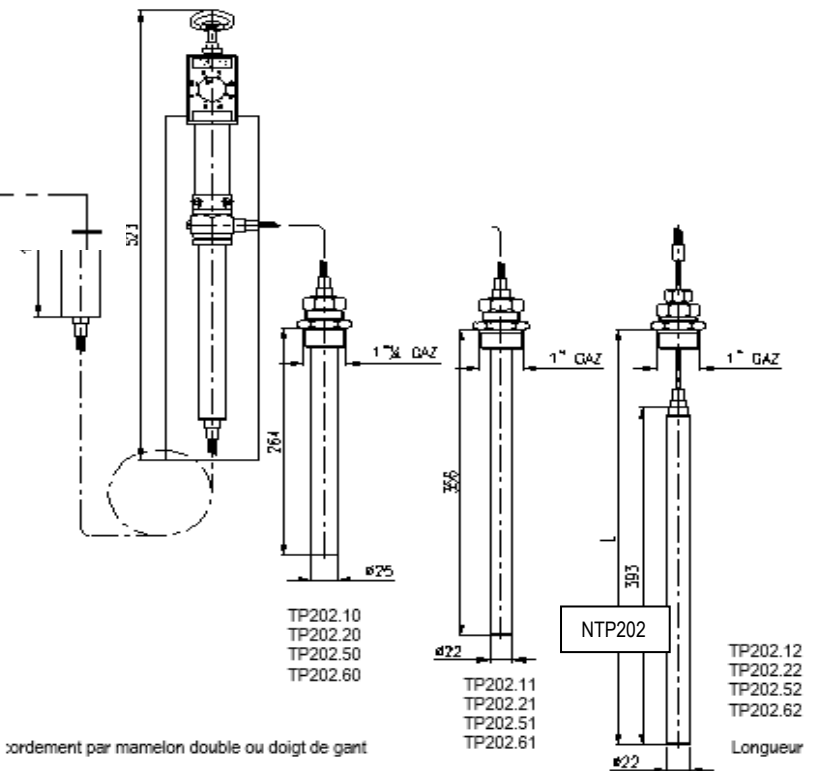
Dimension



The set point scale is graduated from 1 to 6 for the following ranges :

Consignes
0° to 70°C
30 to 100°C
50 to 120°C
80 to 150°C
100 to 170°C
130 to 200°C*

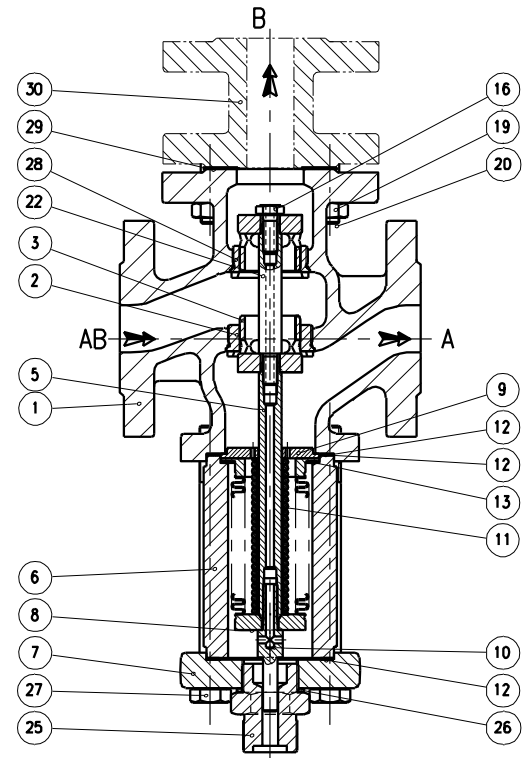
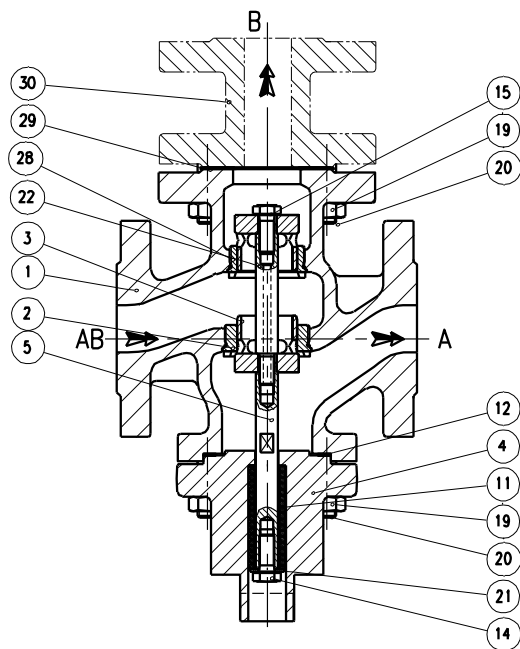
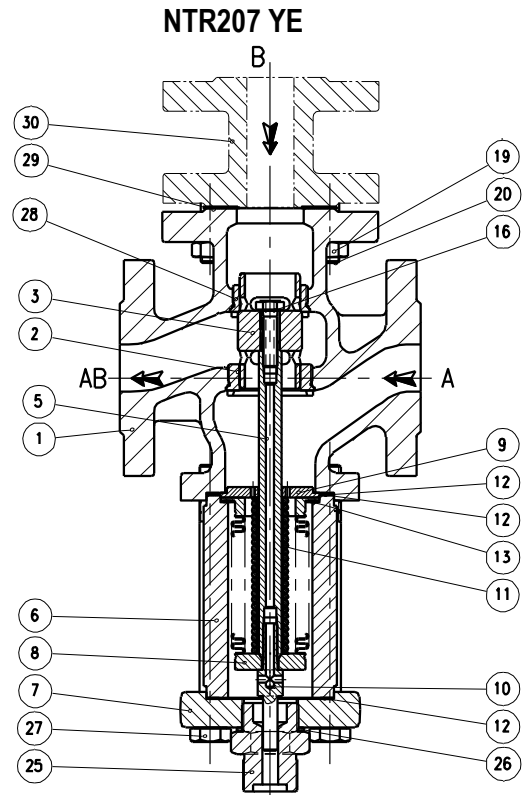
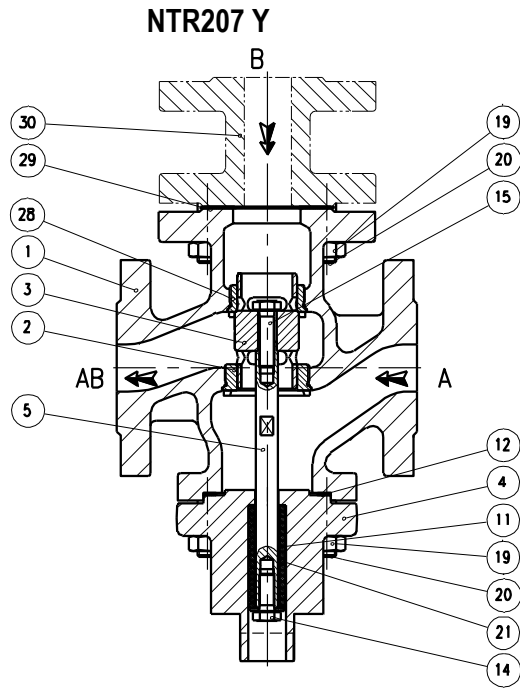
* For stainless steel thermostat only



DN	15	20	25	32	40	50	65	80	100
L	130	150	160	180	200	230	290	310	350
H	70	80	85	100	105	120	130	140	150
H3	150	150	150	160	175	190	225	240	250
H1	150	150	150	155	180	175	180	/	/
H2	/	/	220	225	250	245	263	272	292
Weight NTR207 Y/Z	6	6.5	9	11	15	18	25	/	/
Weight NTR207 YE/ZE	/	/	10	13	17	20	29	38	55

All dimensions are in mm

Spare Parts List



NTR207 Z

NTR207 ZE

Division Controleo®

Rep.	Désignation	Description	Material
1	Corps	Body	1.0619 / 1.4408
2*	Siège supérieur	Upper seat	Inox / Stainless steel
3*	Clapet	Plug	Inox / Stainless steel
4	Chapeau	Cover	Acier / Steel
5*	Tige	Stem	Inox / Stainless steel
6	Cloche	Case	Acier / Steel - Inox / Stainless steel
7	Bride	Flange	Acier / Steel - Inox / Stainless steel
8*	Soufflet	Bellow	Inox / Stainless steel
9	Support ressort	Spring plate	Inox / Stainless steel
10	Embout	Nipple	Inox / Stainless steel
11	Ressort	Spring	Acier / Steel- Inox / Stainless steel
12*	Joint	Gasket	Graphite / Graphit
13*	Joint	Gasket	Graphite / Graphit
14	Vis	Screw	Inox / Stainless steel
15	Vis	Screw	Inox / Stainless steel
16	Vis	Screw	Inox / Stainless steel
19	Ecrous	Nut	Acier / Steel- Inox / Stainless steel
20	Goujons	Stud	Acier / Steel - Inox / Stainless steel
21	Rondelle	Washer	Acier / Steel- Inox / Stainless steel
22	Tige intermédiaire	Middle stem	Inox / Stainless steel
25	Ecrou d'accouplement	Nut	Inox / Stainless steel
26*	Joint	Gasket	Cuivre / Cooper
27	Vis	Screw	Acier / Steel - Inox / Stainless steel
28	Siège inférieur	Lower seat	Inox / Stainless steel
29	Joint de bride	Flange gasket	Graphite / Graphit
30	Entretoise	Spacer	Acier - Inox / Stainless steel

Pressure -Temperature Charts

