

# Temperature Regulators - TR25S

## Self Acting - Non Balanced Simple Seat

## Forged Steel Valves & T Series Thermostats

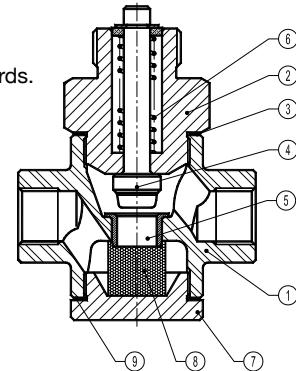
### Description

TR25 Series valves are designed for direct acting temperature control systems where the valve closes on temperature rising. They are single seat type in order to guarantee an excellent tightness and are to be coupled with the thermostats model T.205 and T.405. The liquid filling in the thermostat expands with a rise in temperature operating the valve. The valves are used for controlling the temperature in central heating systems, district heating systems and industrial plants.

Connections are female screwed or flanged.

#### Installation:

Horizontal installation with the thermostat in the vertical position in order to reduce wear. In case of valve temperatures up to 150°C the thermostat may be fitted below or above the valve. In case of valve temperatures between 150 and 250°C a cooling unit type K1 has to be applied with connection downwards. A "Y" strainer should be provided upstream the valve.



Article No.	Size	Price
<b>BSP</b>		
TR25-15*	1/2"	£235.40
TR25-20*	3/4"	£246.10
TR25-25*	1"	£273.90
* Specify opening in mm		
<b>PN40</b>		
TR25-15**	15mm	£310.30
TR25-20**	20mm	£350.90
TR25-25**	25mm	£385.20

\*\* Specify opening in mm & flange type

Thermostat With Copper Rod Sensor			
Article No.	Connection	Temp Range	Price
T205	3/4"	0 - 60°C	£932.40
T205	3/4"	30 - 90°C	£932.40
T205	3/4"	60 - 120°C	£932.40
T405	1"	0 - 120°C	£1,214.00
T405	1"	40 - 160°C	£1,214.00

Accessories for TR25	
COOLING UNIT - STEEL NICKEL PLATED	£126.20
S/S SENSOR POCKET FOR T.205 3/4" x 1"	£158.40
S/S SENSOR POCKET FOR T.405 1" x 11/4"	£185.80
CAPILARY TUBING 6 MTS LONG*	£92.50
CAPILARY TUBING 9 MTS LONG*	£184.90

\* Add on price

### Materials

1	Body	P250GH / 1.0460
2	Bonnet	C45E / 1.1191
3 *	Gasket	St.St./ Graphite
4 *	Valve plug	St.St./NBR/PTFE
5	Seat	AISI 316 / 1.4401
6 *	Spring	AISI 302 / 1.4300
7	Cap	AISI 316 / 1.4401
8 *	Cap gasket	St.St./Graphite
* Available spare parts		

## Max. Permissible Dif. Pressures Specifications

With T.205 Thermostat		
Press. bar	Valve Size	Seat Ø(mm)
21	15	4 and 6
13	15	9
9,3	15	12
5,3	15	15
5,3	20	15
2,9	20	20
2,9	25	20
With T.405 Thermostat		
40	15	4 and 6
38	15	9
24	15	12
15	15	15
15	20	15
9	20	20
9	25	20

Type	Conn. DN	Opening Ø (mm)	Kvs m3/h	Valve stroke
TR25-15/4	15	4	0,2	6
TR25-15/6	15	6	0,45	6
TR25-15/9	15	9	0,95	6
TR25-15/12	15	12	1,7	6
TR25-15	15	15	2,75	6
TR25-20/9	20	9	0,95	6,5
TR25-20/15	20	15	2,75	6,5
TR25-20/20	20	20	5	6,5
TR25-25/20	25	20	5	7

#### Proportional Band

The proportional band is the temperature change required for the valve to move from fully open to fully closed. It depends on the valve stroke and on the thermostat movement per °C, and is calculated as follows:

$$\text{Proportional band: } \frac{\text{Valve stroke (mm)}}{\text{Thermostat mov (mm/°C)}}$$

Thermostat movement in mm per °C : T.205 and T.405 : 0,5 mm / °C

A proportional band in the range 8-13°C is suitable for most applications. A smaller proportional band is not ideal where heat load varies rapidly.