



SELF-ACTING UNBALANCED TEMPERATURE REGULATOR

MODEL TC1-S

TEMPERATURE REGULATING VALVE FOR NON-HAZARDOUS LIQUIDS AND GASES

Features

Unbalanced self-acting single seat globe valve type temperature regulator. Suitable for steam heating of liquids, air and non-hazardous gases.

1. Self-acting design simplifies installation by eliminating the need for power supply and instrument signal lines.
2. No external energy required, allowing for ease of installation in remote areas or potentially flammable atmospheres.
3. Robust design minimizes maintenance.
4. Reliable long-life spring mechanism protects the sensor from overheat damage.
5. Wide set point range and simple set point adjustment provide easy operation.



Specifications

VALVE

Model	TC1-S		
Size	1/2"	3/4"	1"
Kvs Value (DIN)	3.6	5.7	7.2
Cv Value (UK)	3.5	5.5	7.0
Cv Value (US)	4.2	6.7	8.4
Maximum Allowable Differential Pressure (bar) ΔPMX	14		
Leakage Rate	< 0.05% of Cv (Kvs) value		
Connection	Screwed		
Maximum Operating Pressure (barg)	PMO	14	
Maximum Operating Temperature (°C)	TMO	200	
Suitable for Use with:	Steam		

1 bar = 0.1 MPa

THERMOSTAT

Model	TC-A
Suitable for Immersion in*	Liquids Compatible with Sensor Material
Set Point Range*	20 °C to 120 °C
Maximum Temperature at Sensor	Set Point Value + 100 °C
Ambient Temperature Limits at Adjustment Head	- 40 °C to 80 °C
Capillary Tube Length* (m)	3

*Other options available, see overleaf for details

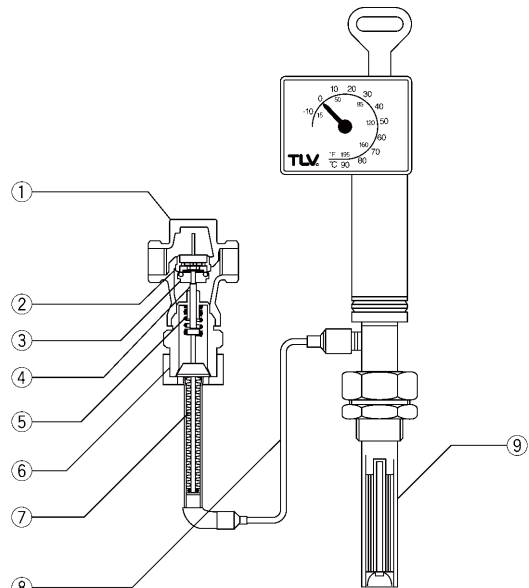
PRESSURE SHELL DESIGN CONDITIONS (NOT OPERATING CONDITIONS):
 Maximum Allowable Pressure (barg) PMA: 14
 Maximum Allowable Temperature (°C) TMA: 200



To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

No.	Description	Material	DIN	ASTM/AISI*
①	Body	Red Brass	—	B505 C83600
②	Seat	Stainless Steel	1.4104	—
③	Plug	Stainless Steel	1.4305	—
④	Plug Stem	Stainless Steel	1.4301	AISI304
⑤	Spring	Stainless Steel	—	—
⑥	Plug Stem Housing	Brass	2.0375	B16 C36000
⑦	Operating Element	Nickel-plated Brass	—	—
⑧	Capillary Tube	Nickel-plated Copper	—	—
⑨	Sensor	Nickel-plated Bronze	—	—

* Equivalent materials



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