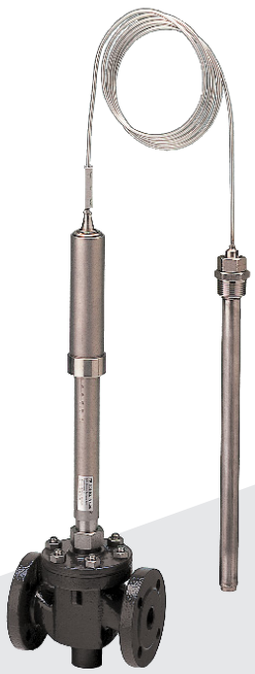
Thermostats of stainless steel types V4.03 and V4.05

0-3.4.05-G



TECHNICAL DATA

Max. closing force	500 N
Standard settings:	
- Type V4.03	0-160 ºC
- Type V4.05	0-120, 40-160 ºC
Reinforcement (mm/°C):	
- Glycerine	Type V4.03: 0.3
	Type V4.05: 0.5
- Paraffin	Type V4.03: 0.33
	Type V4.05: 0.7
For valves with lifting height up to	21 mm
Time constant for rod sensor:	
- Type V4.03:	90 sec.
- Type V4.05:	100 sec.
Time constant for spiral sensor,	20 sec.
Neutral zone	< 2ºC
Excess temperature protection	40ºC
Materials:	
- Spring:	1.4401
- Capillary:	1.4301
- Adjusting cylinder:	1.4501
Sensor material	W. No. 1.4436

Subject to change without notice.

APPLICATIONS

The thermostat is particularly suitable for installation in demanding environments such as tank installations, outdoor plants and where it must be non-magnetic, e.g. in submarines.

FUNCTION

The adjusting cylinder of the thermostat is set at the temperature in ºC for the required heated medium. The temperature is regulated by the thermostatically controlled valve reducing or increasing the flow of the heating medium. Together with the adjusting cylinder, the liquid-filled sensor and capillary tube constitute a closed system. If the temperature of the medium to be heated is above the required level, the sensor liquid expands, causing the spindle of the thermostat to act upon the valve, thereby reducing the flow of the heating medium. If the temperature is below the required level, the temperature of the liquid in the sensor decreases and the volume is reduced, thereby the valve spring opens the valve causing an increasing flow of the heating medium.

CONSTRUCTION

The parts of the thermostat are made of stainless steel. The thermostat consists of a liquid-filled sensor, a capillary tube, and an adjusting cylinder. The adjusting cylinder has O-ring sealings and is sealed with silicone glue at the top for hermetical closure. The thermostat is available with settings between -30ºC and +280ºC. At flow temperatures above 170ºC, a cooling unit must be installed between the valve and the thermostat. Please see datasheet no. 8.5.00.

FEATURES

- **No external power required**
- **For use in hazardous area**
- **Simple design secures reliable controls and reduces costly downtime**
- **Customizable, User friendly, Plug & Control**
- **No special tools needed for service**
- **Low installation cost**
- **For outdoor installation even on open ship deck**
- **Self-acting**
- **P-controller**
- **Completely sealed**
- **Excess temperature protection**
- **All parts made of stainless steel**
- **Non-magnetic**

NEUTRAL ZONE

The neutral zone of the thermostat, which is less than 2 ºC, is the temperature difference which can accur at the sensor without the thermostat spindle being actuated.

SENSOR TYPES

Rod sensors of stainless steel with pipe thread. Sensors are also available with a pack-box on the capillary tube for applications where the sensor is to be lowered into a tank etc.

SENSOR LIQUID

Glycerine at a scale range between - 30 ºC and 160 ºC. Paraffin at a scale range between 140 ºC and 280 ºC.

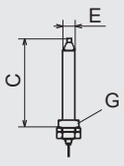
CAPILLARY TUBE

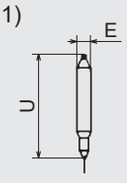
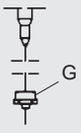
The capillary tube is made of stainless steel and is available in lengths from 3 m up to 21 m.

VALVES

The thermostat can be used with valves up to DN 150 in both heating and cooling systems.

For valve selection, please visit our website at www.cloriuscontrols.com for further information or contact us at clorius@vexve.com.

Sensors with pipe thread		Type V4.03	Type V4.05
	C E G*	190 mm 22 mm 1”	380 mm 22 mm 1”
Weight including G connection		2.4 kg	2.6 kg

Sensors without connection Available with capillary packbox			Type V4.03	Type V4.05
1) 	E U G*		22 mm 230 mm 1”	22 mm 410 mm 1”
3) 	Weight	1)	2.2 kg	2.3 kg
		2)	2.4 kg	2.6 kg

* The measurements G and H are pipe threads according to ISO R7/1.

DIMENSION SKETCH

