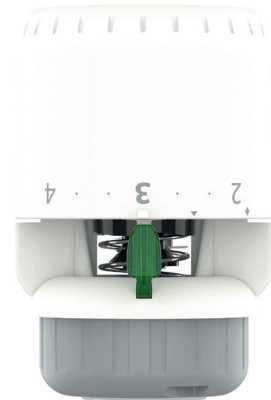


Data Sheet

Danfoss Aveo® Thermostatic sensors series

Application



The Danfoss Aveo® series is a comprehensive portfolio of premium quality thermostatic sensors, produced in Denmark.

Danfoss Aveo® thermostats use a unique gas filled technology, that gives the fastest reacting self-acting thermostat in the world.

The Danfoss Aveo® thermostat is installed onto a radiator valve. The combination of the thermostat and radiator valve, controls the individual room temperature at a given setpoint by adjusting the flow of hot water or low pressure steam through the radiator.

The Danfoss Aveo® thermostat is applicable to all types of heating systems and thanks to its compact size fits most applications.

The use of Danfoss Aveo® gas-filled thermostats is highly recommended for applications with small P-band (1K).

Danfoss Aveo® series includes:

- Standard thermostats with built-in or remote sensor
- Variants with connection for radiator valves and radiators with integrated valves, type Danfoss RA

Features:

- Gas technology - fastest and most precise temperature control
- Highest-class Control Accuracy (CA 0.2 K) per amended EN215 standards
- Danfoss RA Click mount - fast, save, tool-less
- Modern and user-friendly design
- Easy to operate, easy to clean
- Facilities designed for the visually impaired
- Tactile feedback every 0.9°F (0.5°C), for precise temperature setting and improved user experience
- Facilities for limiting and locking temperature set-point, also available as accessory
- Frost protection setting
- A theft protection, from factory or available as accessory

Quality

All Danfoss radiator thermostats are manufactured in factories, assessed and certified by BVC (Bureau Veritas Certification) against ISO 9001 and ISO 14001.

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Danfoss Aveo® Thermostatic sensors series

Ordering and Specification

Type	Model	Sensor	Cap. tube	Set point range	Connection	Zero blocking	Limiter pins	Theft protection	Code no.
Aveo RA	Standard	Built-in		45-79°F (7-26°C)	RA		✓		015G4290
Aveo RA	Standard	Remote	78 inch (0-2m)	45-79°F (7-26°C)	RA		✓		015G4292

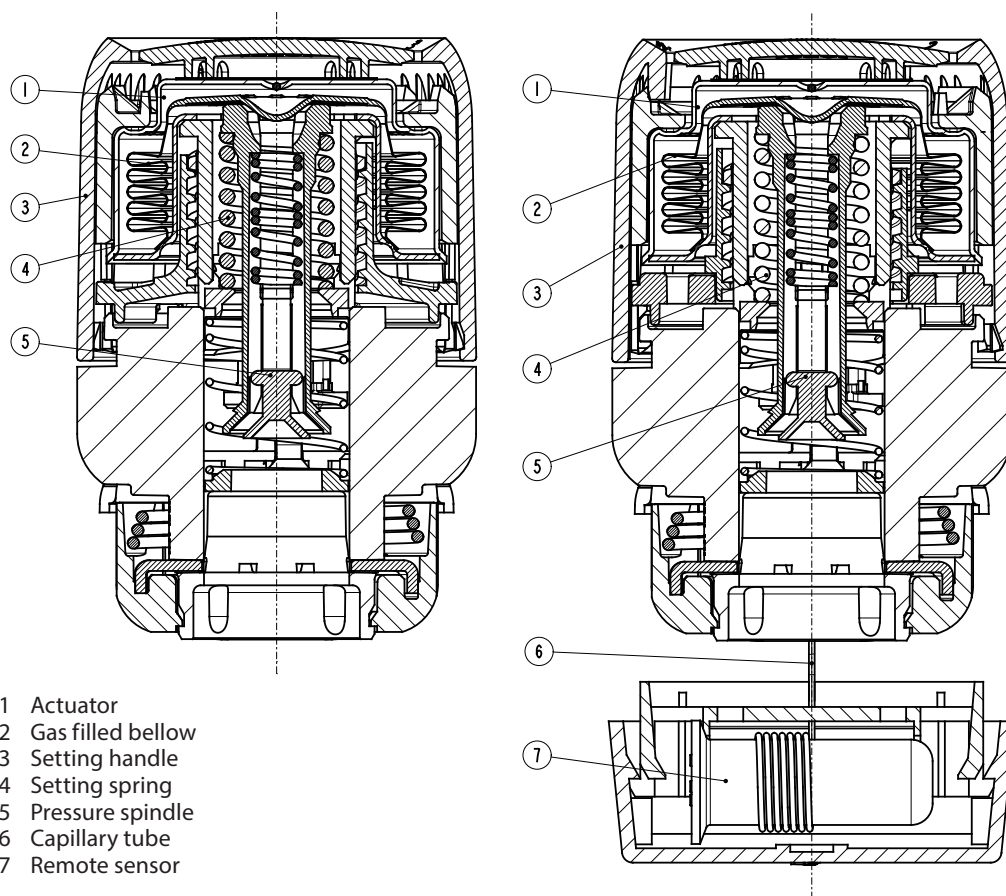
Accessories

Accessories		Code no.
	Anti-theft plug for snap-lock sensors, white (20 pcs.)	013G5245
	Limiting pins for built-in, remote and service sensors (10 pcs.)	013G1246

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Danfoss Aveo® Thermostatic sensors series

Construction



Operating Principle

Thermostatic sensors are proportional controls, regulating the heat supply in relation to the difference between the temperature set on the sensor and the temperature of ambient air, detected by the thermostat.

The thermal expansion element (bellow) responds to room temperature by expanding or contracting proportionally. The movement is transmitted onto the control element of the thermostatic valve.

The thermostatic sensor controls the amount of supply which flows into the radiator to meet what is required to maintain the room temperature based upon the control's setting.

Danfoss Aveo® series of thermostatic sensors are fitted with gas-filled bellows, ensuring fast response time to changing ambient temperature.

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Danfoss Aveo® Thermostatic sensors series

Setting the temperature

The required room temperature is set by turning the setting dial. The temperature scales below shows the correlation between scale values and the room temperature. The temperature values stated are for guidance only as the obtained room temperature will often be influenced by installation conditions.

Integrated with the standard valve mounted operators is a tactile feedback when setting the temperature. The subtle click sound provides a 1°F (0.5°C) indication of temperature setting change when adjusting.

Locking and limitation of the temperature set-point of the Danfoss Aveo® thermostats are carried out using the limiter pins placed at the back of the sensor.

The procedure is described in the instruction.

Danfoss Aveo®



Setting position

❄	1	2	•	•	3	•	•	4	5	
45	57	63			68			73	79	°F
7	14	17			20			23	26	°C

Room temperature

❄ = Frost protection setting

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Danfoss Aveo® Thermostatic sensors series

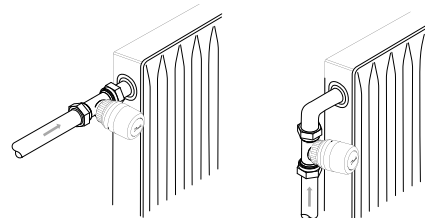
Choose the right sensor

The thermostatic sensor should be selected on the basis of the following criteria:

The thermostat must always be able to register the temperature of the ambient air.

Radiator thermostats with built-in sensors

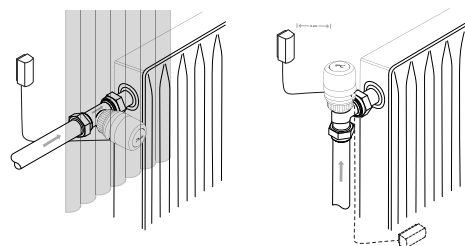
These should always be fitted horizontally so that the ambient air can pass freely over the sensor. Danfoss does not recommend the fitting of a built-in sensor in vertical position because heat effect from the valve body and possibly surface pipes will cause incorrect operation of the thermostat.



Radiator thermostats with remote sensor

These should be used when:

- Curtains cover the thermostat
- Thermostat is affected by surface pipes
- Thermostat is affected by draft
- It is necessary to mount the thermostat in vertical position if there are adjacent obstructions.



The remote sensor must be mounted on the wall, away from curtains, or on the skirting board beneath the radiator if free of surface pipes.

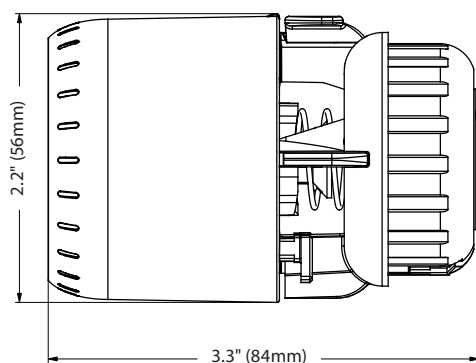
All remote sensors are now supplied with ultra-thin capillary tube. Simply pull out the length required (6ft (2m) maximum) and fix using clips provided or a special tackler gun.

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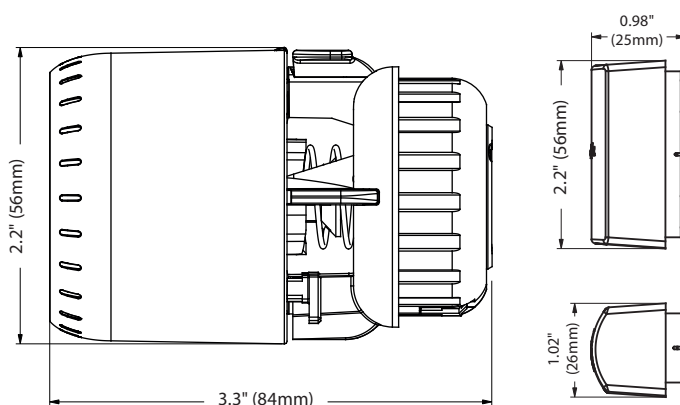
Danfoss Aveo® Thermostatic sensors series

Dimensions

Danfoss Aveo® RA



Danfoss Aveo® RA
with remote sensor



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