

Data Sheet

Replacement Sensor for Danfoss RTD Valve Bodies

Application



RA/RTD 2945 and 2946 are replacement sensors for existing systems fitted with RTD valve bodies. Replacement sensors incorporate RA 2000 technology and design, and provide a simple and straightforward way to upgrade older radiator thermostats without the need to drain down the system.

As part of any upgrade Danfoss recommend that the valve gland seal is also replaced. These can be replaced without draining down the system.

Ordering and Specifications

Thermostatic sensors

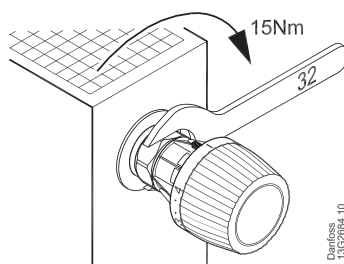
Type	Valve/dim.	Model	Temp. range ¹⁾	Code no.
RA/RTD	RTD 10-25	Built-in sensor	5-26 °C	013G2945
RA/RTD	RTD 10-25	Built-in sensor	16-26 °C	013G2946

¹⁾ Temperatures stated for $X_p = 2K$, i.e. the valve is closed at 2 °C higher room temperature.

Accessories

Product		Code no.
Gland seal assembly for RTD valves	10 pieces	013G0290

Fitting the Sensor



Built-in sensors should always be fitted horizontally so that the ambient air can pass freely over the sensor.

No other tools but an open end spanner is needed to fit the replacement sensor.

Setting the Temperature

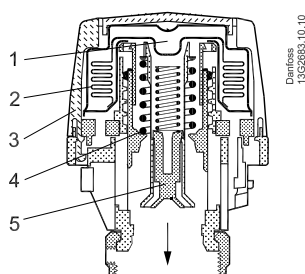
The required room temperature is set by turning the setting dial. The temperature scales show the correlation between scale values and the room temperature. The temperature values stated are for guidance only as the obtained room temperature will often be influenced by installation conditions.

The temperature scales are stated according to European standards at $X_p = 2^\circ\text{C}$. This means that the radiator thermostats close at a sensor temperature which is 2°C higher than stated on the temperature scales.

Locking and limitation of the temperature set-point of RA sensors are carried out using the limiter pins placed at the back of the sensor.

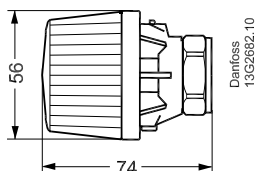
RA 2945		* = Frost protection setting					
	$X_p = 0\text{ K}$	79,5	14	17	20	23	26 28°C
		* 1 2 . . 3 . . 4 5					
	$X_p = 2\text{ K}$	57,5	13	15	18	21	24 26°C
RA 2946		* = Frost protection setting					
	$X_p = 0\text{ K}$	17 20 23 26 28°C					
		2 . . 3 . . 4 5					
	$X_p = 2\text{ K}$	15	18	21	24	26°C	

Construction



1. Actuator
2. Bellows
3. Setting dial
4. Setting spring
5. Spindle

Dimensions



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