

## Data Sheet

# Thermostatic Sensors RAS-C & RAS-CK

## Application



RAS-C 5023 & 5040



RAS-CK 5025



RAS-C 5042

The RAS-C & RAS-CK series is a programme of thermostatic radiator sensors, which covers all central and district heating systems.

RAS-C & RAS-CK sensors are self-actuating proportional controllers with a small P-band., designed for use in 2-pipe domestic heating systems.

RAS-C sensors are equipped with a snap-lock mechanism, which ensures quick, firm and long lasting mounting onto the valve body, without the use of any tools.  
RAS-CK is specially designed for non Danfoss valves and has M30 X1.5 connection. RAS-CK is mounted onto the valve body with a M32 spanner.

All RAS-C & RAS-CK sensors incorporate a Frost Protection Setting.  
Furthermore, the RAS-C range includes models with features for positive shut-off.

RAS-C 5042 is equipped with 2 m of ultra-thin capillary tube, coiled up within the remote sensor housing. After sensor mounting capillary tube is pulled out to the required length.

The RAS-C and RAS-CK construction is particularly robust, with both end-stop strength limits and sensor bending force limits being substantially above the requirements of the European Standard EN 215.

## Ordering and Specifications

### RAS-C & RAS-CK thermostatic sensors

Type	Sensor	Colour	Features	Setting range <sup>1)</sup>	Code no.
RAS-C 5023	Built-in	Black/White	Temp. limitation	8 - 28 °C	013G5023
RAS-C 5040	Built-in	Black/White	Positive shut-off		013G5040
RAS-C 5042	Remote <sup>2)</sup>	Black/White	Capillary tube, 2 m		013G5042
RAS-CK 5025	Built-in	Black/White	With M30x1.5 connection, Temp. limitation		013G5025

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

<sup>2)</sup> The remote sensor is delivered with 2 m of capillary tube coiled up within the sensor. When mounting the sensor, only the capillary tube required is uncoiled.

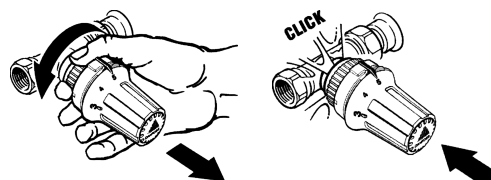
**Accessories**

Product	Code no.
Anti-theft plug for RAS-C, black	013G5242
Anti-theft protection rings for RAS-CK, black	013G5326
Anti-theft protection rings for RAS-CK, white	013G5389

**Mounting**

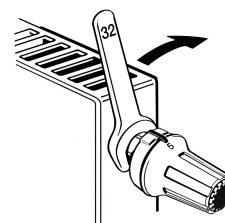
The RAS-C elements with snap-on coupling are easy to mount and require no use of tools, once the valve cover has been removed. The sensor is fitted to the valve by applying a gentle pressure. When the sensor is in place, the snap-on mechanism is activated and the sensor has been correctly mounted. If mounting and dismantling are carried out again, the mechanism must be tightened manually by turning the tightening ring.

**RAS-C**



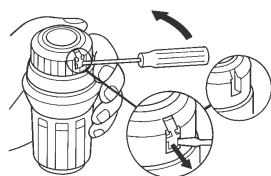
The RAS-CK elements are mounted onto the valve with a M32 spanner.

**RAS-CK**

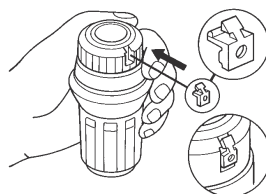


**Theft Protection**

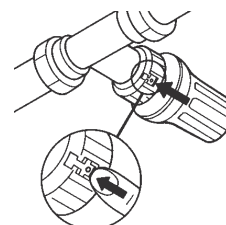
**RAS-C**



1) Remove the cover

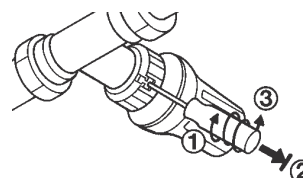


2) Place the anti-theft plug, but do not push it fully in place



3) When the sensor is mounted, push in the anti-theft plug

Anti theft plug for RAS-C: code no. 013G5242.  
The theft protection of RAS-C can be removed without damaging the sensor by using a screwdriver.




### RAS-CK

To lock the RAS-CK sensor to the valve to protect against unintended dismantling two anti-theft protection rings are clamped together around the union nut of the sensor. The half-rings can only be removed by destruction. The anti-theft protection rings are available in white *code no. 013G5389* and black *code no. 013G5326*.



### Setting the Temperature



$X_p = 0\text{ K}$

$X_p = 2\text{ K}$

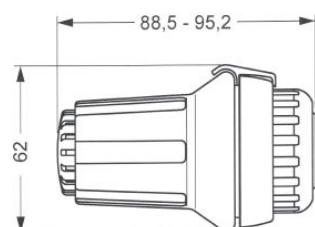
**\* = Frost protection setting**

	10	14	18	22	26	30 °C
<b>0</b>	*	1	2	3	4	5
	8	12	16	20	24	28 °C

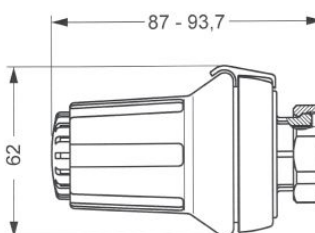
The required room temperature is set by turning the setting dial. The temperature scales show the correlation between scale values and the room temperature. The temperature values stated are for guidance only as the obtained room temperature will often be influenced by installation conditions.

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  $2^\circ\text{C}$  higher than stated on the temperature scales. RAS-CK has no 0-setting.

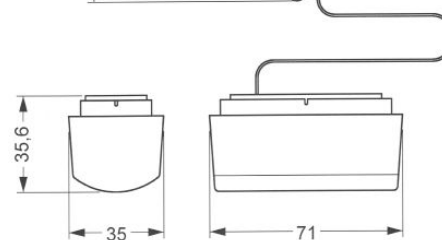
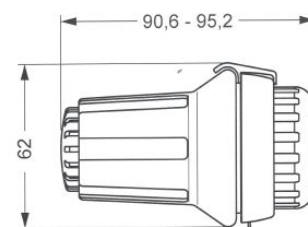
### Dimensions



RAS-C with built-in sensor



RAS-CK with M30 connection



RAS-C with remote sensor

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