

Data Sheet

FTC

Floor Heating Sensor

Application

FTC is used for flow temperature control of floor heating and radiator heating systems.

FTC is a self-acting thermostatic sensor, which can be combined with 2-way valve bodies, types RA-N and RA-C.

The water temperature is measured by a surface sensor, which is easily mounted on the pipe with a strip (enclosed with the product). The snap-lock connector of the sensor element secures a firm connection to the valve.



Features:

- Closes on rising sensor temperature.
- Temperature range: 15 °C to 50 °C or 35 °C to 70 °C.
- Valve can be mounted on flow or return pipe.
- Sized for pressure PN 10.

Ordering

Sensor type	Setting range	Capillary length	Max. ambient temp.	Code no.
FTC	35 °C to 70 °C	0-2 m	65 °C	013G5080
FTC	15 °C to 50 °C	0-2 m	65 °C	013G5081

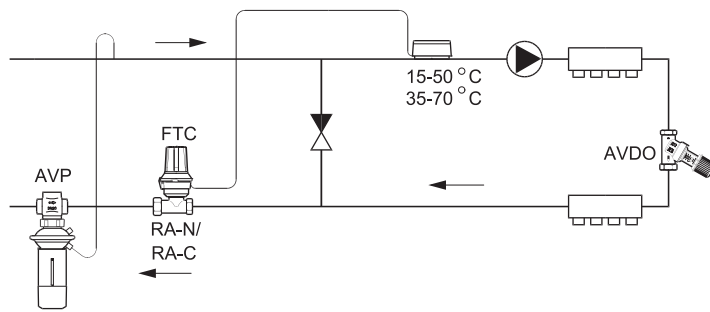
Valve body	Connection		k _v s	Code no.
	Inlet	Outlet		
RA-N 10, straight	G 3/8	R 3/8	0,65 m ³ /h	013G0032
RA-N 15, straight	G 1/2	R 1/2	0,90 m ³ /h	013G0034
RA-N 20, straight	G 3/4	R 3/4	1,40 m ³ /h	013G0036
RA-C 15, straight	G 3/4 A	G 3/4 A	1,20 m ³ /h	013G3094
RA-C 20, straight	G 1 A	G 1 A	3,30 m ³ /h	013G3096

Technical Specifications

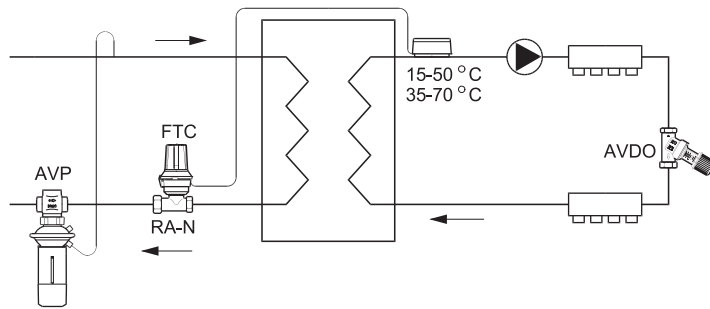
FTC with valve body	k _v m ³ /h* at a P-band of K				Max. pressure			Max. temperature	
	2	4	6	8	PN	Δp	Test	Flow	Ambient
RA-N 10	0,18	0,34	0,46	0,56	10 bar	0,6 bar	16 bar	120 °C	65 °C
RA-N 15	0,22	0,44	0,62	0,73					
RA-N 20	0,32	0,62	0,88	1,04					
RA-C 15	0,40	0,71	0,90	1,03					
RA-C 20	1,06	1,94	2,45	2,75					

* k_v-value stated at setting N. Xp between 2 K and 8 K.

System Principles

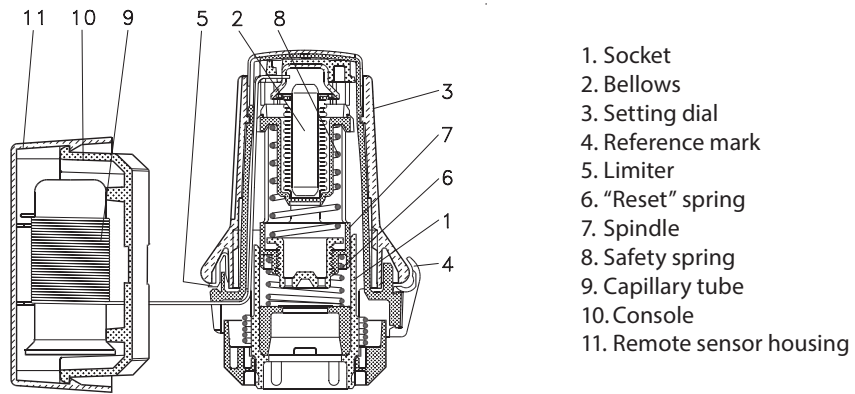


Floor Heating System

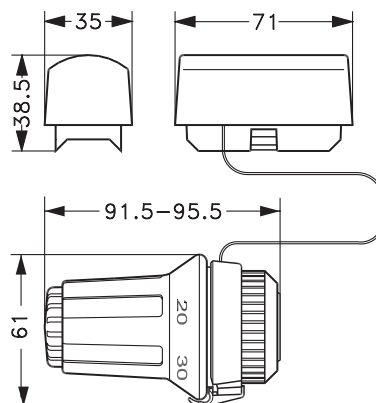


Heat Exchanger in Radiator Heating or Floor Heating System

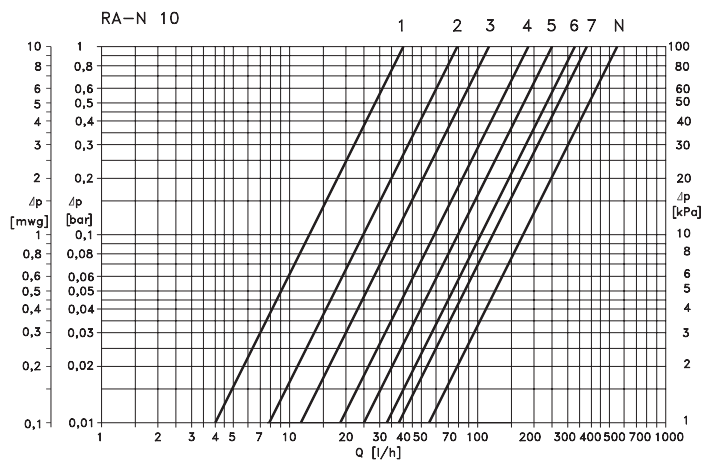
Design



Dimensions

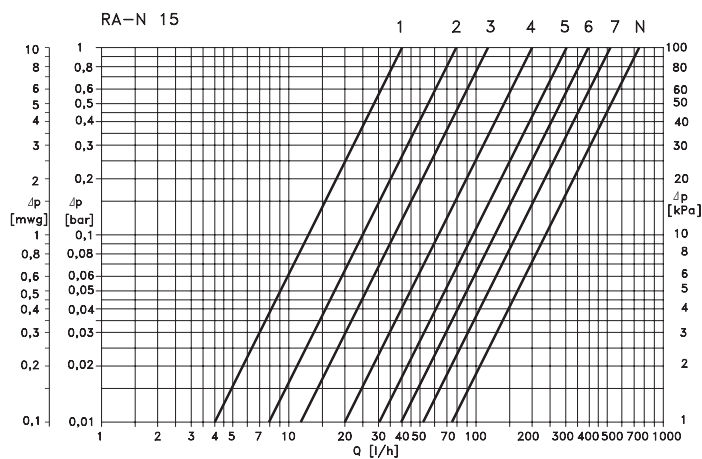


Capacity,
FTC with RA-N



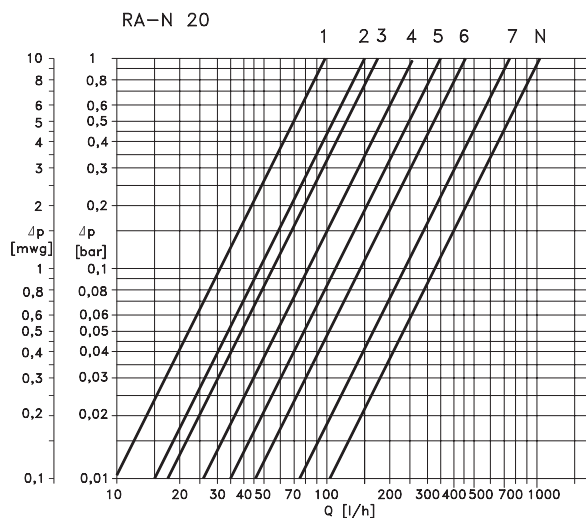
$\Delta t=15^{\circ}\text{C}$	0,02 0,03 0,05 0,07 0,1 0,2 0,3 0,4 0,5 0,7 1 2 3 4 5 7 10	kW
$\Delta t=20^{\circ}\text{C}$	0,03 0,05 0,07 0,1 0,2 0,3 0,4 0,5 0,7 1 2 3 4 5 7 10 20	kW
$\Delta t=40^{\circ}\text{C}$	0,05 0,07 0,1 0,2 0,3 0,4 0,5 0,7 1 2 3 4 5 7 10 20 30 40	kW

FTC sensor with RA-N 10 valve



$\Delta t=15^{\circ}\text{C}$	0,02 0,03 0,05 0,07 0,1 0,2 0,3 0,4 0,5 0,7 1 2 3 4 5 7 10	kW
$\Delta t=20^{\circ}\text{C}$	0,03 0,05 0,07 0,1 0,2 0,3 0,4 0,5 0,7 1 2 3 4 5 7 10 20	kW
$\Delta t=40^{\circ}\text{C}$	0,05 0,07 0,1 0,2 0,3 0,4 0,5 0,7 1 2 3 4 5 7 10 20 30 40	kW

FTC sensor with RA-N 15 valve

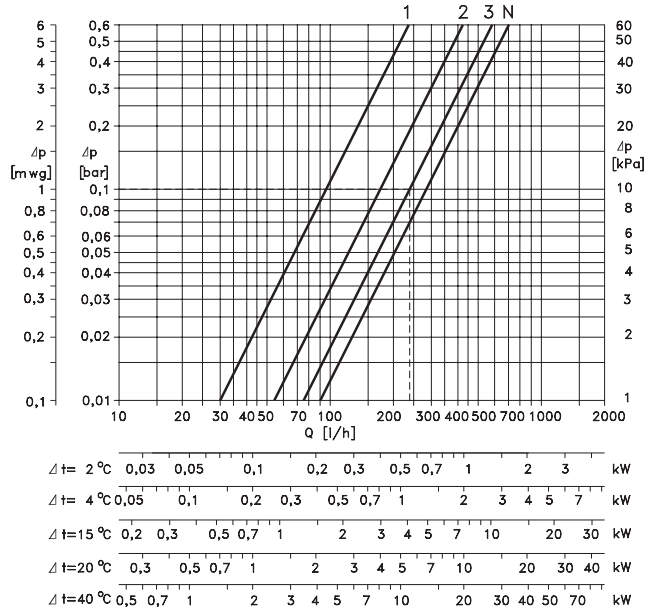


$\Delta t=15^{\circ}\text{C}$	0,2 0,3 0,5 0,7 1 2 3 4 5 7 10 20 3	kW
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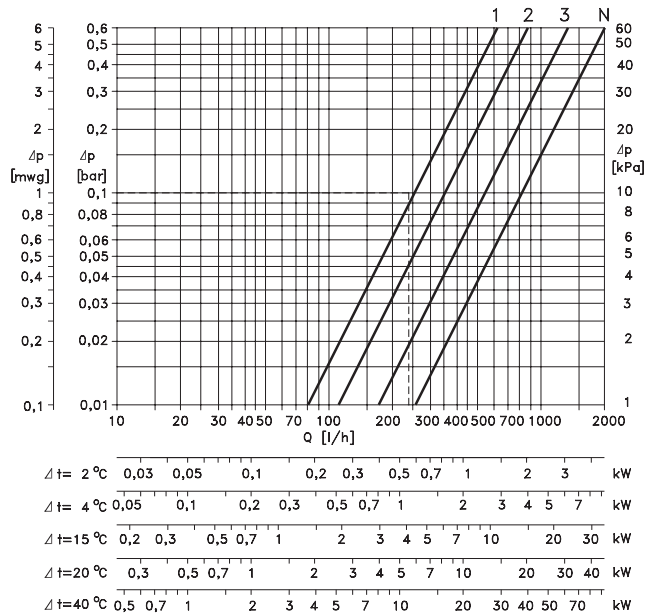
FTC sensor with RA-N 20 valve



**Capacity,
FTC with RA-C**



FTC sensor with RA-C 15 valve



FTC sensor with RA-C 20 valve

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