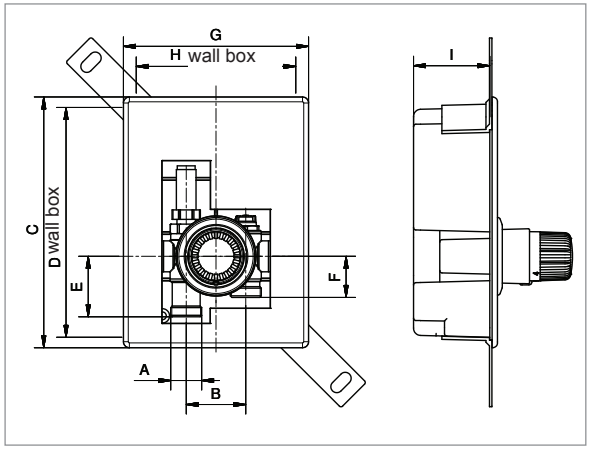
Dimensional Drawing



A	B	C	D	E	F	G	H	I
3/4"	50	210,5	193	50,8	34,5	155,5	134	64

Simplex Armaturen & Systeme GmbH
D-88260 Argenbühl
Germany
Tel. +49 7566 9408-0
Fax. +49 7566 9408-75
www.simplex-armaturen.de

Mounting Instruction
Regulation Box RTL-SI with Flowmeter

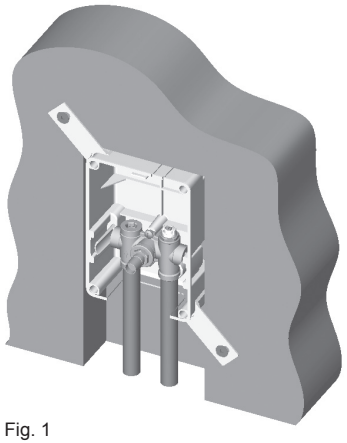


Fig. 1

Area of Application

Warm water heating systems

Description

The Regulation Box RTL-SI is used for regulating an area heating based upon the return temperature with a combined radiator heating system.

The regulating box consists of a wall insulation box with a pre-mounted RTL valve block and outside sensor head, protective cover, air vent plug and facing screen (optional with flowmeter at your choice for precision regulation). The valve block has 3/4“ male thread (Eurocone) for connecting on the pipe side with compression adapters.

The installed safety valve permanently closes the valve when the supply temperature of 70°C is exceeded. After cooling down, the valve can be reset by pressing down the valve insert.

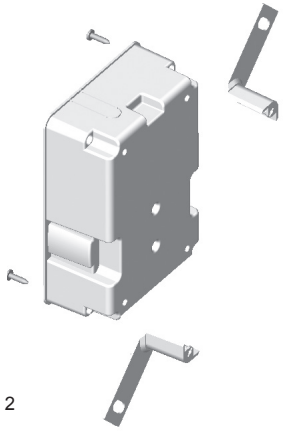


Fig. 2

Mounting

Prepare the insulation box for mounting by inserting the fastening straps from behind into the drill holes arranged at the corner points of the box and securing them against falling out from the front with the attached screws. The fastening straps are arranged crossed-over. These straps can be exchanged in any way depending upon the construction site situation. For instance, the straps can be moved horizontally to compensate for depth as long as the screws have not been finally fixed.

The box is positioned to the fastening straps on the rough wall in a sufficiently large wall recess (approx. 180 x 230 mm) and fixed with adjusting screws at approx. 1.5 cm of plaster over the rough wall. The remaining gap between the box and the wall recess can be filled with in-situ cellular plastic.

Recesses should be made on the box by breaking out the walls at the appropriate places before connecting the pipelines.

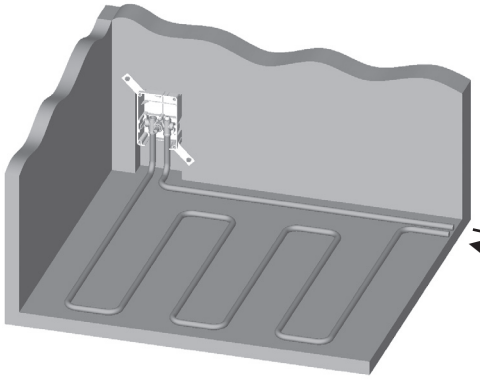


Fig. 3

Make sure to connect the pipline network in accordance with the arrow marks on Figure 4 (supply left, return right). Mixing up connections may cause valve noises and poor controller function.

Cover the box with the protective cover before plastering and wall covering work. After completing wall covering work, remove the protective cover for finishing, mount the sensor head and cover it with the facing screen with rosette.

The return temperature limit valve is arranged in the return of a heating system (such as floor or wall heating). It is connected to the pipe system with compression adapters with Eurocone in conformity with DIN V 3838 (not in the scope of delivery).

The thermostat valve uses the built-in temperature sensor to regulate the maximum acceptable return temperature in the system.

Caution: Parts of the area heating system (pipeline) or structure can be damaged by arranging the valve on the back side if the supply line temperature is too high (>70°C).

Adjustment

The adjustment numbers on the sensor head correspond to the following return line temperatures where the valve closes. The sensor head is limited to a maximum of 40°C in series production (position 4). We do not recommend higher temperatures.

1	2	3	4
closed	20°C	30°C	40°C

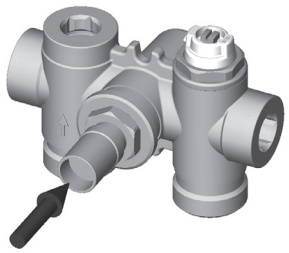


Fig. 4

Safety Valve

The RTL valve is equipped with a safety valve. If the system temperature of 70°C is exceeded on the valve because of a defective thermostat head, the safety equipment permanently closes the valve to protect the surface of the area heating.

The safety valve has to be reset to the pressure piston of the valve insert by pressure with a cylindrical object after correcting the malfunction and letting the valve cool down to room temperature. The safety equipment clicks back audibly into the ready position.

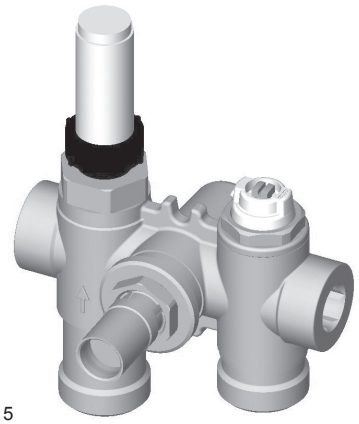


Fig. 5

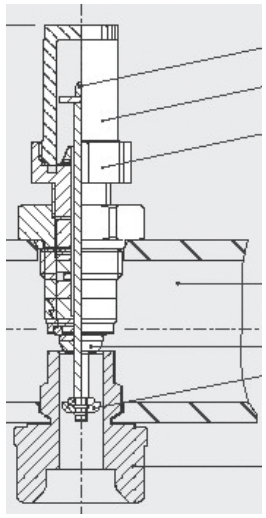


Fig. 6

Technical Data

dimensions:

width:	156 mm
height:	211 mm
depth:	117 mm
angle compensation for the box:	6°
angle compensation for the cover:	6°
depth compensation:	23 mm
axial distance (supply - return):	50 mm
connecting dimensions for the pipeline:	3/4“ male thread, Eurocone DIN V 3838
connecting threads to the head of the thermostat:	M30 x 1,5
control zone for room temperature:	20 - 40°C

Description Flowmeter

Flowmeter regulating valve for regulating the volume flow. The upper part of the valve consists of a valve cone with a rising spindle and a hand wheel for adjustment. The inspection glass is installed in the hand wheel where the flow capacity can be read directly in L/min on the printed scale depending upon the position of the display body. You can also block the adjustment on the flowmeter with the supplied arresting cap and lead seal it wherever necessary.

Volume Flow Regulation

Remove the arresting cap. To regulate turn the black hand wheel where the valve cone is screwed down in the right direction of rotation. The volume flow drops until complete blockage and you can open the valve in the opposite direction of rotation.

Cleaning

The inspection glass and measuring spring can be disassembled and cleaned for maintenance purposes even when they are under full system pressure. Hold the black hand wheel firmly and loosen the inspection glass by rotating the hand wheel (anti-clockwise). Do not use any tools because there is the danger of fracture.

Now promptly unscrew the inspection glass and remove together with the inside spring. The flowmeter blocks automatically as soon as the inspection glass has been lifted and the spring is removed. There might be a slight loss of water from the valve in this state. Clean the inspection glass promptly and assemble in the opposite order.