

Roth RTL valve

Roth RTL valve for regulating underfloor heating in a single room

Description

Roth RTL valves are used to regulate flow and temperature in underfloor heating circuits in single rooms. The RTL valve is installed on the underfloor heating return pipe and measures the media temperature. The valve regulates the flow through the valve using a configured media temperature between 10°C and 50°C.

In addition to regulation using the media temperature, the RTL valve is also supplied with various options to regulate flow using room temperature. Here you can choose between thermostats installed on the RTL valve housing or wireless room thermostats.

The pipe connection is made using Roth EURO distribution couplings in the selected pipe dimension



Technical data

Roth RTL valve, 10-50 degrees	401966.006
Roth RTL valve (10-50 degrees) with room temperature thermostat	401966.106
Roth RTL valve (10-50 degrees) with wireless room thermostat	401966.206
Roth RTL valve with capillary sensor, 5 metres	401966.306

HVAC no.

Applications

Underfloor heating systems

Material

Brass

Material, gaskets

EPDM rubber

Differential pressure

Max. 20 kPa (0.2 bar)

Operating temperature

Max. 95°C

Operating pressure

Max. 10 bar

Thread on connections

EURO 3/4"

Insulation material

EPP

Water containing up to 50% glycol

Accessories

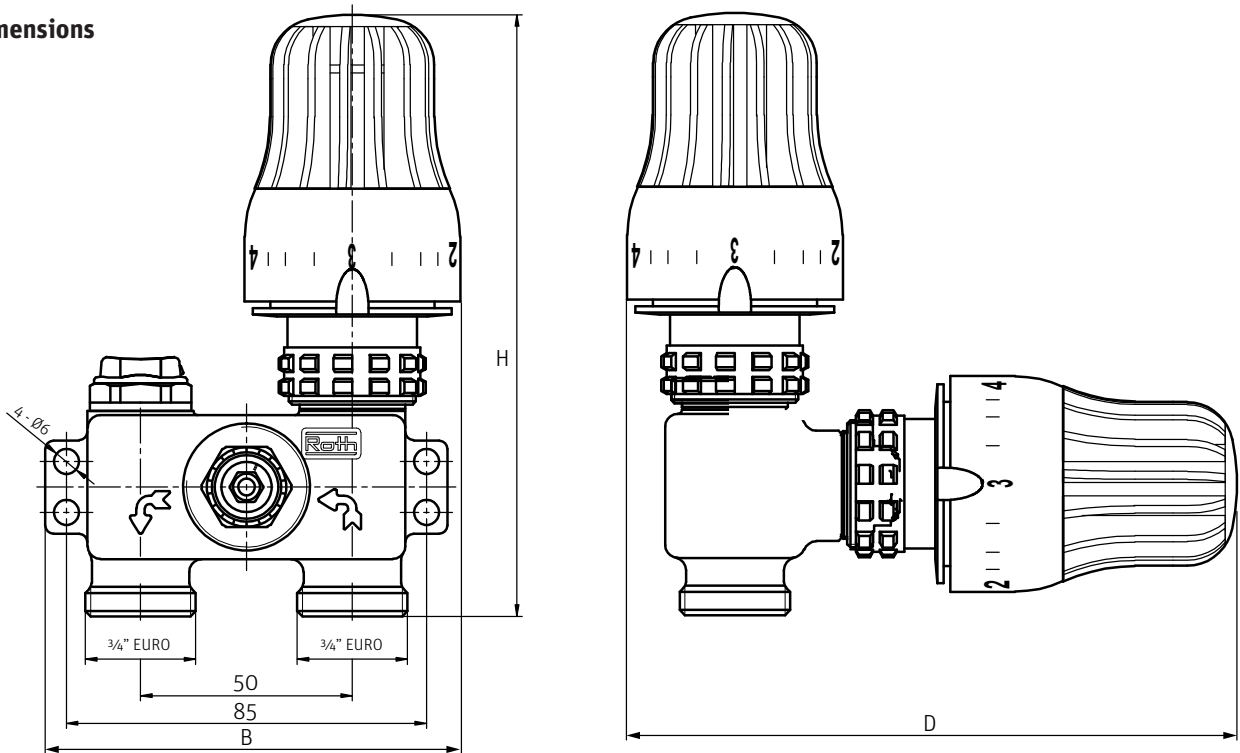
HVAC no.

Roth Basicline 230V room thermostat	RW1000.402
Roth actuator 230V	466275.433
Roth capillary sensor for RTL valve, 5 metres	401966.630
Roth distributor coupling 10.5 mm x 3/4"	401974.810
Roth distributor coupling 12 mm x 3/4"	401975.812
Roth distributor coupling 15 mm x 3/4"	401975.815
Roth distributor coupling 16 mm x 3/4"	401974.816*
Roth distributor coupling 17 mm x 3/4"	401974.817
Roth distributor coupling 20 mm x 3/4"	401974.820*
Roth insert coupling 16 mm x 3/4"	046217.546
Roth insert coupling 20 mm x 3/4"	046217.550
Roth ball valve 3/4" EURO	401973.846
Roth thermometer tee 3/4" EURO	401973.876

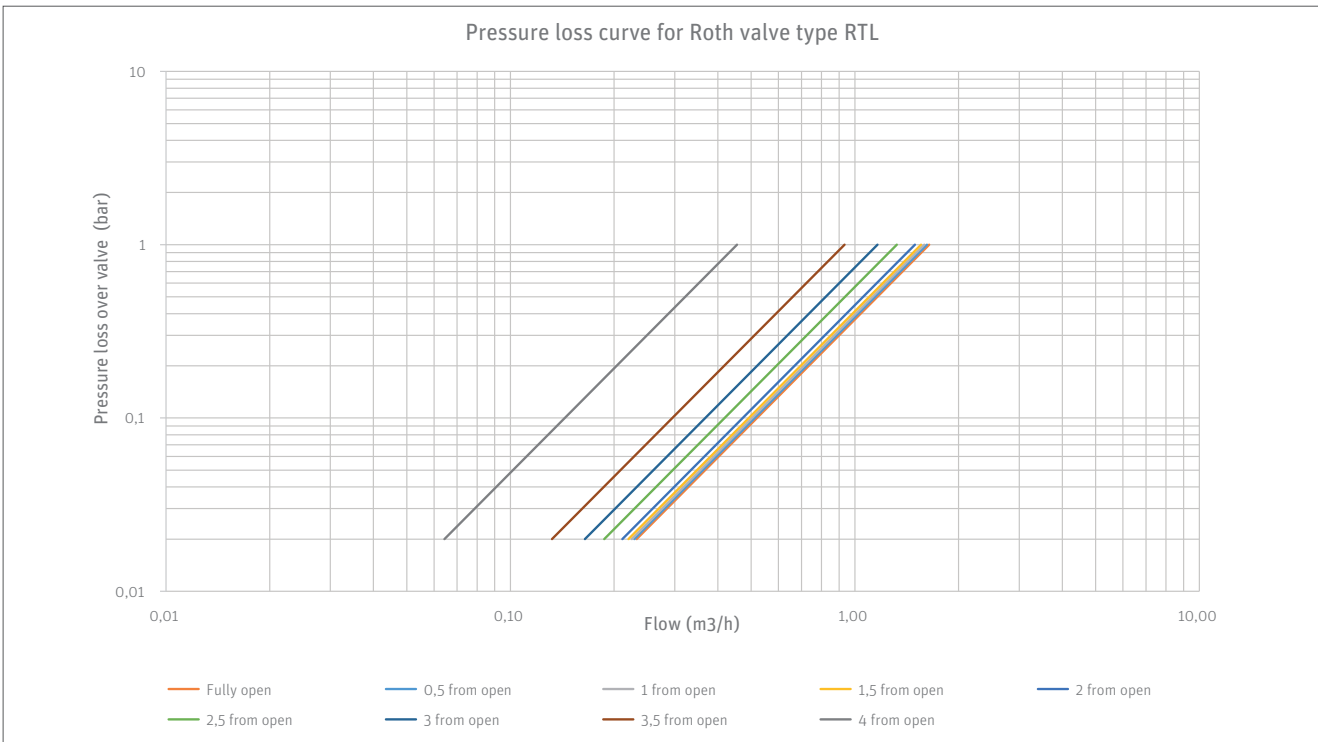
* Can also be used for Alu-LaserPlus® pipes.

Roth RTL valve

Dimensions

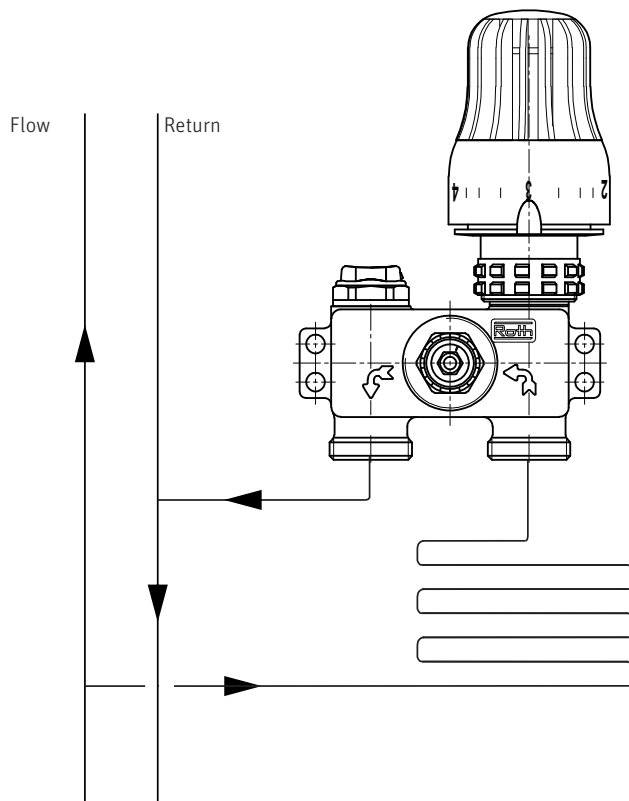


Type	Dimension W	Dimension H	Dimension D
Roth RTL valve, 10-50 degrees / incl. insulation	98/146	142/162	95/105
Roth RTL valve 10-50 degrees with room temperature thermostat / incl. insulation	98/146	142/162	145/160
Roth RTL valve 10-50 degrees with wireless room thermostat / incl. insulation	98/146	142/162	120/130
Roth RTL valve with capillary sensor, 5 metres / incl. insulation	98/146	142/162	145/160



Roth RTL valve

Connection



Installation

The RTL valve can be attached to the wall or similar through the insulation via the four screw holes on the valve body.

The valve must be installed on the return pipe of the underfloor heating circuit as shown in the illustration. It is important to thoroughly flush through the installation and to air it out so that there is no air trapped in the underfloor heating hose and the valve itself.

The media thermostat must be configured to achieve the desired floor temperature. If a thermostat element or wireless room thermostat has been installed to regulate the room temperature then this must be configured afterwards. It is important to ensure that the capillary sensor or wireless room thermostat is positioned in such a way as to achieve the most representative reading for the room. Please see below for configuration of thermostats.

Media thermostat scale					
Thermostat settings	1	2	3	4	5
Media temperature (return)	10°C	20°C	30°C	40°C	50°C

The above scale reflects the mean temperature of the thermostat.

Scale for sensor element with or without capillary sensor						
Thermostat settings	*	1	2	3	4	5
Room temperature	6°C	12°C	16°C	20°C	24°C	28°C

For wireless room thermostats the room temperature must be configured based on the gradation of the room thermostat.