

DATA SHEET

DBV1 Thermal Safety Relief Valve, insulated

DBV1 insulated

DBV1 with T-piece, insulated


Main Features

Application	Protection against overheating of a solid-fuel fired heat source w. no cooling heat exchanger.
Function	Feed and bleed valves are controlled by a thermostatic element; when the limit temperature is reached, both the valves open simultaneously; the bleed valve permits exit of overheated water from the heat source to sewer, the feed valve opens water inlet from the mains; when the temperature drops below the limit value, both the valves close.
Working fluid	Water, antifreeze fluid for heating systems.
Installation ^{1), 2)}	Vertical or horizontal, as close to an outlet from a heat source as possible, insulation can be fitted or removed even after the valve is installed.
Codes	16912 – DBV1, insulated 16913 – DBV1 with T-piece, insulated

1) When installed horizontally, the hot heating fluid outlet shall point downwards.

2) When installed vertically, the head shall not point downward.

Technical Data

Nominal diameter	DN 20
Pipe connection	G 3/4" outer
Connection to heat source	R 3/4" outer (conical)
Min. diameter of connected piping	DN 16
Nominal pressure	PN 6
Heating fluid max. working pressure	4 bar
Cold water max. working pressure	6 bar
Fluid max. working temperature	110 °C
Valve opening temperature	97 ± 2 °C
Max. cooling capacity ^{*)}	190 kW
K _v s at temperature of 110°C	1,8 m ³ /h

^{*)} Under these cooling water parameters, before the valve: 2 bar pressure, 15°C temperature.

Weight

DBV1 and insulation	0.68 kg
DBV1, T-piece, insulation	1.12 kg

Materials

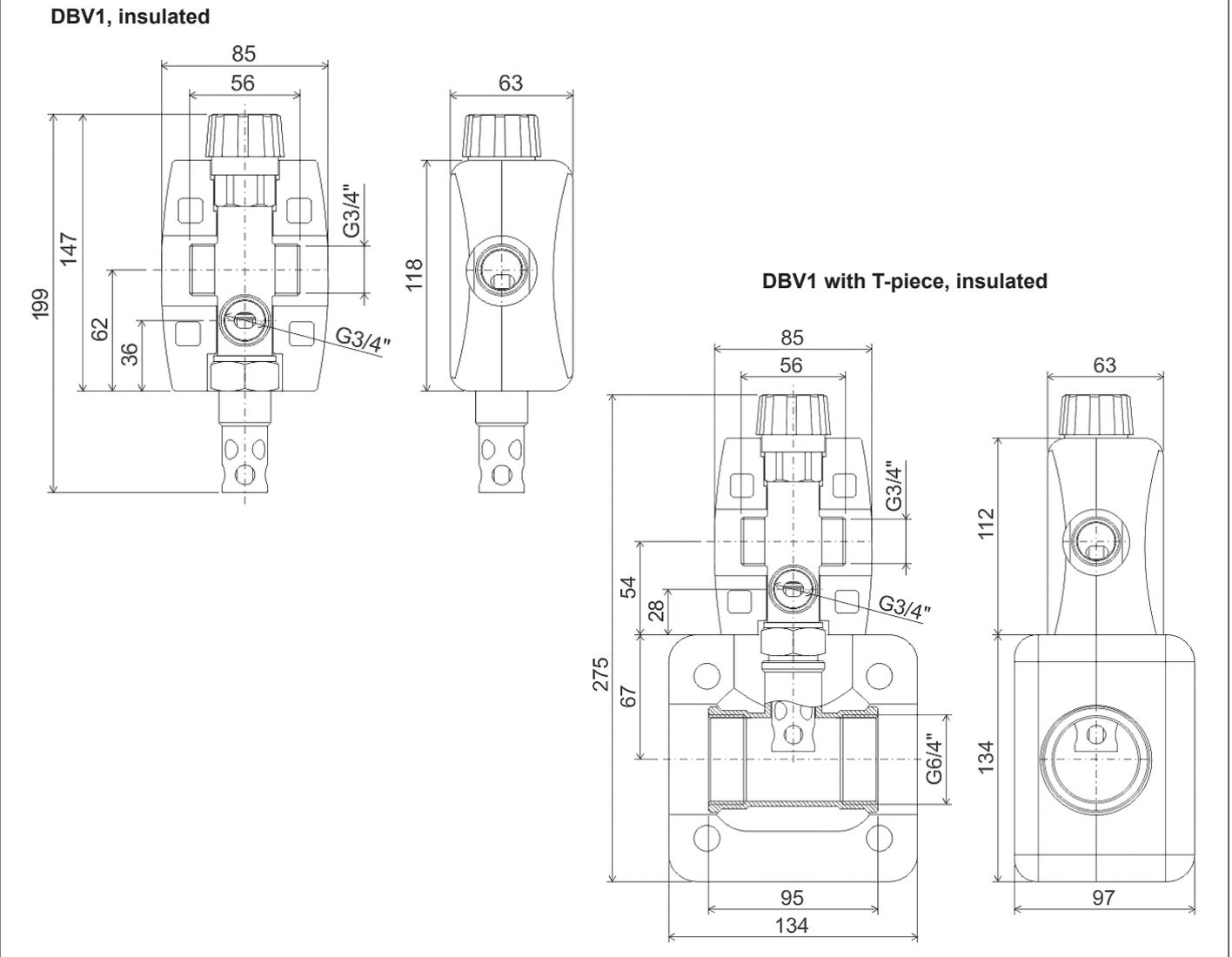
Valve housing	forged brass
Valve gate	forged brass
Valve head	nylon
Sealing O-rings	EPDM
T-piece	brass
Insulation	EPP RG 60 g/l

Thermal Relief Valve must not be used to replace a heat source safety valve.

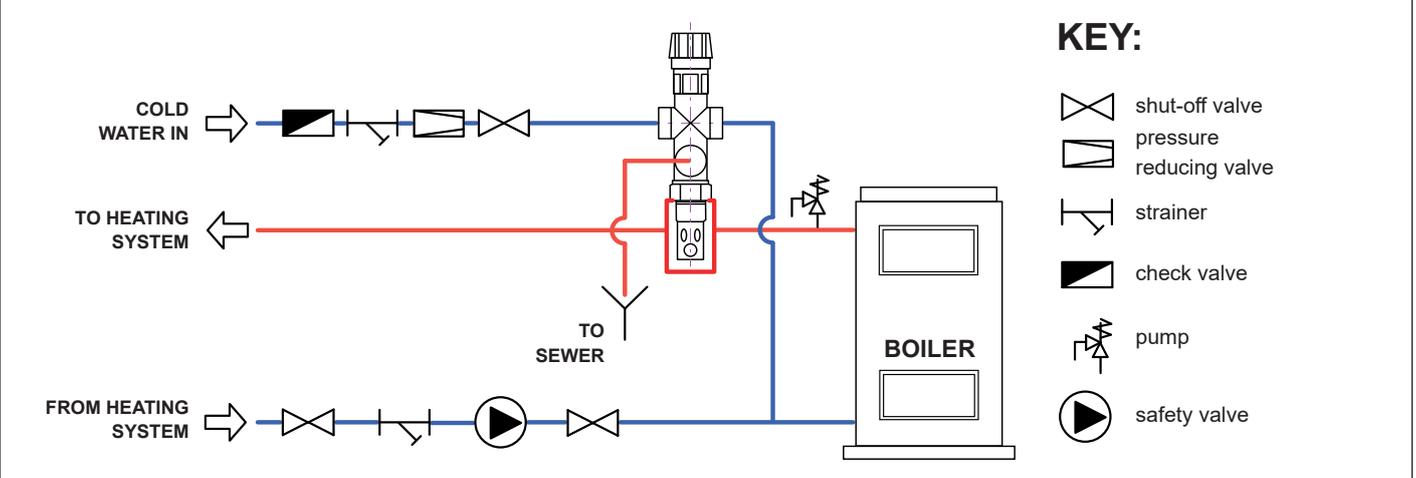
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Dimensions



Connection diagram



Before the assembly is finished, each valve gets its serial number and is tested. During testing a pressure test is performed, tightness of all its O-rings is verified as well as simultaneous opening of both the sections, the value of the opening temperature and stroke. The course of the test is recorded.