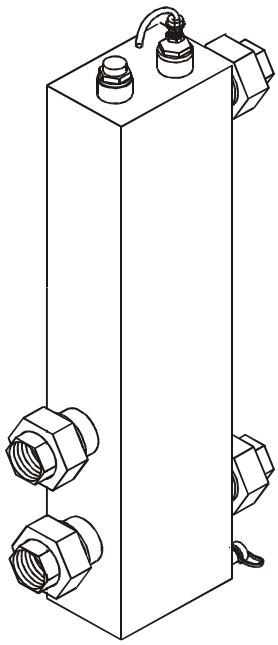
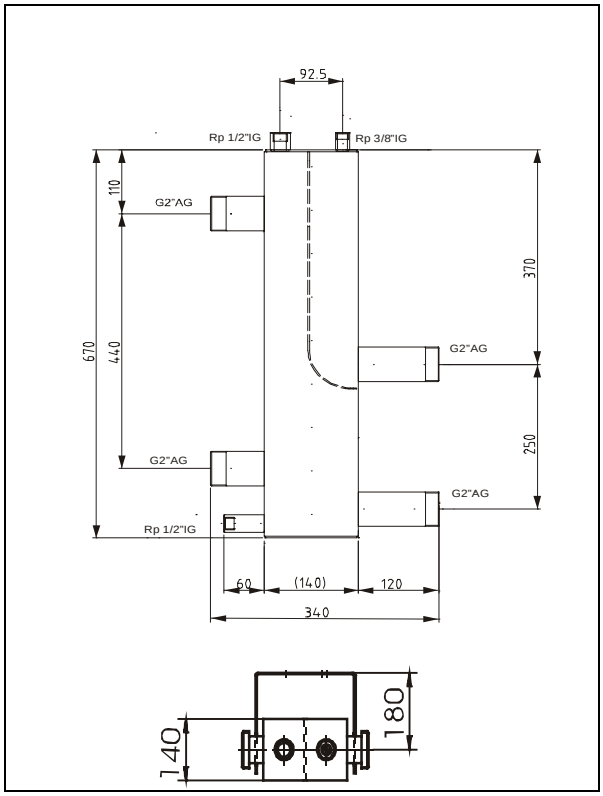
Technical Data Sheet

Hydraulic switch, 10 cubic metres





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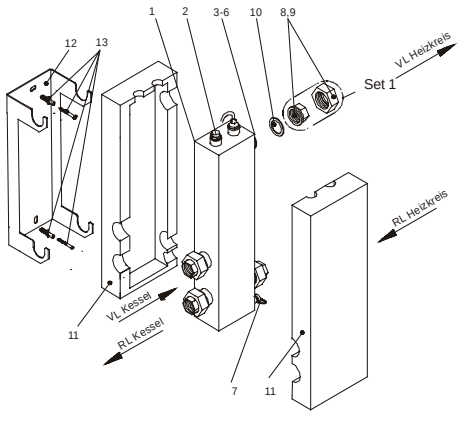
Technical description

The hydraulic switch of the type 140 is designed for use in boiler systems for the hydraulic separation of boiler heating circuit and downstream mixing valve or pump heating circuits.
The switch consists of a square hollow profile (140mm x 140mm) with four flat-sealing connection points G 2“ (male thread) and connections for boiler fill and drain valve, venting unit, each Rp ½“ (female thread), and immersion sleeve Rp 3/8“ (female thread).
The unit is supplied complete with insulation, boiler fill and drain valve, immersion sleeve, venting unit, gaskets, wall bracket and mounting materials. Connection to customer’s piping is via flat-sealing insert components Rp11/4“ (female thread).

Technical data

Max. volume flow	m³/h	10
Max. operating pressure	bar	6
Boiler heating circuit connection	G	2“
Mixing valve/Pump heating circuit connection	G	2“
Material:		
Chamber coated black in acc. with RAL 9005	RSt37-2 (1.0038)	
Heating circuit connection G 2“	St37.0 (1.0254)	
2 connection nuts Rp ½	St37.0 (1.0254)	
1 connection bushing Rp 3/8“	St37.0 (1.0254)	



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The switch must be installed by a suitably qualified technician.
Before working on the wiring, shut off the power supply to the unit and secure against accidental switch-on.
Always comply with the relevant standards and regulations as well as the installation instructions for the boiler.

Installation – see Fig. 2

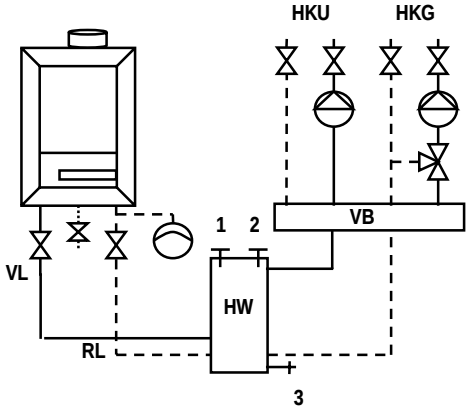
The hydraulic switch is installed between boiler heating circuit and the regulated/unregulated heating circuits as shown in Fig. 3.
Mount the wall bracket (item 12, Fig. 2) in a suitable position using the enclosed fastening materials (item 13, Fig. 2). Push the rear insulation cladding (item 11, Fig. 2) (the rear is fitted with slits) over the wall bracket and hang the hydraulic switch (item 1, Fig. 2) on the bracket.

The immersion sensor connection must point towards the mixing valve/pump heating circuit. Insert the immersion sensor in the immersion sleeve (item 2, Fig. 3) and fix in place using the counternut.
When the hydraulic switch has been installed, push the front insulation cladding onto the switch and pull the rear insulation cladding forward so that the two meet in the middle and are fixed in place.

Startup

After filling he heating system, vent the hydraulic switch using the manual venting device (item 2, Fig 2). Follow the instructions in the installation manual for the boiler and the controller when starting up the overall system.

Integration of the hydraulic switch Fig. 3



1	Venting unit
2	System flow probe
3	Boiler fill and drain valve
VL	Flow
RL	Return
HW	Hydraulic switch
VB	Manifold bar
HKU	Heating circuit, regulated
HKG	Heating circuit, unregulated

Maintenance

During operation of the heating system, oxygen is exhaled from the heating water and collects in the hydraulic switch. Like all the other venting points of the heating system, this should be frequently vented, particularly following initial filling and first startup. A blowing, splashing sound indicates that there is air in the switch.

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