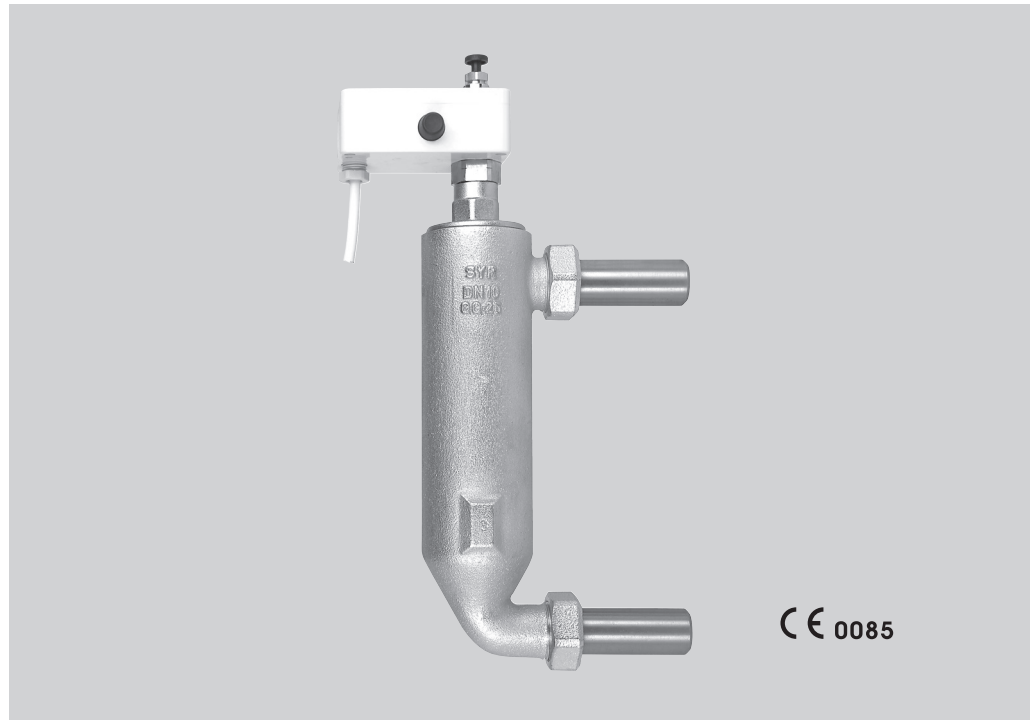


Water Level Limiter 933

Protection against insufficient water level, for installation in pipes



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Field of application

The water level limiter type 933 protects boilers in heating installations against dry-heating resulting from an insufficient water level. The installation of such a device is highly recommended for safety reasons.

The water level limiter type 933 can also be used for any device, which operates with water level dependent electric switches and requires a test possibility without lowering the water level.

Design

The water level limiter type 933 is designed with magnetic transmission of the float movement to a microswitch; it allows testing without lowering the water level. The electric switch unit is rotatable by 360° and can be exchanged without draining the installation. Two models of the water level limiter type 933 are available: type 933.1 isolates

the system after cutting the burner off. When the malfunction is eliminated, re-connect the system by means of the unlock key on the water level limiter. Type 933.2 does not isolate the system after cutting the burner off; therefore, the following electric circuit will have to provide the isolation.

933 Water level limiter

Materials

The nipple, the test sensor, the magnetic glide sleeve and the internal parts are made of a high quality low-lead brass alloy. The float is made of a heat and pressure resistant special glass and the switch unit body of synthetic material. All brass and copper parts in contact with water are nickel-plated. The

sealing elements are made of heat and ageing resistant elastomeric synthetic material. The housing and the captive nut are made of malleable cast iron. The electric connection is made with a hardwired cable H 05 VV-F 4G 0.75 mm², length 2.5 m.

Installation


Install the water level limiter type 933 as external appliance in parallel to the radiator supply line of

the boiler.

Screw the water level limiter type 933 in the pre-installed connection piece (DN 20) in the radiator supply line of the boiler. When installing, imperatively ensure that the float is not damaged. The electric connection has to be made by an electrician in compliance with the prescriptions of the local power supply company under consideration of the circuit diagram and the cable designation.

After the installation, fill and vent the system. Afterwards, vent the water level limiter separately: loosen the gland packing on the test sensor until water comes out; then, re-tighten. To start up the installation, pull the test sensor (only with type 933.1) upwards to the stop; then, press the unlock key.

Technical data

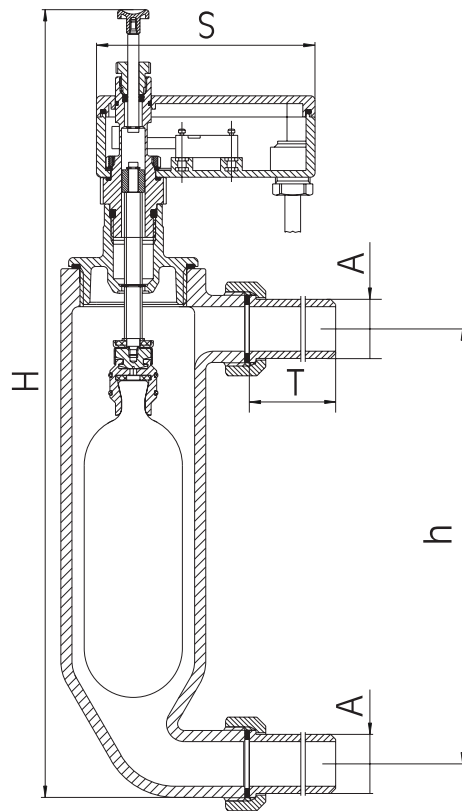
Operating overpressure:	max. 10 bar
Operating temperature:	max. 120 °C
Service temperature:	max. 70°C
Type of protection:	IP 65
Microswitch:	on-off switch, single pole
Mounting position:	main axis vertical
Capacity:	10 (4) A / 250 Volt
Component approval:	TÜV - HWB - 16-190
VDE-Nr.:	139223 
Serial number:	0933...

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Maintenance

The device requires no regular maintenance. However, it should be unlocked manually once per year in order to test functionality. All components can

be exchanged separately. The switch unit can be exchanged without draining the installation.



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Nominal size	DN 20	
Dimensions in mm	A	20 mm
	H (mm)	370
	h (mm)	195
	S (mm)	64 x 98
	T (mm)	70

Models

Type 933.1 with interlock
 Type 933.2 without interlock



933 Water level limiter

Components / Order numbers

- ① **Test sensor**
0933.20.911
- ② **Microswitch**
0933.20.912
- ③ **Complete switch unit**
0933.20.904
- ④ **Complete float**
0933.20.910
- ⑤ **Valve without housing**
0933.20.900
- ⑥ **Glass float**
0933.20.906
- ⑦ **Housing**
- ⑧ **Seal**
- ⑨ **Socket**
- ⑩ **Captive nut**

