

3 Scope of supply

See figure 1:

- Buchholz gas sampler type BGS
- Sealing plug
- Oil trap with opening plug
- Septum plug
- Replacement seals 3 pcs.
- Replacement septa 5 pcs.
- Transport case

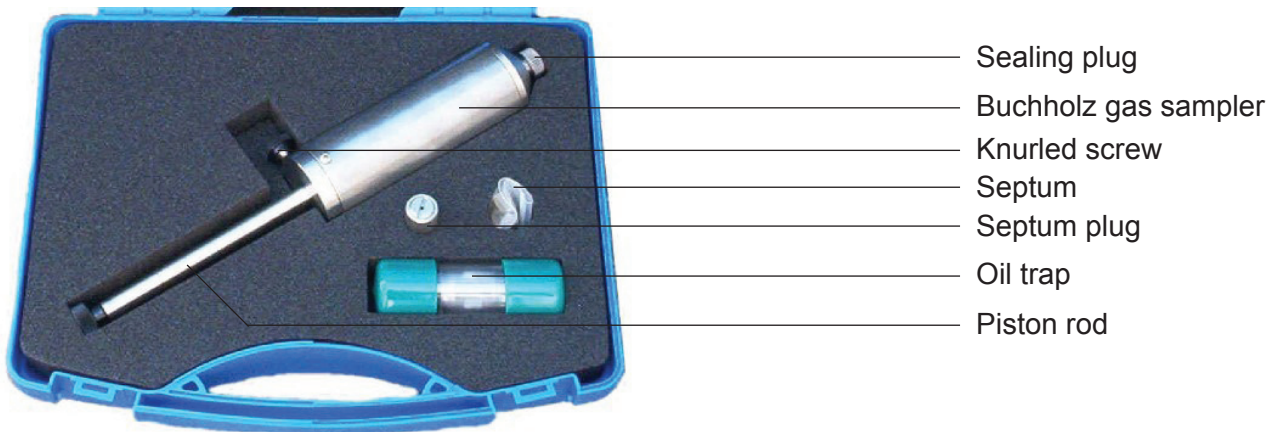


Figure 1 - Case contents of the BGS

4 Description of device

The sampler consists of a cylinder with piston and piston rod. To prevent residual oil from getting into the sampler, an oil trap is provided on the connecting branch of the sampler. The oil trap also serves as opening connection of the check valve in the sampler. At first the oil trap is screwed onto the test valve of the Buchholz relay and after that the sampler is screwed onto the oil trap. When the test valve is opened, the piston is automatically pressed outward by the pressure of the oil column in the transformer or pulled by hand. As a result of this motion, gas from the Buchholz relay is drawn via the check valve into the cylinder. When the sampler is unscrewed from the oil trap, the check valve closes so that the drawn-in gas cannot escape from the hermetically sealed sampler. After opening the test valve the sampler will be filled with Buchholz gas. After closing the test valve at first the sampler must be unscrewed from the oil trap and only thereafter it is allowed to unscrew the oil trap from the test valve of the Buchholz relay. The piston and piston rod can be fixed with the knurled screw. The gas can be kept for up to 5 days in the sampler without exhibiting any impermissible changes in its composition. The sampler with the Buchholz gas is taken to a Buchholz gas tester BGT for the onsite measurement or sent to a laboratory where the gas is analysed.

The sampler has a useful volume of 100 ml. Markings on the piston rod divide this volume into 6 x 15 ml and a residual quantity of 10 ml. 30 to 45 ml gas are consumed in the in-situ measurement. The remaining volume is available for gas analyses in the laboratory. The sampler is transported in the supplied case.