

Installation and Maintenance Instructions for Safety Valves

In selecting and installing safety valves the relevant safety regulations should be observed, i. e. in Germany e. g. the safety valves Safety Code, AD Specification A 2, TRD, DIN 4750, 4751 and 4752, the accident prevention regulations of the Trade Cooperative Association, etc and in other countries the local regulations.

Safety valves with ground metal sealing surfaces are sensitive to contamination. Various means are used to protect the sealing surfaces from damage by dirt during transport. These should not be removed on site until immediately before Installation of the valves.

The operating pressure of the section of the plant should be below the closing pressure of the safety valve, so that satisfactory closure is achieved after blow-off.

At installation ensure that the system (e. g. pressure vessel, boller or piping) is internally clean and free from rust. During the initial pressure test of the system, the safety valve should be fully opened manually, so that any foreign matter still present, or which becomes detached (scale, beads of weld metal), is blown out. Take this opportunity to check that the free lift of the valve has not been affected by damage in transport.

The valve must be so installed that the spindle serving to transmit force between the closing component and the actuating element (spring or weight) is vertical. Gaskets at the connection flanges must not constrict the free passage at the inlet or outlet.

The body of a THIES high-efficiency safety valve is provided with a threaded drain connection, which must connect fundamental. Exception: If the conduit of the second part of the safety valve is installed slope, then you can screw in a metalic-cup.

After the system has been put into service, the safety valves should be kept free from gross external contamination. Even where regulations do not prescribe it, the reliable functioning of each safety valve should be checked from time to time (on the response pressure being exceeded, or on manual lifting when 85 % of the response pressure has been reached).

The spindle and cone can be rotated, but this should be done only, when the valve is open, since otherwise, with force applied, the sealing surfaces can be damaged by rubbing. The safety valve can be opened manually by means of the lifting lever or by raising the pressure above the response level.

The safety valves are adjusted to the desired response pressure and sealed.

