Assembly & Maintenance Instructions - ART 642 & 645

1. Safety

- Only use the valve;
  - for the intended purpose
  - in satisfactory condition
  - with respect for safety and potential hazards.
- Always observe the installation instructions;
- Faults that may impair safety must be addressed immediately;
- The valves are exclusively intended for the application area stated in these installation instructions. Any other or further use is not valid as the intended use;
- The manufacturer's warranty shall be null and void if the sealed cover is removed;
- All assembly work is to be carried out by authorised specialist staff.

2. General Notes

Safety valves are high-quality fittings which require a particularly careful handling.

The sealing surfaces are precision-machined at the seat and cone to attain the required tightness. Always avoid the penetration of foreign particles into the valve during assembly and during the operation. The tightness of a safety valve can be impaired when using hemp, PTFE tape and welding beads, amongst other things. Also rough handling of the finished valve during storage, transport and assembly can result in a safety valve leaking. If the safety valves are painted, make sure that the sliding parts do not come into contact with the paint.

3. Range of Application

For details on the range of application of the individual versions please refer to the datasheets of the manufacturer.

4. Installation and Assembly

Spring-loaded safety valves are to be installed with the spring bonnet pointing vertically upward in line with the direction of the arrow.

To ensure satisfactory operation of the safety valves they must be installed in such a way that the safety valve is not exposed to any impermissible static, dynamic or thermal loads.

Appropriate protection devices must be applied if the medium that discharges upon actuation of the valve can lead to direct or indirect hazards to people or the environment. Always pay attention to possible fumes discharging from the relief bores in the spring bonnet.

Supply

Supply connection pieces for safety valves are to be kept as short as possible and are to be designed in such a way that there can be no pressure loss greater than 3% (Max.) of the response pressure.

Removal of condensate discharge

In the event of possible condensation the pipes or the valves themselves must be fitted at their lowest point with a continuously operating condensate discharge device. Hazard-free removal of the condensate or medium discharge must be ensured. The body, pipes and silencers must be protected against freezing.

Blowing-off pipe / backpressure

The blow-off pipe of the safety valves must be designed to ensure that the required mass flow can be discharged pressure-free during the blowing-off process.

5. Operation/Maintenance

Safety valves are the ultimate safety device for the tank or system. They must be able to prevent impermissible overpressure even when all other upstream control and monitoring equipment fail. To ensure these characteristics safety valves require maintenance, just like any other technical device. The maintenance intervals are determined by the operator in depending upon the operating conditions.

The operating pressure of the plant is to be at least 5 % lower than the closing pressure of the safety valve. In this way, the valve can satisfactorily close again after blowing off.In the event of minor leaks, which may be caused by contamination between the sealing surfaces, the valve can be made to blow off through lifting, for cleaning purposes. If this does not remove the leak, the sealing surface is probably damaged and this can only be repaired at our factory or by authorised specialists. Lifting is by actuating the lifting lever on the upper part of the valve (Fig. a). For delivery purposes the lifting lever is tied by means of a strap which has to be removed for actuating the lifting device.

Prior to removal make sure that the safety valve is not under pressure.

Lifting for maintenance purposes

It is recommended and in some plant specific situations mandatory to manually "blow off" the valve by lifting the seal off the seat with the use of the lifting lever (fig a), in order to ensure correct functioning of the safety valve.

The line pressure must be ≥ 85% of the set pressure before the lifting the lever. The lifting lever is NOT to be operated when the pressure is zero.

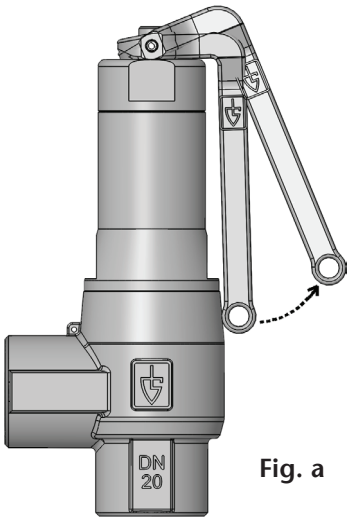


Fig. a

Dimensions in mm

This data sheet is designed as a guide and should not be regarded as wholly accurate in every detail. We reserve the right to amend the specification of any product without notice.

6. Dismantling the Fitting

In addition to the general installation instructions it must be ensured that the system is made pressure free prior to disassembly of the safety valve.

7. Repairs

Repair work on safety valves is only to be carried out by Goetze KG Armaturen or by officially approved specialist workshops authorised by Goetze KG Armaturen using original spare parts only.

8. Warranty

Every valve is tested prior to leaving the factory. We grant a warranty for our products which entails a free of charge repair of any parts that are returned and verified as being prematurely unsuitable for use due to defective material or manufacturing. We shall not assume any liability for any damage or other such obligations. If the seal is damaged due to any incorrect handling of or installation, non-observance of these operating and maintenance instructions, contamination or normal wear, warranty claims shall be null and void.

9. Marking/Testing

Type Description	
EN ISO 4126-1	
Set Pressure	p [bar]
Narrowest cross-section of flow:	A [mm²]
Reduced Discharge Ratio:	S/G k_{dr} designed for steam/gas L k_{dr} designed for liquids
Lift (at 10% above set pressure)	h [mm]

We check the safety valves for pressure resistance and tightness, adjust the requested set pressure and seal them.

The identification on the type plate or on the spring bonnet of the valve is applied using a permanent marking system.

In addition markings and technical data according to DIN EN ISO 4126-1 are included on the identification plate.

10. Declaration of Conformity

According to Annex VII of the Directive 97/23/EC

We, **Goetze KG Armaturen, D-71636 Ludwigsburg** declare under sole responsibility that the delivered poduct:

Safety valve

SeriesEC type test

642 ✓

645 ✓

has been manufactured in compliance with the Directive 97/23/EC and DIN ISO4126 and was subjected to the conformity assessment procedure:

Module B+D

An EC type test certificate is available for the equipment part for pressure devices.

The manufacturer produces the safety valves on behalf of Albion Valves UK Limited under the trademark "Albion".

The monitoring of the production quality assurance is performed by TÜV SÜD Industrie Service GmbH (0036).

Ludwigsburg, 30.04.2013

(Place and date of issue)



D. Weimann

Management

Dimensions in mm

This data sheet is designed as a guide and should not be regarded as wholly accurate in every detail. We reserve the right to amend the specification of any product without notice.