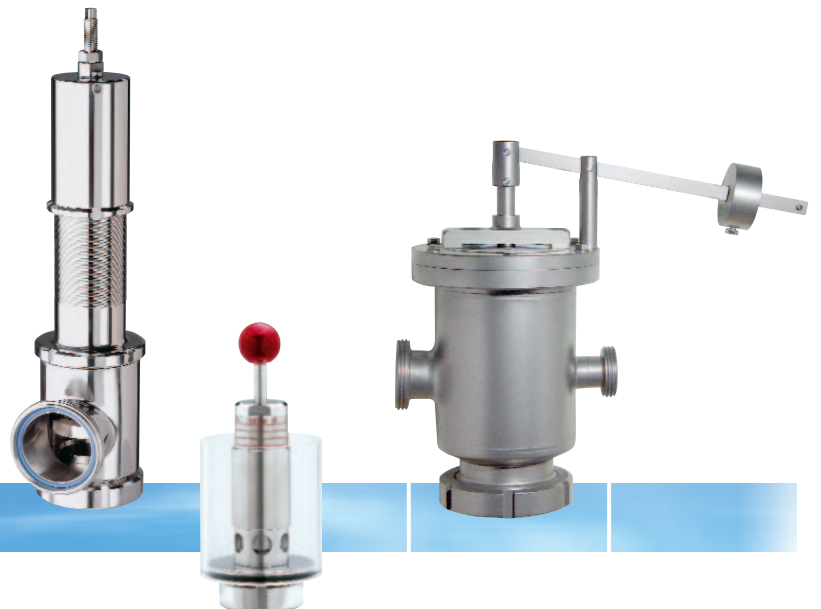




SO EVERYTHING KEEPS FLOWING

Safety valves
Bunging valves
Vacuum valves
Tank dome fittings





Reliable reaction at the right moment

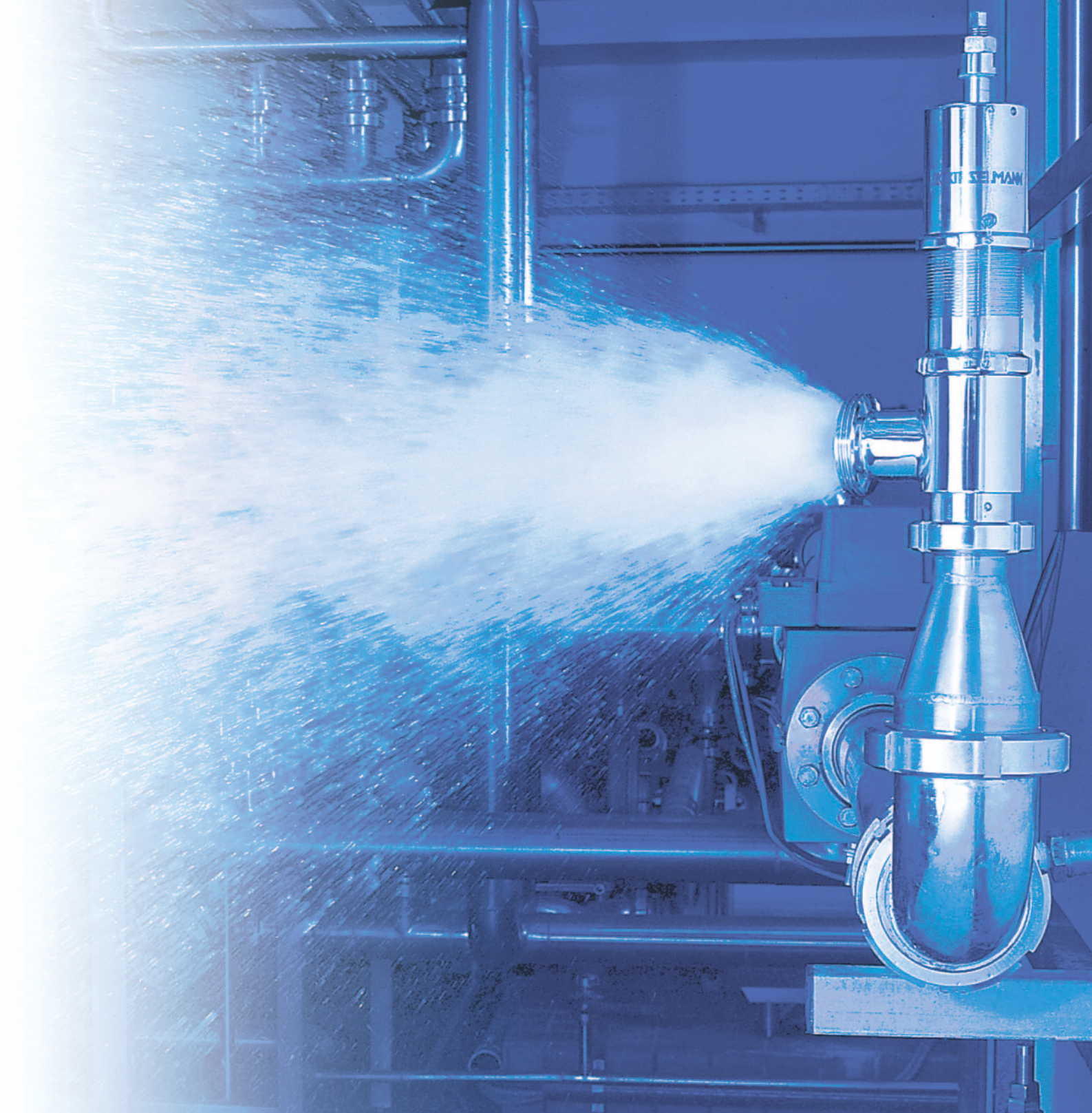
Safety components are part of our everyday life. Like anti-skid systems in cars, safety valves help to ensure that no unforeseeable hazardous situations can occur in production systems.

Overpressure in processing systems can be caused by faulty controls of valves and control elements but also by production processes. For this reason safety components are imperative, especially in sensitive fields such as pressure tanks and pipelines, to avoid material damages and injuries.

Kieselmann safety valves reliably prevent overpressure and ensure that the system operates in a secure and trouble-free manner. The wide range of valves available means that there is always the right solution available for all kinds of media,

whether liquid or gas. We supply spring-loaded and weight-loaded safety valves which comply with PED 97/23/EG. The valves, which are exactly adjusted and sealed in the approved test centre, are supplied with a test certificate.

But safety does not necessarily have to be expensive. Due to their high flowrate (α -value), Kieselmann safety valves achieve the defined performance even in small nominal widths and therefore play a role in saving investment costs.



In the Kieselmann test centre every single safety valve is exactly set, tested thoroughly, sealed and supplied with an inspection certificate.



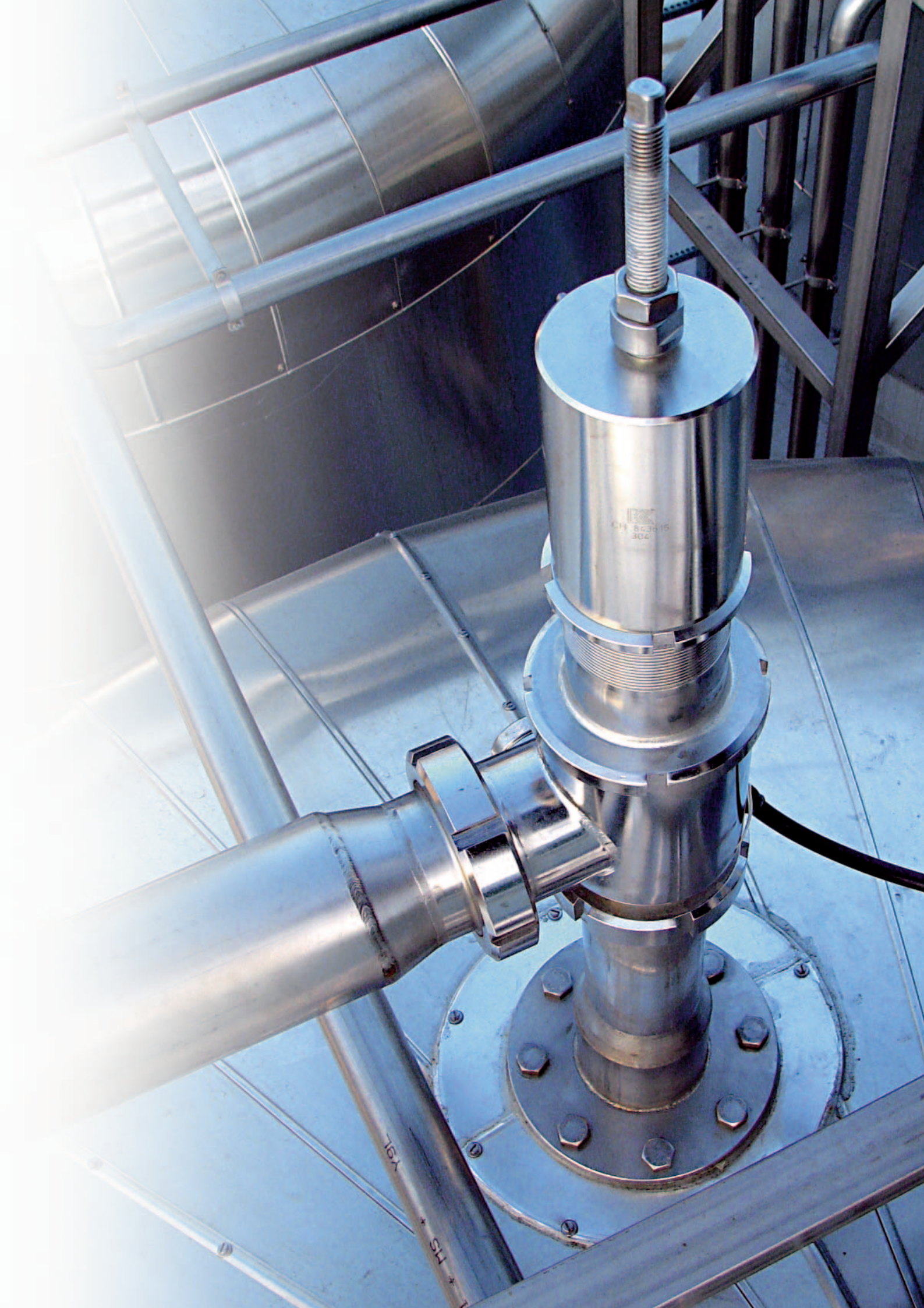
The KIESELMANN safety program

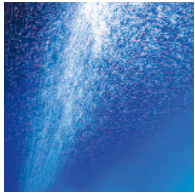
for tanks and pipes

KIESELMANN safety fittings

- ▶ for liquids and gases
- ▶ PED 97/23/EG component approval in accordance with AD 2000 guidelines
- ▶ optimum blowing-off performance combined with low flow resistance, i.e. high α -value
- ▶ hygiene design
- ▶ CIP/SIP-cleanability







Water and air ...

... can cause , if under high uncontrolled pressure, a serious amount of damage. Therefore the Kieselmann safety program contains safety valves that are specially designed for use with water and similar liquids as well as gases and vapours. Thanks to the spring-loaded and weight-loaded designs and the combination of material used, they are ideally suited for use in the food and beverage industry.

In addition to the standard version, Kieselmann safety valves can also be fitted with extra functions. In addition to the possibility of lifting the valve seats which are in product contact to facilitate cleaning, the safety valves for gases can also be fitted with a protection cover. This ensures that the media is blown out down-wards thereby minimizing the risk of injury. For outdoor use, the valves can be fitted with heating cartridges that reliably prevent the moving parts from freezing.

Also available are models with proximity switches that guarantee the recording of the operational status.

Kieselmann safety valves are designed to be low-maintenance. The valve can be serviced by the operator himself without needing to open the sealed housing.

KIESELMANN safety valves

For liquids and gases

Protected against overpressure

These valves open when the pressure, which is defined by the customer and set in our workshop, is exceeded. The valve closes by means of spring or weight power. Field of application: liquids (spring/weight loaded) and gases (spring-loaded). Spring-loaded models can be used in any position, weight-loaded models can only be used vertically due to their design.

Nominal widths: DN 25 - DN 100 (liquids)
DN 20 (gases)

Material: 1.4301 or 1.4404
for all parts which are in product contact

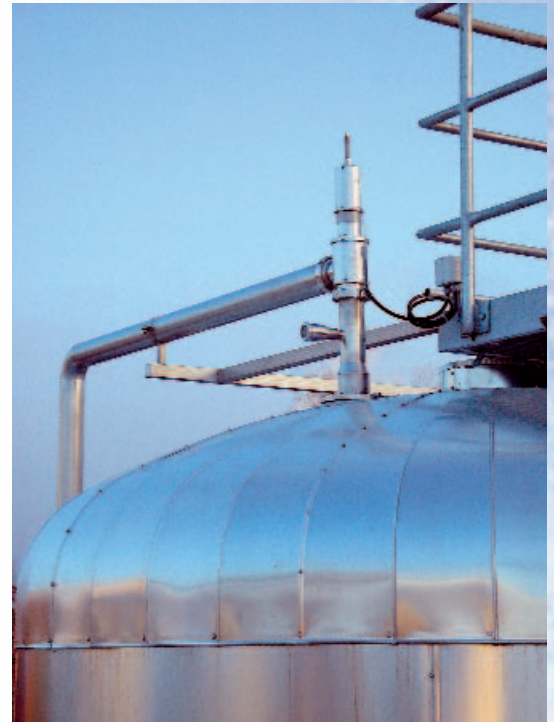
Sealing materials: EPDM (liquids)
Viton (gases)

Set pressure: 0.2 - 12 bar, depending on nominal width (liquids)
0.1 - 10 bar (gases)

Operating temperature: max. 80° C (liquids)
CIP-/SIP-capable up to 140° C
max. 120° C (gases)

Standard connection variants: liner nut DIN 11851,
RA 1" (gases)
Other connections available on request (e.g. flange, clamp)

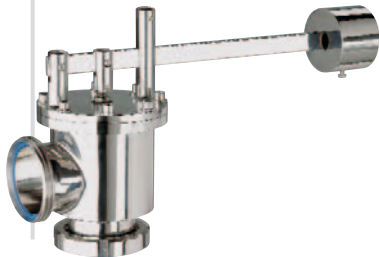
Options: pneumatic seat lifting
proximity switches (liquids)
heatable valve seats (liquids)
protection cover (gases)
water seal (gases)



Heatable safety valve



Safety valves for liquids (spring and weight-loaded) with outlet thread DIN 11851



Safety valve DN 25 for liquids und gases (spring-loaded) with outlet thread DIN 11851



Safety valves for gases (spring-loaded)



Pressure compensation ...

... may be required for certain pressure conditions. For example, if a constant level of pressure is a prerequisite for a production process for achieving a certain level of quality. For these applications Kieselmann has developed the bunging valves. Their characteristics and design are exactly tuned to the requirements of the food industry. The spring-loaded bunging valves can be infinitely adjusted to the required opening pressure. The valves open and close in reaction to the slightest changes of pressure and therefore allow a constant pressure to be maintained.

Bunging valves are available in two versions: the open model (free blow-off of CO_2) and the closed version with pipe connection. The closed version facilitates to collect superfluous CO_2 and to re-fed it into the production process. In addition to the standard version, the Kieselmann bunging valves for gases can also be fitted with a water seal that recognizes when gas is escaping.

KIESELMANN bunging valves for pressure regulation in fermenting processes

Constant pressure levels

These valves open at a defined set pressure (set by user infinitely) with a small tolerance range. Field of application: gases. Bunging valves are usually used in a vertical position.

- Nominal widths: Ra 1", DN 25/32 und 50
- Material: 1.4301 or 1.4404 for all parts which are in product contact
- Sealing material: EPDM
- Set pressure: 0.2 - 4 bar (Type 6266)
0.1 - 10 bar (Type 6246)
- Standard connection variants: liner nut DIN 11851, RA 1"
Other connections available on request (e.g. flange, clamp)



Bunging valve on a KZE for beer



Bunging valve type 6266
(spring-loaded)
with outlet thread DIN 11851



Bunging fitting type 6246
(spring-loaded)



A perfect connection

Tank domes are usually fitted with safety and cleaning components. Kieselmann tank dome fittings type TDAM provide the perfect basis for a combination of the required components in one unit. The inexpensive assembly of only one DIN-connection as a tank connection makes expensive tank dome plates with diverse connections superfluous! In addition to the standardized connection, this model also allows the tank cleaning process to be greatly simplified and made more safe. The fittings are equipped with vacuum valve, safety valve and switch valve for the gas line as well as with spray ball or rotary jet cleaner. They can also be fitted with bunging valves, manometers and other operational fittings on the downward pipe.

Vacuum safety

Vacuum in tanks, e.g. caused by rapid emptying, can cause damage to the tank and injury to persons. Play it safe with Kieselmann vacuum valves. If required, these valves, adjusted in our workshop, enable a specific vacuum that will be released at the right moment. Also available: spring-loaded and suspended vacuum valves.

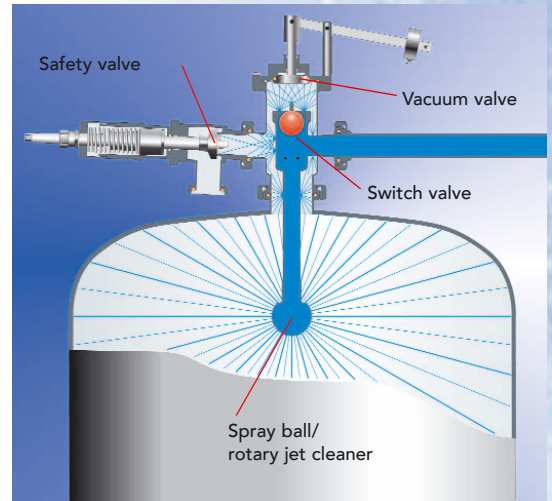


KIESELMANN tank dome fitting with standard connection to the tank dome

Prevention of overpressure and vacuum, for CO₂-recovery and tank cleaning

Combination module for the tank dome with DIN-connection as tank connection. The integrated switch valve ensures optimum cleaning of the interior of the fitting.

- Nominal widths:** DN 50 - 250
- Material:** 1.4301 or 1.4404 for all parts which are in product contact
- Spray ball/
rotary jet cleaner
connection:** DN 20 - 50
- Hygiene:** Cleaning certificate TU Munich
Weihenstephan
- Cleaning:** Self-cleaning due to switch
valve and spray nozzles in the
fitting



Tank dome fitting TDAM during cleaning



Standard version tank dome fitting TDAM
With vacuum valve, safety valve, switch valve and
spray ball



**Quality and
responsibility
secure
the result**

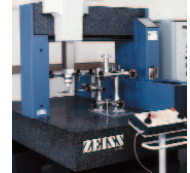
After more than 70 years experience, Kieselmann has achieved a leading position in the production of processing components in stainless steel for the food-, chemical- and pharmaceutical industry. Our success is based mainly on the high quality awareness of employees, combined with a constantly growing performance demand.

Due to continuous product development and constant improvement of the organization, Kieselmann is today prepared for the tasks of the future.

At the parent plant in Knittlingen as well as in numerous national and international representatives, highly motivated and trained employees are at your disposal.

We look forward to a successful cooperation with your company.

Certified according to DIN EN ISO 9001



Quality control with program controlled machines



Most modern equipment for construction and production



Particular test center for new developments and product control

KIESELMANN
TECHNOLOGY AND KNOW-HOW IN STAINLESS STEEL

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