

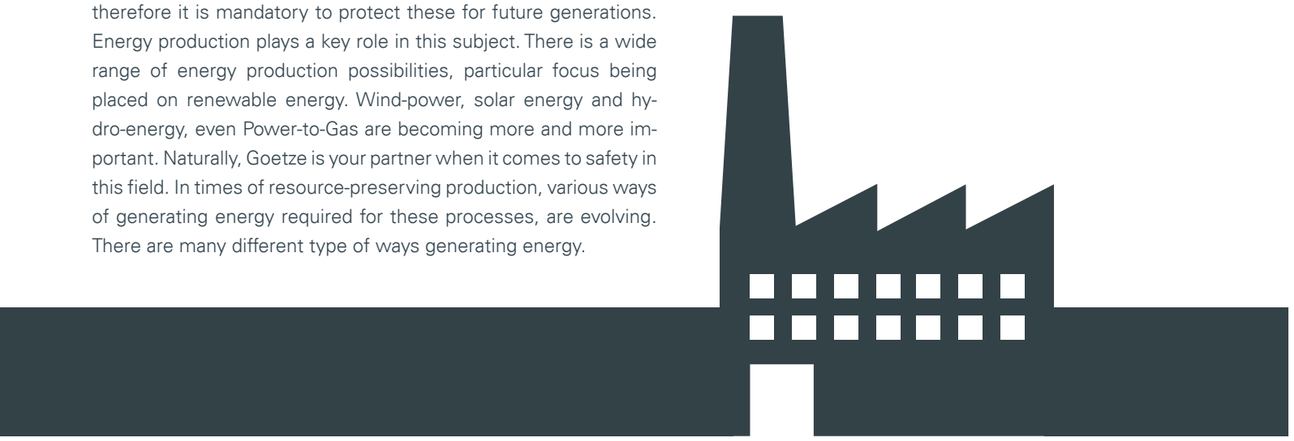
ENERGY PRODUCTION

Customized **solutions**
for your business

ARMATUREN GOETZE



Resources on the planet are becoming more and more limited, therefore it is mandatory to protect these for future generations. Energy production plays a key role in this subject. There is a wide range of energy production possibilities, particular focus being placed on renewable energy. Wind-power, solar energy and hydro-energy, even Power-to-Gas are becoming more and more important. Naturally, Goetze is your partner when it comes to safety in this field. In times of resource-preserving production, various ways of generating energy required for these processes, are evolving. There are many different type of ways generating energy.



GOETZE SAFETY VALVES AND ENERGY PRODUCTION

Goetze offers in the area of energy production and the associated industries protection with usual Goetze quality „Made in Germany". With safety valves, pressure reducers and overflow valves in a wide range of variations from custom-made versions to to lot size one.

At the same time, the body materials, seat seals and connection types are fully customized for the plant in question. No matter whether gunmetal, stainless steel, spheroidal cast iron, flanged or threaded connection, you will always find the right solution for your application from Goetze.

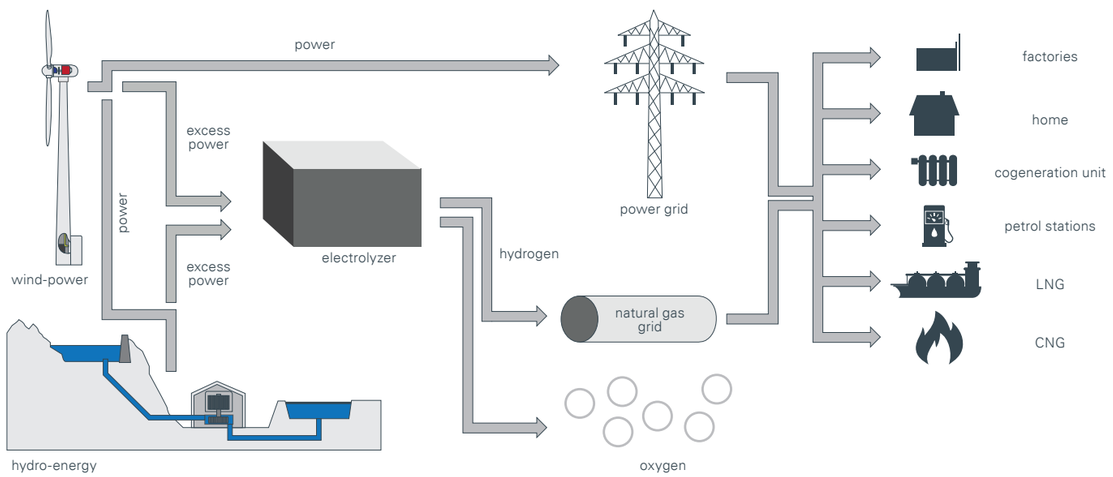
Today, energy can be generated in many different ways. There are more known and less known processes. Hydro-energy, for example, has long been used to generate energy. State-of-the-art plants feed the electric energy produced into the power grid. Particularly for components such as pumps and generators, Goetze provides overflow valves and safety valves for the perfect protection of such devices.

Goetze valves can be found on land and water as well as in large wind farms. Goetze impresses with the quality of the security it provides. In the wind-power industry, generators in particular are equipped with safety valves from Ludwigsburg. This ensures smooth operation when generating energy by wind and protects the generators from damage caused by excessive pressure.

But Goetze KG has not only set itself the task of promoting existing processes. The goal is also to promote new innovations. For example, the generation of energy by processing grain in suitable countries, such as Brazil. During the processing of grain, the otherwise unusable rejects are separated and used as fuel. In this way, both electricity and steam are generated in the plants. Where steam is produced there is also a need to protect the plant. In addition to safety, the focus here is also on efficiency. If a safety valve responds due to pressure fluctuations or an unplanned increase in pressure, only as much medium as necessary should be blown off to stabilize the process and protect the system. Because steam is also an expensive and valuable resource that is necessary for the operation of many systems.

Whereas over the past decades the focus was on producing renewable energy, now it is also becoming very important to store this energy. For the first time, unused electricity can be used in Power-to-Gas applications, where electricity is converted to Natrual Gas. For this purpose, excess electricity in the form of hydrogen is injected into the natural gas grid and the natural gas continues to be used in its usual form. Also, in this process equipment is used which must be fitted with protection devices, which guarantee the safety of both the plant and the environment.

With Goetze safety valves your energy produtcion process is reliably protected at all times. Your safety is our top priority.





SERIES 355

Flange safety valve

made of spheroidal graphite cast iron,
angle-type with flange connections

The series of flanged safety valve 355 captivates with its consistent concept of capacity, function and design. The high capacity of the entire series from DN 15 up to DN 100 is unique in the sector of flanged safety valves. Using spheroidal graphite cast iron for the housing allows a particularly inexpensive variant to be produced.

This is of particular interest for applications with heating water and steam as well as lower requirements with regard to high corrosion resistance. This series can be supplied either with open or closed cap. The range of variants is further extended by offering bellows in either elastomer or stainless steel and either a metal or soft-sealing valve seal.

Temperatures
from -10 °C to +350 °C

Pressures
from 0,2 bar to 40 bar

Flange connections
from DN 15 to DN 100



SERIES 455

Flange safety valve

made of stainless steel,
angle-type with flange connections

The series of flanged safety valve 455 captivates with its consistent concept of capacity, function and design. The high capacity of the entire series from DN 15 up to DN 100 is unique in the sector of flanged safety valves. By using exclusively high-quality materials with outstanding media resistance and the option to secure the tightness towards the atmosphere on a high level with a backpressure compensating bellows, this safety valve is suitable for nearly all applications. The pressure range extends from 0.2 to 40 bar and also extremely high temperatures can be applied up to a limit of 400 °C.

Temperatures
from -60 °C to +400 °C

Pressures
from 0,2 bar to 40 bar

Flange connections
from DN 15 to DN 100



SERIES 851

Safety valve angle-type

made of gunmetal, angle-type
with threaded connections

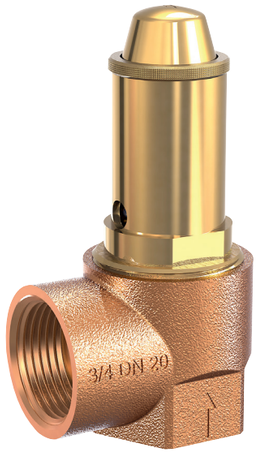
A proven series with an extremely compact design: with its very good price/performance ratio this valve has been proving its reliabiity for many years. In addition to the flexible basic version, according to the version and sealing material in question, this valve can be used for a varied range of applications, media and temperatures. As an optional extra, these valves can be fitted with metal bellows and/or a gastight cap.

Consequently, these valves can be configured for applications involving non-neutral, inflammable, toxic and viscous media.

Temperatures
from -60 °C to +225 °C

Pressures
from 0,5 bar to 50 bar

Threaded connections
from ½“ to 2“



SERIES 652

Safety valve angle-type

made of gunmetal, angle-type
with threaded connections

This safety valve made of gunmetal is an economical alternative to high-performance safety valves, in cases where only small blow-off capacities are required.

The version 652mFK for neutral liquids is ideal for the protection of pumps and pressure vessel systems, in cases where boiling point is never reached or if no evaporation of the media can occur. A diaphragm protects the moving parts and compression spring against the Media.

The version without diaphragm, type 652sGK is ideal for protecting small compressed air systems. Depending on the sealing material, this valve can be used for neutral, non-toxic compressible media with varying temperatures.

Temperatures
from -50 °C to +200 °C

Pressures
from 1,0 bar to 16 bar

Threaded connections
from ½“ to 2“



SERIES 810

Atmospheric discharge safety valve

made of brass, atmospheric discharge,
with threaded connection

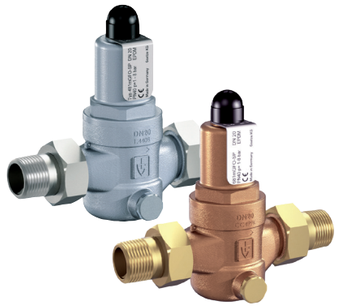
The basic model within the range of small safety valves for compressed air. It is compact and due to its good blow-off capacities is particularly suitable for the protection of pressure vessels and compressors.

However, even for large pressure vessels this valve can be employed due to its excellent price/performance ratio. This valve is equipped as standard with a stainless steel spring and FPM seal.

Temperatures
from -60 °C to +225 °C

Pressures
from 0,2 bar to 50 bar

Threaded connections
from ¼" to 2"



SERIES 481 / 681

Pressure reducing valve

made of stainless steel and gunmetal
with threaded connections

The proven, robust pressure reducing valves in full-metal-version with threaded connectors have not only proven themselves in drinking water application, but especially also in rough industrial operating conditions with many different, also aggressive substances and at fluctuating environmental temperatures. The materials used are optimised for water of different qualities and for warm water applications

Besides the standard range of adjustment of 1 to 8 bar the additional outlet pressure ranges of 0,5 bar to 2 bar and 5 bar to 15 bar cover a wide application range.

Optionally available with female thread.

Temperatures
from -20 °C to +120 °C

Inlet pressure: to 40 bar,
Outlet pressure: from 0,5 bar to 15 bar

Threaded connections
from ½" to 2"



SERIES 482 / 682

Pressure reducing valve

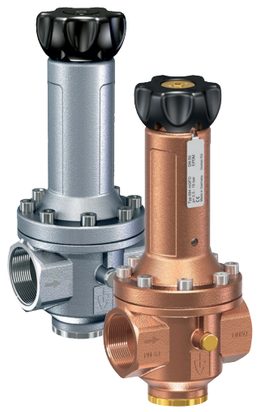
made of stainless steel and gunmetal
with flange connections

Fittings often require flange connections. This is the exact reason for our series in the nominal diameter ranges of DN 15 up to DN 100. Besides the standard versions of these pressure reducing valves made of stainless steel and gunmetal, the valves are also available in nominal diameters from DN 20 to DN 50 in high-pressure and a low-pressure version. Upon request we can also equip the stainless steel pressure reducing valves for various pressure ranges with stainless steel pressure gauges. For highest service-friendliness also in the case of the flange versions, a replacement internal cartridge with integrated dirt trap is available.

Temperatures
from -20 °C to +120 °C

Inlet pressure: to 40 bar,
Outlet pressure: from 0,5 bar to 15 bar

Flange connections
from DN 15 to DN 100



SERIES 484 / 684

Pressure reducing valve

made of stainless steel and gunmetal,
with female threaded connections

These diaphragm and piston pressure reducing valves with female threaded connections for pneumatic and hydraulic applications are distinguished particularly by high flow rates and low pressure losses even in situations of high performance demands.

Their extremely precise control characteristics, the inlet pressure of up to 60 bar and the wide outlet pressure range make these pressure reducing valves the optimal solution for almost all technically demanding applications.

Temperatures
from -40 °C to +120 °C

Inlet pressure: to 60 bar,
Outlet pressure: from 0,5 bar to 50 bar

Threaded connections
from ¼" to 2"

THE GOETZE KG

Individuality for more safety

The competence of Goetze KG Armaturen has been in demand for 75 years. Our wealth of experience is as broad and varied as our areas of application for our high-performance fittings. Our well thought-out family of products covers every industrial application: Liquids of all kinds, gases, technical vapours and steam. Goetze valves are used with temperatures ranging from -270 °C up to +400 °C and the greatest possible safety is a priority.

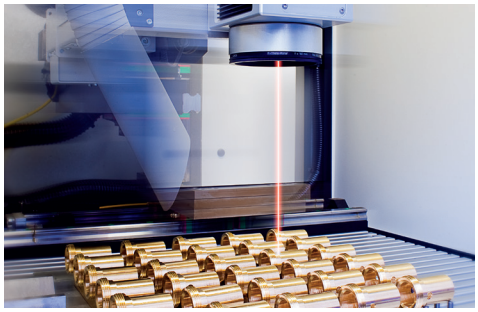
At any time, you can reach a competent contact partner as part of our in-house team at Goetze. Whether it is for the product selection, the configuration of the right valve, urgent requests, whether per telephone call or per mail, there is a personal multilingual consultant at your disposal.

We are your competent partner for all matters relating to the handling of pressure – „Made in Germany".











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