THE PRESSURE REDUCING VALVE SPECIALIST

Customized **solutions**
for your business.

ARMATUREN GOETZE

BUILDING TECHNOLOGY BY GOETZE

Tradition & innovation hand-in-hand

Driving new innovations and upholding tradition is never a contradiction in terms at Goetze KG. Since its founding in 1949, the fittings factory has manufactured heavy-duty gunmetal products for protecting plants using air, water and heating systems against overpressure or for reducing the inlet pressure to a required level. Gunmetal still plays a crucial role in products from Goetze KG – and is continuously optimised to ensure that market demands are ideally met. The development of the new pressure reducing valve, for example, focused on ensuring that the gunmetal used is environmentally compatible and compliant with potable water requirements.

For this reason, the material used is lead-free to prevent lead from entering the recycling loop and therefore also fulfils requirements such as RoHS. For more than 70 years, the supply of valves for building technology applications has been a core area of Goetze KG's business.

In addition to the building technology sector, under the leadership of Detlef Weimann, the industrial valve business has been constantly developed and new solutions for customers and their plants have been found. In 2015, the product range was expanded to include safety fittings for cryogenic applications. Our aim is to perfectly fulfill customer requirements at all times. Despite our expanded business sectors, building technology is still one of our most important branches. No matter, whether valves for heating applications, pressure reducing valves, safety valves for solar applications or the safeguarding of fire extinguishing systems: Goetze products can be found in many buildings today – from multi-storey buildings to single-family houses. Your safety is our top priority in every situation. Experience Goetze quality for yourself in our products and technical advice.

1949
Founding Gerhard Götze

1961
Move to the Robert-Mayer-Straße

1988-2002
Goetze under the direction of Rolf Götze

2002
D. Weimann aquires the general partner's shares and joins company as managing director

2006-2009
Modernization of manufacturing site

2010-2012
Building extension: in-house casino, training rooms

2015-2016
Founding of the sales subsidiaries in China and Russia

2019
70th anniversary and founding of the sales subsidiary in Brazil

2020
New Goetze Water Controls product line

SERIES 9000

Pressure reducing valve

made of lead-free gunmetal,
with threaded connections

The first Goetze fitting with functional parts made of plastic has been developed for the environmentally-aware and health-conscious user.

The lead-free pressure reducing valve housing does not release any harmful substances into the potable water and is corrosion - resistant for all water qualities. At the same time, the avoidance of heavy metals protects the environment.

The valve insert is made of a high-quality plastic from the medical technology sector, and offers convincing cavitation-, temperature- and media-resistance. The flow rate of the pressure reducing valve has also been rated for maximum output - flow optimisation permits a higher maximum flow rate and physical effects in the valve can create a higher flow rate with the same pressure drop.

The integrated 160 µm fine screen insert protects the fitting and downstream installation from dirt particles and is easy to clean without the valve insert having to be removed and the output pressure reset. The degree of contamination can be seen through the transparent filter cup.

Another feature is the setting scale visible from 2 angles. This makes the setting process even more convenient by displaying the current set pressure in every position. This means that the setting can also be made without a pressure gauge, special tool or operating pressure.

ADVANTAGES OF THIS SERIES

- **lead-free gunmetal housing**
- **high-quality plastic**
- **flow optimisation permits a higher maximum flow rate**
- **160 µm fine screen insert**
- **transparent filter cup**
- **setting scale visible from two angles**

Temperatures
from +5 °C to +85 °C

Inlet pressure up to 25 bar,
Outlet pressure adjustable
from 0,5 bar to 12 bar

Threaded connections
from ½“ to 2“

Simple and convenient: Watch step by step how to pressure adjustment and maintenance of the pressure reducer series 9000.


Building services


Construction machinery

SERIES 9040

Pressure reducing valve

made of stainless steel,
with threaded connections

The 9000 series is as the 9040 series, made of stainless steel. The V4A stainless steel housing does not release any harmful substances into the potable water and is corrosion-resistant for all water qualities. The corrosion resistant material is also suitable for aggressive media.

The stainless steel version is used, for example, in systems for processing foodstuffs, cosmetics, beverages or other complex media.

The pressure reducing valve also has an easy-to-clean filter screen with a transparent filter cup to protect the downstream system, the high-performance plastic valve insert and the setting scale visible from 2 angles.

A filter cup made of V4A is also available as an alternative for hot water and PN25 applications.

Also in this case, the valve insert is made entirely of plastic and the user enjoys all the benefits from all the advantages of the 9000 series in combination with those of V4A stainless steel.

Temperatures
from +5 °C to +85 °C

Inlet pressure up to 25 bar,
Outlet pressure adjustable
from 0,5 bar to 12 bar

Threaded connections
from ½“ to 2“

ADVANTAGES OF THIS SERIES

- **V4A stainless steel housing**
- **high-quality plastic**
- **flow optimisation permits a higher maximum flow rate**
- **160 µm fine screen insert**
- **transparent filter cup**
- **setting scale visible from two angles**


Washing facilities


Water systems


Bottling plants

LEAD-FREE GUNMETAL RG+

The lead-free gunmetal RG+ is the result of consistent development from the lead-containing gunmetal RG 5 lead-reduced CuSn5Zn5Pb2-C, which has proven itself for years. It is the preferred material for drinking water installations.

Inside the microstructure, lead has been substituted by sulphur, however it has no effect on the basic properties such as excellent corrosion resistance, tensile strength, elongation, hardness and machinability.

The new RG+ material was extensively tested in the laboratory and over several years in the field. The alloy is standardised by DIN SPEC 2701 and part of the Federal Environment Agency's positive list of metallic materials suitable for drinking water hygiene since 2018.

As well as for the conventional gunmetal, a high tin content in the new alloy ensures the optimum coating structure. In addition to high corrosion resistance it also guarantees long-term safety.

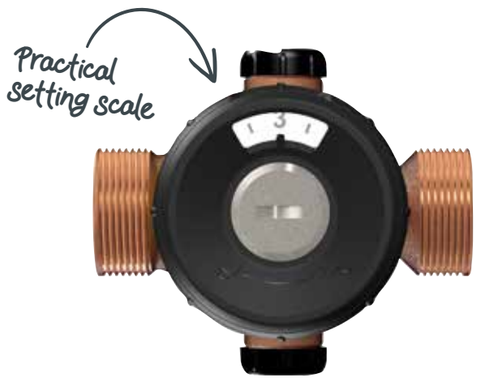
Therefore, the lead-free gunmetal RG+ can be used in all water qualities according to the drinking water ordinance and according to all drinking water-related standards in Europe without any restrictions.

The material has excellent hygienic properties. With a maximum lead content of 0.10% the requirements of national and international legislation, such as for the US are met and is also compliant to the REACH regulation, and will certainly meet future material requirements as well.

Lead-free gunmetal
Safe, environmentally-friendly, corrosion resistant

FUNCTIONS IDEALLY SUPPORTED BY AN INNOVATIVE DESIGN

Goetze is exploring new avenues not only in product development but its products are constantly advancing in terms of design as well. The pressure reducing valve sets itself apart, above all, through an integrated filter, a conveniently-shaped adjustment handle and a clearly arranged scale for setting the desired outlet pressure. Goetze is also breaking new ground in the field of materials. For the very first time, the company is making extensive use of plastics, the transparent filter cup, for example, being made exclusively of high-quality plastic.



OFFERING EVEN MORE BENEFITS THROUGH PLASTIC

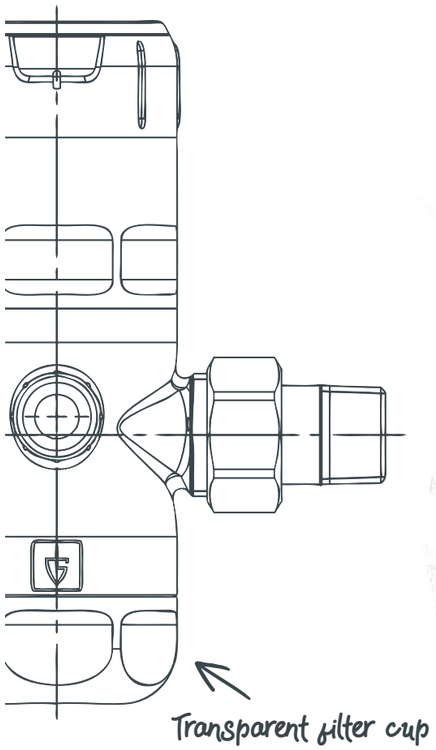
The new pressure reducing valve consists of a combination of materials unique for Goetze. As with numerous other products, the housing is made of gunmetal. Which is lead-free and offers the highest possible corrosion resistance.

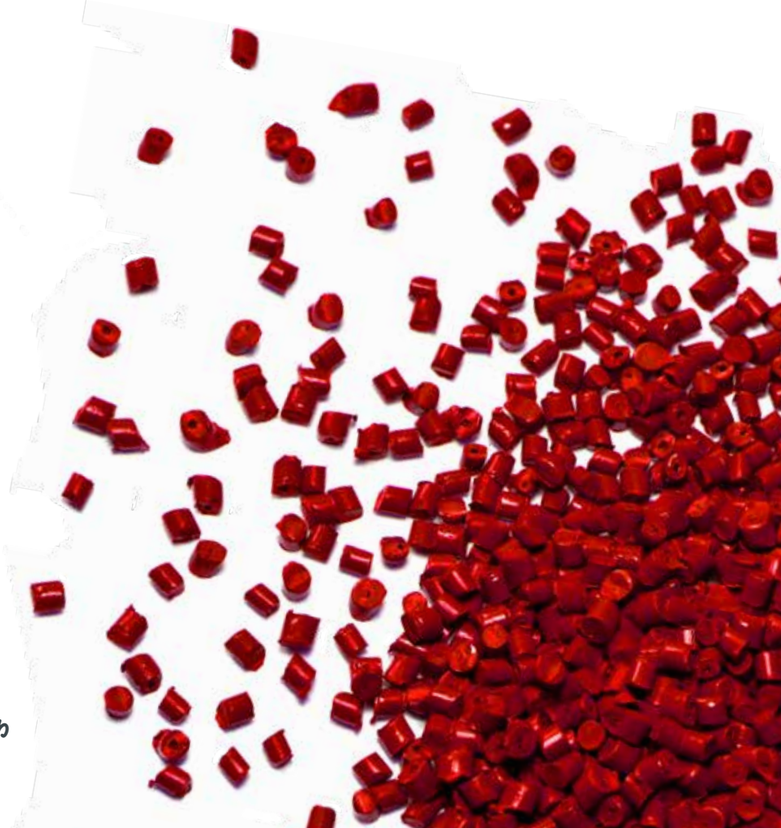
The elimination of lead offers further benefits: The environment is sustainably protected by the avoidance of heavy metals and future-proof recyclability is possible.

The use of selected plastics from medical technology, however, is new: for such components as the spring housing, the adjustment handle as well as in the filter cup and associated filter. The valve insert is even made of a plastic that is mainly used in medical technology.

The materials used set themselves apart in particular through high strength, hardness and rigidity even at high temperatures. In addition, plastics suffer little to no cavitation at all. But there is also enormous creative leeway in terms of the design itself. You benefit, for example, from the high degree of transparency that allows soiling to be detected quickly and the pressure reducing valve to be maintained accordingly.

By expanding the material combination, the user benefits from the positive properties of the plastic without having to forego the usual quality for which Goetze KG is known.





SERIES 382

Pressure reducing valve

made of spheroidal graphite cast iron,
with flange connections

The 382 pressure reducing valve is used in a wide variety of water applications. Whether in apartment buildings, office complexes, hospitals or hotels - wherever larger quantities of water are needed, it regulates the pressure excellently. Due to its low pressure drop, the pressure reducing valves 382 is even used in municipal water supply.

Only high-quality, approved materials are used for the pressure reducing valve 382. Thanks to its body made of spheroidal graphite cast iron the pressure reducing valves 382 is ideally equipped to withstand mechanical stresses in the installation.

Its high-quality polyamide coating applied in a dipping process, offers maximum corrosion resistance – even against sea-water and abrasive water.

The valve insert made of V4A stainless steel can be removed quickly and easily for maintenance.

For easy backpressure adjustment without operating pressure, the flanged pressure reducer is equipped with an adjustment scale in the spring housing.

ADVANTAGES OF THIS SERIES

- **adjustment scale in the bonnet**
- **housing with polyamide coating offers highest corrosion resistance**
- **valve insert made of V4A stainless steel**
- **two glycerine-filled pressure gauges and flange seals made of EPDM with steel core**

Temperatures
from +5 °C to +65 °C

Inlet pressure up to 25 bar,
Outlet pressure
from 0,5 bar to 12 bar

Flange connections
from DN 50 to DN 65


Water supply

Buildings

SERIES 9160

Pressure reducing valve

made of brass,
with threaded connections

The 9160 series - the smallest water pressure reducing valves in the Goetze portfolio.

These mini pressure reducing valves in Nominal diameter DN 8 are used especially in applications such as coffee machines, water dispensers or soft drink dispensers with fixed water connections. The small size is particularly important here, since the pressure reducing valves are often integrated into the integrated into the body of the unit.

In flat water installations, the mini pressure reducing valves are often used in Nominal diameter DN 15 and DN 20.

The integrated filter screen protects the unit and the installation from particles and impurities. An adjustment scale in the spring housing enables pressureless presetting with a screwdriver.

Nominal diameters DN 15 and DN 20 can be installed with optionally available fitting screw connections. Alternatively, directly by means of a female thread.

The body is made of Dezincification resistant brass - also available in lead-free brass on request. Fittings and pressure gauges are available as accessories.

ADVANTAGES OF THIS SERIES

- **integrated filter sieve**
- **adjustment scale for pressureless presetting with a screwdriver**
- **housing made of dezincification-resistant brass**

Temperatures
from +5 °C to +60 °C

Inlet pressure up to 16 bar,
Outlet pressure
from 1 bar to 6 bar

Threaded connections
from ⅜“ to ¾“


Coffee machine


Water dispenser

SERIES 481 & 681

Pressure reducing valve

made of stainless steel and gunmetal,
with threaded connections

The tried and tested, robust pressure reducing valves in full metal design with screwed connections have proven themselves not only in the drinking water sector, but especially under harsh operating conditions in the industrial sector for a wide variety of media, including aggressive media, and at fluctuating ambient temperatures. The materials are optimised for a wide range of water qualities and hot water applications.

In addition to the standard setting range of 1 to 8 bar, a wide range of applications is served by the additional backpressure ranges of 0.5 to 2 bar and 5 to 15 bar.

Optionally available with female thread.

Temperatures
from -20 °C to +120 °C

Inlet pressure up to 40 bar,
Outlet pressure adjustable
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 up to 40 bar,
Outlet pressure adjustable
from 0,5 bar to 15 bar

Flange connections
from DN 15 to DN 100

SERIES 651mW

Diaphragm safety valve

made of gunmetal, angle type,
with threaded connections

651mWNK enlarged outlet (TÜV/CE)
651mWIK with inlet and outlet diameter equal

Particularly in the case of valves which are employed in potable water installations, we do not accept any compromises regarding the materials used.

Only the highest quality materials suitable and approved for potable water applications are used in these valves.

These types of safety valves with diaphragm are installed in the cold water pipe before the hot water heater to protect it from inadmissible overpressure.

Temperatures
from -10 °C to +95 °C

Pressures
from 3 bar to 10 bar

Threaded connections
from ½“ to 1 ¼“

OUR CERTIFICATES

Proof of the safety and reliability: We offer CE Certification according to the European Pressure Equipment Directive is mandatory for many products and markets. Additional certificates are however proof of our individual quality, such as: TÜV, DVG W, WRA S, ACS, EA C, SINTEF . Last but not least, DIN ISO 9001 stands for the internal quality management process, with its comprehensive functionality and performance assessment. The particularly strict regulations of the national rules guarantee the highest possible degree of safety – especially when it comes to the reliability of your plant.

GENERAL TYPE TEST APPROVALS

CE
↗ EUROPEAN PED

National Type Test (TÜV)
↗ NATIONAL TYPE TEST (TÜV)

EU type test
↗ EC-TYPE TEST

ASME
↗ TYPE TEST (USA)

CRN
↗ CANADIAN REGISTRATION NUMBER (CRN)

EAC
↗ TR ZU 032/2013 (RU)

TS
↗ MANUFACTURE LICENSE (CHINA) TSG ZF001-2006

KC
↗ KOREA GAS SAFETY (KR)

KCs
↗ KOSHA

UKCA
↗ TYPE APPROVAL (UK)

APPLICATIONS: POTABLE WATER AND BUILDING TECHNOLOGY

DIN DVGW
↗ TYPE APPROVAL (DE)

ACS
↗ TYPE APPROVAL (FR)

WRAS APPROVED PRODUCT
↗ TYPE APPROVAL (EN)

SVGW SSIGE
↗ TYPE APPROVAL

↗ TYPE APPROVAL (PL)

SINTEF
↗ TYPE APPROVAL (NO)

APPLICATIONS: SHIPBUILDING AND RAILWAY

DNV
↗ TYPE APPROVAL

Lloyd's Register
↗ TYPE APPROVAL

ABS
↗ TYPE APPROVAL

BUREAU VERITAS
↗ TYPE APPROVAL

↗ TYPE APPROVAL

RINA
↗ TYPE APPROVAL

DB
↗ DEUTSCHE BAHN

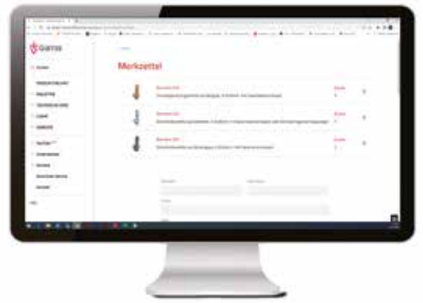
INTERNET SERVICE OF GOETZE

BIM DATA: THE RIGHT DATA FOR YOUR EFFICIENT PLANNING

Building Information Modeling (BIM) is an intelligent process based on a 3D model that provides architects, engineers and contractors with information and tools for efficient planning, design, construction and management of buildings and infrastructure. The BIM process accompanies a building throughout its entire life cycle. From planning to execution to operation, all information is transferred into the digital process.

3D MODELS AND TENDER DOCUMENTS

We provide free-of-charge our 3D models in various and common formats. On our website you will find them under the section „Download-Service".



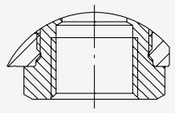
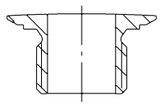
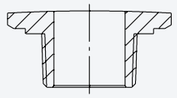
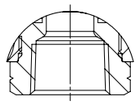
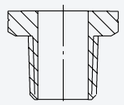
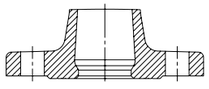
MOBILE WEBSITE

Our website is also available in a version optimised for smart phones. As usual, you may find your products simply and easily – also when you are out and about.

Curious? Just take a look!

www.goetze-group.com

CONNECTION POSSIBILITIES

Connection type	Drawing	Description
f		Whitworth male threaded pipe connection cylindrical; seal not made on thread BSP-P according to DIN ISO 228
m		Whitworth male threaded pipe connection cylindrical; seal not made on thread BSP-P according to DIN ISO 228
BSP-Tm		Whitworth male threaded pipe connection tapered; seal made on thread male connection BSP-T according to DIN EN 10226
NPTf		US tapered pipe thread for dry closure NPTF female threaded pipe connection NPTF according to ANSI / ASME B1.20.3 seal made on thread
NPTm		US standard tapered pipe thread NPT male threaded pipe connection NPT according to ANSI / ASME B 1.20.1 seal made on thread
FL		Cast flange connection according to DIN EN 1092

PRESSURE REDUCING VALVE – SIMPLY EXPLAINED

Assembly instructions are also available as a video

Pressure reducing valve – Installation, maintenance and function simply explained with our assembly video.

See how the pressure reducing valve is fitted in a line with threaded connections and how it then works. With a fascinating view into the valve itself and flow graphics.

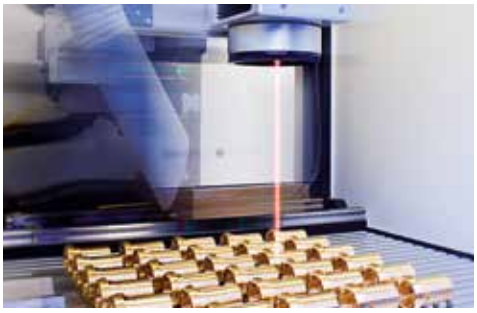
Watch the pressure reducing valve video now!

THE GOETZE KG

Individuality for more safety

The competence of Goetze KG Armaturen has been in demand for 70 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. With over 500.000 valves per year „Made in Germany", we are your competent partner for all matters relating to the handling of pressure.



ARMATUREN GOETZE

Goetze KG Armaturen
Robert-Mayer-Straße 21
71636 Ludwigsburg

Fon: +49 (0) 7141 / 488 94 60
Fax: +49 (0) 7141 / 488 94 88

info@goetze-armaturen.de
www.goetze-group.com