## JRGURED Pressure Reducing Valve

Durable and precise - even under high pressure





## Innovation meets precision: Our expertise in valves



### **Mission**

Water is our element. As a traditional Swiss company for drinking water valves, one of our goals is to contribute to ensuring clean water through innovation. Our solutions improve sustainability, surpass regulations and reduce maintenance costs.

Hygienically optimized All our valves are hygieneoptimized thanks to their water pocket-free design and corrosionresistant materials.

Regulations

Our specialists have their finger on he pulse and are closely familiar vith both global and local regula ors and requirements. Our valves are designed to exceed these requirements, not merely to meet

#### Sustainability strategy

Our sustainability framework has three focal points comprising long-term ambitions and goals that concern the economy, the environment and society as a whole. Including a science-based climate target that aims to reduce greenhouse gas emissions by 21% by 2025/



## **Technology**

We are driven by the constant innovation and improvement of valves. We are continuously developing our products in collaboration with the industry and our customers.

#### Sustainable products

We aim to develop fittings of the highest qualit that guarantee maximum service life thanks to long-lasting precision. low design

Improved flow rate and flow behavior, reduced pressure drop and water pocket-free design fo optimum drinking water hygiene

Structura design

optimization of geometry and surface finish.

Acoustic design We aim to develop fittings of the highest quality that guarantee maximum service life thanks to long-lasting precision. Fittings are at the core of every drinking water system – which is why they are very close to our heart. As one of just a few manufacturers in Switzerland, we have been casting our gunmetal components exclusively in our own factory for over 60 years. Decades of experience in research, development and manufacturing ensure that our products meet the highest Swiss quality standards.



### **Innovation**

In order to meet the stringent requirements on cast alloys for drinking water components, we are making targeted investments in an additional, state-of-the-art melting and casting plant. Besides doubling our casting capacity, the focus is very much on converting our entire product range to lead-free materials.

ntelligent valves New generation of fittings with inegrated sensors for digital conrolled operation of the drinking water system.

Lead-free production Gunmetal is a high-quality, corrosion-resistant material and is one of our well-tried and tested alloys. We are also focusing on the production of lead-free cast alloys.

#### 400 tons of CO, savings

We are making an important contribution to sustainable production through our new energy center.



### **Production**

We understand the challenges of material quality, dimensional accuracy and surface finish and manufacture our valves with the highest precision in compliance with functional requirements.

Production design The casting process is simulated and optimized in advance using intelligent technology to ensure high material strength and reliability.

Tradition and quality

Our production standards undergo a high level of quality assurance. Each and every valve passes through an automated leak test process.

#### Sustainable production process

Environmentally friendly machining processes are made possible by the use of robot-assisted loading and unloading and CNC-controlled systems.

Optimized production processes help to save on scrap material and improve the recyclability of components.

## Powerful performance, smart design

The JRGURED is a pressure reducing valve for meeting the highest standards in quality and precision. Its new, compact design is not only visually appealing. It also ensures space-saving installation and helps achieve the more sustainable manufacturing process.

#### Constant pressure through precision

The JRGURED pressure reducing valve has one key function: It makes sure that the pressure in a downstream pipe system remains constantly low.

By reducing the upstream pressure to a predefined, lower holding pressure, the valve works with exceptional precision and keeps the pressure constant even when there are large differences in pressure. The flow-optimized design of our JRGURED also ensures outstanding control characteristics even when small water volumes are consumed. The valve also significantly reduces annoying flow noises.

#### Functionality & safety that lasts for generations

The use of this pressure reducing valve sustainably increases the safety of your drinking water installation. Thanks to the use of high-quality materials and our Swiss casting technology, the valve guarantees a long service life and precise functionality – for many years to come. An integrated strainer also helps to ensure it functions perfectly over the long term.

#### Hygiene meets sustainability

The dead space-free design of our pressure reducing valve makes an important contribution to drinking water hygiene and prevents the growth of biofilms and legionella. In addition, the precise control characteristics of this valve ensure significantly reduced water consumption during operation.

In production, we set great store by the most sustainable process possible: An optimized casting process has significantly reduced material waste. The more compact geometry of our pressure reducing valve also means that less material is used, which makes the manufacturing process more ecological.

## We make good things even better







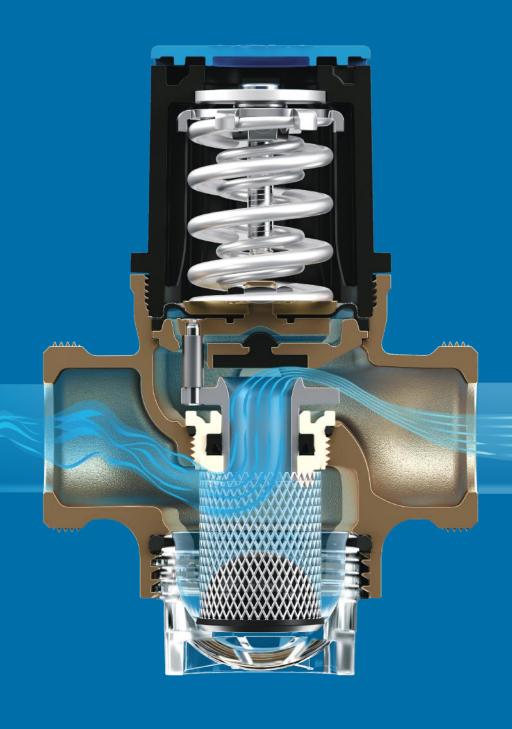
Reduced flow noise



High-quality casting technology



Improved geometry



# Fitting solutions by professionals for professionals

#### **Excellent control characteristics**

The JRGURED offers outstanding control characteristics, even with the smallest consumed water volumes.

#### Permanently robust, safe & precise

The robust design and the integrated strainer, which effectively traps dirt (larger than 1000  $\mu m$ ), guarantee precise control characteristics over the long term.

#### Simple installation & maintenance

The JRGURED pressure reducing valve can be easily installed in any drinking water installation, even in confined spaces. It also requires very little maintenance.

#### A true all-rounder

Installed at the building entrance, the pressure reducing valve lowers the water pressure to a permissible level throughout entire drinking water installation. It can also be installed directly in front of machines and appliances with pressure limits or maximum pressure specifications in order to provide effective protection.

#### Best materials for best results

High quality components such as seals and springs ensure lasting reliability. In addition, all materials used meet the highest standards of corrosion resistance and durability and comply with the official European requirements for drinking water installations.

## Key facts at a glance:

- Temperature: max. 30°C with transparent strainer cup, max. 70°C with gunmetal strainer cup
- Materials: Gunmetal, chromium-nickel steel, EPDM and plastic
- Area of application: Compact fitting for drinking water installations



#### Pressure setting

One-time setting of the desired holding pressure

#### Pressure springs

The set spring force counteracts the movement of the permaphragm

#### Body

The body is made from corrosion-resistant gunmetal

#### Slide with sea

The slide moves up or down to achieve the desired holding pressure

#### O-ring seal

#### Valve cover

The valve cover protects the adjusting screw from incorrect settings

#### Permaphragm

The holding pressure is directed to a permaphragm, which triggers a movement of the slide

#### Straine

The strainer retains suspended particles > 1.000  $\mu m$ 

#### ransparent or gunmetal strainer cup

The strainer cup can be removed for strainer cleaning

Strainer, 0-ring seal, permaphragm (to 1¼"/DN32), cover and strainer cup are available as spare parts.

## Fast installation, easy maintenance

Thanks to its screw threads on both sides, the JRGURED can be easily installed in any drinking water installation – no matter what the installation position. It also requires very little maintenance.

#### Installation & replacement made easy

The dimensions of the JRGURED have been reduced to a minimum to allow installation even in extremely confined spaces. It can also be used regardless of the installation position.

#### Minimal maintenance

The strainer is the only component of the pressure reducing valve that requires maintenance. It is designed so that it is easy to maintain and can be quickly restored to working order. Maintenance is carried out as and when required without normative specifications.

#### **Guaranteed replacement**

We guarantee the availability of spare parts such as strainers, strainer cups, cover and 0-ring seals.

#### Easy replacement & maximum compatibility

The new generation of the JRGURED pressure reducing valve has the same installation length and connection dimensions as its predecessors to guarantee easy replacement. The available spare parts are also compatible with the predecessor model.

#### See for yourself!

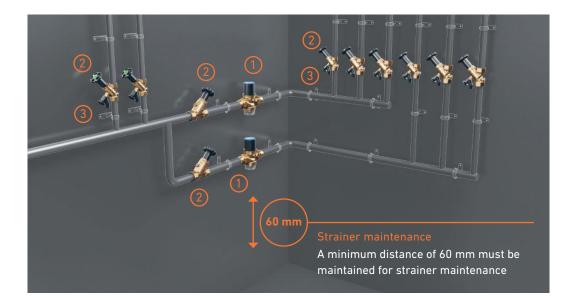
Would you like to know how easy installation and maintenance really are? No problem – we'll show you the details:

- Installation of the JRGURED including removal of the predecessor and installation of the new pressure reducing valve
- · Pressure conversion deviating from the factory setting
- Strainer cleaning

Scan QR code & watch videos now



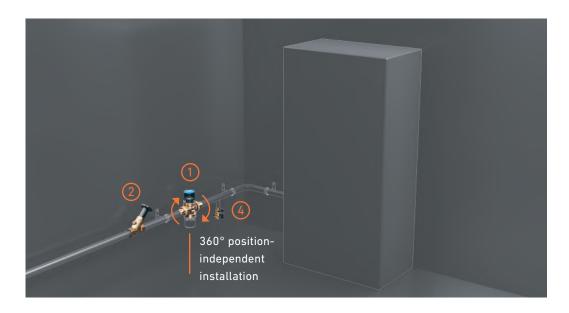




#### Distribution manifold for three pressure levels

Centrally installed pressure reducing valves enhance the living comfort and the service lifetime of a plumbing system and of the appliances connected to it. For systems with different pressure levels, several pressure reducing valves with different secondary pressures have to be used.

|   | Code JRG  | Product                           |
|---|-----------|-----------------------------------|
| 1 | 1300      | JRGURED Pressure reducing valve   |
| 2 | 5211–5239 | JRG LegioStop Slanted seat valves |
| 3 | 7301+7401 | JRG LegioStop Drain tap           |
| 4 | 6011+6013 | JRG Boiler ball valve             |



#### Appliance and machine connections with a separate pressure reducing valve

Appliances or machines can be connected through their own pressure reducing valve if required. In this case, the specifications of the manufacturer of the appliance or machine as well as the installation regulations of the local water supply must be observed.

## **Technical specifications**

The JRGURED pressure reducing valve, designed for a nominal pressure of PN 2500 kPa (25 bar), is available in seven sizes from  $\frac{1}{2}$ " to  $2\frac{1}{2}$ ".

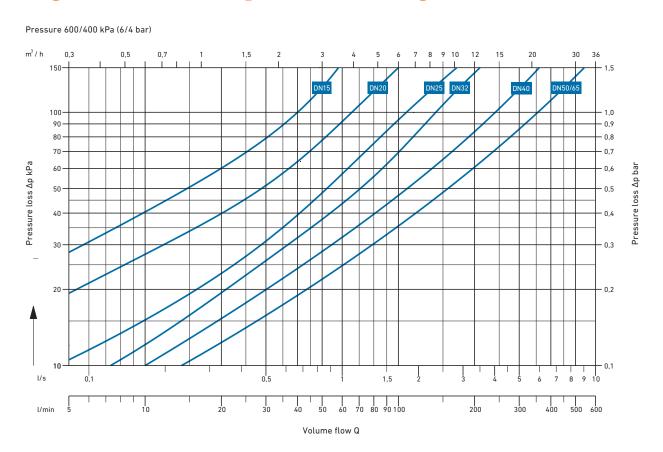
The system pressure settings can be easily adapted to the hydraulic conditions on site by a plumbing specialist. Depending on the version, the valve is suitable for water temperatures of up to  $70^{\circ}\text{C}$  (or  $30^{\circ}\text{C}$ ).

#### Three pressure ranges for optimization

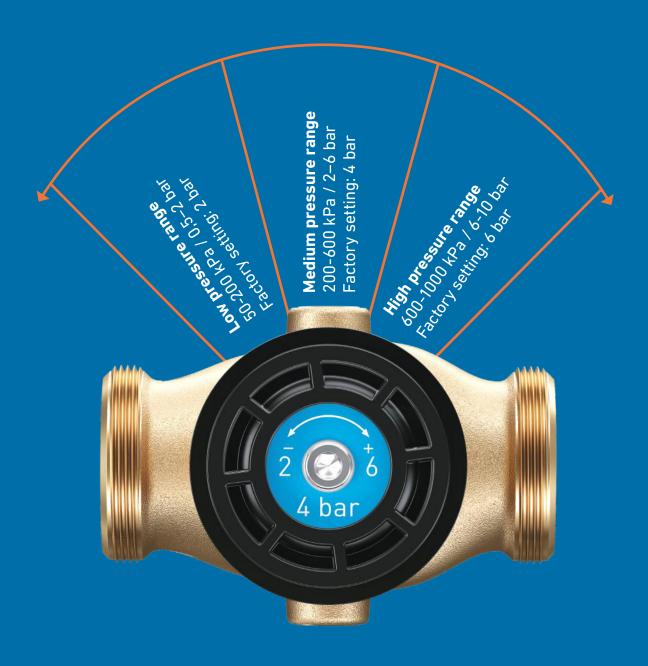
The JRGURED outperforms conventional pressure reducing valves with two additional pressure ranges. While most valves are designed for use in single-family homes (standard 4 bar), the JRGURED can also offer low ranges. This is ideal for appliances such as drinking water dispensers and coffee machines with a drinking water connection, which usually operate in the 0.5-2 bar range.

In addition, the JRGURED can regulate special applications with very high supply pressure and ensure a pressure range of 6-10 bar.

#### Nomogram of JRGURED pressure reducing valve 1300-1330



## 3 different pressure levels



ecobau

Our JRG valves are "ecobau" certified

## The perfect solution for every application

Our range of JRGURED pressure reducing valves includes various designs and combinations. Available with three pressure levels, it is suitable for both cold and hot water applications.

In other words, you will find a suitable solution for almost every conceivable application in our range.



| JRG<br>Code | Components               | Dimension | Nominal<br>pressure<br>PN | Factory<br>settings<br>[kPa (bar)] | Adjustment<br>range<br>[kPa (bar)] | Temperature<br>max. [°C] | Connections     |
|-------------|--------------------------|-----------|---------------------------|------------------------------------|------------------------------------|--------------------------|-----------------|
|             | JRGURED                  |           |                           |                                    |                                    |                          |                 |
|             | Transparent strainer cup | GN ½-2½   |                           |                                    | 200-600                            |                          | tapered         |
| 1300        | incl. screwed valves     | (DN15-65) | 25                        | 400 (4.0)                          | (2.0-6.0)                          | 30                       | external thread |
|             | JRGURED                  |           |                           |                                    |                                    |                          |                 |
|             | Transparent strainer cup | GN ½-2½   |                           |                                    | 200-600                            |                          |                 |
| 1303        | excl. screwed valves     | (DN15-65) | 25                        | 400 (4.0)                          | (2.0-6.0)                          | 30                       | Pipe threads    |
|             | JRGURED                  |           |                           |                                    |                                    |                          |                 |
|             | Gunmetal strainer cup    | GN ½-2½   |                           |                                    | 200-600                            |                          | tapered         |
| 1310        | incl. screwed valves     | (DN15-65) | 25                        | 400 (4.0)                          | (2.0-6.0)                          | 70                       | external thread |
|             | JRGURED                  |           |                           |                                    |                                    |                          |                 |
|             | Gunmetal strainer cup    | GN ½-2½   |                           |                                    | 50-200                             |                          | tapered         |
| 1320        | incl. screwed valves     | (DN15-65) | 25                        | 200 (2.0)                          | (0.5-2.0)                          | 70                       | external thread |
|             | JRGURED                  |           |                           |                                    |                                    |                          |                 |
|             | Gunmetal strainer cup    | GN ½-2½   |                           |                                    | 600-1000                           |                          | tapered         |
| 1330        | incl. screwed valves     | (DN15-65) | 25                        | 600 (6.0)                          | (6.0-10.0)                         | 70                       | external thread |

The range also includes various combinations with an integrated JRGURED pressure reducing valve.

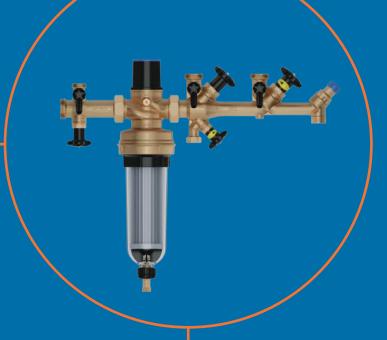
#### **JRGURED Combi domestic water station**

The domestic water station, a combination of pressure reducing valve and fine filter, is installed centrally at the building entry point. It effectively protects the entire drinking water installation from the smallest dirt particles such as sand and rust.



#### Distribution manifold

The distribution manifold simplifies the ordering process (just one article number) and significantly reduces the installation effort because all fittings are installed with a flat seal or, in the case of the drain valves, with a preassembled 0-ring.



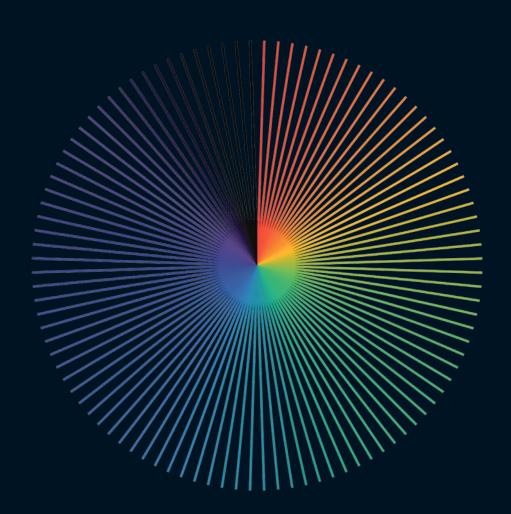
#### JUNIOR safety group

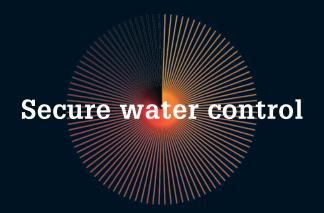
The safety group, designed specifically for water heaters, with integrated pressure reducing valve, backflow preventer and safety valve, offers protection if the volume changes when the water is heated.



## **Complete Water Control**

We offer a comprehensive range of high-quality valves for building services.





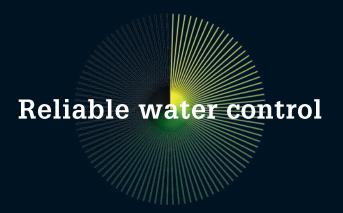
#### Safety valves

Safety valves play a crucial role in building technology, as they help to prevent dangerous operating conditions and hence contribute to the protection of people, systems and buildings. The key protection mechanisms include ensuring a constant pressure and preventing excess pressure.



#### **Shut-off valves**

Shut-off valves are crucially important to every drinking water installation. They enable the targeted opening or closing of pipe sections, whether in the event of operational interruptions, repair work or water damage. It is therefore important that these valves function reliably.



#### Control valves

Control valves monitor and control the key parameters of a pipeline system such as temperature or volume flow. These include mechanic or thermostatic circulation controllers, which are indispensable for hydraulic balancing in drinking water installations.



#### **Digital valves**

The advancing digitalization does not stop at the sanitary industry. That's why we are developing innovative digital valves that, thanks to their technology not only ensure drinking water hygiene, but can also optimize energy efficiency.



## **Leading with Water**

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