



# BROEN

VALVE TECHNOLOGIES

**BROEN BALLOMAX® NG DN 15 - 150**

Next generation valve technology

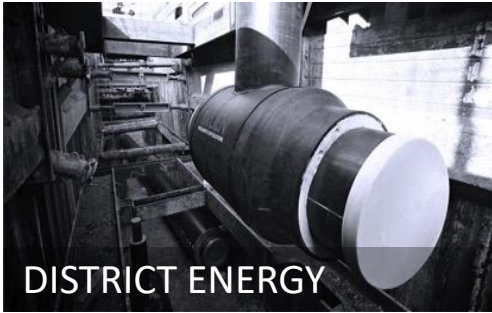
10th biannual DH Days in Serbia, Aranđelovac, Serbia  
1-3.04.2025

# Our End Markets

Where we add value



Complete solutions for the distribution and control of flow in HVAC installations in residential, commercial and industrial buildings.



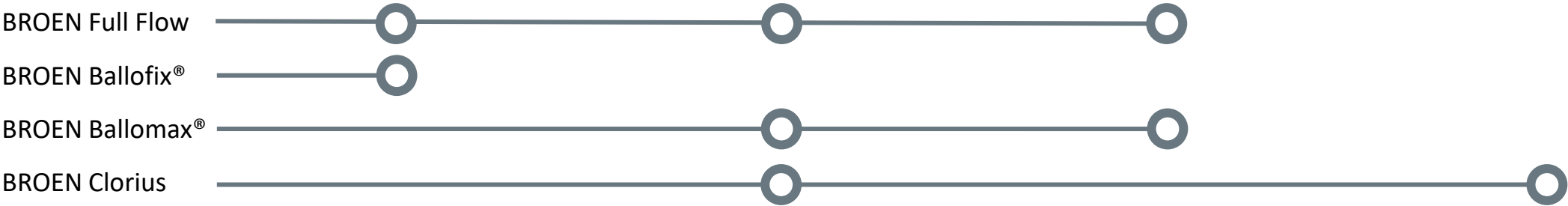
Distribution and transmission of district energy in residential, municipal and commercial applications.



Ball valve technology made to order for distribution and transmission of gas in energy applications.



Temperature and pressure regulation in maritime, offshore and energy applications.



We are proud to present our new BROEN Ballomax Next Generation ball valves in two diameter ranges:

BROEN BALLOMAX® DN 15 - 65  
next generation valve technology



BROEN BALLOMAX® DN 40 - 150  
next generation valve technology



# Now introducing BROEN BALLOMAX® DN 15 – 150

next generation valve technology for district heating/cooling and industry

**BROEN**  
VALVE TECHNOLOGIES

- Green thinking
- Compact spherical design
- One-weld laser technology
- Improved stem design
- Low weight
- Optimized flow
- Uniform operating torque
- Unique valve identification
- Patented Danish design – manufactured in Denmark



**BROEN**  
BALLOMAX®

*Designed to last*

*"Pioneering valve solutions  
with advanced and sustainable technology  
for future installations"*



# BROEN BALLOMAX® DN 15 - 150 next generation valve technology

**BROEN**  
VALVE TECHNOLOGIES



## Applications



Heating



Cooling



Industrial

## BROEN BALLOMAX® is available in different versions:

- DN 15 - 150 Full bore
- DN 15 - 150 Reduced bore
- PN 40, PN 25, PN 16
- Painted (black)
- Welding or flange connection
- High stem
- Approved according to PED 2014/68/EU Module H.

## Our mission is clear, we want to lead BROEN BALLOMAX® DN 15 - 150 into the future as the sustainable valve:

- 45% reduction in carbon footprint
- 40% reduction in material consumption
- 30% reduction in weight
- 30% less material waste and a reduction in the use of consumables.

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\*Calculations based on reference valve DN 100 reduced bore using GWP A1-A3 CO2e and EN 15804 (A2).

## Handle

The ergonomic handle is specially designed for easy operation. The handle is made of metal with a fibreglass-reinforce composite moulded around it - and can be mounted in both directions.

## Uniform operating torque

During production, the valve torque is closely monitored. This ensures that valves of the same size are delivered with a consistent torque.

## Compact spherical design

The world's most compact and spherical valve body, offers the best opportunity in the market to insulate the whole pipe system and at the same time reduces the valve cavity by up to 30%\*. This design is not only innovative but also environmentally friendly.

## Connection technologies

The valve is available with either welded or flanged connections.

## Clips

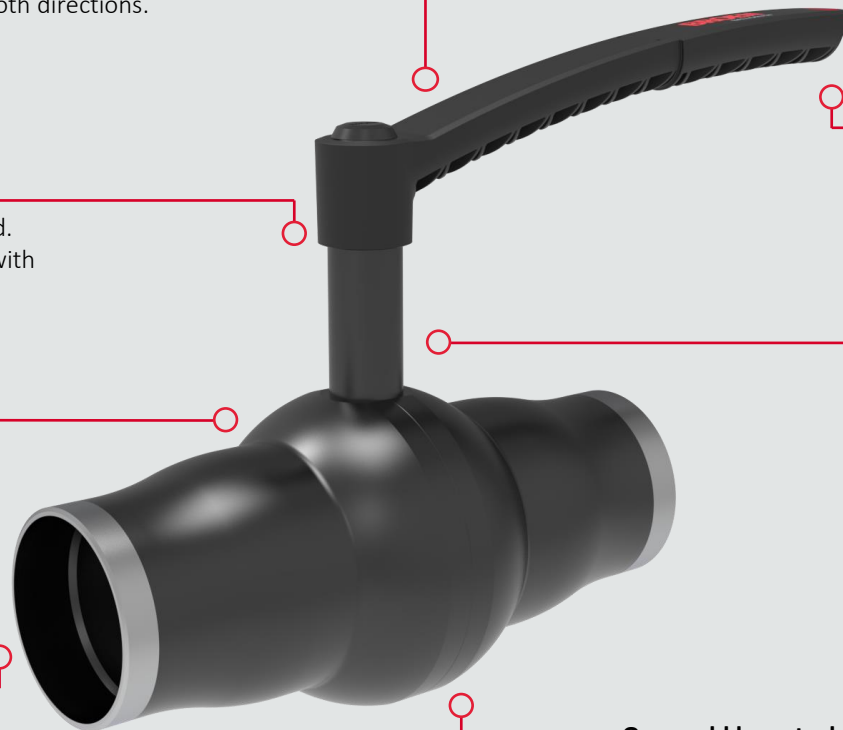
The handle has reversible color clips that ensure easy identification, e.g. cold and hot water or supply and return flow.

## Stem

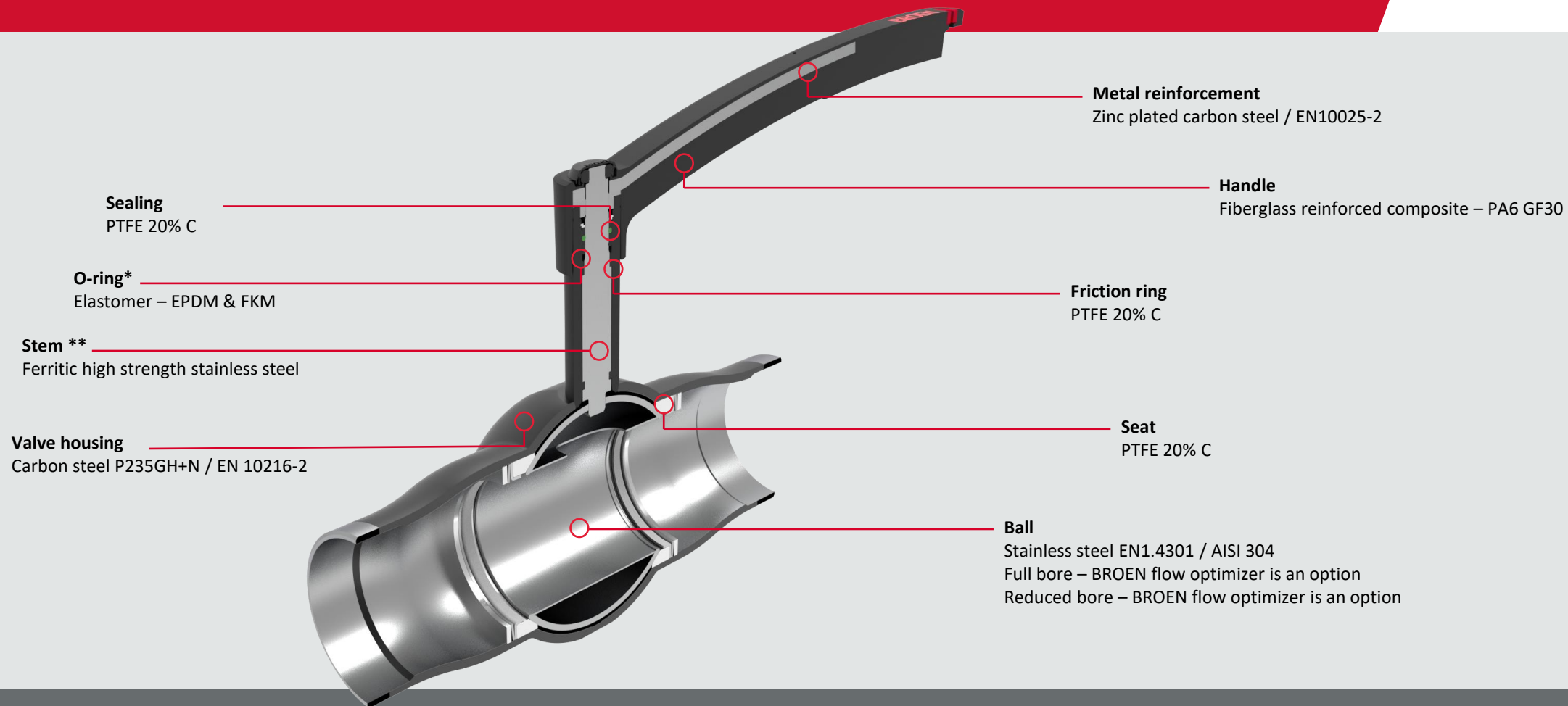
All valves are available with high stem. The long edition is an integrated part of the valve ensuring proper insulation around the spindle. The spindle is laser welded to the body.

## One-weld laser technology – designed to last!

Our one-weld technology with advanced robotic welders, ensures precision and consistency in terms of integrity and strength. That means fewer potential areas for corrosion.



\*Based on reference valve DN 150 RP



## BROEN BALLOMAX® DN 40 - 150

Media: Water  
Operation pressure: 40 | 25 | 16 bar  
Operation temperature: -20 °C to +150 °C  
Design temperature: -20 °C to +200 °C

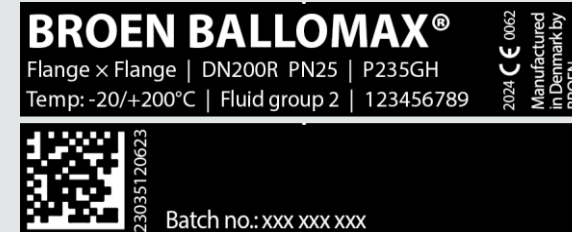
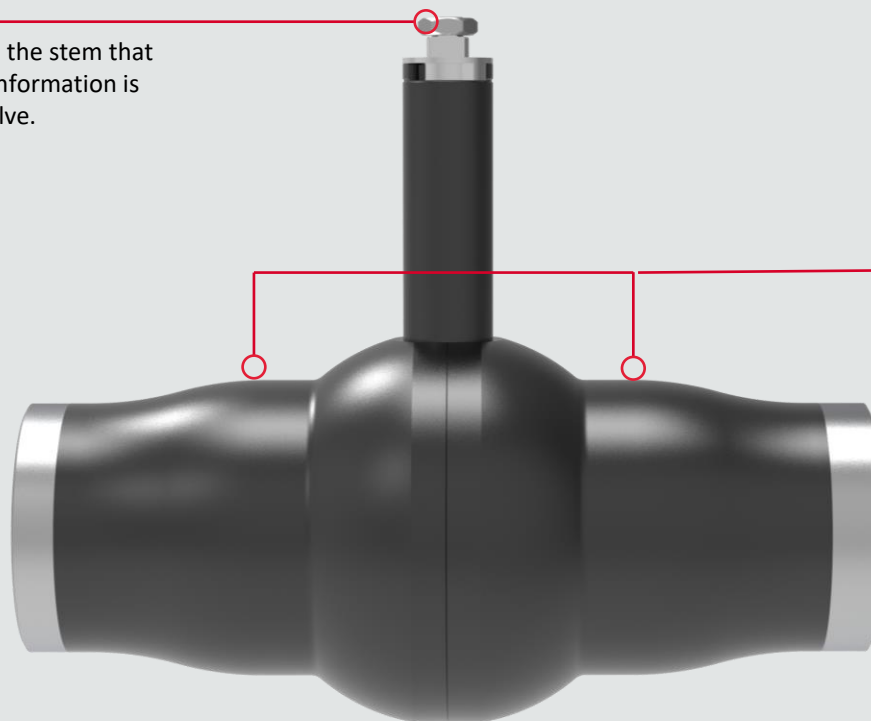
\*The upper O-rings are changeable and the new O-ring comes in spare part sets with tools.

\*\* The stem is constructed as a blow-out secure stem.

# Unique valve identification

## Unique valve identification

Each valve is individually marked with a unique code on the stem that contains production information about the valve. This information is secured in the event of any future queries about the valve.



## Valve labels

All valves are marked with 2 labels.

Label 1 contains following information:

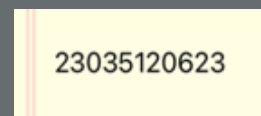
- Valve connections
- DN size
- PN class
- Steel grade
- Temperature
- Fluid group
- Item number
- CE marking
- Manufactured in DK by BROEN

Label 2 contains following information:

- A copy of the stem QR code
- Unique valve ID number
- Batch no

## How does it work?

1. Download QR-scanner on mobile phone
2. Scan QR code on stem or label
3. Unique valve ID emerges
4. BROEN has access to valve data if required



BROEN Valve Technologies is able to look up data such as:

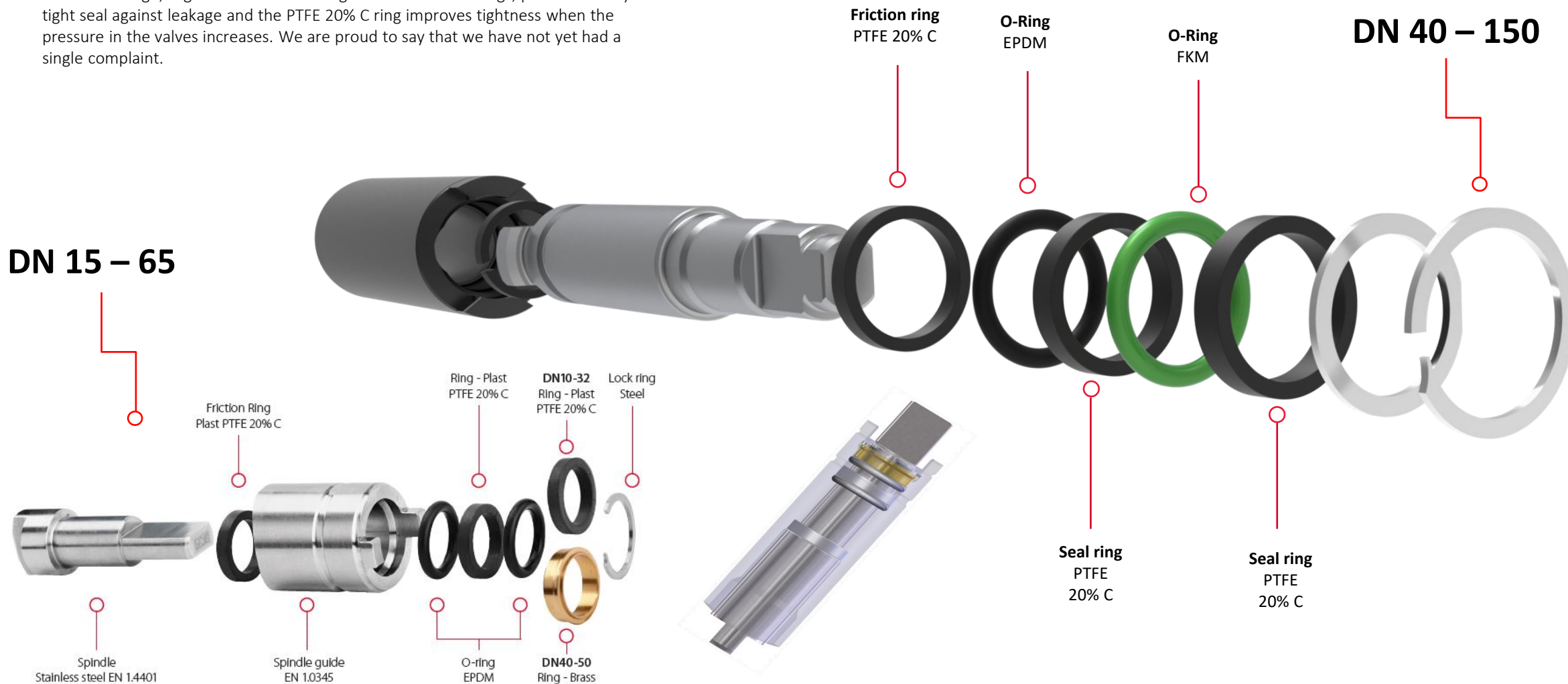
- ✓ Production data
- ✓ Welding parameters etc.
- ✓ Variants & materials
- ✓ Test results



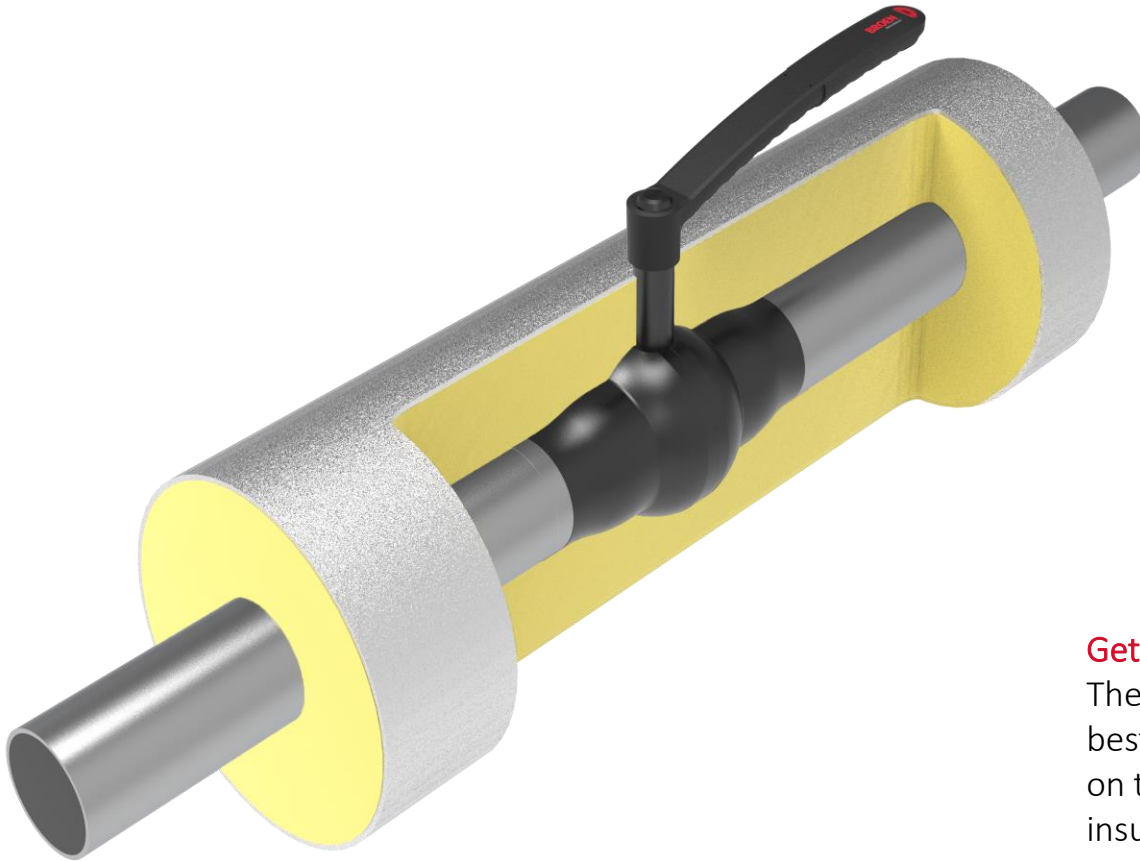
# Improved stem design

## More than four decades of valve know-how is behind the improved stem design

The stem design, together with the O-Rings and PTFE 20% C rings, provides a very tight seal against leakage and the PTFE 20% C ring improves tightness when the pressure in the valves increases. We are proud to say that we have not yet had a single complaint.



# Insulation at its best - easier to insulate due to the extended stem



## Get all the benefits of standard pipe insulation

The world's most compact valve body shape and the high stem offer the best possibilities on the market to insulate the entire installation with standard pipe insulation.

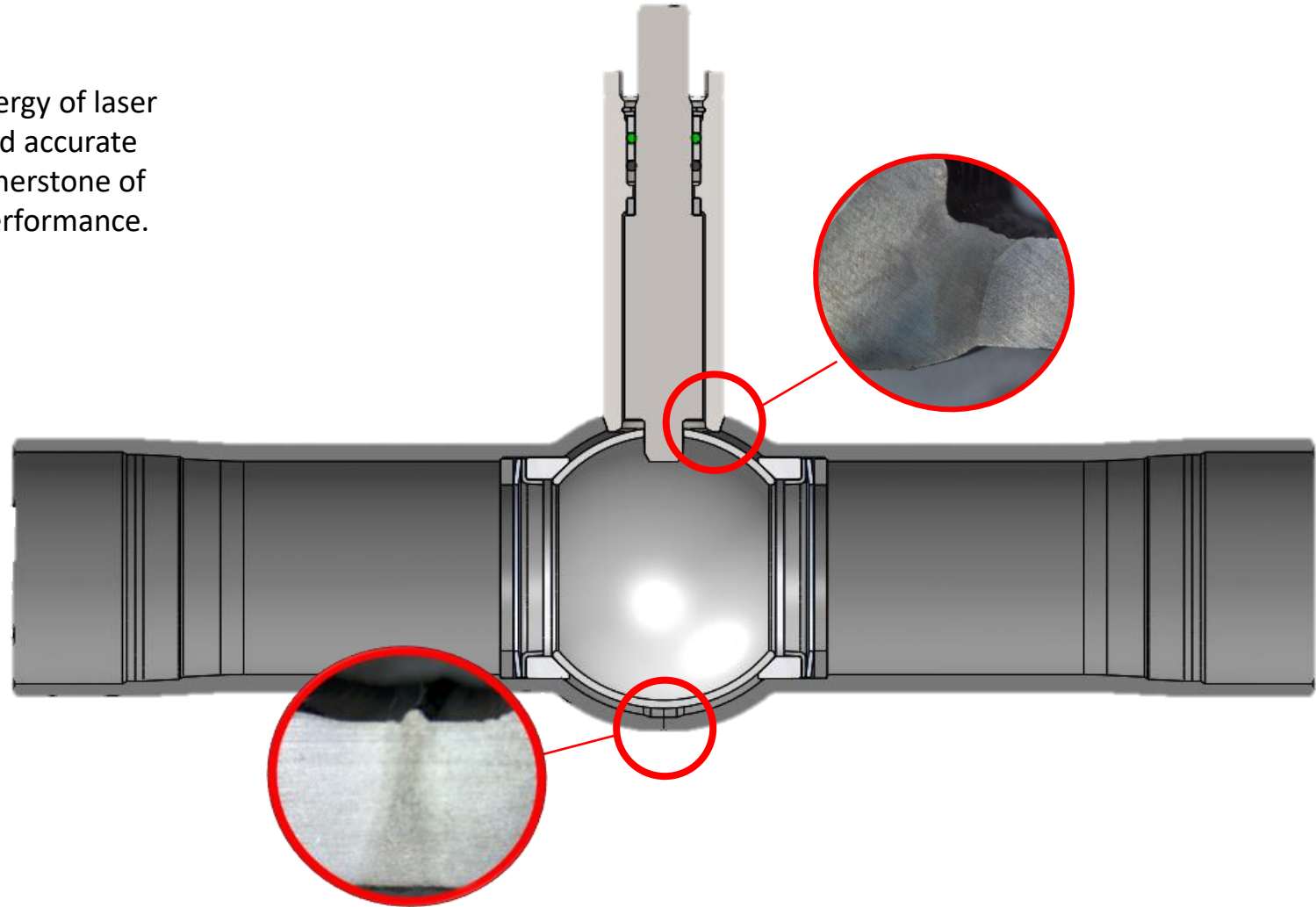
- Reduce heat loss
- Prevent condensation
- Less energy consumption = lower CO2 emissions
- Extend lifespan

## One-weld laser technology

By harnessing the precise and focused energy of laser beams, we achieve exceptionally clean and accurate welds, with full weld penetration as a cornerstone of our commitment to quality, safety, and performance.

- Full weld penetration
- No filler material
- Minimized deformation
- Meeting PED Standards

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BALLOMAX®

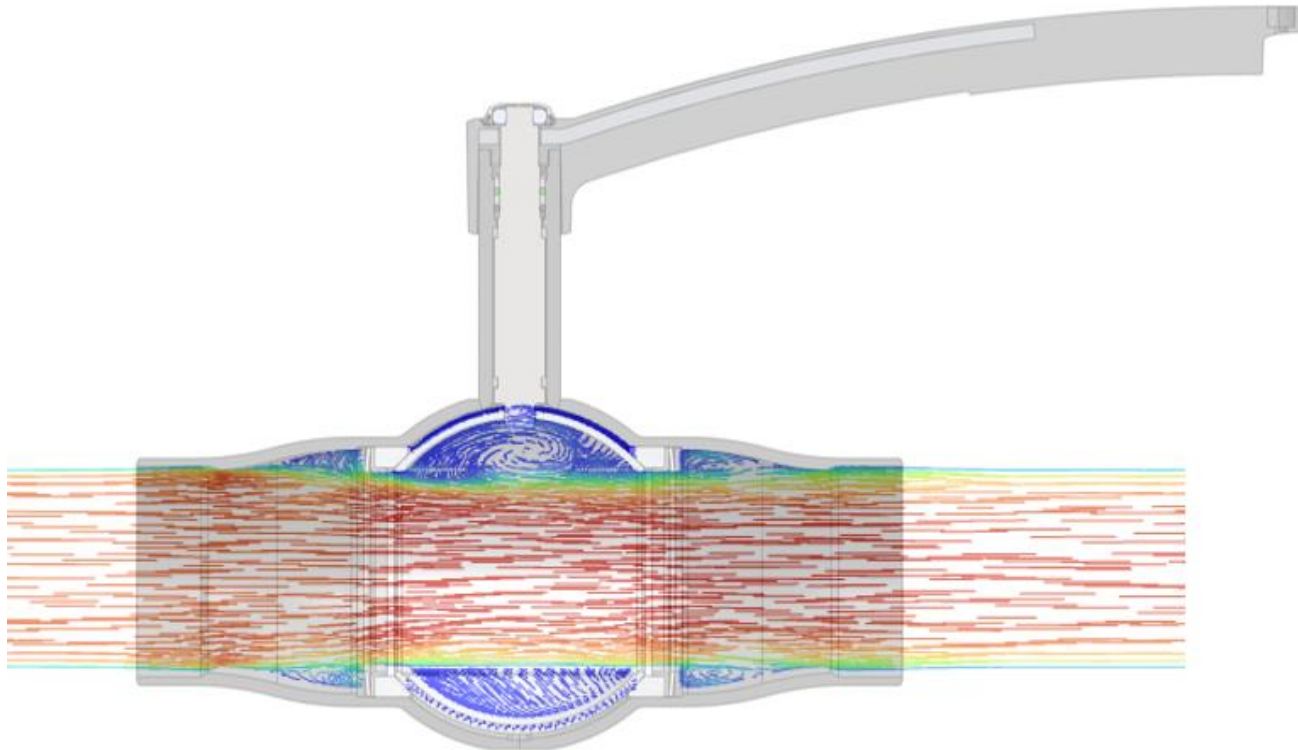


## Media flow in valve

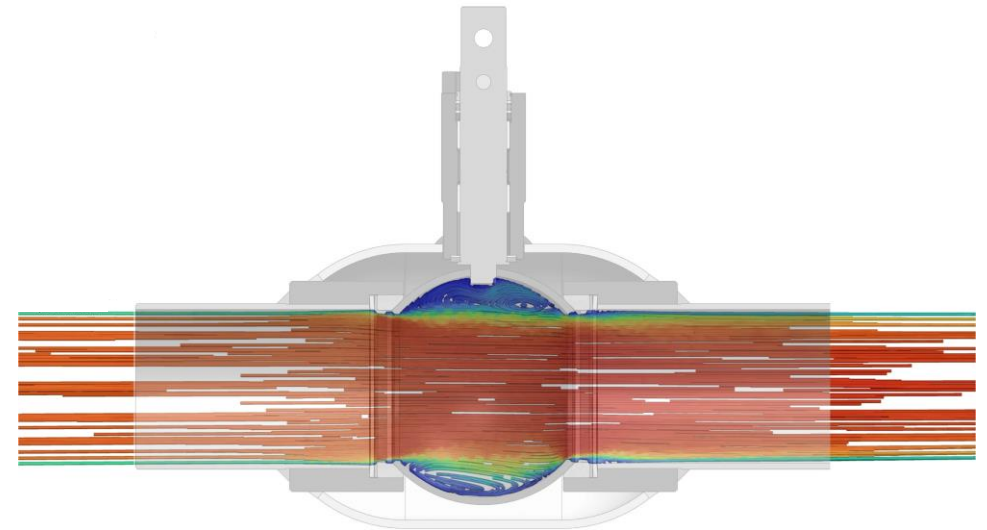
The new spherical design of the valve, together with the sleeve in the ball, minimizes the occurrence of turbulence in the valve. The ring behind the seats creates a buffer zone that helps the flow pass the seat with a minimum of turbulence.

The sleeve in the ball has a hole but this will only fill the void space inside the ball and will not affect the flow through the ball.

The hole in the sleeve is used during production when the body is welded. This feature ensures a perfect weld with full penetration.



**BROEN BALLOMAX® - Next generation**



**BROEN BALLOMAX® - Old version**

# Product variants 2025 - BALLMAX NG DN 15 – 65 - configurations

Welded ends:  
EN 10216-2



Female  
threaded ends:  
ISO 228-1

Flanged  
ends:  
EN 1092-1



Male threaded  
ends:  
ISO 228-1



BBM12031  
Female thread /  
Female thread

BBM13001  
Weld / Weld

BBM13601  
Weld / Female  
thread



BBM13701  
Weld / Male  
thread

BBM14001  
Weld / Flange

BBM15001  
Flange / Flange



# Product variants 2025 – Ballomax NG DN 40 - 150

## PN 40

### Full bore

### Reduced bore

DN	W × W	F × F	W × W	F × F
40	x	x		
50	x	x	x	x

L-handle & ISO Flanged

DN40 – DN80FB/DN100RB: Iso flange adaptors (pinch bolt)  
DN100FB/DN125RB: weld on Iso flange

## PN 25

### Full bore

### Reduced bore

DN	W × W	F × F	W × W	F × F
65	x	x	x	x
80	x	x	x	x
100	x	x	x	x
125	x	x	x	x
150	x	x	x	x

L-handle & ISO Flanged

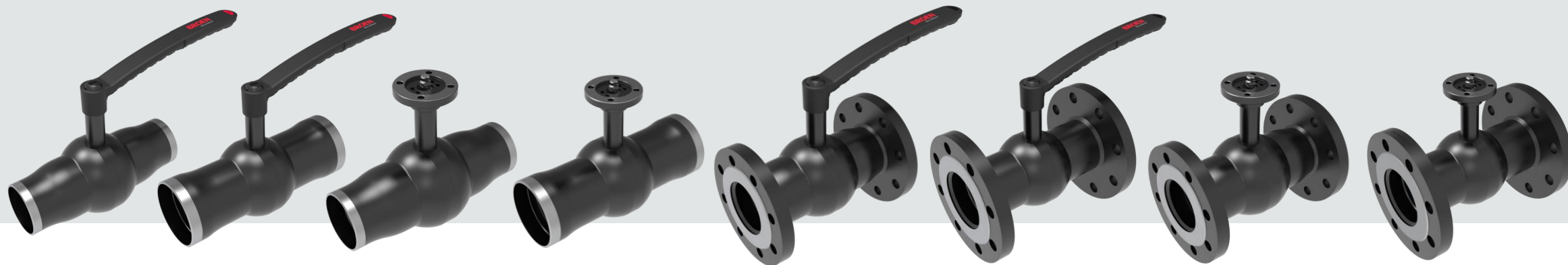
## PN 16


### Full bore

### Reduced bore

DN	F × F	F × F
65	x	x
80	x	x
100	x	x
125	x	x
150	x	x

L-handle & ISO Flanged





With over four decades of experience and  
a reputation for reliability and quality,  
we continue to lead the way and shape the future  
of district heating solutions worldwide.

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BALLOMAX®

For more information: [www.broen.com](http://www.broen.com)