



## DISTRICT ENERGY VALVES AND ACCESSORIES

THE RESPONSE TO CLIMATE CHANGE





# BROEN

VALVE TECHNOLOGIES

## Climate change is our common challenge

Energy efficiency is one of the greatest challenges of our times and for district energy BROEN delivers ready solutions to meet the globally rising demand for energy efficiency.

Based on the heritage from leading edge innovations in Danish district heating, BROEN Ballomax® offers the most comprehensive range of proven ball valves for distribution and transmission of district energy in residential, commercial and industrial applications and is today a key component in district heating and district cooling networks throughout the world.

BROEN A/S is 9001:2015 and 14001:2015 certified.

Our brand is our promise.

### ABOUT BROEN

In 1948 Poul Broen established the company BROEN, which was among the pioneers, when district heating took off in Denmark. In 1982 the BROEN Ballomax® ball valve for district heating was launched. We strive to develop and improve products that use nature's resources as efficiently as possible.

In 1993 BROEN was acquired by Aalberts Industries and today we have more than 15,000 colleagues operating from more than 200 locations in more than 30 countries. Aalberts Industries (AALB) is listed at the EuroNext Stock Exchange, NL

### VISION AND VALUES

Our vision is simple: Be the best in valve technology. Strong values are the foundation for our business and with the same shared vision they link us together as one company across borders and time zones on 3 continents.

### TOWARDS NEW OPPORTUNITIES

BROEN acquired DZT valves (PL) in 1997 and ZAWGAZ and Armatura in 2008. We focus our approach and strive to develop lean and flow efficient valve designs with efficient and automated production technology as the result of smart engineering, know-how and our strong heritage.



## BROEN Ballomax® – our response

For more than 30 years the reliable design of BROEN Ballomax® has proven itself and it remains the best choice in district heating today.

Together with our comprehensive range of BROEN valves, actuators, gears, extensions and hot tapping tools, BROEN offers complete solutions for district energy.

To us quality is not just a key to market access - it goes far beyond that.

Proven valve technology is not something we just claim, but something we must earn. Each and every day.

BROEN Ballomax® is your certainty of energy efficiency, reliability and low operating costs.

BROEN Ballomax® – energy efficiency designed to last.

- PED 2014/68/EU - Module H
- EN 12226 Part 1 and 2
- EN 488:2015



# Energy efficiency – Designed to last

BROEN Ballomax® features unmatched advantages in district energy with the widest portfolio and most comprehensive range of valve technology in the industry.

BROEN delivers proven energy efficiency – designed to last.

Ever since BROEN was established  
our passion for valve technology has been  
a major part of our core competences.

Our brand is our promise.

**Standard: Widest valve technology portfolio**  
DN10-1400 | PN16-40 | EN or GOST | Floating or trunnion |  
Full bore or reduced bore | Above or below ground

**Options:**  
Actuators | gears | flanges

**Custom:**  
Column and stem extensions on request and made to order  
with requested height.

**Reliability**  
ISO 9001 since 2001  
PED 2014/68/EU - Module H |  
EN 12226 | EN 488:2015

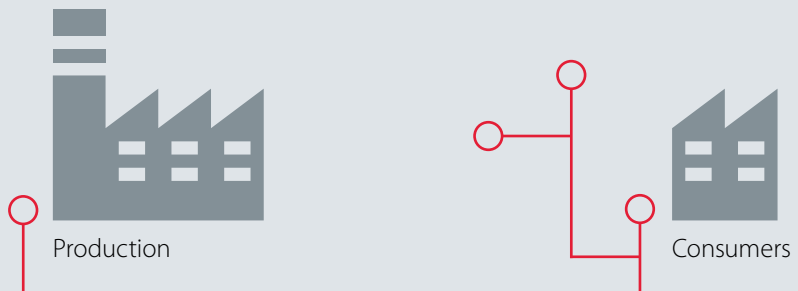
**Energy efficiency**  
Flow optimization | Kvs values | Heritage from  
BROEN Ballomax® and Danish District Heating

**Low cost of ownership**  
No maintenance – one yearly activation |  
Service kits with tools and parts

**Easy installation**  
Regulation and commissioning |  
Tested and adjusted prior to delivery |  
Gears and actuation individually optimized

## TRANSMISSION

## DISTRICT ENERGY



District energy grid



DN150-1400  
Trunnion ball valve



DN80-2000  
Butterfly valves



Trunnion valves EN488:2015



Underground valves  
EN488:2015



DN50-400  
Floating ball valve



Twin valves EN488:2015

# Scope of BROENs valve technology

DN10-1400 | Full bore - Reduced bore  
 Floating ball | Trunnion mounted ball | PN16-PN25-PN40  
 Heating - Cooling - Steam | -20°C to +250°C

## Valve technology:

- Floating ball valves
- Trunnion mounted ball valves
- Flexible main stop valves
- Steam valves
- Hot tapping valves
- Branching valves
- Monoblok valves
- Butterfly valves
- Underground valves (EN 488:2015)

## Options:

- Gears and actuators
- Hot tapping tools
- Flexible extensions
- Flanges
- Tools and handles
- Certificates

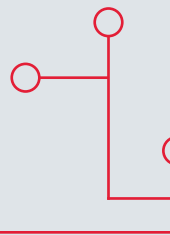
Tested and adjusted prior to delivery

DISTRIBUTION

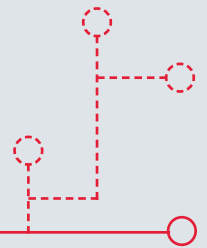


Larger consumers

CONNECTION AND INSTALLATION



Private households



DN200-500  
Floating ball valve



Monoblock and  
compact valves



Branching valve



Flexible main  
stop valve



Hot tapping  
tools



Flex extender



DN10-50 full flow  
valves



Hot tapping  
valve



BROEN-Bevel gear



Electric gears



## BROEN Ballomax® – Energy efficiency designed to last

### Ballomax® valves – Floating and trunnion mounted ball valves

BROEN standard valves for heating systems, district heating, cooling and industrial purposes.

- Water and steam
- Improved lifetime and minimal maintenance
- Full flow and reduced flow
- Safety and reliability
- DN10-1400
- PN25-40



### Underground valves – Floating and trunnion mounted ball valves

BROEN underground valves for heating systems, district heating, cooling and industrial purposes.

- Water
- Improved lifetime and minimal maintenance
- Safety and reliability
- Stainless collar for improved quality and lifetime
- DN25-1000
- EN 488:2015
- PN25



### Monoblock and short valves

BROEN Ballomax® monoblock and short valves offer a safe and modern construction for district heating networks, air conditioning and industrial installations.

- Water, air, steam and gas
- Highest Class A tightness - EN 12266
- DN15-DN200
- PN16-25-40



### Next generation valve technology

The new BROEN Ballomax® ball valve, will set new standards and presents a wide range of unique advantages.

- Energy efficiency – designed to last!
- Compact design
- Optimized full bore valve
- Traceability - individual valve identification
- Patented Danish design – Danish manufacturing
- DN10-50
- PN25



### Butterfly valves

BROEN butterfly valves can be used in shut-off and control applications.

- Heat distribution networks and energy management
- Gas and oil
- Steam treatment systems
- Corrosive media systems
- DN80-200
- PN16-25



### Options:

#### BROEN-Bevel gear

A sturdy and solid manual gear of high quality.



#### Electric gears

We supply customer specific ball valves with custom built electric gears from leading gear manufacturers.



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our passion for valve technology has been  
a major part of our core competences.

Our brand is our promise.

## BROEN Engineered Valve Group

For more than 70 years BROEN has been the global leader in the development and production of valve technology for the control of water, air, gas and oil. BROEN delivers complete solutions for HVAC building installations and is a leading supplier of district energy valves.

We know application and valve technology in depth and in close dialogue with our customers and partners all over the world we create value and reliability with proven valves offering full quality assurance.

BROEN Group – part of Aalberts Industries – is headquartered in Assens, Denmark and the premium engineering and manufacturing brands BROEN, Clorius Controls and BSM Valves all belong to the BROEN Group.

Read more on: [www.broen.com](http://www.broen.com)

[www.cloriuscontrols.com](http://www.cloriuscontrols.com)

[www.bsmvalves.com](http://www.bsmvalves.com)

### BROEN Group locations

Headquarters in Assens, DK

### Sales- and productions sites ●

BROEN A/S, Assens (DK)  
BROEN SA, Dzierżonów (PL)  
BROEN LLC, Kolomna (RU)  
BROEN INC., Houston (US)  
BROEN OIL & GAS, Suchy Las & Rogoźno (PL)  
BSM Valves B.V., Breda (NL)  
Clorius Controls, Dzierżonów (PL)

### Sales companies and offices ○

BROEN, Assens  
BROEN, Stockholm  
BROEN, Helsinki  
BROEN SEI, Romania  
BROEN, Beijing  
BROEN, Singapore  
BROEN, Dusseldorf  
BROEN, Moscow  
Clorius Controls, Copenhagen  
Clorius Controls, Shanghai



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