

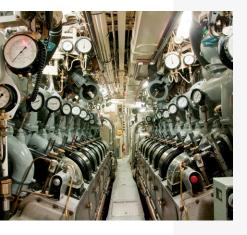
### **SHIPBUILDING**

Valves • Actuators • Automation Technology





## PREMIUM QUALITY. MAXIMUM PERFORMANCE.





### Isolation and Control Valves: High-End Solutions for Shipbuilding and the Maritime Industry

Maximum performance and reliability of all valves are essential in ship-building, as is long-term safety. EBRO provides a comprehensive product portfolio with customized solutions: featuring resilient-seated shut-off and control valves for supply lines, as well as high-performance valves for demanding applications. Alongside compact automation solutions, we support the industry's transition to digitalization in maritime operations.

#### **EBRO: YOUR PARTNER FOR MORE EFFICIENCY**

EBRO demonstrates innovation and extensive experience throught its range of resilient-seated valve designs. Their interchangeable liner minimizes repair costs, material waste and composite disposal, while also reducing CO2 emissions. Our commitment to exceptional manufacturing quality and precise valve engineering deliveres significant benefits, meeting the evolving needs of the shipbuilding industry.

#### **EXCEPTIONAL QUALITY - OUR PORTFOLIO FOR THE INDUSTRY**

- Outstanding performance: Our portfolio excels in delivering premium quality that meets the highest standards of reliability and lightweight design.
- Comprehensive product range: We offer a complete range of solutions, including resilient-seated valves, valves for high pressure and high temperature applications, knife gate valves, as well as modular automation technology.
- Reduced Life-Cycle costs: Resource-efficient repairs with replaceable liners help minimize life-cycle costs.
- **Certified Quality Management:** Adhering to DIN EN ISO 9000 standards we ensure high manufacturing quality while optimizing costs.
- Customized configurations: Leveraging years of expertise in customer processes, we provide tailored solutions for long-term, reliable performance.
- **Global presence:** with 1.000 employees worldwide, our headquarters in Hagen, and over 30 locations and production facilities in Italy, Sweden, China, and Thailand, we offer a truly global partnership.
- Innovative solutions: With over 50 years of intensive development, production, and distribution of isolation and control valves, EBRO stands as a leading global manufacturer with a continuous drive for innovation.

# SOLUTIONS FOR VARIOUS APPLICATIONS.









Sea Cooling Water Ballast Bilge Fire-fighting systems Chemicals and crude oil Steam Diesel Heavy fuel oil

Black water Gray water Wet waste Sludge Hydraulic oil Swimming pool Air conditioning Cooling water Drinking water

CHOOSE EBRO –
YOUR RELIABLE PARTNER FOR
EXCELLENCE AND TRUST.

#### **RESILIENT SEATED VALVES**

#### Versatile and reliable: Z011-A & Z014-A

The resilient seated butterfly valves with triple shaft bearing and replaceable liner have a wide range of applications, for example in supply lines, ballast, bilge, sea cooling water, grey water as well as black water applications.

#### For Heavy-Duty applications: F012-A & F012-K1

These concentric, resilient-seated double-flanged valves feature a robust body and a vulcanized (molded-in) seat, engineered for heavy-duty applications in supply lines. These double-flanged valves are also commonly used as shipside valves.

A short face-to-face version (F012-K1) is also available.

**Temperature range** -40 °C to +200 °C

Max. allowable pressure (PS)

Z011-A & Z014-A: 16 bar F012-A: 25 bar F012-K1: 16 bar



More information on resilient seated valves.



**Z011-A** Wafer-type DN 20 – DN 1000



**Z014-A** Lug-type DN 20 – DN 600



**F012-A & F012-K1**Double-flanged
F012-A: DN 20 – DN 1200
F012-K1: DN 20 – DN 2000

#### **PTFE VALVES**

#### **Durable and safe**

PTFE-lined butterfly and control valves are specially designed for use in chemically aggressive alkalis and acids. The minimum 3 mm thick lining made of pure PTFE guarantees optimum protection and ensures non-contact with metallic components with PTFE coated discs.

In conjunction with live loaded double shaft sealing, this valve series offers maximum operational safety.

PTFE valves are typically used in cargo systems.



More information on PTFE valves.



**T211-A**Wafer-type
DN 50 – DN 300



**T214-A** Lug-type DN 50 – DN 300



**T212-A**Double-flanged
DN 350 – DN 1000

#### HIGH PERFORMANCE VALVES

#### Reliable under extreme conditions

The double eccentric design, high-quality materials and precision machining ensure safety even under extreme operating conditions.

The HP valve is commonly used in areas such as fire fighting systems, exhaust systems as well as cargo systems.



More information on High Performance valves.



**HP111** Wafer-type DN 50 – DN 1200



**HP114** Lug-type DN 50 – DN 1200



**HP112**Double-flanged
DN 80 – DN 600

#### **WB & WB11**

#### **Modular and bidirectional**

The modular Stafsjö knife gate valves in the WB series are easy to handle, have excellent flow characteristics and provide leak-free shut-off.

The full bore enables handling of liquids containing solids. The WB is also ideal for fish farming to control water distribution in fish tanks and in trawlers.

#### Temperature range

-10 °C to 120 °C

#### Max. allowable pressure (PS)

10 bar (depending on size)



More information on the WB & WB11.



#### **WB & WB11**

Bidirectional

WB 11: DN 50 – DN 300 WB: DN 350 – DN 1600

#### MV

#### Versatile and unidirectional

The modular, unidirectional MV knife gate valve is suitable for handling both dry and wet media.

Therefore the MV knife gate valve is ideal for feeding systems (feeders and dispensers) on fish farms.

#### Temperature range

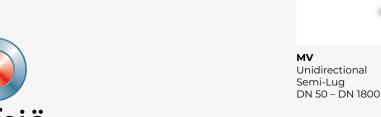
-10 °C to 120 °C

#### Max. allowable pressure (PS)

10 bar (depending on size)

More information on the MV.









More information on actuator technology.



Module E50 – E210 for control applications



sc Linear actuator Double-acting 4.712 N – 48.255 N (6 bar)



**EB-SYD (Scotch-Yoke)** Pneumatic actuator Double-acting 27 Nm – 9.768 Nm



#### **ACTUATOR TECHNOLOGY**

#### **Energy-efficient with uncompromising performance**

EBRO actuators enable butterfly valves and knife gate valves to be actuated with high-efficiency.

No compromises, but rather through seamless component integration, energy efficiency is enhanced. Individual configurations of product components are possible upon customer request to minimize total cost of ownership.

Our challenge is to precisely align valves and actuators with customer needs. Automation technology simplies complex systems, reduces errors, and accelerates processes.



**EB-SYS (Scotch-Yoke)** Pneumatic actuator Single-acting 35 Nm – 3.590 Nm



#### LOCAL

#### EBRO ARMATUREN Gebr. Bröer GmbH

Ivo-Hauptmann-Ring 8 D-22159 Hamburg Germany

**&** +49 40 645 037-0

#### **HEADQUARTERS**

#### EBRO ARMATUREN Gebr. Bröer GmbH

Karlstraße 8 D-58135 Hagen Germany

**&** +49 2331 904-0

■ post@ebro-armaturen.com

www.ebro-armaturen.com

#### Stafsjö Valves AB

Störnings Väg 3 SE-618 95 Stavsjö Sweden

**%** +46 11 39 31 00

☑ sales@stafsjo.com

www.stafsjo.com

A Bröer Group company **www.broeer-group.com** 

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