

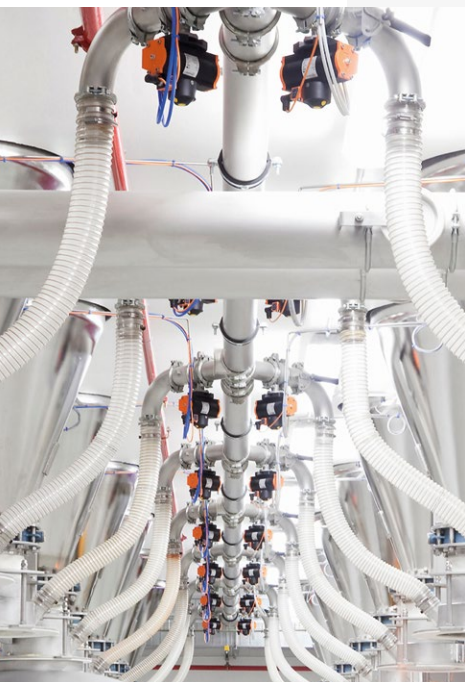


FOOD & BEVERAGE

Valves • Actuators • Automation Technology



PRECISION. MEETS PERFORMANCE.



Industrial shut-off and control valves engineered to meet the highest standards in food processing.

Ensuring flawless initial or intermediate products in the food and beverage industry requires flexible and gentle handling. This applies to both shut-off operations as well as precise execution of tasks such as blending, dosing, and filling sensitive liquids, powders, or solid media.

The same applies to regularly required cleaning processes and procedures such as vacuum or high-temperature drying. Our valves are an excellent choice for these applications – proven in operation for decades.

EBRO: A COMPREHENSIVE PROGRAM

Process safety, quality and reliability – EBRO is a trusted global leader in efficient valve solutions. Our valves comply with the latest guidelines and regulations. Additionally, our product range offers optional tailored actuator and automation technology manufactured by EBRO, ensuring your application is fully optimized.

EXCELLENT QUALITY AND SAFETY CHARACTERIZE THE VARIETY OF PRODUCT VARIANTS:

- **2-piece stainless steel body:** for CIP/SIP-cleaning processes
- **1-piece disc-shaft connection:** prevents cavities
- **Highly-polished discs:** for surfaces in contact with the media
- **Tested, certified materials:** for the requirements of the food industry
- **customized actuator and automation technology:** with energy-efficient electric and pneumatic actuators and tailor-made automation
- **separate flushing flanges:** to remove „build-ups“ and clean the valve disc
- **INFLAS®-valve:** specially developed for gentle processing of abrasive media and minimized seat wear

TRUST OUR EXPERTISE:

EXTENSIVE INVESTMENTS IN R&D, MATERIAL AND LOAD TESTS AS WELL AS ACTIVE MEMBERSHIP IN THE EHEDG GUARANTEE COMPLIANCE WITH ALL NATIONAL AND INTERNATIONAL REGULATIONS AT ALL TIMES.

SOLUTIONS FOR VARIOUS APPLICATIONS.



Malt
Barley
Rice
Animal feed | pellets
Beer
Beverages

Milk
Cheese
Ice-cream
Flour
Cereals
Flakes

Sugar
Potatoes
Starch

Potable water
Water treatment
Coffee
Cocoa
Chocolate

Guaranteed certified:

To guarantee the conformity of our products, we consistently adhere to the current directives and regulations, ensuring that all products used comply with the strictest standards in the food industry.

- Pressure Equipment Directive 2014/68/EU
- DVGW Water, ACS, Kiwa, etc.
- FDA
- EC 1935/2004

RESILIENT SEATED VALVES

Z600 Series

The Z600 series features a split-body design with a one-piece disc-shaft connection. This design is particularly maintenance-friendly and ideal for processes where frequent seat changes are required.

The stainless steel version (Z611-K) is suitable for external cleaning and is often used in the food industry.



Z611-A / Z614-A
Wafer/Lug-type
Split-body
DN 50 – DN 300



Z611-K / Z614-K
Wafer/Lug-type
Short Face-to-Face
DN 50 – DN 300

Z011 | Z014: Versatile and reliable

Due to their design and material variety, our concentric, resilient seated butterfly valves offer huge versatility for isolation and control applications. Whether fluids, powders or gases – we provide you with the optimal solution for your application in the food and beverage industry with a wide range of materials. Versions with a vulcanized seat (B-model) are available for special processes, such as vacuum applications.

Temperature range
-40 °C to +200 °C

Max. allowable pressure (PS)
16 bar



Z011-A / Z011-B
Wafer-type
Z011-A: DN 20 – DN 1200
Z011-B: DN 50 – DN 600



Z014-A / Z014-B
Lug-type
Z014-A: DN 20 – DN 600
Z014-B: DN 50 – DN 300

Z014-WN

The Z014 EBRO works standard features a full-flange aluminum body. This design allows customized flange patterns and ensures a seamless connection to mating flanges, preventing unwanted deposits, especially when handling sensitive products.



Z014-WN
Full-flanged
DN 50 – DN 600



More information on
resilient seated valves.

PTFE VALVES

Durable and safe

PTFE-lined butterfly and control valves are specifically 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.

Temperature range

-40 °C to +200 °C

Max. allowable pressure (PS)

10 bar

H011

The H011 hygienic valve combines the advantages of a chemical valve with the characteristics of a disc valve for hygienic processes and requirements. Its modular design and a variety of specific flange connections enable tailored solutions. Both CIP cleaning and cleaning with up to 150°C hot steam can be easily conducted with the valve installed.

All components in contact with the media are optionally available in accordance with EC 1935/2004 or EC 10/2011.

Size range

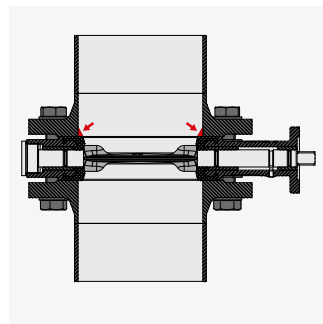
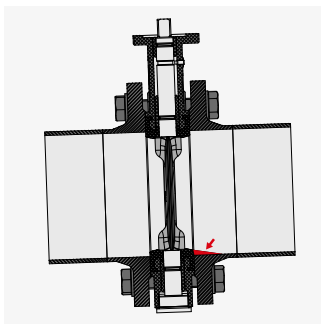
DN 50 – DN 250



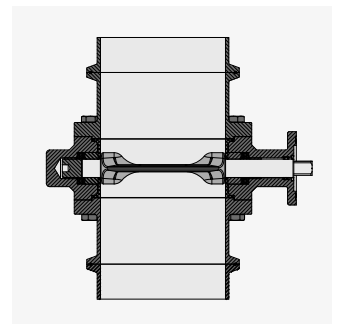
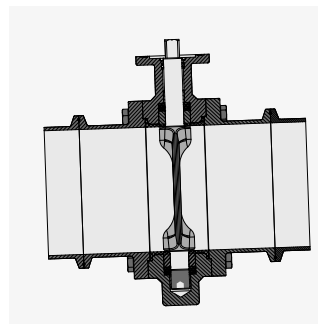
T211-A
Wafer-type
DN 50 – DN 300



T214-A
Lug-type
DN 50 – DN 300



Conventional designs: Offsets at the flange/seat transition can cause undesired deposits.



H011: Almost cavity-free and flow-optimized.



More information on
PTFE valves.

HIGH PERFORMANCE VALVES

Reliable under extreme conditions

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

Depending on the operating conditions, reliable sealing is achieved either through metal-to-metal sealing or with a FDA-compliant PTFE seal.

In the food industry, HP valves are mainly used in energy supply and heat generation (vapors, high-temperature water, hot air) as well as in refrigeration systems with condensate applications.

Temperature range

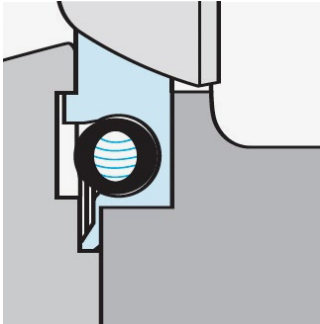
-40 °C to +200 °C

Max. allowable pressure (PS)

40 bar ($\leq$ DN 150)

25 bar ($>$ DN 150)

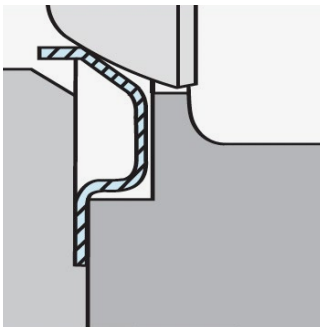
Seat options



R-PTFE

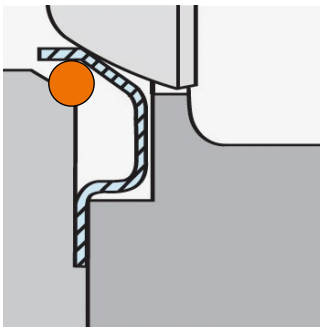
The elasticity of the seat ring ensures sealing in accordance with EN 12266, leakage rate A (tight).

In addition to the EC-compliant R-PTFE seat ring, the material EBRODUR is also available for abrasive applications.



INCONEL®

The seat ring made of INCONEL® is extremely temperature-resistant. Tightness in accordance with EN 12266, leakage rate B (tight).



Cavity-free

An additional O-ring on the back of the INCONEL® seat ring seals the dead space and prevents any infiltration from product deposits.



More information on
High Performance valves.



HP111

Wafer-type
DN 50 – DN 1200



HP114

Lug-type
DN 50 – DN 1200

CYCLE LOCK TS

Gas-tight discharge and precise dosing

A gas-tight discharge is vital when transporting or discharging bulk materials with pressure differentials between production sections. The EBRO Cycle Lock TS enables the discharge and precise dosing of powders or granules from silos, storage containers or BigBags. With conventional dosing devices, considerable air leakage occurs during transfer to pressurized conveying lines. In addition, overflowing air entrains media particles, causing substantial wear on components in contact with the media.

In accordance with European regulations, the cycle lock is optionally available with approval as an explosion decoupling protection system.

Temperature range

-20 °C to +70 °C

Max. allowable pressure (PS)

10 bar



More information on the Cycle Lock.



TS

DN 50 – DN 600

Chamber volume - customer specific

Operating mode of the Cycle Lock System



The mode of operation of the cycle lock system is available as an animation on YouTube.

INFLAS®

Reduced wear through inflatable liner

Abrasive media often cause excessive wear of the seat, resulting in frequent servicing and reduced plant utilization. Sensitive food products, such as spices, tea leaves and granules could be damaged during disc closure. The INFLAS® solution prevents such damage.

When opening the seat is depressurized and allows a frictionless, torque-optimized opening of the valve disc. The integrated control system verifies plausibility during closure, autonomously manages the process, and ensures a secure seal by pressurizing the liner.

Temperature range

+40 °C to +200 °C

Max. allowable pressure (PS)

16 bar



More information on
INFLAS®



INFLAS®
Advanced controls

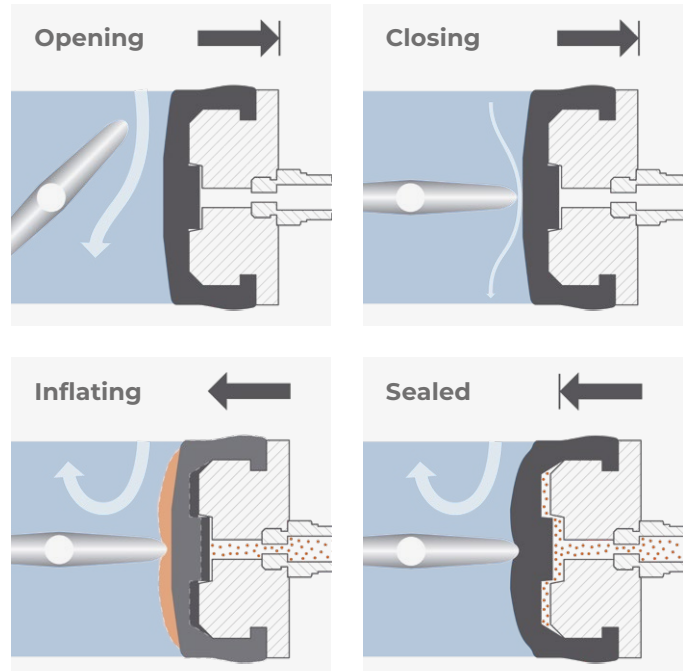
Simply unbeatable

The liner of the INFLAS® is pressurized after the valve disc is closed. This ensures the valve is sealed without the friction between the valve disc and elastomer, unlike with conventional designs.

This principle reliably prevents wear on the liner, ensuring contamination-free processing of the media:



The mode of operation of the
INFLAS® is available as an ani-
mation on YouTube.



IMPELLER VALVE FS-M

Smooth material flow

The FS-M impeller valve ensures the continuous discharge of powders and granules from silos, BigBags or hoppers. This minimizes risks such as blockages or product damage, which is particularly important when conveying food and ingredients.

The powerful, speed-controlled gear motor can optionally be coupled with feed or discharge screw conveyors.

Temperature range

-10 °C to +200 °C, optional bis 250 °C

Max. allowable pressure (PS)

6 bar



More information on the Impeller valve.



FS-M
DN 150 – DN 500

VIDOS® VIBRATING-DOSING VALVE

Preventing product build-up

Bridging is a common problem in bulk material handling, especially in dosing processes. Media adheres, is compressed and interrupts the product flow. The ViDos® butterfly valve from EBRO offers an almost complete solution to this challenge.

A vibrator mounted on the lower shaft causes the disc to vibrate horizontally in a linear motion. The vibrations introduced are precisely controlled by the air pressure and ensure a loosened product flow with low opening angles of the disc.

Temperature range

-10 °C to +200 °C

Max. allowable pressure (PS)

16 bar



More information on the ViDos®.



ViDos®
DN 150 – DN 400

PIPE SYSTEM VALVE CK

Light and reliable

The pipe system valve features a centrally mounted disc and an aluminum body with a collar on both sides for clamping connections.

The valve disc closes precisely into the spherical contour of the body and ensures a reliable seal. The 3 mm NBR-white-coated disc is FDA-compliant, meets the requirements of EC1935/2004 and enables safe use in food industry systems.

Temperature range

-10 °C to +60 °C

Max. allowable pressure (PS)

1 bar



More information on the
Pipe system valve.



CK
Pipe system valve
DN 80 – DN 250

CHECK VALVE RSK

Versatile and robust

The versatile wafer-type check valve is suitable for vertical and horizontal installation and impresses with its simple and robust design. Its short face-to-face dimension is particularly noteworthy.

Centering is achieved via the outer diameter of the body, while the retaining lug facilitates installation. A back pressure of at least 0.3 bar is required for reliable sealing.

On request, the check valves can be equipped with elastomers compliant with EG 1935/2004.

Temperature range

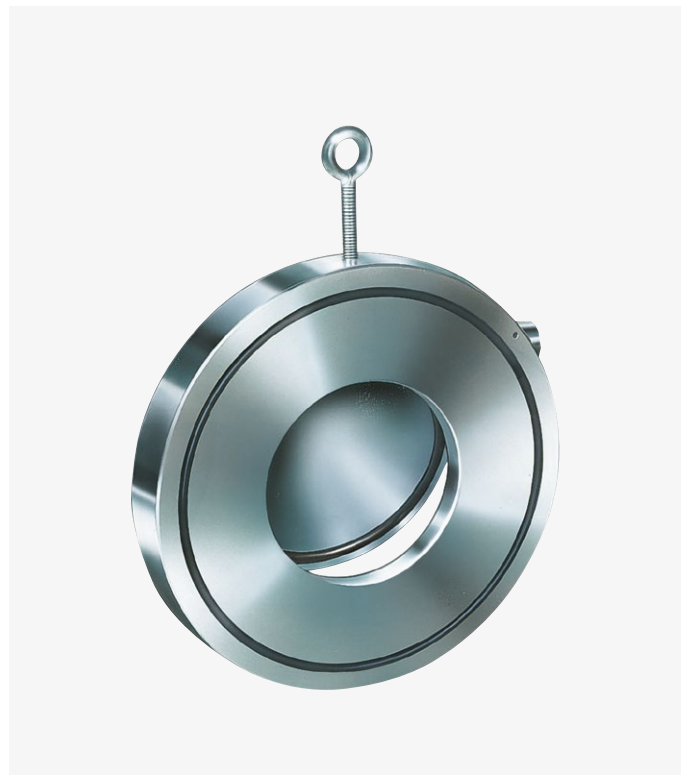
0 °C to +200 °C

Max. allowable pressure (PS)

8 bar plastic version
16 bar metal version
(depending on size and body material)



More information on the
check valve.



RSK
Wafer-type check valve
DN 32 – DN 400

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 the handling of liquids with solids as well as bulk materials such as grain, feed pellets, corn and powdery media such as wheat flour, milk and cocoa powder and starch.

Temperature
max. 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-E

Versatile and unidirectional

The modular, unidirectional MV-E knife gate valve is suitable for handling both dry and wet media. Typical MV-E applications in the food industry include bulk materials as well as washing and cleaning systems.

By utilizing so-called V-port configurations, product flows can be controlled.

Temperature
max. 300 °C

Max. allowable pressure (PS)
16 bar (depending on size)



More information on the
MV-E.



MV-E

Unidirectional

DN 50 – DN 1200



PRODUCT INQUIRIES & SUPPORT

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