

SÜDMO AD ECONOMIC VALVES ASEPTIC DOUBLE SEAL VALVES

DESCRIPTION

The design of the AD Economic is based on many years of experience in valve construction and production. Pentair Südmo's AD Economic is an cost effective yet technologically-sophisticated alternative to liftable and aseptic double seat valves.



AD stands for Aseptic Single Disc seat valve with Double Seal functionality. With this type of valve, two incompatible media (e.g. CIP and product) can be separated in the pipelines without mixing. This is ensured by two separate seals, between which an open air space enables any potential leaks to be detected and removed. The P³ diaphragm prevents the elevator effect and its potentially negative influence to the product. Additionally, the leakage chamber can be externally flushed by two valves fitted on each side.



CUSTOMER BENEFITS

- Suitable for aseptic processing
- Economic and compact alternative to liftable and aseptic double seat valves
- High protection against mixing through innovative positioning of seat seals
- P³ diaphragm prevents elevator effect
- Simple integration of flush/leakage valves into the equipment without welding
- Maintenance easy, fast and safe

ASEPTIC DOUBLE SEAL VALVES APPLICATION EXAMPLES



PRODUCTS

- · Water Beverages
- Beer Spirits Wine
- Food Liquid Egg -Dairy Products

APPLICATIONS

- Distribution of liquid products
- Distribution of CIP media
- Separation of product areas to CIPsupply and CIP-return

MEETS THE FOLLOWING REQUIREMENTS

- · Mix proof valve with low CAPEX and OPEX
- Safe separation of incompatible media in production
- Quick and safe CIP
- · Minimized downtime and maintenance cycles

SÜDMO AD ECONOMIC VALVES ASEPTIC DOUBLE SEAL VALVES

FUNCTIONS



Valve position "Closed"

- Two incompatible media are separated without mixing (e.g. CIP and product)
- Flush/leakage valves open with spring force
- Any potential leaks are detected and removed

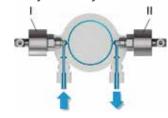


Valve position "Open"

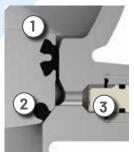
- · Upper and lower lines connected
- Flush/leakage valve closed with air pressure
- Recommended direction of flow during closing procedure (see arrows)



Flushing of the leakage chamber



INNOVATIVE SEALING SOLUTION: SAFE - DURABLE -EASY MAINTENANCE



RSC (Radial Seal Complete) seal as radial sealing element

- Small contact area (optimized friction characteristics)
- Very good swelling compensation
- 2. O-ring as axial sealing element
- Metallic stop to protect against excessive stress
- 3. PEEK as sealing of leakage outlet
 - Sealing close to product aread

TECHNICAL SPECIFICATIONS

MATERIAL

Product contact area

1.4404 (AISI 316L)

Non-product contact area

1.4301(AISI 304)

Optional

High-quality materials

Seals*

EPDM / HNBR / FKM

*All seal qualities are FDA-compliant

PRESSURES

Control air pressure

Standard 6 bar (87 psi) - 8 bar (116 psi)

Operating pressure

Standard DN 25-65/1.0"-2.5"

SURFACES

 $\begin{array}{ll} \textbf{Product contact} & \text{Ra} \leq 0.8 \ \mu m \\ \textbf{Non-product contact} & \text{Ra} \leq 1.6 \ \mu m \\ \end{array}$

Optional High-quality surface finish,

electro-polished

CONNECTIONS

Pipe connections in accordance with

- DIN 11850-2 (DIN 11866-A)
- ASTM A270 (DIN 11866-C) (ASME BPE-2009)

P³ DIAPHRAGM

- No elevator effect
- Easy to maintain
- P³ material with excellent properties:
- Very good chemical resistance
- Temperature resistant up to 150°C
- Dynamic pressure stability up to 10 bar



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