

The logo for ADAMS, featuring the word "ADAMS" in a bold, white, sans-serif font. The letter "A" is stylized with three parallel diagonal lines extending from its top-left corner. The background is a dark gray with faint white technical drawing lines, including a grid and several concentric circular arcs.

Custom-made valves
Enduring Reliability

Made in Germany

MAG/GMZ



Check valve MAG



Check valve GMZ

Safety when flows reverse

We specially developed the MAG and GMZ check valves in order to protect turbines and compressors in steam and gas lines from flow reversals. The sophisticated technology features very fast closing times and a low level of pressure loss.

MAG

The hallmark of the MAG is an external balancing weight that optimally counterbalances the valve disc. The advantage is that the valve is very responsive and the disc reliably reaches its final closing position. Due to the positioning of the balancing weight in its own pressure-resistant body without gland shaft seals, the valve exhibits low internal friction, which benefits the optimal closing and opening characteristics.

GMZ

Our GMZ check valves protect important continuous flow machines from the dangers of backflows. An extremely low degree of internal friction and a finely responsive adjustable counterweight enable the valve to react sensitively. The GMZ is additionally equipped with a pneumatic, spring-controlled drive, enabling controlled and rapid closing behaviour. It is also fitted with a hydraulic damping system to avoid any tendencies the valve disc has to vibrate during flow changes.

Range of applications for MAG/GMZ

As automatically closing check valves, MAG and GMZ are used in exhaust steam pipes in steam turbines as well as in pressure lines of compressors in air and gas systems. The valves can be fitted with either a hydraulic or pneumatic auxiliary drive with spring loading as additional closing support. An overrunning clutch (MAG) enables the free movement, which is not influenced by drive and gland shaft friction.

A summary of the benefits (MAG)

- Excellent tight shut-off behaviour
- Minimal pressure losses
- Additional screw retention
- Robust design
- Minimal maintenance cost

A summary of the benefits (GMZ)

- Positive closing behaviour via spring-loaded pneumatic operation
- Adjustable hydraulic damping facility
- Avoidance of tendencies of the valve disc to vibrate during operation
- Adjustability of slight pressure losses via the closure weight
- Additional screw retention
- High availability and long service life

Facts & Figures MAG

NPS

DN 150 / 6 inches up to DN 2000 / 80 inches

Temperature range

-50 °C / -58 °F up to 500 °C / 932 °F

Pressure Class

PN 6/10/16/25/40
ANSI 150/300

Construction lengths in accordance with ISO 5752 BS 14 (F4)

Custom-made construction lengths on request

Valves designed in accordance with international standards, e. g.

AD technical instructions, ANSI, API, ASME, ATEX, BS, DGRL, DIN EN / ISO, GOST, KTA, MSS, NACE, RCC-M

Operation

Self-closing, pneumatic, hydraulic, electric

Facts & Figures GMZ

NPS

DN 150 / 6 inches up to DN 2000 / 80 inches

Temperature range

-50 °C / -58 °F up to 250 °C / 482 °F

Pressure Class

PN 2.5/6/10/16/25/40
ANSI 150/300

Construction lengths in accordance with ISO 5752 BS 14 (F4)

Custom-made construction lengths on request

Valves designed in accordance with international standards, e. g.

AD technical instructions, ANSI, API, ASME, ATEX, BS, DGRL, DIN EN / ISO, GOST, KTA, MSS, NACE, RCC-M

Operation

Pneumatic

RZN/RZI



Check valve RZN



Check valve RZI

Complete pump protection in sophisticated areas

Our RZN and RZI check valves offer proven pump protection for applications with liquid media. The individually adjustable damping system enables the butterfly valve to perform shock-free checking, even in critical areas.

Our RZN and RZI butterfly valves feature first-class hydrodynamic characteristics, low pressure losses and the individually adaptable damping system. The closing characteristics of the butterfly valve can be optimally adjusted to suit the needs of each system with the help of the damping system. The RZN and RZI models can also be simply readjusted to adapt to new requirements if changes are made to the system at any point in the future.

Long service life

The compact design of the RZN check valve even makes it possible to operate in very limited spaces. The valve is robust and long lasting and can also be fitted with soft seals in a metallic seat or strip-metal seals for use at higher temperatures. Based on the same proven design, the RZI was developed for pipe dimensions over 1,000 millimetres. The damping system has been adapted to suit the greater forces.

Range of applications

The RZN and RZI check valves are ideally suited for protecting pumps for liquid media. The high flexibility of material and seal models enables the valves to be used in a wide variety of applications. For example, a seawater model is available in stainless steel and with a hard rubber lining.

A summary of the benefits

- Complete pump protection
- Controlled, shock-free closing
- Low pressure loss
- Progressive sealing
- Individually adjustable damping system
- Automatic mode of action
- Additional screw retention
- Subsequent installation of counterweight possible

Facts & Figures RZN

NPS

RZN: DN 150 / 6 inches up to DN 1000 m / 40 inches

Temperature range

-50 °C / -58 °F up to 200 °C / 392 °F

Pressure Class

PN 10/16/25/40/64
ANSI 150/300/600

Construction lengths in accordance with

ISO 5752 BS 14 (F4)

Custom-made construction lengths on request

Valves designed in accordance with international standards, e. g.

AD technical instructions, ANSI, API, ASME, ATEX, BS, DGRL, DIN EN / ISO, GOST, KTA, MSS, RCC-M

Operation

Automatically closing and adjustable hydraulically damped

Facts & Figures RZI

NPS

DN 500 / 20 inches up to DN 3000 / 120 inches

Temperature range

-50 °C / -58 °F up to 200 °C / 392 °F

Pressure Class

PN 2.5/6/10/16/25/40
ANSI 150/300

Construction lengths in accordance with

ISO 5752 BS 14 (F4)

Custom-made construction lengths on request

Valves designed in accordance with international standards, e. g.

AD technical instructions, ANSI, API, ASME, ATEX, BS, DGRL, DIN EN / ISO, GOST, KTA, MSS, RCC-M

Operation

Automatically closing and adjustable hydraulically damped