

AXIAL ISOLATION VALVE

PRODUCT SUMMARY SHEET

VALVE TYPE

Axial Isolation Valve, On-Off and ESD

GOODWIN MODEL

AB Series

SIZE AND PRESSURE RANGE

- 2" – 72"
- ASME 150-2500
- API 3000-15000

MATERIALS

Carbon, Low Temp Carbon Steels,
Stainless, Duplex, Super Duplex Steels,
Low-High Alloys, Nickel Alloys and
Titanium Alloys.

AS AN ALTERNATIVE TO

- Ball Valves
- Plug Valves
- Gate Valves
- Butterfly Valves

APPLICATIONS

- Emergency Shut Down (ESD)
- Safety Shut Off
- Over Pressure Protection (HIPPS)

GOODWIN
INTERNATIONAL LTD

AB SERIES



LEARN MORE



GOODWIN
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GOODWIN AXIAL ISOLATION VALVES COME EQUIPPED WITH INNOVATIVE FEATURES THAT SET GOODWIN APART FROM ITS COMPETITION.

STREAMLINED AXIAL FLOW PATH

The streamlined flow path through an Axial Isolation Valve has minimal pressure drop. The flow is directed through the valve to avoid critical sealing areas promoting longevity of the sealing arrangement.

FAST OPENING / CLOSING

Axial Isolation Valves can be operated fully open to fully closed or vice-versa in less than 2 seconds. This compared to a ball valve which usually requires 1 second per inch of bore to do the same operation.

PRESSURE-BALANCED DESIGN

Pressure balancing is equally effective in both forward and reverse pressure conditions. The Isolation valve can be opened against full differential pressure.

TIGHT SHUT-OFF

With pressure energised seals encapsulating the piston body and pressure energised seating seals in the piston head, tight shut-off to FCI 70-2 Class VI, i.e. bubble tight, is achieved.

FLEXIBLE BODY DESIGN

Goodwin offers 2 body styles.

3 Piece Split Body (2" to 12")

- Offers higher flow capacity
- Improvement in NDE accessibility
- Simplified casting and machining methods
- Body construction can be forged, Cast or a combination.
- Inlet / Outlet pipeline size transitioning within the valve removing the need for transition / expansion pieces.

Single Piece Body

- In larger sizes (14" and above) single piece body design is employed for manufacturing and cost purposes.

BI-DIRECTIONAL FLOW AND SEALING

Axial Isolation Valves can be flowed in either direction and because of the pressure energised seals, bubble tight shut-off is achieved in both directions.

LOW FUGITIVE EMISSIONS

Through FET testing witnessed by Lloyds Axial Isolation Valves have been certified to Rate A Class (HS) of ISO 15848-2 which is the tightest rate achievable.

RACK-PINION-RACK GEAR TRAIN

Goodwin Axial Isolation Valves utilise Goodwin's patented Rack-Pinion-Rack gear train mechanism to transpose the linear motion of actuation through 90° into axial motion of the piston providing:

- High durability, rapid and precise movement.
- Closure in less than 2 seconds.
- High rangeability.
- Zero risk of gear teeth seizure with minimal or no lubrication.
- Low friction and high efficiency compared to sliding gear mechanisms.
- Low backlash maintained over lifetime of the product.

ACTUATION OPTIONS

- Manual Operation
- Pneumatic
- Hydraulic
- Electric
- Electro-hydraulic

Goodwin does not currently manufacture actuation. However, its valves will be supplied with full integrated actuation and instrumentation packages according to customer requirements and specifications.

For more information go to:
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