

# Atomac® AKH3.2

Fluoropolymer-lined ball valve certified to API 641 and ISO 15848



# Maximum reliability and fugitive emissions certification for the toughest fluid management challenges

The Atomac AKH3.2 fluoropolymer-lined ball valve from Flowserve delivers unmatched performance in critical service applications. It's the first lined ball valve certified to API 641 and ISO 15848 requirements for fugitive emissions. In addition, improved liner stability extends mean time between maintenance (MTBM) as well as the valve's lifecycle.



# Certified API 641 and ISO 15848 compliance

An innovative interlocking body joint design along with live-loaded wedge packing minimizes leakage and ensures compliance with fugitive emissions requirements of API 641 and ISO 15848.

Reliable sealing also is accomplished by interlocking body joints that require no maintenance. The AKH3.2 valve exceeds ISO 15848 standards and features tight shut-off per API 598 and DIN EN 12266-1, leakage rate A.

#### Chemical processing

- Acetic acid
- Barium chloride
- Bromine
- Calcium chloride
- Chlorine
- · Hydrochloric acid
- Hydrofluoric acid
- Liquid and vapor
- Sulfuric acid

#### **Pharmaceutical**

- Acids
- Alkaline
- Solvents

#### Pulp and paper

- Chlorine dioxide
- Sodium chlorate
- Sodium hypochlorite
- Spent acid
- Tall oil

#### Steel production

• Pickle liquor

# Modular design to meet application requirements

The AKH3.2 valve is available with a floating ball or a monobloc configuration in a uniform body designed for field interchangeability.



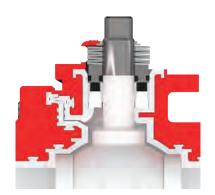
#### AKH3.2M — Monobloc design with one-piece ball and stem

- Prevents wear on stem drive
- Constant torque independent of line pressure
- Optional V and C port configurations for modulating and control applications



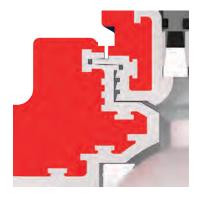
#### AKH3.2F - Floating ball with two-piece ball and stem

- Lower operating torques at low pressure
- Line pressure supports sealing against seat
- Optional AL<sub>2</sub>O<sub>3</sub> ceramic ball for slurry and abrasive services



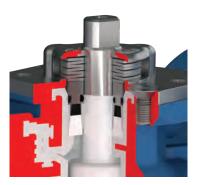
# **Superior liner retention**

The AKH3.2 valve features improved liner stability, which promotes reliability and reduces costly valve failures.



# Interlocking body joints

A dynamic body seal and live-loaded packing reduce inline adjustments for the AKH3.2 valve. A metal-to-metal body joint with labyrinth seal creates a maintenancefree body and tailpiece connection. Another benefit of the design: enhanced sealing under harsh conditions. The AKH3.2 valve meets API 598, DIN EN 12266-1 (leakage rate A) standards.



# Live-loaded wedge packing

Certification to API 641 and ISO 15848 standards along with enhanced reliability are achieved by the live-loaded wedge packing of the AKH3.2 valve.



The Atomac AKH3.2 valve is a reduced port, flanged ball valve with a two-piece bolted body design. Additional specifications include:

Design	AKH3.2M — Monobloc unit with one-piece ball and stem AKH3.2F — Floating ball with two-piece ball and stem
Sizes	NPS 1 to 6
Pressure class	ASME Class 150
Temperature range	-60°C to 200°C (-76°F to 392°F)
End connection	ASME B16.5 flanged, raised face (RF)
Body materials	Ductile iron (DIN EN 1563 Grade EN-GJS-400-18-LT and ASTM A395 Grade 60-40-18) with PFA lining; optional materials available on request
Face-to-face	ASME B16.10 short pattern
Packing	Top cap live-loaded with Belleville washers; optional adjustable packing gland follower available on request
Topworks	ISO 5211 mounting dimensions
Fugitive emissions	ISO 15848-1/API 641
Leakage	Tight shut-off per API 598 and DIN EN 12266-1 (leakage rate A)

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