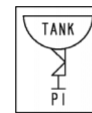


# ASCO™ ASEPTIC VALVES

## TANK BOTTOM VALVE

SERIES  
**224**

- The tank bottom diaphragm valve is designed for use at the bottom of a tank or vessel to drain or sample while minimizing the interior sump and preventing any dead leg for bacteria or microorganism entrapment.



General Valve Information	
Size range	DN 15 to DN 100
Operating mode	Normally close, normally open, double acting
Topworks	Manual operating, pressure operated
Max. service pressure	10,34 bar
Max. service temperature	+149°C
Min. service temperature	EPDM diaphragm: -30°C; PTFE diaphragm: -20°C



Patent # 5,227,401

Diaphragm material compatibility *			
Applications		Material	
		EPDM	PTFE
Passivation	Nitric Acid 15% <sup>(1)</sup>	U	R
	Phosphoric 10% <sup>(1)</sup>	R	R
	Citric Acid 15% <sup>(1)</sup>	R	R
	Mixed Chelants <sup>(2)</sup>	R	R
Cleaning <sup>(5)</sup>	Sodium Hydroxide	R	R
	Sodium Hypochlorite	R	R
	Potassium Hydroxide	R	R
	Phosphoric Acid	R	R
	Hydrogen Peroxide	R	R
Sterilization	Saturated Steam 1,4 bar (126°C)	R <sup>(3)</sup>	R
	Saturated Steam 2,1 bar (135°C)	R <sup>(3)</sup>	R
	Saturated Steam 2,8 bar (142°C)	R <sup>(3)</sup>	R
	Dry Heat (165°C)	U	R
	Ozone <sup>(4)</sup>	R	R

\* Ensure that the compatibility of the fluids in contact with the diaphragm is verified.

<sup>(1)</sup> At 60°C

<sup>(2)</sup> Ammonium citrate base at 80°C

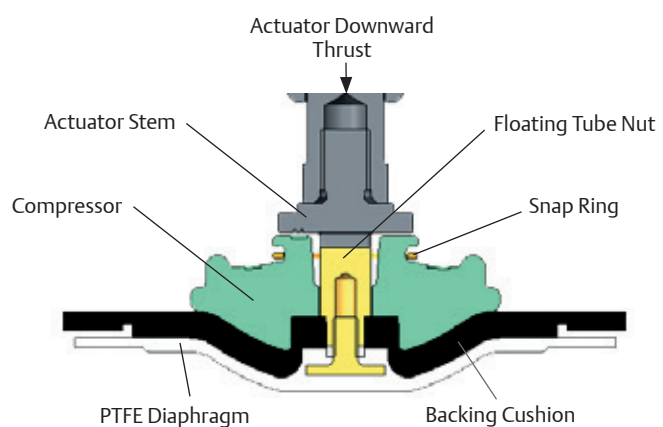
<sup>(3)</sup> Limited life and undesirable failure mode

<sup>(4)</sup> 3% at 27°C

<sup>(5)</sup> Consult factory for specific temperature and concentration limitations.

R = Resistant

U = Unsatisfactory



### Diaphragm certifications

- European Union Pressure Equipment directive 2014/68/EU
- FDA compliant
- 21CFR177.2600 – Elastomers
- 21CFR177.1550 – PTFE
- All diaphragms are available with USP class VI certificate of Conformance
- Chapter 87 In-Vitro
- Chapter 88 In-Vivo
- Certificate of compliance to EMEA/410/01 “Guidance on Minimizing the Risk of Transmitting Animal Spongiform Encephalopathy Agents via Human and Veterinary Medicinal Products” available on demand.
- Certificate of traceability to EN 10204 3.1 B available upon request.



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**Surface finish**

Valve bodies are available in a complete range of mechanically or electropolished surface finishes to satisfy system design requirements.

Electropolishing is the electromechanical method of removing metal from the surface. This surface finishing improves corrosion resistance, removes inclusions and improves the overall surface for cleaning and sterilization.

Mechanical Polish	EU Service Micron Max.
	§No Mechanical Polish§
	0.8Ra
	0.6Ra
	0.5Ra
	0.38Ra
	0.28Ra
Electropolish	0.25Ra
	No Electropolish
	Both Interior and Exterior Electropolish