## Process Automation



IMI PBM

# Igenix® Tank Valve Solutions for Bioreactors

Breakthrough engineering for a better world

MI PBN

## IMI PBM Igenix® Unique Tank & Vessel Solutions

We Provide the Best of Both Worlds Clean. Reliable. Simple. Versatile.

With today's demanding process requirements, IMI PBM offers the best of both worlds with outlet and mixing capabilities This ideal combination offers customers optimal mixing technology to eliminate sheere and improve process yields alongside the Igenix® Radial Diaphragm Valve, focusing on complete drainability.

Using precision and state-of-the art production methods, you can be assured the mixing of your process and discharge is handled with the utmost sensitivity, complete care and optimal drainability. These solutions also deliver user friendly maintenance reduction.



### IMI PBM Magnetic Mixer Bottom Installation

#### Materials

316L (1.4435), EPDM + further materials available on request

#### Surfaces

Standard Ra  $\leq$  04  $\mu$ m e-polished +higher quality available on request

#### Sealing System

Hermetically sealed (aseptic flange connection, welded flange, plug-in flange)

#### Certificates/Conformities

FDA, EC1935, 3.1 GMP-compliant EHEDG-compliant, weld seam documentation, USP class VI, ASME

#### Magnetic Mixer Special Features

- ✓ No more worries about dry running: Possibility of dry running for up to two hours during draining the tank
- ✓ The magnetic bearing enables a number of special features
- Easy cleaning: CIP and SIP cleaning possible thanks to the hygenic design
- Hygienic design: Certified cleanability thanks to riboflavin test conducted by a third party
- Simplest process integration: There is no need for a supply system
- Low maintenance and maximum reliability: simple maintenance and long service life due to few wearing parts and a robust design
- Hermetically closed system

## Igenix® Radial Diaphragm Valves

Our seperate and unique weld pad is designed and machined for complete proven pad drainability. Detached from the body by a standard hygenic clamp, these weld pads can ship early for faster/easier installation. Our sloped internal body and "fold under" diaphragm faciliates complete drainage. The outlet can be orientated in any position, versus a fixed outlet only option.

The IMI PBM Igenix® Radial Diaphragm Valves have mulitple engineered configurations and are built with our tested and proven design - offering customers clean, relaible, simple and versatile solutions.

- <sup>1</sup>/<sub>2</sub>" to 4" (DN15 DN100)
- RDV Polymer 1" to 2" (DN25 DN 50)
- 45° and 2° sloped outlet, clamp/weld connections for complete drainability
- Pressure rating 175 psi/12 bar
- Standard finish 15 Ra with EP (BPE SF4)
- Optional Satellite Valve, purge port & tank connections available
- Body materials Stainless Steel 316L, Hastelloy® C-22®, AL6XN™, & others; weld pads - any material
- Platinum cured Silicone or V-TEF™ (4" (DN100) only) diaphragms

- Interchangeable manual and pneumatic actuators
- Full material traceability and documentation package

Polymer Igenix® Radial Diaphragm Valve

- Exceeds performance requirements of
  ASME-BPE testing
- Optional limit switch including AS-Interface, DeviceNet, Foundation Fieldbus and Modbus
- Approved CRN
- Weld pads can ship early, which improves tank fabrication schedule
- Chill Block available to facilitate welding

Examples of Igenix® Radial Diaphragm Configurations

lgenix®

CLEAN Valve Solutions

2° sloped outlet for complete

drainability

## Why Choose IMI PBM? Drainability. Cleanability. Reliability.

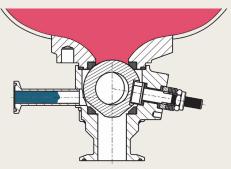
Our Tank Outlet Valves are proven solutions engineered for demanding applications. Our valves eliminate dead leg at the bottom of the tank and have unobstructed flow; emptying the tank quickly. The Adjust-O-Seal® feature provides upstream/downstream seal to allow the body cavity to drain through purge ports or downstream piping/tubing. Weld pad designs will fit most tank configurations.



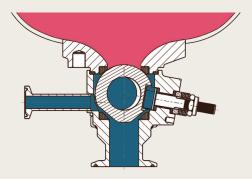
- Adjustable Sealing Technology Upstream Sealing Ideal for vessels functioning in a wide range of operating pressures andd also reduces costly maintenance
- Multiple Cavity Management Options drain, flush or clean the body cavity
- Fewer Process Interruptions versatile standard and custom pad designs
- Unique Solutions a wide range of customizable designs

such as spray balls, sampling and sparging

Clean, Purge Valve - Closed Position Steam/Cleaning Solution - Enters Purge Port



Solution enters around body and down through flats





#### Flush Tank

- 3-piece "swing out" body design
- Sanitary and Industrial = True Bore®
- Valves are rated to full vacuum
- Upstream/downstream bubble tight sealing
  allows valve body cleaning/draining
- Pad radius facilitates efficient drainage and reduces pocket area above ball
- Standard live-loaded stem assembly
- Direct mount actuation available
- API 607 Fire Test Qualified options available
- Accommodate any special vessel configurations: dished, flat, ellipsoidal, jacketed, conical or spherical
- Adapt to competitors weld pads

#### Angle Stem Flush Tank

- 2-piece design
- Outlet connections in both sanitary and industrial
- Designed for applications where automation may interfere with tank head or jacket
- Pad radius facilitates efficient drainage and reduces pocket area above ball
- Valves are rated to full vacuum
- API 607 Fire Test Qualified options available
- Accommodate any special vessel configurations: dished, flat, ellipsoidal, jacketed, conical or spherical
- Adapt to competitors weld pads

#### Spray Ball

- Assist in cleaning agitator blades or other vessel mixing equipment
- Pads mounted virtually anywhere on vessel using radius pad
- Eliminates dead leg
- Customer selects nozzle spray patterns to fit application
- Reduces cleaning time and consumption of CIP



Angle Stem Flush Tank Valve



IMI operates four global centres of technical excellence and a sales and service network in 50 countries, as well as manufacturing capability in Brazil, China, the Czech Republic, Germany, India, Mexico, the UK and the USA.

Supported by distributors worldwide.

For further information, scan this QR code or visit pbmvalve.com or imiplc.com/process-automation



# Process Automation

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Due to our policy of continuous development, IMI reserves the right to change specifications without prior notice.

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