Valves For Marine and Offshore Applications



IMI PBM ball valves are designed, tested and manufactured in the USA for long service life under arduous conditions - using legacy (cast/forged) and additive methods (LPBF/WAMM) in a variety of materials to meet the most aggressive Marine corrosion environments.

- Air, Ballast, Cooling/Lubrication, and Fire Protection Systems
- Desalination/Drinking/Water Treatment, Injection Water, and Water Flood
- Water, Shipboard, Platform and Pier Transportation Systems
- Fuel, Flare Gas, Mud Transfer, Critical Utility and Process Systems for OSV, FPSO
- Liquid Natural Gas (LNG) Processing Storage and Transfer, Platform, Tankers
- Specialized Vessels and Terminal Facilities
- Pressures Class 150 and 300. Higher available.
- -320°F (-200°C) to 400°F (205°C) Cryogenic
- -20°F (-29°C) to 500°F (260°C) Soft Seated
- -20°F (-29°C) to 800°F (427°C) Metal Seated
- Sizes: 1/4" 6"
- Materials
 - Non-Ferrous:
 - Bronze: 836, 922
 - 955 and 958 NiAl-Bronze
 - 953 and 954 Al-Bronze
 - 70/30 and 90/10 CuNi
 - Bronze and Copper Nickel valve testing and acceptance criteria IAW MSS-72
 - Ferrous:
 - Stainless Steel
 - Duplex and Super Duplex Alloys
 - High Performance Alloys (i.e. Monel, Hastelloy, Alloy 20, etc.)
 - ASME B16.34 and MSS-61 and others as required
- Laser etched high pressure to low pressure flow direction

Approvals

- ABS Type Approval
- BV Type Approval
- DNV-GL Type Approval
- LR Type Approval
- API 607 Fire Test Qualified
- API 6D (certification per order)
- API 622 Low-E Packing
- API 641 Fugitive Emission

- CE
- CRN Registrations
- EU Pressure Equipment Directive (PED)
- ISO 9001
- NACE MR 0175
- NSF-61* / ANSI-372
- USCG Category A

* COPPER ALLOYS C89833, C89835, AND C87600 HAVE BEEN EVALUATED BY NSF TO NSF/ANSI/CAN 61 FOR USE IN DRINKING WATER SUPPLIES PH OF 6.5 AND ABOVE. DRINKING WATER SUPPLIES THAT ARE LESS THAN PH 6.5 MAY REQUIRE CORROSION CONTROL TO LIMIT LEACHING OF COPPER INTO THE DRINKING WATER

Process Automation

1070 Sandy Hill Road Irwin, Pennsylvania 15642 USA pbmvalve.com 1.800.967.4PBM mary.rozakis@imi-critical.com Due to our policy of continuous development, IMI reserves the right to change specifications without prior notice.



CRYOGENIC AND LNG VALVES

IMI PBM Cryogenic and LNG Valves are designed for liquified natural gas production, purification, transportation, and storage.

Safety is #1

Our Cryogenic Valves are designed to B16.34, tested to API 607 and meet seat leakage criteria of MSS SP-134.

- Sizes 1/2" 6"
- Temperatures from 400°F (205°C) to -423°F (-253°C). Lower than -320°F, please consult factory.
- Pressures to 1440 psi CWP / 49.6 bar (ANSI 600# class) (Above 1440 psi / CWP available)
- V-TEF™ seats/graphite seals, internal and external grounding
- Optional API-622 Low-e Packing (cannot be LOX cleaned)
- Cleaned for oxygen service
- Meets European PED and ATEX standards
- Locking lever handle, optional oval locking handwheel, or manual gear operator

Keyed Ball and Stem for Maintenance Safety

Keyed connection ensures proper assembly orientation ball, stem and flow direction alignment determined by external visual.

Vented Ball for Safety

Prevents liquid from being trapped inside the cavity; positioned to high pressure side of the valve to equalize pressure in ball cavity.

Extended Socket Weld Ends (Optional)

- Welding without disassembly
- Save fabrication time and money
- Minimize fabrication errors
- Maintain factory warranty

Live Loaded Packing for Reliable Stem Sealing

Packing materials:

V-TEF[™] and graphite

Adjustable Belleville/Spring washers ensure proper loading of stem packing through temperature/pressure cycles, and normal wear to prevent leakage.

Proprietary Seat Gasketing

Spring energized seat-back seal applies pressure to both upstream/downstream seats during low pressure usage and temperature fluctuations to ensure a tight seal.





