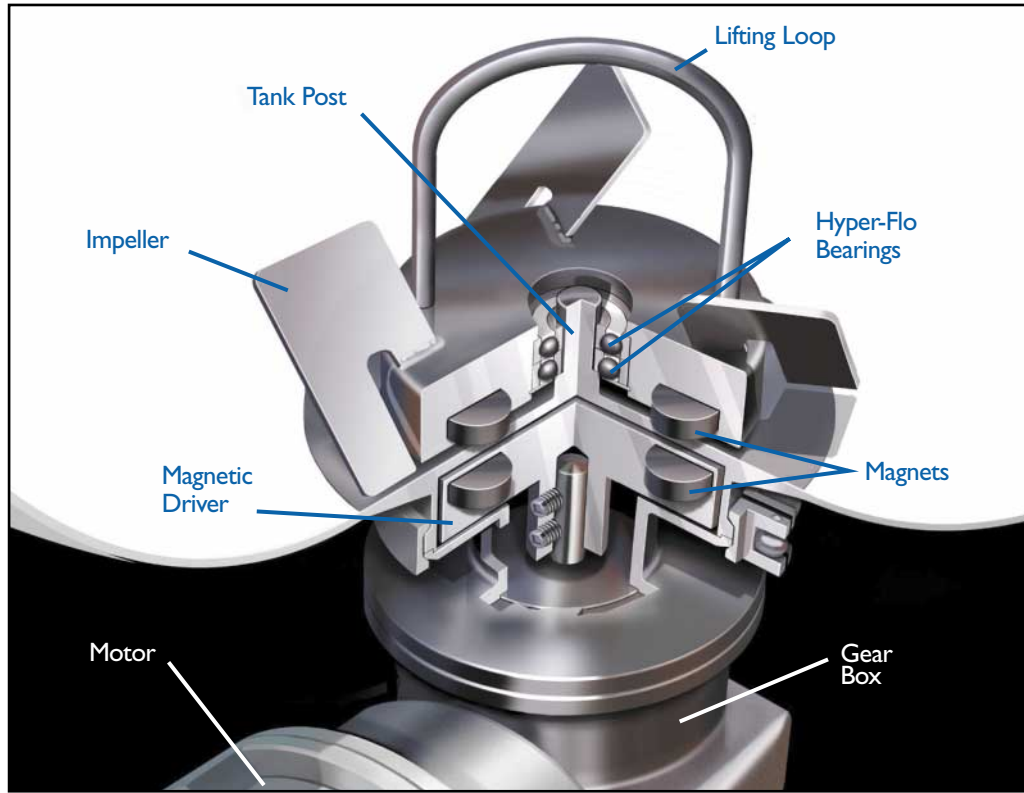


MagMixer MBI

The new standard
for cleanability,
durability and
performance.



The LIGHTNIN MagMixer™ MBI sets the new standard for cleanability, durability and performance in pharmaceutical and biotechnology applications. Its innovative design makes the MagMixer MBI the ideal choice for a variety of sanitary processing and storage applications, including plasma fractions, vaccines, injectables and media suspensions.



The patented Hyper-Flo bearing system is more cleanable and produces significantly less particulate than conventional sleeve bearing designs.

Designed for Maximum Cleanability

- The patented Hyper-Flo™ bearing design has been proven more cleanable than sleeve bearing designs. Independent tests comparing the new MagMixer MBI to an older design and the leading competitive product concluded that the MagMixer MBI is easier to clean, especially in applications involving sticky, hard-to-clean soils¹.
- Can be Cleaned in Place (CIP) by flooding or spray ball.
- Can be run dry to permit complete draining during CIP cycles.
- Impeller assembly can be autoclaved – magnets designed to withstand temperatures up to 300° F.
- Face-to-face magnetic coupling design minimizes surface area to be cleaned.
- Bearings can be removed easily for Cleaning Out of Place (COP) or maintenance.

Designed to Prevent Contamination

- The Hyper-Flo bearing has rolling contact points, resulting in significantly reduced particulate generation. Independent testing confirmed that particulate generation from the MagMixer MBI is below the limits set by the USP standard for particulate generation in large-volume injectables².
- All in-tank materials meet USP Class VI biological standards.
- The Hyper-Flo bearings are constructed of silicon nitride, glass-filled Teflon* and MP35N alloy for corrosion resistance, strength and bio-compatibility.

Designed for Durability and Superior Performance

- Unlike sleeve bearings, the Hyper-Flo bearing **will not:**
 - fracture due to rough handling during mixer installation, removal or transport, or
 - fracture or generate particulate under heavy vortexing, a common phenomenon when magnetic mixers run at high speeds and low liquid levels.
- Suitable for 30,000 liters and viscosities up to 1,000 cp. (Viscosity limits depend on tank volume)
- Advanced three-blade impeller design increases flow by 30% for improved mixing.
- CE Marked.



Designed for Easy Maintenance

- Integral lifting loop permits easy installation and removal of the impeller.
- Unlike sleeve bearings, which must be sent back to the factory, Hyper-Flo bearings can be replaced on-site using only a pair of snap-ring pliers.
- Motors and drive assemblies range from 25-51 lbs. depending on size for easier handling.
- Speed reducer and motor attach to the tank plate with a Tri-Clamp** connection for simple attachment and detachment.
- Drive can be rotated through 360°; rotated out for easy maintenance access, then rotated back to minimize interference with other external tank components.
- Bottom-entry design provides low center of gravity on mobile units for increased stability during transport.
- White epoxy paint finish is easy to clean.

Easy to Validate

- Mill Certificates are supplied with each tank plate.
- Quality Assurance Documentation, including the LIGHTNIN Quality Plan, inspection tests and data reports, materials of construction, weld procedures and polish verification data, is available.
- LIGHTNIN's Authorized Service Centers worldwide can provide installation, commissioning and ongoing maintenance services to ensure that your system is running within validated specifications.

Specifications

Impeller

- 3 bladed 316L Stainless Steel.
- Hyper-Flo™ bearing design.
- Surface finish per customer specification.

Tank Plate

- 316L SS tank plate.
- Certificate of Compliance and Mill Certificate shipped with each tank plate.
- Surface finish per customer specification.

Drive Assembly

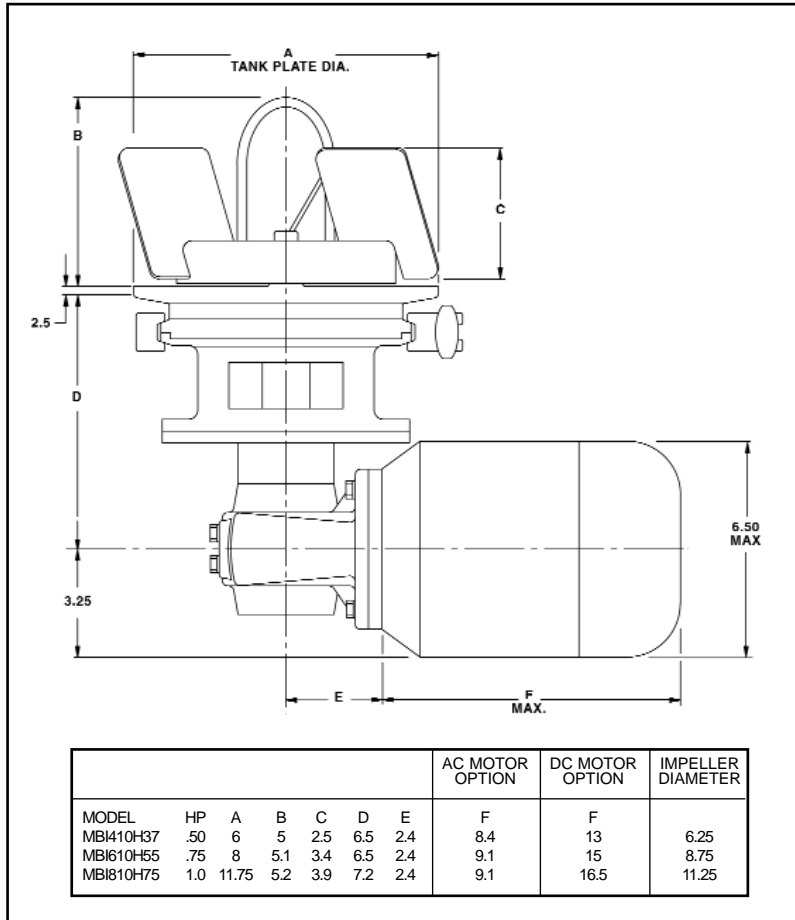
- 1/2 - 1 HP.
- Lightweight aluminum alloy IP56 reducer (Severe duty washdown) with integral motor.
- 9.25:1 ratio (nominal 175 rpm).
- Washdown duty drive, with FDA approved lubricant I.25 AGMA SF.
- 316SS pedestal with Tri-Clamp fitting.

Motor Options

- IP55 (washdown), 56C TEFC, 1-phase, 115V 50 or 60Hz, DC.
- AC Washdown duty TENV motor with inverter.
- Explosion-proof motor.
- All stainless motor.
- XP C&D inverter Duty motor.
- NEMA 4/12 SCR controller.

Custom Options

- High alloy, non ferrous tank plate and impeller.
- Tank plates for jacketed vessels.
- Tachometer.
- White epoxy or stainless steel paint.



Call the LIGHTNIN experts

For more information about the MagMixer MBI or to discuss your application, contact your local LIGHTNIN Sales Representative. Or visit our website at www.lightninmixers.com. Or call 1-888-MIX-BEST (U.S. and Canada) or +1 (716) 527-1623 (worldwide).

¹Copies of the reports are available from your LIGHTNIN Sales Representative or on our website at www.lightninmixers.com.

²A copy of the report is available from your LIGHTNIN Sales Representative or on our website at www.lightninmixers.com.

³Teflon is a registered trademark of DuPont

⁴Tri-Clamp is a registered trademark of Ladish Company

The LIGHTNIN trademark is registered in the U.S. and other countries.



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