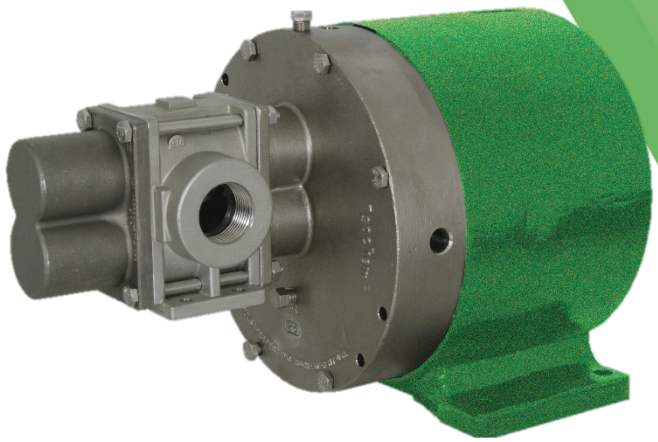
Isochem® GMH8

MAGNETICALLY DRIVEN SEALLESS GEAR PUMP

Pulsafeeder's Isochem® GMH8 Series is a compact magnetically driven sealless gear pump designed for safely handling highly corrosive, hazardous, explosive, or toxic chemicals and industrial applications. The GMH8 is the high-pressure counterpart to the model GMC8 and provides safe leak free service since the magnetic coupling eliminates the need for traditional shaft sealing methods such as mechanical seals and shaft packing which are the primary source of leakage in rotating shaft pumps. Furthermore, expensive seal flushing or lubrication systems are eliminated. Consequently, mean time between failures is maximized while maintenance and operation costs are minimized!



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Intertek

Configurations available certified to UL 1389:2019 Ed 1, "Plant Oil Extraction Equipment for Installation and Use in Ordinary (Unclassified) Locations and Hazardous (Classified) Locations"

Operating Benefits

- Flows up to 22.0 gpm (83.3 lpm)
- Pressures up to 200 psi (6.9 bar)
- Laminar, non-pulsating flow
- Compact, close-coupled foot print eliminates issues related to alignment between pump and motor
- Leak free service minimizes exposure of your personnel to hazardous chemicals
- Ideal for viscosities from less than 1 to 100,000 cPs
- Suitable for vacuum service
- Can be used for metering or transfer of expensive, hazardous and corrosive chemicals over the entire pH range

Key Features

- Samarium cobalt (standard) coaxial synchronous magnets
- High torque magnetic coupling minimizes possibility of decoupling
- Internal pressurized lubrication system
- Inline discharge and suction connections
- Sealless, leak free operation

Materials of Construction

- **Pump Housing:** 316, Alloy 20, Hastelloy-C
- **Gears:** 316, Alloy C, PEEK
- **Wear Plates**: Carbon, Teflon®, PEEK, Ceramic
- **Bearings:** Teflon®, Carbon (Grade 76), Carbon (Grade P90)
- **Containment Can:** Hastelloy-C
- **Magnets:** Samarium Cobalt
- **O-Ring Seal:** PTFE or 316SS spiral wound PFA encapsulated

Aftermarket & Accessory Offerings

- KOPkit®
- Cal Column
- Strainer
- Pressure Relief Valves
- Back Pressure Valves
- Gauges

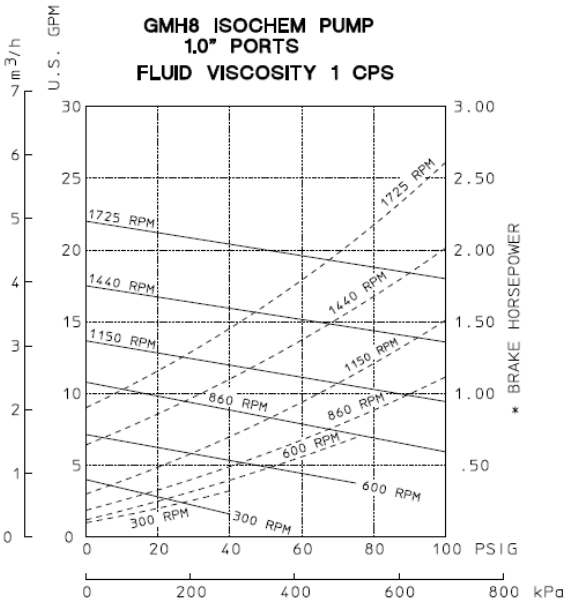


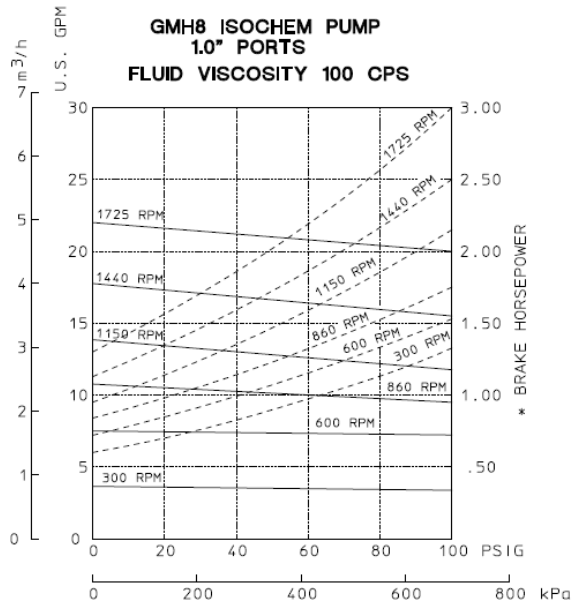
PULSAFEEDER® ENGINEERED PRODUCTS

Isochem® GMH8

GENERAL SPECIFICATIONS

Curves shown represent Maximum Differential Pressure[1,3].
Contact your Pulsafeeder representative for more information on:
~ Operating at viscosities greater than 100 cPs





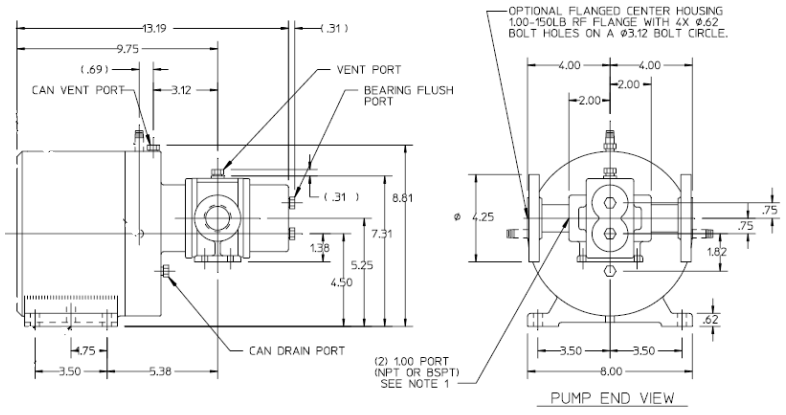
Port Size and Type	1" FNPT and 150 lb. RF Flange
Direction of Rotation	Bi-directional
Theoretical Displacement	1.37 gal/100 rev. (51.8 cc/rev)
Maximum Differential Pressure (MDP)[1,3]	100 psi (6.9 bar)
Max. Allowable Working Pressure (MAWP)[2,3]	200 psig (10.3 barg)
Maximum Speed	1750 rpm
Maximum Capacity at 0 psig	22.0 gpm (83.3 lpm)
Maximum Viscosity	100,000 cPs
Maximum Process Fluid Temperature	450 F (232 C)
Minimum Process Fluid Temperature	-40 F (-40 C)
Fluid pH Range	0-14
Gear Type	Compact Spur Gear
Bearing Type	Sleeve
Magnetic Torque Rating	341-389 in-lbs.
Motor Frame Sizes – NEMA	143/45TC, 182/84TC, 213/15TC
Motor Frame Sizes – IEC	100L B3 / B14 Flange
Weight, Less Motor	75 lbs. (165 kg)

1. MDP. Maximum differential pressures between inlet (suction) and outlet (discharge) ports
2. MAWP. Maximum allowable continuous outlet (discharge) pressure
3. Operating above MDP will require offsetting inlet (suction) pressure

Reference dimensional data for GMH8 with 143/45TC frame motor is shown below.

For dimensional data for pump mounted to NEMA or IEC motors listed above please visit our website.

Pedestal mount (long coupled arrangement) will be required for certain motor sizes. Drawing below does not represent a pedestal mount arrangement.



PULSAFEEDER® ENGINEERED PRODUCTS

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