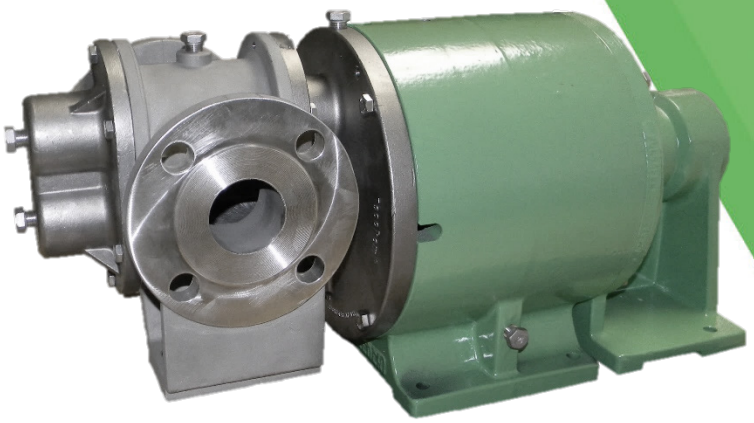
Isochem® GM16

MAGNETICALLY DRIVEN SEALLESS GEAR PUMP

Pulsafeeder's Isochem® GM16 Series is a compact magnetically driven sealless gear pump designed for safely handling highly corrosive, hazardous, explosive, or toxic chemicals and industrial applications. The GM16 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!



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 55.0 gpm (208 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 Stainless Steel
- **Gears:** 316, Alloy C, PEEK, Teflon®
- **Wear Plates**: Carbon, Teflon®, PEEK, Ceramic
- **Bearings:** Glass Filled Teflon®, 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

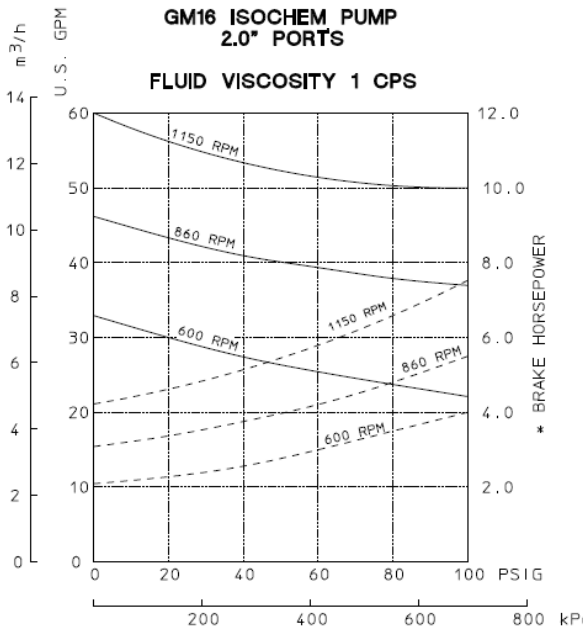


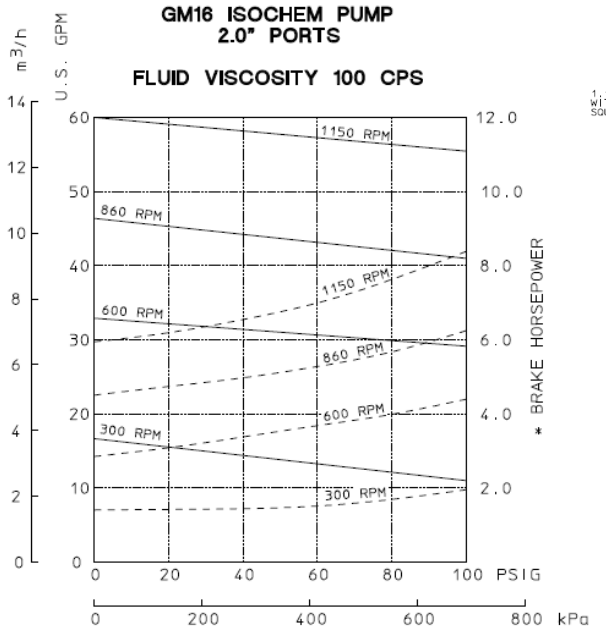
PULSAFEEDER® ENGINEERED PRODUCTS

Isochem® GM16

GENERAL SPECIFICATIONS

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

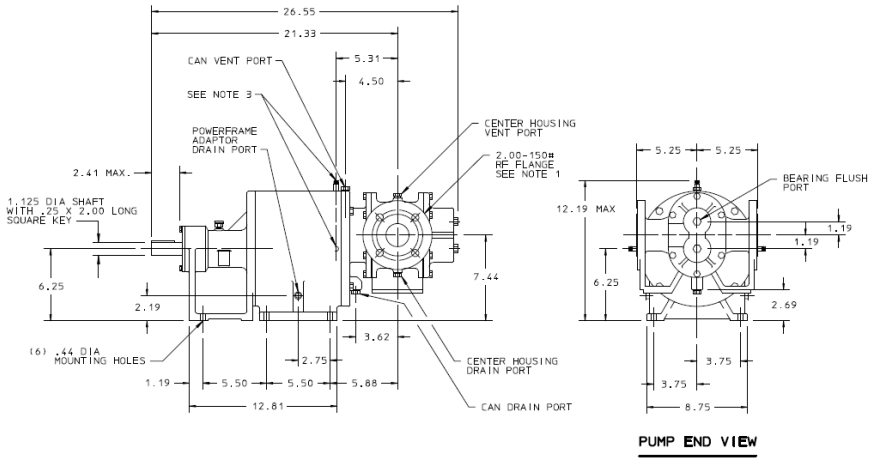




Port Size and Type	2” 150 lb. RF Flange
Direction of Rotation	Bi-directional
Theoretical Displacement	5.58 gal/100 rev. (211 cc/rev)
Maximum Differential Pressure (MDP)[1,3]	100 psi (6.9 bar)
Max. Allowable Working Pressure (MAWP)[2,3]	200 psig (10.3 barg)
Maximum Speed	1150 rpm
Maximum Capacity at 0 psig	55 gpm (208 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	Journal / Sleeve
Magnetic Torque Rating	1084-1239 in-lbs.
Motor Frame Sizes – NEMA	1.125 inch input shaft
Motor Frame Sizes – IEC	28 mm input shaft
Weight, Less Motor	225 lbs. (495 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 GM16 un-mounted is shown below with 1.125-inch input shaft. For dimensional information showing metric input shaft please visit our website



PULSAFEEDER® ENGINEERED PRODUCTS

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