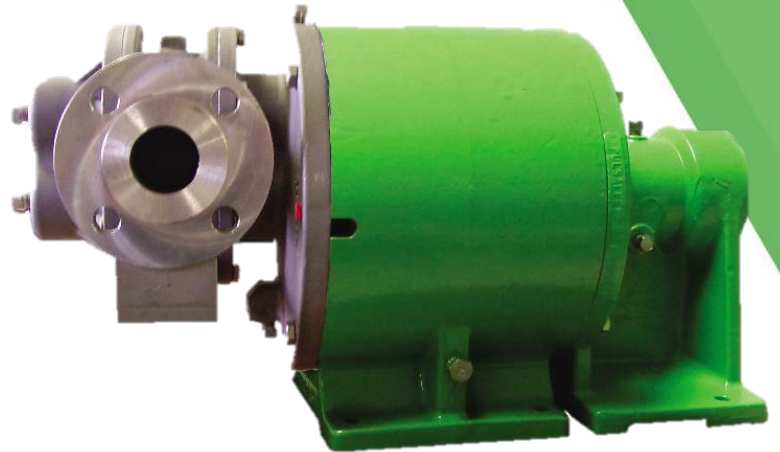


Isochem[®] GM12

MAGNETICALLY DRIVEN SEALLESS GEAR PUMP

Pulsafeeder's Isochem[®] GM12 Series is a compact magnetically driven sealless gear pump designed for safely handling highly corrosive, hazardous, explosive, or toxic chemicals and industrial applications. The GM12 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!



Operating Benefits

- Flows up to 28.0 gpm (106 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

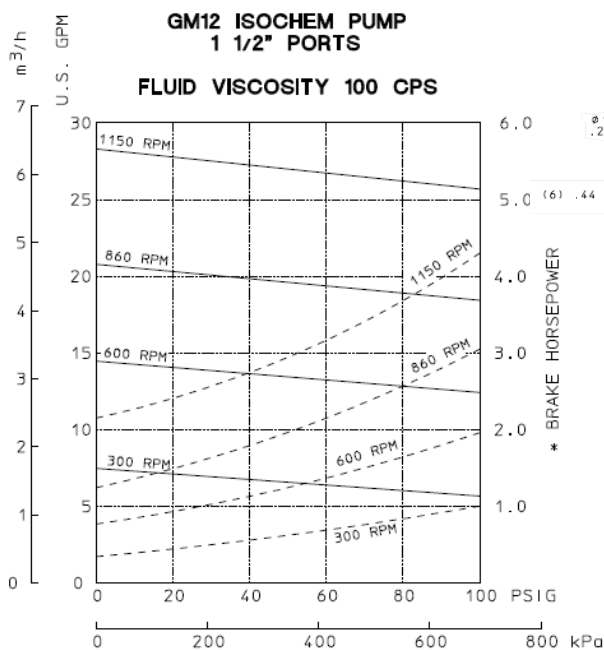
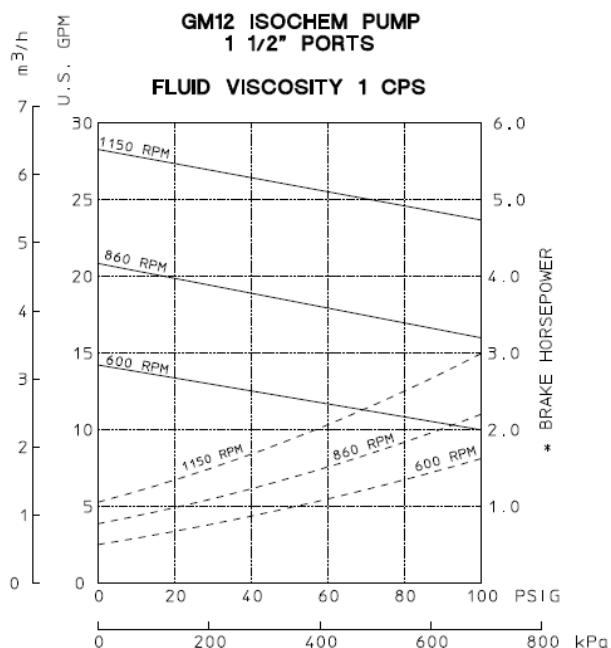
- KOPkit[®]
- Cal Column
- Strainer
- Pressure Relief Valves
- Back Pressure Valves
- Gauges



Isochem® GM12

GENERAL SPECIFICATIONS

Curves shown represent Maximum Differential Pressure^{1,3}.
 Contact your Pulsafeeder representative for more information on:
 ~ Operating up to 150 psi maximum differential pressure
 ~ Operating at viscosities greater than 100 cPs



Port Size and Type _____ 1-1/2" FNPT, BSPT and 150 lb. RF Flange
 Direction of Rotation _____ Bi-directional
 Theoretical Displacement _____ 2.79 gal/100 rev. (106 cc/rev)
 Maximum Differential Pressure (MDP)^{1,3} _____ 150 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 _____ 28.0 gpm (106 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 _____ 558-637 in.-lbs.
 Motor Frame Sizes – NEMA _____ 1.125 inch input shaft
 Motor Frame Sizes – IEC _____ 28 mm input shaft
 Weight, Less Motor _____ 190 lbs. (418 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 GM12 un-mounted is shown below
 with 1.125-inch input shaft. For dimensional information showing
 metric input shaft please visit our website

