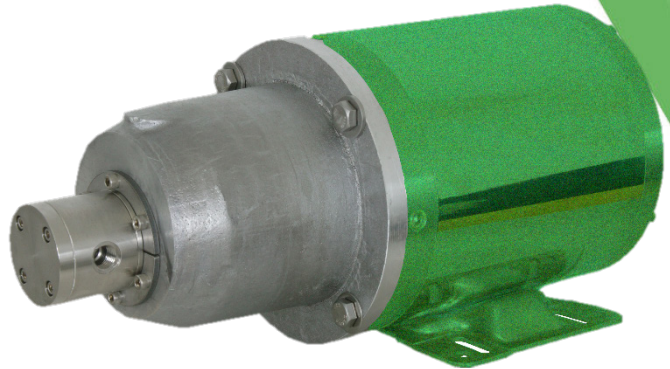


# Isochem<sup>®</sup> GMC1

## MAGNETICALLY DRIVEN SEALLESS GEAR PUMP

Pulsafeeder's Isochem<sup>®</sup> GMC1 Series is a compact magnetically driven sealless gear pump designed for safely handling highly corrosive, hazardous, explosive, or toxic chemicals and industrial applications. The GMC1 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 to 0.8 gpm (2.8 lpm)
- Pressures up to 300 psi (20.7 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 1000 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 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
- **Gears:** 316, Alloy C, Alloy 20, Ryton<sup>®</sup>, PEEK
- **Bearings and Wear Plates:** Carbon, Ryton<sup>®</sup>
- **Containment Can:** 316SS
- **Magnets:** Samarium Cobalt
- **O-Ring Seal:** PTFE

### Aftermarket & Accessory Offerings

- KOPkit<sup>®</sup>
- Cal Column
- Strainer
- Pressure Relief Valves
- Back Pressure Valves
- Gauges



# Isochem<sup>®</sup> GMC1

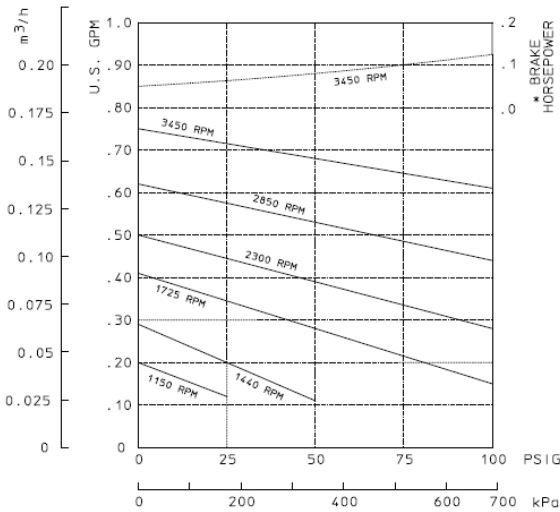
## GENERAL SPECIFICATIONS

Curves shown represent Maximum Differential Pressure<sup>1,3</sup>.  
For viscosities greater than 100 cPs, contact your Pulsafeeder representative.

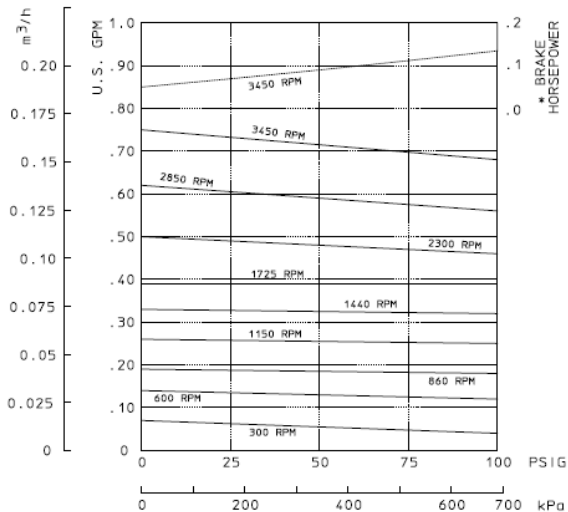
Port Size and Type \_\_\_\_\_ 1/4" FNPT or BSPT  
Direction of Rotation \_\_\_\_\_ Bi-directional  
Theoretical Displacement \_\_\_\_\_ 0.03 gal/100 rev. (1.1 cc/rev)  
Maximum Differential Pressure (MDP)<sup>1,3</sup> \_\_\_\_\_ 100 psi (6.9 bar)  
Max. Allowable Working Pressure (MAWP)<sup>2,3</sup> \_\_\_\_\_ 300 psig (20.7 barg)  
Maximum Speed \_\_\_\_\_ 1750 rpm  
Maximum Capacity at 0 psig \_\_\_\_\_ 0.8 gpm (2.8 lpm)  
Maximum Viscosity \_\_\_\_\_ 1000 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 \_\_\_\_\_ 15 in.-lbs.  
Motor Frame Sizes – NEMA \_\_\_\_\_ 56C  
Motor Frame Sizes – IEC \_\_\_\_\_ 63, 71 B3 / B14 Flange  
Weight, Less Motor \_\_\_\_\_ 7 lbs. (14.7 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

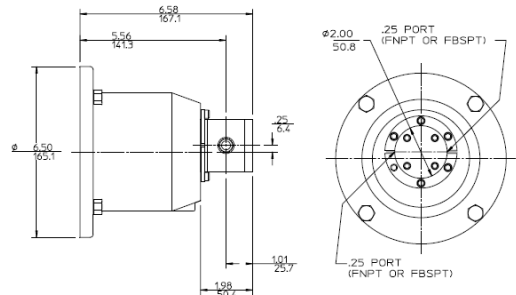
**GMC1 ISOCHEM PUMP  
1/4" PORTS  
FLUID VISCOSITY 1 CPS**



**GMC1 ISOCHEM PUMP  
1/4" PORTS  
FLUID VISCOSITY 100 CPS**



GMC1 for 56C motors. Reference only



GMC1 for IEC 63 and 71 motor. Reference Only

