

# Isochem<sup>®</sup> GMC2

## MAGNETICALLY DRIVEN SEALLESS GEAR PUMP

Pulsafeeder's Isochem<sup>®</sup> GMC2 Series is a compact magnetically driven sealless gear pump designed for safely handling highly corrosive, hazardous, explosive, or toxic chemicals and industrial applications. The GMC2 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 1.5 gpm (5.7 lpm)
- Pressures up to 200 psi (13.8 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

- Neodymium (standard) or 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, Alloy 20, Hastelloy-C
- **Gears:** 316, Alloy C, Alloy 20, Teflon<sup>®</sup>, PEEK, Carbon
- **Wear Plates:** Carbon, Teflon<sup>®</sup>, PEEK, Ceramic
- **Bearings:** Teflon<sup>®</sup>, Carbon (Grade 76), Carbon (Grade P90)
- **Containment Can:** Single or Double 316SS, Hastelloy-C
- **Magnets:** Neodymium or Samarium Cobalt
- **O-Ring Seal:** PTFE or 316SS spiral wound PFA encapsulated

### Aftermarket & Accessory Offerings

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



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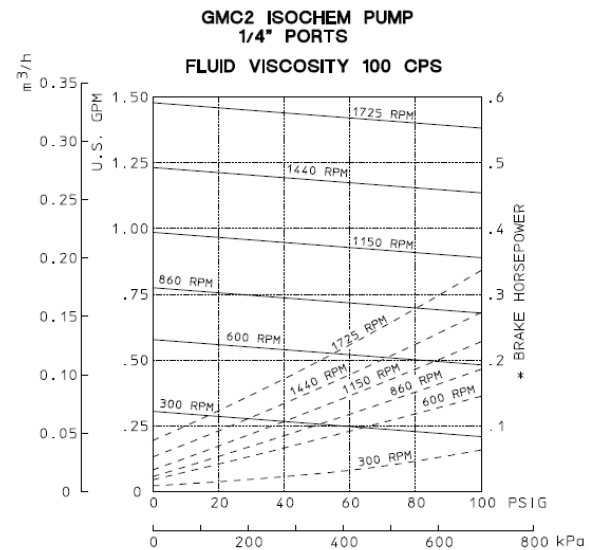
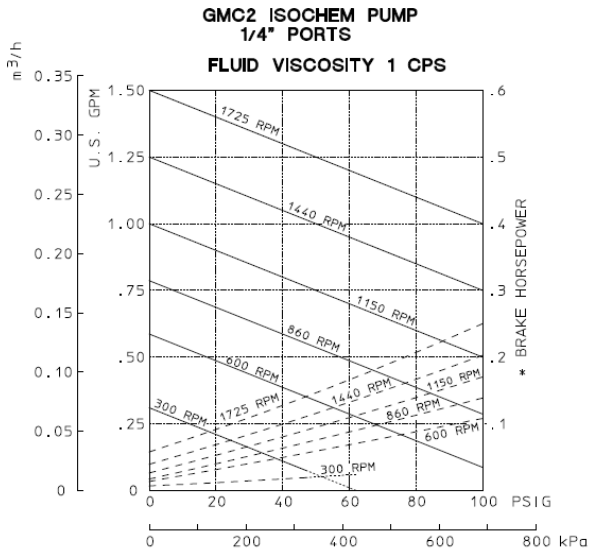
## GENERAL SPECIFICATIONS

Curves shown represent Maximum Differential Pressure<sup>1,3</sup>.  
Contact your Pulsafeeder representative for more information on:

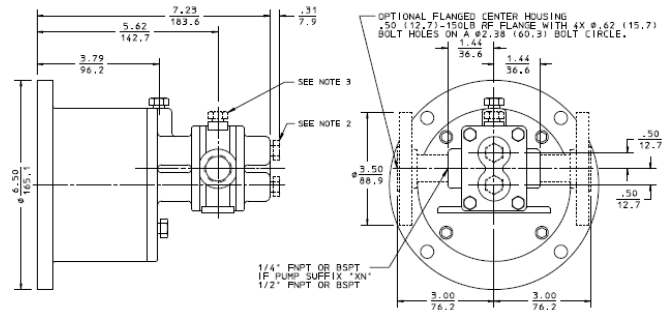
- ~ Operating up to 175 psi maximum differential pressure
- ~ Operating at lower flows with optional narrow width gears
- ~ Operating at viscosities greater than 100 cPs

Port Size and Type \_\_\_\_\_ 1/4" or 1/2" FNPT, BSPT, 150 lb. RF Flange  
 Direction of Rotation \_\_\_\_\_ Bi-directional  
 Theoretical Displacement \_\_\_\_\_ 0.108 gal/100 rev. (4.08 cc/rev)  
 Maximum Differential Pressure (MDP)<sup>1,3</sup> \_\_\_\_\_ 175 psi (6.9 bar)  
 Max. Diff. Pressure (MDP) <sup>1,3</sup> Plastic Gears \_\_\_\_\_ 50 psi (3.5 bar)  
 Max. Allowable Working Pressure (MAWP)<sup>2,3</sup> \_\_\_\_\_ 200 psig (10.3 barg)  
 MAWP<sup>2,3</sup> Plastic Gears \_\_\_\_\_ 100 psig (10.3 barg)  
 Maximum Speed \_\_\_\_\_ 1750 rpm  
 Maximum Capacity at 0 psig \_\_\_\_\_ 1.5 gpm (5.7 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 \_\_\_\_\_ 51.5 – 75.6 in.-lbs.  
 Motor Frame Sizes – NEMA \_\_\_\_\_ 56C, 143/45TC  
 Motor Frame Sizes – IEC \_\_\_\_\_ 71, 80 B3 / B14 Flange  
 Weight, Less Motor \_\_\_\_\_ 16 lbs. (35.3 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



GMC2 for 56C, 143/45TC motors. Reference only



GMC2 for IEC 71C motor. Consult factory for 80C. Reference Only

