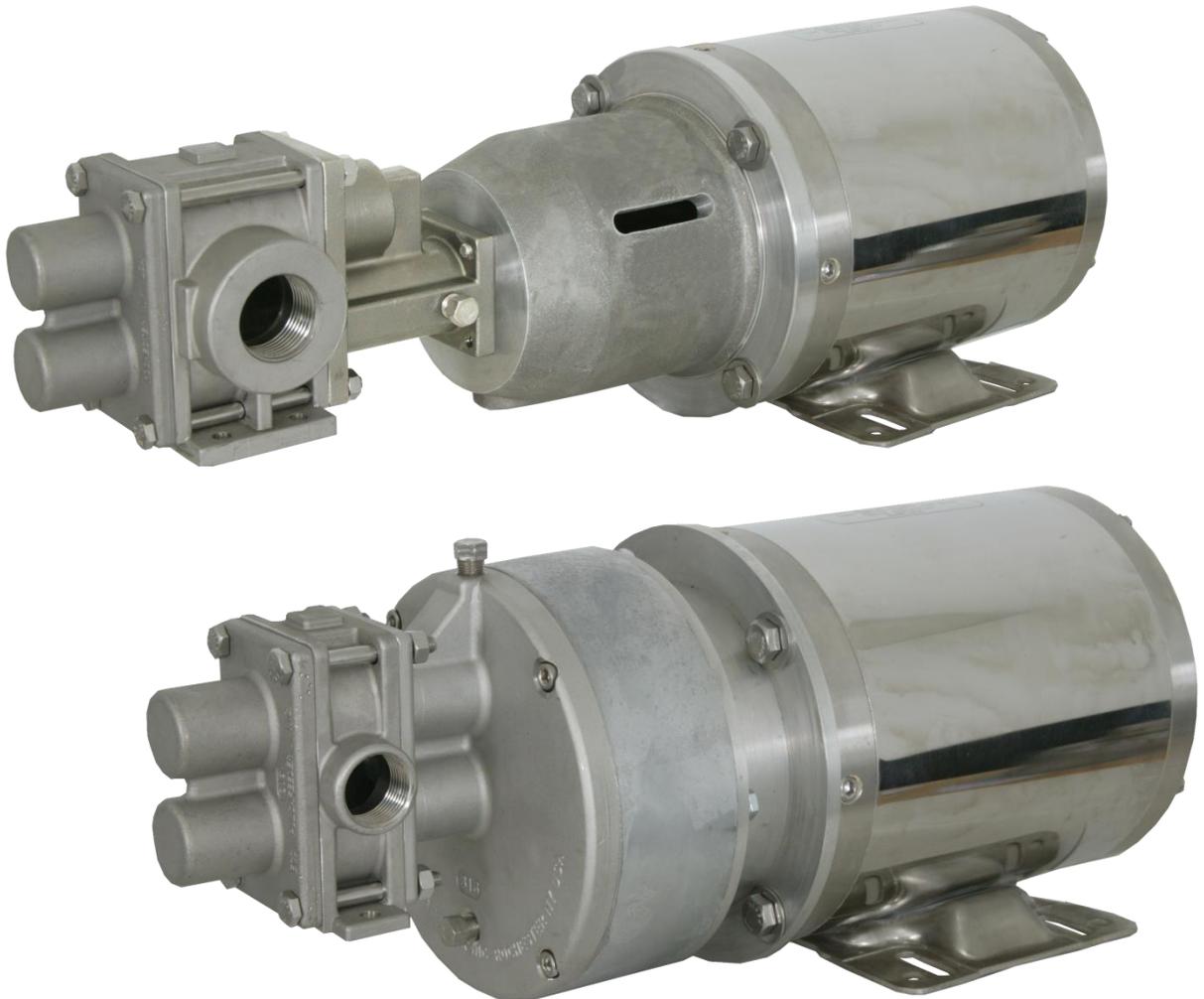


## Installation, Operation & Maintenance Instruction

All Models







**Powerful Magnetic Material can be harmful to pacemakers and sensitive electronic devices**

**If using pacemakers or hearing aids, stay back 3 feet as these magnets can be harmful to these devices.**

**Use extreme caution while unpacking**

**Use proper safety equipment and handling techniques as described in Installation, Operation and Maintenance Manual.**

**Can harm cell phones and/or credit cards.**

**For more information on handling instructions contact:**



Pulsafeeder, Inc.  
2883 Brighton Henrietta Town Line Rd.  
Rochester, NY 14623  
1-585-292-8000



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## INTRODUCTION

Isochem Series pumps use sealless technology which eliminates the need for a rotary mechanical seal and enables the pump to handle hazardous fluids safely with zero leakage.

Some Isochem Gear pumps accept standard NEMA 56C and 143/5TC motors. This enables the pumps to be close coupled which provides greater assembled strength, complete enclosure of all moving parts and compact design. This also eliminates the need for special base plate mountings, couplings or complicated drives. Isochem Gear pumps are also available to accept standard large flange C face metric motors with feet in 71, 80 and 90 L frame sizes.

All Isochem pumps transmit rotation from the motor shaft to the pump shaft by means of a magnetic drive coupling. The principle of operation of the magnetic drive coupling is that an encapsulated driven magnet assembly is mounted on the end of the pump shaft. It is then contained by a closed end "can" which seals against the pump front housing with a static Teflon O-ring. Then a drive magnet assembly attached to an electric motor shaft rotates around the containment can. When the drive magnet assembly rotates, lines of magnetic force cause the driven magnet assembly to rotate which in turn causes the pump shaft to rotate.

The magnetic drive couplings for all Isochem Series are designed for satisfactory operation of the pump. The magnetic couplings have a built in safety feature which allows them to "decouple" if the coupling torque limit (listed in the pump specification chart) is exceeded. This could happen if a piece of foreign material were to jam the pump gears or if unusually high torque was developed on pump start-up. Unlike many other magnetic drive pumps Isochem pumps use permanent, rare earth magnets which can run decoupled without losing their magnetic strength provided magnet temperature does not exceed 450°F (232°C).

**Note: If the pump is allowed to run for an extended period of time decoupled, high temperatures could be generated which ultimately would cause the loss of magnetic strength.**

Isochem pumps have all the standard features of ECO Gearchem pumps such as continuous operation over wide temperature and pressure variations, self-priming, constant volume pulsation free flow, able to handle wide viscosity variations and ease of inspection and maintenance.

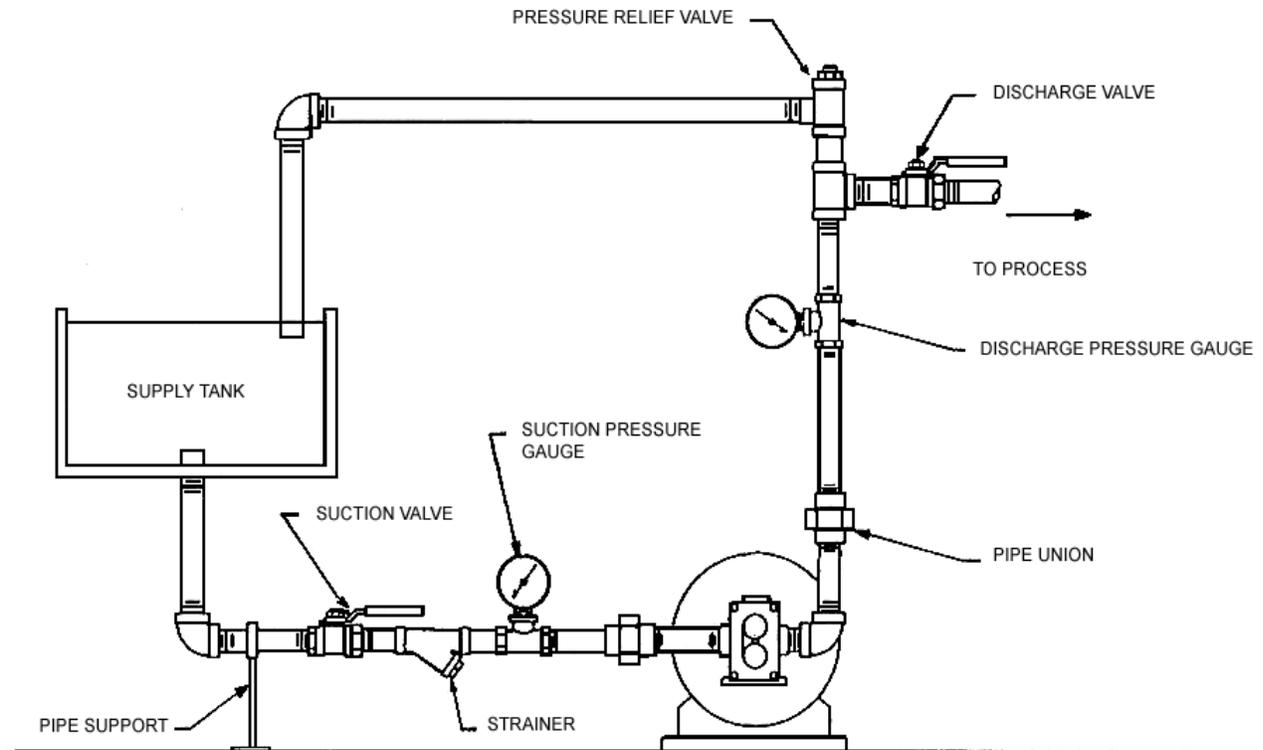
To achieve successful operation and maximum life from your pump make sure that the pump is compatible with the service and operating conditions of your application. The pump materials of construction and other details are specified by the pump model number. This along with the "Significant Model Numbering System and Selection Table" will fully describe the components of the pump.

## EQUIPMENT INSPECTION

1. Check all equipment for completeness against the order and for any evidence of shipping damage. Shortages or damage should be reported immediately to the carrier and to your Isochem representative.
2. If the pump is not going to be installed immediately, the following steps should be taken:
  - Leave pump in original shipping carton.
  - Store indoors in a dry ambient atmosphere. Avoid temperature variations.
  - Leave all shipping plugs in place.
  - Contact the motor manufacturer for specific motor storage information.
3. These instructions should be read carefully by the personnel responsible for installation, operation and maintenance of the equipment and kept in a convenient place for ready reference. It is recommended that a copy of the Isochem order be kept with this manual as well as a written record of the pump model and serial number which is on the name tag attached to the pump. A space has been provided inside the front cover of the manual to record these numbers.

# INSTALLATION (SEE FIGURE 1)

1. Pump installation site should provide easy access for routine maintenance and where possible to protect the pump from the elements and from leaks or drips from nearby process equipment.
2. Bolt the pump motor down firmly to mounting surface. Provide for air movement over electric motor.
3. Looking at the pump from the magnetic drive end, the suction port is to the right when the pump drive shaft rotates clockwise and is located below the ports. Reversing drive shaft rotation reverses flow and thus suction and discharge ports. Verify proper motor rotation before final piping.
4. To check system operation, installation of vacuum/pressure gauges in the suction and discharge lines is recommended.
5. Keep suction lines short and straight to minimize friction loss to the pump. Make sure that the pump will not run dry. Flooded suction or gravity feed of fluid to pump inlet is generally preferred.
6. Use only full-bore ball valves or gate valves in the suction piping. If suction strainers are used size them to minimize pressure drop and select those of a type that are easily cleaned.
7. Arrange all suction piping and fittings to prevent formation of air pockets. Make sure all joints are air tight.
8. Flush and blow out all suction lines prior to mating up to pump. Use nipples and unions, for ease of maintenance.



TYPICAL PUMP INSTALLATION  
FIG. 1

9. Do not spring piping, either suction or discharge when mating up to the pump. Use supports or hangers at intervals as required. When necessary, provide for thermal expansion and contraction so no strain is placed upon the pump.
10. Check all bolts and nuts for tightness. Correct any conditions which could cause destructive vibration or leakage.
11. Where required, provide proper system for containment can recirculation.
12. If start-up screens are used, be sure they do not clog and starve suction. Start-up screens should be removed prior to placing system into regular operation.
13. If flexible suction lines are used, be sure their selection and installation will prevent wall collapse and thus a starved suction condition.
14. When taking suction from a tank or vessel, avoid entry of sludge, solids, etc. into suction line by placing suction line inlet above maximum expected level of solids.
15. Discharge line should be fitted with properly sized pressure relief valve to protect both pump and discharge system. Pressure relief valve outlet should be piped back to the supply tank.
16. When a by-pass system is used to control flow from the pump, the bypassed fluid should be piped back to the suction vessel to prevent heat build-up due to recirculation. If it is absolutely necessary to pipe by-pass back to the pump suction line, the point of entry should be at least 10 pipe diameters away from the suction inlet. Provision for cooling should be made in the event of excessive heat buildup through fluid recirculation.
17. Where pumped fluids may solidify, crystallize, precipitate etc., provision should be made to thoroughly flush pump and piping prior to periods of shutdown. Pay particular attention to proper flushing and draining of the magnetic coupling area because this area will not self drain. There is a drain plug in the front housing for access to this area.

## OPERATION

1. Prior to operation, make sure all suction piping is air tight and clean. Check that electrical service to motor agrees with name plate ratings. Jog to check rotation and for signs of binding. To check rotation, observe the motor fan. Rewire motor if necessary.
2. Isochem Gear pumps are designed to handle clear fluids at viscosities up to 500,000 SSU (100,000 CPS).
  - No gear pump should be run dry. Damage to wear surfaces will result.
  - Pumping fluids containing abrasives should be avoided as accelerated pump wear will result.
3. It is recommended that pumps with metallic drive and idler gears not be run with fluids having a viscosity less than 500 SSU (1 00 CPS) or at speeds greater than 1450 RPM.
4. The pump will self-prime if fluid is supplied at the pump inlet. If foot valves are used, the valve should be of the flapper type and sized to minimize friction loss.
5. If the pump is to operate near the boiling point of the fluid being pumped, a recirculation loop can be set up between the drain connection in the front housing and the suction with provisions for flow control in the recirculation loop.
6. Do not operate the pump against a closed discharge. Doing so will cause the magnetic drive to decouple. High temperatures will then be created which can cause the fluid to boil or damage the magnet assemblies. If decoupling occurs, stop the motor and restart after the obstruction has been cleared. As a safety precaution a pressure relief valve by-pass system is highly recommended. Ideally the pressure relief valve is set for a low pressure for start-up.
7. Start pump with discharge and suction valves open and check for proper operation. Excessive noise or vibration is an indication of harmful cavitation which is due to insufficient NPSH (Net Positive Suction Head).

## MAINTENANCE

The timing for maintenance of the pump is established primarily on past performance. Each installation is different. Therefore detailed maintenance records of past performance can be invaluable for determining future preventative maintenance intervals. For motor maintenance instructions consult the motor manufacturer.

### CAUTION

**Before performing any maintenance requiring pump disassembly, be sure to flush and drain pump/magnetic drive thoroughly with a neutralizing fluid. Wear protective clothing and handle equipment with proper care.**

1. When changing a pump from one service to another, be sure to check that all wetted parts of the pump are compatible with the fluid to be handled and that the motor is sufficiently sized for the application. If in doubt contact your Isochem representative.
2. All Isochem pumps transmit rotation from the motor shaft to the pump shaft by means of a magnetic drive coupling. The principle of operation of the magnetic drive coupling is that an encapsulated driven magnet assembly is mounted on the end of the pump shaft. It is then contained by a closed end "can" which seals against the pump front housing with a static Teflon O- ring. Then a drive magnet assembly attached to an electric motor shaft rotates around the containment can. When the drive magnet assembly rotates, lines of magnetic force cause the driven magnet assembly to rotate which in turn causes the pump shaft to rotate.

All magnetic drive couplings have a specific maximum torque limit. If this torque is exceeded the drive will decouple. Operation in the decoupled mode should be avoided as high temperatures could be generated.

3. Whenever gear pumps exhibit reduced flow rates, inability to maintain pressures, noisy

or otherwise abnormal operation, first refer to the troubleshooting section. If the problem cannot be resolved the pump must be inspected for wear or damage. Isochem pumps can be easily opened for cleaning and inspection without disturbing piping connections by removing the pump rear housing.

Where inspection shows wear, rebuilding the pump using an Isochem KOPkit is strongly recommended. Where pumps are equipped with two metallic or plastic gears, replacement with a new set is preferred. Pumps having a metallic drive gear and plastic idler gear can often be restored to original performance by replacing the idler gear alone.

**Note: Extended life bearings must be used only with extended life shafts.**

## RECOMMENDED SPARES

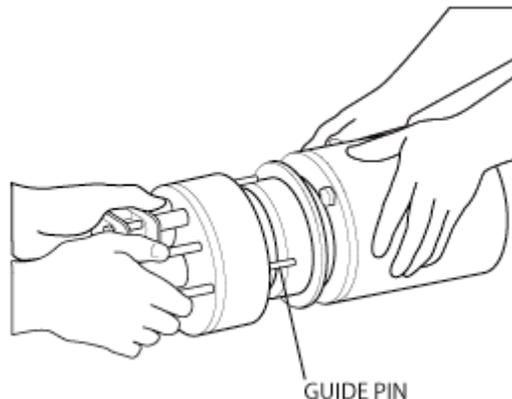
KOPkits. The basic Isochem KOPkit consists of the following parts which are recommended as spares:

- Drive Shaft
- Idler Shaft
- Drive Gear
- Idler Gear
- Drive Keys
- Bearings
- Wear Plates
- Bearing Lock Pins
- Magnet Retaining Rings
- Drive Gear Retaining Rings
- Idler Gear Retaining Rings
- Housing O-Rings
- Can O-Ring

A KOPkit is completely identified by placing the letter "K" before the pump significant model number and deleting the hyphens. Example: A KOPkit for a GMC6-ACC-KKO pump would be designated as KGMC6ACCKKO.

4. General maintenance precautions to observe are:
  - Drain and flush pump and magnetic drive before any pump disassembly. Access to the magnetic drive area is provided by a drain connection in the pump main cover.
  - The exposed magnets on the drive magnet assembly are very fragile and will chip easily. Use extreme care in handling them.
  - Don't wear a wrist watch in the vicinity of the drive or driven magnets as it may be damaged.
  - Take care to avoid particles or objects from attaching themselves to the drive magnets. It is difficult to remove small particles and larger objects could be attracted with enough force to break the magnets.
  - Be careful during disassembly and reassembly of the drive and driven magnet assemblies. Assembly and disassembly can best be described as a feat of strength. The attraction forces

are high and when the magnets come close together there is a strong tendency to snap together suddenly, possibly causing pinching or worse to fingers. The attraction forces are strongest on the GMC12 and GMC16 pumps. Your representative is fully equipped and prepared to provide maintenance support. See Figure 2.



5. Caution. Do not machine the magnets in the drive or driven magnet assemblies. The dust that would be produced is highly inflammable.
6. The significant model number stamped on the pump nameplate, identifies the pump type and other details. Refer to the significant model number chart if you are unsure of exactly what type of pump you have.

Always refer to the full model and serial number in any correspondence with your Isochem representative. Drawings and a consolidated bill of materials for each Isochem pump are included in this manual. Recommended spare parts are denoted on the consolidated bill of materials.

## GMC2 & GMC4 SERIES

REFERENCE DRAWING: SD2579

### DISASSEMBLY

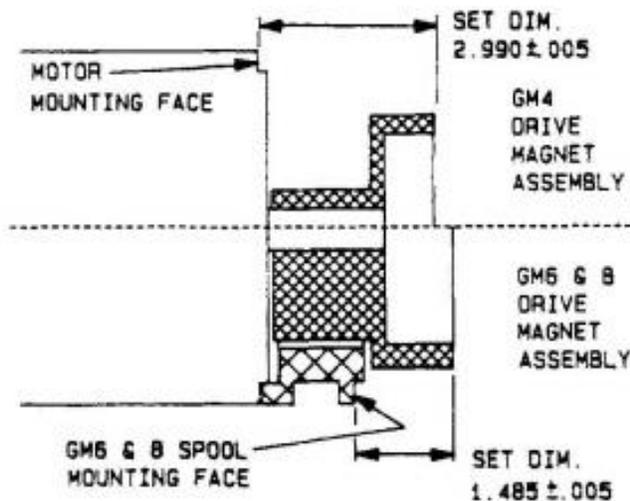
1. Close discharge and suction valves.
2. Disconnect power source to motor.
3. Flush and drain pump then remove pump from the piping. Do not forget to drain the can area through the front housing drain plug (Item 27).
4. Remove motor bolts (Item 25). Metric motors use an extra motor adaptor (Item 29) and require that the adaptor bolts (Item 30) be removed first.
5. Separate the motor and casing (Item 20) by pulling them apart. This will take physical force because you are pulling against the magnetic attraction of the drive to the driven magnet. Do not pry but pull straight apart.
6. Do not remove the drive magnet assembly (Item 21) from the motor unless it or the motor are to be replaced. This will make reassembly easier later. The drive magnet assembly is removed by loosening the setscrews (Item 24) and sliding it off the motor shaft.
7. Remove the recessed front housing bolts (Item 26). You must first remove the protective plug. This will allow the casing and can (Item 19) to be separated from the front housing (Item 3). Note: Any remaining fluid left in the can will now drain out.
8. Remove the retaining ring (Item 14) on the end of the pump drive shaft (Item 4) and slide the driven magnet assembly (Item 18) off the drive shaft. The key (Item 8) and other retaining ring can also now be removed.
9. Remove the housing nuts (Item 16) and the rear housing (Item 1).
10. Remove the center housing (Item 2). The gears (Items 6, 7) and wear plates (Item 11) are now accessible and can readily be removed along with the drive and idler shafts (Items 4, 5).

11. The gears can be removed from the shafts by removing one of the retaining rings and sliding the gear off the shaft.
12. Inspect all parts for signs of wear or damage. The maximum diametrical clearance (bearing I.D. - shaft O.D.) that is acceptable is .010 inches (.254mm). Shafts and bearings that are scored or worn must be replaced. Gears and wear plates with excessive wear or scoring must also be replaced.
13. Clean all parts before reassembly.

### REASSEMBLY

1. Install the drive and idler gear (Items 6, 7) onto their respective shafts (Items 4, 5) using keys (Item 8) and retaining rings (Item 14). Take care not to scratch the shafts when installing the rings. Check the ends of the rings for sharp burrs. If a plastic and metal gear set are being used, the plastic gear is always the idler gear.
2. With the housing pins (Item 13) in the locator holes in the front housing (Item 3) and new O-rings (Item 12) installed in the center housing, assemble on the center housing (Item 2).
3. Install a pair of wear plates (Item 11) and the shaft assemblies.
4. Next install another pair of wear plates, housing pins, and the rear housing (Item 1). Install the housing bolts (Item 15) and nuts (Item 16) and tighten.
5. Install the following parts onto the pump drive shaft in the order listed: retaining ring (Item 14), key (Item 8), Driven magnet assembly (Item 18) with the short hub side towards the front housing and retaining ring. (Item 14).
6. Place a new O-ring (Item 28) onto the pilot on the front housing and place the can (Item 19) over the O-ring. Next pilot the casing (Item 20) over the can and thread in hand tight the front housing bolts (Item 26). Gradually and evenly tighten the front housing bolts to draw the casing and front housing together. Take care not to pinch the O-ring. Replace the protective plugs.

7. Install the drive magnet assembly (Item 21) onto the motor shaft to the dimension shown in Figure 4. If the motor is metric install the motor adaptor (Item 29) using motor bolts (Item 25) to the motor at this time. Also install the drive magnet assembly onto the motor shaft until it butts up against the shoulder on the motor shaft. Tighten the drive magnet setscrews (Item 24) to 35 inch lbs. (395 Ncm). These setscrews have a special nylon patch applied to the threads to prevent loosening.
8. Carefully assemble the motor/drive magnet assembly to the pump casing. Be careful not to chip the drive magnets when slipping them over the can or to pinch your fingers when the two assemblies snap together. The use of (4) assembly guide pins (Part #79637) is suggested. Use guide pin (Part #49639) for metric motors. See Figure 2. Install motor bolts (Item 25) or adaptor bolts (Item 30) for metric motors.



**FIGURE 3**  
(NEMA Motors Only)

9. Reinstall pump in system, open inlet and discharge valves and start pump. Monitor pump for 5-10 minutes for signs of binding, excessive noise and motor amperage draw. Check performance. If problems are encountered refer to the Troubleshooting Section.

#### GMC6 & GMC8 SERIES REFERENCE

DRAWINGS: SD2580

#### DISASSEMBLY

1. Close discharge and suction valves.
2. Disconnect power source to motor.
3. Flush and drain pump then remove pump from the piping. Do not forget to drain the can area through the front housing drain plug (Item 27).
4. Remove the four casing bolts (Item 35) which are orientated vertically and horizontally. Do not remove the motor bolts (Item 23) or the recessed front housing bolts (Item 26) which have protective plugs and are orientated at 45° to vertical and horizontal, at this time.
5. Separate the spool and casing (Item 20) by pulling them apart. This will take physical force because you are pulling against the magnetic attraction of the drive to the driven magnet. Do not pry but pull straight apart.
6. Do not remove the drive magnet assembly (Item 21) from the motor unless it or the motor are to be replaced. This will make reassembly easier later. The drive magnet assembly is removed by loosening the setscrews (Item 24) and sliding it off the motor shaft. Access to the setscrews is provided through hole in the spool. Remove the spool from the motor at this time if desired.
7. Remove the recessed front housing bolts. You must first remove the protective plug. This will allow the casing and can (Item 19) to be separated from the front housing (Item 3). **Note: Any remaining fluid left in the can will now drain out.**
8. Remove the retaining ring (Item 14) on the

end of the pump drive shaft (Item 4) and slide the driven magnet assembly (Item 18) off the drive shaft. The key (Item 8) and other retaining ring can also now be removed.

9. Remove the housing nuts (Item 16) and the rear housing (Item 1).
10. Remove the center housing (Item 2). The gears (Items 6, 7) and wear plates (Item 11) are now accessible and can readily be removed along with the drive and idler shafts (Item 4, 5).
11. The gears can be removed from the shafts by removing one of the retaining rings and sliding the gear off the shaft.
12. Inspect all parts for signs of wear or damage. The maximum diametrical clearance (bearing J.D. - shaft 0.0.) that is acceptable is .010 inches (.254mm). Shafts and bearings that are scored or worn must be replaced. Gears and wear plates with excessive wear or scoring must also be replaced.
13. Clean all parts before reassembly.

#### REASSEMBLY

1. Install the drive and idler gear (Items 6, 7) onto their respective shafts (Items 4, 5) using keys (Item 8) and retaining rings (Item 14). Take care not to scratch the shafts when installing the rings. Check the ends of the rings for sharp burrs. If a plastic and metal gear set are being used, the plastic gear is always the idler gear.
2. With the housing pins (Item 13) in the locator holes in the front housing (Item 3) and new O-rings (Item 12) installed in the center housing, assemble on the center housing (Item 2).
3. Install a pair of wear plates (Item 11) and the shaft assemblies.
4. Next install another pair of wear plates, housing pins and the rear housing (Item 1). Install the housing bolts (Item 15) and nuts (Item 16) and tighten.
5. Install the following parts onto the pump drive shaft in the order listed: retaining ring (Item 14), key (Item 8), driven magnet assembly (Item 18) with the short, hub

side towards the front housing and retaining ring. (Item 14). Note: Only new retaining rings should be used on the driven magnet end due to the bending required at disassembly. Use caution not to bend these rings during assembly.

6. Place a new O-ring (Item 28) onto the pilot on the front housing and place the can (Item 19) over the O-ring. Next pilot the casing (Item 20) over the can and thread in hand tight the front housing bolts (Item 26). Gradually and evenly tighten the front housing bolts to draw the casing and front housing together. Take care not to pinch the O-ring. Replace the protective plugs.
7. Install the spool (Item 29) onto the motor. Then install the drive magnet assembly (Item 21) onto the motor shaft to the dimension shown in Figure 3. If the motor is metric slide the drive magnet assembly onto the motor shaft until it butts up against the shoulder on the motor shaft. Tighten the drive magnet setscrews (Item 24) through the hole provided in the spool to 75 inch lbs. (847 Ncm). These setscrews have a special nylon patch applied to the threads to prevent loosening.
8. Carefully assemble the motor/spool/drive magnet assembly to the pump casing. Be careful not to chip the drive magnets when slipping them over the can or to pinch your fingers when the two assemblies snap together. The use of (4) assembly guide pins (Part # 49639) is suggested. Use guide pin (Part # 49656) for metric motors. See Figure 2. Install casing bolts (Item 35).
9. Reinstall pump in system, open inlet and discharge valves and start pump. Monitor pump for 5-10 minutes for signs of binding, excessive noise and motor amperage draw. Check performance. If problems are encountered refer to the Troubleshooting Section.

## GMH8 & GMC12/16 SERIES

REFERENCE DRAWINGS: SD-2776, SD-2777, SD-2781

### DISASSEMBLY

1. Close discharge and suction valves.
2. Disconnect power source to motor.
3. Flush and drain pump then remove pump from the piping. Do not forget to drain the can area through the front housing drain plug (Item 62 or 63).
4. Remove the bolts (Item 22) which fasten the front housing (Item 1) to the adaptor (Item 36). Then separate the pump from the adaptor by pulling them apart. This will take physical force because you are pulling against the magnetic attraction of the drive to the driven magnet. Do not pry but pull straight apart. Jack out screw tapped holes are provided on the front housing to aid in separating the front housing from the adaptor.
5. Do not remove the drive magnet assembly (items 31,32) or the drive magnet holder from the motor unless it or the motor are to be replaced. This will make reassembly easier later. The drive magnet assembly is removed by removing the holder screws (Item 33) then carefully pulling the magnet assembly off the holder. Note: the magnets are very fragile and can be easily damaged by rough handling. The drive magnet holder (Item 30) can be removed by loosening the setscrews (Item 35) and sliding it off the motor shaft or power-frame as appropriate. Access to the setscrews for the GMH8 is provided through the slot in the adaptor. The setscrews for the GMC12/16 drive magnet holder can only be accessed by unbolting the power frame assembly from the adaptor and pulling it out the back of the adaptor.
6. The next step is to remove the containment can ring screws (Item 29) and can ring (Item 28). If the pump has the double can option remove the nipples (Item 66) first, then the double can (Item 27). The double can has an integral can ring welded to it. Now the containment can (Item 26) can be removed from the pump.
7. The driven magnet assembly (Item 24) can be removed by carefully prying the retaining ring (Item 10) from the end of the pump drive shaft (Item 4). The driven magnet can then be removed from the shaft along with the coupling keys (Item 21) and other retaining ring.
8. Remove the housing bolts (Item 18) and the rear housing (Item 3).
9. Remove the center housing (Item 2). The gears (Items 6, 7) and wearplates (Item 15) are now accessible and can readily be removed along with the drive and idler shafts (Items 4, 5).
10. The gears can be removed from the shafts by removing one of the retaining rings and sliding the gear off the shaft.
11. Inspect all parts for signs of wear or damage. The maximum diametrical clearance (bearing I.D. - shaft O.D.) that is acceptable is .010 inches (.254 mm). Shafts and bearings that are scored or worn must be replaced. Gears and wearplates with excessive wear or scoring must also be replaced.
12. Clean all parts before reassembly.

## GMH8 & GMC12/16 SERIES

REFERENCE DRAWINGS: SD-2776, SD-2777, SD-2781

### REASSEMBLY

1. Install the drive and idler gear (Items 6, 7) onto their respective shafts (Items 4, 5) using keys (Item 8, 9) and retaining rings (item 10, 11). Take care not to scratch the shafts when installing the rings. Check the ends of the rings for sharp burrs. If a plastic and metal gear are being used the plastic gear is always the idler gear.
2. With the housing pins (Item 17) in the locator holes in the front housing (Item 1) and new O-rings (Item 16) installed in the center housing (Item 2), assemble on the center housing.
3. Install a pair of wearplates (Item 15) and the shaft assemblies.

4. Next install another pair of wearplates, housing pins and the rear housing (Item 3). Install the housing bolts (Item 18) and tighten.
5. Install the following parts onto the pump drive shaft in the order listed: retaining ring (Item 10), keys (Item 21), driven magnet assembly (Item 24) with the short hub side towards the front housing and retaining ring. Note: Only new retaining rings should be used on the driven magnet end due to the bending required at disassembly. Use caution not to bend these rings during assembly.
6. Place a new O-ring (Item 25) into the groove in the front housing. Then install the containment can (Item 26) over the driven magnet assembly. Next slide the can ring (Item 28) over the can and install screws (Item 29). If pump is equipped with a double can, install an additional O-ring (Item 25) then the double can assembly (Item 27) instead of the can ring. Also at this time install pipe plugs (Item 66).
7. If the pump is a GMC12 or GMC16, reinstall the guide pins (Item 39) at this time if they had been previously removed. If pump is a GMH8 fabricate guide pins by cutting off the head of some 1/4-20 bolts and screwing them into the front housing. The purpose of these guide pins is to guide the pump assembly into the adaptor (Item 36). The attractive force of the magnetic assemblies is so great that it is not possible to slowly insert the pump into the adaptor. The GMC12 and GMC16 pumps have springs (Item 40) which cushion the impact when inserting the pump assembly into the adaptor. Note: Great care must be used when assembling pump to adaptor so that your fingers are not pinched. Install pump assembly into adaptor at this time.
8. Install bolts (Item 22). Turn motor or power-frame input shaft by hand to check for free rotation without binding.
9. Reinstall pump in system, open inlet and discharge valves and check for leaks. Start pump. Monitor pump for 5-10 minutes for signs of binding, excessive noise and high motor amperage draw. Check performance. If problems are encountered refer to the Troubleshooting Section.

## BOLT-ON THERMAL JACKETS

### INSTALLATION

The following tools are required:

- Suitable wrenches (open end, socket or adjustable) to bolt jacket halves together. 7/16, 9/16 or 3/4 inch wrench sizes. Bolts provided with jacket.
  - Heat transfer cement (Thermon "standard grade" or equivalent) to fill any slight clearance between the interior surface of the bolt-on jacket and the exterior surface of the pump.
  - A suitable mason's trowel to apply heat transfer cement to the interior surface of the jacket.
  - Damp paper towels or rags for clean-up.
1. Install the Isochem pump that is to be jacketed in the process line.
  2. Visually inspect pump to be jacketed and remove any foreign material, packing lists, or identification tags which might come between inner jacket surface and the pump. Note: Pumps that have painted surfaces require no special preparation. Paint should be dry.
  3. Check for proper fit of the bolt-on jacket halves by removing bolts which hold the halves together, and place both halves around pump. Normally there is slight clearance between the inner jacket surface and the pump.
  4. Remove jacket halves from the pump and lay them on a clean, dry, work area, inner surfaces face up.
  5. With a trowel, coat the inner surfaces of the jacket halves with heat transfer cement. Coating should be approximately 1/8 to 1/4 inch (3-6mm) thick. Also dab a small quantity of the cement on the back of the pump flanges in three or four places.
  6. Place jacket halves with heat transfer cement on pump and press firmly in place. Bolt jacket halves together with jacket bolts removed in Step 3.
  7. Tighten bolts alternately to assure snug, even seating of jacket halves on the pump.

NOTE: As bolts are tightened alternately excess heat transfer cement will extrude from edges of jackets and at flange interfaces. Remove this excess cement with trowel.

8. Use damp rags or paper towels to clean any excess heat transfer cement from installation. Make sure there is no heat transfer cement on threads of valve stems.
9. Allow heat transfer cement to dry for 24 hours above 32°F (0°C) before applying heating medium to the bolt-on jacket.

#### REMOVAL

The following tools are required:

- Rubber or plastic mallet to dislodge jacket halves from heat transfer cement and pump.
  - Suitable wrenches (open-end, socket or adjustable) to remove bolts holding jacket halves on pump.
  - A hand chisel to remove any chunks of heat transfer cement that adhered to the inner surfaces of the bolt-on jacket.
1. Turn off heating medium supply and allow jacket/pump to cool to ambient temperature. Remove heating medium jump-overs from jacket halves with suitable wrenches. NOTE: If jacket halves are being removed to repair the pump or replace it with an identical component and flexible metal houses are used as jump-overs, it is normally unnecessary to remove the jump-overs. Work on the pump can proceed with the jacket halves dislodged from the pump while the heating medium jump-overs remain connected to the drain and supply jacket.
  2. Remove bolts holding jacket halves on the pump. Tap the jacket halves lightly with a rubber or plastic mallet to dislodge them from the pump. NOTE: Jacket halves may be pried apart with a screwdriver or hand chisel, but this should be done very carefully with only nominal force.
  3. In most instances, the heat transfer cement adheres to the pump and not the inner surfaces of the jacket. The cement can be easily chipped away from the pump surface with a hand chisel. Any chunks of the heat transfer cement adhering to the inner surface of the jacket halves should be removed also. Residual traces of heat transfer cement on the inner surfaces of the jacket halves need not be

removed. These traces neither affect a good fit nor inhibit good thermal performance.

4. When inside surfaces of jacket halves are clean, the jacket is ready for re-use. If the gear pump is to be repaired and reused, be sure to remove heat transfer cement adhering to its surface before reinstalling the bolt-on jacket.

#### PEDESTAL ASSEMBLY

REFERENCE DRAWING: SD2582

#### GENERAL MAINTENANCE

1. Fill power-frame oil cup (Item 4) to about 1/6 inch (2mm) from the top of the cup. Use standard motor oil SAE 10W-40, 10W-30 or 5W-30.
2. Drain and change oil after every 2000 hrs. of operation. Sooner if water or other contamination occurs.

#### DISASSEMBLY

1. Remove bearing cap bolts (Items 9).
2. Slide bearing cap (Item 3) out of housing (Item 1) and over end of shaft (Item 2).
3. Remove shaft/bearing assembly by sliding out of housing.

#### REASSEMBLY

1. Press new bearings (Items 6, 10) onto shaft (Item 2) if replacement is required.
2. Press new oil seals (Item 7) into housing (Item 1) and bearing cap (Item 3). Apply grease to seal lips.
3. Slide shaft/bearing assembly into power-frame housing.
4. Determine the correct gasket (Item 5) quantity Necessary to obtain an end play of .000-.004 inches (0-.10mm).
5. Replace bearing cap bolts (Items #9) and tighten.

## TROUBLESHOOTING

DIFFICULTY	PROBABLE CAUSE	REMEDY
<b>NO LIQUID DELIVERED</b>	<ol style="list-style-type: none"> <li>1. Pump not primed.</li> <li>2. Suction and/or discharge valve closed.</li> <li>3. Wrong direction or rotation.</li> <li>4. Suction plugged.</li> <li>5. Air leak in suction.</li> <li>6. Suction lift too high.</li> <li>7. Motor incorrectly wired.</li> <li>8. Magnetic coupling decoupled.</li> </ol>	<ol style="list-style-type: none"> <li>1. Prime pump.</li> <li>2. Open valves.</li> <li>3. Reverse rotation</li> <li>4. Eliminate plug.</li> <li>5. Locate and repair leak.</li> <li>6. Do not exceed vapor pressure of liquid.</li> <li>7. Check wiring diagram.</li> <li>8. Stop motor, eliminate discharge blockage or foreign matter jamming gears and restart. If no blockage exists verify motor supply voltage is correct and restart.</li> </ol>
<b>LOW LIQUID DELIVERY</b>	<ol style="list-style-type: none"> <li>1. Discharge pressure higher than expected.</li> <li>2. Air leak in suction.</li> <li>3. Rotational speed incorrect.</li> <li>4. Inlet obstructed or clogged.</li> <li>5. Liquid viscosity higher than expected.</li> <li>6. Leaky relief valve.</li> <li>7. Insufficient suction pressure.</li> <li>8. Worn or damaged internal parts.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce pressure.</li> <li>2. Locate and repair leak.</li> <li>3. Check speed and wiring</li> <li>4. Remove restriction</li> <li>5. Thin liquid or accept lower flow.</li> <li>6. Correctly set or repair relief valve.</li> <li>7. Increase suction pressure.</li> <li>8. Inspect and repair as required.</li> </ol>
<b>PUMP GRADUALLY LOSES PRIME</b>	<ol style="list-style-type: none"> <li>1. Air leak in suction</li> <li>2. Suction lift too high.</li> <li>3. Air or gas in liquid.</li> <li>4. Pump worn or damaged.</li> </ol>	<ol style="list-style-type: none"> <li>1. Locate and repair leak.</li> <li>2. Increase suction pressure.</li> <li>3. Eliminate air or gas.</li> <li>4. Inspect and repair as required.</li> </ol>
<b>PUMP NOISY</b>	<ol style="list-style-type: none"> <li>1. Pump cavitating.</li> <li>2. Pump worn or damaged.</li> <li>3. Air or gas in liquid.</li> <li>4. Foreign particles in liquid.</li> </ol>	<ol style="list-style-type: none"> <li>1. Increase suction pressure to provide sufficient NPSH</li> <li>2. Inspect and repair as required.</li> <li>3. Eliminate air or gas.</li> <li>4. Install (or clean) strainer in inlet pipe.</li> </ol>
<b>MOTOR RUNS HOT OR OVERLOADS</b>	<ol style="list-style-type: none"> <li>1. It is normal for motors to feel hot even when not overloading.</li> <li>2. Discharge pressure too high.</li> <li>3. Liquid viscosity higher than expected.</li> <li>4. Rotational speed too high.</li> <li>5. Binding internal pump parts.</li> <li>6. Motor wired incorrectly.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check motor amp draw to be sure.</li> <li>2. Lower pressure. Check pressure relief valve setting and for defective discharge pressure gauge.</li> <li>3. Thin liquid or install larger motor.</li> <li>4. Reduce speed.</li> <li>5. Inspect and correct condition.</li> <li>6. Check wiring diagram.</li> </ol>

### PUMP SPECIFICATION CHART

PUMP SIZE		GMH8	GM12	GM16	
	MAXIMUM FLOW @ 1750 RPM, 0 PRESSURE	GPM (M <sup>3</sup> /HR)	22.0 (5.0)	NA	NA
	MAXIMUM FLOW @ 1150 RPM, 0 PRESSURE	GPM (M <sup>3</sup> /HR)	14.5 (3.3)	28.0 (6.3)	55.0 (12.5)
	THEORETICAL DISPLACEMENT	GAL/100 REV (cc/REV)	1.3687 (51.78)	2.792 (105.7)	5.584 (211)
	MAXIMUM DIFFERENTIAL PRESSURE	PSI (BARS)	100 (6.9)	100 (6.9)	100 (6.9)
	MAX DIFF. PRES. PLASTIC/PLASTIC GEARS	PSI (BARS)	100 (6.9)	150 (10.3)	100 (6.9)
	MAXIMUM CASING PRESSURE	PSIG (BARS)	150 (10.3)	200 (10.3)	150 (10.3)
	TEMPERATURE RANGE : METAL/METAL GEARS		-100 TO +450 °F	-100 TO +450 °F	-100 TO +450 °F
	METAL/CARBON GEARS		(-73 TO +232 °C)	(-73 TO +232 °C)	(-73 TO +232 °C)
	METAL/PEEK GEARS				
(1)	METAL/PLASTIC GEARS		0 TO +210 °F	0 TO +210 °F	0 TO +210 °F
			(-18 TO +99 °C)	(-18 TO +99 °C)	(-18 TO +99 °C)
(2)	MAXIMUM VISCOSITY	SSU (CPS)	500000 (100000)	500000 (100000)	500000 (100000)
	MINIMUM VISCOSITY: METAL/METAL GEARS	SSU (CPS)	500 (100)	500 (100)	500 (100)
	MINIMUM VISCOSITY: CERAMIC WEAR PLATES	SSU (CPS)	500 (100)	500 (100)	500 (100)
	MAXIMUM ROTATIONAL SPEED		1750 RPM	1150 RPM	1150 RPM
	MAX ROTATIONAL SPEED: METAL/METAL GEARS		1450 RPM	1150 RPM	1150 RPM
(4)	MAGNETIC COUPLING TORQUE LIMIT @ 68 °F	IN/LB	389 (288)	637 (496)	1239 (991)
(4)	MAGNETIC COUPLING TORQUE LIMIT @ 392 °F	IN/LB	341 (252)	558 (434)	1084 (872)
	INLET PORT SIZE	NPT, BSPT, 150 LB FLG	1 THD	1 1/2 THD OR FLG	2 FLG
	OUTLET PORT SIZE	NPT, BSPT, 150 LB FLG	1 THD	1 1/2 THD OR FLG	2 FLG
	CAN DRAIN PORT SIZE	NPT	1/8 THD	1/4 THD	1/4 THD
	BEARING TYPE		INTERNAL SLEEVE	INTERNAL SLEEVE	INTERNAL SLEEVE
	BEARING LUBRICATION		BY PUMPED FLUID	BY PUMPED FLUID	BY PUMPED FLUID
	ROTATION DIRECTION		REVERSIBLE	REVERSIBLE	REVERSIBLE
	MOTOR FRAME SIZES AVAILABLE		143/5TC, 100L	ANY BASE MOUNT ONLY	ANY BASE MOUNT ONLY
	STANDARD SEALING MATERIAL		TEFLON	TEFLON	TEFLON
(3)	PUMP AND CASING H x W x L	INCH	8.88x8.00x13.44	12.19x10.0x24.56	12.19x10.0x26.56
	PUMP AND CASING WEIGHT	LBS (kg)	75 (165)	190 (418)	225 (495)

**NOTES:**

- (1) FOR TEMPERATURES OVER 110 °F TRIMMED PLASTIC GEARS ARE REQUIRED.
- (2) CONSULT THE FACTORY FOR HIGHER VISCOSITIES
- (3) DIMENSIONS VARY FOR METRIC UNITS, BUT ARE WITHIN ENVELOPE DIMENSIONS SPECIFIED.
- (4) TORQUE IN ( ) IS FOR DOUBLE CAN PUMPS.

DRAWING: ISOGSPEC

# ISOICHEM GEAR PUMP PRESSURES TO 100 PSI

## SIGNIFICANT MODEL NUMBERING SYSTEM AND SELECTION TABLE

POSITION NO.:                    1    2    3    4    5    6    7    8    9    10   11

<b>POSITION 1 ISOICHEM MAGNETICALLY DRIVEN SEALLESS</b>									
GMC = C-FACE MOTOR MOUNTING ASSEMBLY					- 1, 2, 4, 6, 8				
GM = C-FACE MOTOR MOUNTING ASSEMBLY					- 12, 16				
GMH = HIGHER PRESSURE MODEL, C-FACE MOTOR MOUNTING ASSEMBLY					- 8				
<b>POSITION 2 PUMP SIZE</b>									
	1	2	4	6	8	*8	12	16	
Port Size (INCHES)	.25"	.25"	.50"	.75"	1.00"	1.00"	1.50"	2.00"	
Capacity (GPM MAX)	.8	1.5	3	10	20	20	26	55	
Differential Pressure (PSIG MAX)	100	100	100	100	50	100	100	100	
Max. Casing Pressure (PSIG MAX)	300	200	200	150	150	150	200	200	
<b>POSITION 3 AVAILABLE PUMP METALLURGIES AND TYPE PORT CONNECTION</b>									
A = 316SS	FNPT	X	X	X	X	X	X	X	
B = ALLOY B	FNPT	X							
C = ALLOY C	FNPT	X	X	X	X	X	X	X	
D = ALLOY 20	FNPT	X	X	X	X	X	X	X	
F = TITANIUM	FNPT	X							
K = 316SS	FBSPT	X	X	X	X	X	X	X	
L = ALLOY B	FBSPT	X							
M = ALLOY C	FBSPT	X	X	X	X	X	X	X	
N = ALLOY 20	FBSPT	X	X	X	X	X	X	X	
O = TITANIUM	FBSPT	X							
U = 316SS	FLANGED		X	X	X	X	X	X	X
V = ALLOY C	FLANGED		X	X	X	X	X	X	X
W = ALLOY 20	FLANGED		X	X	X	X	X	X	X
<b>POSITION 4 DRIVE GEAR MATERIAL</b>									
C = ALLOY C		X	X	X	X	X	X	X	X
D = ALLOY 20		X	X	X	X	X	X	X	X
T = TFE (Glass Filled)	(1, 17)	X	X	X	X	X	X	X	X
E = PEEK	(17)	X	X	X	X	X	X	X	X
A = 316SS		X	X	X	X	X	X	X	X
Q = RYTON	(17)	X							
<b>POSITION 5 IDLER GEAR MATERIAL</b>									
C = ALLOY C	(2, 12)	X	X	X	X	X	X	X	X
D = ALLOY 20	(2)	X	X	X	X	X	X	X	X
K = Carbon		X	X	X	X	X	X	X	X
T = TFE (Glass Filled)	(17)	X	X	X	X	X	X	X	X
E = PEEK	(17)	X	X	X	X	X	X	X	X
A = 316SS		X	X	X	X	X	X	X	X
Q = RYTON	(17)	X							
<b>POSITION 6 WEAR PLATE MATERIAL (16)</b>									
K = Carbon		X	X	X	X	X	X	X	X
T = TFE (Glass Filled)		X	X	X	X	X	X	X	X
Z = Ceramic	(3)	X	X	X	X	X	X	X	X
E = PEEK		X	X	X	X	X	X	X	X
Q = RYTON		X							
<b>POSITION 7 BEARING MATERIAL (16)</b>									
K = Standard Carbon	(4)	X	X	X	X	X	X	X	X
L = Extended Life Carbon	(4)	X	X	X	X	X	X	X	X
T = TFE (Glass Filled)	(4, 11)	X	X	X	X	X	X	X	X
C = Standard Carbon - Slotted	(4)		X	X	X	X	X	X	X
A = Extended Life Carbon - "CW" Shafts	(5)		X	X	X	X	X	X	X
B = Silicon Carbide - "CW" Shafts	(5, 6)		X	X	X	X	X	X	X
Q = RYTON		X							
E = PEEK		X							
<b>POSITION 8 MAG DRIVE MOUNTING ARRANGEMENT</b>									
STANDARD U.S. MOUNTINGS									
B = 42C FRAME, SGL. CAN CNTNMNT.	(13)	X							
C = 48C FRAME, SGL. CAN CNTNMNT.	(13)	X							
F = 56C FRAME, SGL. CAN CNTNMNT.	(13)	X	X	X	X	X			
O = 143TC-184C FRAME, SGL. CAN CNTNMNT.	(13)		X	X	X	X			
D = 143TC-184C FRAME, DBL. CAN CNTNMNT.	(13)						X		X
R = 182TC-184TC FRAME, SGL. CAN CNTNMNT.	(14)						X		X
T = 182TC-184TC FRAME, DBL. CAN CNTNMNT.	(14)						X		X
W = 213TC-215TC FRAME, DBL. CAN CNTNMNT.	(14)						X		X
Y = 213TC-215TC FRAME, DBL. CAN CNTNMNT.	(14)						X		X
STANDARD METRIC MOUNTINGS									
H = 63 FRAME, SGL. CAN (Ø 85.00 B.C.)	(13)	X							
J = 71 FRAME, SGL. CAN (Ø 85.00 B.C.)	(13)	X							
K = 80 FRAME, SGL. CAN (Ø 100.00 B.C.)	(13)		X	X					
L = 90 FRAME, SGL. CAN (Ø 115.00 B.C.)	(13)		X	X	X				
P = 100 FRAME, SGL. CAN (Ø 130.00 B.C.)					X	X			
Q = 100 FRAME, DBL. CAN (Ø 130.00 B.C.)							X		
U = Ø28 MM INPUT SHAFT, SGL. CAN CNTNMNT.	(14)							X	X
V = Ø28 MM INPUT SHAFT, DBL. CAN CNTNMNT.	(14)							X	X

(\* Higher Pressure Model.



## ISOICHEM GEAR PUMP PRESSURES TO 100 PSI

### SIGNIFICANT MODEL NUMBERING SYSTEM AND SELECTION TABLE

(CONTINUED)

PUMP SIZE	1	2	4	6	8	*8	12	16
POSITIONS 9, 10, AND 11 OPTIONS								
A - Bearing Flush Ports		X	X	X	X	X	STD	STD
B - PFA Coated, SS Hsg O-Rings Metallic Bearing Lock Pins		X	X	X	X	X	X	X
C - Bearing Flush Ports PFA Coated, SS Hsg O-Rings Metallic Bearing Lock Pins		X	X	X	X	X		
D - Bearing Flush Ports, PFA Coated, SS Hsg O-Rings Metallic Bearing Lock Pins Slotted Bearings (7)		X	X	X	X	X		
E - Bearing Flush Ports, PFA Coated, SS Hsg O-Rings Metallic Bearing Lock Pins Slotted Bearings (7) Slotted Wear Plates (8)		X	X	X	X			
F - NON-Recirculation Wear Plates		X	X	X	X	STD	STD	STD
H - PFA Coated, SS Hsg O-Rings Metallic Bearing Lock Pins Samarium Cobalt Magnets		X	X	X	X			
M - Alloy C Containment Can (For 316ss Construction Pumps)		X	X	X	X	STD	STD	STD
N - Narrow Width Gears (9)			X	X				
R - Recirculation Wear Plates (10)		STD	STD	STD	STD	X	X	X
S - Samarium Cobalt Magnet (For Temperatures above 300°F)	STD	X	X	X	X	STD	STD	STD
T - Temperature Trimmed Plastic Gear		X	X	X	X	X	X	X
V - Center Hsg - Vent		X	X	X	X	X	X	STD
W - Welded Driven Magnet Assy (Samarium Cobalt Magnets ONLY)		X	X	X	X	X	X	X
X - Special (15)		X	X	X	X	X	X	X

NOTES:

- (1) Maximum differential pressure for plastic/plastic gears is 50 PSIG.
- (2) Pumps with metallic drive and idler gears require minimum viscosity of 100 cps and are limited to 1440 RPM maximum speed for GM2-GMH8 and 1150 RPM for GM12-16 pumps.
- (3) Ceramic wear plates with metallic gears require minimum viscosity of 100 cps.
- (4) Shaft material is same as material of pump.
- (5) 'CW' means corrosion/wear shaft material.
- (6) Recommended for speeds above 1150 RPM and viscosities above 1 cps. GMH8, GM12/16 pumps require minimum viscosity of 100 cps.
- (7) Slotted bearings available in carbon material only.
- (8) Slotted wear plates reduce volumetric efficiency.
- (9) Designation for reduced capacity pump.
- (10) Recirculation wear plates reduce volumetric efficiency.
- (11) GM12 TFE bearings can not be used above 100 PSI differential pressure. GM16 TFE bearings can not be used above 50 PSI differential pressure.
- (12) GM12 pumps with metal idler gear can be operated at 150 PSI differential pressure.
- (13) GMC2, GMC4, GMC6, and GMC8 pumps require motors with feet.
- (14) GM12, GM16 pumps are not available with integrally mounted motors.
- (15) Consult Factory.
- (16) GMC1 Models REQUIRE positions 6 and 7 to match. EX: KK, TT, QQ
- (17) GMC1 Models supplied with Position 3 material shaft.
- (\* ) Higher Pressure Model.

# ISOICHEM GEAR PUMP EXTENDED PRESSURE PRESSURES ABOVE 100 PSI

## SIGNIFICANT MODEL NUMBERING SYSTEM AND SELECTION TABLE

(CONTINUED)

PUMP SIZE	2	**4	**6	*6	12
POSITIONS 9, 10, AND 11 OPTIONS					
A = Bearing Flush Ports	X	X	X	X	STD
B = PFA Coated, SS Hsg O-Rings Metallic Bearing Lock Pins	X	X	X	X	X
C = Bearing Flush Ports PFA Coated, SS Hsg O-Rings Metallic Bearing Lock Pins	X	X	X	X	
D = Bearing Flush Ports, PFA Coated, SS Hsg O-Rings Metallic Bearing Lock Pins Slotted Bearings (7)	X	X	X	X	
E = Bearing Flush Ports, PFA Coated, SS Hsg O-Rings Metallic Bearing Lock Pins Slotted Bearings Slotted Wear Plates (7) (8)	X	X	X		
F = NON-Recirculation Wear Plates	X	X	X	STD	STD
H = PFA Coated, SS Hsg O-Rings Metallic Bearing Lock Pins Samarium Cobalt Magnets	X	X	X		
M = Alloy C Containment Can (For 316ss Construction Pumps)	X	X	X	STD	STD
N = Narrow Width Gears		X	X		
R = Recirculation Wear Plates (10)	STD	STD	STD	X	X
S = Samarium Cobalt Magnet (For Temperatures above 300°F)	X	X	X	STD	STD
T = Temperature Trimmed Plastic Gear	X	X	X	X	X
V = Center Hsg - Vent	X	X	X	X	X
W = Welded Driven Magnet Assy (Samarium Cobalt Magnets ONLY)	X	X	X	X	X
X = Special (15)	X	X	X	X	X

NOTES:

- (1)
- (2) Pumps with metallic drive and idler gears require minimum viscosity of 100 cps and are limited to 1440 RPM maximum speed for GMC2-GMH6 and 1150 RPM for GM12 pumps.
- (3) Ceramic wear plates with metallic gears require minimum viscosity of 100 cps.
- (4) Shaft material is same as material of pump.
- (5) \*CW\* means corrosion/wear shaft material.
- (6) Recommended for speeds above 1150 RPM and viscosities above 1 cps. GMH6, GM12 pumps require minimum viscosity of 100 cps.
- (7) Slotted bearings available in carbon material only.
- (8) Slotted wear plates reduce volumetric efficiency.
- (9)
- (10) Recirculation wear plates reduce volumetric efficiency.
- (11)
- (12)
- (13) GMC2, GMC4, GMC6, and GMC8 pumps require motors with feet.
- (14) GM12, GM16 pumps are not available with integrally mounted motors.
- (15) Consult Factory.
- (\* Higher Pressure Model.
- (\*\*) Model Requires Option \*N\* (Narrow Width Gears) In Position 9.



# ISOICHEM GEAR PUMP PRESSURES TO 100 PSI

## SIGNIFICANT MODEL NUMBERING SYSTEM AND SELECTION TABLE

POSITION NO.:                      1    2    3    4    5    6    7    8    9    10   11

POSITION 1 ISOICHEM MAGNETICALLY DRIVEN SEALLESS									
GMC = C-FACE MOTOR MOUNTING ASSEMBLY									
GM = C-FACE MOTOR MOUNTING ASSEMBLY									
GMH = HIGHER PRESSURE MODEL, C-FACE MOTOR MOUNTING ASSEMBLY									
			</						

## ISOICHEM GEAR PUMP PRESSURES TO 100 PSI

### SIGNIFICANT MODEL NUMBERING SYSTEM AND SELECTION TABLE

(CONTINUED)

PUMP SIZE	1	2	4	6	8	*8	12	16
<b>POSITIONS 9, 10, AND 11 OPTIONS</b>								
A - Bearing Flush Ports		X	X	X	X	X	STD	STD
B - PFA Coated, SS Hsg O-Rings Metallic Bearing Lock Pins		X	X	X	X	X	X	X
C - Bearing Flush Ports PFA Coated, SS Hsg O-Rings Metallic Bearing Lock Pins		X	X	X	X	X		
D - Bearing Flush Ports, PFA Coated, SS Hsg O-Rings Metallic Bearing Lock Pins Slotted Bearings (7)		X	X	X	X	X		
E - Bearing Flush Ports, PFA Coated, SS Hsg O-Rings Metallic Bearing Lock Pins Slotted Bearings (7) Slotted Wear Plates (8)		X	X	X	X			
F - NON-Recirculation Wear Plates		X	X	X	X	STD	STD	STD
H - PFA Coated, SS Hsg O-Rings Metallic Bearing Lock Pins Samarium Cobalt Magnets		X	X	X	X			
M - Alloy C Containment Can (For 316ss Construction Pumps)		X	X	X	X	STD	STD	STD
N - Narrow Width Gears (9)			X	X				
R - Recirculation Wear Plates (10)		STD	STD	STD	STD	X	X	X
S - Samarium Cobalt Magnet (For Temperatures above 300°F)	STD	X	X	X	X	STD	STD	STD
T - Temperature Trimmed Plastic Gear		X	X	X	X	X	X	X
V - Center Hsg - Vent		X	X	X	X	X	X	STD
W - Welded Driven Magnet Assy (Samarium Cobalt Magnets ONLY)		X	X	X	X	X	X	X
X - Special (15)		X	X	X	X	X	X	X

**NOTES:**

- (1) Maximum differential pressure for plastic/plastic gears is 50 PSIG.
- (2) Pumps with metallic drive and idler gears require minimum viscosity of 100 cps and are limited to 1440 RPM maximum speed for GM2-GMH8 and 1150 RPM for GM12-16 pumps.
- (3) Ceramic wear plates with metallic gears require minimum viscosity of 100 cps.
- (4) Shaft material is same as material of pump.
- (5) 'CW' means corrosion/wear shaft material.
- (6) Recommended for speeds above 1150 RPM and viscosities above 1 cps. GMH8, GM12/16 pumps require minimum viscosity of 100 cps.
- (7) Slotted bearings available in carbon material only.
- (8) Slotted wear plates reduce volumetric efficiency.
- (9) Designation for reduced capacity pump.
- (10) Recirculation wear plates reduce volumetric efficiency.
- (11) GM12 TFE bearings can not be used above 100 PSI differential pressure. GM16 TFE bearings can not be used above 50 PSI differential pressure.
- (12) GM12 pumps with metal idler gear can be operated at 150 PSI differential pressure.
- (13) GMC2, GMC4, GMC6, and GMC8 pumps require motors with feet.
- (14) GM12, GM16 pumps are not available with integrally mounted motors.
- (15) Consult Factory.
- (16) GMC1 Models REQUIRE positions 6 and 7 to match. EX: KK, TT, QQ
- (17) GMC1 Models supplied with Position 3 material shaft.
- (\*) Higher Pressure Model.

# ISOICHEM GEAR PUMP EXTENDED PRESSURE PRESSURES ABOVE 100 PSI

## SIGNIFICANT MODEL NUMBERING SYSTEM AND SELECTION TABLE

POSITION NO.:  1  2  3  4  5  6  7  8  9  10  11

POSITION 1 ISOICHEM MAGNETICALLY DRIVEN SEALLESS						
GMC - C-FACE MOTOR MOUNTING ASSEMBLY - 2, 4, 6 GM - C-FACE MOTOR MOUNTING ASSEMBLY - 12 GMH - HIGHER PRESSURE MODEL, C-FACE MOTOR MOUNTING ASSEMBLY - 6						
POSITION 2 PUMP SIZE		2	**4	**6	*6	12
Port Size (INCHES)		.25"	.50"	.75"	.75"	1.50"
Capacity (GPM MAX)		1.5	2.1	8.0	10	26
Differential Pressure (PSIG MAX)		175	140	125	200	150
Max. Casing Pressure (PSIG MAX)		200	200	150	250	200
POSITION 3 AVAILABLE PUMP METALLURGIES AND TYPE PORT CONNECTION						
A = 316SS	FNPT	X	X	X	X	X
C = ALLOY C	FNPT	X	X	X	X	X
D = ALLOY 20	FNPT	X	X	X	X	X
K = 316SS	FBSPT	X	X	X	X	X
M = ALLOY C	FBSPT	X	X	X	X	X
N = ALLOY 20	FBSPT	X	X	X	X	X
U = 316SS	FLANGED	X	X	X	X	X
V = ALLOY C	FLANGED	X	X	X	X	X
W = ALLOY 20	FLANGED	X	X	X	X	X
POSITION 4 DRIVE GEAR MATERIAL						
A = 316 SS		X	X	X	X	X
C = ALLOY C		X	X	X	X	X
D = ALLOY 20		X	X	X	X	X
POSITION 5 IDLER GEAR MATERIAL						
A = 316 SS		X	X	X	X	X
C = ALLOY C	(2, 12)	X	X	X	X	X
D = ALLOY 20	(2)	X	X	X	X	X
E = PEEK		X	X	X	X	X
POSITION 6 WEAR PLATE MATERIAL						
K = Carbon		X	X	X	X	X
T = TFE (Glass Filled)		X	X	X	X	X
Z = Ceramic	(3)	X	X	X	X	X
E = PEEK		X	X	X	X	X
POSITION 7 BEARING AND SHAFT MATERIAL						
K = Standard Carbon	(4)	X	X	X	X	X
L = Extended Life Carbon	(4)	X	X	X	X	X
Z = Standard Carbon - Slatted	(4)	X	X	X	X	X
C = Extended Life Carbon - "CW" Shafts	(5)	X	X	X	X	X
B = Silicon Carbide - "CW" Shafts	(5,6)	X	X	X	X	X
POSITION 8 MAG DRIVE MOUNTING ARRANGEMENT						
STANDARD U.S. MOUNTINGS						
F = 56C FRAME, SGL. CAN CNTNMNT.	(13)	X	X	X		
O = 143TC- 184C FRAME, SGL. CAN CNTNMNT.	(13)	X	X	X	X	
D = 143TC- 184C FRAME, DBL. CAN CNTNMNT.	(13)				X	
R = 182TC- 184TC FRAME, SGL. CAN CNTNMNT.	(14)				X	X
T = 182TC- 184TC FRAME, DBL. CAN CNTNMNT.	(14)				X	X
W = 213TC- 215TC FRAME, SGL. CAN CNTNMNT.	(14)				X	
Y = 213TC- 215TC FRAME, DBL. CAN CNTNMNT.	(14)				X	
STANDARD METRIC MOUNTINGS						
J = 71 FRAME, SGL. CAN (Ø 85.00 B.C.)	(13)	X	X			
K = 80 FRAME, SGL. CAN (Ø 100.00 B.C.)	(13)	X	X	X		
L = 90 FRAME, SGL. CAN (Ø 115.00 B.C.)	(13)			X		
P = 100 FRAME, SGL. CAN (Ø 130.00 B.C.)					X	
O = 100 FRAME, DBL. CAN (Ø 130.00 B.C.)					X	
U = Ø28 MM INPUT SHAFT, SGL. CAN CNTNMNT.	(14)					X
V = Ø28 MM INPUT SHAFT, DBL. CAN CNTNMNT.	(14)					X

(\*) Higher Pressure Model.  
(\*\*) Model Requires Option "N" (Narrow Width Gears) In Position 9.

# ISOICHEM GEAR PUMP EXTENDED PRESSURE PRESSURES ABOVE 100 PSI

## SIGNIFICANT MODEL NUMBERING SYSTEM AND SELECTION TABLE

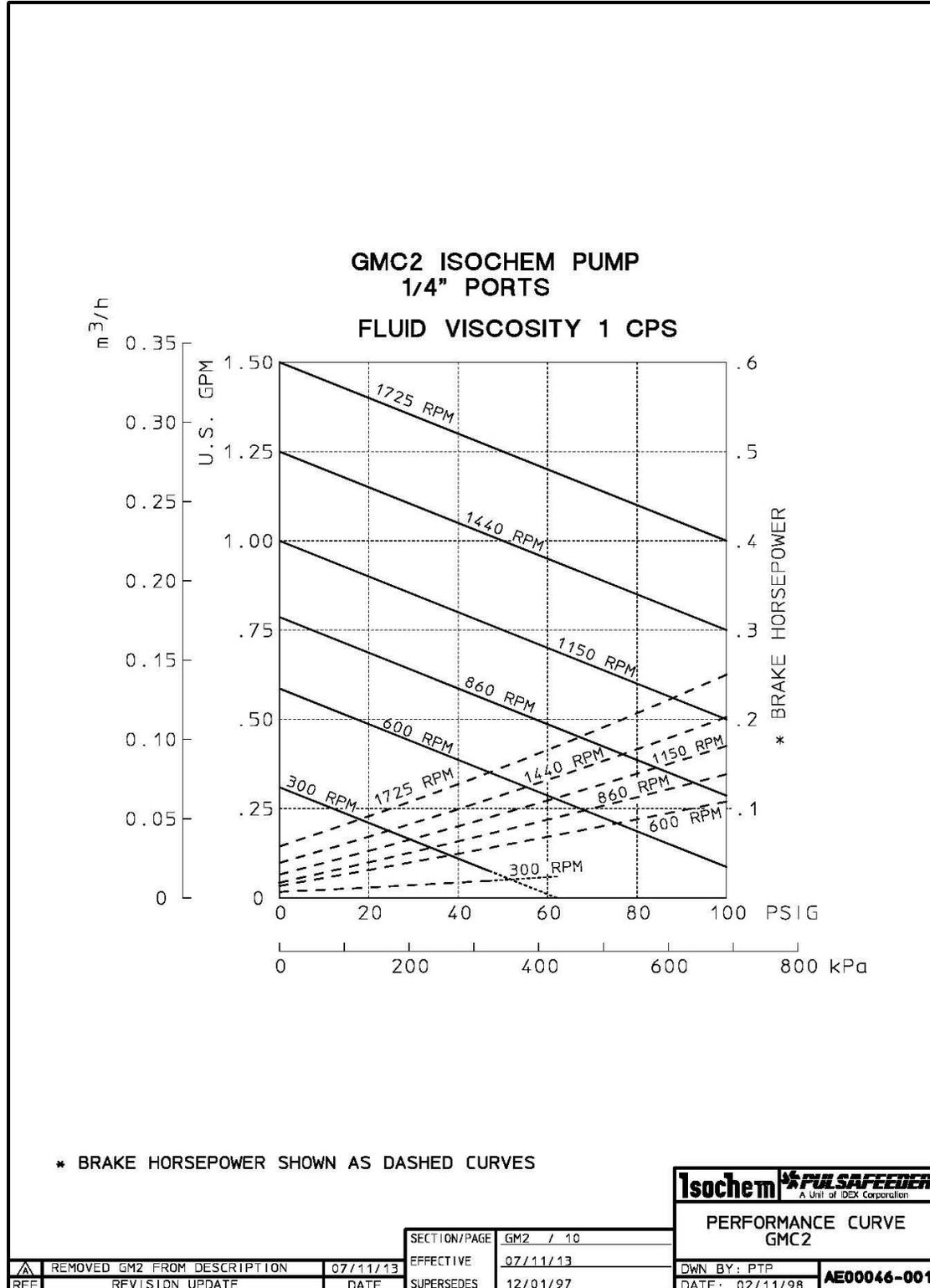
(CONTINUED)

PUMP SIZE	2	**4	**6	*6	12
POSITIONS 9, 10, AND 11 OPTIONS					
A - Bearing Flush Ports	X	X	X	X	STD
B - PFA Coated, SS Hsg O-Rings Metallic Bearing Lock Pins	X	X	X	X	X
C - Bearing Flush Ports PFA Coated, SS Hsg O-Rings Metallic Bearing Lock Pins	X	X	X	X	
D - Bearing Flush Ports, PFA Coated, SS Hsg O-Rings Metallic Bearing Lock Pins Slotted Bearings (7)	X	X	X	X	
E - Bearing Flush Ports, PFA Coated, SS Hsg O-Rings Metallic Bearing Lock Pins Slotted Bearings (7) Slotted Wear Plates (8)	X	X	X		
F - NON-Recirculation Wear Plates	X	X	X	STD	STD
H - PFA Coated, SS Hsg O-Rings Metallic Bearing Lock Pins Samarium Cobalt Magnets	X	X	X		
M - Alloy C Containment Can (For 316ss Construction Pumps)	X	X	X	STD	STD
N - Narrow Width Gears		X	X		
R - Recirculation Wear Plates (10)	STD	STD	STD	X	X
S - Samarium Cobalt Magnet (For Temperatures above 300°F)	X	X	X	STD	STD
T - Temperature Trimmed Plastic Gear	X	X	X	X	X
V - Center Hsg - Vent	X	X	X	X	X
W - Welded Driven Magnet Assy (Samarium Cobalt Magnets ONLY)	X	X	X	X	X
X - Special (15)	X	X	X	X	X

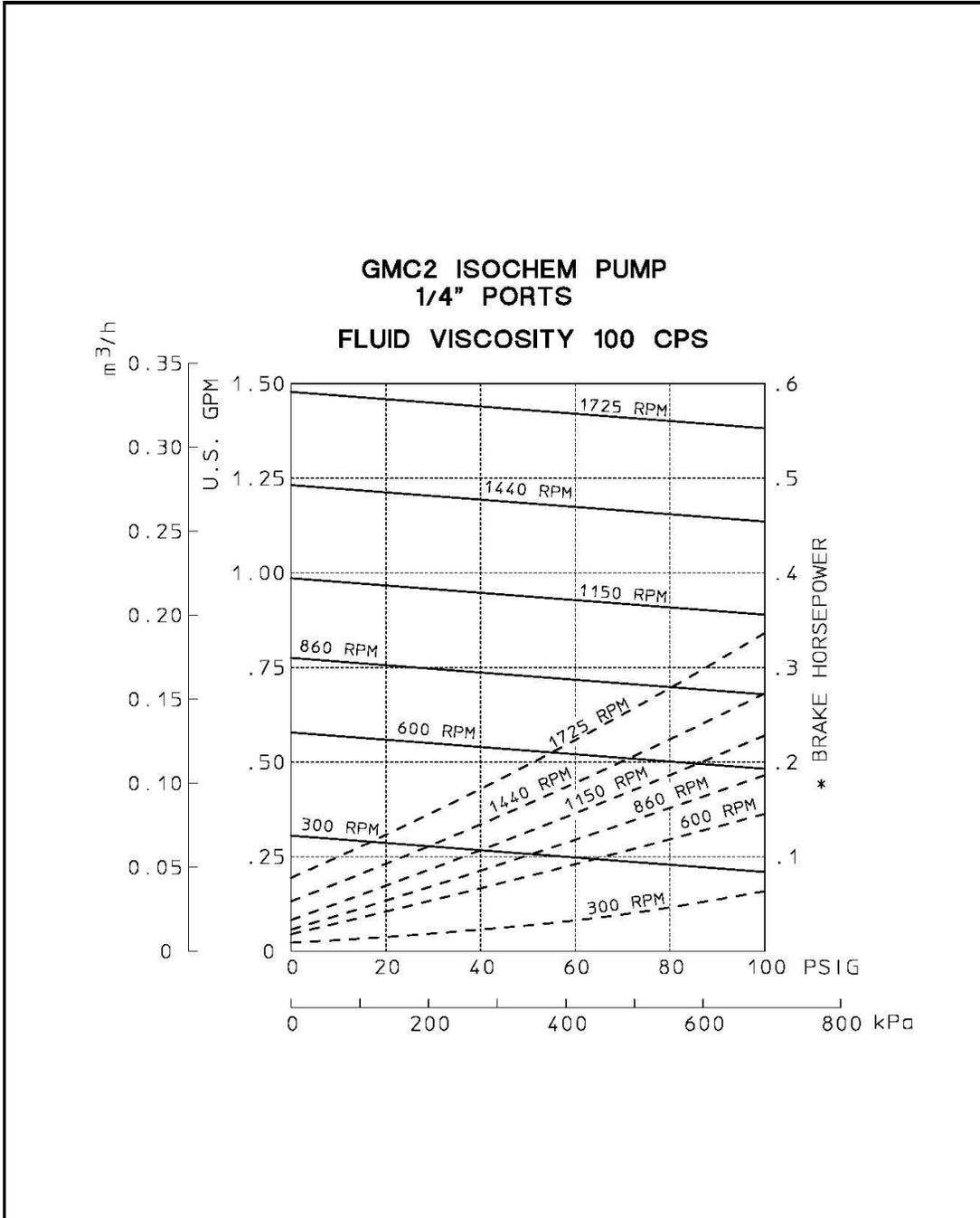
NOTES:

- (1)
- (2) Pumps with metallic drive and idler gears require minimum viscosity of 100 cps and are limited to 1440 RPM maximum speed for GMC2-GMH6 and 1150 RPM for GM12 pumps.
- (3) Ceramic wear plates with metallic gears require minimum viscosity of 100 cps.
- (4) Shaft material is same as material of pump.
- (5) \*CW\* means corrosion/wear shaft material.
- (6) Recommended for speeds above 1150 RPM and viscosities above 1 cps. GMH6, GM12 pumps require minimum viscosity of 100 cps.
- (7) Slotted bearings available in carbon material only.
- (8) Slotted wear plates reduce volumetric efficiency.
- (9)
- (10) Recirculation wear plates reduce volumetric efficiency.
- (11)
- (12)
- (13) GMC2, GMC4, GMC6, and GMC8 pumps require motors with feet.
- (14) GM12, GM16 pumps are not available with integrally mounted motors.
- (15) Consult Factory.
- (\*) Higher Pressure Model.
- (\*\*) Model Requires Option \*N\* (Narrow Width Gears) In Position 9.

FOR: \_\_\_\_\_ SERIAL NO.: \_\_\_\_\_  
 CUSTOMER P.O. NO.: \_\_\_\_\_ SERIAL NO.: \_\_\_\_\_  
 ITEM: GMC2 DATED: \_\_\_\_\_ BY: \_\_\_\_\_ PULSA. ORDER NO.: \_\_\_\_\_  
 TAGGING: \_\_\_\_\_



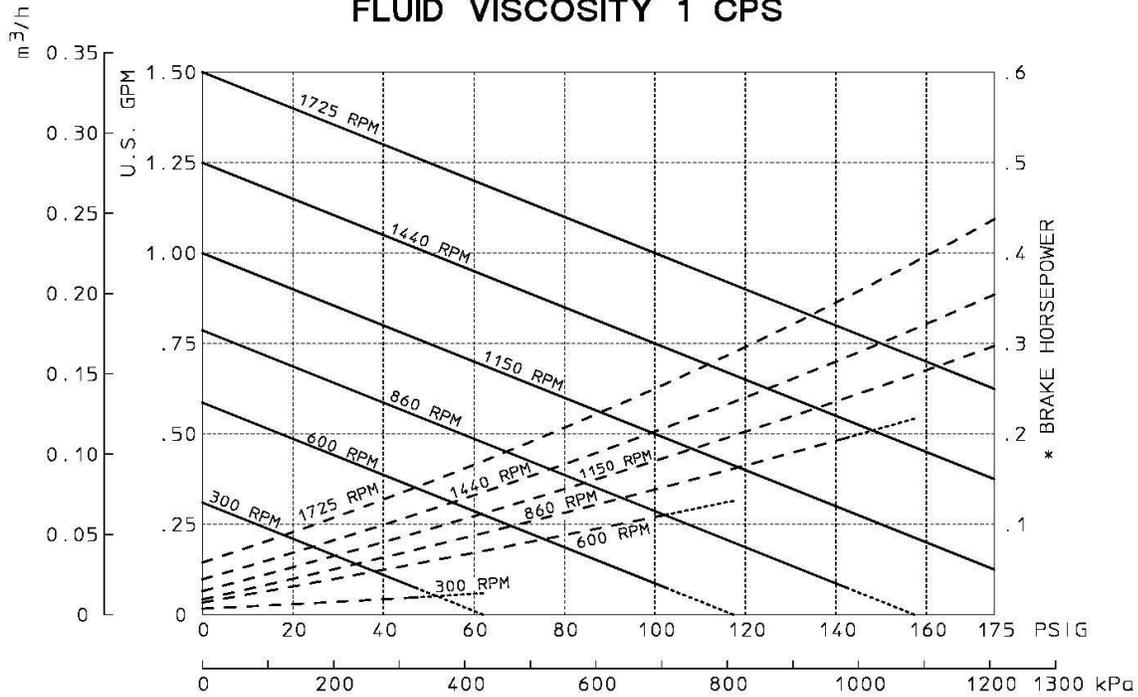
FOR: \_\_\_\_\_ SERIAL NO.: \_\_\_\_\_  
 CUSTOMER P.O. NO.: \_\_\_\_\_ SERIAL NO.: \_\_\_\_\_  
 ITEM: **GMC2** DATED: \_\_\_\_\_ BY: \_\_\_\_\_ PULSA. ORDER NO.: \_\_\_\_\_  
 TAGGING: \_\_\_\_\_



\* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

		SECTION/PAGE	GM2 / 11	<b>Isoschem</b> <b>PULSAFEEDER</b> <small>A Unit of IDEX Corporation</small>
		PERFORMANCE CURVE GMC2		
REMOVED GM2 FROM DESCRIPTION	07/11/13	EFFECTIVE	07/11/13	DWN BY: PTP
REF REVISION UPDATE	DATE	SUPERSEDES	12/01/97	DATE: 02/11/98
				<b>AE00046-002</b>

**GMC2 ISOICHEM PUMP  
1/4" PORTS  
FLUID VISCOSITY 1 CPS**



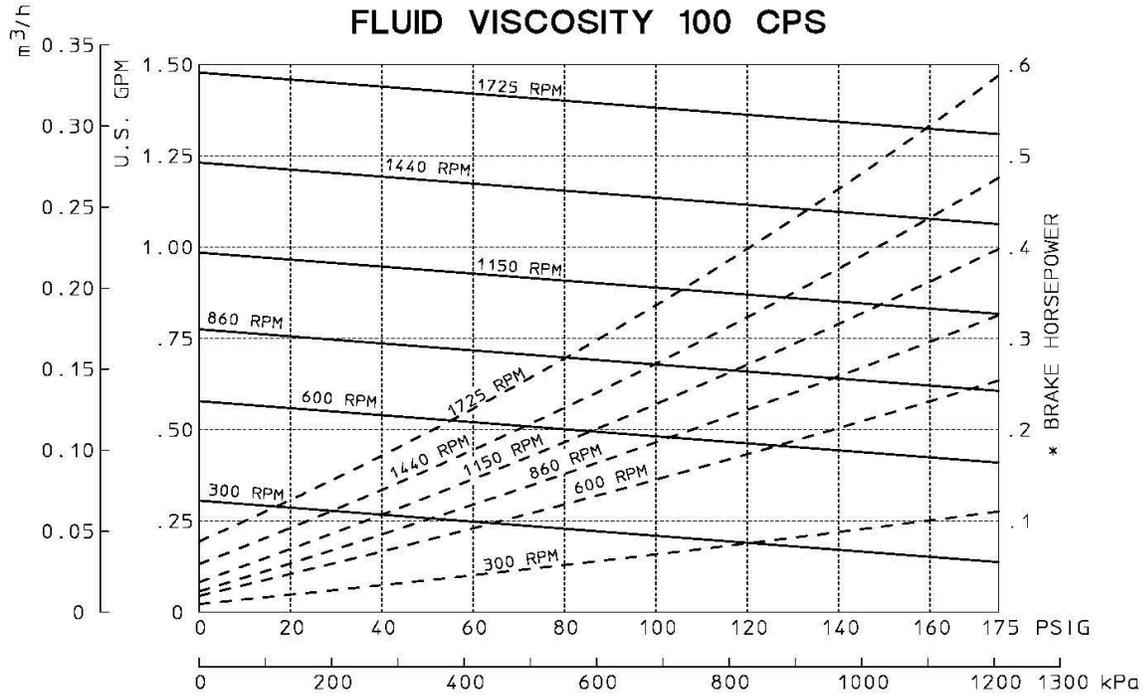
NOTES: 1. TFE GEARS AND BEARINGS LIMITED TO 100 PSIG

\* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

<b>Isochem</b>	<b>PULSAFEEDER</b> A Unit of IDEX Corporation
PERFORMANCE CURVE GMC2 EXTENDED PRESSURE	
DWN BY: PTP	<b>AE00046-003</b>
DATE: 02/11/98	

SECTION/PAGE	GM2 / 12
EFFECTIVE	07/11/13
SUPERSEDES	12/01/97
REF	REVISION UPDATE
DATE	07/11/13

**GMC2 ISOICHEM PUMP  
1/4" PORTS  
FLUID VISCOSITY 100 CPS**



NOTES: 1. TFE GEARS AND BEARINGS LIMITED TO 100 PSIG

\* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

<b>Isochem</b>	<b>PULSAFEEDER</b> A Unit of IDEX Corporation
PERFORMANCE CURVE GMC2 EXTENDED PRESSURE	
DWN BY: PTP	AE00046-004
DATE: 02/11/98	

SECTION/PAGE	GM2 / 13
EFFECTIVE	07/11/13
SUPERSEDES	12/01/97
REF	REVISION UPDATE
DATE	07/11/13

ITEM CLASS GMC2 = II  
 PRODUCT LINE = H / ISOICHEM

**ISOICHEM GMC2 SERIES PUMP  
 CONSOLIDATED B / M**

SECTION: MODEL GMC2  
 PAGE: 204  
 DATE REV.: 06 / 24 / 14  
 SUPERSEDES: 01 / 07 / 14

DESCRIPTION	QTY	STANDARD PUMP MATERIAL						ITEM
		316 SS (A, K, OR U)		ALLOY C (C, M, OR V)		ALLOY 20 (D, N, OR W)		
		PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	
<b>POSITION 3 STANDARD PUMP - NON-VARIABLE COMPONENTS</b>								
HOUSING, CENTER - 1/4" PORT FNPT	1	70026	316 SS	70027	ALLOY C	70028	ALLOY 20	2
HOUSING, CENTER FBSPT		70029	316 SS	70030	ALLOY C	70031	ALLOY 20	2
HOUSING, CENTER FLANGED	1	NG040004-316	316 SS	NG040004-HC0	ALLOY C	NG040004-020	ALLOY 20	2
HOUSING, REAR		70214	316 SS	70215	ALLOY C	70216	ALLOY 20	1
# RING, RETAINING	6	76706	316 SS	76701	ALLOY C	76701	ALLOY C	14
# KEY, METAL DRIVE GEAR	*1	71931	316 SS	71911	ALLOY C	71910	ALLOY 20	8
# KEY, PLASTIC DRIVE GEAR		71932	316 SS	71917	ALLOY C	71916	ALLOY 20	8
# KEY, MTL / CBN IDLER GEAR	*1	71931	316 SS	71911	ALLOY C	71910	ALLOY 20	8
# KEY, PLASTIC IDLER GEAR		71932	316 SS	71917	ALLOY C	71916	ALLOY 20	8
# KEY, MAGNETIC CPLG - DRIVE	1	71933	316 SS	71926	ALLOY C	71925	ALLOY 20	8
# O-RING, HOUSING	2	61101	TFE	61101	TFE	61101	TFE	12
PIN, HOUSING	4	40801	316 SS	40801	316 SS	40801	316 SS	13
BOLT, HOUSING	4	72006	188 SS	72006	188 SS	72006	188 SS	15
NUT, HOUSING BOLT	4	72101	188 SS	72101	188 SS	72101	188 SS	16
NAMEPLATE	1	41210	188 SS	41210	188 SS	41210	188 SS	--

**POSITIONS 9, 10, AND 11 OPTIONS - DELETE CORRESPONDING STANDARD PUMP COMPONENT FROM B / M**

V	HOUSING, CENTER - VENT FNPT	1	70026-2	316 SS	70027-2	ALLOY C	70028-2	ALLOY 20	2
	HOUSING, CENTER - VENT FBSPT		70029-2	316 SS	70030-2	ALLOY C	70031-2	ALLOY 20	2
	HOUSING, CENTER - VENT FLANGED	*1	NG040008-316	316 SS	NG040008-HC0	ALLOY C	NG040008-020	ALLOY 20	2
	PLUG, 1/8" NPT		W772565-316	316 SS	52301	ALLOY C	52300	ALLOY 20	27
A	HOUSING, REAR - BRG FLUSH	1	70212	316 SS	70234	ALLOY C	70233	ALLOY 20	1
	PLUG, 1/8" NPT	*2	W772565-316	316 SS	52301	ALLOY C	52300	ALLOY 20	27
B	# PIN, BEARING LOCK	3-4	41802	ALLOY 20	41806	ALLOY C	41802	ALLOY 20	10
	# O-RING, HOUSING	2	61104	SS / PFA	61104	SS / PFA	61104	SS / PFA	12
C	# O-RING, FRONT HOUSING	1	61109	SS / PFA	61109	SS / PFA	61109	SS / PFA	28
	# BEARING, SLOTTED CARBON	5	70419	CARBON	70419	CARBON	70419	CARBON	9
D	# BEARING, SLOTTED TFE (GF)	1	70432	TFE (GF)	70432	TFE (GF)	70432	TFE (GF)	9
	# BEARING, SLOTTED TFE (GF)	3	70433	TFE (GF)	70433	TFE (GF)	70433	TFE (GF)	9
E	# WEAR PLATE, SLOTTED	4	70526	CARBON	70526	CARBON	70526	CARBON	11
F	# WEAR PLATE - NON-RECIRCULATION	4	70523	CARBON	70523	CARBON	70523	CARBON	11
	# WEAR PLATE - NON-RECIRCULATION		70524	TFE (GF)	70524	TFE (GF)	70524	TFE (GF)	11
	# WEAR PLATE - NON-RECIRCULATION		70525	CERAMIC	70525	CERAMIC	70525	CERAMIC	11
	# WEAR PLATE - NON-RECIRCULATION		70534	PEEK	70534	PEEK	70534	PEEK	11
M	CONTAINMENT CAN	1	79631	ALLOY C	-----	-----	-----	-----	19
S	DRVN MAG ASSY (WELDED) / (SAMAR)	1	79616	316 SS	79643	ALLOY C	79662	ALLOY 20	18
	DRV MAG ASSY, 56C FR (SAMAR.)	1	79604	STEEL	79604	STEEL	79604	STEEL	21
	DRV MAG ASSY, 140TC FR (SAMAR.)		79636	STEEL	79636	STEEL	79636	STEEL	21
	DRV MAG ASSY, 71 FR (SAMAR.)		79688	STEEL	79688	STEEL	79688	STEEL	21
	DRV MAG ASSY, 80 FR (SAMAR.)		79689	STEEL	79689	STEEL	79689	STEEL	21
DRVN MAG ASSY (WELDED) / (SAMAR)	1		79616	316 SS	79650	ALLOY C	79665	ALLOY 20	18
H	HIGH TEMPERATURE APPLICATION		COMBINE	PUMP	OPTIONS	B	AND	S	
XN	HOUSING, CENTER - 1/2" PORT FNPT	1	70014	316 SS	70016	ALLOY C	70015	ALLOY 20	2

\*COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B / M  
 # DENOTES RECOMMENDED SPARE PART

DWG: GM2P204

## ISOICHEM GMC2 SERIES PUMP CONSOLIDATED B / M

SECTION: MODEL GMC2  
PAGE: 205  
DATE REV.: 11 / 12 / 12  
SUPERSEDES: 11 / 12 / 04

DESCRIPTION	QTY	STANDARD PUMP MATERIAL						ITEM
		316 SS (A, K, OR U)		ALLOY C (C, M, OR V)		ALLOY 20 (D, N, OR W)		
		PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	

### POSITION 4 & 5 DRIVE AND IDLER GEAR MATERIAL

A	# GEAR, DRIVE / IDLER	1-2	70696	316 SS	----	----	----	----	6, 7
C	# GEAR, DRIVE / IDLER	1-2	70672	ALLOY C	70672	ALLOY C	70672	ALLOY C	6, 7
D	# GEAR, DRIVE / IDLER	1-2	70673	ALLOY 20	----	----	70673	ALLOY 20	6, 7
K	# GEAR, IDLER	1	70674	CARBON	70674	CARBON	70674	CARBON	6, 7
T	# GEAR, DRIVE / IDLER	1-2	70675	TFE (GF)	70675	TFE (GF)	70675	TFE (GF)	7
E	# GEAR, DRIVE / IDLER	1-2	70676	PEEK	70676	PEEK	70676	PEEK	6, 7

### POSITION 6 WEAR PLATE MATERIAL

K	# WEAR PLATE, RECIRCULATION	4	70527	CARBON	70527	CARBON	70527	CARBON	11
T	# WEAR PLATE, RECIRCULATION		70528	TFE (GF)	70528	TFE (GF)	70528	TFE (GF)	11
Z	# WEAR PLATE, RECIRCULATION		70529	CERAMIC	70529	CERAMIC	70529	CERAMIC	11
E	# WEAR PLATE, RECIRCULATION		70546	PEEK	70546	PEEK	70546	PEEK	11

### POSITION 7 SHAFT AND BEARING MATERIAL

STANDARD CONSTRUCTION									
K	# SHAFT, DRIVE	1	70396	316 SS	70301	ALLOY C	70305	ALLOY 20	4
	# SHAFT, IDLER	1	70378	316 SS	70379	ALLOY C	70380	ALLOY 20	5
	# BEARING, DRIVE / IDLER SHAFT	5	70404	CARBON	70404	CARBON	70404	CARBON	9
	# PIN, BEARING LOCK - DRIVEN	1	41808	316 SS	41809	ALLOY C	41810	ALLOY 20	31
	# PIN, BEARING LOCK	3	41801	TFE	41801	TFE	41801	TFE	10
L	# SHAFT, DRIVE	1	70396	316 SS	70301	ALLOY C	70305	ALLOY 20	4
	# SHAFT, IDLER	1	70378	316 SS	70379	ALLOY C	70380	ALLOY 20	5
	# BEARING, DRIVE / IDLER SHAFT	5	70431	EWCBN	70431	EWCBN	70431	EWCBN	9
	# PIN, BEARING LOCK - DRIVEN	1	41808	316 SS	41809	ALLOY C	41810	ALLOY 20	31
	# PIN, BEARING LOCK	3	41801	TFE	41801	TFE	41801	TFE	10
T	# SHAFT, DRIVE	1	70396	316 SS	70301	ALLOY C	70305	ALLOY 20	4
	# SHAFT, IDLER	1	70378	316 SS	70379	ALLOY C	70380	ALLOY 20	5
	# BEARING, DRIVE SHAFT	1	70401	TFE (GF)	70401	TFE (GF)	70401	TFE (GF)	9
	# BEARING, DRIVE / IDLER SHAFT	3	70402	TFE (GF)	70402	TFE (GF)	70402	TFE (GF)	9
	# PIN, BEARING LOCK	4	41801	TFE	41801	TFE	41801	TFE	10

### EXTENDED / WEAR - BOTH SHAFTS

C	# SHAFT, DRIVE	1	70393	"CW"	70303	"CW"	70307	"CW"	4
	# SHAFT, IDLER	1	70394	"CW"	70397	"CW"	70308	"CW"	5
	# BEARING, DRIVE SHAFT	5	70431	EWCBN	70431	EWCBN	70431	EWCBN	9
	# PIN, BEARING LOCK - DRIVEN	1	41808	316 SS	41809	ALLOY C	41810	ALLOY 20	31
	# PIN, BEARING LOCK	3	41801	TFE	41801	TFE	41801	TFE	10

### CORROSION / WEAR ("CW") - BOTH SHAFTS

B	# SHAFT, DRIVE	1	70393	"CW"	70303	"CW"	70307	"CW"	4
	# SHAFT, IDLER	1	70394	"CW"	70397	"CW"	70308	"CW"	5
	# BEARING, DRIVE / IDLER SHAFT	5	70428	SICBD	70428	SICBD	70428	SICBD	9
	# PIN, BEARING LOCK - DRIVEN	1	41808	316 SS	41809	ALLOY C	41810	ALLOY 20	31
	# PIN, BEARING LOCK	3	41801	TFE	41801	TFE	41801	TFE	10

\* COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B / M  
# DENOTES RECOMMENDED SPARE PART

DWG: GM2P205

## ISOCHEM GMC2 SERIES PUMP CONSOLIDATED B / M

SECTION: MODEL GMC2  
PAGE: 206  
DATE REV.: 06 / 24 / 14  
SUPERSEDES: 11 / 12 / 12

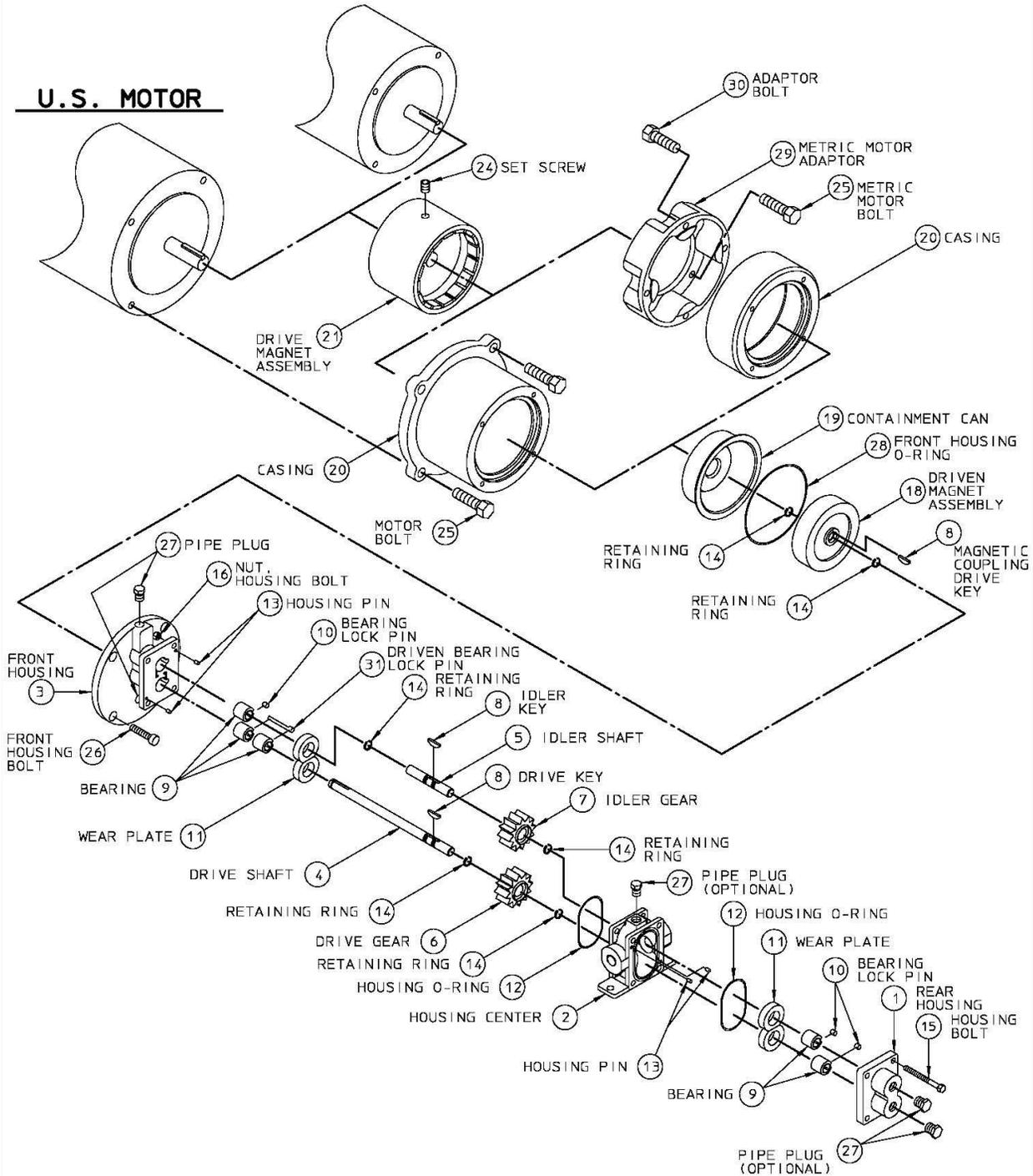
DESCRIPTION		QTY	STANDARD PUMP MATERIAL						ITEM
			316 SS (A, K, OR U)	ALLOY C (C, M, OR V)	ALLOY 20 (D, N, OR W)	PART NUMBER	MATERIAL	PART NUMBER	
<b>POSITION 8 MAGNETIC COUPLING COMPONENTS</b>									
COMMON PARTS	HOUSING, FRONT	1	70140	316SS	70141	ALLOY C	70144	ALLOY 20	3
	CONTAINMENT CAN	1	79672	316SS	79631	ALLOY C	79631	ALLOY C	19
	DRIVEN MAGNET ASSY	1	79691	316SS	79692	ALLOY C	79693	ALLOY 20	18
	# O-RING, FRONT HOUSING	1	W209787-TFE	TFE	W209787-TFE	TFE	W209787-TFE	TFE	28
	BOLT, FRONT HOUSING	4	16717	188SS	16717	188SS	16717	188SS	26
	PLUG, 1/8" NPT	*2	W772565-316	316SS	52301	ALLOY C	52300	ALLOY 20	27
	SET SCREW, DRIVE MAGNET ASSY	1	W771004-019	STEEL	W771004-019	STEEL	W771004-019	STEEL	24
<b>56C FRAME COMPONENTS</b>									
F	CASING, 56C / 140TC FR	1	79610	ALUMINUM	79610	ALUMINUM	79610	ALUMINUM	20
	DRIVE MAGNET ASSEMBLY, 56C FR	1	79684	STEEL	79684	STEEL	79684	STEEL	21
	BOLT, MOTOR	4	W770425-STL	STEEL	W770425-STL	STEEL	W770425-STL	STEEL	25
<b>140TC FRAME COMPONENTS</b>									
O	CASING, 56C / 140TC FR	1	79610	ALUMINUM	79610	ALUMINUM	79610	ALUMINUM	20
	DRIVE MAGNET ASSEMBLY, 140TC FR	1	79685	STEEL	79685	STEEL	79685	STEEL	21
	BOLT, MOTOR	4	W770425-STL	STEEL	W770425-STL	STEEL	W770425-STL	STEEL	25
<b>71 METRIC FRAME COMPONENTS</b>									
J	CASING, 71 FRAME METRIC	1	79681	ALUMINUM	79681	ALUMINUM	79681	ALUMINUM	20
	DRIVE MAGNET ASSEMBLY, 71 FR	1	79686	STEEL	79686	STEEL	79686	STEEL	21
	MOTOR ADAPTOR, 71 FR METRIC	1	79679	ALUMINUM	79679	STEEL	79679	STEEL	29
	BOLT, MOTOR ADAPTOR	4	16722	STEEL	16722	STEEL	16722	STEEL	30
	BOLT, MOTOR	4	NP990415-STL	STEEL	NP990415-STL	STEEL	NP990415-STL	STEEL	25
<b>80 METRIC FRAME COMPONENTS</b>									
K	CASING, 80 FRAME METRIC	1	79681	ALUMINUM	79681	ALUMINUM	79681	ALUMINUM	20
	DRIVE MAGNET ASSEMBLY, 80 FR	1	79687	STEEL	79687	STEEL	79687	STEEL	21
	MOTOR ADAPTOR, 80 FR METRIC	1	79680	ALUMINUM	79680	ALUMINUM	79680	STEEL	29
	BOLT, MOTOR ADAPTOR	4	16722	STEEL	16722	STEEL	16722	STEEL	30
	BOLT, MOTOR	4	NP990415-STL	STEEL	NP990415-STL	STEEL	NP990415-STL	STEEL	25

\*COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B / M  
# DENOTES RECOMMENDED SPARE PART

DWG: GM2P206

# METRIC MOTOR

## U.S. MOTOR



**Isochem** **PULSAFEEDER**  
A Unit of IDEX Corporation

MODEL GMC2/4  
ISOICHEM PUMP  
EXPLODED VIEW

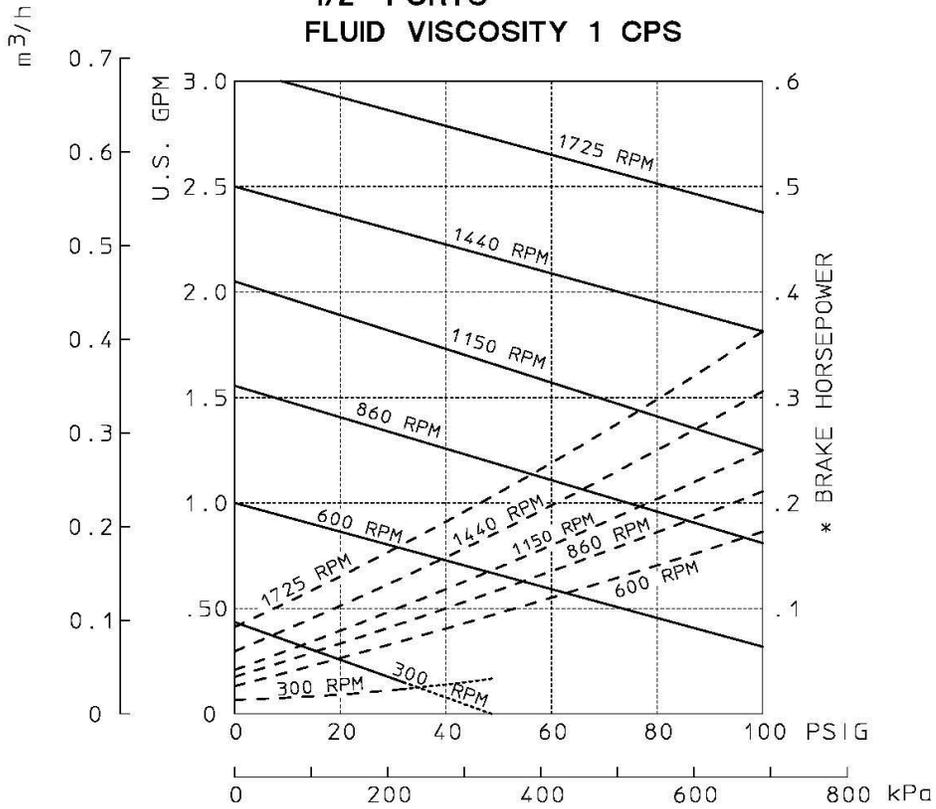
SECTION/PAGE	MODEL GMC2 / 400
EFFECTIVE	07/11/13
SUPERSEDES	10/06/06

REF	REMOVED GM2/4 FROM DESCRIPTION	07/11/13
	REVISION UPDATE	DATE

DWN BY: CLA	SD2889
DATE: 09/22/97	

FOR: \_\_\_\_\_ SERIAL NO.: \_\_\_\_\_  
 CUSTOMER P.O. NO: \_\_\_\_\_ SERIAL NO.: \_\_\_\_\_  
 ITEM: GMC4 DATED: \_\_\_\_\_ BY: \_\_\_\_\_ PULSA. ORDER NO.: \_\_\_\_\_  
 TAGGING: \_\_\_\_\_

**GMC4 ISOCHEM PUMP  
 1/2" PORTS  
 FLUID VISCOSITY 1 CPS**



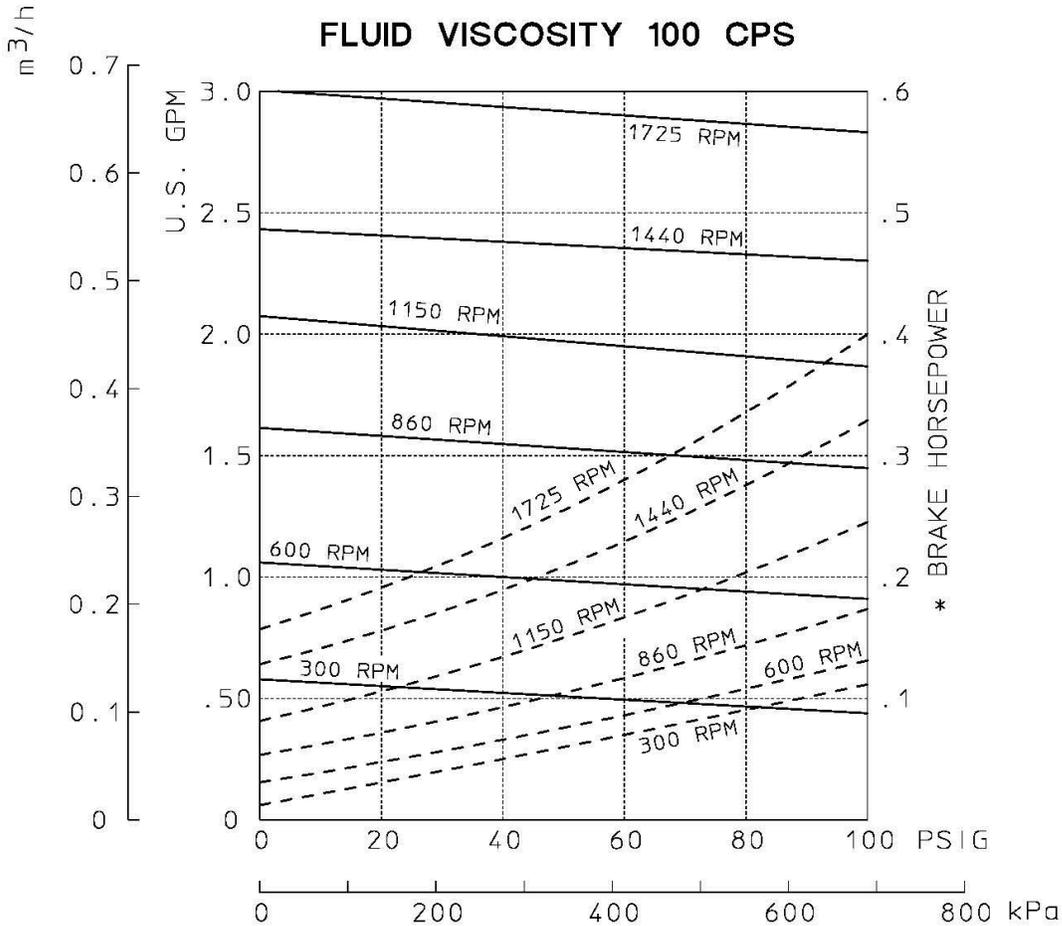
\* BRAKE HORSEPOWER SHOWN AS DASHED CURVES



PERFORMANCE CURVE  
 GMC4

SECTION/PAGE	GMC4 / 10	EFFECTIVE	07/11/13	DOWN BY: PTP	AE00047-001
REF	REMOVED GM4 FROM DESCRIPTION	DATE	07/11/13	DATE: 02/11/98	
	REVISION UPDATE	DATE		SUPERSEDES	12/01/97

**GMC4 ISOICHEM PUMP  
1/2" PORTS  
FLUID VISCOSITY 100 CPS**



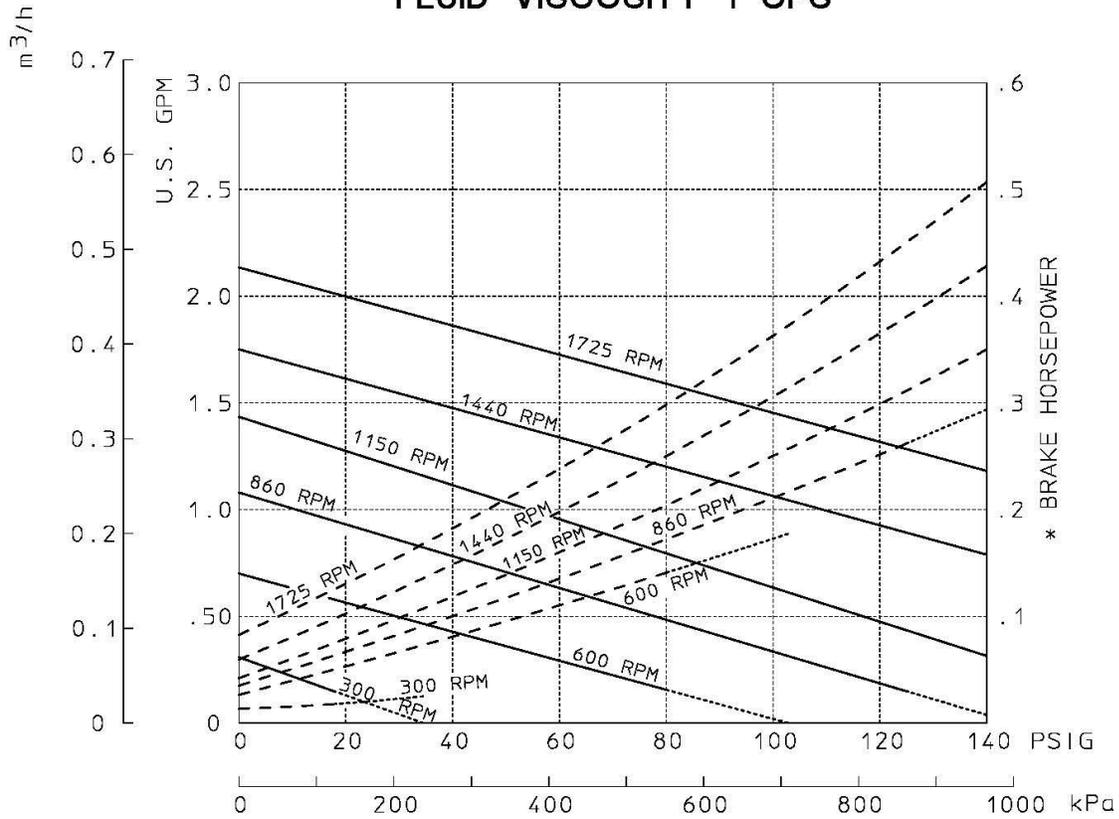
\* BRAKE HORSEPOWER SHOWN AS DASHED CURVES



**PERFORMANCE CURVE  
GMC4**

SECTION/PAGE	GMC4 / 14	EFFECTIVE		07/11/13	DWN BY: PTP	AE00047-002
REF	REMOVED GM4 FROM DESCRIPTION	07/11/13	SUPERSEDES	12/01/97	DATE: 02/11/98	
REF	REVISION UPDATE	DATE				

**GMC4 ISOICHEM PUMP  
NARROW WIDTH GEARS  
1/2" PORTS  
FLUID VISCOSITY 1 CPS**



NOTES: 1. TFE GEARS AND BEARINGS LIMITED TO 100 PSIG

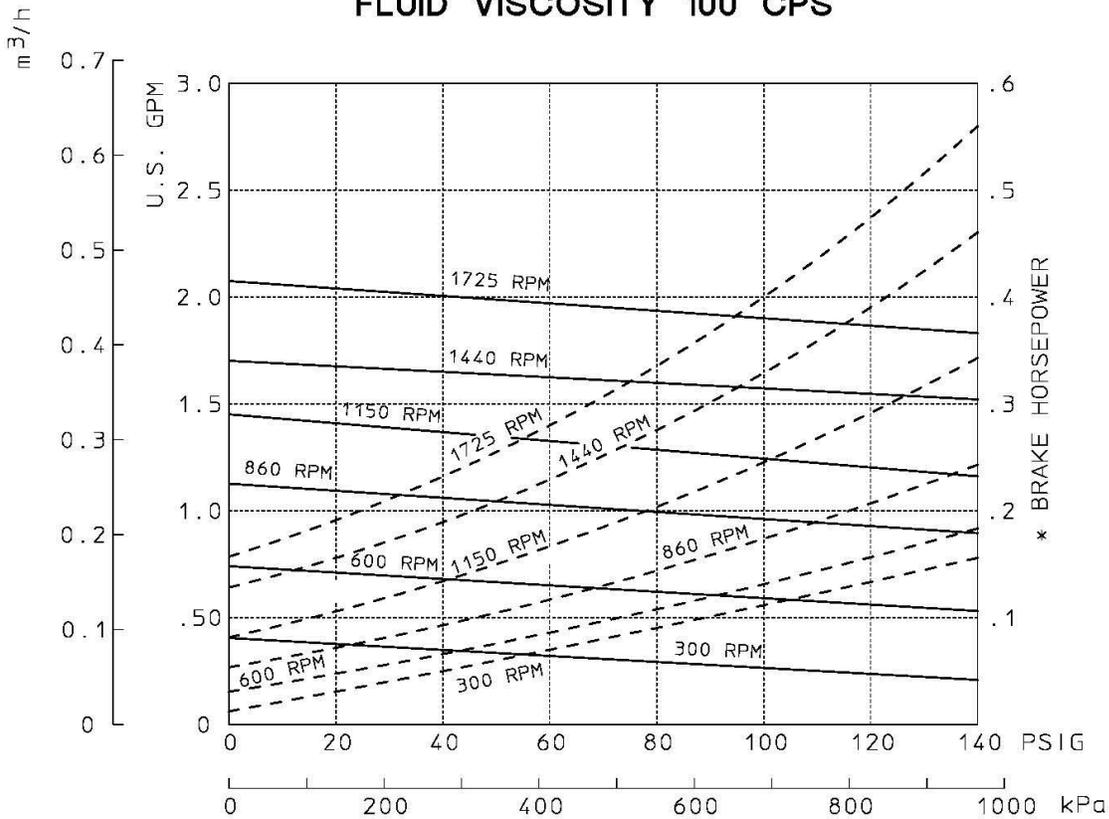
\* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

<b>Isochem</b>	<b>PULSAFEEDER</b> A Unit of IDEX Corporation
PERFORMANCE CURVE GMC4 EXTENDED PRESSURE NARROW WIDTH GEARS	
DWN BY: PTP	<b>AE00047-003</b>
DATE: 02/11/98	

SECTION/PAGE	GMC4 / 15
EFFECTIVE	07/11/13
SUPERSEDES	12/01/07
REF	REMOVED GM4 FROM DESCRIPTION
	REVISION UPDATE
	07/11/13
	DATE

**GMC4 ISOICHEM PUMP  
NARROW WIDTH GEARS  
1/2" PORTS**

**FLUID VISCOSITY 100 CPS**



NOTES: 1. TFE GEARS AND BEARINGS LIMITED TO 100 PSIG

\* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

<b>Isachem</b>	<b>PULSAFEEDER</b> A Unit of IDEX Corporation
PERFORMANCE CURVE GMC4 EXTENDED PRESSURE NARROW WIDTH GEARS	
DWN BY: PTP	<b>AE00047-004</b>
DATE: 02/11/98	

SECTION/PAGE	GMC4 / 16
EFFECTIVE	07/11/13
SUPERSEDES	12/01/97
REF	REVISION UPDATE
DATE	07/11/13

ITEM CLASS GMC4 = IK  
 PRODUCT LINE = H / Isochem

## GMC4 SERIES PUMP CONSOLIDATED B / M

SECTION: MODEL GMC4  
 PAGE: 204  
 DATE REV: 11 / 12 / 12  
 SUPERSEDES: 05 / 31 / 07

DESCRIPTION		QTY	STANDARD PUMP MATERIAL						ITEM
			316 SS (A, K, OR U)		ALLOY C (C, M, OR V)		ALLOY 20 (D, N, OR W)		
			PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	
<b>POSITION 3 STANDARD PUMP - NON-VARIABLE COMPONENTS</b>									
	HOUSING, CENTER FNPT	1	70014	316 SS	70016	ALLOY C	70015	ALLOY 20	2
	HOUSING, CENTER FBSPT		70020	316 SS	70022	ALLOY C	70021	ALLOY 20	2
	HOUSING, CENTER FLANGED		NG040004-316	316 SS	NG040004-HC0	ALLOY C	NG040004-020	ALLOY 20	2
	HOUSING, REAR	1	70214	316 SS	70215	ALLOY C	70216	ALLOY 20	1
	# RING, RETAINING	6	76706	316 SS	76701	ALLOY C	76701	ALLOY C	14
	# KEY, METAL DRIVE GEAR	*1	71930	316 SS	71904	ALLOY C	71906	ALLOY 20	8
	# KEY, PLASTIC DRIVE GEAR		71929	316 SS	71903	ALLOY C	71905	ALLOY 20	8
	# KEY, MTL/CBN IDLER GEAR	*1	71930	316 SS	71904	ALLOY C	71906	ALLOY 20	8
	# KEY, PLASTIC IDLER GEAR		71929	316 SS	71903	ALLOY C	71905	ALLOY 20	8
	# KEY, MAGNETIC CPLG - DRIVE	1	71933	316 SS	71926	ALLOY C	71925	ALLOY 20	8
	# O-RING, HOUSING	2	61101	TFE	61101	TFE	61101	TFE	12
	PIN, HOUSING	4	40801	316 SS	40801	316 SS	40801	316 SS	13
	BOLT, HOUSING	4	72006	188 SS	72006	188 SS	72006	188 SS	15
	NUT, HOUSING BOLT	4	72101	188 SS	72101	188 SS	72101	188 SS	16
	NAMEPLATE	1	41210	188 SS	41210	188 SS	41210	188 SS	--

**POSITIONS 9, 10, AND 11 OPTIONS - DELETE CORRESPONDING STANDARD PUMP COMPONENT FROM B/M**

V	HOUSING, CENTER - VENT FNPT	1	70014-2	316 SS	70016-2	ALLOY C	70015-2	ALLOY 20	2	
	HOUSING, CENTER - VENT FBSPT		70020-2	316 SS	70022-2	ALLOY C	70021-2	ALLOY 20	2	
	HOUSING, CENTER - VENT FLANGED		NG040008-316	316 SS	NG040008-HC0	ALLOY C	NG040008-020	ALLOY 20	2	
	PLUG, 1/8" NPT	*1	W772565-316	316 SS	52301	ALLOY C	52300	ALLOY 20	27	
A	HOUSING, REAR - BRG FLUSH	1	70212	316 SS	70234	ALLOY C	70233	ALLOY 20	1	
	PLUG, 1/8" NPT	*2	W772565-316	316 SS	52301	ALLOY C	52300	ALLOY 20	27	
B	# PIN, BEARING LOCK	3-4	41802	ALLOY 20	41806	ALLOY C	41802	ALLOY 20	10	
	# O-RING, HOUSING	2	61104	SS / PFA	61104	SS / PFA	61104	SS / PFA	12	
	# O-RING, FRONT HOUSING	1	61109	SS / PFA	61109	SS / PFA	61109	SS / PFA	28	
D	# BEARING, SLOTTED	5	70419	CARBON	70419	CARBON	70419	CARBON	9	
	# WEAR PLATE, SLOTTED	4	70509	CARBON	70509	CARBON	70509	CARBON	11	
F	# WEAR PLATE - NON-RECIRCULATION	4	70501	CARBON	70501	CARBON	70501	CARBON	11	
	# WEAR PLATE - NON-RECIRC (NWG)		70536	CARBON	70536	CARBON	70536	CARBON	11	
	# WEAR PLATE - NON-RECIRCULATION		**4	70504	TFE (GF)	70504	TFE (GF)	70504	TFE (GF)	11
	# WEAR PLATE - NON-RECIRCULATION		70503	CERAMIC	70503	CERAMIC	70503	CERAMIC	11	
	# WEAR PLATE - NON-RECIRCULATION		70535	PEEK	70535	PEEK	70535	PEEK	11	
M	CONTAINMENT CAN	1	79631	ALLOY C	-----	-----	-----	-----	19	
	# GEAR, DRIVE / IDLER	1-2	70698	316 SS	-----	-----	-----	-----	6, 7	
N	# GEAR, DRIVE / IDLER	1-2	70613	ALLOY C	70613	ALLOY C	70613	ALLOY C	6, 7	
	# GEAR, DRIVE / IDLER	1-2	70633	ALLOY 20	-----	-----	70633	ALLOY 20	6, 7	
	# GEAR, IDLER	1	70651	CARBON	70651	CARBON	70651	CARBON	7	
	# GEAR, DRIVE / IDLER	1-2	70623	TFE (GF)	70623	TFE (GF)	70623	TFE (GF)	6, 7	
	# GEAR, DRIVE / IDLER	1-2	70677	PEEK	70677	PEEK	70677	PEEK	6, 7	
	# KEY, METAL DRIVE GEAR	*1	71931	316 SS	71911	ALLOY C	71910	ALLOY 20	8	
	# KEY, PLASTIC DRIVE GEAR		71932	316 SS	71917	ALLOY C	71916	ALLOY 20	8	
		# KEY, MTL / CBN IDLER GEAR	*1	71931	316 SS	71911	ALLOY C	71910	ALLOY 20	8
	# KEY, PLASTIC IDLER GEAR	71932		316 SS	71917	ALLOY C	71916	ALLOY 20	8	
S	DRVN MAG ASSY (WELDED) / (SAMAR)	1	79616	316 SS	79643	ALLOY C	79662	ALLOY 20	18	
	DRV MAG ASSY, 56C FR (SAMAR)		79604	STEEL	79604	STEEL	79604	STEEL	21	
	DRV MAG ASSY, 140TC FR (SAMAR)		79636	STEEL	79636	STEEL	79636	STEEL	21	
	DRV MAG ASSY, 71 FR (SAMAR)		79688	STEEL	79688	STEEL	79688	STEEL	21	
	DRV MAG ASSY, 80 FR (SAMAR)		79689	STEEL	79689	STEEL	79689	STEEL	21	
W	DRVN MAG ASSY (WELDED) / (SAMAR)	1	79616	316 SS	79650	ALLOY C	79665	ALLOY 20	18	
H	HIGH TEMPERATURE APPLICATION		COMBINE	PUMP	OPTIONS	B	AND	S		

\*\* QTY. 8 WHEN USING NARROW WIDTH GEARS.

\*COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B / M

# DENOTES RECOMMENDED SPARE PART

DWG: GM4P204

# GMC4 SERIES PUMP CONSOLIDATED B / M

SECTION: MODEL GMC4  
PAGE: 205  
DATE REV: 11 / 12 / 12  
SUPERSEDES: 11 / 12 / 04

		STANDARD PUMP MATERIAL						
		316 SS (A, K, OR U)		ALLOY C (C, M, OR V)		ALLOY 20 (D, N, OR W)		
DESCRIPTION	QTY	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	ITEM

**POSITION 4 & 5 DRIVE AND IDLER GEAR MATERIAL**

A	# GEAR, DRIVE/IDLER	1-2	70695	316 SS	-----	-----	-----	-----	6, 7
C	# GEAR, DRIVE/IDLER	1-2	70638	ALLOY C	70638	ALLOY C	70638	ALLOY C	6, 7
D	# GEAR, DRIVE/IDLER	1-2	70642	ALLOY 20	-----	-----	70642	ALLOY 20	6, 7
K	# GEAR, IDLER	1	70611	CARBON	70611	CARBON	70611	CARBON	6, 7
T	# GEAR, DRIVE/IDLER	1-2	70600	TFE (GF)	70600	TFE (GF)	70600	TFE (GF)	7
E	# GEAR, DRIVE/IDLER	1-2	70671	PEEK	70671	PEEK	70671	PEEK	6, 7

**POSITION 6 WEAR PLATE MATERIAL - \*\*QTY 8 WHEN USING NARROW WIDTH GEARS**

K	# WEAR PLATE, RECIRCULATION	**4	70531	CARBON	70531	CARBON	70531	CARBON	11
T	# WEAR PLATE, RECIRCULATION		70532	TFE (GF)	70532	TFE (GF)	70532	TFE (GF)	11
Z	# WEAR PLATE, RECIRCULATION		70533	CERAMIC	70533	CERAMIC	70533	CERAMIC	11
E	# WEAR PLATE, RECIRCULATION		70542	PEEK	70542	PEEK	70542	PEEK	11

**POSITION 7 SHAFT AND BEARING MATERIAL**

**STANDARD CONSTRUCTION**

K	# SHAFT, DRIVE	1	70396	316 SS	70301	ALLOY C	70305	ALLOY 20	4
	# SHAFT, IDLER	1	70378	316 SS	70379	ALLOY C	70380	ALLOY 20	5
	# BEARING, DRIVE/IDLER SHAFT	5	70404	CARBON	70404	CARBON	70404	CARBON	9
	# PIN, BEARING LOCK - DRIVEN	1	41808	316 SS	41809	ALLOY C	41810	ALLOY 20	31
	# PIN, BEARING LOCK	3	41801	TFE	41801	TFE	41801	TFE	10
L	# SHAFT, DRIVE	1	70396	316 SS	70301	ALLOY C	70305	ALLOY 20	4
	# SHAFT, IDLER	1	70378	316 SS	70379	ALLOY C	70380	ALLOY 20	5
	# BEARING, DRIVE/IDLER SHAFT	5	70431	EWCBN	70431	EWCBN	70431	EWCBN	9
	# PIN, BEARING LOCK - DRIVEN	1	41808	316 SS	41809	ALLOY C	41810	ALLOY 20	31
	# PIN, BEARING LOCK	3	41801	TFE	41801	TFE	41801	TFE	10
T	# SHAFT, DRIVE	1	70396	316 SS	70301	ALLOY C	70305	ALLOY 20	4
	# SHAFT, IDLER	1	70378	316 SS	70379	ALLOY C	70380	ALLOY 20	5
	# BEARING, DRIVE SHAFT	1	70401	TFE (GF)	70401	TFE (GF)	70401	TFE (GF)	9
	# BEARING, DRIVE/IDLER SHAFT	3	70402	TFE (GF)	70402	TFE (GF)	70402	TFE (GF)	9
	# PIN, BEARING LOCK	4	41801	TFE	41801	TFE	41801	TFE	10

**EXTENDED/WEAR - BOTH SHAFTS**

C	# SHAFT, DRIVE	1	70393	"CW"	70303	"CW"	70307	"CW"	4
	# SHAFT, IDLER	1	70394	"CW"	70397	"CW"	70308	"CW"	5
	# BEARING, DRIVE SHAFT	5	70431	EWCBN	70431	EWCBN	70431	EWCBN	9
	# PIN, BEARING LOCK - DRIVEN	1	41808	316 SS	41809	ALLOY C	41810	ALLOY 20	31
	# PIN, BEARING LOCK	3	41801	TFE	41801	TFE	41801	TFE	10

**CORROSION/WEAR ("CW") - BOTH SHAFTS**

B	# SHAFT, DRIVE	1	70393	"CW"	70303	"CW"	70307	"CW"	4
	# SHAFT, IDLER	1	70394	"CW"	70397	"CW"	70308	"CW"	5
	# BEARING, DRIVE/IDLER SHAFT	5	70428	SICBD	70428	SICBD	70428	SICBD	9
	# PIN, BEARING LOCK - DRIVEN	1	41808	316 SS	41809	ALLOY C	41810	ALLOY 20	31
	# PIN, BEARING LOCK	3	41801	TFE	41801	TFE	41801	TFE	10

\*COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B / M

DWG: GM4P205

# DENOTES RECOMMENDED SPARE PART

# GMC4 SERIES PUMP CONSOLIDATED B / M

SECTION: MODEL GMC4  
PAGE: 206  
DATE REV: 11 / 12 / 12  
SUPERSEDES: 02 / 12 / 01

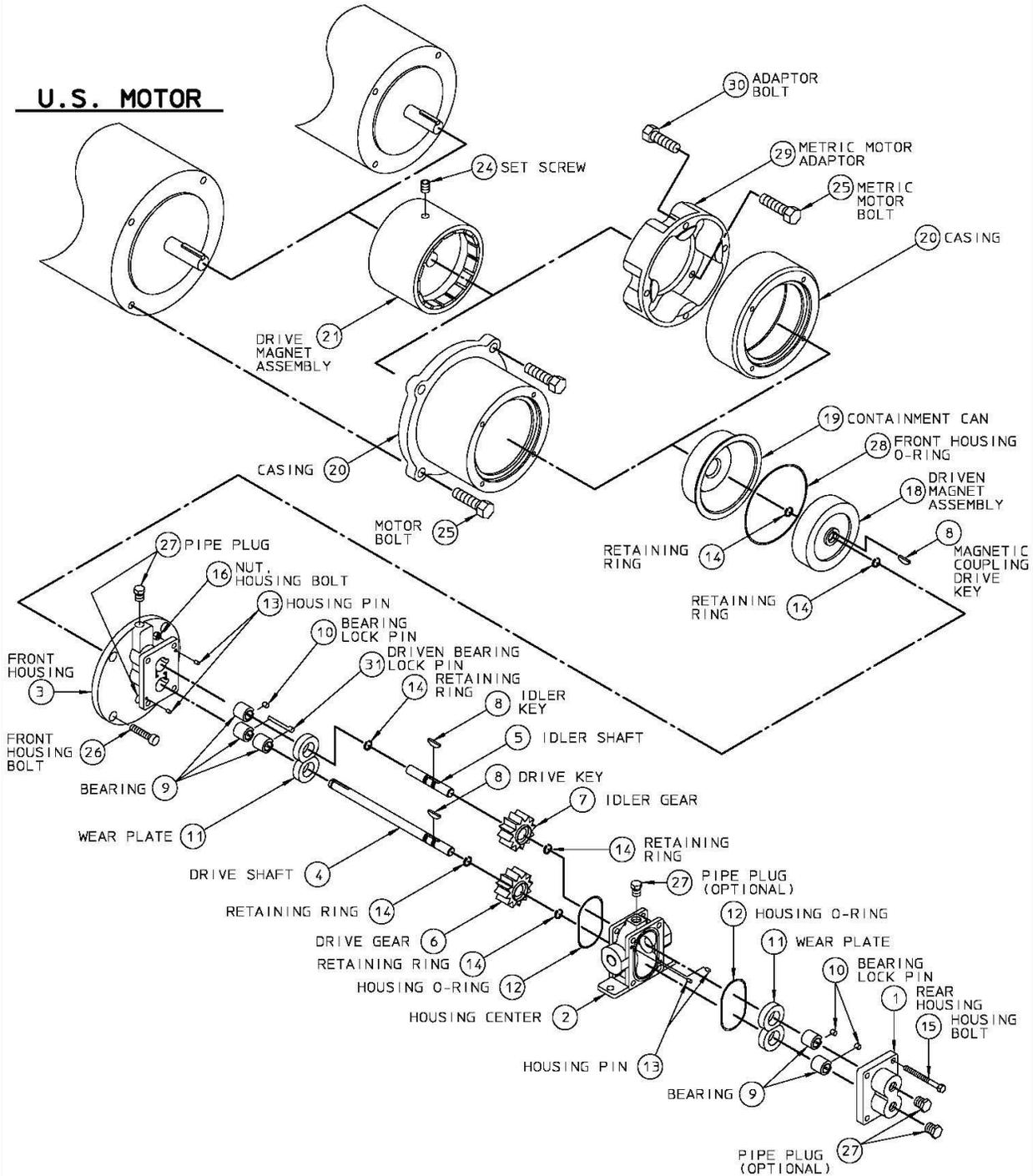
DESCRIPTION		QTY	STANDARD PUMP MATERIAL						ITEM
			316 SS (A, K, OR U)	ALLOY C (C, M, OR V)	ALLOY 20 (D, N, OR W)	PART NUMBER	MATERIAL	PART NUMBER	
<b>POSITION 8 MAGNETIC COUPLING COMPONENTS</b>									
COMMON PARTS	HOUSING, FRONT	1	70140	316 SS	70141	ALLOY C	70144	ALLOY 20	3
	CONTAINMENT CAN	1	79672	316 SS	79631	ALLOY C	79631	ALLOY C	19
	DRIVEN MAGNET ASSY	1	79691	316 SS	79692	ALLOY C	79693	ALLOY 20	18
	# O-RING, FRONT HOUSING	1	W209787-TFE	TFE	W209787-TFE	TFE	W209787-TFE	TFE	28
	BOLT, FRONT HOUSING	4	16717	188 SS	16717	188 SS	16717	188 SS	26
	PLUG, 1 / 8" NPT	*2	W772565-316	316 SS	52301	ALLOY C	52300	ALLOY 20	27
SET SCREW, DRIVE MAGNET ASSY	1	W771004-019	STEEL	W771004-019	STEEL	W771004-019	STEEL	24	
<b>56C FRAME COMPONENTS</b>									
F	CASING, 56C / 140TC FR	1	79610	ALUMINUM	79610	ALUMINUM	79610	ALUMINUM	20
	DRIVE MAGNET ASSEMBLY, 56C FR	1	79684	STEEL	79684	STEEL	79684	STEEL	21
	BOLT, MOTOR	4	W770425-STL	STEEL	W770425-STL	STEEL	W770425-STL	STEEL	25
<b>140TC FRAME COMPONENTS</b>									
O	CASING, 56C / 140TC FR	1	79610	ALUMINUM	79610	ALUMINUM	79610	ALUMINUM	20
	DRIVE MAGNET ASSEMBLY, 140TC FR	1	79685	STEEL	79685	STEEL	79685	STEEL	21
	BOLT, MOTOR	4	W770425-STL	STEEL	W770425-STL	STEEL	W770425-STL	STEEL	25
<b>71 METRIC FRAME COMPONENTS</b>									
J	CASING, 71 FRAME METRIC	1	79681	ALUMINUM	79681	ALUMINUM	79681	ALUMINUM	20
	DRIVE MAGNET ASSEMBLY, 71 FR	1	79686	STEEL	79686	STEEL	79686	STEEL	21
	MOTOR ADAPTOR, 71 FR METRIC	1	79679	ALUMINUM	79679	ALUMINUM	79679	ALUMINUM	29
	BOLT, MOTOR ADAPTOR	4	16722	STEEL	16722	STEEL	16722	STEEL	30
	BOLT, MOTOR	4	NP990415-STL	STEEL	NP990415-STL	STEEL	NP990415-STL	STEEL	25
<b>80 METRIC FRAME COMPONENTS</b>									
K	CASING, 80 FRAME METRIC	1	79681	ALUMINUM	79681	ALUMINUM	79681	ALUMINUM	20
	DRIVE MAGNET ASSEMBLY, 80 FR	1	79687	STEEL	79687	STEEL	79687	STEEL	21
	MOTOR ADAPTOR, 80 FR METRIC	1	79680	ALUMINUM	79680	ALUMINUM	79680	ALUMINUM	29
	BOLT, MOTOR ADAPTOR	4	16722	STEEL	16722	STEEL	16722	STEEL	30
	BOLT, MOTOR	4	NP990415-STL	STEEL	NP990415-STL	STEEL	NP990415-STL	STEEL	25

\* COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B / M  
# DENOTES RECOMMENDED SPARE PART

DWG: GM4P206

# METRIC MOTOR

## U.S. MOTOR

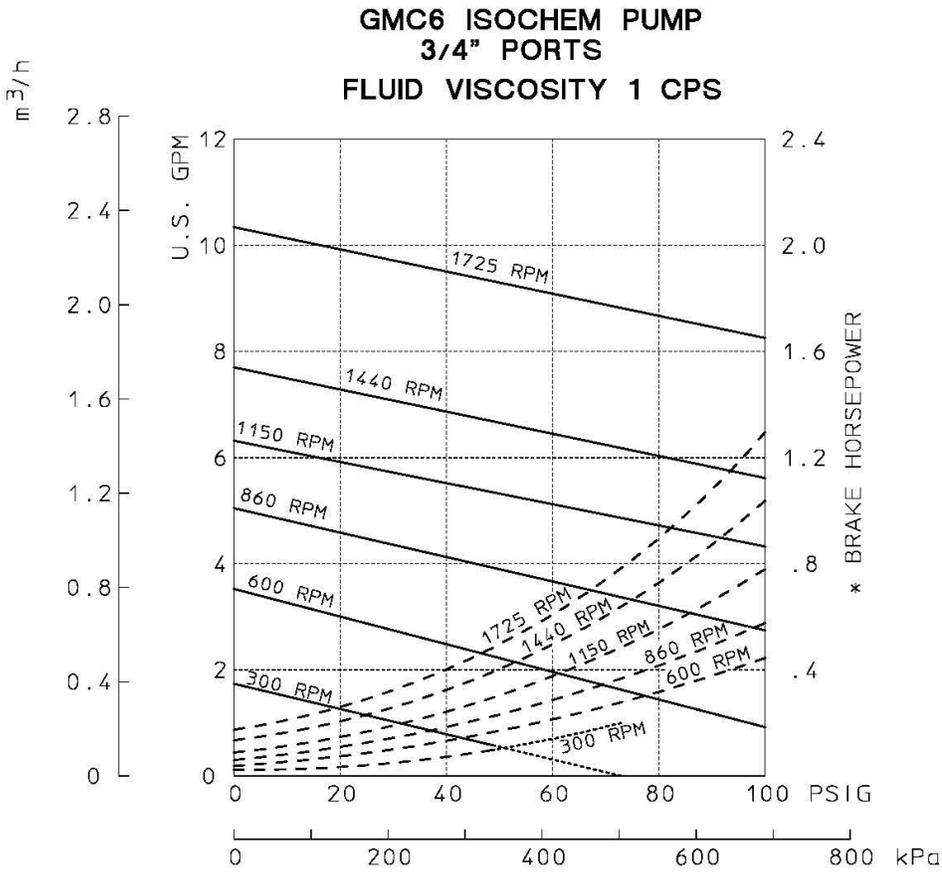


**Isochem** **PULSAFEEDER**  
A Unit of IDEX Corporation

MODEL GMC2/4  
ISOICHEM PUMP  
EXPLODED VIEW

SECTION/PAGE	MODEL GMC2 / 400	EFFECTIVE	07/11/13
REF	REMOVED GM2/4 FROM DESCRIPTION	DATE	07/11/13
REF	REVISION UPDATE	DATE	10/06/06
		SUPERSEDES	10/06/06
		DWN BY:	CLA
		DATE:	09/22/97
			<b>SD2889</b>

FOR: \_\_\_\_\_ SERIAL NO.: \_\_\_\_\_  
 CUSTOMER P.O. NO: \_\_\_\_\_ SERIAL NO.: \_\_\_\_\_  
 ITEM: GMC6 DATED: \_\_\_\_\_ BY: \_\_\_\_\_ PULSA. ORDER NO.: \_\_\_\_\_  
 TAGGING: \_\_\_\_\_



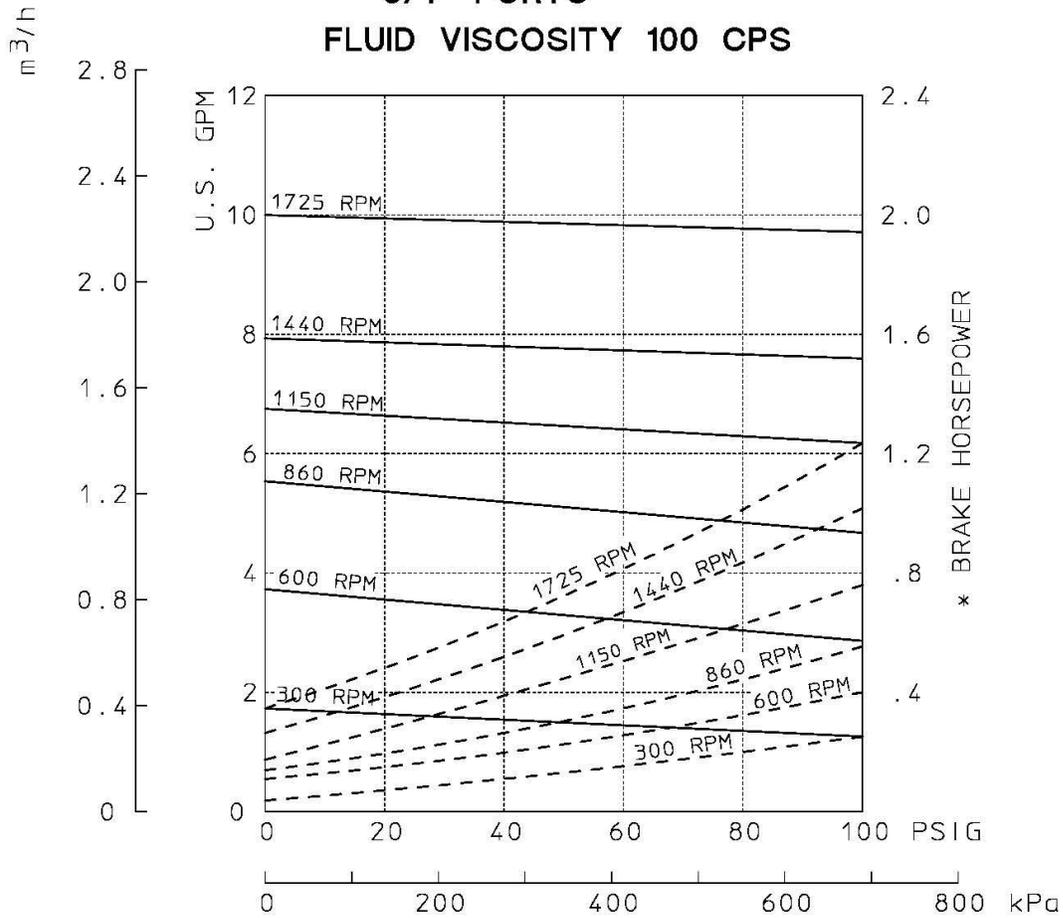
\* BRAKE HORSEPOWER SHOWN AS DASHED CURVES



PERFORMANCE CURVE  
 GMC6

SECTION/PAGE		GMC6 / 10		DWN BY: PTP		AE00048-001
EFFECTIVE		07/11/13		DATE: 02/11/98		
REF	REVISION UPDATE	DATE	SUPERSEDES	12/01/97		
△	REMOVED GM6 FROM DESCRIPTION	07/11/13	EFFECTIVE	07/11/13		

**GMC6 ISOICHEM PUMP  
3/4" PORTS  
FLUID VISCOSITY 100 CPS**



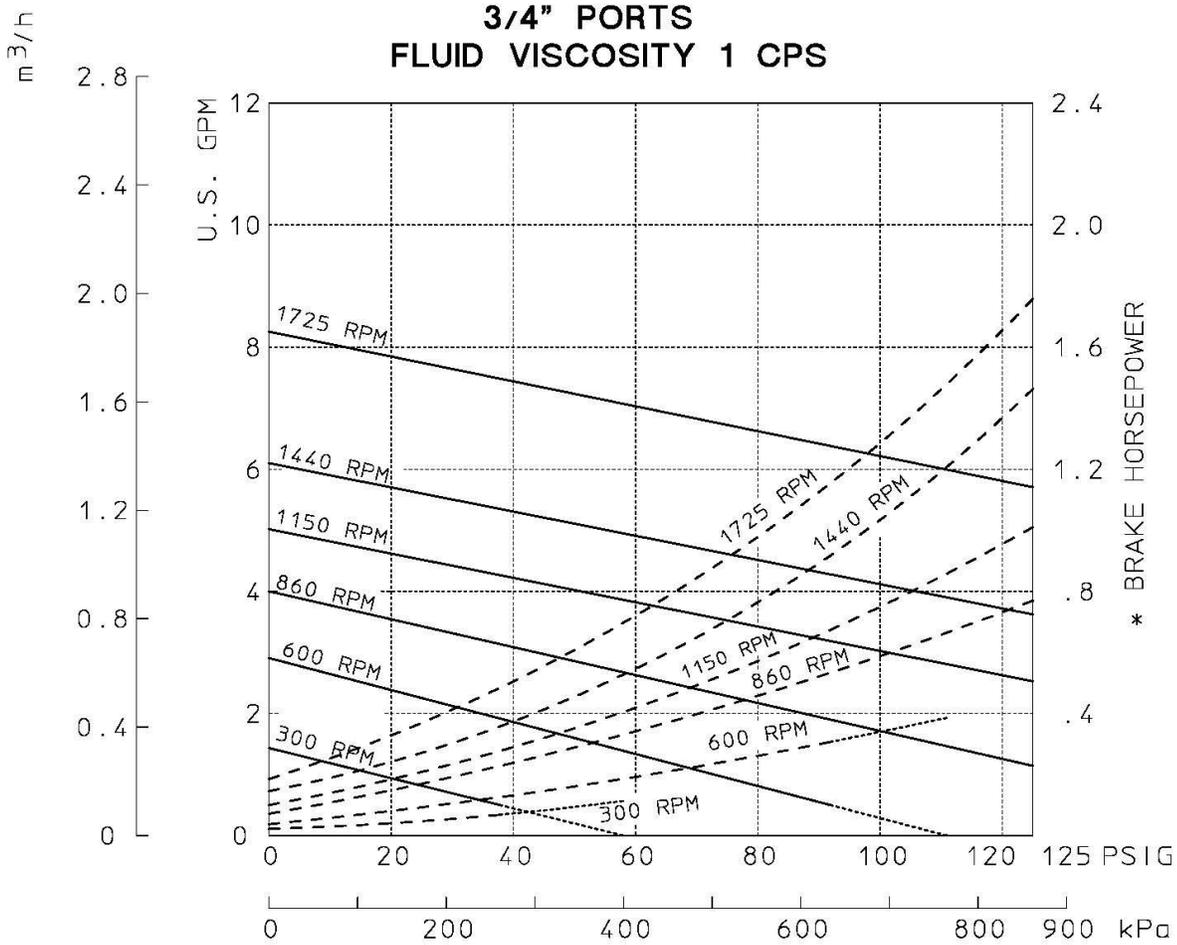
\* BRAKE HORSEPOWER SHOWN AS DASHED CURVES



**PERFORMANCE CURVE  
GMC6**

SECTION/PAGE		GMC6 / 14		DWN BY: PTP	
EFFECTIVE		07/11/13		DATE: 02/11/98	
SUPERSEDES		12/01/97		<b>AE00048-002</b>	
REF	REMOVED GM6 FROM DESCRIPTION	07/11/13	DATE		
	REVISION UPDATE				

**GMC6 ISOICHEM PUMP  
NARROW WIDTH GEARS  
3/4" PORTS  
FLUID VISCOSITY 1 CPS**



NOTES: 1. TFE GEARS AND BEARINGS LIMITED TO 100 PSIG

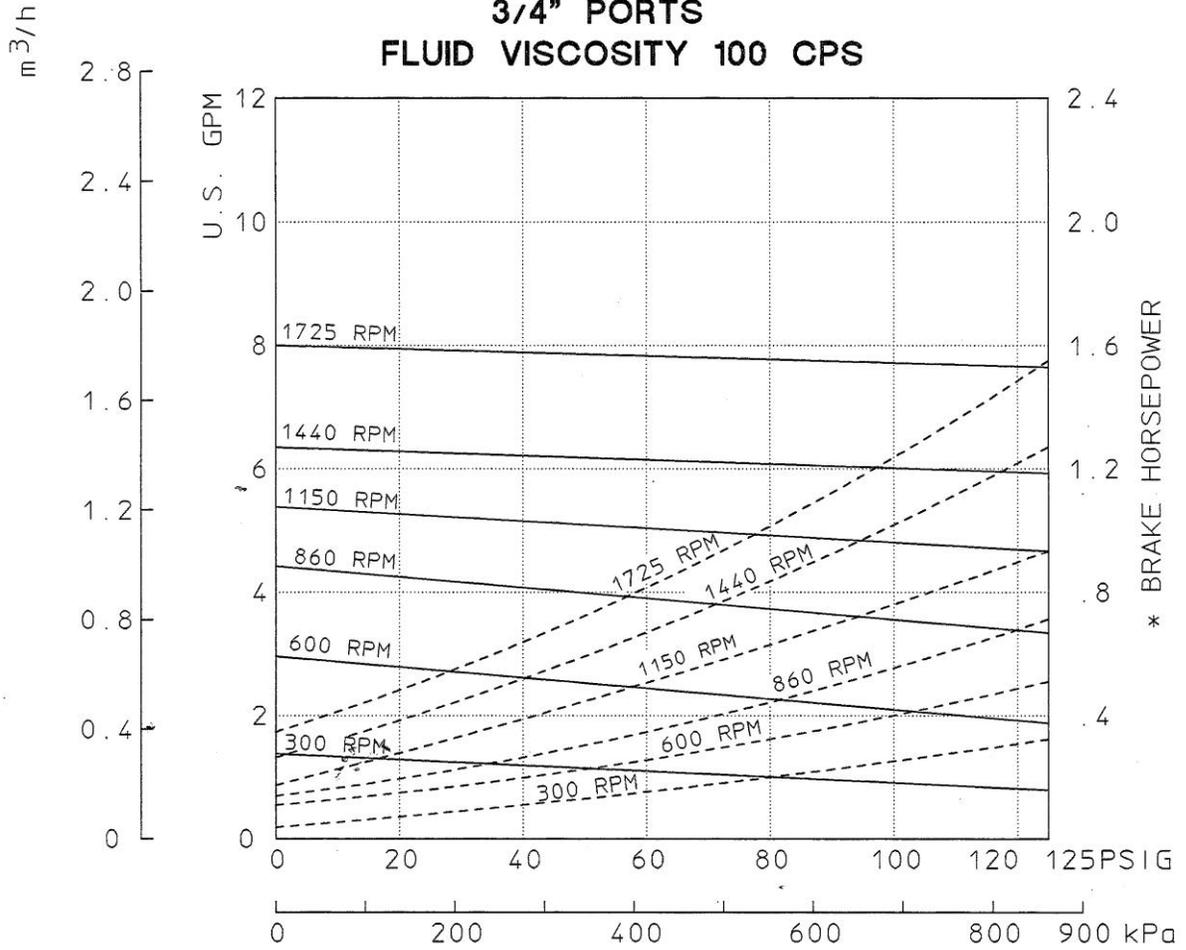
\* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

<b>Isochem</b>	<b>PULSAFEEDER</b> A Unit of IDEX Corporation
PERFORMANCE CURVE GMC6 EXTENDED PRESSURE NARROW WIDTH GEARS	
DWN BY: PTP	<b>AE00048-003</b>
DATE: 02/11/98	

SECTION/PAGE	GMC6 / 15
EFFECTIVE	07/11/13
SUPERSEDES	05/26/99

REF	REMOVED GM6 FROM DESCRIPTION	07/11/13
	REVISION UPDATE	DATE

**GMC6 ISOICHEM PUMP  
NARROW WIDTH GEARS  
3/4" PORTS  
FLUID VISCOSITY 100 CPS**



NOTES: 1. TFE GEARS AND BEARINGS LIMITED TO 100 PSIG

\* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

SECTION/PAGE		GMC6 / 16		<b>Isochem</b> <b>PULSAFEEDER</b> <small>A Unit of IDEX Corporation</small>	PERFORMANCE CURVE GMC6 EXTENDED PRESSURE NARROW WIDTH GEARS
EFFECTIVE		07/11/13			
REF	REMOVED GM FROM DESCRIPTION	07/11/13	DATE	SUPERSEDES	12/01/97
REF	REVISION UPDATE	DATE			
				DATE: 02/11/98	AE00048-004

ITEM CLASS GMC6 = IL  
 PRODUCT LINE = H / ISOCHEM

**ISOICHEM GMC6 SERIES PUMP  
 CONSOLIDATED B / M**

SECTION: MODEL GMC6  
 PAGE: 204  
 DATE REV.: 06 / 24 / 14  
 SUPERSEDES: 11 / 12 / 12

DESCRIPTION	QTY	STANDARD PUMP MATERIAL						ITEM
		316 SS (A, K, OR U)		ALLOY C (C, M, OR V)		ALLOY 20 (D, N, OR W)		
		PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	
<b>POSITION 3 STANDARD PUMP - NON-VARIABLE COMPONENTS</b>								
HOUSING, CENTER FNPT	1	40002	316 SS	40006	ALLOY C	40008	ALLOY 20	2
HOUSING, CENTER FBSPT		40011	316 SS	40023	ALLOY C	40017	ALLOY 20	2
HOUSING, CENTER FLANGED		NG040002-316	316 SS	NG040002-HCO	ALLOY C	NG040002-020	ALLOY 20	2
HOUSING, REAR	1	40218	316 SS	40219	ALLOY C	40220	ALLOY 20	1
# RING, RETAINING	6	46713	316 SS	46701	ALLOY C	46701	ALLOY C	14
# KEY, METAL DRIVE GEAR	*1	41937	316 SS	41903	ALLOY C	41905	ALLOY 20	8
# KEY, PLASTIC DRIVE GEAR		41938	316 SS	41904	ALLOY C	41906	ALLOY 20	8
# KEY, MTL / CBN IDLER GEAR	*1	41937	316 SS	41903	ALLOY C	41905	ALLOY 20	8
# KEY, PLASTIC IDLER GEAR		41938	316 SS	41904	ALLOY C	41906	ALLOY 20	8
# KEY, MAGNETIC CPLG - DRIVEN	1	41939	316 SS	41934	ALLOY C	41933	ALLOY 20	8
# PIN, BEARING LOCK	4	41801	TFE	41801	TFE	41801	TFE	10
# O-RING, HOUSING	2	41101	TFE	41101	TFE	41101	TFE	12
PIN, HOUSING	4	40801	316 SS	40801	316 SS	40801	316 SS	13
BOLT, HOUSING	4	62005	188 SS	62005	188 SS	62005	316 SS	15
NUT, HOUSING BOLT	4	62101	188 SS	62101	188 SS	62101	188 SS	16
NAMEPLATE	1	41210	188 SS	41210	188 SS	41210	188 SS	--

**POSITIONS 9, 10, AND 11 OPTIONS - DELETE CORRESPONDING STANDARD PUMP COMPONENT FROM B/M**

V	HOUSING, CENTER - VENT FNPT	1	40002-2	316 SS	40006-2	ALLOY C	40008-2	ALLOY 20	2
	HOUSING, CENTER - VENT FBSPT		40011-2	316 SS	40023-2	ALLOY C	40017-2	ALLOY 20	2
	HOUSING, CENTER - VENT FLANGED		NG040009-316	316 SS	NG040009-HCO	ALLOY C	NG040009-020	ALLOY 20	2
	PLUG, 1 / 8" NPT	*1	W772565-316	316 SS	52301	ALLOY C	52300	ALLOY 20	27
A	HOUSING, REAR - BRG FLUSH	1	40224	316 SS	40231	ALLOY C	40234	ALLOY 20	1
	PLUG, 1 / 8" NPT	*2	W772565-316	316 SS	52301	ALLOY C	52300	ALLOY 20	27
C	# PIN, BEARING LOCK	4	41802	ALLOY 20	41806	ALLOY C	41802	ALLOY 20	10
	# O-RING, HOUSING	2	41107	SS / PFA	41107	SS / PFA	41107	SS / PFA	12
D	# O-RING, FRONT HOUSING	1	41112	SS / PFA	41112	SS / PFA	41112	SS / PFA	28
	# BEARING, SLOTTED	4	40428	CARBON	40428	CARBON	40428	CARBON	9
E	# WEAR PLATE, SLOTTED	4	40511	CARBON	40511	CARBON	40511	CARBON	11
	# WEAR PLATE, SLOTTED		40513	TFE (GF)	40513	TFE (GF)	40513	TFE (GF)	11
F	# WEAR PLATE - NON-RECIRCULATION	4	40501	CARBON	40501	CARBON	40501	CARBON	11
	# WEAR PLATE - NON-RECIRCULATION		40504	TFE (GF)	40504	TFE (GF)	40504	TFE (GF)	11
	# WEAR PLATE - NON-RECIRCULATION		40503	CERAMIC	40503	CERAMIC	40503	CERAMIC	11
	# WEAR PLATE - NON-RECIRCULATION		40523	PEEK	40523	PEEK	40523	PEEK	11
M	CONTAINMENT CAN	1	49605	ALLOY C	----	----	----	----	19
N	# GEAR, DRIVE / IDLER	1-2	40727	316 SS	----	----	----	----	6, 7
	# GEAR, DRIVE / IDLER	1-2	40604	ALLOY C	40604	ALLOY C	40604	ALLOY C	6, 7
	# GEAR, IDLER	1	40681	CARBON	40681	CARBON	40681	CARBON	7
	# GEAR, DRIVE / IDLER	1-2	40648	TFE (GF)	40648	TFE (GF)	40648	TFE (GF)	6, 7
	# GEAR, DRIVE / IDLER	1-2	40717	PEEK	40717	PEEK	40717	PEEK	6, 7
	# KEY, METAL DRIVE GEAR	*1	41940	316 SS	41913	ALLOY C	41920	ALLOY 20	8
	# KEY, PLASTIC DRIVE GEAR		41941	316 SS	41914	ALLOY C	41921	ALLOY 20	8
	# KEY, MTL / CBN IDLER GEAR	*1	41940	316 SS	41913	ALLOY C	41920	ALLOY 20	8
	# KEY, PLASTIC IDLER GEAR		41941	316 SS	41914	ALLOY C	41921	ALLOY 20	8
	S	DRVN MAG ASSY (WELDED) / (SAMAR)	1	49616	316 SS	49643	ALLOY C	49664	ALLOY 20
DRV MAG ASSY, 56C FR (SAMAR.)		49604		STEEL	49604	STEEL	49604	STEEL	21
DRV MAG ASSY, 140TC FR (SAMAR.)		49636		STEEL	49636	STEEL	49636	STEEL	21
DRV MAG ASSY, 80 FR (SAMAR.)		49735		STEEL	49735	STEEL	49735	STEEL	21
DRV MAG ASSY, 90 FR (SAMAR.)		49736		STEEL	49736	STEEL	49736	STEEL	21
W	DRVN MAG ASSY (WELDED) / (SAMAR)	1	49616	316 SS	49659	ALLOY C	49662	ALLOY 20	18
H	HIGH TEMPERATURE APPLICATION		COMBINE	PUMP	OPTIONS	B	AND	S	

\*COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B / M  
 # DENOTES RECOMMENDED SPARE PART

DWG: GM6P204

**ISOCHEM GMC6 SERIES PUMP  
CONSOLIDATED B / M**

SECTION: MODEL GMC6  
PAGE: 205  
DATE REV.: 11 / 12 / 12  
SUPERSEDES: 11 / 12 / 04

DESCRIPTION	QTY	STANDARD PUMP MATERIAL						ITEM
		316 SS (A, K, OR U)		ALLOY C (C, M, OR V)		ALLOY 20 (D, N, OR W)		
		PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	

**POSITION 4 & 5 DRIVE AND IDLER GEAR MATERIAL**

A	# GEAR, DRIVE / IDLER	1-2	40728	316 SS	-----	-----	-----	-----	6, 7
C	# GEAR, DRIVE / IDLER	1-2	40668	ALLOY C	40668	ALLOY C	40668	ALLOY C	6, 7
D	# GEAR, DRIVE / IDLER	1-2	40674	ALLOY 20	-----	-----	40674	ALLOY 20	6, 7
K	# GEAR, IDLER	1	40622	CARBON	40622	CARBON	40622	CARBON	7
T	# GEAR, DRIVE / IDLER	1-2	40600	TFE (GF)	40600	TFE (GF)	40600	TFE (GF)	6, 7
E	# GEAR, DRIVE / IDLER	1-2	40715	PEEK	40715	PEEK	40715	PEEK	6, 7

**POSITION 6 WEAR PLATE MATERIAL - \*\* QTY. 8 WHEN USING NARROW WIDTH GEARS**

K	# WEAR PLATE, RECIRCULATION	**4	40520	CARBON	40520	CARBON	40520	CARBON	11
T	# WEAR PLATE, RECIRCULATION		40521	TFE (GF)	40521	TFE (GF)	40521	TFE (GF)	11
Z	# WEAR PLATE, RECIRCULATION		40522	CERAMIC	40522	CERAMIC	40522	CERAMIC	11
E	# WEAR PLATE, RECIRCULATION		40524	PEEK	40524	PEEK	40524	PEEK	11

**POSITION 7 SHAFT AND BEARING MATERIAL**

STANDARD CONSTRUCTION									
K	# SHAFT, DRIVE	1	40326	316 SS	40305	ALLOY C	40317	ALLOY 20	4
	# SHAFT, IDLER	1	40360	316 SS	40362	ALLOY C	40374	ALLOY 20	5
	# BEARING, DRIVE / IDLER SHAFT	4	40426	CARBON	40426	CARBON	40426	CARBON	9
L	# SHAFT, DRIVE	1	40326	316 SS	40305	ALLOY C	40317	ALLOY 20	4
	# SHAFT, IDLER	1	40360	316 SS	40362	ALLOY C	40374	ALLOY 20	5
	# BEARING, DRIVE / IDLER SHAFT	4	40430	EWCBN	40430	EWCBN	40430	EWCBN	9
T	# SHAFT, DRIVE	1	40326	316 SS	40305	ALLOY C	40317	ALLOY 20	4
	# SHAFT, IDLER	1	40360	316 SS	40362	ALLOY C	40374	ALLOY 20	5
	# BEARING, DRIVE / IDLER SHAFT	4	40425	TFE (GF)	40425	TFE (GF)	40425	TFE (GF)	9

**EXTENDED / WEAR - BOTH SHAFTS**

C	# SHAFT, DRIVE	1	40322	"CW"	40303	"CW"	40318	"CW"	4
	# SHAFT, IDLER	1	40323	"CW"	40302	"CW"	40319	"CW"	5
	# BEARING, DRIVE / IDLER SHAFT	4	40430	EWCBN	40430	EWCBN	40430	EWCBN	9

**CORROSION / WEAR ("CW") - BOTH SHAFTS**

B	# SHAFT, DRIVE	1	40322	"CW"	40303	"CW"	40318	"CW"	4
	# SHAFT, IDLER	1	40323	"CW"	40302	"CW"	40319	"CW"	5
	# BEARING, DRIVE / IDLER SHAFT	4	40429	SICBD	40429	SICBD	40429	SICBD	9

E	# SHAFT, DRIVE	1	40326	316 SS	40305	ALLOY C	40317	ALLOY 20	4
	# SHAFT, IDLER	1	40360	316 SS	40362	ALLOY C	40374	ALLOY 20	5
	# BEARING, DRIVE / IDLER SHAFT	4	40431	PEEK	40431	PEEK	40431	PEEK	9

\* COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B / M

# DENOTES RECOMMENDED SPARE PART

DWG: GM6P205

## ISOCHEM GMC6 SERIES PUMP CONSOLIDATED B / M

SECTION: MODEL GMC6  
PAGE: 206  
DATE REV.: 06 / 24 / 14  
SUPERSEDES: 11 / 12 / 12

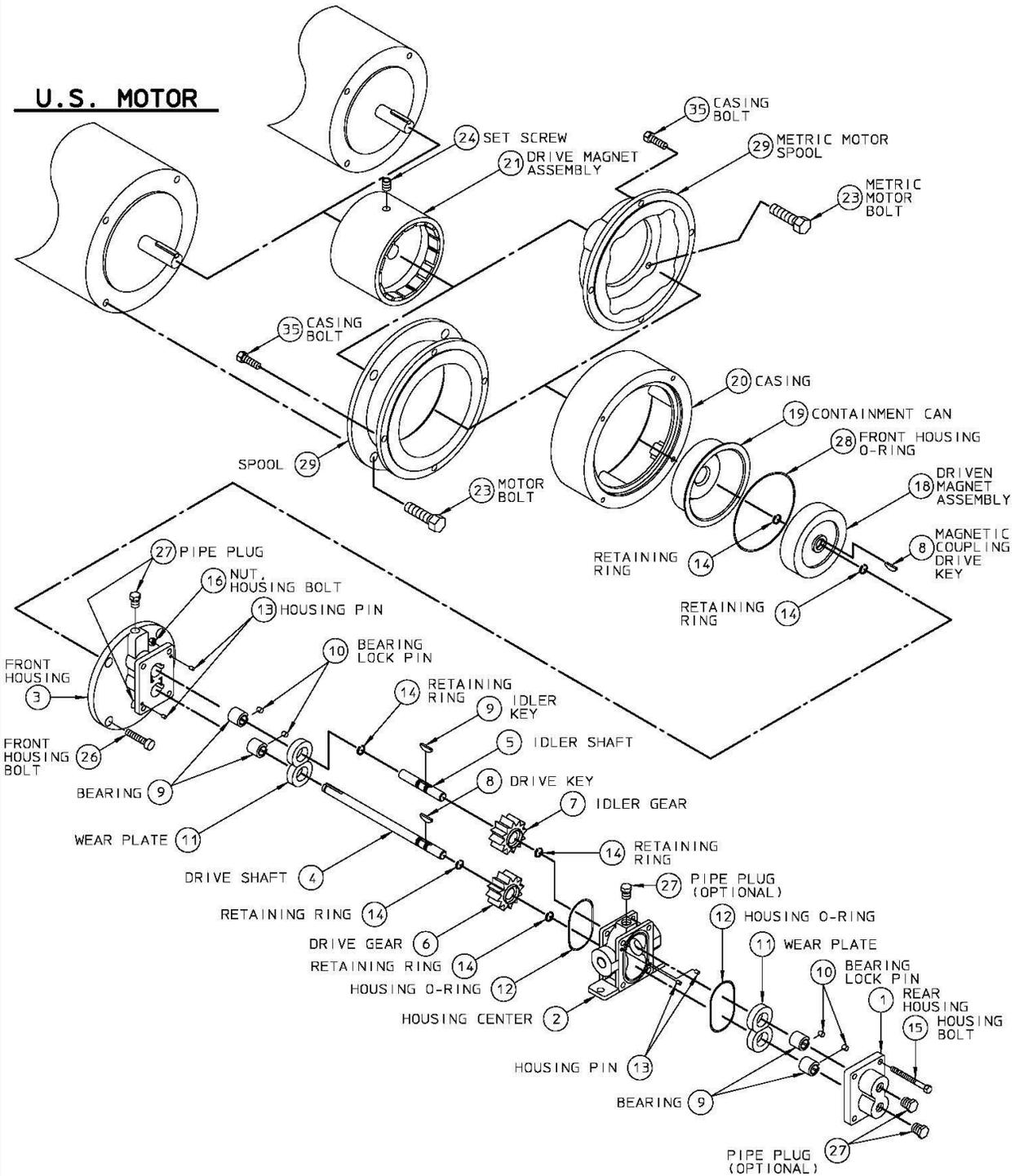
DESCRIPTION		QTY	STANDARD PUMP MATERIAL						ITEM
			316 SS (A, K, OR U)		ALLOY C (C, M, OR V)		ALLOY 20 (D, N, OR W)		
			PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	
<b>POSITION 8 MAGNETIC COUPLING COMPONENTS</b>									
COMMON PARTS	HOUSING, FRONT	1	40144	316SS	40145	ALLOY C	40148	ALLOY 20	3
	DRIVEN MAGNET ASSY	1	49738	316SS	49739	ALLOY C	49740	ALLOY 20	18
	CONTAINMENT CAN	1	49672	316SS	49605	ALLOY C	49605	ALLOY C	19
	CASING	1	49610	ALUMINUM	49610	ALUMINUM	49610	ALUMINUM	20
	# O-RING, FRONT HOUSING	1	W209729-TFE	TFE	W209729-TFE	TFE	W209729-TFE	TFE	28
	BOLT, FRONT HOUSING	4	W770198-188	188 SS	W770198-188	188 SS	W770198-188	188 SS	26
PIUG, 1/8" NPT	*2	W772565-316	316SS	52301	ALLOY C	52300	ALLOY 20	27	
<b>56C FRAME COMPONENTS</b>									
F	DRIVE MAGNET ASSEMBLY, 56C FR	1	49731	STEEL	49731	STEEL	49731	STEEL	21
	MOTOR SPOOL	1	49627	ALUMINUM	49627	ALUMINUM	49627	ALUMINUM	29
	BOLT, CASING	4	16722	STEEL	16722	STEEL	16722	STEEL	35
	BOLT, MOTOR	4	W770424-STL	STEEL	W770424-STL	STEEL	W770424-STL	STEEL	23
<b>140TC FRAME COMPONENTS</b>									
O	DRIVE MAGNET ASSEMBLY, 140TC FR	1	49732	STEEL	49732	STEEL	49732	STEEL	21
	MOTOR SPOOL	1	49627	ALUMINUM	49627	ALUMINUM	49627	ALUMINUM	29
	BOLT, CASING	4	16722	STEEL	16722	STEEL	16722	STEEL	35
	BOLT, MOTOR	4	W770424-STL	STEEL	W770424-STL	STEEL	W770424-STL	STEEL	23
<b>182 / 4TC FRAME COMPONENTS</b>									
R	DRIVE MAGNET ASSEMBLY, 182 / 4TC	1	NG200057-STL	STEEL	NG200057-STL	STEEL	NG200057-STL	STEEL	21
	MOTOR SPOOL	1	49627	ALUMINUM	49627	ALUMINUM	49627	ALUMINUM	29
	BOLT, CASING	4	16722	STEEL	16722	STEEL	16722	STEEL	35
	BOLT, MOTOR	4	W770424-STL	STEEL	W770424-STL	STEEL	W770424-STL	STEEL	23
	ADAPTOR, MOTOR 182 / 4TC	1	NG110018-ALU	ALUMINUM	NG110018-ALU	ALUMINUM	NG110018-ALU	ALUMINUM	23
	ADAPTOR, SCRFW	4	NP999006-STI	STEFFI	NP999006-STI	STEFFI	NP999006-STI	STEFFI	23
<b>80 METRIC FRAME COMPONENTS</b>									
K	DRIVE MAGNET ASSEMBLY, 80 FR	1	49733	STEEL	49733	STEEL	49733	STEEL	21
	MOTOR SPOOL	1	49727	ALUMINUM	49727	ALUMINUM	49727	ALUMINUM	29
	BOLT, CASING	4	16722	STEEL	16722	STEEL	16722	STEEL	35
	BOLT, MOTOR	4	NP990415-STL	STEEL	NP990415-STL	STEEL	NP990415-STL	STEEL	25
<b>90 METRIC FRAME COMPONENTS</b>									
L	DRIVE MAGNET ASSEMBLY, 90 FR	1	49734	STEEL	49734	STEEL	49734	STEEL	21
	MOTOR SPOOL	1	49728	ALUMINUM	49728	ALUMINUM	49728	ALUMINUM	29
	BOIT, CASING	4	16722	STEFFI	16722	STEFFI	16722	STEFFI	35
	BOLT, MOTOR	4	NP990478-STL	STEEL	NP990478-STL	STEEL	NP990478-STL	STEEL	25

\*COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B / M  
# DENOTES RECOMMENDED SPARE PART

DWG: GM6P206

# METRIC MOTOR

## U.S. MOTOR

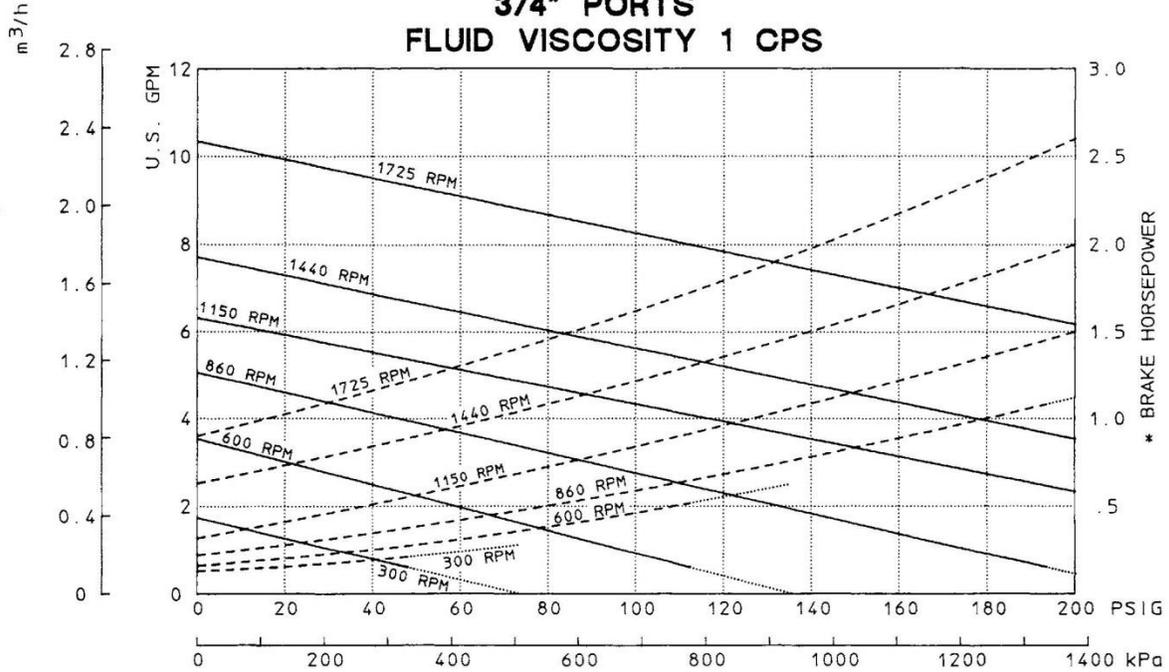


**Isochem** **PULSAFEEDER**  
A Unit of IDEX Corporation

MODEL GMC6/8  
ISOICHEM PUMP  
EXPLODED VIEW

SECTION/PAGE	MODEL GMC6 / 400	DWN BY: CLA	SD-2868
EFFECTIVE	07/11/13	DATE: 09/22/97	
REF	REVISION UPDATE	SUPERSEDES	
	07/11/13	10/06/06	

**GMH6 ISOCEM PUMP  
3/4" PORTS  
FLUID VISCOSITY 1 CPS**

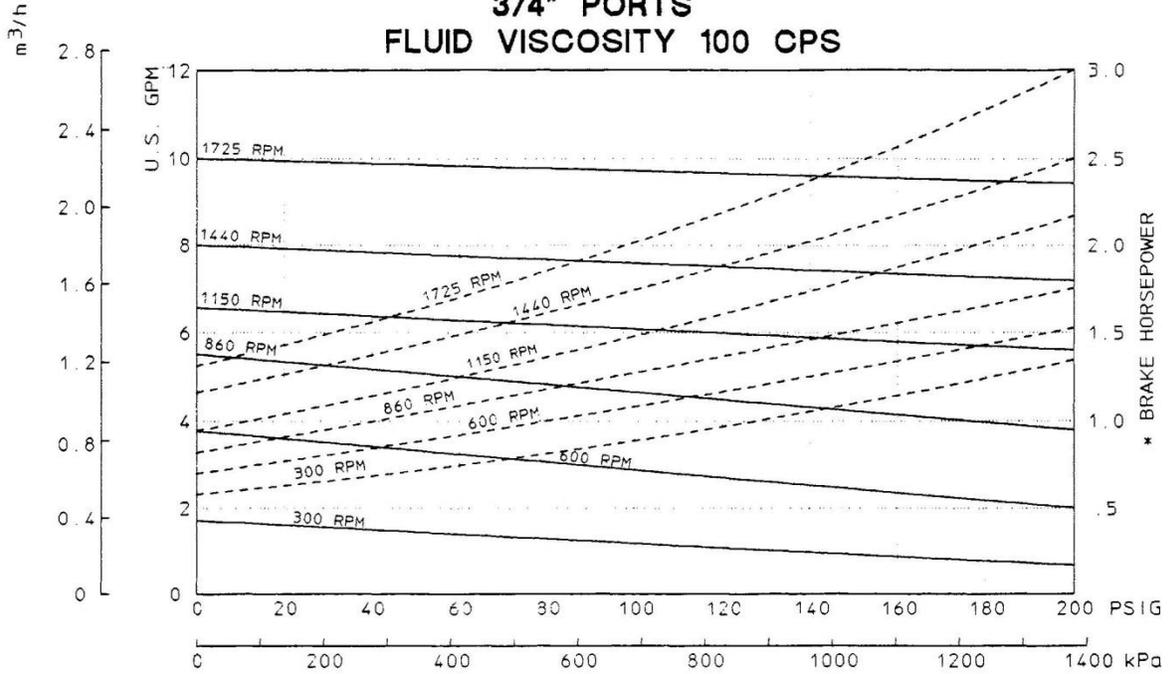


\* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

<b>Isochem</b>	<b>PULSAFEEDER</b> A Unit of IDEX Corporation
PERFORMANCE CURVE GMH6 EXTENDED PRESSURE	
DWN BY: PTP	AE00049-003
DATE: 02/11/98	

SECTION/PAGE	GMH6 / 12
EFFECTIVE	12/01/97
SUPERSEDES	NEW
REF	REVISION UPDATE
DATE	

**GMH6 ISOICHEM PUMP  
3/4" PORTS  
FLUID VISCOSITY 100 CPS**



\* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

<b>Isochem</b>	<b>PULSAFEEDER</b> A Unit of IDEX Corporation
PERFORMANCE CURVE GMH6 EXTENDED PRESSURE	
DWN BY: PTP	AE00049-004
DATE: 02/11/98	

SECTION/PAGE	GMH6 / 13
EFFECTIVE	12/01/97
SUPERSEDES	NEW

REF	REVISION UPDATE	DATE
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ITEM CLASS GMH6 = IB  
 PRODUCT LINE = H / ISOICHEM

**ISOICHEM GMH6 SERIES PUMP  
 CONSOLIDATED B / M**

SECTION: MODEL GMH6  
 PAGE: 200  
 DATE REV.: 11 / 12 / 12  
 SUPERSEDES: 07 / 13 / 04

		STANDARD PUMP MATERIAL						
		316 SS (A, K, OR U)		ALLOY C (C, M, OR V)		ALLOY 20 (D, N, OR W)		
DESCRIPTION	QTY	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	ITEM
<b>POSITION 3 STANDARD PUMP - NON-VARIABLE COMPONENTS</b>								
HOUSING, FRONT	1	49678	316 SS	49679	ALLOY C	49680	ALLOY 20	1
HOUSING, CENTER FNPT	1	40002	316 SS	40006	ALLOY C	40008	ALLOY 20	2
HOUSING, CENTER FBSPT		40011	316 SS	40023	ALLOY C	40017	ALLOY 20	2
HOUSING, CENTER FLANGED		NG040002-316	316 SS	NG040002-HC0	ALLOY C	NG040002-020	ALLOY 20	2
HOUSING, REAR	1	40247	316 SS	40248	ALLOY C	40249	ALLOY 20	3
# RING, RETAINING 3/4"	4-6	46714	316 SS	46711	ALLOY C	46711	ALLOY C	10
# RING, RETAINING 5/8"	0-2	Y9901400-316	316 SS	Y9901400-HC0	ALLOY C	Y9901400-HC0	ALLOY C	11
# KEY, METAL DRIVE GEAR	*1	41937	316 SS	41903	ALLOY C	41905	ALLOY 20	8
# KEY, MTL/CBN IDLER GEAR	*1	41937	316 SS	41903	ALLOY C	41905	ALLOY 20	9
# KEY, PLASTIC IDLER GEAR		41938	316 SS	41904	ALLOY C	41906	ALLOY 20	9
# KEY, MAGNETIC CPLG - DRIVE	*2	41937	316 SS	41903	ALLOY C	41905	ALLOY 20	21
# PIN, BEARING LOCK	4	41811	TFE	41811	TFE	41811	TFE	14
# BUSHING, RECIRCULATION (.000)	1	99618-00	TFE	99618-00	TFE	99618-00	TFE	23
# O RING, CENTER HOUSING	2	41101	TFE	41101	TFE	41101	TFE	16
PIN, HOUSING	4	40801	316 SS	40801	316 SS	40801	316 SS	17
BOLT, HOUSING	4	62005	188 SS	62005	188 SS	62005	188 SS	18
NUT, HOUSING	4	62101	188 SS	62101	188 SS	62101	188 SS	19
PLUG, 1/8" NPT	*2	W772565-316	316 SS	52301	ALLOY C	52300	ALLOY 20	62
NAMEPLATE	1	41210	188 SS	41210	188 SS	41210	188 SS	--

**POSITION 9, 10, AND 11 OPTIONS - DELETE CORRESPONDING STANDARD PUMP COMPONENT FROM B/M**

V	HOUSING, CENTER - VENT FNPT	1	40002-2	316 SS	40006-2	ALLOY C	40008-2	ALLOY 20	2
	HOUSING, CENTER - VENT FBSPT		40011-2	316 SS	40023-2	ALLOY C	40017-2	ALLOY 20	2
	HOUSING, CENTER - VENT FLANGED		NG040009-316	316 SS	NG040009-HC0	ALLOY C	NG040009-020	ALLOY 20	2
	PLUG, 1/8" NPT	*1	W772565-316	316 SS	52301	ALLOY C	52300	ALLOY 20	62
A	HOUSING, REAR - BRG FLUSH	1	40247-2	316 SS	40248-2	ALLOY C	40249-2	ALLOY 20	3
	PLUG, 1/8" NPT	*2	W772565-316	316 SS	52301	ALLOY C	52300	ALLOY 20	62
C	# PIN, BEARING LOCK	4	41812	316 SS	41813	ALLOY C	41814	ALLOY 20	14
	# O RING, CENTER HOUSING	2	41107	SS / PFA	41107	SS / PFA	41107	SS / PFA	16
D	# O RING, CONTANMENT CAN	1-2	W210422-002	SS / PFA	W210422-002	SS / PFA	W210422-002	SS / PFA	25
	# BEARING, SLOTTED 3/4"	0-4	40442	CARBON	40442	CARBON	40442	CARBON	12
	# BEARING, SLOTTED 5/8"	0-2	40440	CARBON	40440	CARBON	40440	CARBON	13
R	HOUSING, REAR - RECIRCULATION	1	40247-3	316 SS	40248-3	ALLOY C	40249-3	ALLOY 20	3
	# BUSHING, RECIRCULATION (.060)	2	99618-06	TFE	99618-06	TFE	99618-06	TFE	23
	# WEAR PLATE, RECIRCULATION	4	40527	CARBON	40527	CARBON	40527	CARBON	15
	# WEAR PLATE, RECIRCULATION		40529	TFE (GF)	40529	TFE (GF)	40529	TFE (GF)	15
	# WEAR PLATE, RECIRCULATION		40528	CERAMIC	40528	CERAMIC	40528	CERAMIC	15
# WEAR PLATE, RECIRCULATION	40530		PEEK	40530	PEEK	40530	PEEK	15	
W	DRIVEN MAGNET ASSY (WELDED)	1	49715	316 SS	49716	ALLOY C	49717	ALLOY 20	24

\*COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B / M  
 # DENOTES RECOMMENDED SPARE PART

DWG: GMH6P200

**ISOCHEM GMH6 SERIES PUMP  
CONSOLIDATED B / M**

SECTION: MODEL GMH6  
PAGE: 201  
DATE REV.: 11 / 12 / 12  
SUPERSEDES: 11 / 12 / 04

DESCRIPTION	QTY	STANDARD PUMP MATERIAL								
		316 SS (A, K, OR U)		ALLOY C (C, M, OR V)		ALLOY 20 (D, N, OR W)		PART NUMBER	MATERIAL	ITEM
		PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL			

**POSITION 4 & 5 DRIVE AND IDLER GEAR MATERIAL**

DESCRIPTION	QTY	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	ITEM
A # GEAR, DRIVE/IDLER 3/4"	1-2	40729	316 SS	-----	-----	-----	-----	6, 7
C # GEAR, DRIVE/IDLER 3/4"	1-2	40612	ALLOY C	40612	ALLOY C	40612	ALLOY C	6, 7
E # GEAR, IDLER 5/8"	1	40613	PEEK	40613	PEEK	40613	PEEK	7

**POSITION 6 WEAR PLATE MATERIAL**

DESCRIPTION	QTY	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	ITEM
K # WEAR PLATE, SLOTTED	4	40511	CARBON	40511	CARBON	40511	CARBON	15
T # WEAR PLATE, SLOTTED		40513	TFE (GF)	40513	TFE (GF)	40513	TFE (GF)	15
Z # WEAR PLATE, SLOTTED		40525	CERAMIC	40525	CERAMIC	40525	CERAMIC	15
E # WEAR PLATE, SLOTTED		40526	PEEK	40526	PEEK	40526	PEEK	15

**POSITION 7 SHAFT AND BEARING MATERIAL**

STANDARD CONSTRUCTION										
DESCRIPTION	QTY	PART NUMBER	MATERIAL	ITEM						
K # SHAFT, DRIVE	1	41415	316 SS	41423	ALLOY C	41424	ALLOY 20	4		
	1	41434	316 SS	41435	ALLOY C	41436	ALLOY 20	5		
		41428	316 SS	41429	ALLOY C	41430	ALLOY 20	5		
		40436	CARBON	40436	CARBON	40436	CARBON	12		
# BEARING, DRIVE/IDLER SHAFT 3/4"	2-4	40436	CARBON	40436	CARBON	40436	CARBON	12		
# BEARING, IDLER SHAFT 5/8"	0-2	40432	CARBON	40432	CARBON	40432	CARBON	13		
T # SHAFT, DRIVE	1	41415	316 SS	41423	ALLOY C	41424	ALLOY 20	4		
	1	41434	316 SS	41435	ALLOY C	41436	ALLOY 20	5		
		41428	316 SS	41429	ALLOY C	41430	ALLOY 20	5		
		40438	TFE (GF)	40438	TFE (GF)	40438	TFE (GF)	12		
	# BEARING, DRIVE/IDLER SHAFT 3/4"	2-4	40438	TFE (GF)	40438	TFE (GF)	40438	TFE (GF)	12	
	# BEARING, IDLER SHAFT 5/8"	0-2	40434	TFE (GF)	40434	TFE (GF)	40434	TFE (GF)	13	

**EXTENDED LIFE - BEARINGS**

DESCRIPTION	QTY	PART NUMBER	MATERIAL	ITEM						
L # SHAFT, DRIVE	1	41415	316 SS	41423	ALLOY C	41424	ALLOY 20	4		
	1	41434	316 SS	41435	ALLOY C	41436	ALLOY 20	5		
		41428	316 SS	41429	ALLOY C	41430	ALLOY 20	5		
		40437	EWCBN	40437	EWCBN	40437	EWCBN	12		
	# BEARING, IDLER SHAFT 5/8"	0-2	40433	EWCBN	40433	EWCBN	40433	EWCBN	13	

**EXTENDED LIFE - BEARINGS AND SHAFTS**

DESCRIPTION	QTY	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	ITEM
C # SHAFT, DRIVE	1	41425	CW / 316 SS	41426	CW / ALY C	41427	CW / ALY 20	4		
	1	41437	CW / 316 SS	41438	CW / ALY C	41439	CW / ALY 20	5		
		41431	CW / 316 SS	41432	CW / ALY C	41433	CW / ALY 20	5		
		40437	EWCBN	40437	EWCBN	40437	EWCBN	12, 13		
	# BEARING, IDLER SHAFT 5/8"	0-2	40433	EWCBN	40433	EWCBN	40433	EWCBN	13	

**CORROSION/WEAR ("CW") - BOTH SHAFTS**

DESCRIPTION	QTY	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	ITEM
B # SHAFT, DRIVE	1	41425	CW / 316 SS	41426	CW / ALY C	41427	CW / ALY 20	4		
	1	41437	CW / 316 SS	41438	CW / ALY C	41439	CW / ALY 20	5		
		41431	CW / 316 SS	41432	CW / ALY C	41433	CW / ALY 20	5		
		40439	SICBD	40439	SICBD	40439	SICBD	12, 13		
	# BEARING, IDLER SHAFT 5/8"	0-2	40435	SICBD	40435	SICBD	40435	SICBD	13	

\*COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B / M  
# DENOTES RECOMMENDED SPARE PART

DWG: GMH6P201

**ISOCHEM GMH6 SERIES PUMP  
CONSOLIDATED B / M**

SECTION: MODEL GMH6  
PAGE: 202  
DATE REV.: 11 / 12 / 12  
SUPERSEDES: 02 / 12 / 01

DESCRIPTION	QTY	STANDARD PUMP MATERIAL						ITEM
		316 SS (A, K, OR U)		ALLOY C (C, M, OR V)		ALLOY 20 (D, N, OR W)		
		PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	

**POSITION 8 MAGNETIC COUPLING COMPONENTS**

COMMON PARTS	DRIVEN MAGNET ASSY	1	49697	316 SS	49707	ALLOY C	49708	ALLOY 20	24
	BOLT, FRONT HOUSING/ADAPTOR	8	W770407-188	188 SS	W770407-188	188 SS	W770407-188	188 SS	22
	# O RING, CONTAINMENT CAN	1	W210422-TFE	TFE	W210422-TFE	TFE	W210422-TFE	TFE	25
	SCREW, SET	2	W771004-030	STEEL	W771004-030	STEEL	W771004-030	STEEL	35
	PIN, DRIVE MAGNET/HOLDER	2	W771209-003	STEEL	W771209-003	STEEL	W771209-003	STEEL	34
	SCREW, SKHD DRIVE MAGNET/HOLDER	4	W770027-188	188 SS	W770027-188	188 SS	W770027-188	188 SS	33
	CAN, CONTAINMENT	1	49674	ALLOY C	49674	ALLOY C	49674	ALLOY C	26
SCREW, CONTAINMENT CAN RING	8	W770021-188	188 SS	W770021-188	188 SS	W770021-188	188 SS	29	

**143/5TC, 184C FRAME COMPONENTS**

COMMON PARTS	HOLDER, DRIVE MAGNET	1	49705	STEEL	49705	STEEL	49705	STEEL	30
	ADAPTOR, MOTOR	1	Y1100700-ALU	ALUMINUM	Y1100700-ALU	ALUMINUM	Y1100700-ALU	ALUMINUM	36
	BOLT, MOTOR	4	W770425-188	188 SS	W770425-188	188 SS	W770425-188	188 SS	41

**SINGLE CONTAINMENT CAN COMPONENTS**

O	DRIVE MAGNET ASSY	1	49702	STEEL	49702	STEEL	49702	STEEL	31
	RING, CONTAINMENT CAN	1	49719	316 SS	49719	316 SS	49719	316 SS	28

**DOUBLE CONTAINMENT CAN COMPONENTS**

D	DRIVE MAGNET ASSY	1	49704	STEEL	49704	STEEL	49704	STEEL	32
	CAN ASSY, CONTAINMENT	1	49698	316 SS	49699	ALLOY C	49700	ALLOY 20	27
	# O RING, CONTAINMENT CAN	*1	W210422-TFE	TFE	W210422-TFE	TFE	W210422-TFE	TFE	25
	NIPPLE, 1/8" NPT X 2.00	2	W773965-208	316 SS	W773965-235	ALLOY C	W773965-145	ALLOY 20	66

**100L FRAME COMPONENTS**

COMMON PARTS	HOLDER, DRIVE MAGNET	1	49718	STEEL	49718	STEEL	49718	STEEL	30
	ADAPTOR, MOTOR	1	Y1101000-ALU	ALUMINUM	Y1101000-ALU	ALUMINUM	Y1101000-ALU	ALUMINUM	36
	BOLT, MOTOR (METRIC)	4	W770533-188	188 SS	W770533-188	188 SS	W770533-188	188 SS	41

**SINGLE CONTAINMENT CAN COMPONENTS**

P	DRIVE MAGNET ASSY	1	49702	STEEL	49702	STEEL	49702	STEEL	31
	RING, CONTAINMENT CAN	1	49719	316 SS	49719	316 SS	49719	316 SS	28

**DOUBLE CONTAINMENT CAN COMPONENTS**

Q	DRIVE MAGNET ASSY	1	49704	STEEL	49704	STEEL	49704	STEEL	32
	CAN ASSY, CONTAINMENT	1	49698	316 SS	49699	ALLOY C	49700	ALLOY 20	27
	# O RING, CONTAINMENT CAN	*1	W210422-TFE	TFE	W210422-TFE	TFE	W210422-TFE	TFE	25
	NIPPLE, 1/8" NPT X 2.00	2	W773965-208	316 SS	W773965-235	ALLOY C	W773965-145	ALLOY 20	66

\*COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B / M  
# DENOTES RECOMMENDED SPARE PART

DWG: GMH6P202

**ISOICHEM GMH6 SERIES PUMP  
CONSOLIDATED B / M**

SECTION: MODEL GMH6  
PAGE: 203  
DATE REV.: 11 / 12 / 12  
SUPERSEDES: 02 / 12 / 01

DESCRIPTION	QTY	STANDARD PUMP MATERIAL						ITEM
		316 SS (A, K, OR U)		ALLOY C (C, M, OR V)		ALLOY 20 (D, N, OR W)		
		PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	

**POSITION 8 MAGNETIC COUPLING COMPONENTS**

COMMON PARTS	DRIVEN MAGNET ASSY	1	49697	316 SS	49707	ALLOY C	49708	ALLOY 20	24
	BOLT, FRONT HOUSING/ADAPTOR	8	W770407-188	188 SS	W770407-188	188 SS	W770407-188	188 SS	22
	# O RING, CONTAINMENT CAN	*1	W210422-TFE	TFE	W210422-TFE	TFE	W210422-TFE	TFE	25
	PIN, DRIVE MAGNET/HOLDER	2	W771209-003	STEEL	W771209-003	STEEL	W771209-003	STEEL	34
	SCREW, SKHD DRIVE MAGNET/HOLDER	4	W770027-188	188 SS	W770027-188	188 SS	W770027-188	188 SS	33
	CAN, CONTAINMENT	1	49674	ALLOY C	49674	ALLOY C	49674	ALLOY C	26
SCREW, CONTAINMENT CAN RING	8	W770021-188	188 SS	W770021-188	188 SS	W770021-188	188 SS	29	

**182/4TC FRAME COMPONENTS**

COMMON PARTS	HOLDER, DRIVE MAGNET	1	49757	IRON	49757	IRON	49757	IRON	30
	ADAPTOR, MOTOR	1	Y1100700-ALU	ALUMINUM	Y1100700-ALU	ALUMINUM	Y1100700-ALU	ALUMINUM	36
	SCREW, MOTOR	4	W770580-STL	STEEL	W770580-STL	STEEL	W770580-STL	STEEL	69
	ADAPTOR, PLATE	1	Y1101600-STL	STEEL	Y1101600-STL	STEEL	Y1101600-STL	STEEL	68
	BOLT, ADAPTOR PLATE	4	W770425-188	188 SS	W770425-188	188 SS	W770425-188	188 SS	41
	WASHER, LOCK	4	W771108-188	188 SS	W771108-188	188 SS	W771108-188	188 SS	67
SCREW, SET	2	W771004-030	STEEL	W771004-030	STEEL	W771004-030	STEEL	35	

**SINGLE CONTAINMENT CAN COMPONENTS**

R	DRIVE MAGNET ASSY	1	49702	STEEL	49702	STEEL	49702	STEEL	31
	RING, CONTAINMENT CAN	1	49719	316 SS	49719	316 SS	49719	316 SS	28

**DOUBLE CONTAINMENT CAN COMPONENTS**

T	DRIVE MAGNET ASSY	1	49704	STEEL	49704	STEEL	49704	STEEL	32
	CAN ASSY, CONTAINMENT	1	49698	316 SS	49699	ALLOY C	49700	ALLOY 20	27
	# O RING, CONTAINMENT CAN	*1	W210422-TFE	TFE	W210422-TFE	TFE	W210422-TFE	TFE	25
	NIPPLE, 1/8" NPT X 2.00	2	W773965-208	316 SS	W773965-235	ALLOY C	W773965-145	ALLOY 20	66

**213/5TC FRAME COMPONENTS**

COMMON PARTS	HOLDER, DRIVE MAGNET	1	49758	IRON	49758	IRON	49758	IRON	30
	ADAPTOR, MOTOR	1	Y1100700-ALU	ALUMINUM	Y1100700-ALU	ALUMINUM	Y1100700-ALU	ALUMINUM	36
	SCREW, MOTOR	4	W770068-188	188 SS	W770068-188	188 SS	W770068-188	188 SS	69
	ADAPTOR, PLATE	1	Y1101700-STL	STEEL	Y1101700-STL	STEEL	Y1101700-STL	STEEL	68
	BOLT, ADAPTOR PLATE	4	W770426-188	188 SS	W770426-188	188 SS	W770426-188	188 SS	41
	SCREW, SET	2	W771004-046	STEEL	W771004-046	STEEL	W771004-046	STEEL	35

**SINGLE CONTAINMENT CAN COMPONENTS**

W	DRIVE MAGNET ASSY	1	49702	STEEL	49702	STEEL	49702	STEEL	31
	RING, CONTAINMENT CAN	1	49719	316 SS	49719	316 SS	49719	316 SS	28

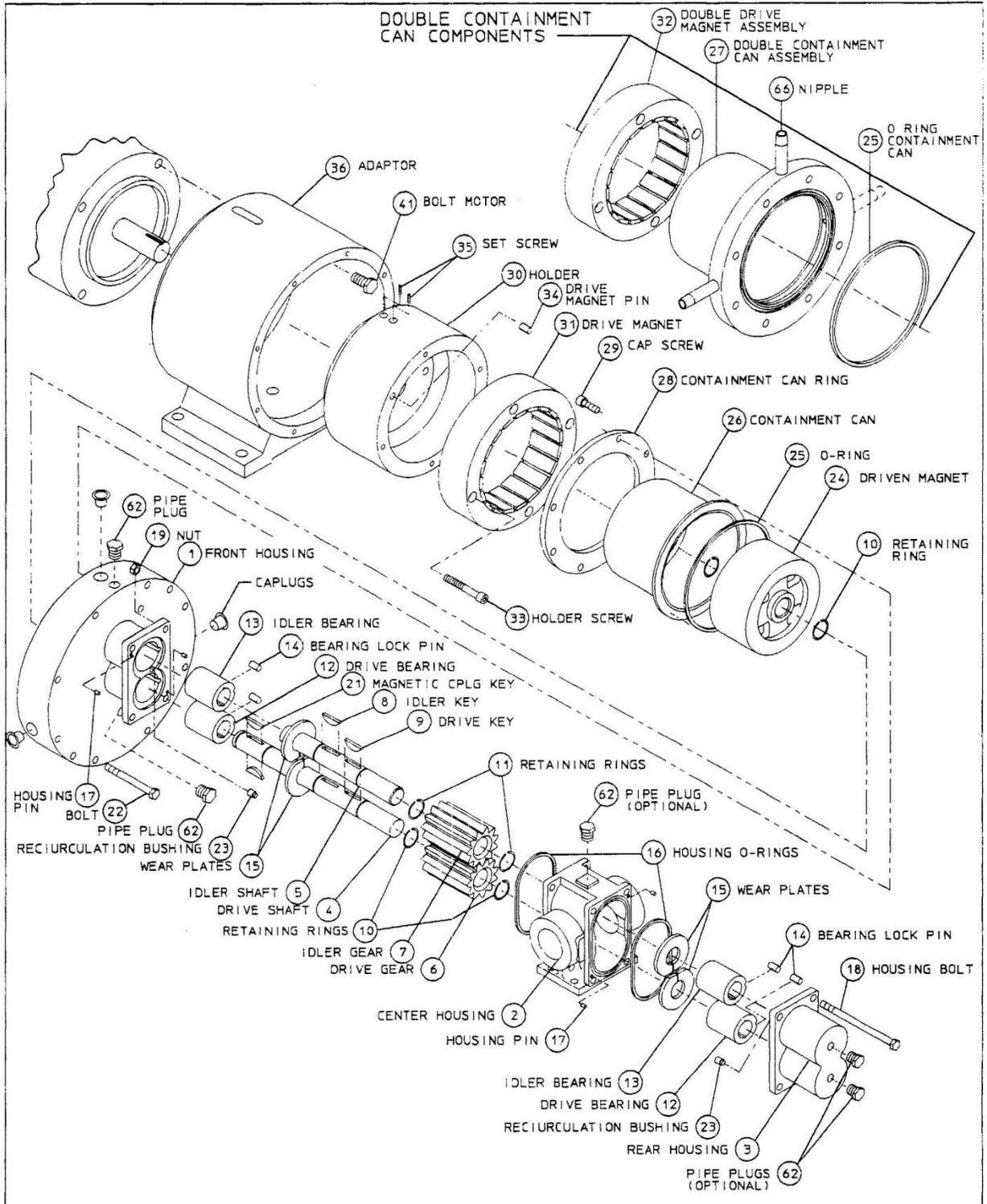
**DOUBLE CONTAINMENT CAN COMPONENTS**

Y	DRIVE MAGNET ASSY	1	49704	STEEL	49704	STEEL	49704	STEEL	32
	CAN ASSY, CONTAINMENT	1	49698	316 SS	49699	ALLOY C	49700	ALLOY 20	27
	# O RING, CONTAINMENT CAN	*1	W210422-TFE	TFE	W210422-TFE	TFE	W210422-TFE	TFE	25
	NIPPLE, 1/8" NPT X 2.00	2	W773965-208	316 SS	W773965-235	ALLOY C	W773965-145	ALLOY 20	66

\* COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B / M

DWG: GMH6P203

# DENOTES RECOMMENDED SPARE PART



ALL DIMENSIONS ARE IN INCHES

**Isochem** **PULSAFEEDER**  
A Unit of IDEX Corporation

MODEL GMH6/8  
ISOICHEM PUMP  
EXPLODED VIEW

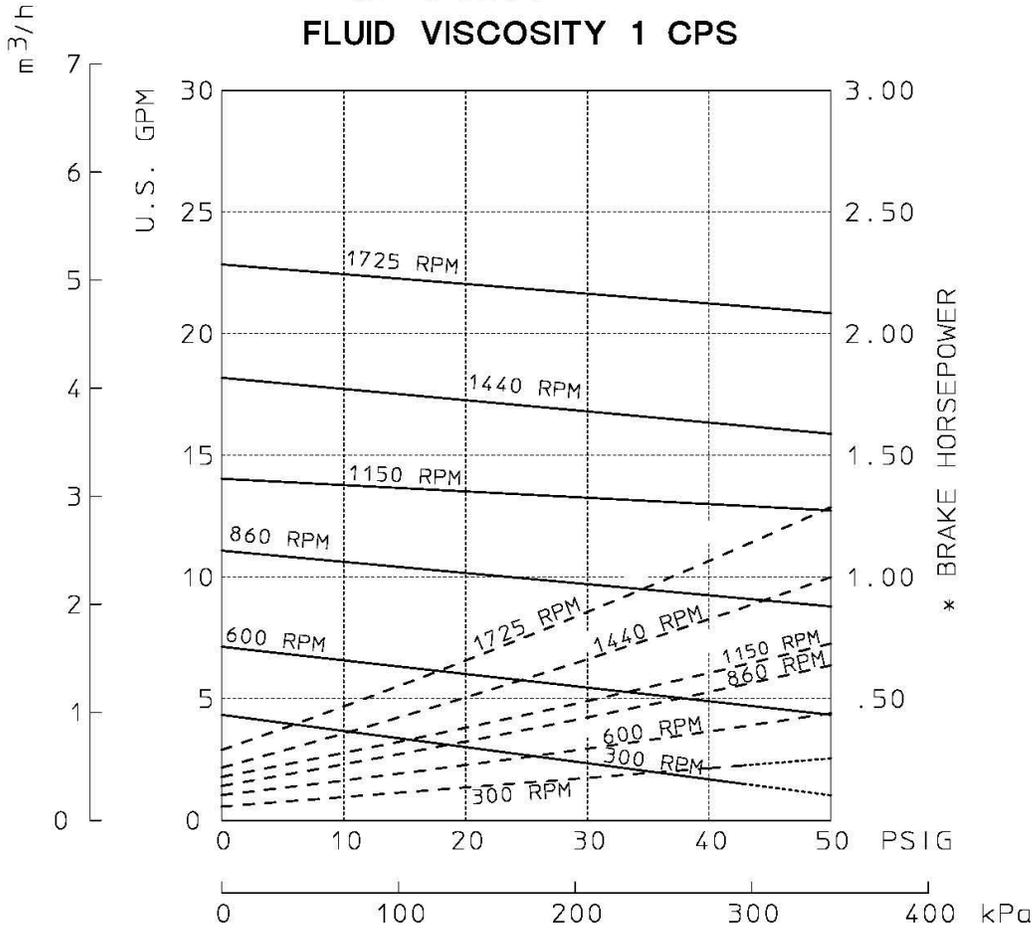
DWN BY: CLA  
DATE: 04/04/94

SD-2776

SECTION/PAGE	MODEL GMH6 / 400
EFFECTIVE	04/01/98
SUPERSEDES	04/04/94

ADDED GMH6 PUMP	10/08/97
REVISION UPDATE	DATE

**GMC8 ISOICHEM PUMP  
1.0" PORTS  
FLUID VISCOSITY 1 CPS**



\* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

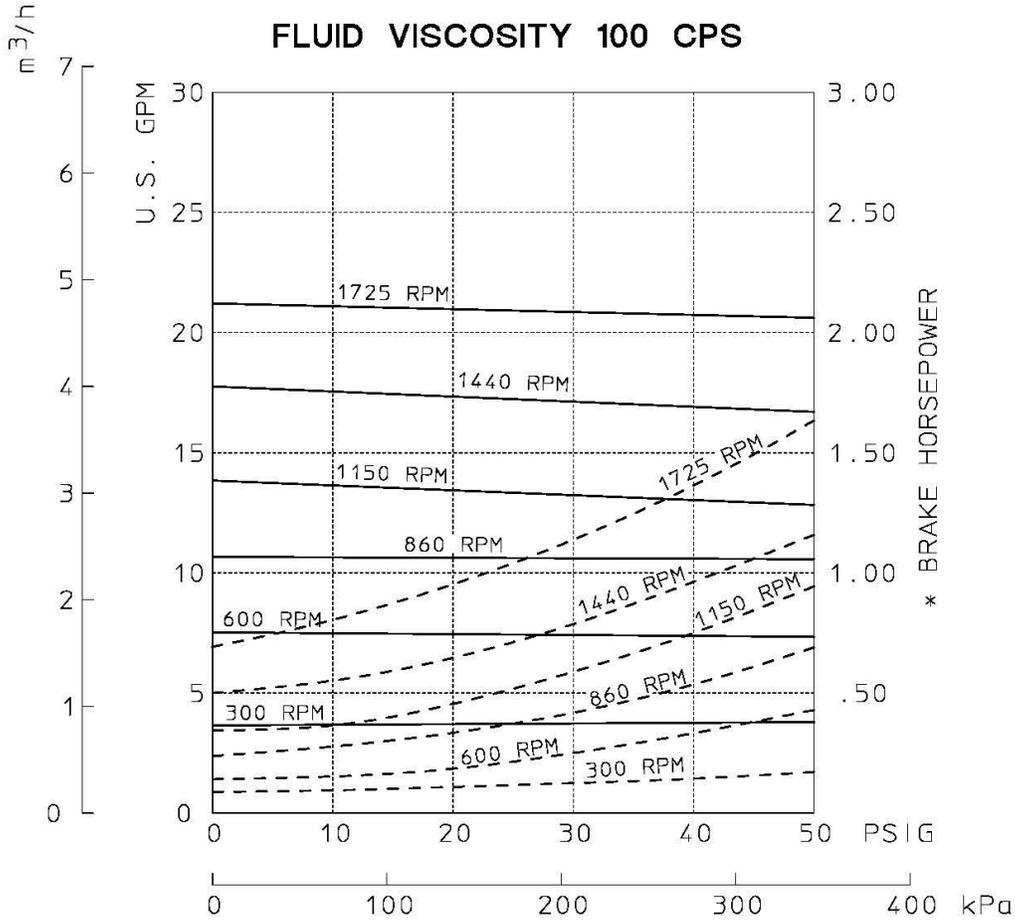


**PERFORMANCE CURVE  
GMC8**

SECTION/PAGE	GMC8 / 10	EFFECTIVE	07/11/13	DWN BY:	PTP	<b>AE00050-001</b>
REF	REMOVED GM8 FROM DESCRIPTION	DATE	07/11/13	DATE:	02/11/98	
	REVISION UPDATE			SUPERSEDES	12/01/97	

**GMC8 ISOCHEM PUMP  
1.0" PORTS**

**FLUID VISCOSITY 100 CPS**



\* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

<b>Isochem</b>	<b>PULSAFEEDER</b> A Unit of IOEX Corporation
PERFORMANCE CURVE GMC8	
DWN BY: PTP	AE00050-002
DATE: 02/11/98	

SECTION/PAGE	GMC8 / 12
EFFECTIVE	07/11/13
SUPERSEDES	12/01/97
REVISION UPDATE	07/11/13
REF	DATE

ITEM CLASS GMC8 = IP  
 PRODUCT LINE = H / ISOICHEM

**ISOICHEM GMC8 SERIES PUMP  
 CONSOLIDATED B / M**

SECTION: MODEL GMC8  
 PAGE: 204  
 DATE REV.: 06 / 24 / 14  
 SUPERSEDES: 11 / 12 / 12

		STANDARD PUMP MATERIAL							
		316 SS (A, K, OR U)		ALLOY C (C, M, OR V)		ALLOY 20 (D, N, OR W)			
DESCRIPTION	QTY	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	ITEM	
<b>POSITION 3 STANDARD PUMP - NON-VARIABLE COMPONENTS</b>									
HOUSING, CENTER FNPT		40052	316 SS	40053	ALLOY C	40054	ALLOY 20	2	
HOUSING, CENTER FBSPT	1	40064	316 SS	40065	ALLOY C	40066	ALLOY 20	2	
HOUSING, CENTER FLANGED		NG040007-316	316 SS	NG040007-HC0	ALLOY C	NG040007-020	ALLOY 20	2	
HOUSING, REAR	1	40218	316 SS	40219	ALLOY C	40220	ALLOY 20	1	
# RING, RETAINING	6	46713	316 SS	46701	ALLOY C	46701	ALLOY C	14	
# KEY, METAL DRIVE GEAR		41937	316 SS	41903	ALLOY C	41905	ALLOY 20	8	
# KEY, PLASTIC DRIVE GEAR	*2	41938	316 SS	41904	ALLOY C	41906	ALLOY 20	8	
# KEY, MTL / CBN IDLER GEAR		41937	316 SS	41903	ALLOY C	41905	ALLOY 20	8	
# KEY, PLASTIC IDLER GEAR	*2	41938	316 SS	41904	ALLOY C	41906	ALLOY 20	8	
# KEY, MAGNETIC CPLG - DRIVEN	1	41939	316 SS	41934	ALLOY C	41933	ALLOY 20	8	
# PIN, BEARING LOCK	4	41801	TFE	41801	TFE	41801	TFE	10	
# O-RING, HOUSING	2	41101	TFE	41101	TFE	41101	TFE	12	
PIN, HOUSING	4	40801	316 SS	40801	316 SS	40801	316 SS	13	
BOLT, HOUSING	4	62006	188 SS	62006	188 SS	62006	316 SS	15	
NUT, HOUSING BOLT	4	62101	188 SS	62101	188 SS	62101	188 SS	16	
NAMEPLATE	1	41210	188 SS	41210	188 SS	41210	188 SS	--	

**POSITIONS 9, 10, AND 11 OPTIONS - DELETE CORRESPONDING STANDARD PUMP COMPONENT FROM B / M**

V	HOUSING, CENTER - VENT FNPT	1	40052-2	316 SS	40053-2	ALLOY C	40054-2	ALLOY 20	2
	HOUSING, CENTER - VENT FBSPT		40064-2	316 SS	40065-2	ALLOY C	40066-2	ALLOY 20	2
	HOUSING, CENTER - VENT FLANGED		NG040010-316	316 SS	NG040010-HC0	ALLOY C	NG040010-020	ALLOY 20	2
A	PLUG, 1/8" NPT	*1	W772565-316	316 SS	52301	ALLOY C	52300	ALLOY 20	27
	HOUSING, REAR - BRG FLUSH	1	40224	316 SS	40231	ALLOY C	40234	ALLOY 20	1
	PLUG, 1/8" NPT	*2	W772565-316	316 SS	52301	ALLOY C	52300	ALLOY 20	27
	# PIN, BEARING LOCK	4	41802	ALLOY 20	41806	ALLOY C	41802	ALLOY 20	10
	# O-RING, HOUSING	2	41107	SS / PFA	41107	SS / PFA	41107	SS / PFA	12
	# O-RING, FRONT HOUSING	1	41112	SS / PFA	41112	SS / PFA	41112	SS / PFA	28
	# BEARING, SLOTTED	4	40428	CARBON	40428	CARBON	40428	CARBON	9
	# WEAR PLATE, SLOTTED		40511	CARBON	40511	CARBON	40511	CARBON	11
	# WEAR PLATE, SLOTTED	4	40513	TFE (GF)	40513	TFE (GF)	40513	TFE (GF)	11
	# WEAR PLATE - NON-RECIRCULATION		40501	CARBON	40501	CARBON	40501	CARBON	11
F	# WEAR PLATE - NON-RECIRCULATION		40504	TFE (GF)	40504	TFE (GF)	40504	TFE (GF)	11
	# WEAR PLATE - NON-RECIRCULATION	4	40503	CERAMIC	40503	CERAMIC	40503	CERAMIC	11
	# WEAR PLATE - NON-RECIRCULATION		40523	PEEK	40523	PEEK	40523	PEEK	11
	# WEAR PLATE - NON-RECIRCULATION		40501	CARBON	40501	CARBON	40501	CARBON	11
M	CONTAINMENT CAN	1	49605	ALLOY C	-----	-----	-----	-----	19
	DRV N MAG ASSY (WELDED) / (SAMAR)	1	49616	316 SS	49643	ALLOY C	49664	ALLOY 20	18
	DRV MAG ASSY, 56C FR (SAMAR)		49604	STEEL	49604	STEEL	49604	STEEL	21
	DRV MAG ASSY, 140TC FR (SAMAR)		49636	STEEL	49636	STEEL	49636	STEEL	21
	DRV MAG ASSY, 80 FR (SAMAR)	1	49735	STEEL	49735	STEEL	49735	STEEL	21
	DRV MAG ASSY, 90 FR (SAMAR)		49736	STEEL	49736	STEEL	49736	STEEL	21
W	DRV N MAG ASSY (WELDED) / (SAMAR)	1	49616	316 SS	49659	ALLOY C	49662	ALLOY 20	18
	H	HIGH TEMPERATURE APPLICATION		COMBINE	PUMP	OPTIONS	B	AND	S

\*COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B / M  
 # DENOTES RECOMMENDED SPARE PART

DWG: GM8P204

**ISOICHEM GMC8 SERIES PUMP  
CONSOLIDATED B / M**

SECTION: MODEL GMC8  
PAGE: 205  
DATE REV.: 11 / 12 / 12  
SUPERSEDES: 11 / 12 / 04

DESCRIPTION	QTY	STANDARD PUMP MATERIAL						ITEM
		316 SS (A, K, OR U)		ALLOY C (C, M, OR V)		ALLOY 20 (D, N, OR W)		
		PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	

**POSITION 4 & 5 DRIVE AND IDLER GEAR MATERIAL**

A	# GEAR, DRIVE / IDLER	1-2	40684	316 SS	----	----	----	----	6, 7
C	# GEAR, DRIVE / IDLER	1-2	40689	ALLOY C	40689	ALLOY C	40689	ALLOY C	6, 7
D	# GEAR, DRIVE / IDLER	1-2	40691	ALLOY 20	----	----	40691	ALLOY 20	6, 7
K	# GEAR, IDLER	1	40623	CARBON	40623	CARBON	40623	CARBON	7
T	# GEAR, DRIVE / IDLER	1-2	40701	TFE (GF)	40701	TFE (GF)	40701	TFE (GF)	6, 7
E	# GEAR, DRIVE / IDLER	1-2	40716	PEEK	40716	PEEK	40716	PEEK	6, 7

**POSITION 6 WEAR PLATE MATERIAL**

K	# WEAR PLATE, RECIRCULATION	4	40520	CARBON	40520	CARBON	40520	CARBON	11
T	# WEAR PLATE, RECIRCULATION		40521	TFE (GF)	40521	TFE (GF)	40521	TFE (GF)	11
Z	# WEAR PLATE, RECIRCULATION		40522	CERAMIC	40522	CERAMIC	40522	CERAMIC	11
E	# WEAR PLATE, RECIRCULATION		40524	PEEK	40524	PEEK	40524	PEEK	11

**POSITION 7 SHAFT AND BEARING MATERIAL**

STANDARD CONSTRUCTION									
K	# SHAFT, DRIVE	1	40336	ALLOY 20	40316	ALLOY C	40336	ALLOY 20	4
	# SHAFT, IDLER	1	40350	ALLOY 20	40346	ALLOY C	40350	ALLOY 20	5
	# BEARING, DRIVE / IDLER SHAFT	4	40426	CARBON	40426	CARBON	40426	CARBON	9
L	# SHAFT, DRIVE	1	40336	ALLOY 20	40316	ALLOY C	40336	ALLOY 20	4
	# SHAFT, IDLER	1	40350	ALLOY 20	40346	ALLOY C	40350	ALLOY 20	5
	# BEARING, DRIVE / IDLER SHAFT	4	40430	EWCBN	40430	EWCBN	40430	EWCBN	9
T	# SHAFT, DRIVE	1	40336	ALLOY 20	40316	ALLOY C	40336	ALLOY 20	4
	# SHAFT, IDLER	1	40350	ALLOY 20	40346	ALLOY C	40350	ALLOY 20	5
	# BEARING, DRIVE / IDLER SHAFT	4	40425	TFE (GF)	40425	TFE (GF)	40425	TFE (GF)	9

**EXTENDED / WEAR - BOTH SHAFTS**

C	# SHAFT, DRIVE	1	40332	"CW"	40306	"CW"	40332	"CW"	4
	# SHAFT, IDLER	1	40333	"CW"	40308	"CW"	40333	"CW"	5
	# BEARING, DRIVE / IDLER SHAFT	4	40430	EWCBN	40430	EWCBN	40430	EWCBN	9

**CORROSION / WEAR ("CW") - BOTH SHAFTS**

B	# SHAFT, DRIVE	1	40332	"CW"	40306	"CW"	40332	"CW"	4
	# SHAFT, IDLER	1	40333	"CW"	40308	"CW"	40333	"CW"	5
	# BEARING, DRIVE / IDLER SHAFT	4	40429	SICBD	40429	SICBD	40429	SICBD	9

\*COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B / M  
# DENOTES RECOMMENDED SPARE PART

DWG: GM8P205

**ISOCHEM GMC8 SERIES PUMP  
CONSOLIDATED B / M**

SECTION: MODEL GMC8  
PAGE: 206  
DATE REV.: 06 / 24 / 14  
SUPERSEDES: 11 / 12 / 12

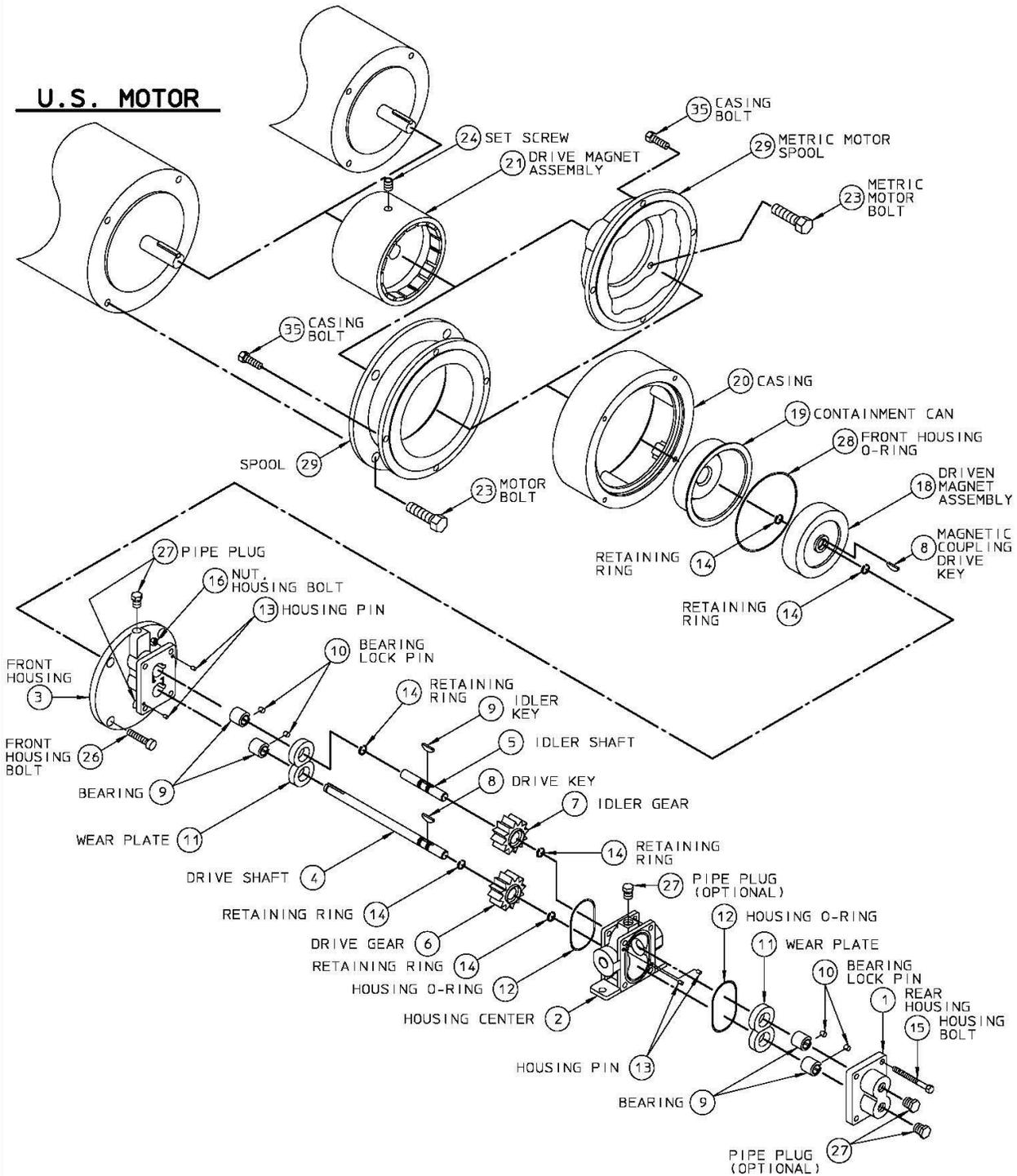
DESCRIPTION		QTY	STANDARD PUMP MATERIAL						ITEM
			316 SS (A, K, OR U)		ALLOY C (C, M, OR V)		ALLOY 20 (D, N, OR W)		
			PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	
<b>POSITION 8 MAGNETIC COUPLING COMPONENTS</b>									
COMMON PARTS	HOUSING, FRONT	1	40144	316 SS	40145	ALLOY C	40148	ALLOY 20	3
	DRIVEN MAGNET ASSY	1	49738	316 SS	49739	ALLOY C	49740	ALLOY 20	18
	CONTAINMENT CAN	1	49672	316 SS	49605	ALLOY C	49605	ALLOY C	19
	CASING	1	49610	ALUMINUM	49610	ALUMINUM	49610	ALUMINUM	20
	# O-RING, FRONT HOUSING	1	W209729-TFE	TFE	W209729-TFE	TFE	W209729-TFE	TFE	28
	BOLT, FRONT HOUSING	4	W770198-188	188 SS	W770198-188	188 SS	W770198-188	188 SS	26
PLUG, 1/8" NPT	*2	W772565-316	316 SS	52301	ALLOY C	52300	ALLOY 20	27	
<b>56C FRAME COMPONENTS</b>									
F	DRIVE MAGNET ASSEMBLY, 56C FR	1	49731	STEEL	49731	STEEL	49731	STEEL	21
	MOTOR SPOOL	1	49627	ALUMINUM	49627	ALUMINUM	49627	ALUMINUM	29
	BOLT, CASING	4	16722	STEEL	16722	STEEL	16722	STEEL	35
	BOLT, MOTOR	4	W770424-STL	STEEL	W770424-STL	STEEL	W770424-STL	STEEL	23
<b>140TC FRAME COMPONENTS</b>									
O	DRIVE MAGNET ASSEMBLY, 140TC FR	1	49732	STEEL	49732	STEEL	49732	STEEL	21
	MOTOR SPOOL	1	49627	ALUMINUM	49627	ALUMINUM	49627	ALUMINUM	29
	BOLT, CASING	4	16722	STEEL	16722	STEEL	16722	STEEL	35
	BOLT, MOTOR	4	W770424-STL	STEEL	W770424-STL	STEEL	W770424-STL	STEEL	23
<b>182/4 TC FRAME COMPONENTS</b>									
R	DRIVE MAGNET ASSEMBLY, 56C FR	1	NG200057-STL	STEEL	NG200057-STL	STEEL	NG200057-STL	STEEL	21
	MOTOR SPOOL	1	49627	ALUMINUM	49627	ALUMINUM	49627	ALUMINUM	29
	BOLT, CASING	4	16722	STEEL	16722	STEEL	16722	STEEL	35
	BOLT, MOTOR	4	W770424-STL	STEEL	W770424-STL	STEEL	W770424-STL	STEEL	23
	ADAPTOR, MOTOR	1	NG110018-ALU	ALUMINUM	NG110018-ALU	ALUMINUM	NG110018-ALU	ALUMINUM	--
	BOLT, ADAPTOR	4	NP999006-STI	STFFI	NP999006-STI	STFFI	NP999006-STI	STFFI	--
<b>80 METRIC FRAME COMPONENTS</b>									
K	DRIVE MAGNET ASSEMBLY, 80 FR	1	49733	STEEL	49733	STEEL	49733	STEEL	21
	MOTOR SPOOL	1	49727	ALUMINUM	49727	ALUMINUM	49727	ALUMINUM	29
	BOLT, CASING	4	16722	STEEL	16722	STEEL	16722	STEEL	35
	BOLT, MOTOR	4	NP990415-STL	STEEL	NP990415-STL	STEEL	NP990415-STL	STEEL	25
<b>90 METRIC FRAME COMPONENTS</b>									
L	DRIVE MAGNET ASSEMBLY, 90 FR	1	49734	STEEL	49734	STEEL	49734	STEEL	21
	MOTOR SPOOL	1	49728	ALUMINUM	49728	ALUMINUM	49728	ALUMINUM	29
	BOLT, CASING	4	16722	STFFI	16722	STFFI	16722	STFFI	35
	BOLT, MOTOR	4	NP990478-STL	STEEL	NP990478-STL	STEEL	NP990478-STL	STEEL	25

\*COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B / M  
# DENOTES RECOMMENDED SPARE PART

DWG: GM8P206

# METRIC MOTOR

## U.S. MOTOR

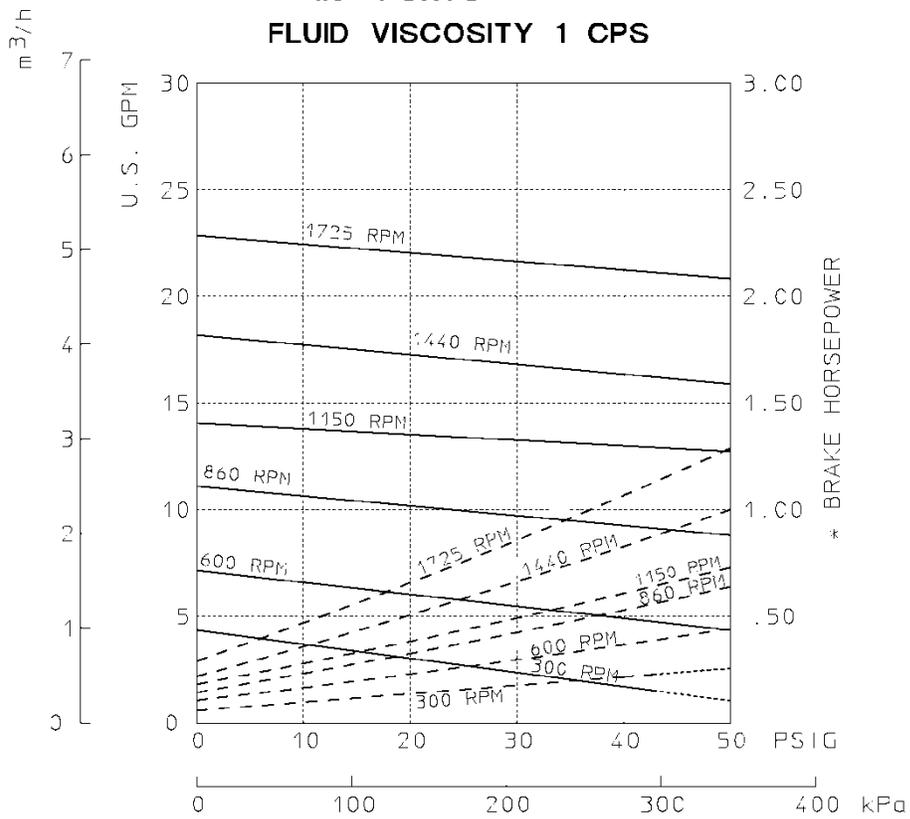


**Isochem** **PULSAFEEDER**  
A Unit of IDEX Corporation

MODEL GMC6/8  
ISOICHEM PUMP  
EXPLODED VIEW

SECTION/PAGE	MODEL GMC6 / 400		
EFFECTIVE	07/11/13		
REF	REVISION UPDATE	DATE	SUPERSEDES
			10/06/06
		DWN BY: CLA	DATE: 09/22/97
			<b>SD-2868</b>

**GMC8 ISOCHEM PUMP  
1.0" PORTS  
FLUID VISCOSITY 1 CPS**

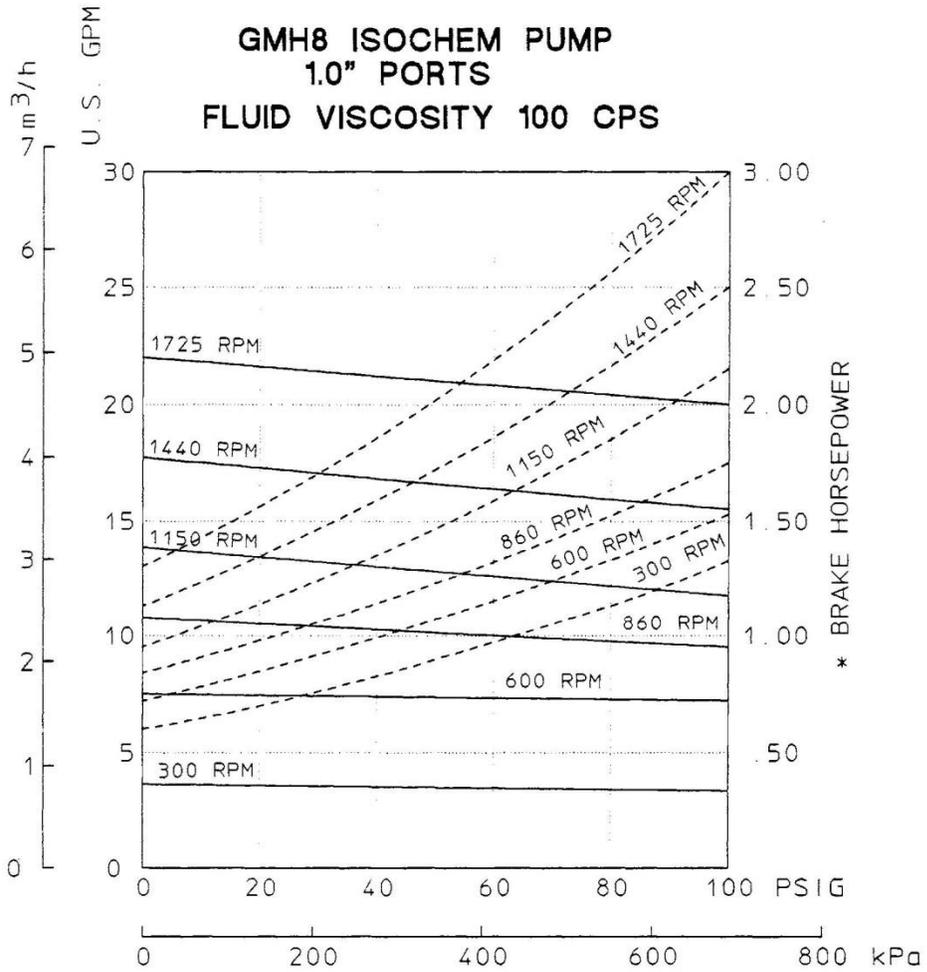


\* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

<b>Isochem</b>	<b>PULSAFEEDER</b> A Unit of IDEX Corporation
<b>PERFORMANCE CURVE GMC8</b>	
OWN BY: PTP	<b>AE00050-001</b>
DATE: 02/11/98	

SECTION/PAGE	GMC8 / 10
EFFECTIVE	07/11/13
REF	REMOVED GM8 FROM DESCRIPTION
DATE	07/11/13
SUPERSEDES	12/01/97

**GMH8 ISOCHEM PUMP  
1.0" PORTS  
FLUID VISCOSITY 100 CPS**



\* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

**Isochem** **PULSAFEEDER**  
A Unit of IDEX Corporation

PERFORMANCE CURVE  
GMH8

SECTION/PAGE	GMH8 / 11	DWN BY:	PTP	AE00051-002
EFFECTIVE	12/01/97	DATE	02/11/98	
REF	REVISION UPDATE	DATE	SUPERSEDES	08/15/94

ITEM CLASS GMH8 = IH  
 PRODUCT LINE = H / ISOICHEM

**ISOICHEM GMH8 SERIES PUMP  
 CONSOLIDATED B / M**

SECTION: MODEL GMH8  
 PAGE: 200  
 DATE REV.: 11 / 12 / 12  
 SUPERSEDES: 11 / 03 / 06

		STANDARD PUMP MATERIAL						
		316 SS (A, K, OR U)		ALLOY C (C, M, OR V)		ALLOY 20 (D, N, OR W)		
DESCRIPTION	QTY	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	ITEM
<b>POSITION 3 STANDARD PUMP - NON-VARIABLE COMPONENTS</b>								
HOUSING, FRONT	1	49678	316 SS	49679	ALLOY C	49680	ALLOY 20	1
HOUSING, CENTER FNPT	1	40052	316 SS	40053	ALLOY C	40054	ALLOY 20	2
HOUSING, CENTER FBSPT		40064	316 SS	40065	ALLOY C	40066	ALLOY 20	2
HOUSING, CENTER FLANGED		NG040007-316	316 SS	NG040007-HC0	ALLOY C	NG040007-020	ALLOY 20	2
HOUSING, REAR	1	40247	316 SS	40248	ALLOY C	40249	ALLOY 20	3
# RING, RETAINING 3/4"	4-6	46714	316 SS	46711	ALLOY C	46711	ALLOY C	10
# RING, RETAINING 5/8"	0-2	Y9901400-316	316 SS	Y9901400-HC0	ALLOY C	Y9901400-HC0	ALLOY C	11
# KEY, METAL DRIVE GEAR	*2	41937	316 SS	41903	ALLOY C	41905	ALLOY 20	8
# KEY, MTL / CBN IDLER GEAR	*2	41937	316 SS	41903	ALLOY C	41905	ALLOY 20	9
# KEY, PLASTIC IDLER GEAR		41938	316 SS	41904	ALLOY C	41906	ALLOY 20	9
# KEY, MAGNETIC CPLG - DRIVE	*2	41937	316 SS	41903	ALLOY C	41905	ALLOY 20	21
# PIN, BEARING LOCK	4	41811	TFE	41811	TFE	41811	TFE	14
# BUSHING, RECIRCULATION (.000)	1	99618-00	TFE	99618-00	TFE	99618-00	TFE	23
# O RING, CENTER HOUSING	2	41101	TFE	41101	TFE	41101	TFE	16
PIN, HOUSING	4	40801	316 SS	40801	316 SS	40801	316 SS	17
BOLT, HOUSING	4	62006	188 SS	62006	188 SS	62006	188 SS	18
NUT, HOUSING	4	62101	188 SS	62101	188 SS	62101	188 SS	19
PLUG, 1 / 8" NPT	*2	W772565-316	316 SS	52301	ALLOY C	52300	ALLOY 20	62
NAMEPLATE	1	41210	188 SS	41210	188 SS	41210	188 SS	--

**POSITION 9, 10, AND 11 OPTIONS - DELETE CORRESPONDING STANDARD PUMP COMPONENT FROM B/M**

V	HOUSING, CENTER - VENT FNPT	1	40052-2	316 SS	40053-2	ALLOY C	40054-2	ALLOY 20	2
	HOUSING, CENTER - VENT FBSPT		40064-2	316 SS	40065-2	ALLOY C	40066-2	ALLOY 20	2
	HOUSING, CENTER - VENT FLANGED		NG040010-316	316 SS	NG040010-HC0	ALLOY C	NG040010-020	ALLOY 20	2
	PLUG, 1/8" NPT	*1	W772565-316	316 SS	52301	ALLOY C	52300	ALLOY 20	62
A	HOUSING, REAR - BRG FLUSH	1	40247-2	316 SS	40248-2	ALLOY C	40249-2	ALLOY 20	3
	PLUG, 1/8" NPT	*2	W772565-316	316 SS	52301	ALLOY C	52300	ALLOY 20	62
C	# PIN, BEARING LOCK	4	41812	316 SS	41813	ALLOY C	41814	ALLOY 20	14
	# O RING, CENTER HOUSING	2	41107	SS / PFA	41107	SS / PFA	41107	SS / PFA	16
	# O RING, CONTANMENT CAN	1-2	W210422-002	SS / PFA	W210422-002	SS / PFA	W210422-002	SS / PFA	25
D	# BEARING, SLOTTED 3/4"	0-4	40442	CARBON	40442	CARBON	40442	CARBON	12
	# BEARING, SLOTTED 5/8"	0-2	40440	CARBON	40440	CARBON	40440	CARBON	13
R	HOUSING, REAR - RECIRCULATION	1	40247-3	316 SS	40248-3	ALLOY C	40249-3	ALLOY 20	3
	# BUSHING, RECIRCULATION (.060)	2	99618-06	TFE	99618-06	TFE	99618-06	TFE	23
	# WEAR PLATE, RECIRCULATION	4	40527	CARBON	40527	CARBON	40527	CARBON	15
	# WEAR PLATE, RECIRCULATION		40529	TFE (GF)	40529	TFE (GF)	40529	TFE (GF)	15
	# WEAR PLATE, RECIRCULATION		40528	CERAMIC	40528	CERAMIC	40528	CERAMIC	15
# WEAR PLATE, RECIRCULATION	40530		PEEK	40530	PEEK	40530	PEEK	15	
W	DRIVEN MAGNET ASSY (WELDED)	1	49715	316 SS	49716	ALLOY C	49717	ALLOY 20	24

\*COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B / M  
 # DENOTES RECOMMENDED SPARE PART

DWG: GMH8P200

**ISOICHEM GMH8 SERIES PUMP  
CONSOLIDATED B / M**

SECTION: MODEL GMH8  
PAGE: 201  
DATE REV.: 11 / 12 / 12  
SUPERSEDES: 11 / 12 / 04

DESCRIPTION	QTY	STANDARD PUMP MATERIAL						ITEM
		316 SS (A, K, OR U)		ALLOY C (C, M, OR V)		ALLOY 20 (D, N, OR W)		
		PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	

**POSITION 4 & 5 DRIVE AND IDLER GEAR MATERIAL**

A	# GEAR, DRIVE / IDLER	3/4"	1-2	40730	316 SS	-----	-----	-----	-----	6, 7
C	# GEAR, DRIVE / IDLER	3/4"	1-2	40605	ALLOY C	40605	ALLOY C	40605	ALLOY C	6, 7
K	# GEAR, IDLER	5/8"	0-1	40606	CARBON	40606	CARBON	40606	CARBON	7
T	# GEAR, IDLER	5/8"		40608	TFE (GF)	40608	TFE (GF)	40608	TFE (GF)	7
E	# GEAR, IDLER	5/8"		40609	PEEK	40609	PEEK	40609	PEEK	7

**POSITION 6 WEAR PLATE MATERIAL**

K	# WEAR PLATE, SLOTTED		4	40511	CARBON	40511	CARBON	40511	CARBON	15
T	# WEAR PLATE, SLOTTED			40513	TFE (GF)	40513	TFE (GF)	40513	TFE (GF)	15
Z	# WEAR PLATE, SLOTTED			40525	CERAMIC	40525	CERAMIC	40525	CERAMIC	15
E	# WEAR PLATE, SLOTTED			40526	PEEK	40526	PEEK	40526	PEEK	15

**POSITION 7 SHAFT AND BEARING MATERIAL**

**STANDARD CONSTRUCTION**

K	# SHAFT, DRIVE		1	41370	316 SS	41371	ALLOY C	41372	ALLOY 20	4
	# SHAFT, IDLER	5/8"	1	41337	316 SS	41338	ALLOY C	41339	ALLOY 20	5
	# SHAFT, IDLER METAL GEAR	3/4"		41342	316 SS	41343	ALLOY C	41344	ALLOY 20	5
	# BEARING, DRIVE / IDLER SHAFT	3/4"	2-4	40436	CARBON	40436	CARBON	40436	CARBON	12
	# BEARING, IDLER SHAFT	5/8"	0-2	40432	CARBON	40432	CARBON	40432	CARBON	13
L	# SHAFT, DRIVE		1	41370	316 SS	41371	ALLOY C	41372	ALLOY 20	4
	# SHAFT, IDLER	5/8"	1	41337	316 SS	41338	ALLOY C	41339	ALLOY 20	5
	# SHAFT, IDLER METAL GEAR	3/4"		41342	316 SS	41343	ALLOY C	41344	ALLOY 20	5
	# BEARING, DRIVE / IDLER SHAFT	3/4"	2-4	40437	EWCBN	40437	EWCBN	40437	EWCBN	12
	# BEARING, IDLER SHAFT	5/8"	0-2	40433	EWCBN	40433	EWCBN	40433	EWCBN	13
T	# SHAFT, DRIVE		1	41370	316 SS	41371	ALLOY C	41372	ALLOY 20	4
	# SHAFT, IDLER	5/8"	1	41337	316 SS	41338	ALLOY C	41339	ALLOY 20	5
	# SHAFT, IDLER METAL GEAR	3/4"		41342	316 SS	41343	ALLOY C	41344	ALLOY 20	5
	# BEARING, DRIVE / IDLER SHAFT	3/4"	2-4	40438	TFE (GF)	40438	TFE (GF)	40438	TFE (GF)	12
	# BEARING, IDLER SHAFT	5/8"	0-2	40434	TFE (GF)	40434	TFE (GF)	40434	TFE (GF)	13

**EXTENDED / WEAR - BOTH SHAFTS**

C	# SHAFT, DRIVE		1	41396	CW / 316 SS	41397	CW / ALY C	41398	CW / ALY20	4
	# SHAFT, IDLER	5/8"	1	41354	CW / 316 SS	41355	CW / ALY C	41356	CW / ALY20	5
	# SHAFT, IDLER METAL GEAR	3/4"		41365	CW / 316 SS	41366	CW / ALY C	41367	CW / ALY20	5
	# BEARING, DRIVE SHAFT	3/4"	2-4	40437	EWCBN	40437	EWCBN	40437	EWCBN	12, 13
	# BEARING, IDLER SHAFT	5/8"	0-2	40433	EWCBN	40433	EWCBN	40433	EWCBN	13

**CORROSION / WEAR ("CW") - BOTH SHAFTS**

B	# SHAFT, DRIVE		1	41396	CW / 316 SS	41397	CW / ALY C	41398	CW / ALY20	4
	# SHAFT, IDLER	5/8"	1	41354	CW / 316 SS	41355	CW / ALY C	41356	CW / ALY20	5
	# SHAFT, IDLER METAL GEAR	3/4"		41365	CW / 316 SS	41366	CW / ALY C	41367	CW / ALY20	5
	# BEARING, DRIVE / IDLER SHAFT	3/4"	2-4	40439	SICBD	40439	SICBD	40439	SICBD	12, 13
	# BEARING, IDLER SHAFT	5/8"	0-2	40435	SICBD	40435	SICBD	40435	SICBD	13

\*COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B/M

DWG: GMH8P201

# DENOTES RECOMMENDED SPARE PART

**ISOCHEM GMH8 SERIES PUMP  
CONSOLIDATED B / M**

SECTION: MODEL GMH8  
PAGE: 202  
DATE REV.: 11 / 12 / 12  
SUPERSEDES: 02 / 12 / 01

DESCRIPTION	QTY	STANDARD PUMP MATERIAL						ITEM
		316 SS (A, K, OR U)		ALLOY C (C, M, OR V)		ALLOY 20 (D, N, OR W)		
		PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	

**POSITION 8 MAGNETIC COUPLING COMPONENTS**

COMMON PARTS	DRIVEN MAGNET ASSY	1	49697	316 SS	49707	ALLOY C	49708	ALLOY 20	24
	BOLT, FRONT HOUSING / ADAPTOR	8	W770407-188	188 SS	W770407-188	188 SS	W770407-188	188 SS	22
	# O RING, CONTAINMENT CAN	*1	W210422-TFE	TFE	W210422-TFE	TFE	W210422-TFE	TFE	25
	SCREW, SET	2	W771004-030	STEEL	W771004-030	STEEL	W771004-030	STEEL	35
	PIN, DRIVE MAGNET / HOLDER	2	W771209-003	STEEL	W771209-003	STEEL	W771209-003	STEEL	34
	SCREW, SKHD DRIVE MAGNET / HOLDER	4	W770027-188	188 SS	W770027-188	188 SS	W770027-188	188 SS	33
	CAN, CONTAINMENT	1	49674	ALLOY C	49674	ALLOY C	49674	ALLOY C	26
SCREW, CONTAINMENT CAN RING	8	W770021-188	188 SS	W770021-188	188 SS	W770021-188	188 SS	29	

**143 / 5TC, 184C FRAME COMPONENTS**

COMMON PARTS	HOLDER, DRIVE MAGNET	1	49705	STEEL	49705	STEEL	49705	STEEL	30
	ADAPTOR, MOTOR	1	Y1100700-ALU	ALUMINUM	Y1100700-ALU	ALUMINUM	Y1100700-ALU	ALUMINUM	36
	BOLT, MOTOR	4	W770425-188	188 SS	W770425-188	188 SS	W770425-188	188 SS	41

**SINGLE CONTAINMENT CAN COMPONENTS**

O	DRIVE MAGNET ASSY	1	49702	STEEL	49702	STEEL	49702	STEEL	31
	RING, CONTAINMENT CAN	1	49719	316 SS	49719	316 SS	49719	316 SS	28

**DOUBLE CONTAINMENT CAN COMPONENTS**

D	DRIVE MAGNET ASSY	1	49704	STEEL	49704	STEEL	49704	STEEL	32
	CAN ASSY, CONTAINMENT	1	49698	316 SS	49699	ALLOY C	49700	ALLOY 20	27
	# O RING, CONTAINMENT CAN	*1	W210422-TFE	TFE	W210422-TFE	TFE	W210422-TFE	TFE	25
	NIPPLE, 1/8" NPT X 2.00	2	W773965-208	316 SS	W773965-235	ALLOY C	W773965-145	ALLOY 20	66

**100 FRAME COMPONENTS**

COMMON PARTS	HOLDER, DRIVE MAGNET	1	49718	STEEL	49718	STEEL	49718	STEEL	30
	ADAPTOR, MOTOR	1	Y1101000-ALU	ALUMINUM	Y1101000-ALU	ALUMINUM	Y1101000-ALU	ALUMINUM	36
	BOLT, MOTOR (METRIC)	4	W770533-188	188 SS	W770533-188	188 SS	W770533-188	188 SS	41

**SINGLE CONTAINMENT CAN COMPONENTS**

P	DRIVE MAGNET ASSY	1	49702	STEEL	49702	STEEL	49702	STEEL	31
	RING, CONTAINMENT CAN	1	49719	316 SS	49719	316 SS	49719	316 SS	28

**DOUBLE CONTAINMENT CAN COMPONENTS**

Q	DRIVE MAGNET ASSY	1	49704	STEEL	49704	STEEL	49704	STEEL	32
	CAN ASSY, CONTAINMENT	1	49698	316 SS	49699	ALLOY C	49700	ALLOY 20	27
	# O RING, CONTAINMENT CAN	*1	W210422-TFE	TFE	W210422-TFE	TFE	W210422-TFE	TFE	25
	NIPPLE, 1/8" NPT X 2.00	2	W773965-208	316 SS	W773965-235	ALLOY C	W773965-145	ALLOY 20	66

\*COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B / M  
# DENOTES RECOMMENDED SPARE PART

DWG: GMH8P202

**ISOICHEM GMH8 SERIES PUMP  
CONSOLIDATED B / M**

SECTION: MODEL GMH8  
PAGE: 203  
DATE REV.: 11 / 12 / 12  
SUPERSEDES: 02 / 12 / 01

DESCRIPTION	QTY	STANDARD PUMP MATERIAL						ITEM
		316 SS (A, K, OR U)		ALLOY C (C, M, OR V)		ALLOY 20 (D, N, OR W)		
		PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	

**POSITION 8 MAGNETIC COUPLING COMPONENTS**

COMMON PARTS	DRIVEN MAGNET ASSY	1	49697	316 SS	49707	ALLOY C	49708	ALLOY 20	24
	BOLT, FRONT HOUSING / ADAPTOR	8	W770407-188	188 SS	W770407-188	188 SS	W770407-188	188 SS	22
	# O RING, CONTAINMENT CAN	1	W210422-TFE	TFE	W210422-TFE	TFE	W210422-TFE	TFE	25
	PIN, DRIVE MAGNET / HOLDER	2	W771209-003	STEEL	W771209-003	STEEL	W771209-003	STEEL	34
	SCREW, SKHD DRIVE MAGNET / HOLDER	4	W770027-188	188 SS	W770027-188	188 SS	W770027-188	188 SS	33
	CAN, CONTAINMENT	1	49674	ALLOY C	49674	ALLOY C	49674	ALLOY C	26
SCREW, CONTAINMENT CAN RING	8	W770021-188	188 SS	W770021-188	188 SS	W770021-188	188 SS	29	

**182 / 4TC FRAME COMPONENTS**

COMMON PARTS	HOLDER, DRIVE MAGNET	1	49757	IRON	49757	IRON	49757	IRON	30
	ADAPTOR, MOTOR	1	Y1100700-ALU	ALUMINUM	Y1100700-ALU	ALUMINUM	Y1100700-ALU	ALUMINUM	36
	SCREW, MOTOR	4	W770580-STL	STEEL	W770580-STL	STEEL	W770580-STL	STEEL	69
	ADAPTOR, PLATE	1	Y1101600-STL	STEEL	Y1101600-STL	STEEL	Y1101600-STL	STEEL	68
	BOLT, ADAPTOR PLATE	4	W770425-188	188 SS	W770425-188	188 SS	W770425-188	188 SS	41
	WASHER, LOCK	4	W771108-188	188 SS	W771108-188	188 SS	W771108-188	188 SS	67
SCREW, SET	2	W771004-030	STEEL	W771004-030	STEEL	W771004-030	STEEL	35	

**SINGLE CONTAINMENT CAN COMPONENTS**

R	DRIVE MAGNET ASSY	1	49702	STEEL	49702	STEEL	49702	STEEL	31
	RING, CONTAINMENT CAN	1	49719	316 SS	49719	316 SS	49719	316 SS	28

**DOUBLE CONTAINMENT CAN COMPONENTS**

T	DRIVE MAGNET ASSY	1	49704	STEEL	49704	STEEL	49704	STEEL	32
	CAN ASSY, CONTAINMENT	1	49698	316 SS	49699	ALLOY C	49700	ALLOY 20	27
	# O RING, CONTAINMENT CAN	*1	W210422-TFE	TFE	W210422-TFE	TFE	W210422-TFE	TFE	25
	NIPPLE, 1/8" NPT X 2.00	2	W773965-208	316 SS	W773965-235	ALLOY C	W773965-145	ALLOY 20	66

**213 / 5TC FRAME COMPONENTS**

COMMON PARTS	HOLDER, DRIVE MAGNET	1	49758	IRON	49758	IRON	49758	IRON	30
	ADAPTOR, MOTOR	1	Y1100700-ALU	ALUMINUM	Y1100700-ALU	ALUMINUM	Y1100700-ALU	ALUMINUM	36
	SCREW, MOTOR	4	W770068-188	188 SS	W770068-188	188 SS	W770068-188	188 SS	69
	ADAPTOR, PLATE	1	Y1101700-STL	STEEL	Y1101700-STL	STEEL	Y1101700-STL	STEEL	68
	BOLT, ADAPTOR PLATE	4	W770426-188	188 SS	W770426-188	188 SS	W770426-188	188 SS	41
	SCREW, SET	2	W771004-046	STEEL	W771004-046	STEEL	W771004-046	STEEL	35

**SINGLE CONTAINMENT CAN COMPONENTS**

W	DRIVE MAGNET ASSY	1	49702	STEEL	49702	STEEL	49702	STEEL	31
	RING, CONTAINMENT CAN	1	49719	316 SS	49719	316 SS	49719	316 SS	28

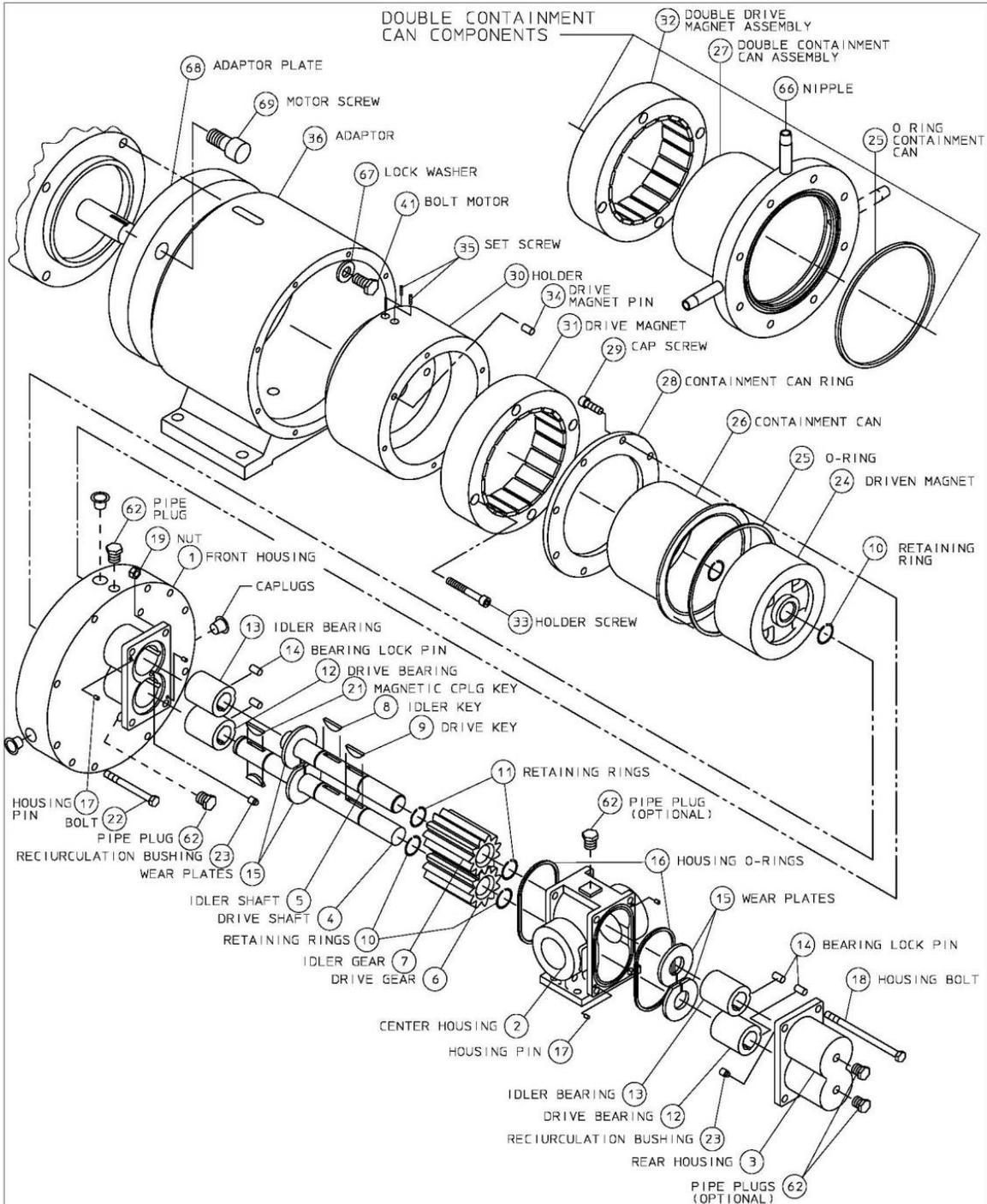
**DOUBLE CONTAINMENT CAN COMPONENTS**

Y	DRIVE MAGNET ASSY	1	49704	STEEL	49704	STEEL	49704	STEEL	32
	CAN ASSY, CONTAINMENT	1	49698	316 SS	49699	ALLOY C	49700	ALLOY 20	27
	# O RING, CONTAINMENT CAN	*1	W210422-TFE	TFE	W210422-TFE	TFE	W210422-TFE	TFE	25
	NIPPLE, 1/8" NPT X 2.00	2	W773965-208	316 SS	W773965-235	ALLOY C	W773965-145	ALLOY 20	66

\* COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B / M

DWG: GMH8P203

# DENOTES RECOMMENDED SPARE PART



ALL DIMENSIONS ARE IN INCHES  
**Isochem** **PULSAFEEDER**  
 A Unit of IDEX Corporation

MODEL GMH6/8  
 ISOICHEM PUMP  
 EXPLODED VIEW

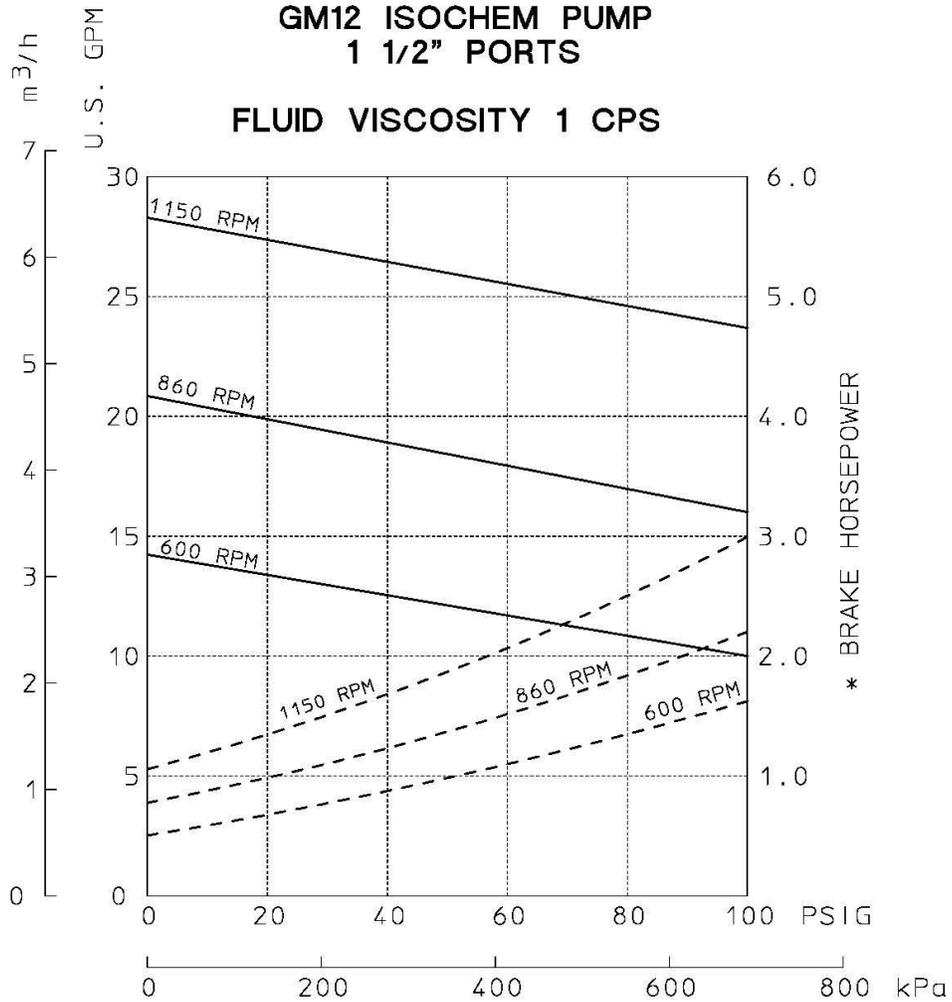
ADDED ITEM 67,68 & 69	10/10/00
REVISION UPDATE	DATE

SECTION/PAGE	MODEL GMH8 / 400
EFFECTIVE	10/10/00
SUPERSEDES	04/01/98

DWN BY: CLA	SD-2776
DATE: 04/04/94	

© PULSAFEEDER 1994 10-Feb-2004 16:30:32

**GM12 ISOICHEM PUMP  
1 1/2" PORTS  
FLUID VISCOSITY 1 CPS**

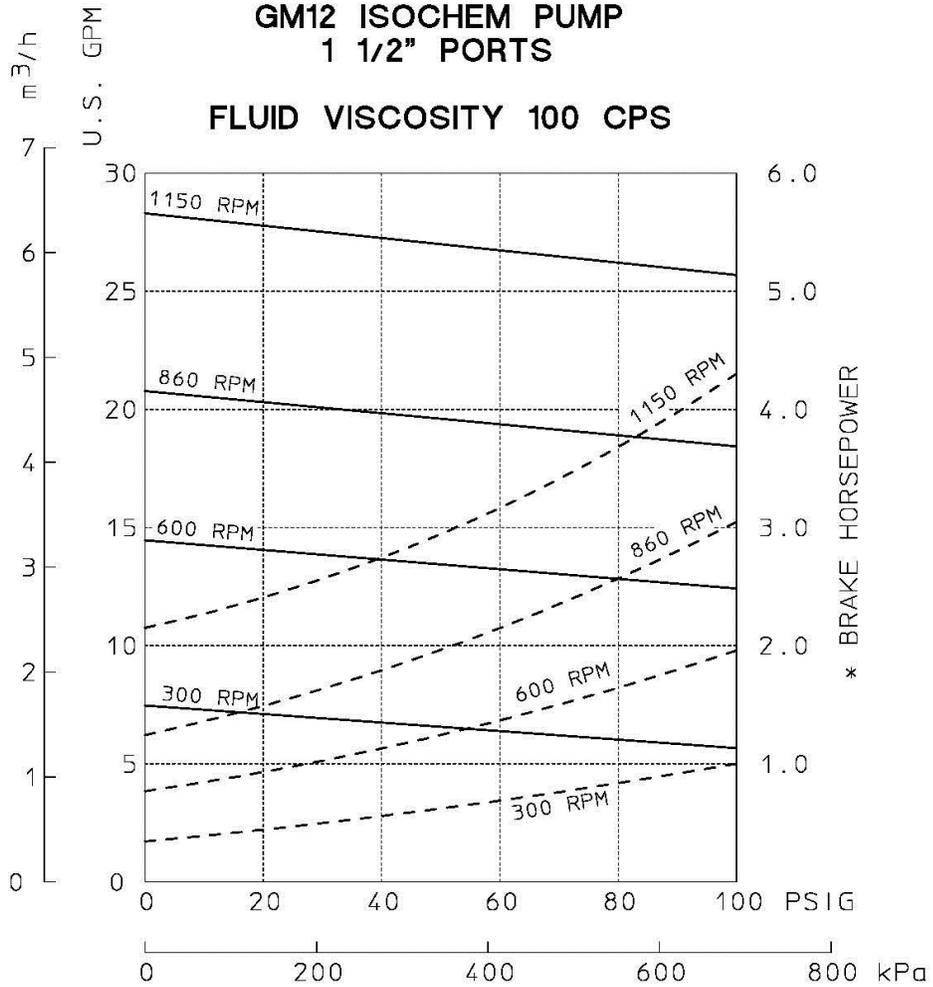


\* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

<b>Isochem</b>	<b>PULSAFEEDER</b> A Unit of IDEX Corporation
<b>PERFORMANCE CURVE GM12</b>	
DWN BY: PTP	AE00052-001
DATE: 02/11/98	

SECTION/PAGE	GM12 / 10
EFFECTIVE	09/22/09
SUPERSEDES	12/01/97
UPDATED DRAWING	09/22/09
REVISION UPDATE	DATE

**GM12 ISOICHEM PUMP  
1 1/2" PORTS  
FLUID VISCOSITY 100 CPS**



\* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

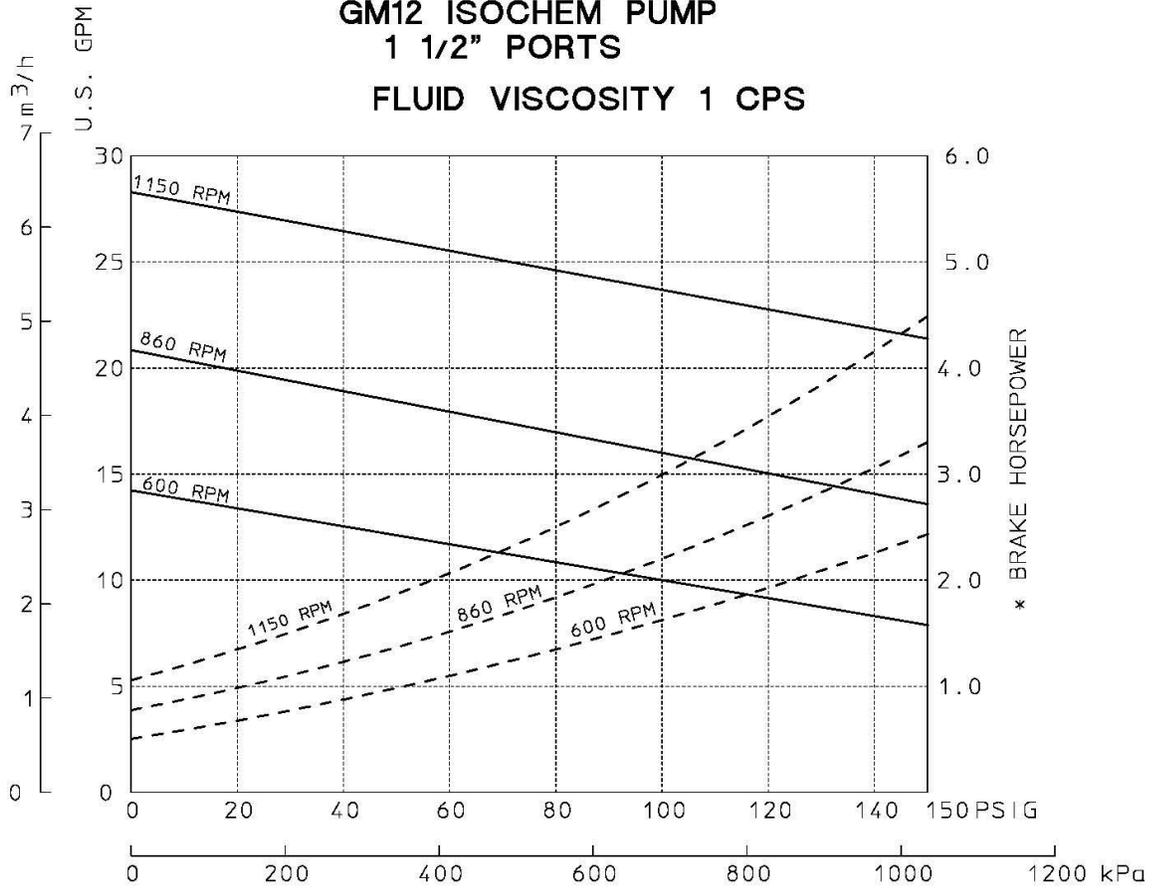
**Isochem** **PULSAFEEDER**  
A Unit of IDEX Corporation

PERFORMANCE CURVE  
GM12

SECTION/PAGE	GM12 / 11	DWN BY:	PTP	AE00052-002
EFFECTIVE	09/22/09	DATE:	02/11/98	
SUPERSEDES	05/20/08			
UPDATE DRAWING	09/22/09			
REVISION UPDATE	DATE			

ISOICHEM PUMP 1-1/2" PORTS

**GM12 ISOICHEM PUMP  
1 1/2" PORTS  
FLUID VISCOSITY 1 CPS**

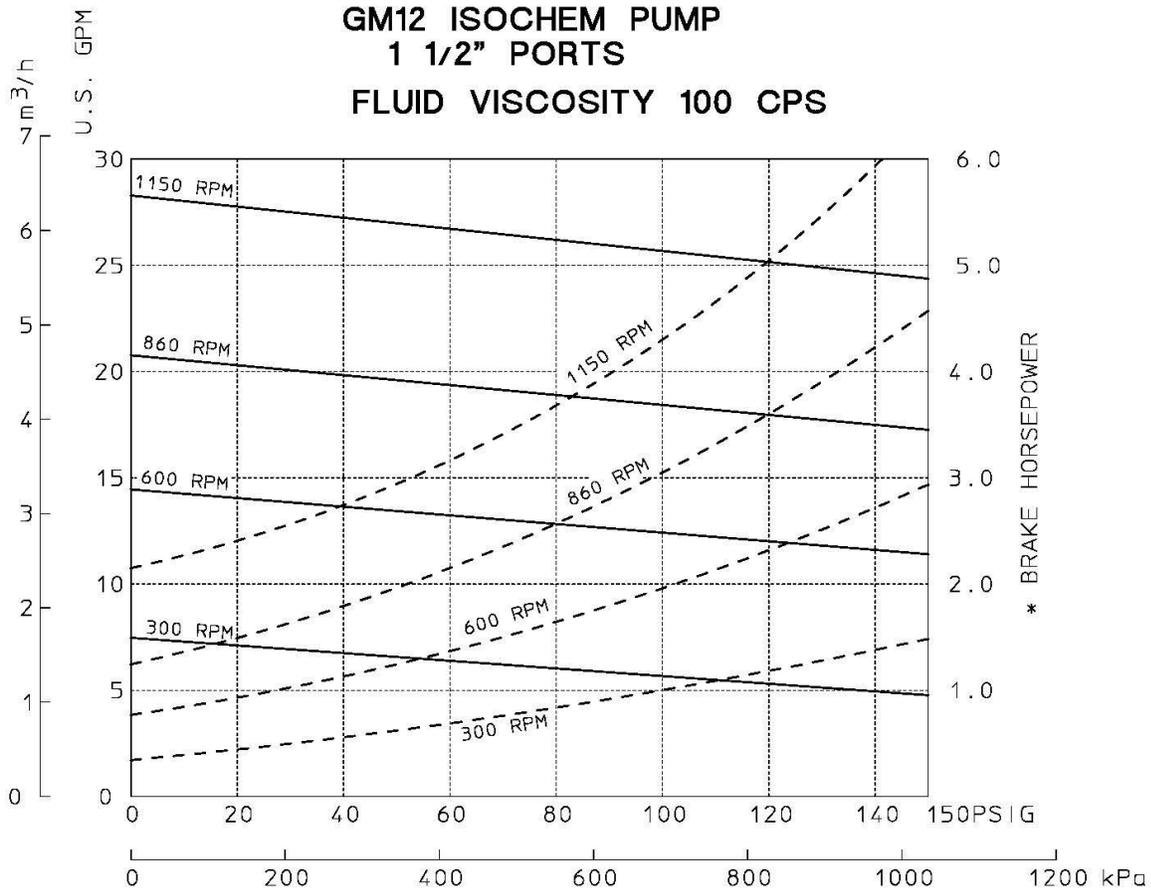


NOTES: 1. TFE GEARS LIMITED TO 100 PSIG  
\* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

<b>Isochem</b>	<b>PULSAFEEDER</b> <small>A Unit of IDEX Corporation</small>
PERFORMANCE CURVE GM12 EXTENDED PRESSURE	
DWN BY: PTP	AE00052-003
DATE: 02/11/98	

SECTION/PAGE	GM12 / 12
EFFECTIVE	07/15/13
SUPERSEDES	12/01/97
REF	REVISION UPDATE
DATE	07/15/13

**GM12 ISOICHEM PUMP  
1 1/2" PORTS  
FLUID VISCOSITY 100 CPS**



NOTES: 1. TFE GEARS LIMITED TO 100 PSIG

\* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

<b>Isochem</b>	<b>PULSAFEEDER</b> A Unit of IDEX Corporation
PERFORMANCE CURVE GM12 EXTENDED PRESSURE	
DWN BY: PTP	AE00052-004
DATE: 02/11/98	

SECTION/PAGE	GM12 / 13
EFFECTIVE	07/15/13
SUPERSEDES	12/01/97

REF	REMOVED GMC12 FROM DESCRIPTION	07/15/13
	REVISION UPDATE	DATE

ITEM CLASS GM12 = IZ  
 PRODUCT LINE = H / ISOICHEM

**ISOICHEM GM12 SERIES PUMP  
 CONSOLIDATED B / M**

SECTION: MODEL GM12  
 PAGE: 200  
 DATE REV.: 11 / 12 / 12  
 SUPERSEDES: 11 / 21 / 11

STRUCTURED WITH NO DASHES EXAMPLE: GM12XXXXXX		STANDARD PUMP MATERIAL						
		316 SS (A, K, OR U)		ALLOY C (C, M, OR V)		ALLOY 20 (D, N, OR W)		
DESCRIPTION	QTY	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	ITEM
<b>POSITION 3 STANDARD PUMP - NON-VARIABLE COMPONENTS</b>								
HOUSING, FRONT	1	99609	316 SS	99610	ALLOY C	99611	ALLOY 20	1
HOUSING, CENTER FNPT	1	90001	316 SS	90006	ALLOY C	90005	ALLOY 20	2
HOUSING, CENTER FBSPT		90012	316 SS	90013	ALLOY C	90014	ALLOY 20	2
HOUSING, CENTER 1.50-150# FLG		90003	316 SS	90007	ALLOY C	90010	ALLOY 20	2
HOUSING, REAR	1	90201	316 SS	90205	ALLOY C	90204	ALLOY 20	3
# RING, RETAINING 1"	4-6	96702	316 SS	96708	ALLOY C	96708	ALLOY C	10
# RING, RETAINING 3/4"	0-2	96701	316 SS	96709	ALLOY C	96709	ALLOY C	11
# KEY, DRIVE GEAR 1"	*1	91904	316 SS	91910	ALLOY C	91910	ALLOY C	8,9
# KEY, MTL IDLER GEAR 1"	*0-1	91904	316 SS	91910	ALLOY C	91910	ALLOY C	9
# KEY, CBN IDLER GEAR 3/4"	0-2	91925	316 SS	91926	ALLOY C	91926	ALLOY C	9
# KEY, PLASTIC IDLER GEAR 3/4"	0-2	91901	316 SS	91912	ALLOY C	91912	ALLOY C	9
# KEY, MAGNETIC CPLG - DRIVEN	*1	91904	316 SS	91910	ALLOY C	91910	ALLOY C	21
# PIN, BEARING LOCK	*4	90801	316 SS	90803	ALLOY C	90803	ALLOY C	14
# BUSHING, RECIRCULATION (.000)	1	99618-00	TFE	99618-00	TFE	99618-00	TFE	23
# O-RING, HOUSING	2	91101	TFE	91101	TFE	91101	TFE	16
PIN, HOUSING	*4	90801	316 SS	90801	316 SS	90801	316 SS	17
BOLT, CENTER HOUSING (ALL)	12	W770412-188	188 SS	W770412-188	188 SS	W770412-188	188 SS	18
LOCKWASHER, HOUSING	12	W771107-188	188 SS	W771107-188	188 SS	W771107-188	188 SS	20
PLUG, 1/8" NPT	**1	W772565-316	316 SS	52301	ALLOY C	52300	ALLOY 20	62
PLUG, 1/4" NPT	4	16415	316 SS	16422	ALLOY C	16432	ALLOY 20	63
NAMEPLATE	1	41210	188 SS	41210	188 SS	41210	188 SS	--

**POSITION 9, 10, AND 11 OPTIONS - DELETE CORRESPONDING STANDARD PUMP COMPONENT FROM B / M**

V	HOUSING, CENTER - VENT FNPT	1	90001-2	316 SS	90006-2	ALLOY C	90005-2	ALLOY 20	2
	HOUSING, CENTER - VENT FBSPT		90012-2	316 SS	90013-2	ALLOY C	90014-2	ALLOY 20	2
	HOUSING, CENTER - VENT FLGD		90003-2	316 SS	90007-2	ALLOY C	90010-2	ALLOY 20	2
	PLUG, 1/8" NPT	*1	W772565-316	316 SS	52301	ALLOY C	52300	ALLOY 20	62
B	# O-RING, HOUSING	2	91106	SS / PFA	91106	SS / PFA	91106	SS / PFA	16
	# O-RING, CONTAINMENT CAN	1-2	W212172-001	SS / PFA	W212172-001	SS / PFA	W212172-001	SS / PFA	25
R	HOUSING, REAR - RECIRCULATION	1	90201-3	316 SS	90205-3	ALLOY C	90204-3	ALLOY 20	3
	# BUSHING, RECIRCULATION (.060)	2	99618-06	TFE	99618-06	TFE	99618-06	TFE	23
	# WEAR PLATE, RECIRCULATION	4	90516	CARBON	90516	CARBON	90516	CARBON	15
	# WEAR PLATE, RECIRCULATION		90517	TFE (GF)	90517	TFE (GF)	90517	TFE (GF)	15
	# WEAR PLATE, RECIRCULATION		90518	CERAMIC	90518	CERAMIC	90518	CERAMIC	15
# WEAR PLATE, RECIRCULATION	90519		PEEK	90519	PEEK	90519	PEEK	15	
W	DRIVEN MAGNET ASSY (WELDED)	1	99663	316 SS	99664	ALLOY C	99665	ALLOY 20	24
HF	# DRIVE SHAFT	1	90367	316 SS	-----	-----	-----	-----	--
	IDLER SHAFT ASSEMBLY		-----	-----	-----	-----	-----	-----	--
	SHAFT, SLEEVED IDLER 3/4"	1	90397	316 SS	-----	-----	-----	-----	--
	# SLEEVE SHAFT 1"	2	90391	316 SS	-----	-----	-----	-----	--
	# SCREW, SLEEVE	2	W770021-316	316 SS	-----	-----	-----	-----	--
	# GEAR, IDLER 3/4"	1	90677	PEEK	-----	-----	-----	-----	--
# BEARING, SLTD DRV / IDL SHAFT	4	90437	EWCBN	-----	-----	-----	-----	--	

\*COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B / M  
 \*\*QTY (2) WHEN PUMP HAS FNPT OR FBSPT CENTER HOUSING;  
 COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B/M  
 # DENOTES RECOMMENDED SPARE PART

DWG: GM12P200

# ISOHEM GM12 SERIES PUMP CONSOLIDATED B / M

SECTION: MODEL GM12  
PAGE: 201  
DATE REV.: 11 / 12 / 12  
SUPERSEDES: 11 / 12 / 04

DESCRIPTION		QTY	STANDARD PUMP MATERIAL						ITEM
			316 SS (A, K, OR U)	ALLOY C (C, M, OR V)	ALLOY 20 (D, N, OR W)	PART NUMBER	MATERIAL	PART NUMBER	

**POSITION 4 & 5 DRIVE AND IDLER GEAR MATERIAL**

A	# GEAR, DRIVE/IDLER	1"	1-2	90679	316 SS	-----	-----	-----	-----	6, 7
C	# GEAR, DRIVE/IDLER	1"	1-2	90627	ALLOY C	90627	ALLOY C	90627	ALLOY C	6, 7
K	# GEAR, IDLER	3/4"	0-1	90664	CARBON	90664	CARBON	90664	CARBON	7
T	# GEAR, IDLER	3/4"		90682	TFE (GF)	90682	TFE (GF)	90682	TFE (GF)	7
E	# GEAR, IDLER	3/4"		90677	PEEK	90677	PEEK	90677	PEEK	7

**POSITION 6 WEAR PLATE MATERIAL**

K	# WEAR PLATE, SLOTTED		4	90503	CARBON	90503	CARBON	90503	CARBON	15
T	# WEAR PLATE, SLOTTED			90510	TFE (GF)	90510	TFE (GF)	90510	TFE (GF)	15
Z	# WEAR PLATE, SLOTTED			90512	CERAMIC	90512	CERAMIC	90512	CERAMIC	15
E	# WEAR PLATE, SLOTTED			90515	PEEK	90515	PEEK	90515	PEEK	15

**POSITION 7 SHAFT AND BEARING MATERIAL**

**STANDARD CONSTRUCTION**

L	# BEARING, DRIVE/IDLER SHAF	1"	4	90437	EWCBN	90437	EWCBN	90437	EWCBN	12, 13
	# SHAFT, DRIVE		1	90367	316 SS	90368	ALLOY C	90369	ALLOY 20	4
	# SHAFT, IDLER (METAL GEAR)	1"	1	90308	316 SS	90318	ALLOY C	90364	ALLOY 20	5
	IDLER SHAFT ASSEMBLY	3/4"		-----	-----	-----	-----	-----	-----	--
	SHAFT, SLEEVED IDLER		1	90397	316 SS	90398	ALLOY C	90399	ALLOY 20	5
	SHAFT, SLEEVED IDLER (CBN GR)		1	99669	316 SS	99670	ALLOY C	99671	ALLOY 20	5
	# SLEEVE, SHAFT	1"	2	90391	316 SS	90392	ALLOY C	90393	ALLOY 20	42
# SCREW, SLEEVE		2	W770021-316	316 SS	W770021-HC0	ALLOY C	W770021-020	ALLOY 20	43	
T	# BEARING, DRIVE/IDLER SHAFT	1"	4	90428	TFE (GF)	90428	TFE (GF)	90428	TFE (GF)	12, 13
	# SHAFT, DRIVE		1	90367	316 SS	90368	ALLOY C	90369	ALLOY 20	4
	# SHAFT, IDLER (METAL GEAR)	1"	1	90308	316 SS	90318	ALLOY C	90364	ALLOY 20	5
	IDLER SHAFT ASSEMBLY	3/4"		-----	-----	-----	-----	-----	-----	--
	SHAFT, SLEEVED IDLER		1	90397	316 SS	90398	ALLOY C	90399	ALLOY 20	5
	SHAFT, SLEEVED IDLER (CBN GR)		1	99669	316 SS	99670	ALLOY C	99671	ALLOY 20	5
	# SLEEVE, SHAFT	1"	2	90391	316 SS	90392	ALLOY C	90393	ALLOY 20	42
# SCREW, SLEEVE		2	W770021-316	316 SS	W770021-HC0	ALLOY C	W770021-020	ALLOY 20	43	
4	# BEARING, SLTD DRV/IDL SHAFT	1"	4	90441	EWCBN	90441	EWCBN	90441	EWCBN	12, 13
	# SHAFT, DRIVE		1	90367	316 SS	90368	ALLOY C	90369	ALLOY 20	4
	# SHAFT, IDLER (METAL GEAR)	1"	1	90308	316 SS	90318	ALLOY C	90364	ALLOY 20	5
	IDLER SHAFT ASSEMBLY	3/4"		-----	-----	-----	-----	-----	-----	--
	SHAFT, SLEEVED IDLER		1	90397	316 SS	90398	ALLOY C	90399	ALLOY 20	5
	SHAFT, SLEEVED IDLER (CBN GR)		1	99669	316 SS	99670	ALLOY C	99671	ALLOY 20	5
	# SLEEVE, SHAFT	1"	2	90391	316 SS	90392	ALLOY C	90393	ALLOY 20	42
# SCREW, SLEEVE		2	W770021-316	316 SS	W770021-HC0	ALLOY C	W770021-020	ALLOY 20	43	

**EXTENDED/WEAR - BOTH SHAFTS**

C	# BEARING, DRIVE/IDLER SHAFT	1"	4	90437	EWCBN	90437	EWCBN	90437	EWCBN	12, 13
	# SHAFT, DRIVE		1	90370	CW / 316 SS	90371	CW / ALY C	90372	CW / ALY20	4
	# SHAFT, IDLER (METAL GEAR)	1"	1	90373	CW / 316 SS	90374	CW / ALY C	90375	CW / ALY20	5
	IDLER SHAFT ASSEMBLY	3/4"		-----	-----	-----	-----	-----	-----	--
	SHAFT, SLEEVED IDLER		1	90397	316 SS	90398	ALLOY C	90399	ALLOY 20	5
	SHAFT, SLEEVED IDLER (CBN GR)		1	99669	316 SS	99670	ALLOY C	99671	ALLOY 20	5
	# SLEEVE, SHAFT	1"	2	90394	CW / 316 SS	90395	CW / ALY C	90396	CW / ALY20	42
# SCREW, SLEEVE		2	W770021-316	316 SS	W770021-HC0	ALLOY C	W770021-020	ALLOY 20	43	

**CORROSION/WEAR ("CW") - BOTH SHAFTS**

B	# BEARING, DRIVE/IDLER SHAFT	1"	4	90439	SICBD	90439	SICBD	90439	SICBD	12, 13
	# SHAFT, DRIVE		1	90370	CW / 316 SS	90371	CW / ALY C	90372	CW / ALY20	4
	# SHAFT, IDLER (METAL GEAR)	1"	1	90373	CW / 316 SS	90374	CW / ALY C	90375	CW / ALY20	5
	IDLER SHAFT ASSEMBLY	3/4"		-----	-----	-----	-----	-----	-----	--
	SHAFT, SLEEVED IDLER		1	90397	316 SS	90398	ALLOY C	90399	ALLOY 20	5
	SHAFT, SLEEVED IDLER (CBN GR)		1	99669	316 SS	99670	ALLOY C	99671	ALLOY 20	5
	# SLEEVE, SHAFT	1"	2	90394	CW / 316 SS	90395	CW / ALY C	90396	CW / ALY20	42
# SCREW, SLEEVE		2	W770021-316	316 SS	W770021-HC0	ALLOY C	W770021-020	ALLOY 20	43	

\* COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B / M

DWG: GM12P201

# DENOTES RECOMMENDED SPARE PART

# ISOCHEM GM12 SERIES PUMP CONSOLIDATED B / M

SECTION: MODEL GM12  
PAGE: 202  
DATE REV: 11 / 12 / 12  
SUPERSEDES: 04 / 01 / 98

		STANDARD PUMP MATERIAL							
		316 SS (A, K, OR U)		ALLOY C (C, M, OR V)		ALLOY 20 (D, N, OR W)			
DESCRIPTION	QTY	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	ITEM	
<b>POSITION 8 MAGNETIC COUPLING COMPONENTS</b>									
COMMON PARTS	DRIVEN MAGNET ASSY	1	99626	316 SS	99627	ALLOY C	99628	ALLOY 20	24
	BOLT, FRONT HOUSING/ADAPTOR	*4	W770426-188	188 SS	W770426-188	188 SS	W770426-188	188 SS	22
	# O-RING, CONTAINMENT CAN	*1	W212172-TFE	TFE	W212172-TFE	TFE	W212172-TFE	TFE	25
	SCREW, SET	2	W771004-030	STL	W771004-030	STL	W771004-030	STL	35
	PIN, DRIVE MAGNET/HOLDER	4	W771209-003	STL	W771209-003	STL	W771209-003	STL	34
	SCREW, SKHD DRIVE MAGNET/HOLDER	4	W770027-188	188 SS	W770027-188	188 SS	W770027-188	188 SS	33
	CAN, CONTAINMENT	1	99600	ALLOY C	99600	ALLOY C	99600	ALLOY C	26
	SCREW, CONTAINMENT CAN RING	12	W770021-188	188 SS	W770021-188	188 SS	W770021-188	188 SS	29
	HOLDER, DRIVE MAGNET	1	99640	STL	99640	STL	99640	STL	30
	ADAPTOR, POWERFRAME	1	99619	ALU	99619	ALU	99619	ALU	36
	LUG, LIFTING	1	W212304-STL	STL	W212304-STL	STL	W212304-STL	STL	37
	PIN	6	99641	188 SS	99641	188 SS	99641	188 SS	39
	SPRING	6	99642	188 SS	99642	188 SS	99642	188 SS	40
	BOLT, POWERFRAME	*4	W770426-188	188 SS	W770426-188	188 SS	W770426-188	188 SS	41

**STANDARD U.S. MOUNTING**

<b>SINGLE CONTAINMENT CAN COMPONENTS</b>									
R	POWERFRAME $\mu$ 1.125 INPUT SHAFT	1	99648	STL	99648	STL	99648	STL	38
	DRIVE MAGNET ASSY	1	99635	STL	99635	STL	99635	STL	31
	RING, CONTAINMENT CAN	1	99630	316 SS	99630	316 SS	99630	316 SS	28

**DOUBLE CONTAINMENT CAN COMPONENTS**

T	POWERFRAME $\mu$ 1.125 INPUT SHAFT	1	99648	STL	99648	STL	99648	STL	38
	DRIVE MAGNET ASSY	1	99638	STL	99638	STL	99638	STL	32
	CAN ASSY, CONTAINMENT	1	99631	316 SS	99632	ALLOY C	99633	ALLOY 20	27
	# O RING, CONTAINMENT CAN ASSY	*1	W212172-TFE	TFE	W212172-TFE	TFE	W212172-TFE	TFE	25
	NIPPLE, 1/8" NPT X 2.00	2	W773965-208	316 SS	W773965-235	ALLOY C	W773965-145	ALLOY 20	66

**STANDARD METRIC MOUNTING**

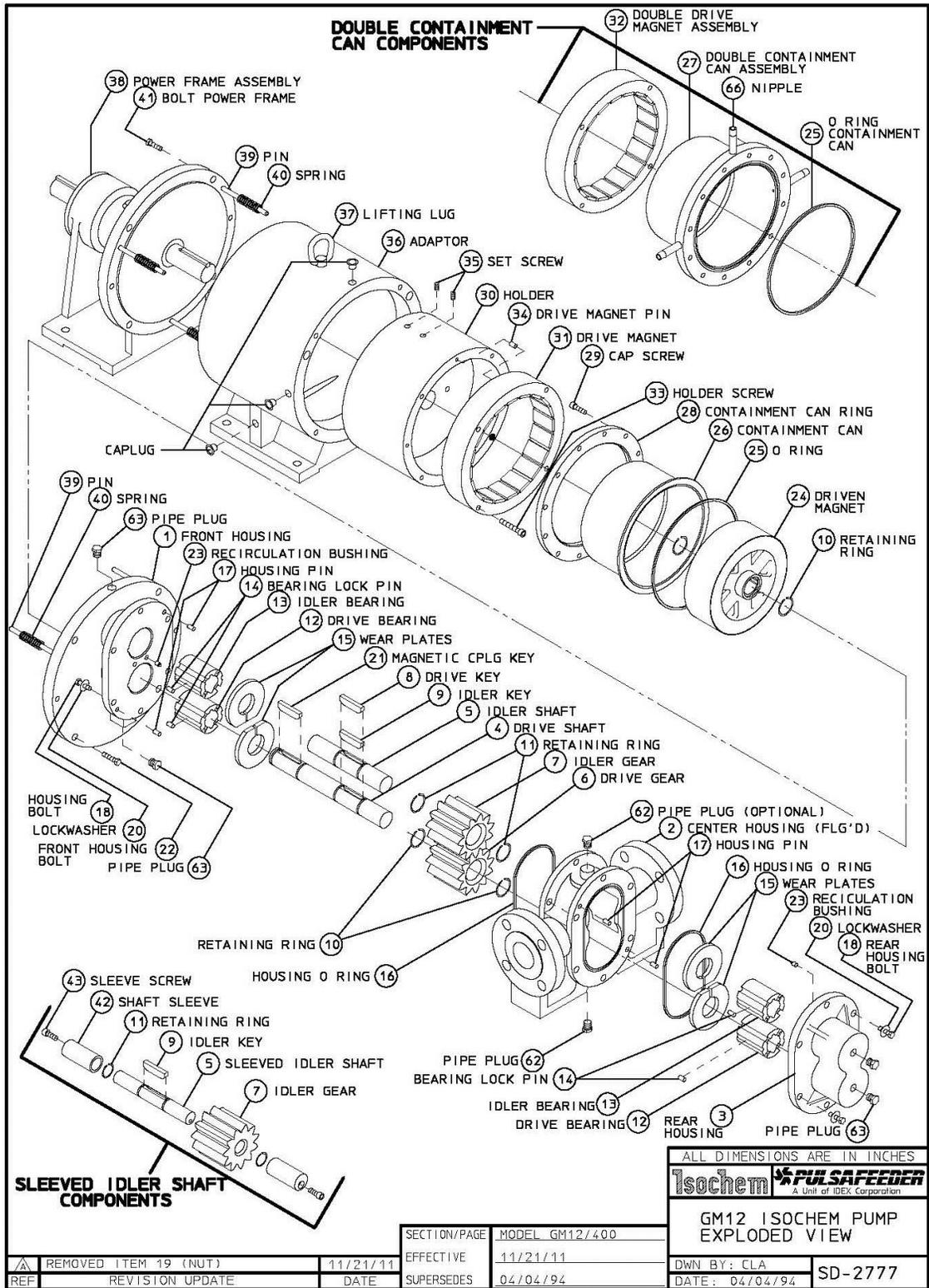
<b>SINGLE CONTAINMENT CAN COMPONENTS</b>									
U	POWERFRAME $\mu$ 28 MM INPUT SHAFT	1	99649	STL	99649	STL	99649	STL	38
	DRIVE MAGNET ASSY	1	99635	STL	99635	STL	99635	STL	31
	RING, CONTAINMENT CAN	1	99630	316 SS	99630	316 SS	99630	316 SS	28

**DOUBLE CONTAINMENT CAN COMPONENTS**

V	POWERFRAME $\mu$ 28 MM INPUT SHAFT	1	99649	STL	99649	STL	99649	STL	38
	DRIVE MAGNET ASSY	1	99638	STL	99638	STL	99638	STL	32
	CAN ASSY, CONTAINMENT	1	99631	316 SS	99632	ALLOY C	99633	ALLOY 20	27
	# O RING, CONTAINMENT CAN ASSY	*1	W212172-TFE	TFE	W212172-TFE	TFE	W212172-TFE	TFE	25
	NIPPLE, 1/8" NPT X 2.00	2	W773965-208	316 SS	W773965-235	ALLOY C	W773965-145	ALLOY 20	66

\*COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B / M  
# DENOTES RECOMMENDED SPARE PART

DWG: GM12P202



ITEM CLASS GM16 = IU  
 PRODUCT LINE = H / ISOCHEM

**ISOICHEM GM16 SERIES PUMP  
 CONSOLIDATED B / M**

SECTION: MODEL GM16  
 PAGE: 200  
 DATE REV.: 11 / 12 / 12  
 SUPERSEDES: 02 / 23 / 10

STRUCTURED WITH NO DASHES  
 EXAMPLE: GM16XXXXXX

STANDARD PUMP MATERIAL

DESCRIPTION	QTY	316 SS (U)		ALLOY C (V)		ALLOY 20 (W)		ITEM
		PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	

POSITION 3 STANDARD PUMP - NON-VARIABLE COMPONENTS

HOUSING, FRONT	1	99609	316 SS	99610	ALLOY C	99611	ALLOY 20	1
HOUSING, CENTER 2.00-150# FLG	1	90020	316 SS	90021	ALLOY C	90022	ALLOY 20	2
HOUSING, REAR	1	90201	316 SS	90205	ALLOY C	90204	ALLOY 20	3
# RING, RETAINING 1"	4-6	96702	316 SS	96708	ALLOY C	96708	ALLOY C	10, 11
# RING, RETAINING 3/4"	0-2	96701	316 SS	96709	ALLOY C	96709	ALLOY C	11
# KEY, MTL DRIVE/IDLER GEAR 1"	*2	91904	316 SS	91910	ALLOY C	91910	ALLOY C	8, 9
# KEY, MTL IDLER GEAR 1"	*0-2	91904	316 SS	91910	ALLOY C	91910	ALLOY C	8, 9
# KEY, CBN/PLSTC GEAR 3/4"	0-2	91929	ALLOY C	91929	ALLOY C	91929	ALLOY C	9
# KEY, MAGNETIC CPLG - DRIVEN	*2	91904	316 SS	91910	ALLOY C	91910	ALLOY C	21
# PIN, BEARING LOCK	*4	90801	316 SS	90803	ALLOY C	90803	ALLOY C	14
# BUSHING, RECIRCULATION (.000)	1	99618-00	TFE	99618-00	TFE	99618-00	TFE	23
# O-RING, HOUSING	2	91101	TFE	91101	TFE	91101	TFE	16
PIN, HOUSING	*4	90801	316 SS	90801	316 SS	90801	316 SS	17
BOLT, HOUSING	12	W770412-188	188 SS	W770412-188	188 SS	W770412-188	188 SS	18
LOCKWASHER, HOUSING	12	W771107-188	188 SS	W771107-188	188 SS	W771107-188	188 SS	20
PLUG, 1/4" NPT	6	16415	316 SS	16422	ALLOY C	16432	ALLOY 20	63
NAMEPLATE	1	41210	188 SS	41210	188 SS	41210	188 SS	--

POSITION 9, 10, AND 11 OPTIONS - DELETE CORRESPONDING STANDARD PUMP COMPONENT FROM B/M

B	# O-RING, HOUSING	2	91106	SS / PFA	91106	SS / PFA	91106	SS / PFA	16
	# O-RING, CONTAINMENT CAN	1-2	W212172-001	SS / PFA	W212172-001	SS / PFA	W212172-001	SS / PFA	25
R	HOUSING, REAR - RECIRCULATION	1	90201-3	316 SS	90205-3	ALLOY C	90204-3	ALLOY 20	3
	# BUSHING, RECIRCULATION (.060)	2	99618-06	TFE	99618-06	TFE	99618-06	TFE	23
	# WEAR PLATE, RECIRCULATION	4	90516	CARBON	90516	CARBON	90516	CARBON	15
	# WEAR PLATE, RECIRCULATION		90517	TFE (GF)	90517	TFE (GF)	90517	TFE (GF)	15
	# WEAR PLATE, RECIRCULATION		90518	CERAMIC	90518	CERAMIC	90518	CERAMIC	15
# WEAR PLATE, RECIRCULATION		90519	PEEK	90519	PEEK	90519	PEEK	15	
W	DRIVEN MAGNET ASSY (WELDED)	1	99666	316 SS	99667	ALLOY C	99668	ALLOY 20	24
HF	# IDLER SHAFT, 1" DIA	1	NG070021-316	316 SS	-----	-----	-----	-----	--
	# GEAR, IDLER, 1" DIA	1	NG010026-PK1	316 SS	-----	-----	-----	-----	--
	# BEARING, SLTD DRV/IDL SHAFT, 1"	4	90437	EWCBN	-----	-----	-----	-----	--

\* COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B / M  
 # DENOTES RECOMMENDED SPARE PART

DWG: GM16P200

## ISOCHEM GM16 SERIES PUMP CONSOLIDATED B / M

SECTION: MODEL GM16  
PAGE: 201  
DATE REV.: 10 / 17 / 14  
SUPERSEDES: 11 / 12 / 12

		STANDARD PUMP MATERIAL								ITEM
		316 SS (U)		ALLOY C (V)		ALLOY 20 (W)				
DESCRIPTION	QTY	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL			

**POSITION 4 & 5 DRIVE AND IDLER GEAR MATERIAL**

A	# GEAR, DRIVE/IDLER	1"	1-2	90668	316 SS	----	----	----	----	6, 7
C	# GEAR, DRIVE/IDLER	1"	1-2	90667	ALLOY C	90667	ALLOY C	90667	ALLOY C	6, 7
K	# GEAR, IDLER	3/4"	0-1	90676	CARBON	90676	CARBON	90676	CARBON	7
T	# GEAR, IDLER	3/4"		90670	TFE (GF)	90670	TFE (GF)	90670	TFE (GF)	7
E	# GEAR, IDLER	3/4"		90678	PEEK	90678	PEEK	90678	PEEK	7

**POSITION 6 WEAR PLATE MATERIAL**

K	# WEAR PLATE, SLOTTED		4	90503	CARBON	90503	CARBON	90503	CARBON	15
T	# WEAR PLATE, SLOTTED			90510	TFE (GF)	90510	TFE (GF)	90510	TFE (GF)	15
Z	# WEAR PLATE, SLOTTED			90512	CERAMIC	90512	CERAMIC	90512	CERAMIC	15
E	# WEAR PLATE, SLOTTED			90515	PEEK	90515	PEEK	90515	PEEK	15

**POSITION 7 SHAFT AND BEARING MATERIAL**

**STANDARD CONSTRUCTION**

L	# BEARING, DRIVE/IDLER SHAFT	1"	4	90437	EWCBN	90437	EWCBN	90437	EWCBN	12, 13
	# SHAFT, DRIVE		1	90379	316 SS	90380	ALLOY C	90381	ALLOY 20	4
	# SHAFT, IDLER (METAL GEAR)	1"	1	90349	316 SS	90351	ALLOY C	90350	ALLOY 20	5
	IDLER SHAFT ASSEMBLY	3/4"		----	----	----	----	----	----	--
	SHAFT, SLEEVED IDLER		1	99672	316 SS	99673	ALLOY C	99674	ALLOY 20	5
	# SLEEVE, SHAFT	1"	2	90391	316 SS	90392	ALLOY C	90393	ALLOY 20	42
T	# SCREW, SLEEVE		2	W770021-316	316 SS	W770021-HC0	ALLOY C	W770021-020	ALLOY 20	43
	# BEARING, DRIVE/IDLER SHAFT	1"	4	90428	TFE (GF)	90428	TFE (GF)	90428	TFE (GF)	12, 13
	# SHAFT, DRIVE		1	90379	316 SS	90380	ALLOY C	90381	ALLOY 20	4
	# SHAFT, IDLER (METAL GEAR)	1"	1	90349	316 SS	90351	ALLOY C	90350	ALLOY 20	5
	IDLER SHAFT ASSEMBLY	3/4"		----	----	----	----	----	----	--
	SHAFT, SLEEVED IDLER		1	99672	316 SS	99673	ALLOY C	99674	ALLOY 20	5
# SLEEVE, SHAFT	1"	2	90391	316 SS	90392	ALLOY C	90393	ALLOY 20	42	
4	# SCREW, SLEEVE		2	W770021-316	316 SS	W770021-HC0	ALLOY C	W770021-020	ALLOY 20	43
	# BEARING, SLTD DRV/IDL	1"	4	90441	EWCBN	90441	EWCBN	90441	EWCBN	12, 13
	# SHAFT, DRIVE		1	90379	316 SS	90380	ALLOY C	90381	ALLOY 20	4
	# SHAFT, IDLER (METAL GEAR)	1"	1	90349	316 SS	90351	ALLOY C	90350	ALLOY 20	5
	IDLER SHAFT ASSEMBLY	3/4"		----	----	----	----	----	----	--
	SHAFT, SLEEVED IDLER		1	99672	316 SS	99673	ALLOY C	99674	ALLOY 20	5
# SLEEVE, SHAFT	1"	2	90391	316 SS	90392	ALLOY C	90393	ALLOY 20	42	
# SCREW, SLEEVE		2	W770021-316	316 SS	W770021-HC0	ALLOY C	W770021-020	ALLOY 20	43	

**EXTENDED/WEAR - BOTH SHAFTS**

C	# BEARING, DRIVE/IDLER SHAFT	1"	4	90437	EWCBN	90437	EWCBN	90437	EWCBN	12, 13
	# SHAFT, DRIVE		1	90382	CW / 316 SS	90383	CW / ALY C	90384	CW / ALY20	4
	# SHAFT, IDLER (METALIC GEAR)	1"	1	90385	CW / 316 SS	90386	CW / ALY C	90387	CW / ALY20	5
	IDLER SHAFT ASSEMBLY	3/4"		----	----	----	----	----	----	--
	SHAFT, SLEEVED IDLER		1	99672	316 SS	99673	ALLOY C	99674	ALLOY 20	5
	# SLEEVE, SHAFT	1"	2	90394	CW / 316 SS	90395	CW / ALY C	90396	CW / ALY20	42
# SCREW, SLEEVE		2	W770021-316	316 SS	W770021-HC0	ALLOY C	W770021-020	ALLOY 20	43	

**CORROSION/WEAR ("CW") - BOTH SHAFTS**

B	# BEARING, DRIVE/IDLER SHAFT	1"	4	90439	SICBD	90439	SICBD	90439	SICBD	12, 13
	# SHAFT, DRIVE		1	90382	CW / 316 SS	90383	CW / ALY C	90384	CW / ALY20	4
	# SHAFT, IDLER (METALIC GEAR)	1"	1	90385	CW / 316 SS	90386	CW / ALY C	90387	CW / ALY20	5
	IDLER SHAFT ASSEMBLY	3/4"		----	----	----	----	----	----	--
	SHAFT, SLEEVED IDLER		1	99672	316 SS	99673	ALLOY C	99674	ALLOY 20	5
	# SLEEVE, SHAFT	1"	2	90394	CW / 316 SS	90395	CW / ALY C	90396	CW / ALY20	42
# SCREW, SLEEVE		2	W770021-316	316 SS	W770021-HC0	ALLOY C	W770021-020	ALLOY 20	43	

\*COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B / M  
# DENOTES RECOMMENDED SPARE PART

DWG: GM16P201

**ISOCHEM GM16 SERIES PUMP  
CONSOLIDATED B / M**

SECTION: MODEL GM16  
PAGE: 202  
DATE REV.: 11 / 12 / 12  
SUPERSEDES: 04 / 01 / 98

		STANDARD PUMP MATERIAL							
		316 SS (U)		ALLOY C (V)		ALLOY 20 (W)			
DESCRIPTION	QTY	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL		ITEM
<b>POSITION 8</b>	<b>MAGNETIC COUPLING COMPONENTS</b>								
COMMON PARTS	DRIVEN MAGNET ASSY	1	99651	316 SS	99652	ALLOY C	99653	ALLOY 20	24
	BOLT, FRONT HOUSING/ADAPTOR	*4	W770426-188	188 SS	W770426-188	188 SS	W770426-188	188 SS	22
	# O-RING, CONTAINMENT CAN	*1	W212172-TFE	TFE	W212172-TFE	TFE	W212172-TFE	TFE	25
	SCREW, SET	2	W771004-030	STL	W771004-030	STL	W771004-030	STL	35
	PIN, DRIVE MAGNET/HOLDER	4	W771209-003	STL	W771209-003	STL	W771209-003	STL	34
	SCREW, SKHD DRIVE MAGNET/HOLDER	4	W770027-188	188 SS	W770027-188	188 SS	W770027-188	188 SS	33
	CAN, CONTAINMENT	1	99600	ALLOY C	99600	ALLOY C	99600	ALLOY C	26
	SCREW, CONTAINMENT CAN RING	12	W770021-188	188 SS	W770021-188	188 SS	W770021-188	188 SS	29
	HOLDER, DRIVE MAGNET	1	99640	STL	99640	STL	99640	STL	30
	ADAPTOR, POWERFRAME	1	99619	ALU	99619	ALU	99619	ALU	36
	LUG, LIFTING	1	W212304-STL	STL	W212304-STL	STL	W212304-STL	STL	37
	PIN	6	99641	188 SS	99641	188 SS	99641	188 SS	39
	SPRING	6	99642	188 SS	99642	188 SS	99642	188 SS	40
	BOLT, POWERFRAME ADAPTOR	*4	W770426-188	188 SS	W770426-188	188 SS	W770426-188	188 SS	41

**STANDARD U.S. MOUNTING**

**SINGLE CONTAINMENT CAN COMPONENTS**

R	POWERFRAME $\mu$ 1.125 INPUT SHAFT	1	99648	STL	99648	STL	99648	STL	38
	DRIVE MAGNET ASSY	1	99636	STL	99636	STL	99636	STL	31
	RING, CONTAINMENT CAN	1	99630	316 SS	99630	316 SS	99630	316 SS	28

**DOUBLE CONTAINMENT CAN COMPONENTS**

T	POWERFRAME $\mu$ 1.125 INPUT SHAFT	1	99648	STL	99648	STL	99648	STL	38
	DRIVE MAGNET ASSY	1	99639	STL	99639	STL	99639	STL	32
	CAN ASSY, CONTAINMENT	1	99631	316 SS	99632	ALLOY C	99633	ALLOY 20	27
	# O RING, CONTAINMENT CAN ASSY	*1	W212172-TFE	TFE	W212172-TFE	TFE	W212172-TFE	TFE	25
	NIPPLE, 1/8" NPT X 2.00	2	W773965-208	316 SS	W773965-235	ALLOY C	W773965-020	ALLOY 20	66

**STANDARD METRIC MOUNTING**

**SINGLE CONTAINMENT CAN COMPONENTS**

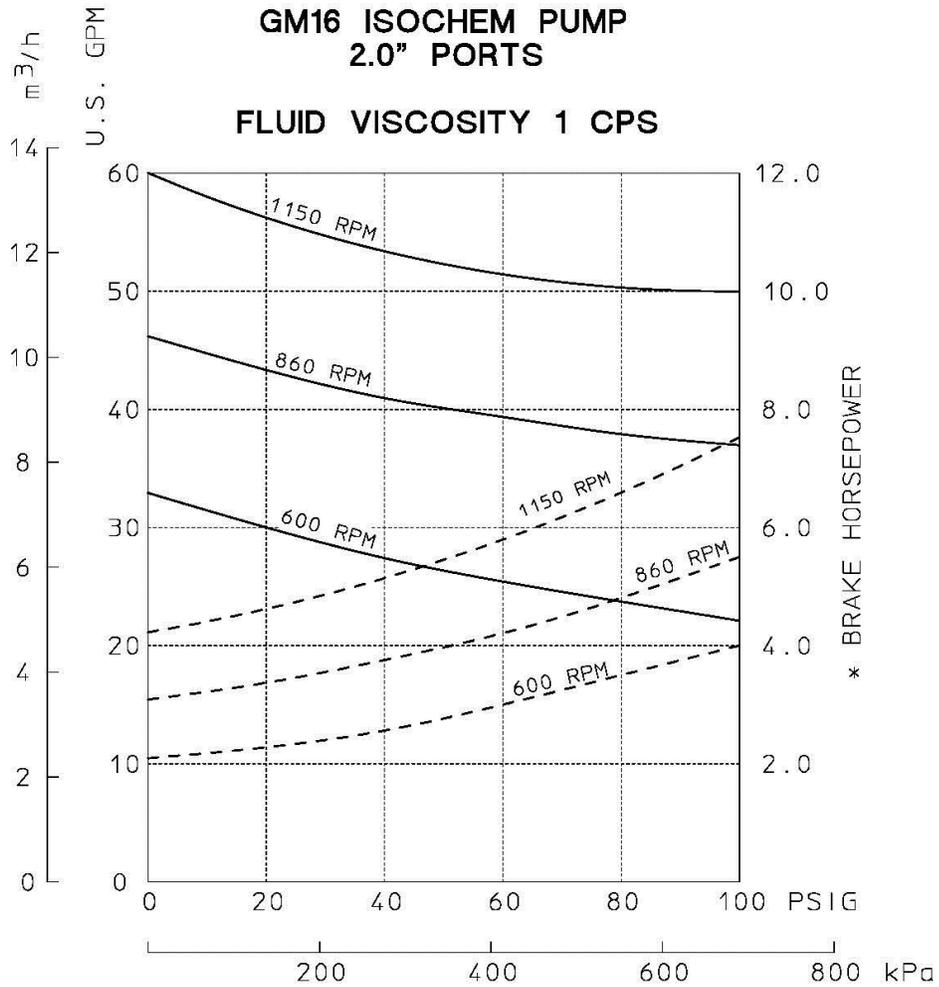
U	POWERFRAME $\mu$ 28 MM INPUT SHAFT	1	99649	STL	99649	STL	99649	STL	38
	DRIVE MAGNET ASSY	1	99636	STL	99636	STL	99636	STL	31
	RING, CONTAINMENT CAN	1	99630	316 SS	99630	316 SS	99630	316 SS	28

**DOUBLE CONTAINMENT CAN COMPONENTS**

V	POWERFRAME $\mu$ 24 MM INPUT SHAFT	1	99649	STL	99649	STL	99649	STL	38
	DRIVE MAGNET ASSY	1	99639	STL	99639	STL	99639	STL	32
	CAN ASSY, CONTAINMENT	1	99631	316 SS	99632	ALLOY C	99633	ALLOY 20	27
	# O RING, CONTAINMENT CAN ASSY	*1	W212172-TFE	TFE	W212172-TFE	TFE	W212172-TFE	TFE	25
	NIPPLE, 1/8" NPT X 2.00	2	W773965-208	316 SS	W773965-235	ALLOY C	W773965-145	ALLOY 20	66

\*COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B / M  
# DENOTES RECOMMENDED SPARE PART

DWG: GM16P202



\* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

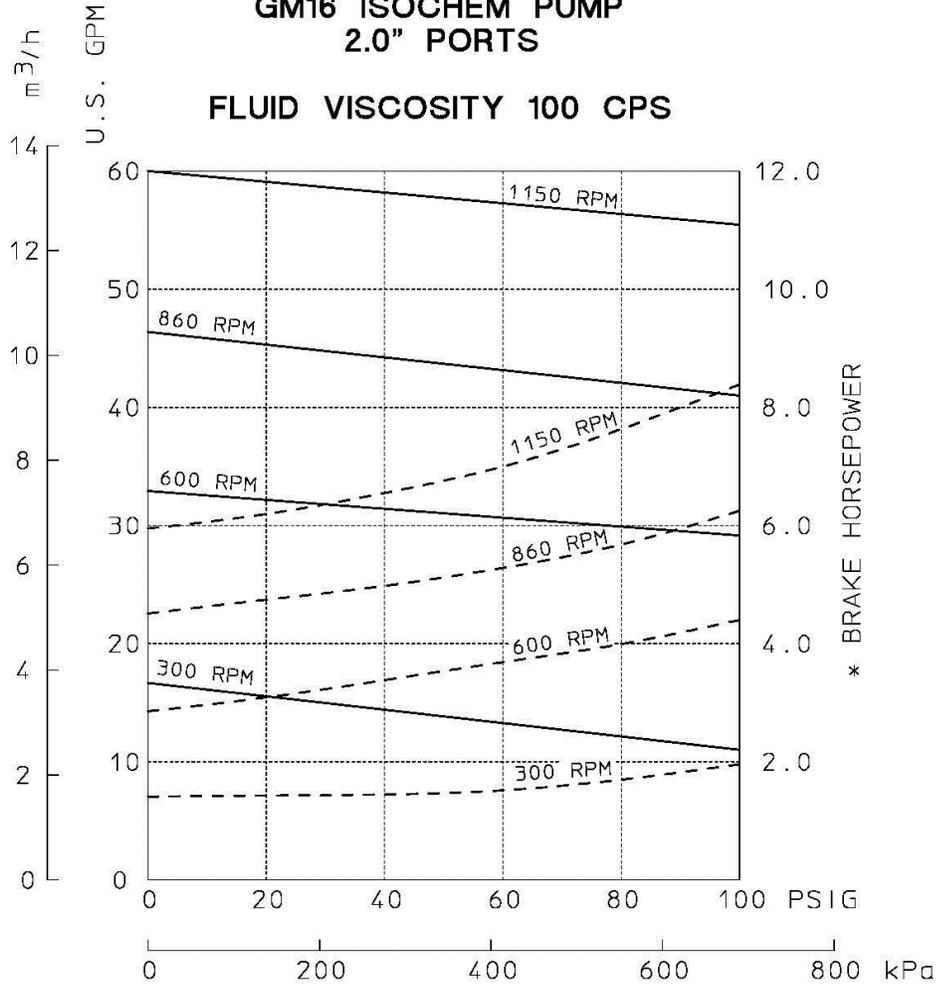
**Isochem** **PULSAFEEDER**  
A Unit of IDEX Corporation

PERFORMANCE CURVE  
GM16

SECTION/PAGE		GM16 / 10		DWN BY: PTP		AE00053-001
EFFECTIVE		09/22/09		DATE: 02/11/98		
REV	UPDATE DRAWING	09/22/09	DATE	SUPERSEDES	06/12/08	
	REVISION UPDATE					

ISOICHEM PUMP P-20-200 H25.0

**GM16 ISOICHEM PUMP  
2.0" PORTS  
FLUID VISCOSITY 100 CPS**



\* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

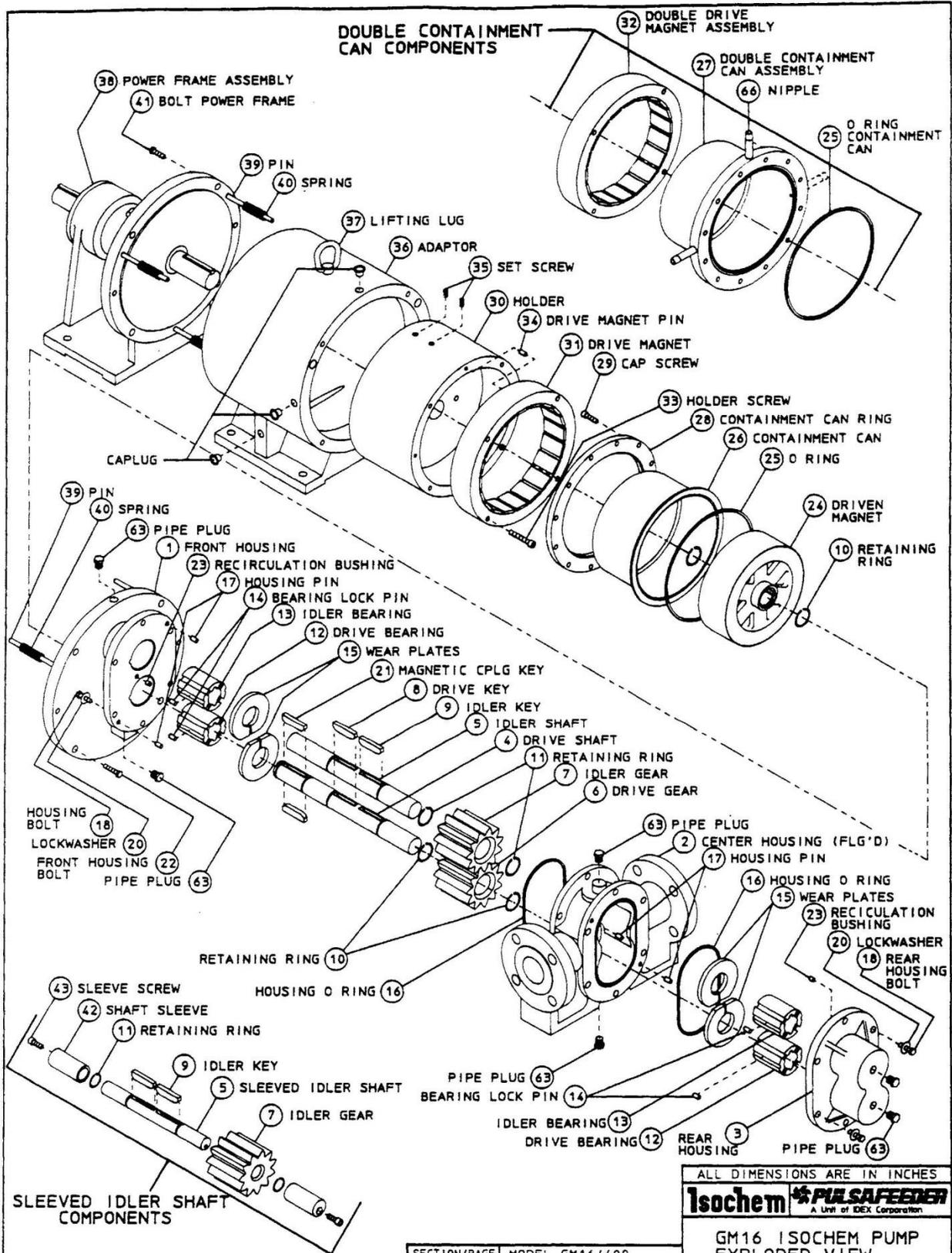


PERFORMANCE CURVE GM16	
DWN BY: PTP	AE00053-002
DATE: 02/11/98	

SECTION/PAGE	GM16 / 11
EFFECTIVE	09/22/09
SUPERSEDES	06/12/08

UPDATE DRAWING	09/22/09
REVISION UPDATE	DATE

ISOICHEM PUMP P-20-20 H-2.5



**DOUBLE CONTAINMENT CAN COMPONENTS**

- 38 POWER FRAME ASSEMBLY
- 41 BOLT POWER FRAME
- 39 PIN
- 40 SPRING
- 37 LIFTING LUG
- 36 ADAPTOR
- 35 SET SCREW
- 30 HOLDER
- 34 DRIVE MAGNET PIN
- 31 DRIVE MAGNET
- 29 CAP SCREW
- 33 HOLDER SCREW
- 28 CONTAINMENT CAN RING
- 26 CONTAINMENT CAN
- 25 O RING
- 24 DRIVEN MAGNET
- 10 RETAINING RING
- 32 DOUBLE DRIVE MAGNET ASSEMBLY
- 27 DOUBLE CONTAINMENT CAN ASSEMBLY
- 66 NIPPLE
- 25 O RING CONTAINMENT CAN
- 1 FRONT HOUSING
- 23 RECIRCULATION BUSHING
- 17 HOUSING PIN
- 14 BEARING LOCK PIN
- 13 IDLER BEARING
- 12 DRIVE BEARING
- 15 WEAR PLATES
- 21 MAGNETIC CPLG KEY
- 8 DRIVE KEY
- 9 IDLER KEY
- 5 IDLER SHAFT
- 4 DRIVE SHAFT
- 11 RETAINING RING
- 7 IDLER GEAR
- 6 DRIVE GEAR
- 63 PIPE PLUG
- 2 CENTER HOUSING (FLG'D)
- 17 HOUSING PIN
- 16 HOUSING O RING
- 15 WEAR PLATES
- 23 RECIRCULATION BUSHING
- 20 LOCKWASHER
- 18 REAR HOUSING BOLT
- 18 HOUSING BOLT
- 20 LOCKWASHER
- 22 FRONT HOUSING BOLT
- 63 PIPE PLUG
- 10 RETAINING RING
- 16 HOUSING O RING
- 43 SLEEVE SCREW
- 42 SHAFT SLEEVE
- 11 RETAINING RING
- 9 IDLER KEY
- 5 SLEEVED IDLER SHAFT
- 7 IDLER GEAR
- 13 IDLER BEARING
- 12 DRIVE BEARING
- 3 REAR HOUSING
- 63 PIPE PLUG

**SLEEVED IDLER SHAFT COMPONENTS**

ALL DIMENSIONS ARE IN INCHES

**Isochem** **PULSAFEEDER**  
A Unit of IDEX Corporation

GM16 ISOICHEM PUMP  
EXPLODED VIEW

SECTION/PAGE	MODEL GM16/400
EFFECTIVE	04/04/94
SUPERSEDES	NEW
DWN BY:	CLA
DATE:	04/04/94
	SD-2781

REF	REVISION UPDATE	DATE
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ISOICHEM GMH8 AND CENTRIFUGAL POWER FRAME  
 ASSEMBLY COMPOSITE BILL OF MATERIALS FOR  
 Y0400600-(SUFFIX FROM BELOW)

SECTION: DRIVES  
 PAGE: 120  
 DATE REV.: 12/02/94  
 SUPERSEDES: 04/04/94

	DESCRIPTION	QTY	PART NUMBER	MATERIAL	ITEM
COMMON PARTS	PIPE PLUG	1	W772565-STL	STEEL	13
	OIL CUP	1	A53801	STEEL	12
	AIR VENT	1	27219	STEEL	11
	SHIM PACKAGE	* 1	Y1300700-PAK	PLASTIC	8
	O-RING	* 1	W209789-NTR	NITRILE	7
	OIL SEAL	* 2	Y1501100-000	STL/NTR	6
	.25 LOCK WASHER	4	W771117-STL	STEEL	5
	.25-20 X .75 HEX HD BOLT	4	W770402-STL	STEEL	4
	.19 X 1.38 SQUARE KEY	1	W773098-010	STEEL	14
	BEARING CAP	1	Y1700200-000	STEEL	3
	POWER FRAME	1	Y0400500-IRN	CAST IRON	1
.625 DIA. OUTPUT SHAFT FOR UP TO 3 H.P. INPUT					
SUFFIX	DRIVE SHAFT	1	Y0701600-000	STEEL	2
-000	BEARING, SINGLE ROW	* 2	Y0800800-000	STEEL	9
.875 DIA. OUTPUT SHAFT FOR UP TO 5 H.P. INPUT					
SUFFIX	DRIVE SHAFT	1	Y0701800-000	STEEL	2
-001	BEARING, SINGLE ROW	* 2	Y0800800-000	STEEL	9
.875 DIA. OUTPUT SHAFT FOR UP TO 10 H.P. INPUT					
SUFFIX	DRIVE SHAFT	1	Y0701500-000	STEEL	2
-002	BEARING, SINGLE ROW	* 1	Y0800800-000	STEEL	9
	BEARING, DOUBLE ROW	* 1	Y0800700-000	STEEL	10
.875 DIA. OUTPUT SHAFT FOR UP TO 20 H.P. INPUT					
SUFFIX	DRIVE SHAFT	1	Y0701700-000	STEEL	2
-003	BEARING, DOUBLE ROW	* 2	Y0800700-000	STEEL	10

\* DENOTES RECOMMENDED SPARE PARTS

ISOICHEM SUPERSEDES 19-Feb-2004 18:15:17

**GENERAL MAINTENANCE:**

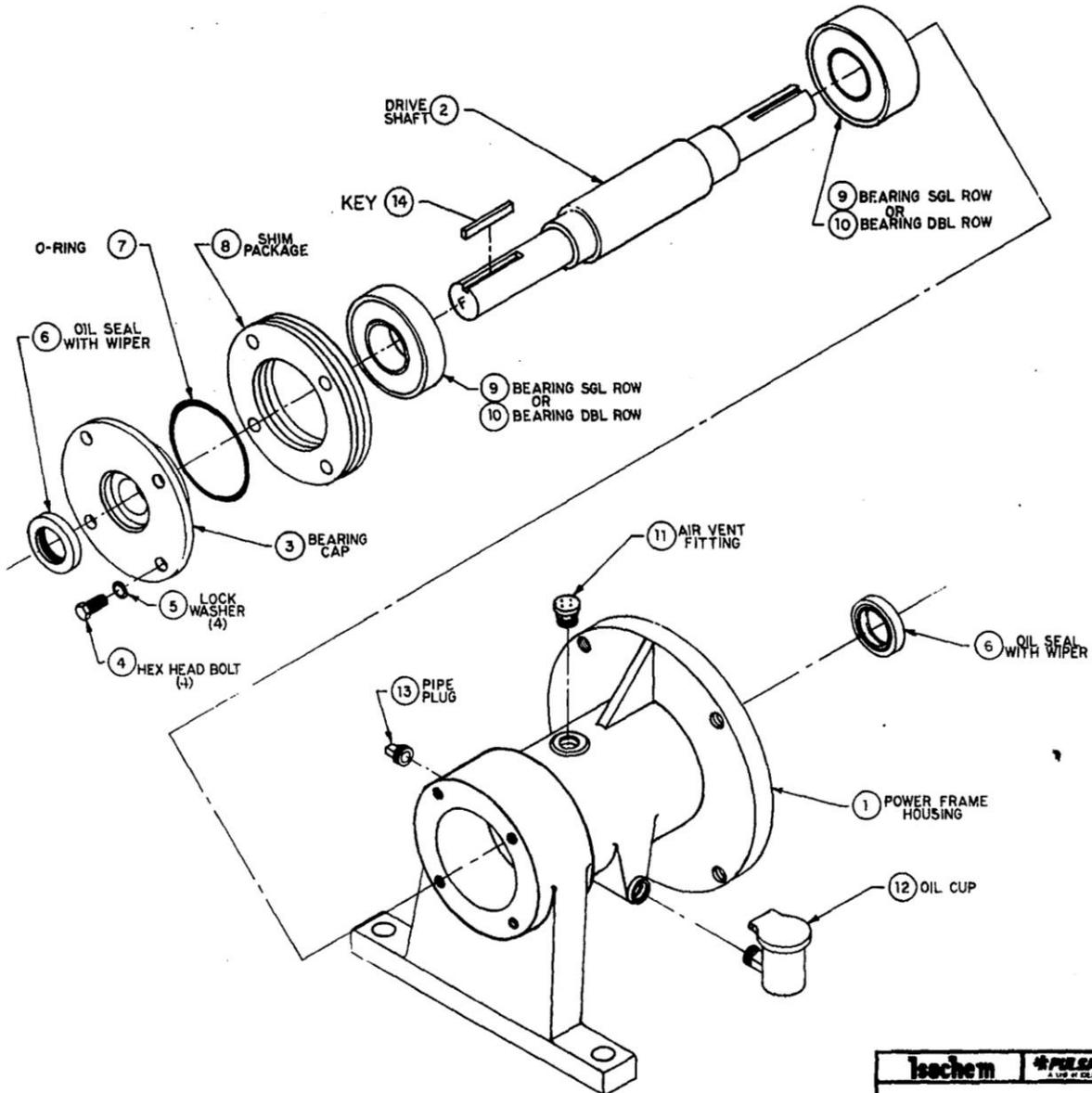
1. FILL POWER FRAME OIL CUP (ITEM # 12) TO THE "OIL LEVEL" LINE, ABOUT 1/2 INCH FROM THE TOP OF THE CUP. USE STANDARD MOTOR OIL SAE 10W-40, 10W-30 OR 5W-30.
2. DRAIN AND CHANGE OIL AFTER EVERY 1000 HRS. OF OPERATION. SOONER IF WATER OR OTHER CONTAMINATION OCCURS.

**DISASSEMBLY:**

1. REMOVE BEARING CAP BOLTS (ITEMS # 4 & 5)
2. SLIDE BEARING CAP (ITEM #3) OUT OF HOUSING (ITEM #1) AND OVER END OF SHAFT (ITEM # 2).
3. REMOVE SHAFT / BEARING ASSEMBLY BY SLIDING OUT OF HOUSING.

**REASSEMBLY:**

1. PRESS NEW BEARINGS (ITEMS #9 & 10) ONTO SHAFT (ITEM #2) IF REPLACEMENT IS REQUIRED.
2. PRESS NEW OIL SEALS (ITEM #6) INTO HOUSING (ITEM #1) AND BEARING CAP (ITEM #3). APPLY GREASE TO AREA BETWEEN THE SEAL AND WIPER LIPS.
3. INSTALL A NEW O-RING (ITEM #7) ONTO THE BEARING CAP.
4. SLIDE SHAFT / BEARING ASSEMBLY INTO POWERFRAME HOUSING. THE END STAMPED "F" MUST BE TOWARDS THE BEARING CAP.
5. DETERMINE THE CORRECT SHIM COMBINATION NECESSARY TO OBTAIN AN END PLAY OF .000 - .004 INCHES.
6. REPLACE BEARING CAP BOLTS (ITEMS # 4 & 5) AND TIGHTEN.



A	CHANGED TITLE BLOCK FOR CLARITY	4/4/94	
REF	REVISION DESCRIPTION	DATE	APP

SECTION / PAGE	DRIVES / 180
EFFECTIVE	04/04/94
SUPERSEDES	12/01/88

<b>Ischem</b>	<b>#PCL/CAF/ENR</b>
A UNIT OF OEL Corporation	
ISOICHEM GMH8 AND CENTRIFUGAL PUMP POWER FRAME ASSEMBLY EXPLODED VIEW	
DWN BY DJF	Y1028
DATE: 08/13/88	

**GENERAL MAINTENANCE:**

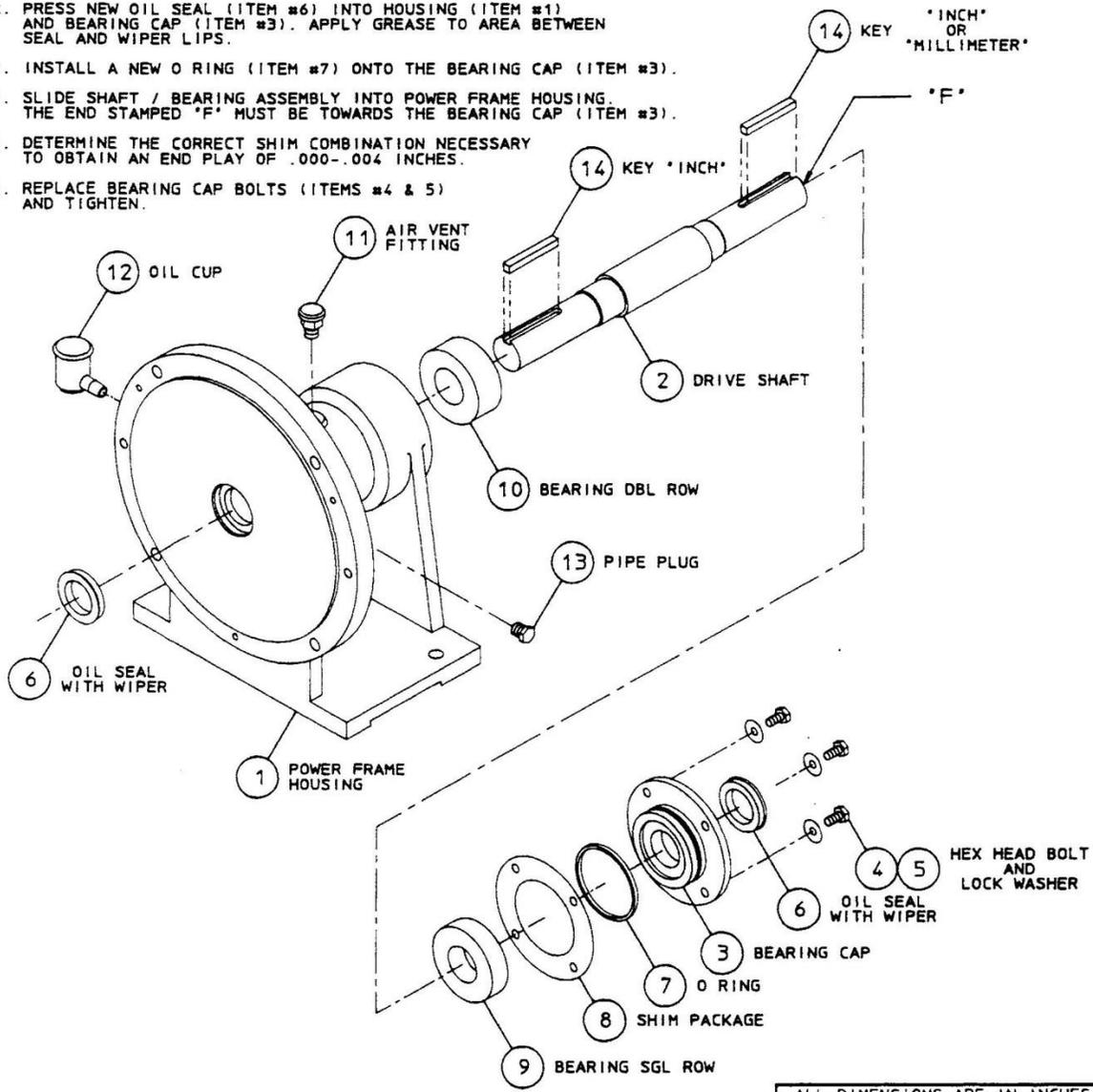
1. FILL POWER FRAME OIL CUP (ITEM #12) TO THE "OIL LEVEL" LINE. ABOUT 1/2" INCH FROM THE TOP OF THE CUP. USE STANDARD MOTOR OIL SAE 10W-40, 10W-30 OR 5W-30.
2. DRAIN AND CHANGE OIL AFTER EVERY 2000 HOURS OF OPERATION. SOONER IF WATER OR OTHER CONTAMINATION OCCURS.

**DISASSEMBLY:**

1. REMOVE BEARING CAP BOLTS (ITEMS #4 & 5).
2. SLIDE BEARING CAP (ITEM #3) OUT OF HOUSING (ITEM #1) AND OVER END OF SHAFT (ITEM #2).
3. REMOVE SHAFT / BEARING ASSEMBLY BY SLIDING OUT OF HOUSING.

**REASSEMBLY:**

1. PRESS NEW BEARINGS (ITEMS #9 & 10) ONTO SHAFT (ITEM #2) IF REPLACEMENT IS REQUIRED.
2. PRESS NEW OIL SEAL (ITEM #6) INTO HOUSING (ITEM #1) AND BEARING CAP (ITEM #3). APPLY GREASE TO AREA BETWEEN SEAL AND WIPER LIPS.
3. INSTALL A NEW O RING (ITEM #7) ONTO THE BEARING CAP (ITEM #3).
4. SLIDE SHAFT / BEARING ASSEMBLY INTO POWER FRAME HOUSING. THE END STAMPED 'F' MUST BE TOWARDS THE BEARING CAP (ITEM #3).
5. DETERMINE THE CORRECT SHIM COMBINATION NECESSARY TO OBTAIN AN END PLAY OF .000-.004 INCHES.
6. REPLACE BEARING CAP BOLTS (ITEMS #4 & 5) AND TIGHTEN.



ALL DIMENSIONS ARE IN INCHES

**Isochem** **PULSAFEEDER**  
A Unit of IDEX Corporation

GM12 & 16  
POWER FRAME ASSY  
EXPLODED VIEW

SECTION/PAGE	DRIVES/190	DWN BY:	CLA
EFFECTIVE	04/04/94	DATE:	04/04/94
SUPSEDES	NEW		SD-2796

REF	REVISION UPDATE	DATE
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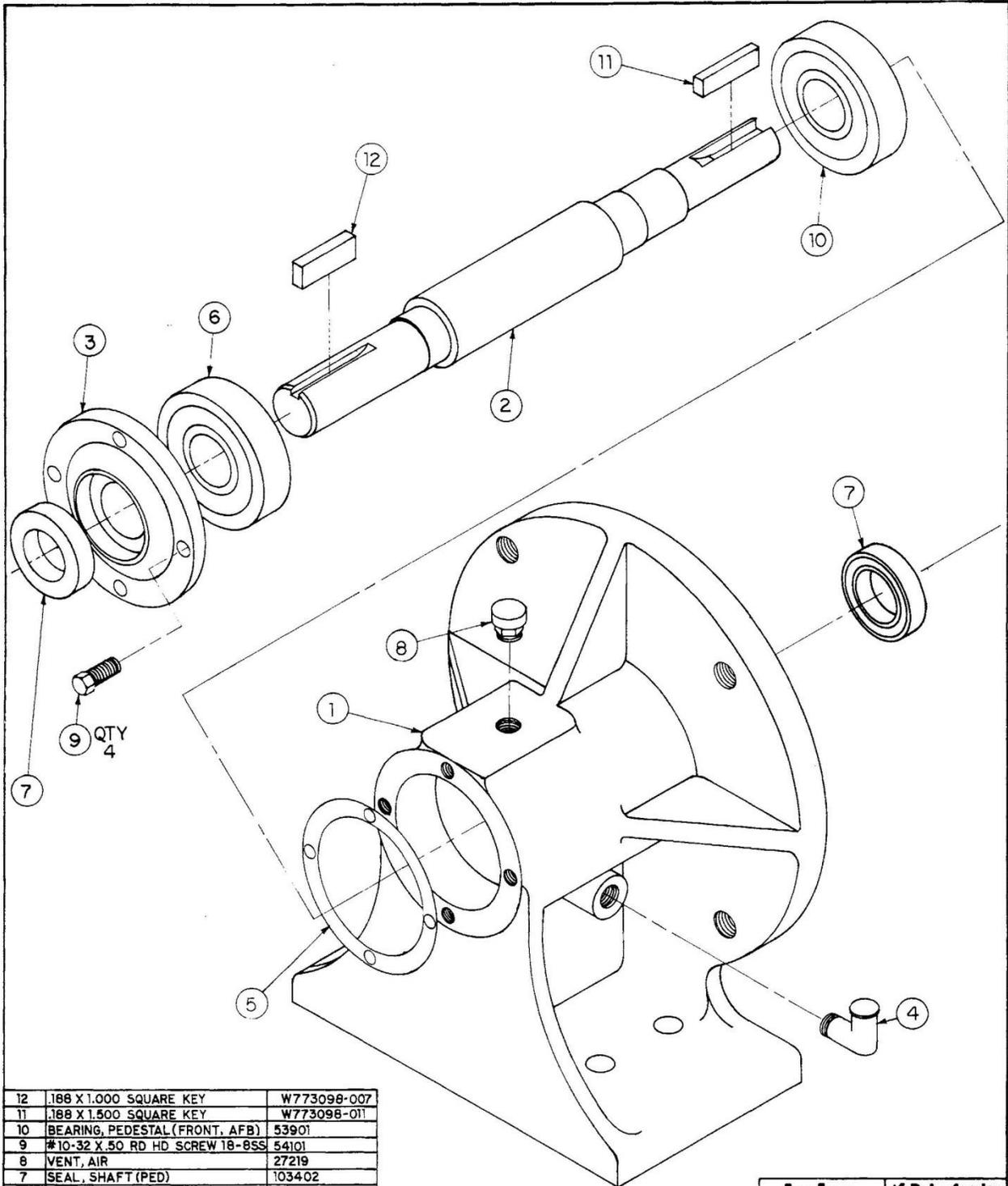
ISOICHEM GEAR POWER FRAME ASSEMBLY  
 COMPOSITE BILL OF MATERIALS FOR  
 99648 AND 99649 (METRIC)

SECTION: DRIVES  
 PAGE: 191  
 DATE REV.: 12/02/94  
 SUPERSEDES: 04/04/94

DESCRIPTION	QTY	PART No.	MATERIAL	ITEM
HOUSING, POWER FRAME	1	99620	IRON	1
SHAFT, POWER FRAME $\phi$ 1.125 INPUT	1	99646	STL	2
SHAFT, POWER FRAME $\phi$ 28 MM INPUT		99647	STL	2
KEY, STANDARD	1-2	W773099-015	STL	14
KEY, METRIC	0-1	W773107-000	STL	14
CAP, BEARING	1	99645	STL	3
BOLT, BEARING CAP	4	W770402-STL	STL	4
LOCK WASHER, BOLT	4	W771117-STL	STL	5
+SEAL, LIP	2	99644	NTR	6
+O RING	1	W209789-NTR	NTR	7
+SHIM PACKAGE	1	Y1300700-PAK	PLSTC	8
+BEARING, SINGLE	1	Y0800800-000	STL	9
+BEARING, DOUBLE	1	Y0800700-000	STL	10
AIR VENT	1	27219	STL	11
OIL CUP	1	A53801	STL	12
PIPE PLUG	1	W772565-STL	STL	13

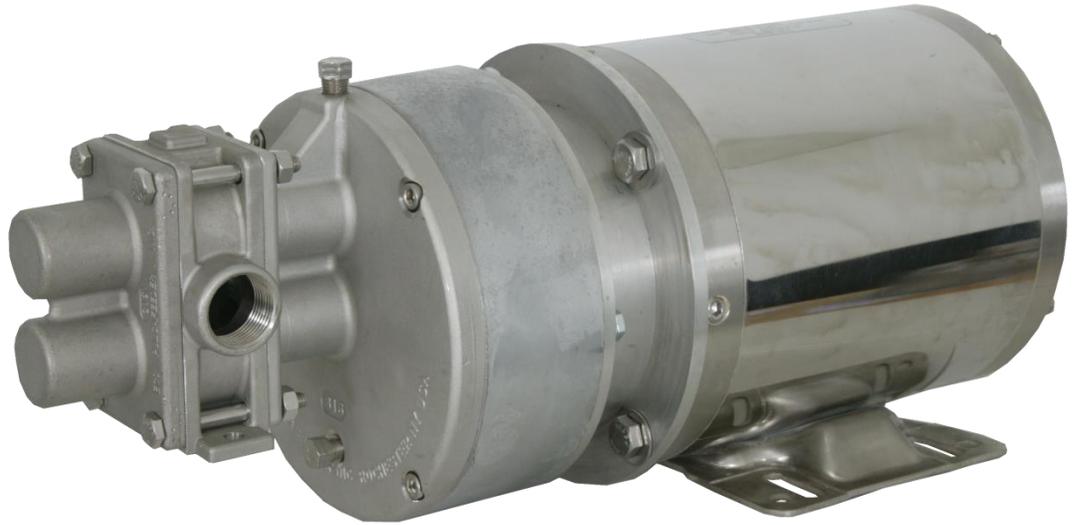
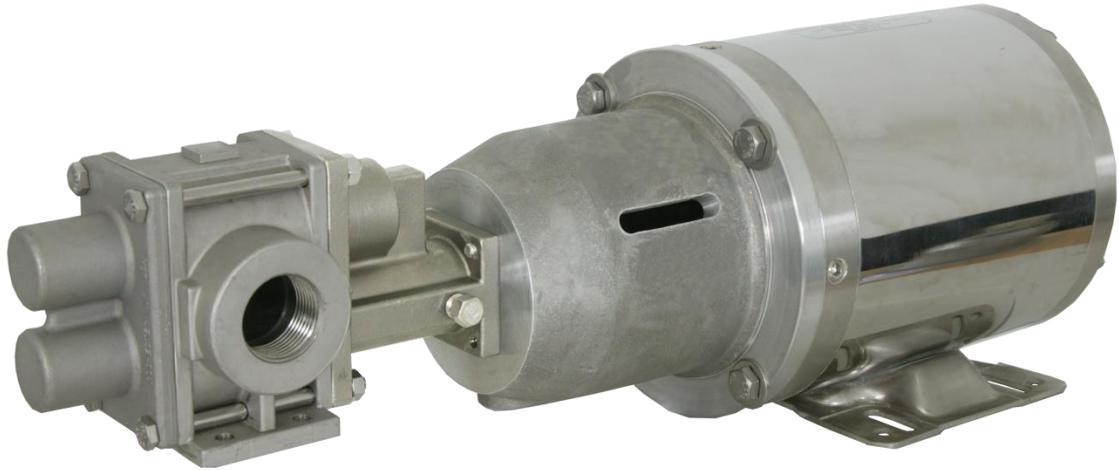
+ DENOTES RECOMMENDED SPARE PART.

~~ISOICHEM GEAR POWER FRAME ASSEMBLY~~ 19-Feb-2004 10:11:59



12	.188 X 1.000 SQUARE KEY	W773098-007
11	.188 X 1.500 SQUARE KEY	W773098-011
10	BEARING, PEDESTAL (FRONT, AFB)	53901
9	#10-32 X .50 RD HD SCREW 18-8SS	54101
8	VENT, AIR	27219
7	SEAL, SHAFT (PED)	103402
6	BEARING, PEDESTAL (REAR, AFB)	53900
5	GASKET, PEDESTAL	52400
4	CUP, OIL (PED)	53800
3	CAP. BEARING (PED.)	53302
2	SHAFT, PEDESTAL	120408
1	PEDESTAL	123202
X	PEDESTAL ASS'Y	A123205
ITEM	DESCRIPTION	PART NUMBER

<b>Isochem</b>	<b>Pulsafeeder</b>
ISOICHEM GEAR PUMP PEDESTAL ASSEMBLY EXPLODED VIEW	
SECTION / PAGE DRIVES / 280	DWN BY: D HYMAN
EFFECTIVE 04/01/98	DATE: 1-30-87
SUPERSEDES 08/01/91	SD2582
DATE REV: 5/31/89	



# Isochem<sup>®</sup>

## GEARCHEM PUMPS

**Bulletin No. IOM-ISO-4000-Rev D  
(All Models)**

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Pulsafeeder, Inc.  
A unit of IDEX Corporation  
2883 Brighton Henrietta Town Line Road  
Rochester NY 14623  
+1 (585) 292-8000  
[www.pulsa.com](http://www.pulsa.com)  
[pulsa@idexcorp.com](mailto:pulsa@idexcorp.com)

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