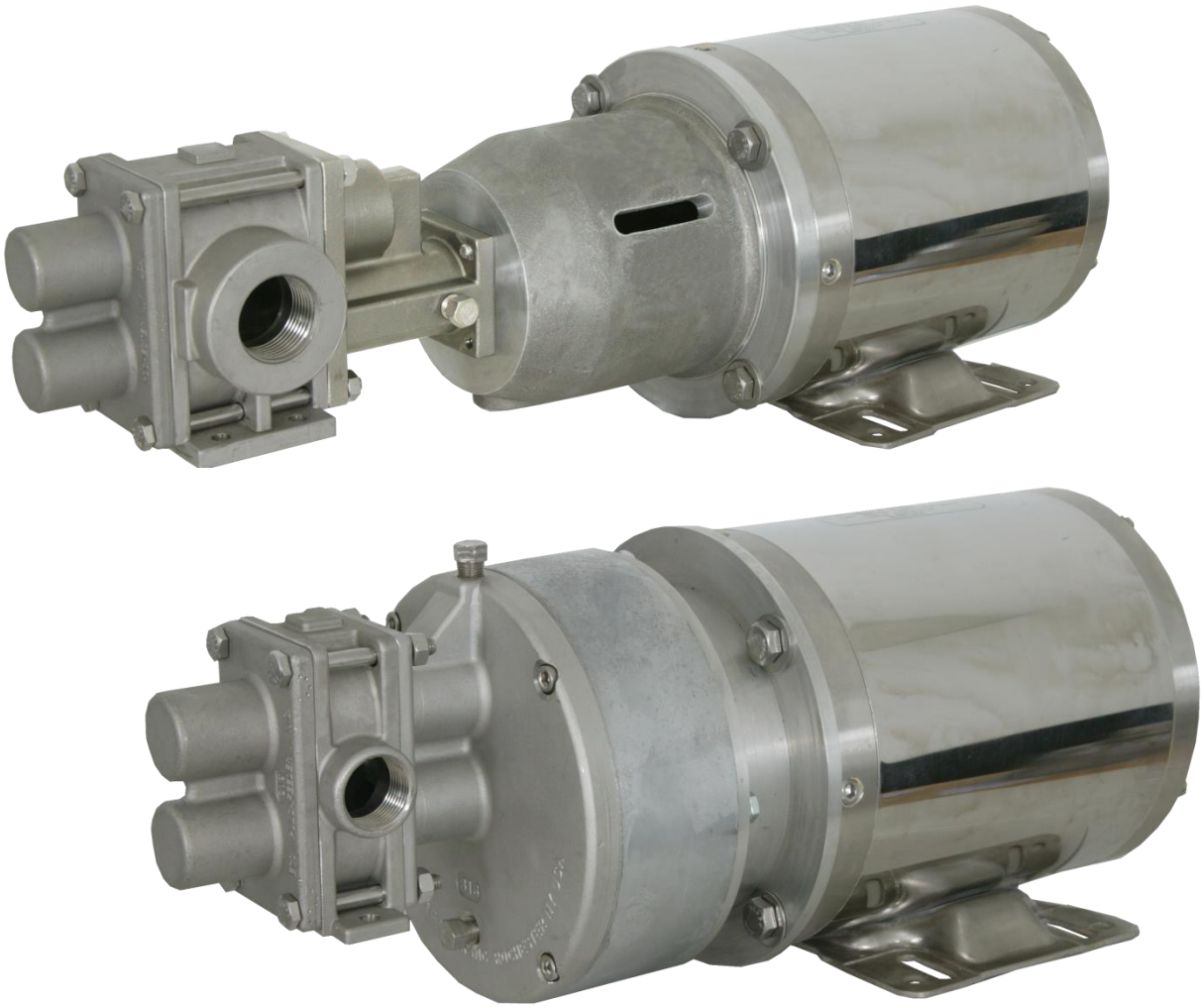
PULSAFEEDER®
ENGINEERED PRODUCTS

# Installation, Operation & Maintenance Instruction

All Models



**Isochem®**
**GEARCHEM PUMPS**

**Bulletin No. IOM-ISO-4000-Rev B**

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PUMP MODEL#_____

PUMP SERIAL #_____

# 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.

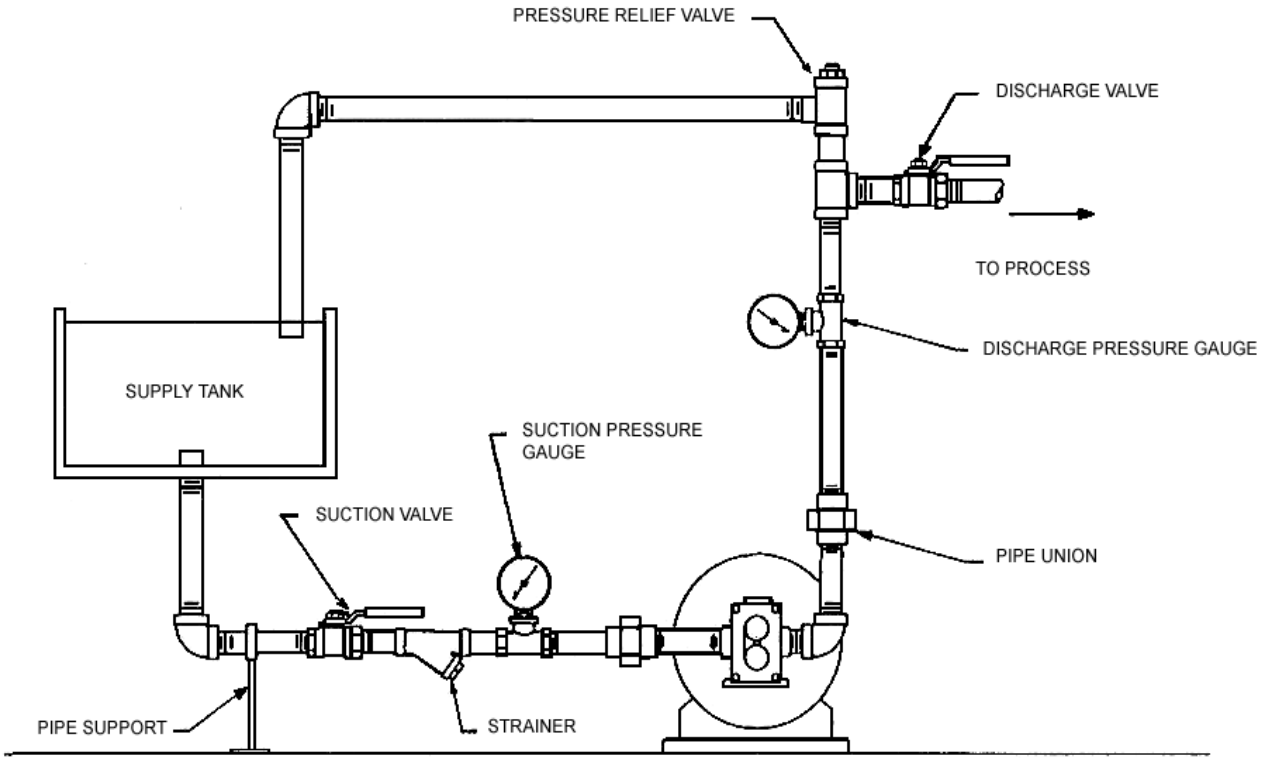
4. To check system operation, installation of vacuum/pressure gauges in the suction and discharge lines is recommended.

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 than1450 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:

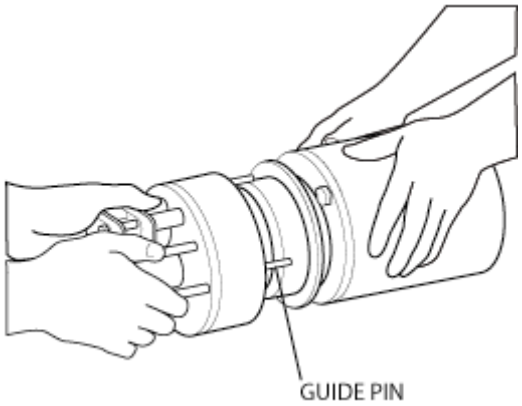
   - Drain and flush pump and magnetic drive before any pump disassembly. Access to the magnetic drive area is provided by a drain connection in the pump main cover.

   - 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.

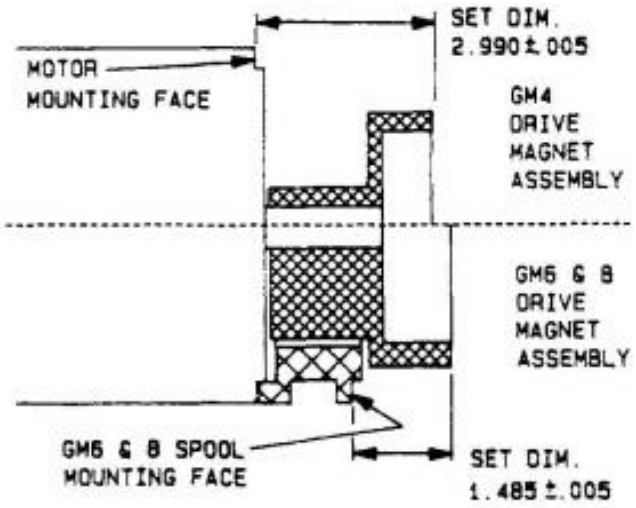



FIGURE 3
(NEMA Motors Only)

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 1OW-40, 1OW-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 |
|---|---|---|
| **NO LIQUID DELIVERED** | 1. Pump not primed.<br>2. Suction and/or discharge valve closed.<br>3. Wrong direction or rotation.<br>4. Suction plugged.<br>5. Air leak in suction.<br>6. Suction lift too high.<br>7. Motor incorrectly wired.<br>8. Magnetic coupling decoupled. | 1. Prime pump.<br>2. Open valves.<br>3. Reverse rotation<br>4. Eliminate plug.<br>5. Locate and repair leak.<br>6. Do not exceed vapor pressure of liquid.<br>7. Check wiring diagram.<br>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. |
| **LOW LIQUID DELIVERY** | 1. Discharge pressure higher than expected.<br>2. Air leak in suction.<br>3. Rotational speed incorrect.<br>4. Inlet obstructed or clogged.<br>5. Liquid viscosity higher than expected.<br>6. Leaky relief valve.<br>7. Insufficient suction pressure.<br>8. Worn or damaged internal parts. | 1. Reduce pressure.<br>2. Locate and repair leak.<br>3. Check speed and wiring<br>4. Remove restriction<br>5. Thin liquid or accept lower flow.<br>6. Correctly set or repair relief valve.<br>7. Increase suction pressure.<br>8. Inspect and repair as required. |
| **PUMP GRADUALLY LOSES PRIME** | 1. Air leak in suction<br>2. Suction lift too high.<br>3. Air or gas in liquid.<br>4. Pump worn or damaged. | 1. Locate and repair leak.<br>2. Increase suction pressure.<br>3. Eliminate air or gas.<br>4. Inspect and repair as required. |
| **PUMP NOISY** | 1. Pump cavitating.<br>2. Pump worn or damaged.<br>3. Air or gas in liquid.<br>4. Foreign particles in liquid. | 1. Increase suction pressure to provide sufficient NPSH<br>2. Inspect and repair as required.<br>3. Eliminate air or gas.<br>4. Install (or clean) strainer in inlet pipe. |
| **MOTOR RUNS HOT OR OVERLOADS** | 1. It is normal for motors to feel hot even when not overloading.<br>2. Discharge pressure too high.<br>3. Liquid viscosity higher than expected.<br>4. Rotational speed too high.<br>5. Binding internal pump parts.<br>6. Motor wired incorrectly. | 1. Check motor amp draw to be sure.<br>2. Lower pressure. Check pressure relief valve setting and for defective discharge pressure gauge.<br>3. Thin liquid or install larger motor.<br>4. Reduce speed.<br>5. Inspect and correct condition.<br>6. Check wiring diagram. |

## PUMP SPECIFICATION CHART

| | PUMP SIZE | GMH8 | GM12 | GM16 |
|---|---|---|---|---|
| | MAXIMUM FLOW @ 1750 RPM, 0 PRESSURE GPM ($M^3$/HR) | 22.0 (5.0) | NA | NA |
| | MAXIMUM FLOW @ 1150 RPM, 0 PRESSURE GPM ($M^3$/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<br>METAL/CARBON GEARS<br>METAL/PEEK GEARS | -100 TO +450 °F<br>(-73 TO +232 °C) | -100 TO +450 °F<br>(-73 TO +232 °C) | -100 TO +450 °F<br>(-73 TO +232 °C) |
| (1) | METAL/PLASTIC GEARS | 0 TO +210 °F<br>(-18 TO +99 °C) | 0 TO +210 °F<br>(-18 TO +99 °C) | 0 TO +210 °F<br>(-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:

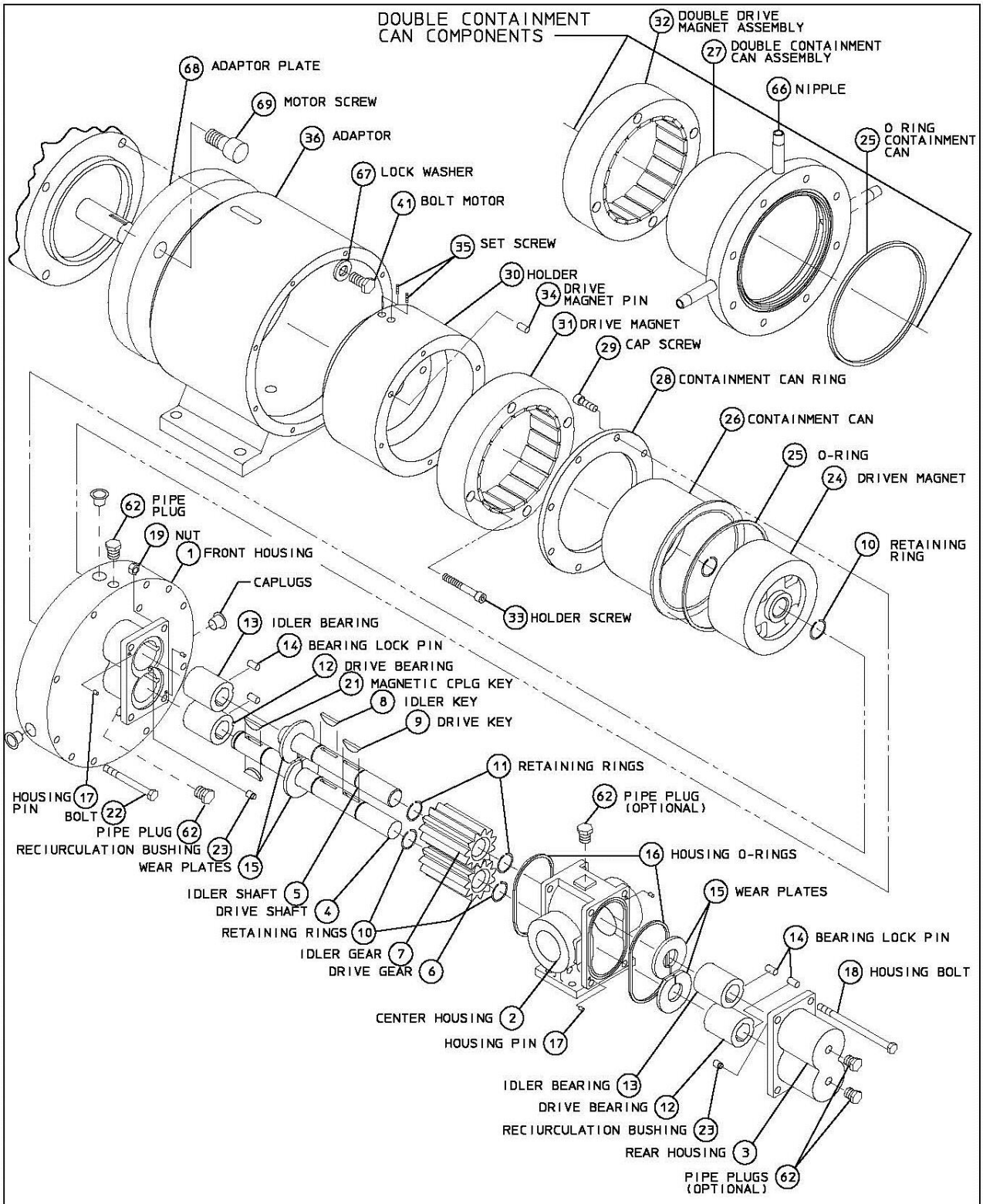
(1) FOR TEMPERATURES OVER 110 °F TRIMMED PLASTIC GEARS ARE REQUIRED.

(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




ALL DIMENSIONS ARE IN INCHES

Isochem | PULSAFEEDER A Unit of IDEX Corporation

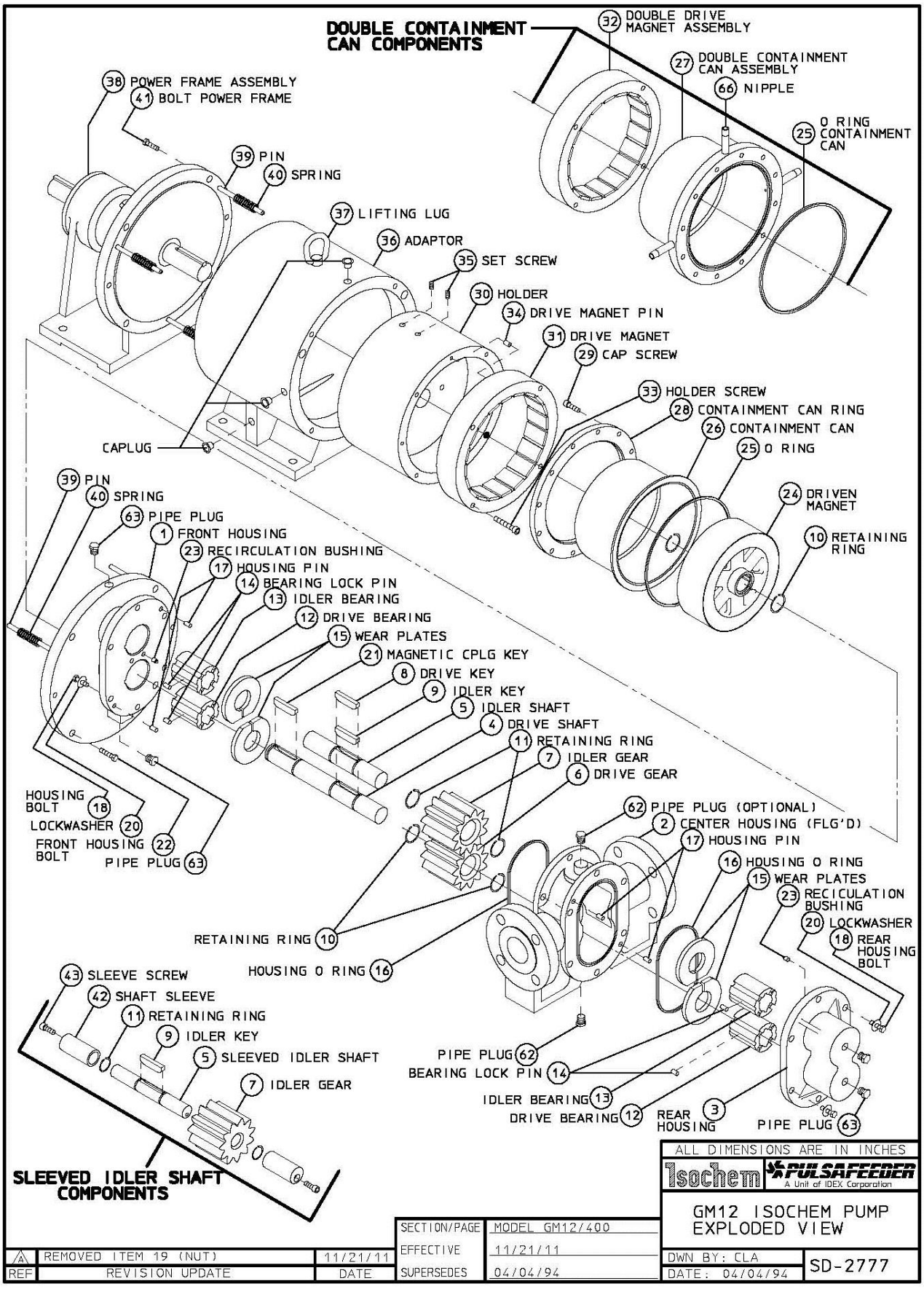
MODEL GMH6/8
ISOCHEM PUMP
EXPLODED VIEW

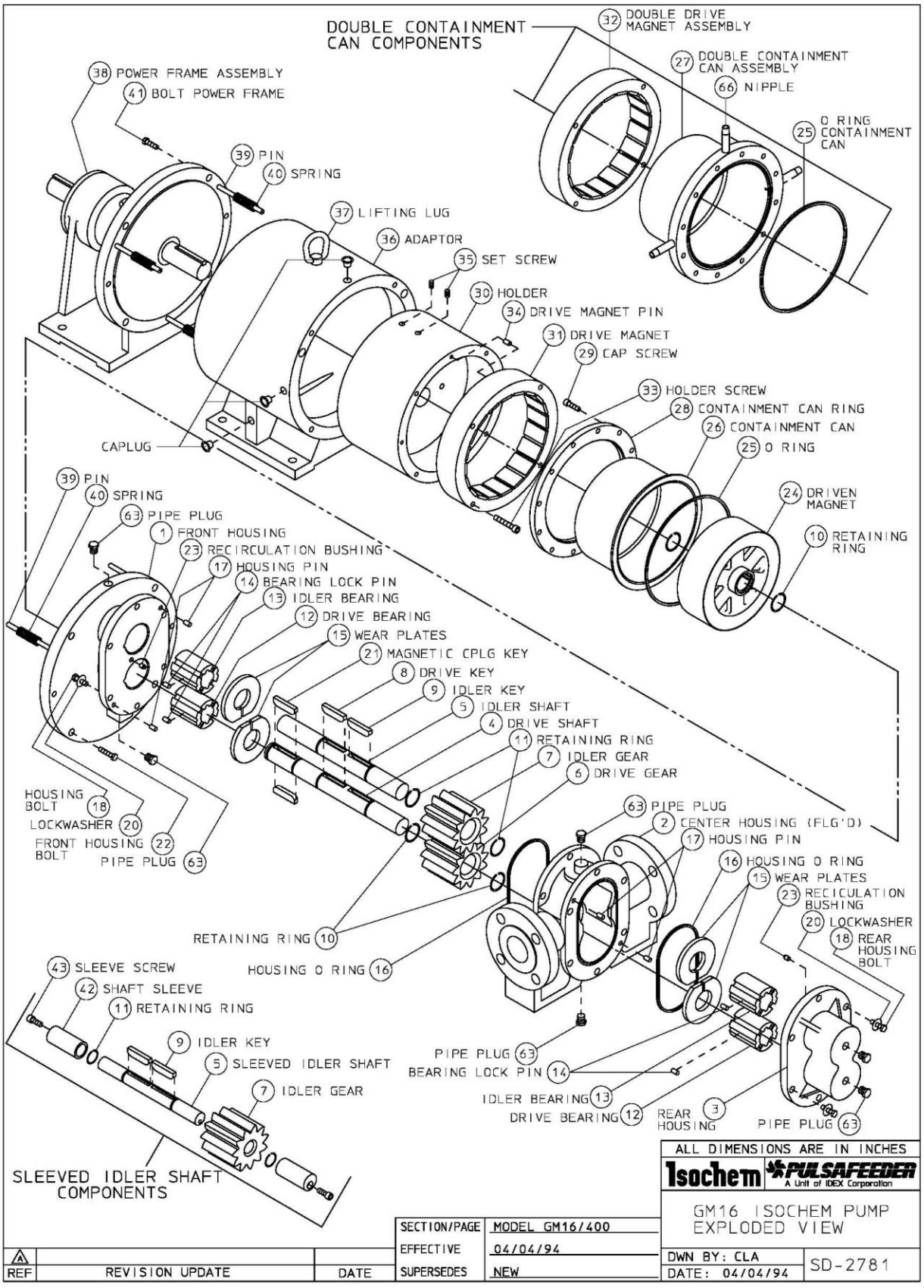
| | | |
|---|---|---|
| B | ADDED ITEM 67,68 & 69 | 10/10/00 |
| REF | REVISION UPDATE | DATE |

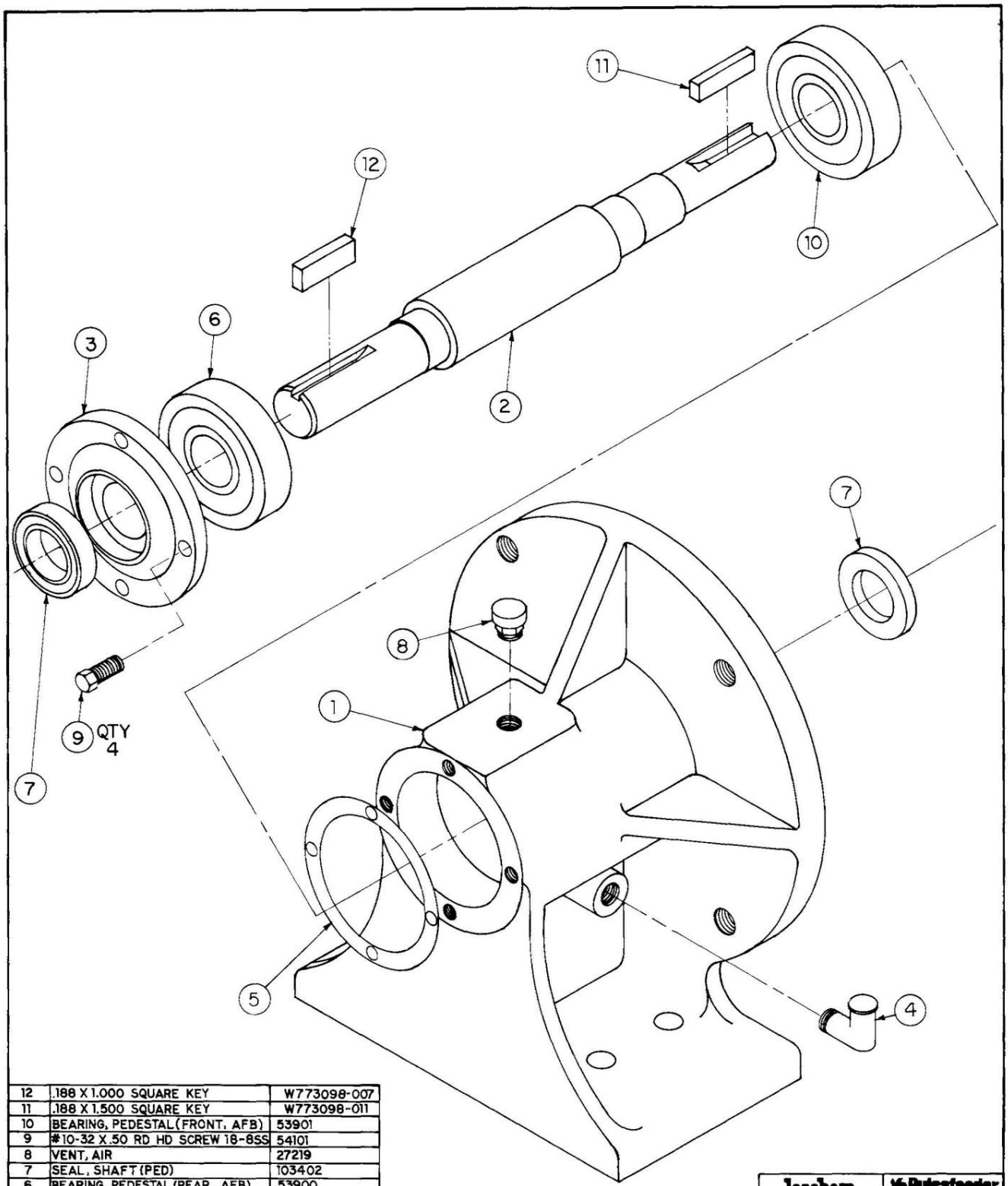
| | |
|---|---|
| SECTION/PAGE | MODEL GMH8 / 400 |
| EFFECTIVE | 10/10/00 |
| SUPERSEDES | 04/01/98 |

DWN BY: CLA
DATE: 04/04/94

SD-2776


DOUBLE CONTAINMENT CAN COMPONENTS
32 DOUBLE DRIVE MAGNET ASSEMBLY
27 DOUBLE CONTAINMENT CAN ASSEMBLY
66 NIPPLE
25 O RING CONTAINMENT CAN
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
CAPLUG
39 PIN
40 SPRING
63 PIPE PLUG
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
HOUSING BOLT 18
LOCKWASHER 20
FRONT HOUSING BOLT 22
PIPE PLUG 63
62 PIPE PLUG (OPTIONAL)
2 CENTER HOUSING (FLG'D)
17 HOUSING PIN
16 HOUSING O RING
15 WEAR PLATES
23 RECICULATION BUSHING
20 LOCKWASHER
18 REAR HOUSING BOLT
RETAINING RING 10
HOUSING O RING 16
43 SLEEVE SCREW
42 SHAFT SLEEVE
11 RETAINING RING
9 IDLER KEY
5 SLEEVED IDLER SHAFT
7 IDLER GEAR
SLEEVED IDLER SHAFT COMPONENTS
PIPE PLUG 62
BEARING LOCK PIN 14
IDLER BEARING 13
DRIVE BEARING 12
REAR HOUSING 3
PIPE PLUG 63
ALL DIMENSIONS ARE IN INCHES
Isochem
PULSAFEEDER A Unit of IDEX Corporation
GM12 ISOCHEM PUMP EXPLODED VIEW
SECTION/PAGE MODEL GM12/400
EFFECTIVE 11/21/11
SUPERSEDES 04/04/94
A REMOVED ITEM 19 (NUT) 11/21/11
REF REVISION UPDATE DATE
DWN BY: CLA
DATE: 04/04/94
SD-2777


DOUBLE CONTAINMENT CAN COMPONENTS
32 DOUBLE DRIVE MAGNET ASSEMBLY
27 DOUBLE CONTAINMENT CAN ASSEMBLY
66 NIPPLE
25 O RING CONTAINMENT CAN
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
CAPLUG
39 PIN
40 SPRING
63 PIPE PLUG
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
HOUSING BOLT 18
LOCKWASHER 20
FRONT HOUSING BOLT 22
PIPE PLUG 63
63 PIPE PLUG
2 CENTER HOUSING (FLG'D)
17 HOUSING PIN
16 HOUSING O RING
15 WEAR PLATES
23 RECICULATION BUSHING
20 LOCKWASHER
18 REAR HOUSING BOLT
RETAINING RING 10
HOUSING O RING 16
43 SLEEVE SCREW
42 SHAFT SLEEVE
11 RETAINING RING
9 IDLER KEY
5 SLEEVED IDLER SHAFT
7 IDLER GEAR
SLEEVED IDLER SHAFT COMPONENTS
PIPE PLUG 63
BEARING LOCK PIN 14
IDLER BEARING 13
DRIVE BEARING 12
REAR HOUSING 3
PIPE PLUG 63
ALL DIMENSIONS ARE IN INCHES
Isochem
PULSAFEEDER
A Unit of IDEX Corporation
GM16 ISOCHEM 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




| ITEM | DESCRIPTION | PART NUMBER |
|---|---|---|
| 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 |

Isochem | Pulsafeeder

ISOCHEM GEAR PUMP
PEDESTAL ASSEMBLY
EXPLODED VIEW

DWN BY: D HYMAN
DATE: 1-30-87
DATE REV: 5/31/89

SD2582

GENERAL MAINTENANCE:

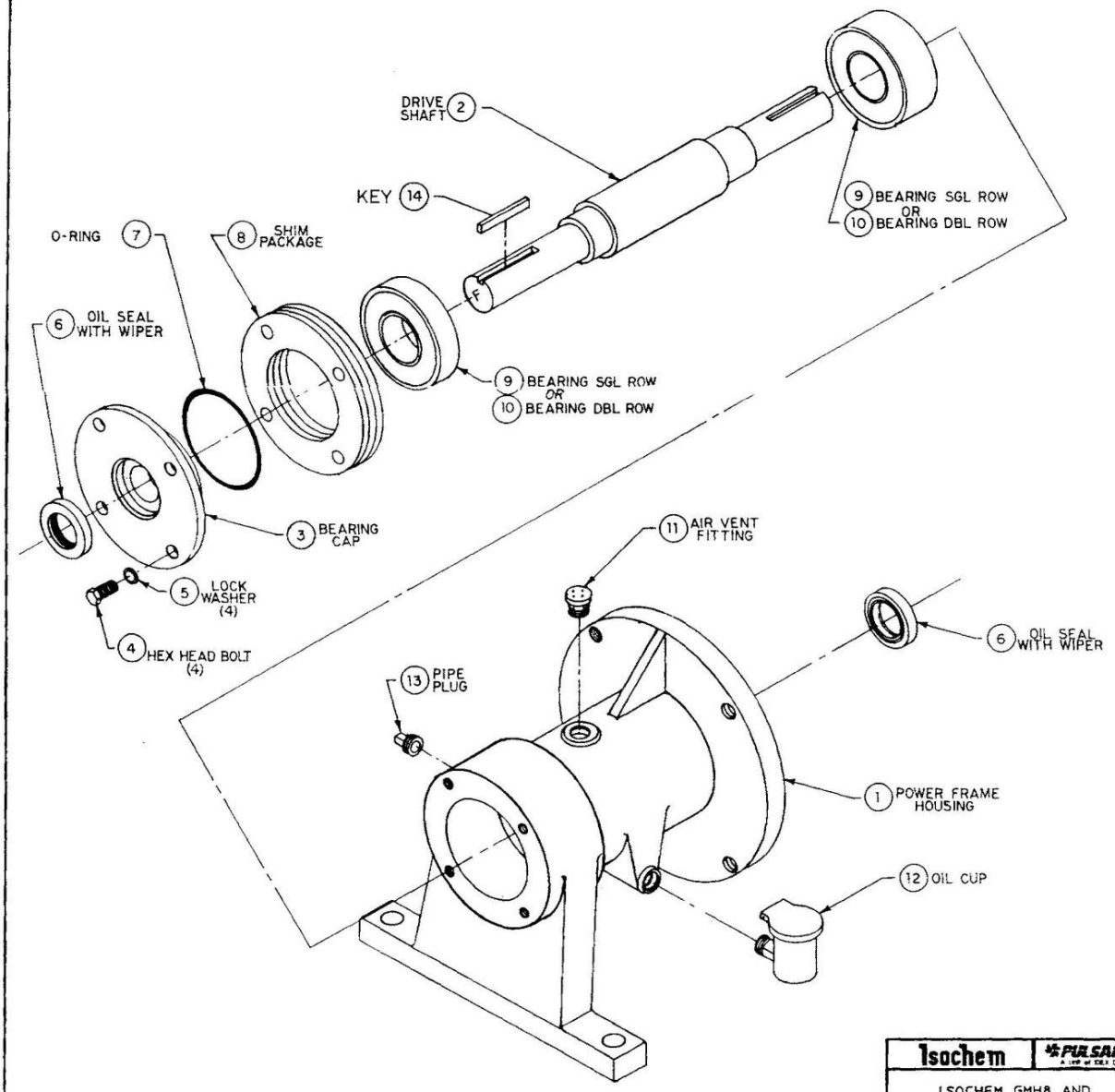
1. FILL POWER FRAME OIL CUP (ITEM #12) TO THE "OIL LEVEL" LINE, ABOUT 1/2 INCH FROM THE TOP OF THE CUP. USE STANDARD MOTOR OIL SAE 10W-40, 10W-30 OR 5W-30.
2. DRAIN AND CHANGE OIL AFTER EVERY 1000 HRS. OF OPERATION. SOONER IF WATER OR OTHER CONTAMINATION OCCURS.

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.




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

Isochem | PULSAFEEDER

ISOCHEM GMH8 AND CENTRIFUGAL PUMP POWER FRAME ASSEMBLY EXPLODED VIEW

DWN BY DJF
DATE: 08/13/88

Y1028

GENERAL MAINTENANCE:

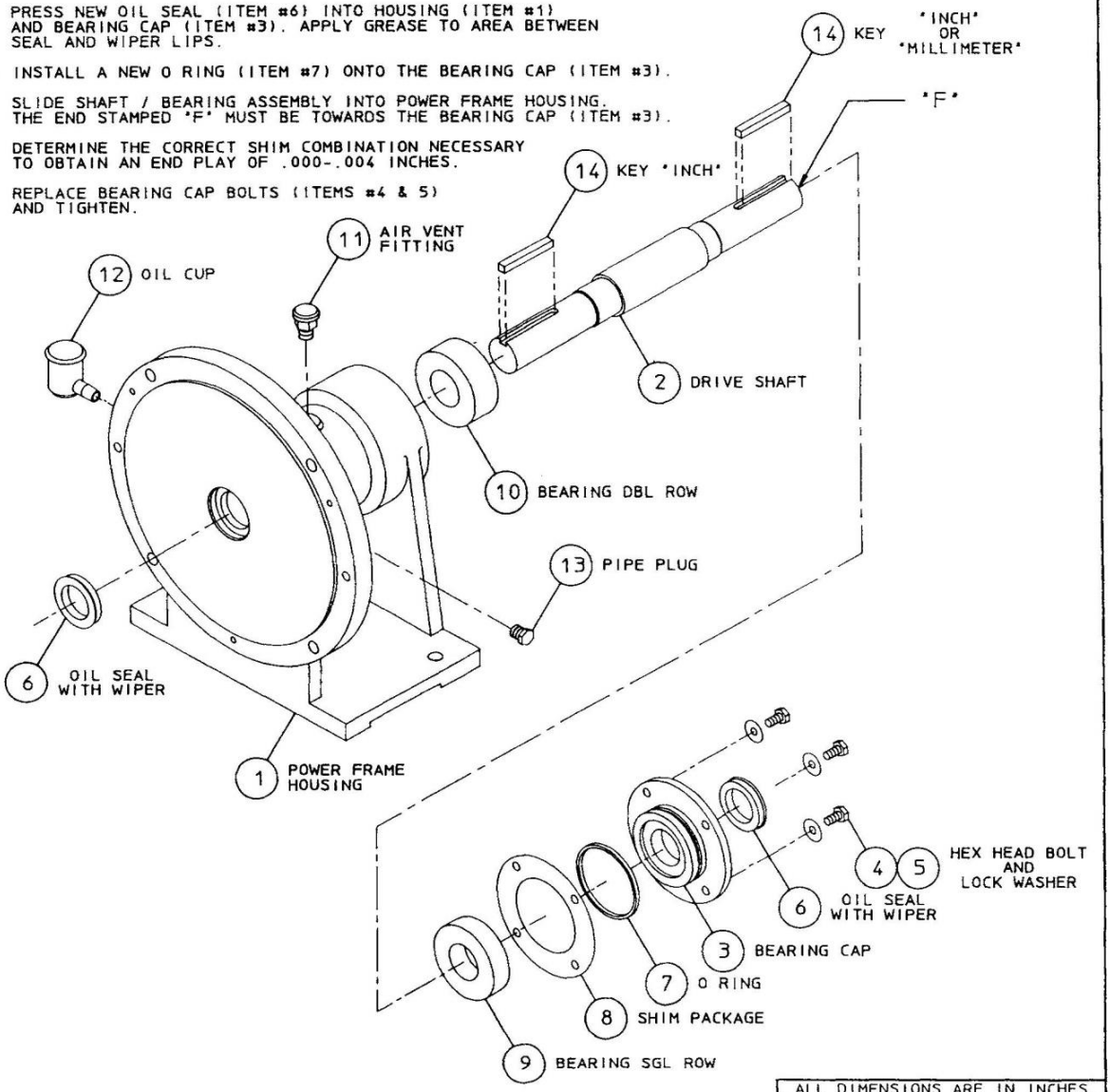
1. FILL POWER FRAME OIL CUP (ITEM #12) TO THE 'OIL LEVEL' LINE, ABOUT 1/2" INCH FROM THE TOP OF THE CUP. USE STANDARD MOTOR OIL SAE 10W-40, 10W-30 OR 5W-30.
2. DRAIN AND CHANGE OIL AFTER EVERY 2000 HOURS OF OPERATION. SOONER IF WATER OR OTHER CONTAMINATION OCCURS.

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

DWN BY: CLA
DATE: 04/04/94

SD-2796

| REF | REVISION UPDATE | DATE |
|---|---|---|
| A | | |

# ISOCHEM 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 ISOCHEM MAGNETICALLY DRIVEN SEALLESS

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

| POSITION 2 PUMP SIZE | 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 |
| **POSITION 3 AVAILABLE PUMP METALLURGIES AND TYPE PORT CONNECTION** | | | | | | | | |
| 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 |
| **POSITION 4 DRIVE GEAR MATERIAL** | | | | | | | | |
| C = ALLOY C | X | X | X | X | X | X | X | X |
| D = ALLOY 20 | X | X | X | X | X | | | |
| T = TFE (Glass Filled) (1,17) | | X | X | X | X | | | |
| E = PEEK (17) | X | X | X | X | X | | | |
| A = 316SS | X | X | X | X | X | X | X | X |
| Q = RYTON (17) | X | | | | | | | |
| **POSITION 5 IDLER GEAR MATERIAL** | | | | | | | | |
| C = ALLOY C (2,12) | X | X | X | X | X | X | X | X |
| D = ALLOY 20 (2) | X | X | X | X | X | | | |
| K = Carbon | | 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 | | | | | | | |
| **POSITION 6 WEAR PLATE MATERIAL (16)** | | | | | | | | |
| 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 |
| E = PEEK | X | X | X | X | X | X | X | X |
| Q = RYTON | X | | | | | | | |
| **POSITION 7 BEARING MATERIAL (16)** | | | | | | | | |
| K = Standard Carbon (4) | X | X | X | X | X | X | | |
| L = Extended Life Carbon (4) | | X | X | X | X | X | X | X |
| T = TFE (Glass Filled) (4,11) | X | X | X | X | X | X | X | X |
| 4 = Standard Carbon - Slotted (4) | | | | | | X | X | |
| C = 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 | | | | | | | |
| **POSITION 8 MAG DRIVE MOUNTING ARRANGEMENT** | | | | | | | | |
| 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 | | | |
| G = 143TC- 184C FRAME, SGL. CAN CNTNMNT. (13) | | X | X | X | X | X | | |
| D = 143TC- 184C FRAME, DBL. CAN CNTNMNT. (13) | | | | | | X | | |
| R = 182TC- 184TC FRAME, SGL. CAN CNTNMNT.(14) | | | | | | X | X | X |
| T = 182TC- 184TC FRAME, DBL. CAN CNTNMNT.(14) | | | | | | X | X | X |
| W = 213TC- 215TC FRAME, DBL. CAN CNTNMNT.(14) | | | | | | X | | |
| Y = 213TC- 215TC FRAME, DBL. CAN CNTNMNT.(14) | | | | | | 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 | X | X | | | | | |
| K = 80 FRAME, SGL. CAN (ø100.00 B.C.) (13) | | X | X | X | X | | | |
| L = 90 FRAME, SGL. CAN (ø115.00 B.C.) (13) | | | | X | X | | | |
| P = 100 FRAME, SGL. CAN (ø130.00 B.C.) | | | | | | X | | |
| Q = 100 FRAME, DBL. CAN (ø130.00 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.

DRAWING: GMCTAB150

# ISOCHEM 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 ISOCHEM 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 | | |
| **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 | | |
| 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 | |
| L = Extended Life Carbon (4) | X | X | X | X | X |
| 4 = Standard Carbon - Slotted (4) | | | | | 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 (ø100.00 B.C.) (13) | X | X | X | | |
| L = 90 FRAME, SGL. CAN (ø115.00 B.C.) (13) | | | X | | |
| P = 100 FRAME, SGL. CAN (ø130.00 B.C.) | | | | X | |
| Q = 100 FRAME, DBL. CAN (ø130.00 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 Postion 9.

# ISOCHEM 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<br>Metallic Bearing Lock Pins | | | X | X | X | X | X | X | X |
| C = Bearing Flush Ports<br>PFA Coated, SS Hsg O-Rings<br>Metallic Bearing Lock Pins | | | X | X | X | X | X | | |
| D = Bearing Flush Ports,<br>PFA Coated, SS Hsg O-Rings<br>Metallic Bearing Lock Pins<br>Slotted Bearings | (7) | | X | X | X | X | X | | |
| E = Bearing Flush Ports,<br>PFA Coated, SS Hsg O-Rings<br>Metallic Bearing Lock Pins<br>Slotted Bearings<br>Slotted Wear Plates | (7)<br>(8) | | X | X | X | X | | | |
| F = NON-Recirculation Wear Plates | | | X | X | X | X | STD | STD | STD |
| H = PFA Coated, SS Hsg O-Rings<br>Metallic Bearing Lock Pins<br>Samarium Cobalt Magnets | | | X | X | X | X | | | |
| M = Alloy C Containment Can<br>(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<br>(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<br>(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 integraly 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.

# ISOCHEM GEAR PUMP EXTENDED PRESSURE PRESSURES ABOVE 100 PSI

## SIGNIFICANT MODEL NUMBERING SYSTEM AND SELECTION TABLE

(CONTIUED)

| 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<br>Metallic Bearing Lock Pins | | X | X | X | X | X |
| C = Bearing Flush Ports<br>PFA Coated, SS Hsg O-Rings<br>Metallic Bearing Lock Pins | | X | X | X | X | |
| D = Bearing Flush Ports,<br>PFA Coated, SS Hsg O-Rings<br>Metallic Bearing Lock Pins<br>Slotted Bearings | (7) | X | X | X | X | |
| E = Bearing Flush Ports,<br>PFA Coated, SS Hsg O-Rings<br>Metallic Bearing Lock Pins<br>Slotted Bearings<br>Slotted Wear Plates | (7)<br>(8) | X | X | X | | |
| F = NON-Recirculation Wear Plates | | X | X | X | STD | STD |
| H = PFA Coated, SS Hsg O-Rings<br>Metallic Bearing Lock Pins<br>Samarium Cobalt Magnets | | X | X | X | | |
| M = Alloy C Containment Can<br>(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<br>(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<br>(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 integraly mounted motors.

(15) Consult Factory.

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

ITEM CLASS GMH8 = IH
PRODUCT LINE = H / ISOCHEM

# ISOCHEM 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 |
| **POSITION 3** | **STANDARD PUMP - NON-VARIBLE COMPONENTS** | | | | | | | | | |
| | 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 |
| D | 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 | B | # 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 |
| | | # 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

# ISOCHEM GMH8 SERIES PUMP
# CONSOLIDATED B / M



| | | | | 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 | 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

# DENOTES RECOMMENDED SPARE PART

DWG: GMH8P201

# ISOCHEM GMH8 SERIES PUMP
# CONSOLIDATED B / M

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

| | | | 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 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

# ISOCHEM GMH8 SERIES PUMP
# CONSOLIDATED B / M



| | | | 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 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

# DENOTES RECOMMENDED SPARE PART

DWG: GMH8P203

ITEM CLASS GM12 = IZ
PRODUCT LINE = H / ISOCHEM

# ISOCHEM GM12 SERIES PUMP
# CONSOLIDATED B / M

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

| | | | STANDARD PUMP MATERIAL | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **STRUCTURED WITH NO DASHES** | | | 316 SS | | ALLOY C | | ALLOY 20 | | |
| **EXAMPLE: GM12XXXXXX** | | | (A, K, OR U) | | (C, M, OR V) | | (D, N, OR W) | | |
| | DESCRIPTION | QTY | PART NUMBER | MATERIAL | PART NUMBER | MATERIAL | PART NUMBER | MATERIAL | ITEM |
| **POSITION 3** | **STANDARD PUMP - NON-VARIABLE COMPONENTS** | | | | | | | | |
| | 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, RECIRCLATION (.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

DWG: GM12P200

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

# DENOTES RECOMMENDED SPARE PART

# ISOCHEM GM12 SERIES PUMP
# CONSOLIDATED B / M



| | | | | 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" | 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) | | | 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) | | | 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) | | | 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) | | | 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) | | | 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



| | | | 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 8** | **MAGNETIC COUPLING COMPONENTS** | | | | | | | | |
| 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** | | | | | | | | | |
| **SINGLE CONTAINMENT CAN COMPONENTS** | | | | | | | | | |
| R | POWERFRAME µ1.125 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 µ1.125 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** | | | | | | | | | |
| **SINGLE CONTAINMENT CAN COMPONENTS** | | | | | | | | | |
| U | POWERFRAME µ28 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 µ28 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

# ISOCHEM GM16 SERIES PUMP
# CONSOLIDATED B / M



| | | | STANDARD PUMP MATERIAL | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **STRUCTURED WITH NO DASHES** | | 316 SS (U) | | ALLOY C (V) | | ALLOY 20 (W) | | |
| | **EXAMPLE: GM16XXXXXX** | | | | | | | | |
| | DESCRIPTION | QTY | PART NUMBER | MATERIAL | PART NUMBER | MATERIAL | PART NUMBER | MATERIAL | ITEM |
| **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

DWG: GM16P200

# DENOTES RECOMMENDED SPARE PART

# ISOCHEM GM16 SERIES PUMP
# CONSOLIDATED B / M

**SECTION:** MODEL GM16
**PAGE:** 201
**DATE REV.:** 11 / 12 / 12
**SUPERSEDES:** 11 / 12 / 04

| | | | | STANDARD PUMP MATERIAL | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 316 SS (U) | | ALLOY C (V) | | ALLOY 20 (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" | 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" | | 90683 | TFE (GF) | 90683 | TFE (GF) | 90683 | 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 |
| | # 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 | 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 |
| 4 | # 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

DWG: GM16P201

# DENOTES RECOMMENDED SPARE PART

# ISOCHEM GM16 SERIES PUMP
# CONSOLIDATED B / M



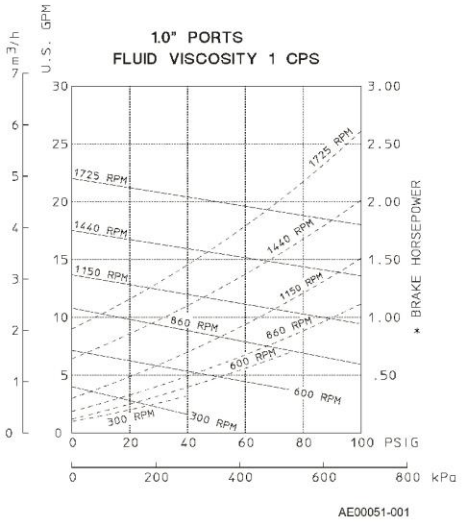
| | | | STANDARD PUMP MATERIAL | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | 316 SS (U) | | ALLOY C (V) | | ALLOY 20 (W) | | |
| | DESCRIPTION | QTY | PART NUMBER | MATERIAL | PART NUMBER | MATERIAL | PART NUMBER | MATERIAL | ITEM |
| **POSITION 8** | **MAGNETIC COUPLING COMPONENTS** | | | | | | | | |
| 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 µ1.125 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 µ1.125 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 µ28 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 µ24 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

DWG: GM16P202

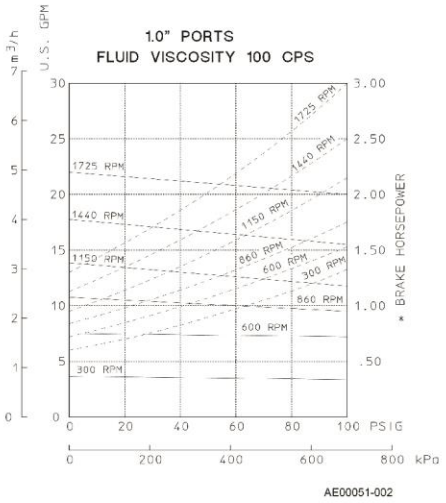
# DENOTES RECOMMENDED SPARE PART

# PERFORMANCE CHARTS




AE00051-001

GMH8

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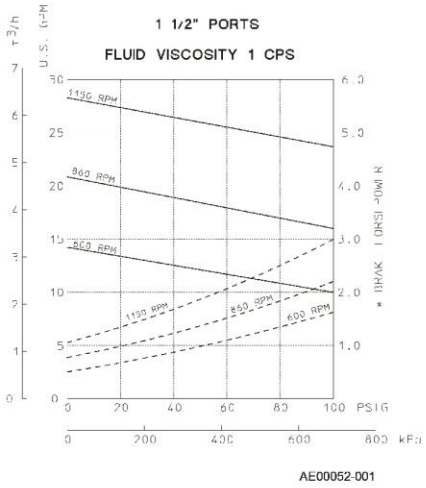


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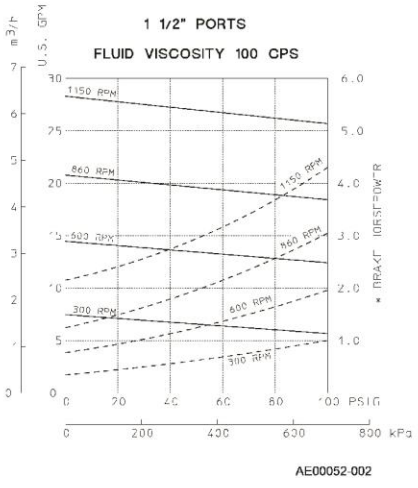
GM12

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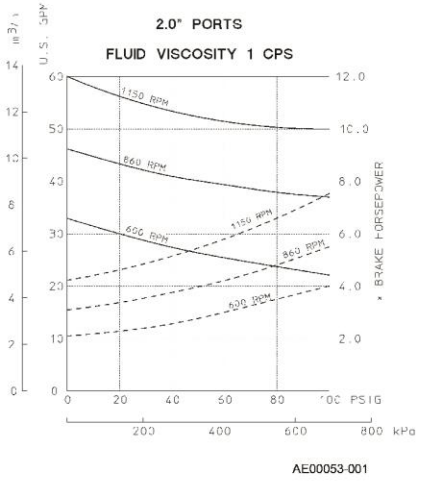


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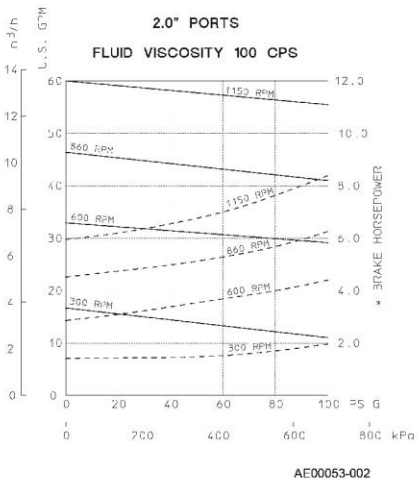
GM16



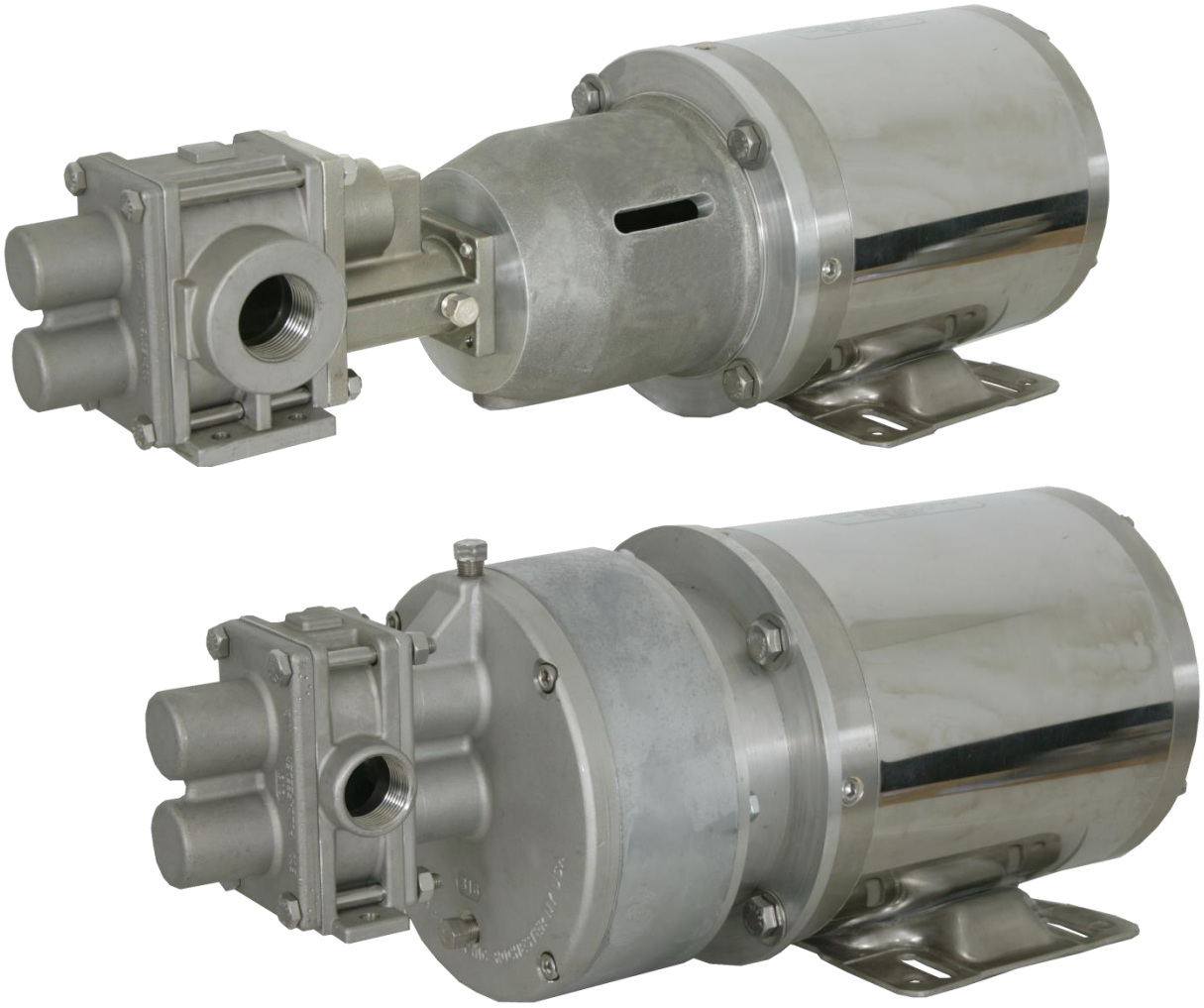

AE00053-002

* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

PULSAFEEDER®
ENGINEERED PRODUCTS

# Installation, Operation & Maintenance Instruction

All Models



## Isochem®
## GEARCHEM PUMPS

**Bulletin No. IOM-ISO-4000-Rev B**
**ADDENDUM 7-2015**

# ISOCHEM 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 ISOCHEM MAGNETICALLY DRIVEN SEALLESS**

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

| POSITION 2 PUMP SIZE | 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 | 200 | 200 | 200 |
| **POSITION 3 AVAILABLE PUMP METALLURGIES AND TYPE PORT CONNECTION** | | | | | | | | |
| 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 |
| **POSITION 4 DRIVE GEAR MATERIAL** | | | | | | | | |
| C = ALLOY C | X | X | X | X | X | X | X | X |
| D = ALLOY 20 | X | X | X | X | X | | | |
| T = TFE (Glass Filled) (1,17) | | X | X | X | X | | | |
| E = PEEK (17) | X | X | X | X | X | | | |
| A = 316SS | X | X | X | X | X | X | X | X |
| Q = RYTON (17) | X | | | | | | | |
| **POSITION 5 IDLER GEAR MATERIAL** | | | | | | | | |
| C = ALLOY C (2,12) | X | X | X | X | X | X | X | X |
| D = ALLOY 20 (2) | X | X | X | X | X | | | |
| K = Carbon | | 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 | | | | | | | |
| **POSITION 6 WEAR PLATE MATERIAL (16)** | | | | | | | | |
| 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 |
| E = PEEK | X | X | X | X | X | X | X | X |
| Q = RYTON | X | | | | | | | |
| **POSITION 7 BEARING MATERIAL (16)** | | | | | | | | |
| K = Standard Carbon (4) | X | X | X | X | X | X | | |
| L = Extended Life Carbon (4) | | X | X | X | X | X | X | X |
| T = TFE (Glass Filled) (4,11) | X | X | X | X | X | X | X | X |
| 4 = Standard Carbon - Slotted (4) | | | | | | X | X | |
| C = 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 | | | | | | | |
| **POSITION 8 MAG DRIVE MOUNTING ARRANGEMENT** | | | | | | | | |
| 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 | X | | |
| D = 143TC- 184C FRAME, DBL. CAN CNTNMNT. (13) | | | | | | X | | |
| R = 182TC- 184TC FRAME, SGL. CAN CNTNMNT.(14) | | | | | | X | X | X |
| T = 182TC- 184TC FRAME, DBL. CAN CNTNMNT.(14) | | | | | | X | X | X |
| W = 213TC- 215TC FRAME, DBL. CAN CNTNMNT.(14) | | | | | | X | | |
| Y = 213TC- 215TC FRAME, DBL. CAN CNTNMNT.(14) | | | | | | 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 | X | X | | | | | |
| K = 80 FRAME, SGL. CAN (ø100.00 B.C.) (13) | | X | X | X | X | | | |
| L = 90 FRAME, SGL. CAN (ø115.00 B.C.) (13) | | | | X | X | | | |
| P = 100 FRAME, SGL. CAN (ø130.00 B.C.) | | | | | | X | | |
| O = 100 FRAME, DBL. CAN (ø130.00 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.

# ISOCHEM 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<br>Metallic Bearing Lock Pins | | | X | X | X | X | X | X | X |
| C = Bearing Flush Ports<br>PFA Coated, SS Hsg O-Rings<br>Metallic Bearing Lock Pins | | | X | X | X | X | X | | |
| D = Bearing Flush Ports;<br>PFA Coated, SS Hsg O-Rings<br>Metallic Bearing Lock Pins<br>Slotted Bearings | (7) | | X | X | X | X | X | | |
| E = Bearing Flush Ports;<br>PFA Coated, SS Hsg O-Rings<br>Metallic Bearing Lock Pins<br>Slotted Bearings<br>Slotted Wear Plates | (7)<br>(8) | | X | X | X | X | | | |
| F = NON-Recirculation Wear Plates | | | X | X | X | X | STD | STD | STD |
| H = PFA Coated, SS Hsg O-Rings<br>Metallic Bearing Lock Pins<br>Samarium Cobalt Magnets | | | X | X | X | X | | | |
| M = Alloy C Containment Can<br>(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<br>(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<br>(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 integraly 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.

# ISOCHEM 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 ISOCHEM 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 | | |
| **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 | | |
| 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 | |
| L = Extended Life Carbon (4) | X | X | X | X | X |
| 4 = Standard Carbon - Slotted (4) | | | | | 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 (ø100.00 B.C.) (13) | X | X | X | | |
| L = 90 FRAME, SGL. CAN (ø115.00 B.C.) (13) | | | X | | |
| P = 100 FRAME, SGL. CAN (ø130.00 B.C.) | | | | X | |
| Q = 100 FRAME, DBL. CAN (ø130.00 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 Postion 9.

# ISOCHEM 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<br>Metallic Bearing Lock Pins | | X | X | X | X | X |
| C = Bearing Flush Ports<br>PFA Coated, SS Hsg O-Rings<br>Metallic Bearing Lock Pins | | X | X | X | X | |
| D = Bearing Flush Ports,<br>PFA Coated, SS Hsg O-Rings<br>Metallic Bearing Lock Pins<br>Slotted Bearings | (7) | X | X | X | X | |
| E = Bearing Flush Ports,<br>PFA Coated, SS Hsg O-Rings<br>Metallic Bearing Lock Pins<br>Slotted Bearings<br>Slotted Wear Plates | (7)<br>(8) | X | X | X | | |
| F = NON-Recirculation Wear Plates | | X | X | X | STD | STD |
| H = PFA Coated, SS Hsg O-Rings<br>Metallic Bearing Lock Pins<br>Samarium Cobalt Magnets | | X | X | X | | |
| M = Alloy C Containment Can<br>(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<br>(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<br>(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 integraly mounted motors.

(15) Consult Factory.

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

CERTIFIED DRAWING BY PULSAFEEDER
A Unit of IDEX Corporation

FOR: _____ SERIAL NO.: _____

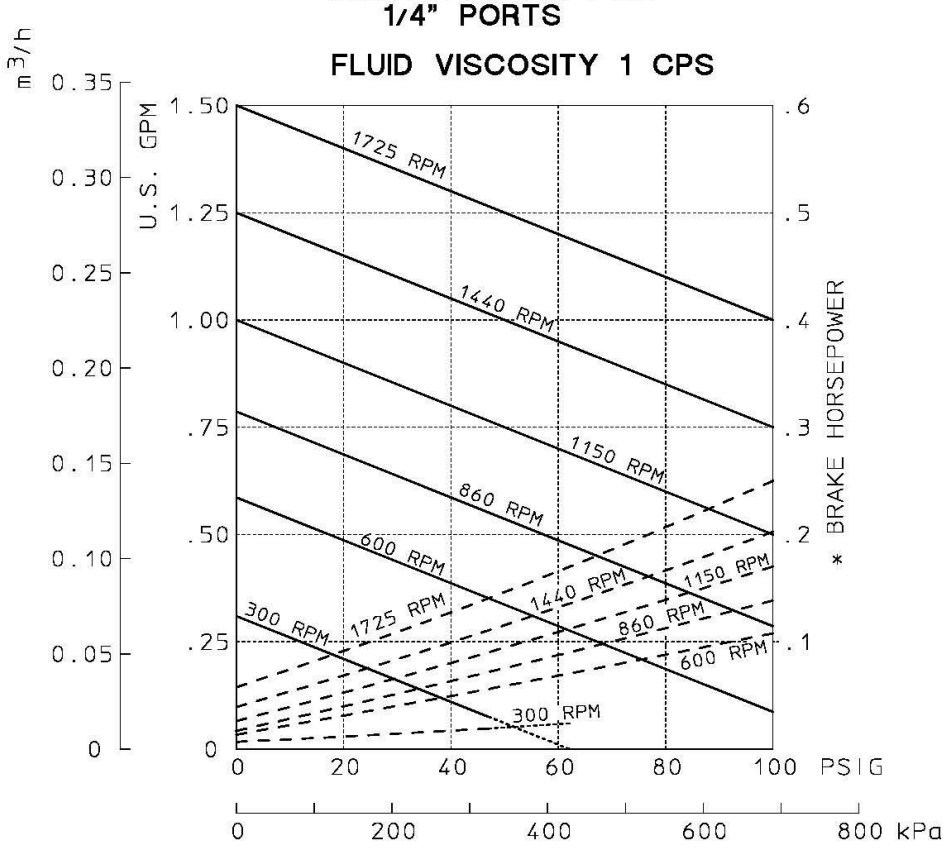
CUSTOMER P.O. NO: _____ SERIAL NO.: _____

ITEM: GMC2 DATED: _____ BY: _____ PULSA. ORDER NO.: _____

TAGGING: _____

## GMC2 ISOCHEM PUMP
## 1/4" PORTS

### FLUID VISCOSITY 1 CPS




* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

| | | | | | |
|---|---|---|---|---|---|
| | | | SECTION/PAGE | GM2 / 10 | Isochem / PULSAFEEDER — PERFORMANCE CURVE GMC2 |
| A | 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 — AE00046-001 |

CERTIFIED DRAWING BY PULSAFEEDER
A Unit of IDEX Corporation

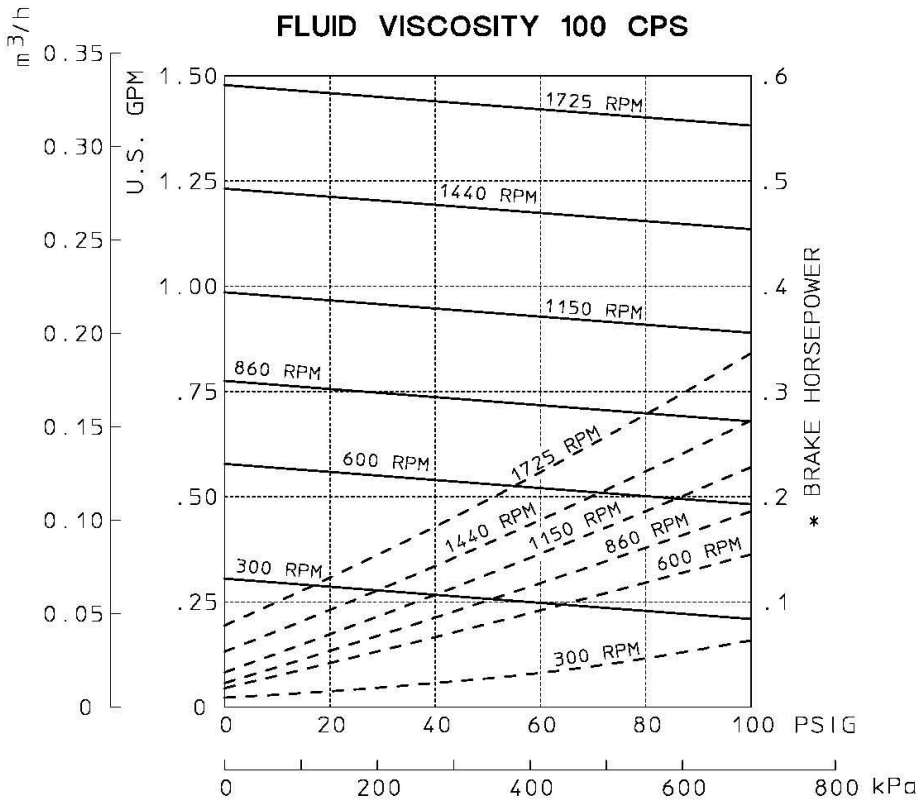
FOR: _____ SERIAL NO.: _____

CUSTOMER P.O. NO: _____ SERIAL NO.: _____

ITEM: GMC2 DATED: _____ BY: _____ PULSA. ORDER NO.: _____

TAGGING: _____

## GMC2 ISOCHEM PUMP
## 1/4" PORTS
## FLUID VISCOSITY 100 CPS



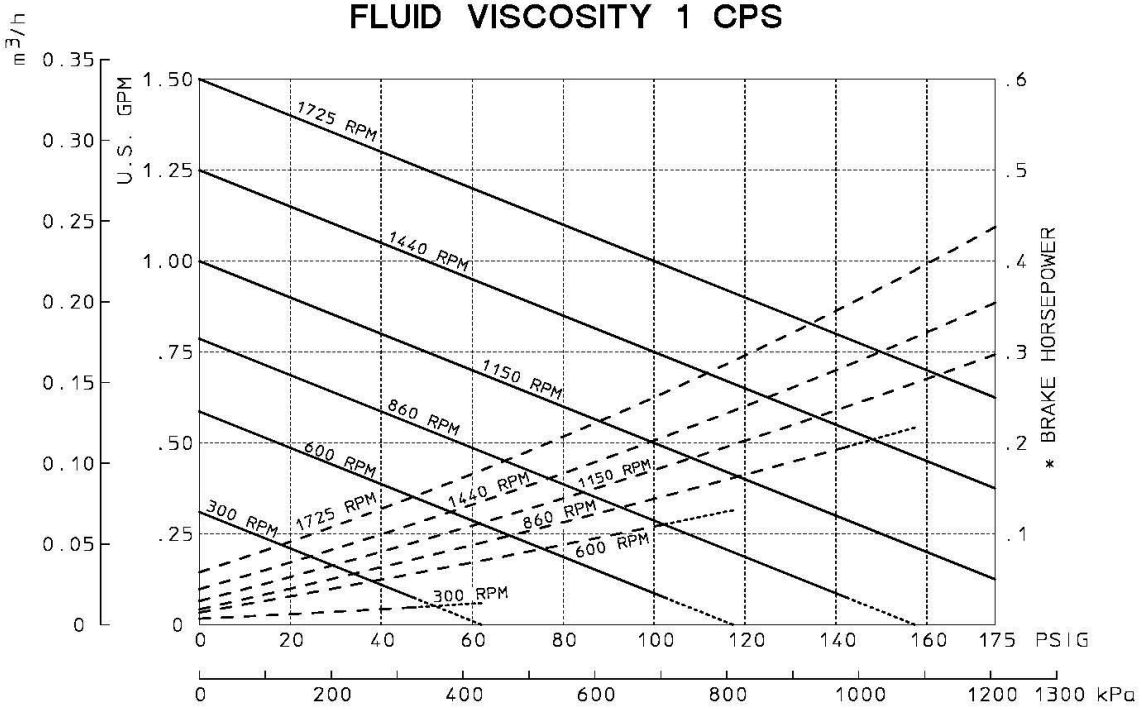

* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

Isochem PULSAFEEDER A Unit of IDEX Corporation

PERFORMANCE CURVE
GMC2

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | SECTION/PAGE | GM2 / 11 | | |
| A | REMOVED GM2 FROM DESCRIPTION | 07/11/13 | EFFECTIVE | 07/11/13 | DWN BY: PTP | AE00046-002 |
| REF | REVISION UPDATE | DATE | SUPERSEDES | 12/01/97 | DATE: 02/11/98 | |

## GMC2 ISOCHEM PUMP
## 1/4" PORTS
## FLUID VISCOSITY 1 CPS




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

* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

| REF | REVISION UPDATE | DATE |
|---|---|---|
| A | REMOVED GM2 FROM DESCRIPTION | 07/11/13 |

| | |
|---|---|
| SECTION/PAGE | GM2 / 12 |
| EFFECTIVE | 07/11/13 |
| SUPERSEDES | 12/01/97 |

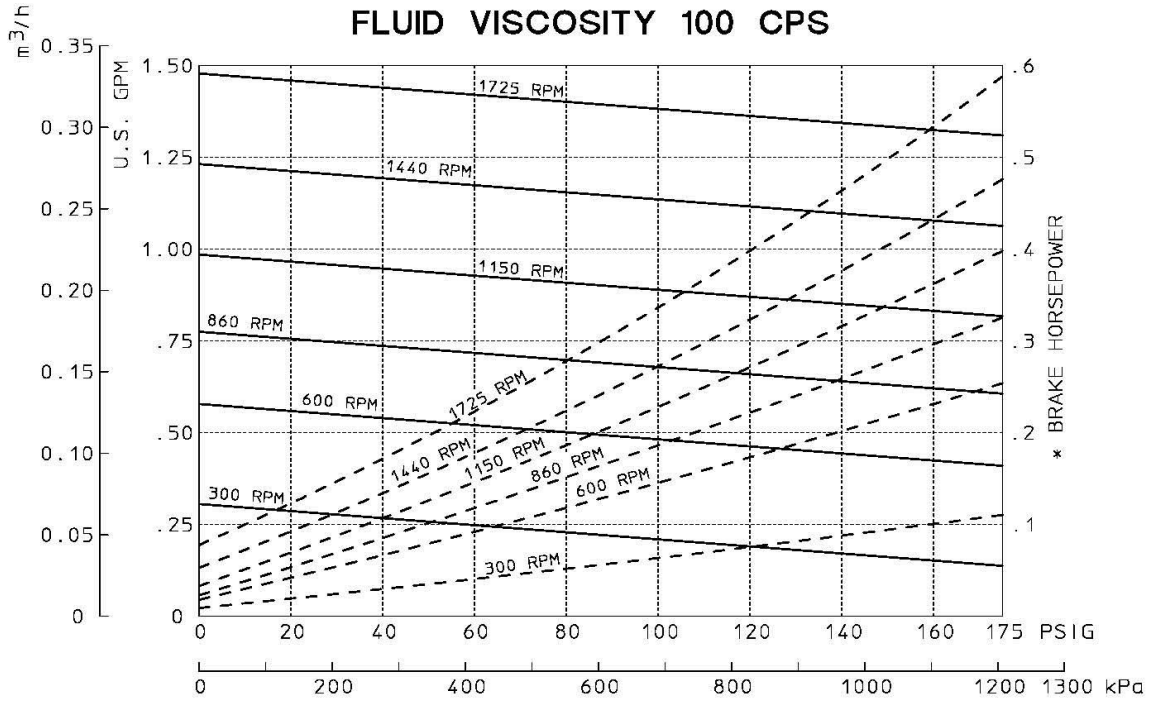
Isochem — PULSAFEEDER, A Unit of IDEX Corporation

PERFORMANCE CURVE
GMC2
EXTENDED PRESSURE

DWN BY: PTP
DATE: 02/11/98

AE00046-003

## GMC2 ISOCHEM PUMP
## 1/4" PORTS
## FLUID VISCOSITY 100 CPS




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

* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

| | | | | | |
|---|---|---|---|---|---|
| | | | SECTION/PAGE | GM2 / 13 | Isochem / PULSAFEEDER (A Unit of IDEX Corporation) |
| | | | EFFECTIVE | 07/11/13 | PERFORMANCE CURVE GMC2 EXTENDED PRESSURE |
| A | REMOVED GM2 FROM DESCRIPTION | 07/11/13 | | | |
| REF | REVISION UPDATE | DATE | SUPERSEDES | 12/01/97 | DWN BY: PTP / DATE: 02/11/98 / AE00046-004 |

ITEM CLASS GMC2 = II
PRODUCT LINE = H / ISOCHEM

# ISOCHEM GMC2 SERIES PUMP
# CONSOLIDATED B / M

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

| | | | | 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 3** | | **STANDARD PUMP - NON-VARIABLE COMPONENTS** | | | | | | | | |
| | | 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 | | 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 | 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 | | 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 |
| C | 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 |
| | | # 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 |
| | | | 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 | ALL0Y 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 |
| W | | DRVN MAG ASSY (WELDED) / (SAMAR) | 1 | 79616 | 316 SS | 79650 | ALL0Y 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

# ISOCHEM GMC2 SERIES PUMP
# CONSOLIDATED B / M



| | | | 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 | 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

DWG: GM2P205

# DENOTES RECOMMENDED SPARE PART

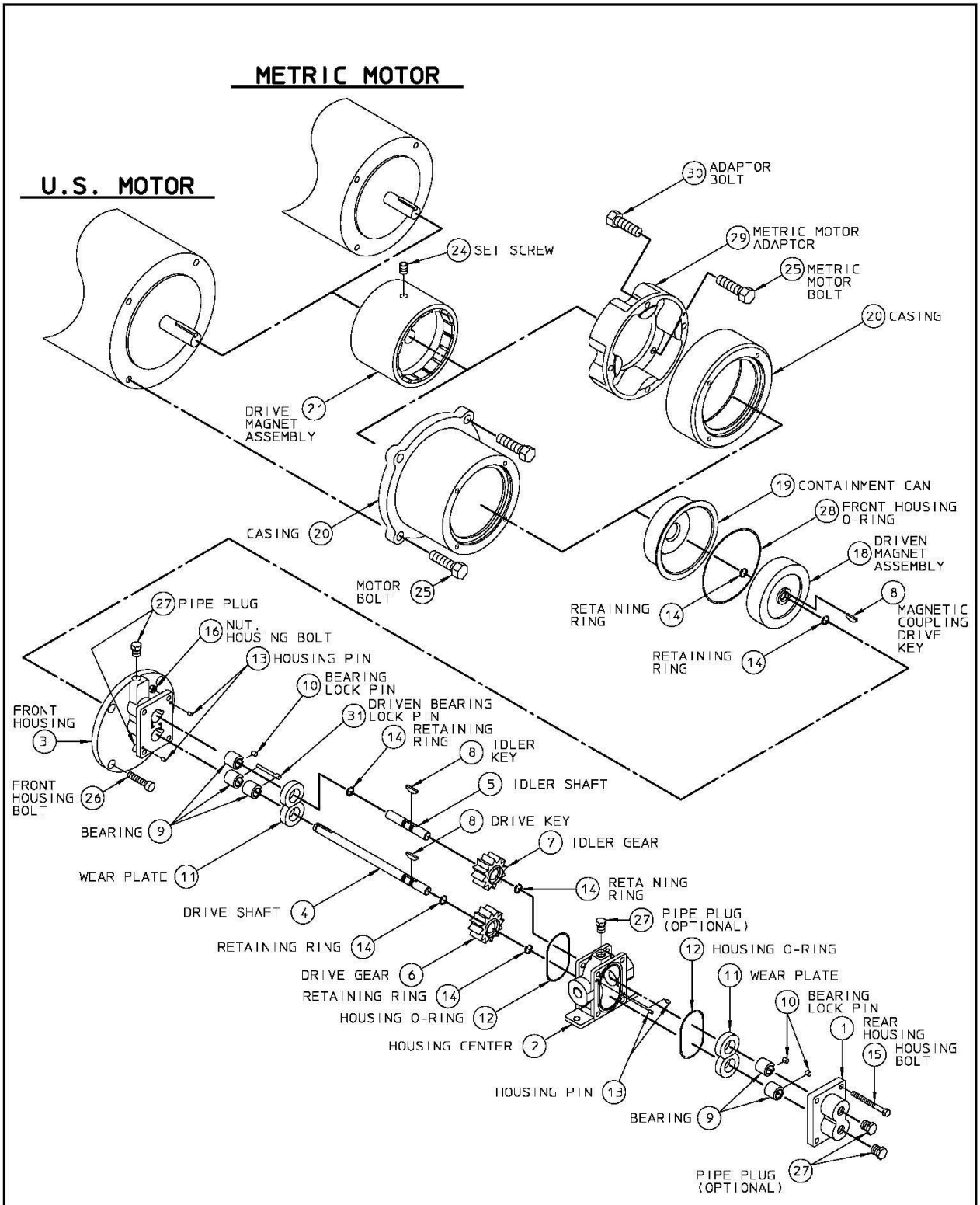
# ISOCHEM GMC2 SERIES PUMP
# CONSOLIDATED B / M

SECTION: MODEL GMC2
PAGE: 206
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 |
| **POSITION 8** | **MAGNETIC COUPLING COMPONENTS** | | | | | | | | |
| 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 |
| **56C FRAME COMPONENTS** | | | | | | | | | |
| 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 |
| **140TC FRAME COMPONENTS** | | | | | | | | | |
| 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 |
| **71 METRIC FRAME COMPONENTS** | | | | | | | | | |
| 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 |
| **80 METRIC FRAME COMPONENTS** | | | | | | | | | |
| 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




Isochem | PULSAFEEDER A Unit of IDEX Corporation

MODEL GMC2/4
ISOCHEM PUMP
EXPLODED VIEW

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

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

DWN BY: CLA
DATE: 09/22/97

SD2889

CERTIFIED DRAWING BY PULSAFEEDER
A Unit of IDEX Corporation

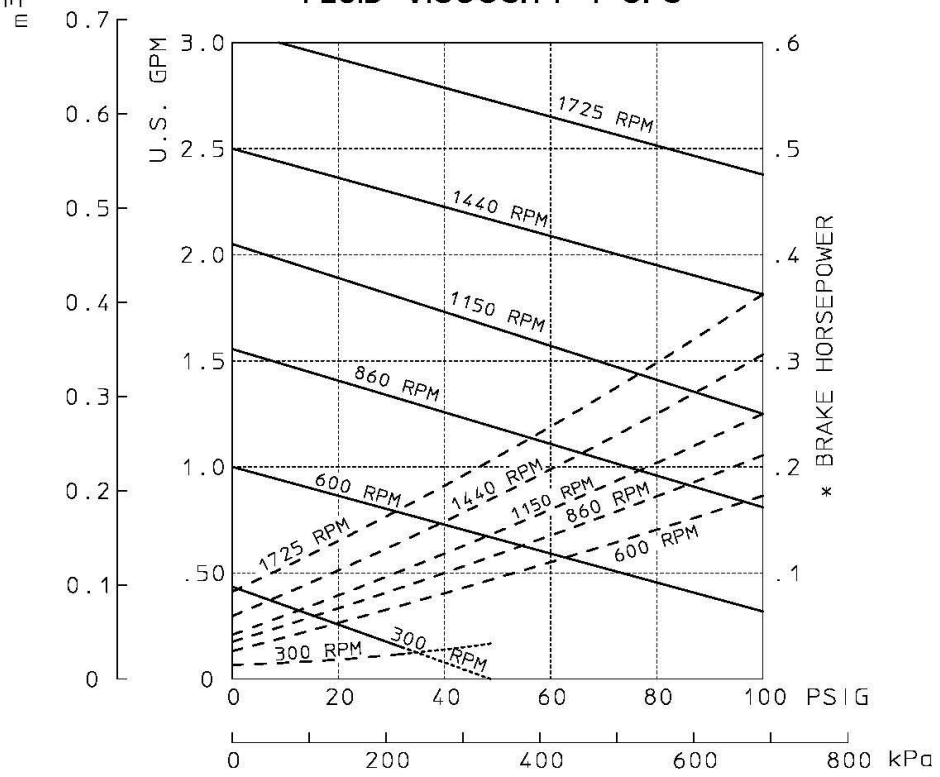
FOR: _____ SERIAL NO.: _____

CUSTOMER P.O. NO: _____ SERIAL NO.: _____

ITEM: GMC4 DATED: _____ BY: _____ PULSA. ORDER NO.: _____

TAGGING: _____

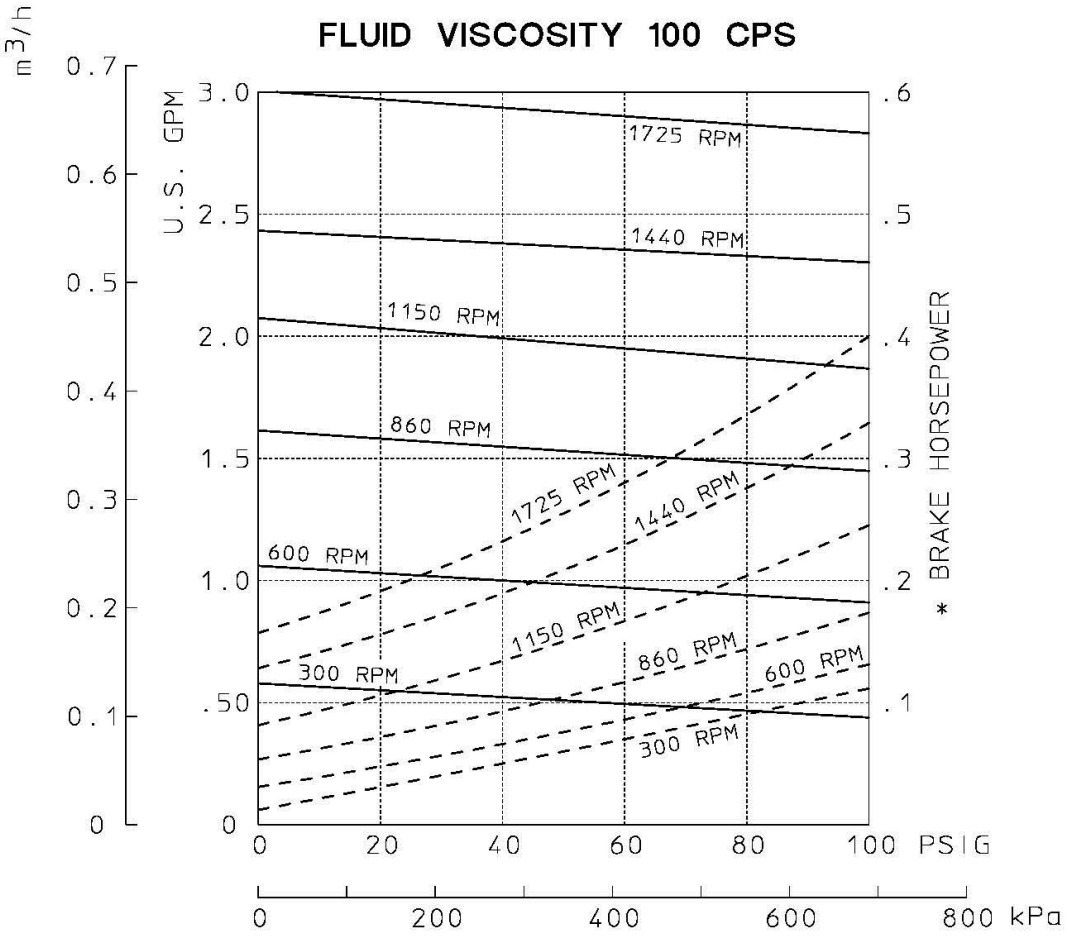
## GMC4 ISOCHEM PUMP
## 1/2" PORTS
## FLUID VISCOSITY 1 CPS




* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | SECTION/PAGE | GMC4 / 10 | Isochem / PULSAFEEDER | |
| | | | EFFECTIVE | 07/11/13 | PERFORMANCE CURVE GMC4 | |
| A | REMOVED GM4 FROM DESCRIPTION | 07/11/13 | | | | |
| REF | REVISION UPDATE | DATE | SUPERSEDES | 12/01/97 | DWN BY: PTP | AE00047-001 |
| | | | | | DATE: 02/11/98 | |

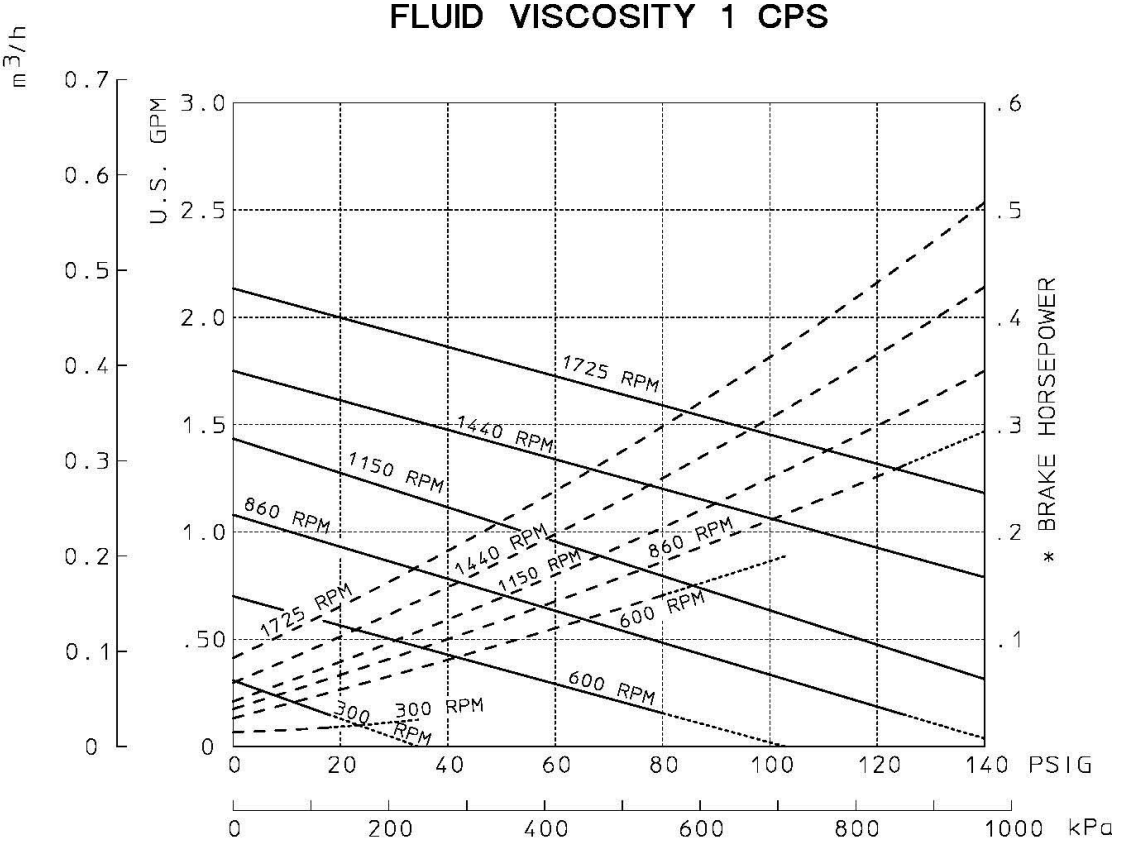
## GMC4 ISOCHEM PUMP
## 1/2" PORTS
## FLUID VISCOSITY 100 CPS




* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

| | | | | | |
|---|---|---|---|---|---|
| | | | SECTION/PAGE | GMC4 / 14 | Isochem / PULSAFEEDER (A Unit of IDEX Corporation) |
| | | | EFFECTIVE | 07/11/13 | PERFORMANCE CURVE GMC4 |
| A | REMOVED GM4 FROM DESCRIPTION | 07/11/13 | | | |
| REF | REVISION UPDATE | DATE | SUPERSEDES | 12/01/97 | DWN BY: PTP |
| | | | | | DATE: 02/11/98 |
| | | | | | AE00047-002 |

## GMC4 ISOCHEM 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

| REF | REVISION UPDATE | DATE |
|---|---|---|
| ⚠ | REMOVED GM4 FROM DESCRIPTION | 07/11/13 |

| | |
|---|---|
| SECTION/PAGE | GMC4 / 15 |
| EFFECTIVE | 07/11/13 |
| SUPERSEDES | 12/01/07 |

Isochem — PULSAFEEDER, A Unit of IDEX Corporation

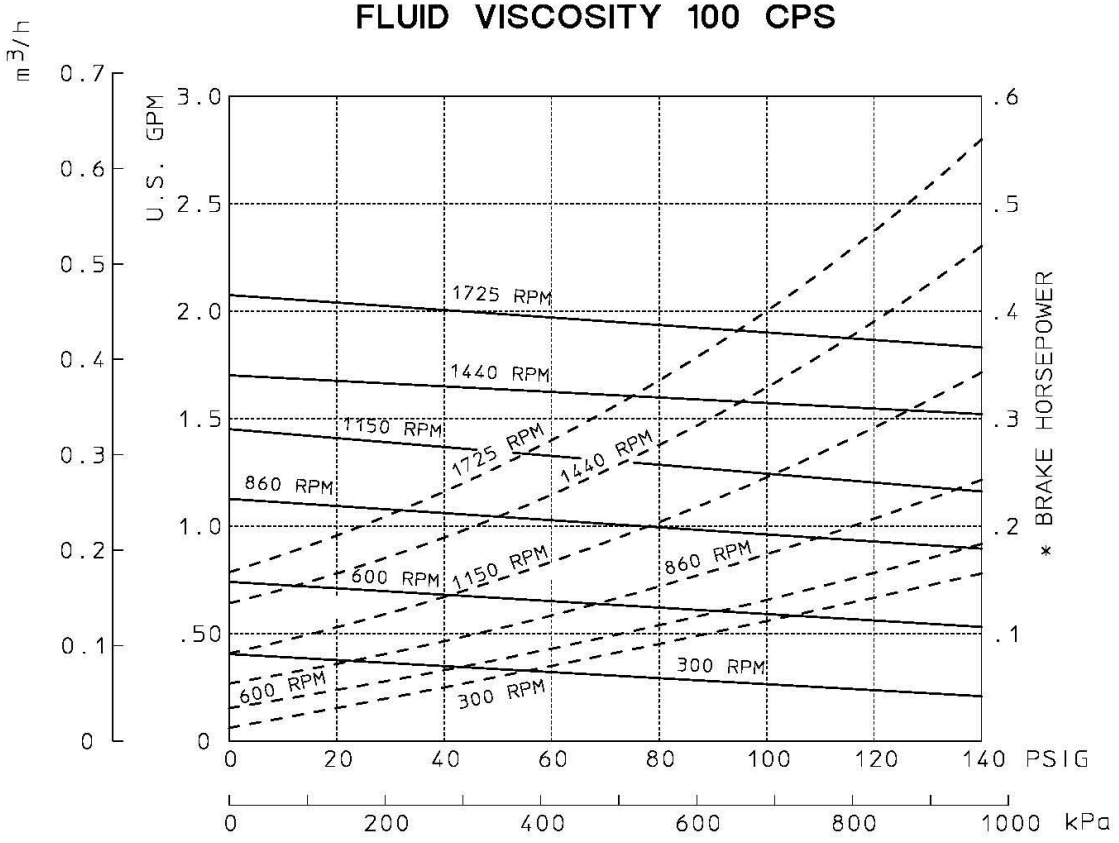
PERFORMANCE CURVE
GMC4
EXTENDED PRESSURE
NARROW WIDTH GEARS

DWN BY: PTP
DATE: 02/11/98

AE00047-003

# GMC4 ISOCHEM 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

| | | | | | |
|---|---|---|---|---|---|
| | | | SECTION/PAGE | GMC4 / 16 | Isochem / PULSAFEEDER (A Unit of IDEX Corporation) |
| A | REMOVED GM4 FROM DESCRIPTION | 07/11/13 | EFFECTIVE | 07/11/13 | PERFORMANCE CURVE GMC4 EXTENDED PRESSURE NARROW WIDTH GEARS |
| REF | REVISION UPDATE | DATE | SUPERSEDES | 12/01/97 | DWN BY: PTP / DATE: 02/11/98 — AE00047-004 |

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

| | | | | 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 3** | **STANDARD PUMP - NON-VARIABLE COMPONENTS** | | | | | | | | | |
| | 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 |
| C | 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 |
| E | | # 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 |
| | N | # GEAR, DRIVE / IDLER | 1-2 | 70698 | 316 SS | ----- | ----- | ----- | ----- | 6, 7 |
| | | # 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) | 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 |
| 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.

DWG: GM4P204

*COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B / M

# DENOTES RECOMMENDED SPARE PART

# 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

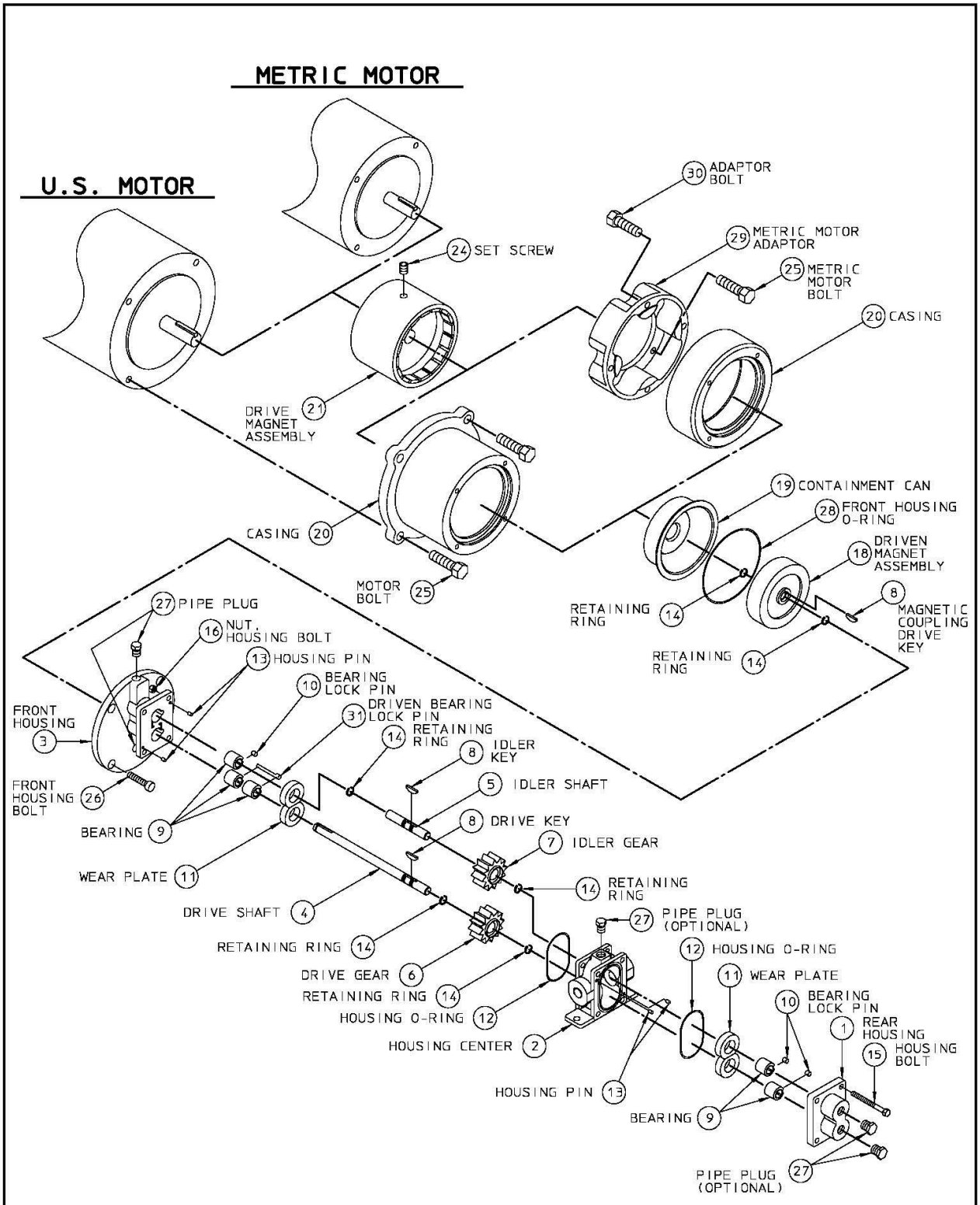
**SECTION:** MODEL GMC4
**PAGE:** 206
**DATE REV:** 11 / 12 / 12
**SUPERSEDES:** 02 / 12 / 01

| | | | 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 8** | **MAGNETIC COUPLING COMPONENTS** | | | | | | | | |
| 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 |
| **56C FRAME COMPONENTS** | | | | | | | | | |
| 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 |
| **140TC FRAME COMPONENTS** | | | | | | | | | |
| 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 |
| **71 METRIC FRAME COMPONENTS** | | | | | | | | | |
| 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 |
| **80 METRIC FRAME COMPONENTS** | | | | | | | | | |
| 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




Isochem | PULSAFEEDER A Unit of IDEX Corporation

MODEL GMC2/4
ISOCHEM PUMP
EXPLODED VIEW

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

SD2889

CERTIFIED DRAWING BY PULSAFEEDER
A Unit of IDEX Corporation

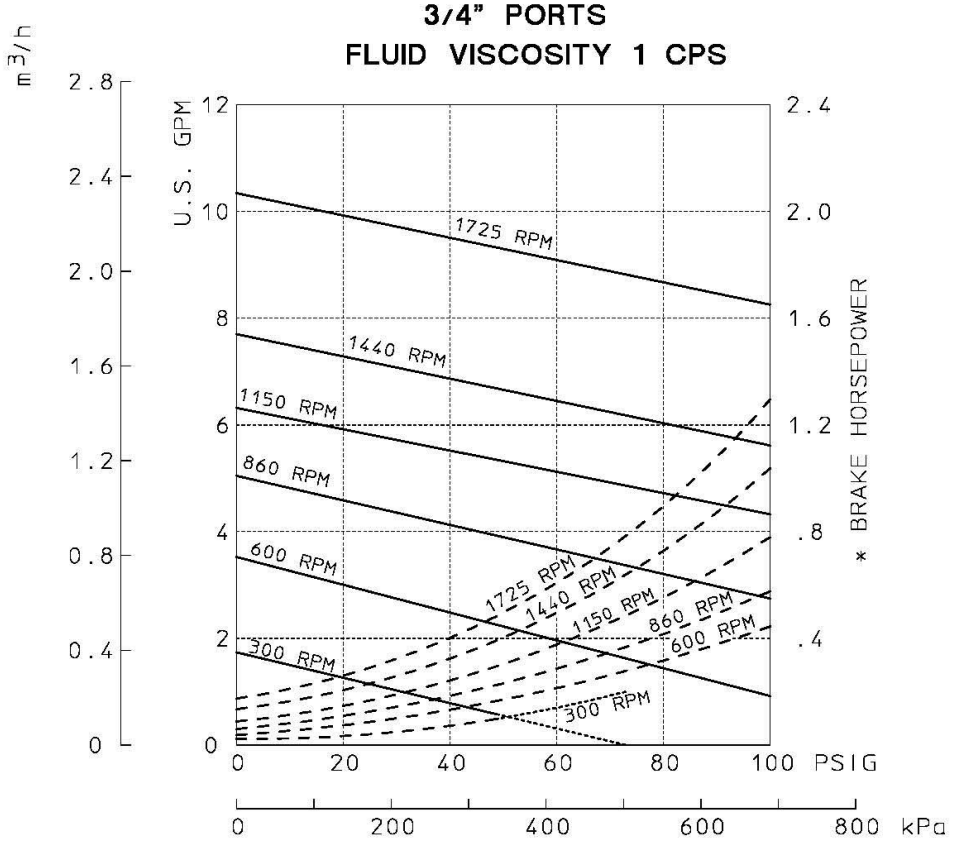
FOR: _____ SERIAL NO.: _____

CUSTOMER P.O. NO: _____ SERIAL NO.: _____

ITEM: GMC6 DATED: _____ BY: _____ PULSA. ORDER NO.: _____

TAGGING: _____

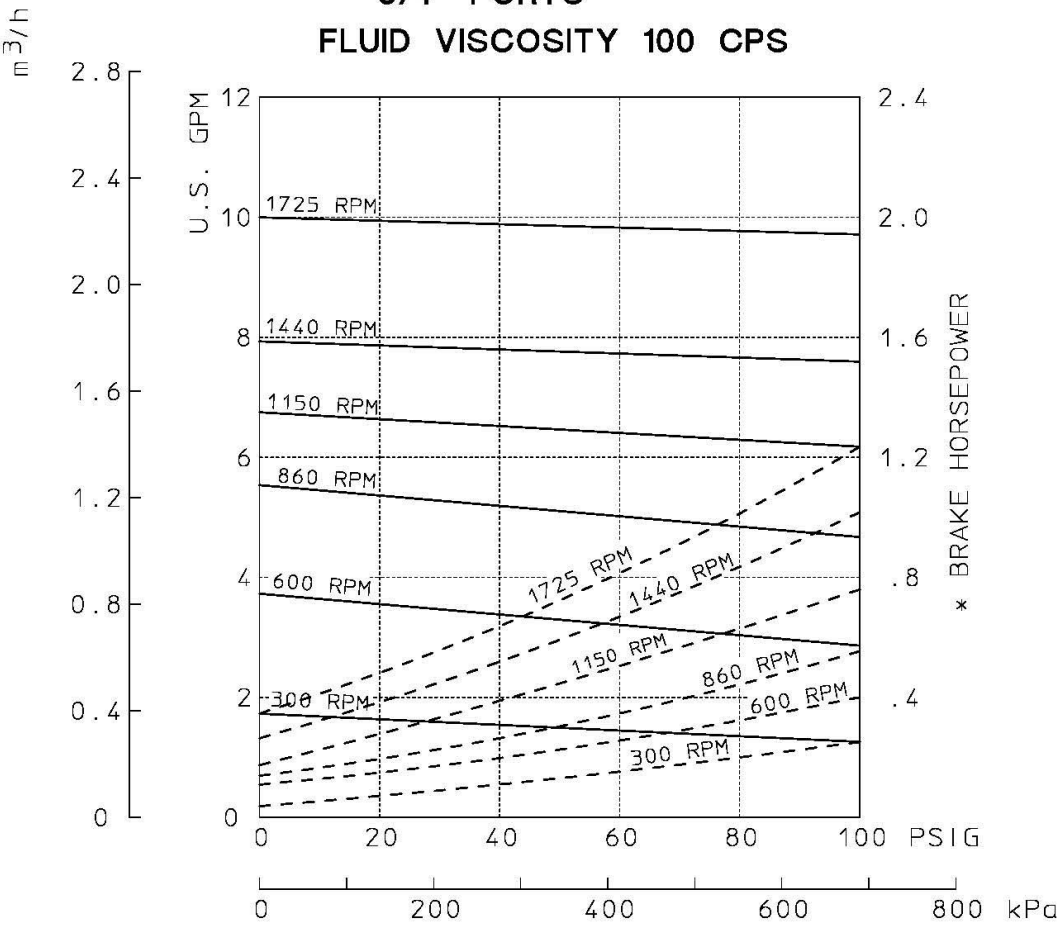
## GMC6 ISOCHEM PUMP
### 3/4" PORTS
### FLUID VISCOSITY 1 CPS




* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | SECTION/PAGE | GMC6 / 10 | Isochem PULSAFEEDER A Unit of IDEX Corporation | |
| | | | | | PERFORMANCE CURVE GMC6 | |
| ⚠ | REMOVED GM6 FROM DESCRIPTION | 07/11/13 | EFFECTIVE | 07/11/13 | DWN BY: PTP | AE00048-001 |
| REF | REVISION UPDATE | DATE | SUPERSEDES | 12/01/97 | DATE: 02/11/98 | |

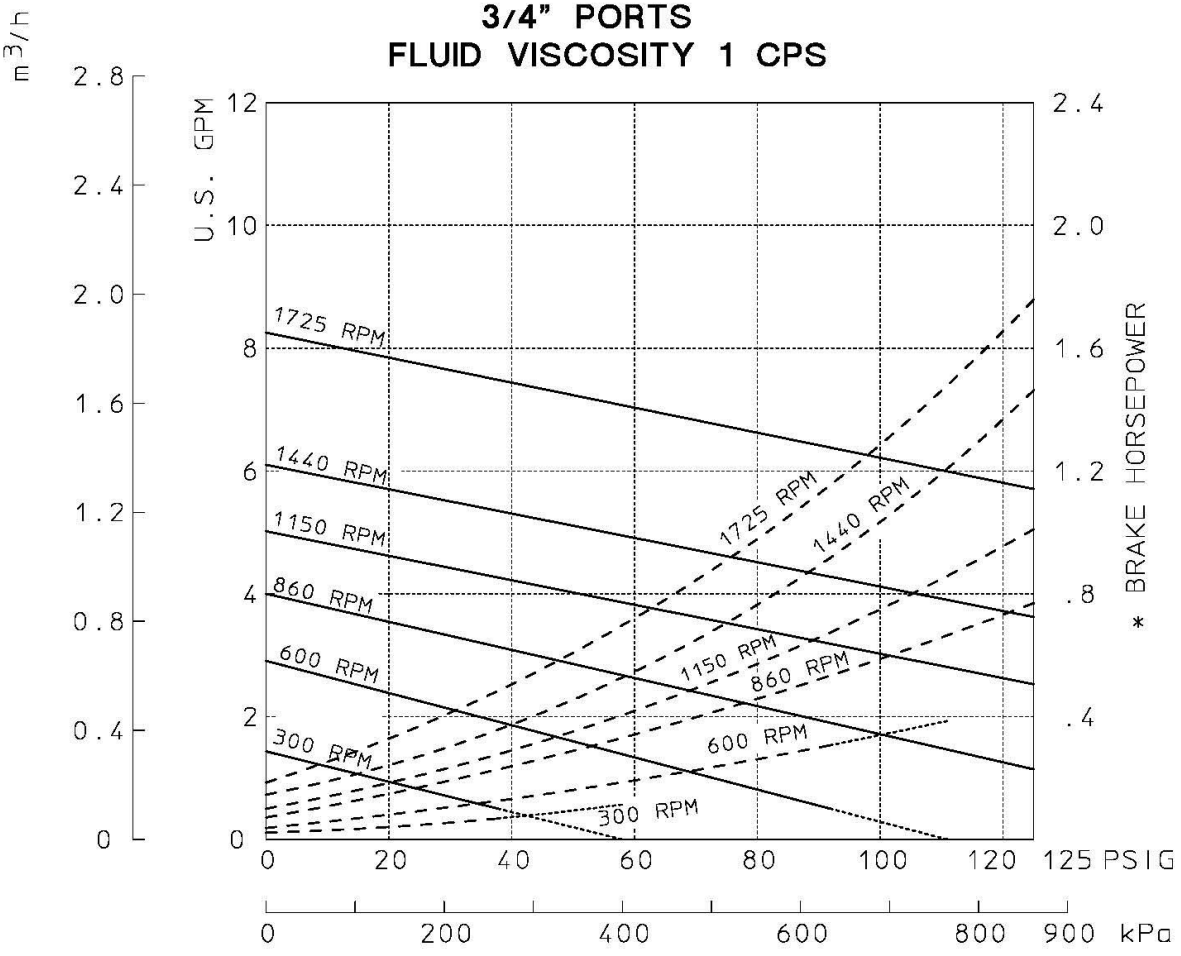
## GMC6 ISOCHEM PUMP
## 3/4" PORTS
## FLUID VISCOSITY 100 CPS




* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

| | | | | | |
|---|---|---|---|---|---|
| | | | SECTION/PAGE | GMC6 / 14 | Isochem / PULSAFEEDER (A Unit of IDEX Corporation) |
| | | | EFFECTIVE | 07/11/13 | PERFORMANCE CURVE GMC6 |
| A | REMOVED GM6 FROM DESCRIPTION | 07/11/13 | | | |
| REF | REVISION UPDATE | DATE | SUPERSEDES | 12/01/97 | DWN BY: PTP / DATE: 02/11/98 — AE00048-002 |

# GMC6 ISOCHEM PUMP
# NARROW WIDTH GEARS
## 3/4" PORTS
## FLUID VISCOSITY 1 CPS

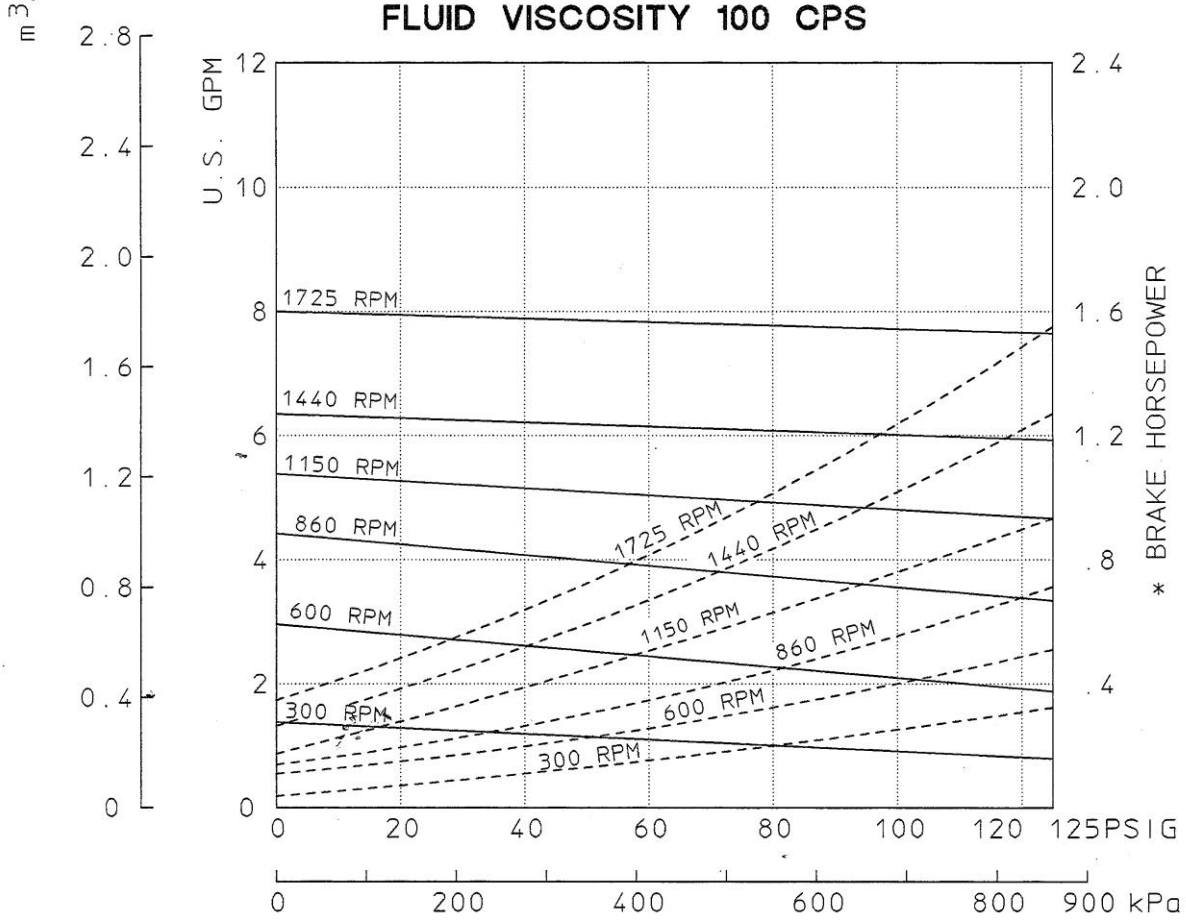



NOTES: 1. TFE GEARS AND BEARINGS LIMITED TO 100 PSIG

* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

| | | | | | |
|---|---|---|---|---|---|
| | | | SECTION/PAGE | GMC6 / 15 | Isochem / PULSAFEEDER (A Unit of IDEX Corporation) |
| | | | EFFECTIVE | 07/11/13 | PERFORMANCE CURVE GMC6 EXTENDED PRESSURE NARROW WIDTH GEARS |
| B | REMOVED GM6 FROM DESCRIPTION | 07/11/13 | | | |
| REF | REVISION UPDATE | DATE | SUPERSEDES | 05/26/99 | DWN BY: PTP |
| | | | | | DATE: 02/11/98 |
| | | | | | AE00048-003 |

# GMC6 ISOCHEM 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

| REF | REVISION UPDATE | DATE |
|---|---|---|
| A | REMOVED GM FROM DESCRIPTION | 07/11/13 |

| | |
|---|---|
| SECTION/PAGE | GMC6 / 16 |
| EFFECTIVE | 07/11/13 |
| SUPERSEDES | 12/01/97 |

Isochem — PULSAFEEDER, A Unit of IDEX Corporation

PERFORMANCE CURVE
GMC6
EXTENDED PRESSURE
NARROW WIDTH GEARS

DWN BY: PTP
DATE: 02/11/98

AE00048-004

ITEM CLASS GMC6 = IL
PRODUCT LINE = H / ISOCHEM

# ISOCHEM GMC6 SERIES PUMP
# CONSOLIDATED B / M

SECTION: MODEL GMC6
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 |
| **POSITION 3** | **STANDARD PUMP - NON-VARIABLE COMPONENTS** | | | | | | | | | |
| 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 | 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-HC0 | 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 B | # 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 |
| D | # BEARING, SLOTTED | | 4 | 40428 | CARBON | 40428 | CARBON | 40428 | CARBON | 9 |
| | # WEAR PLATE, SLOTTED | | 4 | 40511 | CARBON | 40511 | CARBON | 40511 | CARBON | 11 |
| E | # 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 | 18 |
| | DRV MAG ASSY, 56C FR (SAMAR.) | | 1 | 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



| | | | 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 | 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

DWG: GM6P205

# DENOTES RECOMMENDED SPARE PART

# ISOCHEM GMC6 SERIES PUMP
# CONSOLIDATED B / M

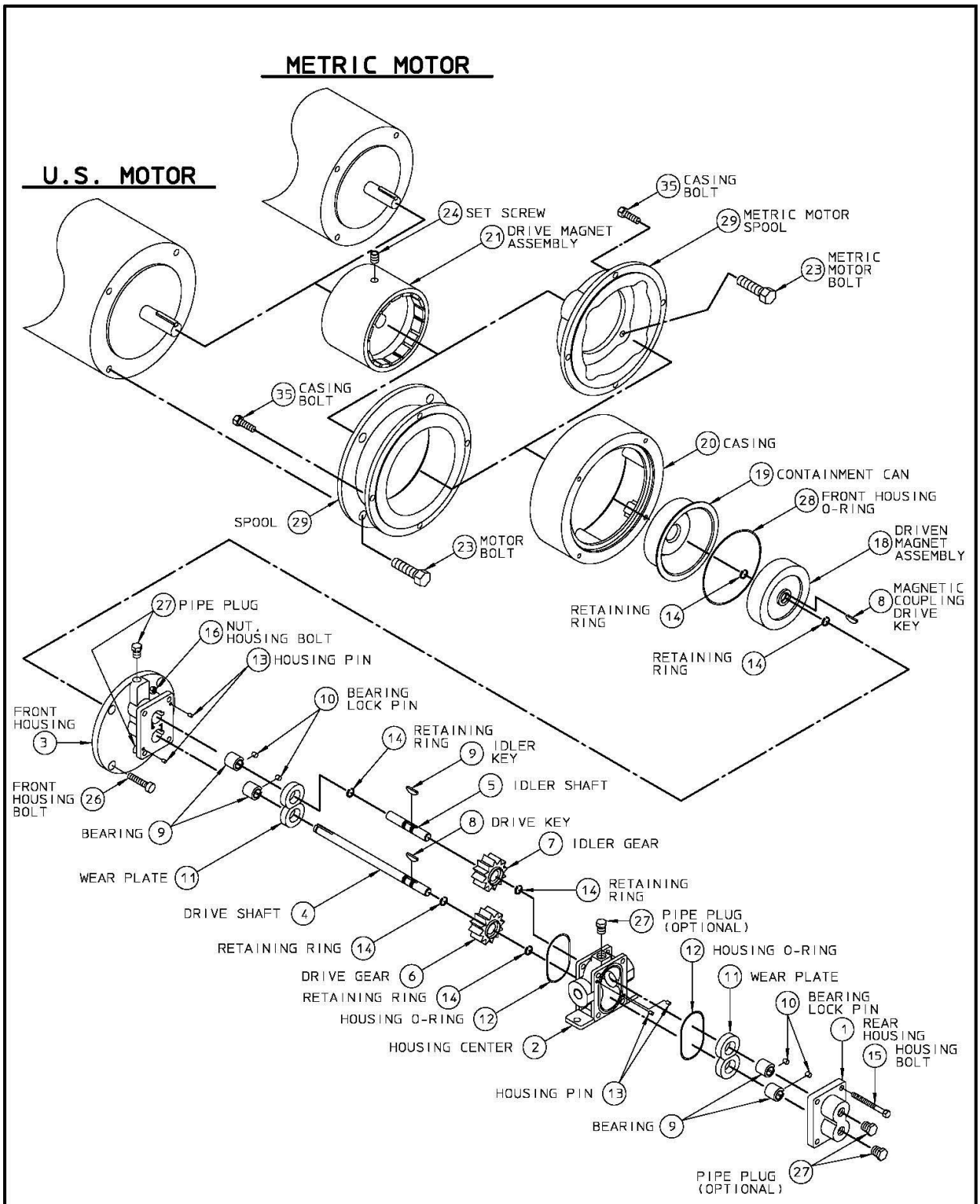
SECTION: MODEL GMC6
PAGE: 206
DATE REV.: 06 / 24 / 14
SUPERSEDES: 11 / 12 / 12

| | | | 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 |
| **POSITION 8** | **MAGNETIC COUPLING COMPONENTS** | | | | | | | | |
| 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 |
| | PLUG, 1/8" NPT | *2 | W772565-316 | 316SS | 52301 | ALLOY C | 52300 | ALLOY 20 | 27 |
| **56C FRAME COMPONENTS** | | | | | | | | | |
| 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 |
| **140TC FRAME COMPONENTS** | | | | | | | | | |
| 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 |
| **182 / 4TC FRAME COMPONENTS** | | | | | | | | | |
| 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, SCREW | 4 | NP999006-STL | STEEL | NP999006-STL | STEEL | NP999006-STL | STEEL | 23 |
| **80 METRIC FRAME COMPONENTS** | | | | | | | | | |
| 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 |
| **90 METRIC FRAME COMPONENTS** | | | | | | | | | |
| 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 | STEEL | 16722 | STEEL | 16722 | STEEL | 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




Isochem | PULSAFEEDER A Unit of IDEX Corporation

MODEL GMC6/8
ISOCHEM PUMP
EXPLODED VIEW

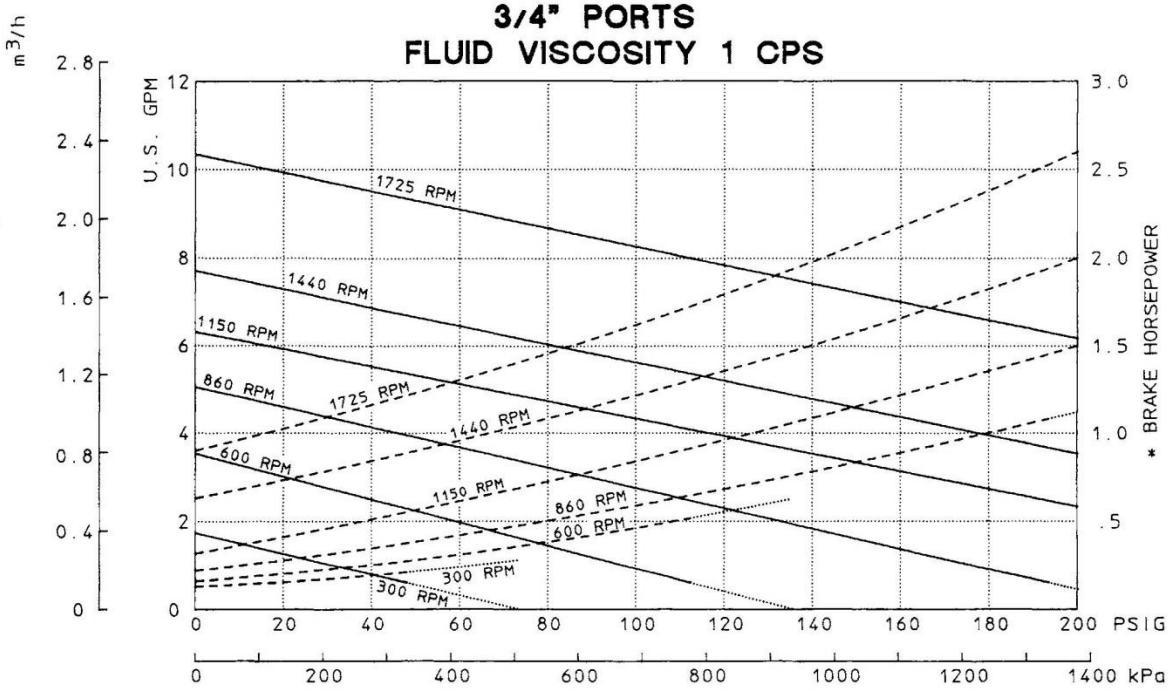
| REF | REVISION UPDATE | DATE |
|---|---|---|
| C | REMOVED GM6/8 FROM DESCRIPTION | 07/11/13 |

| | |
|---|---|
| SECTION/PAGE | MODEL GMC6 / 400 |
| EFFECTIVE | 07/11/13 |
| SUPERSEDES | 10/06/06 |

DWN BY: CLA
DATE: 09/22/97

SD-2868

# GMH6 ISOCHEM PUMP
## 3/4" PORTS
## FLUID VISCOSITY 1 CPS




* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

| REF | REVISION UPDATE | DATE |
|---|---|---|
| A | | |

| | |
|---|---|
| SECTION/PAGE | GMH6 / 12 |
| EFFECTIVE | 12/01/97 |
| SUPERSEDES | NEW |

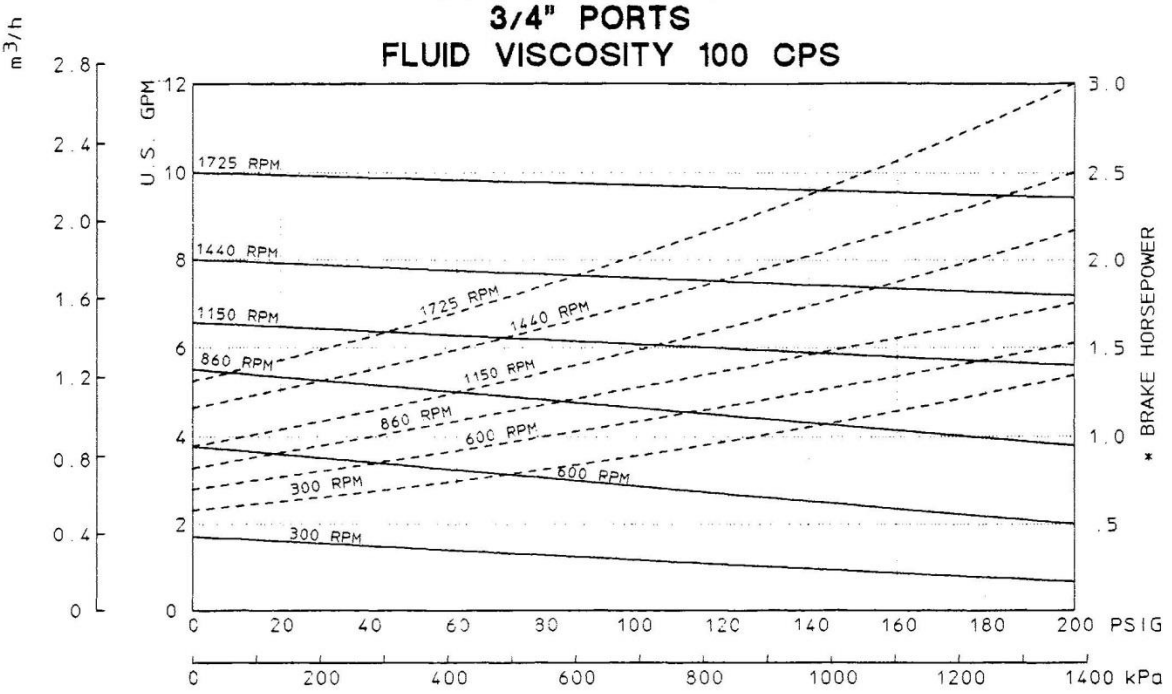
Isochem — PULSAFEEDER, A Unit of IDEX Corporation

PERFORMANCE CURVE
GMH6
EXTENDED PRESSURE

DWN BY: PTP
DATE: 02/11/98

AE00049-003

# GMH6 ISOCHEM PUMP
## 3/4" PORTS
## FLUID VISCOSITY 100 CPS




* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

| REF | REVISION UPDATE | DATE |
|---|---|---|
| A | | |

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

Isochem — PULSAFEEDER, A Unit of IDEX Corporation

PERFORMANCE CURVE
GMH6
EXTENDED PRESSURE

DWN BY: PTP
DATE: 02/11/98

AE00049-004

ITEM CLASS GMH6 = IB
PRODUCT LINE = H / ISOCHEM

# ISOCHEM 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 |
| **POSITION 3** | **STANDARD PUMP - NON-VARIBLE COMPONENTS** | | | | | | | | | |
| | 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 |
| | C 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 |
| | B | # 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 |
| | | # BEARING, SLOTTED | 3/4" | 0-4 | 40442 | CARBON | 40442 | CARBON | 40442 | CARBON | 12 |
| | D | # BEARING, SLOTTED | 5/8" | 0-2 | 40440 | CARBON | 40440 | CARBON | 40440 | CARBON | 13 |
| | | 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 |
| | R | # 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

DWG: GMH6P200

# DENOTES RECOMMENDED SPARE PART

# ISOCHEM GMH6 SERIES PUMP
# CONSOLIDATED B / M



| | | | | 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 | 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** | | | | | | | | | |
| 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 | 41415 | 316 SS | 41423 | ALLOY C | 41424 | ALLOY 20 | 4 |
| | # SHAFT, IDLER | 5/8" | 1 | 41434 | 316 SS | 41435 | ALLOY C | 41436 | ALLOY 20 | 5 |
| | # SHAFT, IDLER METAL GEAR | 3/4" | | 41428 | 316 SS | 41429 | ALLOY C | 41430 | 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 |
| T | # SHAFT, DRIVE | | 1 | 41415 | 316 SS | 41423 | ALLOY C | 41424 | ALLOY 20 | 4 |
| | # SHAFT, IDLER | 5/8" | 1 | 41434 | 316 SS | 41435 | ALLOY C | 41436 | ALLOY 20 | 5 |
| | # SHAFT, IDLER METAL GEAR | 3/4" | | 41428 | 316 SS | 41429 | ALLOY C | 41430 | 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 LIFE - BEARINGS** | | | | | | | | | | |
| L | # SHAFT, DRIVE | | 1 | 41415 | 316 SS | 41423 | ALLOY C | 41424 | ALLOY 20 | 4 |
| | # SHAFT, IDLER | 5/8" | 1 | 41434 | 316 SS | 41435 | ALLOY C | 41436 | ALLOY 20 | 5 |
| | # SHAFT, IDLER METAL GEAR | 3/4" | | 41428 | 316 SS | 41429 | ALLOY C | 41430 | 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 |
| **EXTENDED LIFE - BEARINGS AND SHAFTS** | | | | | | | | | | |
| C | # SHAFT, DRIVE | | 1 | 41425 | CW / 316 SS | 41426 | CW / ALY C | 41427 | CW / ALY20 | 4 |
| | # SHAFT, IDLER | 5/8" | 1 | 41437 | CW / 316 SS | 41438 | CW / ALY C | 41439 | CW / ALY20 | 5 |
| | # SHAFT, IDLER METAL GEAR | 3/4" | | 41431 | CW / 316 SS | 41432 | CW / ALY C | 41433 | CW / ALY20 | 5 |
| | # BEARING, DRIVE/IDLER 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 | 41425 | CW / 316 SS | 41426 | CW / ALY C | 41427 | CW / ALY20 | 4 |
| | # SHAFT, IDLER | 5/8" | 1 | 41437 | CW / 316 SS | 41438 | CW / ALY C | 41439 | CW / ALY20 | 5 |
| | # SHAFT, IDLER METAL GEAR | 3/4" | | 41431 | CW / 316 SS | 41432 | CW / ALY C | 41433 | 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: GMH6P201

# DENOTES RECOMMENDED SPARE PART

# ISOCHEM GMH6 SERIES PUMP
# CONSOLIDATED B / M

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

| | | | 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 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

# ISOCHEM GMH6 SERIES PUMP
# CONSOLIDATED B / M

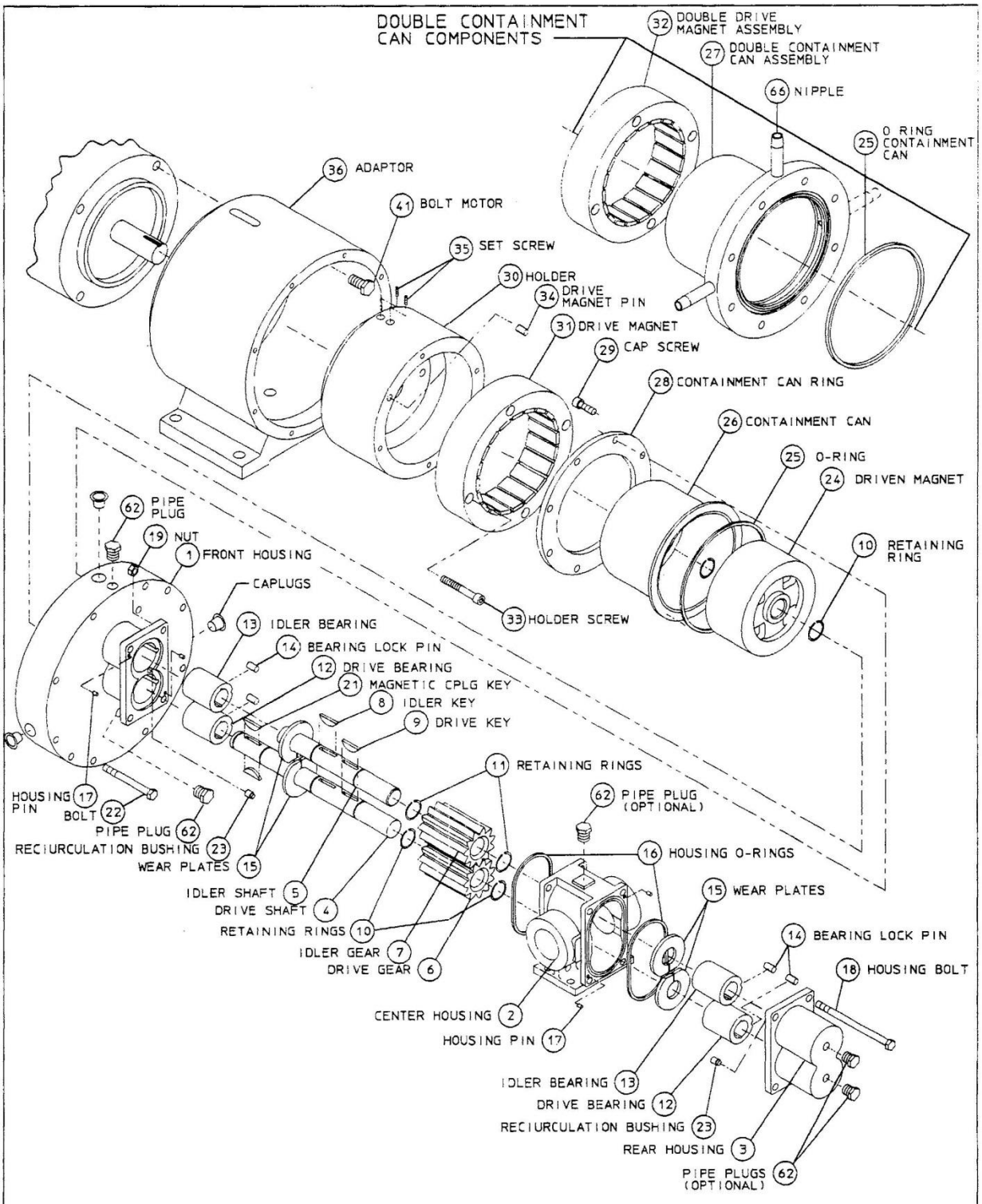


| | | | STANDARD PUMP MATERIAL | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | 316 SS (A, K, OR U) | | ALLOY C (C, M, OR V) | | ALLOY 20 (D, N, OR W) | | |
| | DESCRIPTION | QTY | PART NUMBER | MATERIAL | PART NUMBER | MATERIAL | PART NUMBER | MATERIAL | ITEM |
| **POSITION 8** | **MAGNETIC 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 |

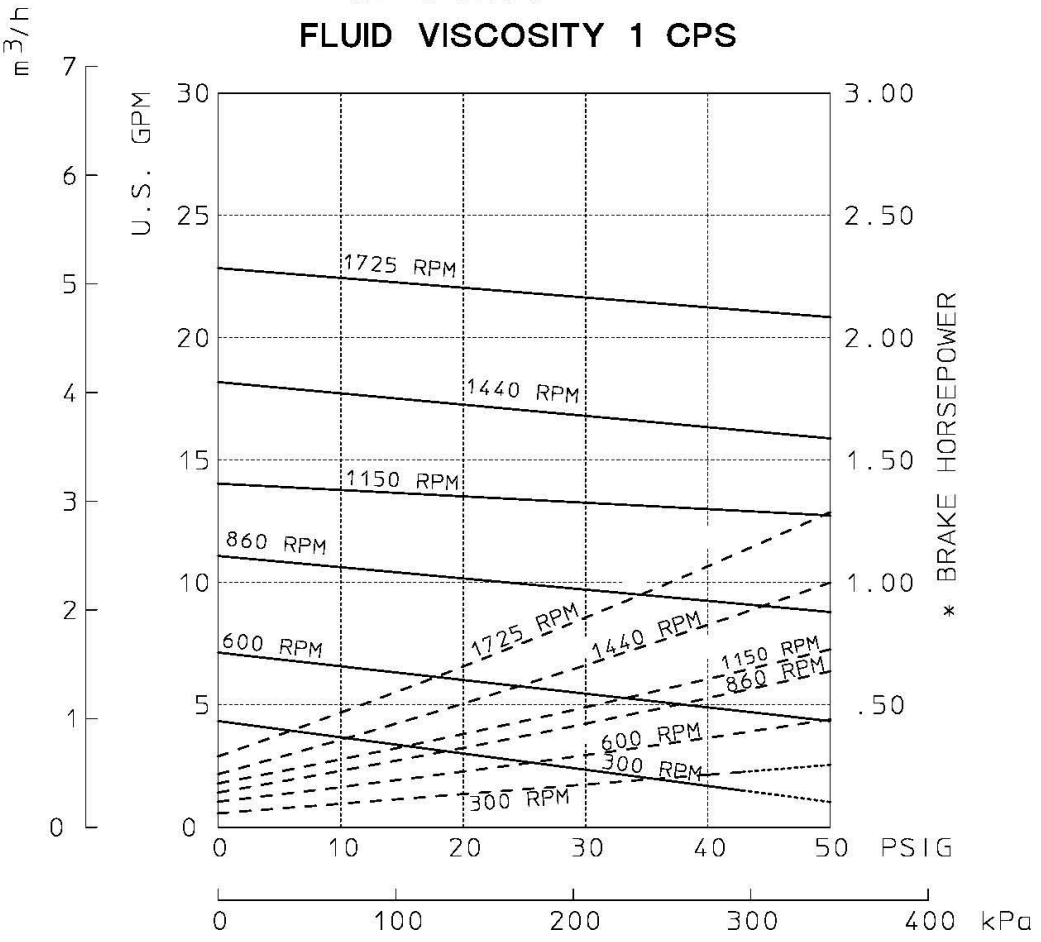
*COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B / M

# DENOTES RECOMMENDED SPARE PART

DWG: GMH6P203


DOUBLE CONTAINMENT CAN COMPONENTS
32 DOUBLE DRIVE MAGNET ASSEMBLY
27 DOUBLE CONTAINMENT CAN ASSEMBLY
66 NIPPLE
25 O RING CONTAINMENT CAN
36 ADAPTOR
41 BOLT MOTOR
35 SET SCREW
30 HOLDER
34 DRIVE MAGNET PIN
31 DRIVE MAGNET
29 CAP SCREW
28 CONTAINMENT CAN RING
26 CONTAINMENT CAN
25 O-RING
24 DRIVEN MAGNET
10 RETAINING RING
33 HOLDER SCREW
62 PIPE PLUG
19 NUT
1 FRONT HOUSING
CAPLUGS
13 IDLER BEARING
14 BEARING LOCK PIN
12 DRIVE BEARING
21 MAGNETIC CPLG KEY
8 IDLER KEY
9 DRIVE KEY
11 RETAINING RINGS
62 PIPE PLUG (OPTIONAL)
16 HOUSING O-RINGS
15 WEAR PLATES
14 BEARING LOCK PIN
18 HOUSING BOLT
HOUSING PIN 17
BOLT 22
PIPE PLUG 62
RECIRCULATION BUSHING 23
WEAR PLATES 15
IDLER SHAFT 5
DRIVE SHAFT 4
RETAINING RINGS 10
IDLER GEAR 7
DRIVE GEAR 6
CENTER HOUSING 2
HOUSING PIN 17
IDLER BEARING 13
DRIVE BEARING 12
RECIRCULATION BUSHING 23
REAR HOUSING 3
PIPE PLUGS (OPTIONAL) 62
ALL DIMENSIONS ARE IN INCHES
Isochem
PULSAFEEDER A Unit of IDEX Corporation
MODEL GMH6/8 ISOCHEM PUMP EXPLODED VIEW
SECTION/PAGE MODEL GMH6 / 400
EFFECTIVE 04/01/98
SUPERSEDES 04/04/94
DWN BY CLA
DATE 04/04/94
SD-2776
A ADDED GMH6 PUMP 10/08/97
REF REVISION UPDATE DATE

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

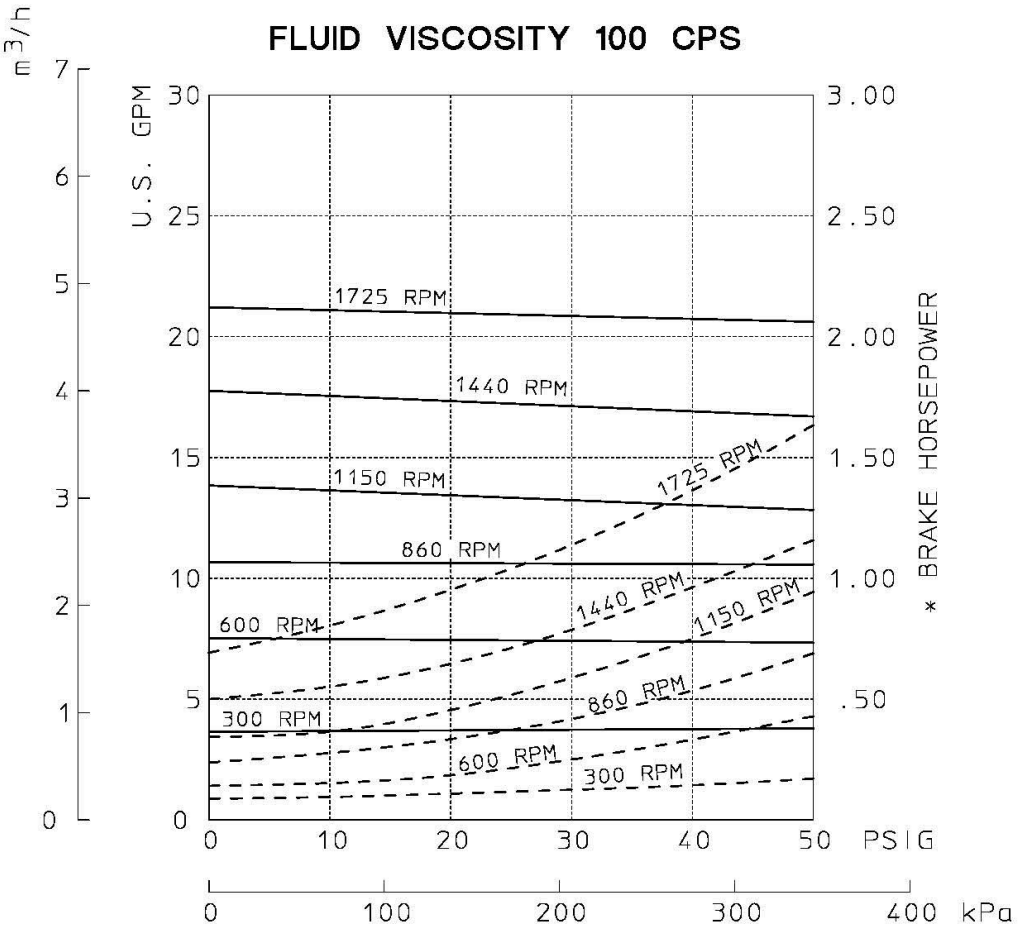



* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

| | | | | | |
|---|---|---|---|---|---|
| | | | SECTION/PAGE | GMC8 / 10 | Isochem / PULSAFEEDER (A Unit of IDEX Corporation) |
| | | | EFFECTIVE | 07/11/13 | PERFORMANCE CURVE GMC8 |
| A | REMOVED GM8 FROM DESCRIPTION | 07/11/13 | | | |
| REF | REVISION UPDATE | DATE | SUPERSEDES | 12/01/97 | DWN BY: PTP / DATE: 02/11/98 — AE00050-001 |

## GMC8 ISOCHEM PUMP
## 1.0" PORTS

### FLUID VISCOSITY 100 CPS




* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

Isochem | PULSAFEEDER — A Unit of IDEX Corporation

PERFORMANCE CURVE
GMC8

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | SECTION/PAGE | GMC8 / 12 | | |
| A | REVISION UPDATE | 07/11/13 | EFFECTIVE | 07/11/13 | DWN BY: PTP | AE00050-002 |
| REF | REVISION UPDATE | DATE | SUPERSEDES | 12/01/97 | DATE: 02/11/98 | |

ITEM CLASS GMC8 = IP
PRODUCT LINE = H / ISOCHEM

# ISOCHEM GMC8 SERIES PUMP
# CONSOLIDATED B / M



| | | | | 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 3** | **STANDARD PUMP - NON-VARIABLE COMPONENTS** | | | | | | | | | |
| | 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 | 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 | | *2 | 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 | | *2 | 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 | 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 |
| | | PLUG, 1/8" NPT | *1 | W772565-316 | 316 SS | 52301 | ALLOY C | 52300 | ALLOY 20 | 27 |
| | C 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 B | # 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 |
| | D | # BEARING, SLOTTED | 4 | 40428 | CARBON | 40428 | CARBON | 40428 | CARBON | 9 |
| | | # WEAR PLATE, SLOTTED | 4 | 40511 | CARBON | 40511 | CARBON | 40511 | CARBON | 11 |
| | E | # 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 |
| | S | DRVN MAG ASSY (WELDED) / (SAMAR) | 1 | 49616 | 316 SS | 49643 | ALLOY C | 49664 | ALLOY 20 | 18 |
| | | DRV MAG ASSY, 56C FR (SAMAR) | 1 | 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: GM8P204

# ISOCHEM GMC8 SERIES PUMP
# CONSOLIDATED B / M

**SECTION:** MODEL GMC8
**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 | 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

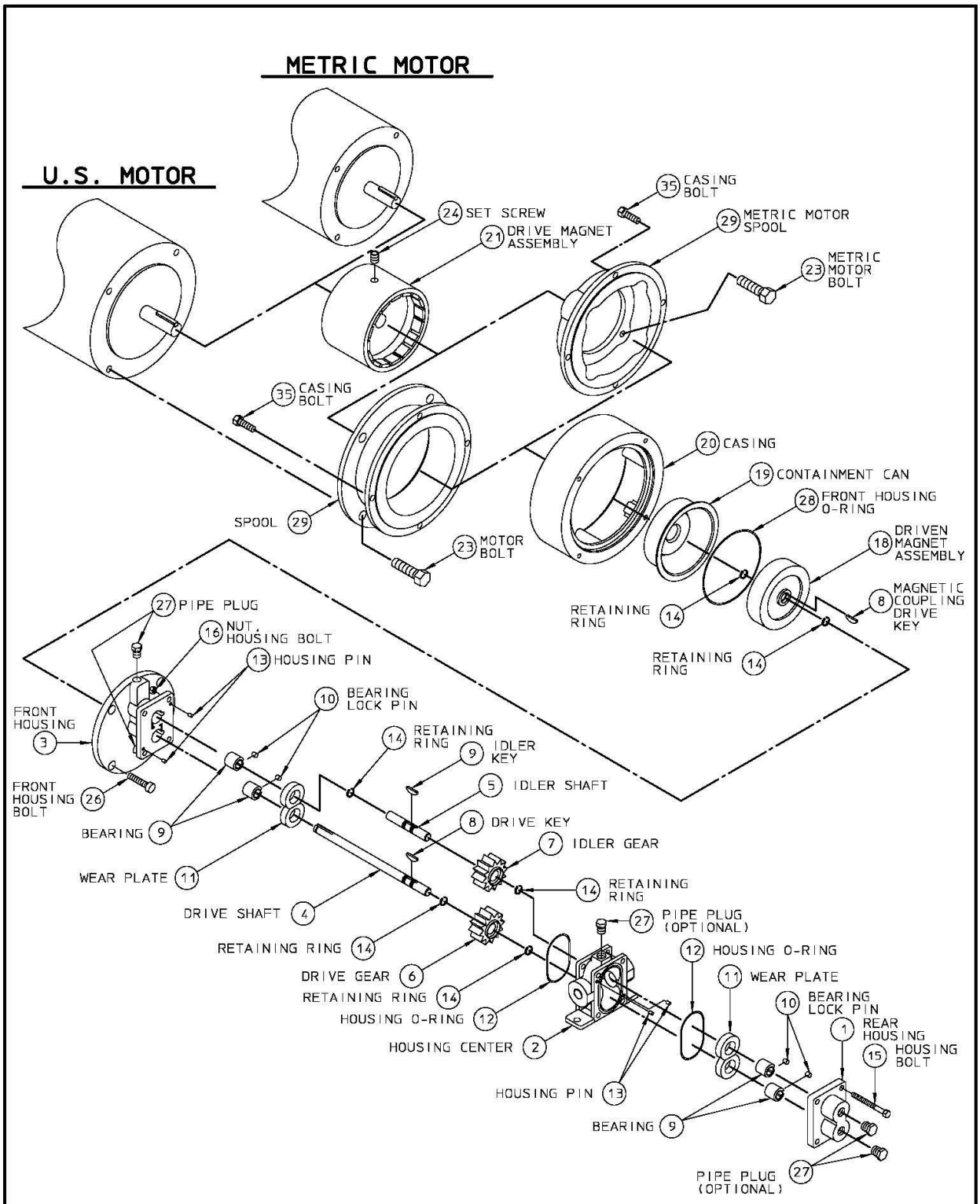


| | | | STANDARD PUMP MATERIAL | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | 316 SS (A, K, OR U) | | ALLOY C (C, M, OR V) | | ALLOY 20 (D, N, OR W) | | |
| | DESCRIPTION | QTY | PART NUMBER | MATERIAL | PART NUMBER | MATERIAL | PART NUMBER | MATERIAL | ITEM |
| **POSITION 8** | **MAGNETIC COUPLING COMPONENTS** | | | | | | | | |
| 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 |
| **56C FRAME COMPONENTS** | | | | | | | | | |
| 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 |
| **140TC FRAME COMPONENTS** | | | | | | | | | |
| 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 |
| **182/4 TC FRAME COMPONENTS** | | | | | | | | | |
| 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-STL | STEEL | NP999006-STL | STEEL | NP999006-STL | STEEL | -- |
| **80 METRIC FRAME COMPONENTS** | | | | | | | | | |
| 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 |
| **90 METRIC FRAME COMPONENTS** | | | | | | | | | |
| 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 | STEEL | 16722 | STEEL | 16722 | STEEL | 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

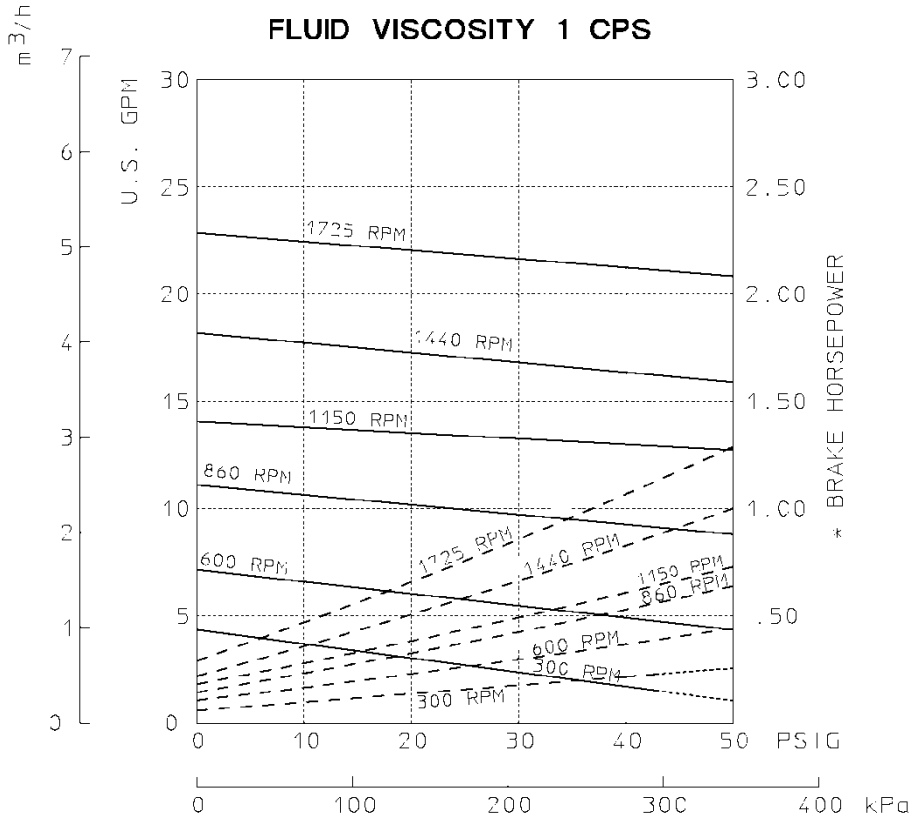
DWG: GM8P206




| | | | | | |
|---|---|---|---|---|---|
| | | | SECTION/PAGE | MODEL GMC6 / 400 | MODEL GMC6/8 ISOCHEM PUMP EXPLODED VIEW |
| C | REMOVED GM6/8 FROM DESCRIPTION | 07/11/13 | EFFECTIVE | 07/11/13 | DWN BY: CLA |
| REF | REVISION UPDATE | DATE | SUPERSEDES | 10/06/06 | DATE: 09/22/97 SD-2868 |

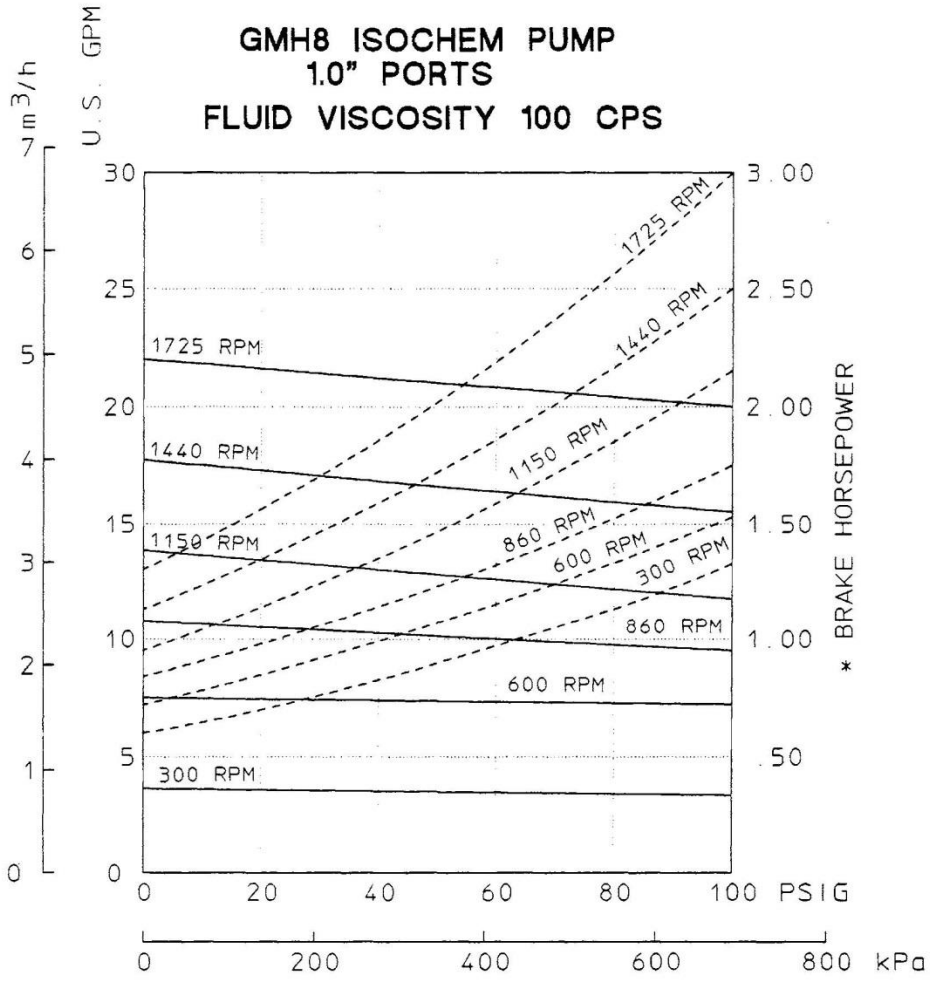
Isochem PULSAFEEDER A Unit of IDEX Corporation

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




* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

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




* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

Isochem PULSAFEEDER A Unit of IDEX Corporation

PERFORMANCE CURVE
GMH8

| REF | REVISION UPDATE | DATE |
|---|---|---|
| A | | |

| | |
|---|---|
| SECTION/PAGE | GMH8 / 11 |
| EFFECTIVE | 12/01/97 |
| SUPERSEDES | 08/15/94 |

DWN BY PTP
DATE 02/11/98

AE00051-002

ITEM CLASS GMH8 = IH
PRODUCT LINE = H / ISOCHEM

# ISOCHEM 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 |
| **POSITION 3** | **STANDARD PUMP - NON-VARIBLE COMPONENTS** | | | | | | | | | |
| | 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 | B | # 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 |
| | | # BEARING, SLOTTED 3/4" | 0-4 | 40442 | CARBON | 40442 | CARBON | 40442 | CARBON | 12 |
| D | | # 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

# ISOCHEM GMH8 SERIES PUMP
# CONSOLIDATED B / M

SECTION: MODEL GMH8
PAGE: 201
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 | 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

| | | | 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 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

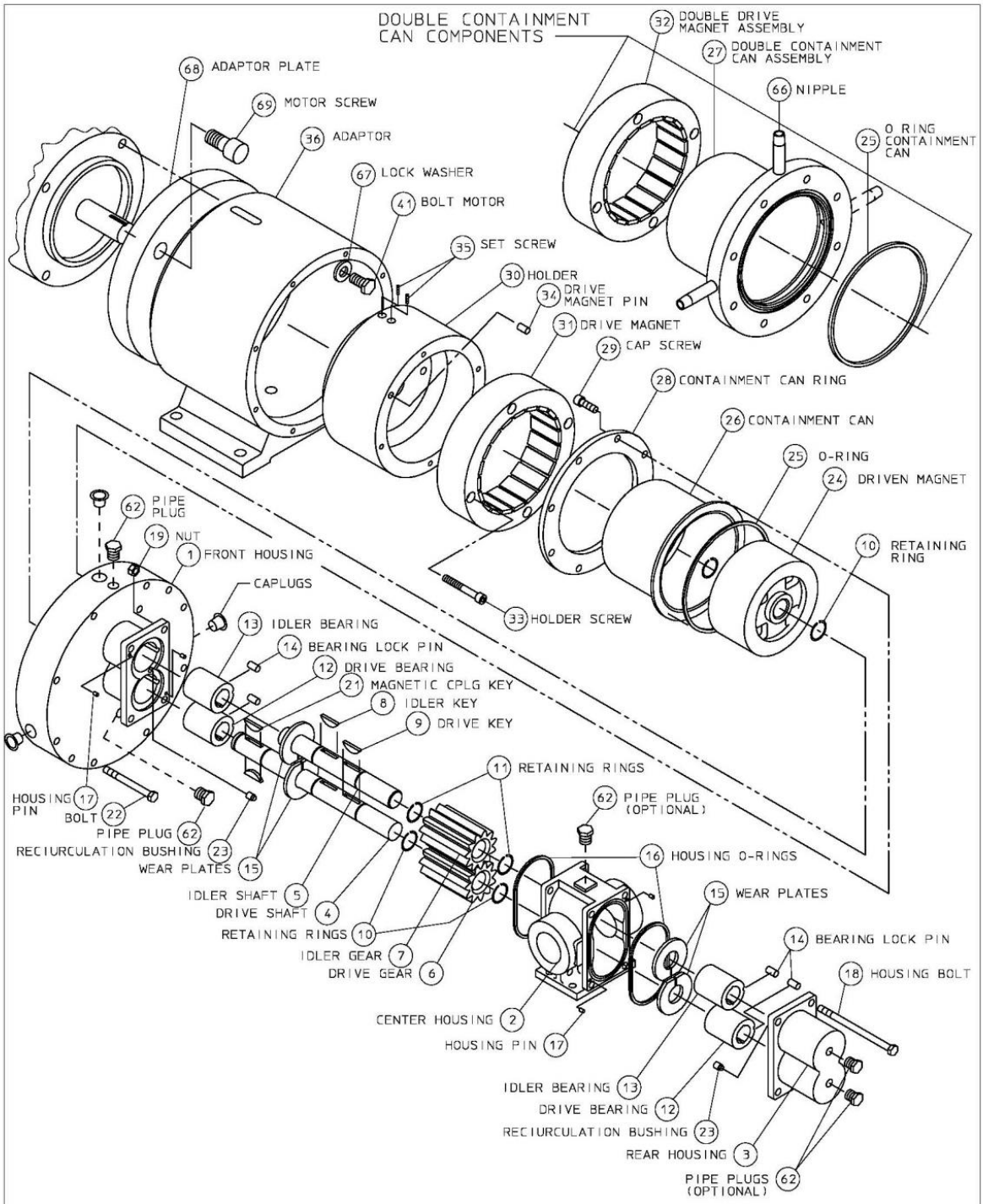
# ISOCHEM GMH8 SERIES PUMP
# CONSOLIDATED B / M

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

| | | | 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 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
# DENOTES RECOMMENDED SPARE PART

DWG: GMH8P203



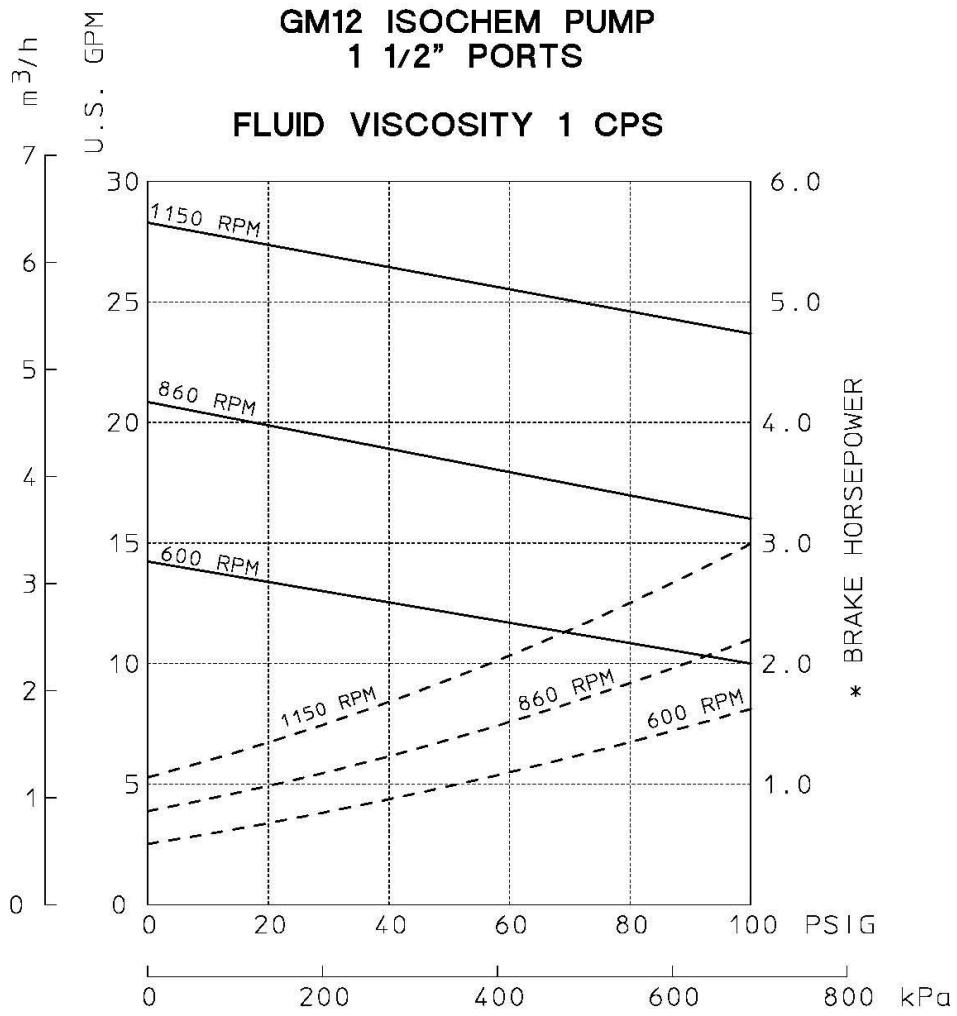

ALL DIMENSIONS ARE IN INCHES

Isochem | PULSAFEEDER A Unit of IDEX Corporation

MODEL GMH6/8
ISOCHEM PUMP
EXPLODED VIEW

| | | | | | |
|---|---|---|---|---|---|
| | | | SECTION/PAGE | MODEL GMH8 / 400 | |
| B | ADDED ITEM 67.68 & 69 | 10/10/00 | EFFECTIVE | 10/10/00 | DWN BY: CLA |
| REF | REVISION UPDATE | DATE | SUPERSEDES | 04/01/98 | DATE: 04/04/94 |

SD-2776




* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

| REV | | |
|---|---|---|
| B | UPDATED DRAWING | 09/22/09 |
| | REVISION UPDATE | DATE |

| | |
|---|---|
| SECTION/PAGE | GM12 / 10 |
| EFFECTIVE | 09/22/09 |
| SUPERSEDES | 12/01/97 |

Isochem PULSAFEEDER A Unit of IDEX Corporation

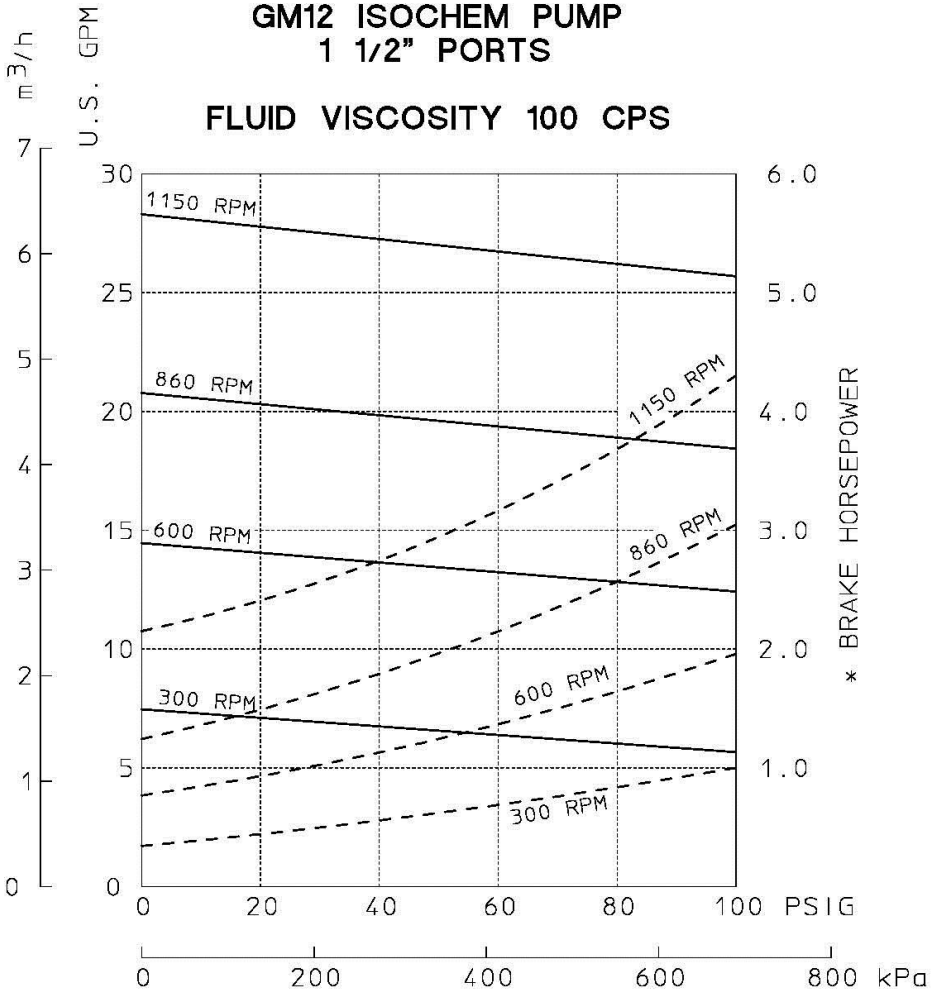
PERFORMANCE CURVE
GM12

DWN BY: PTP
DATE: 02/11/98

AE00052-001

# GM12 ISOCHEM PUMP
# 1 1/2" PORTS

## FLUID VISCOSITY 100 CPS




* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

Isochem | PULSAFEEDER — A Unit of IDEX Corporation

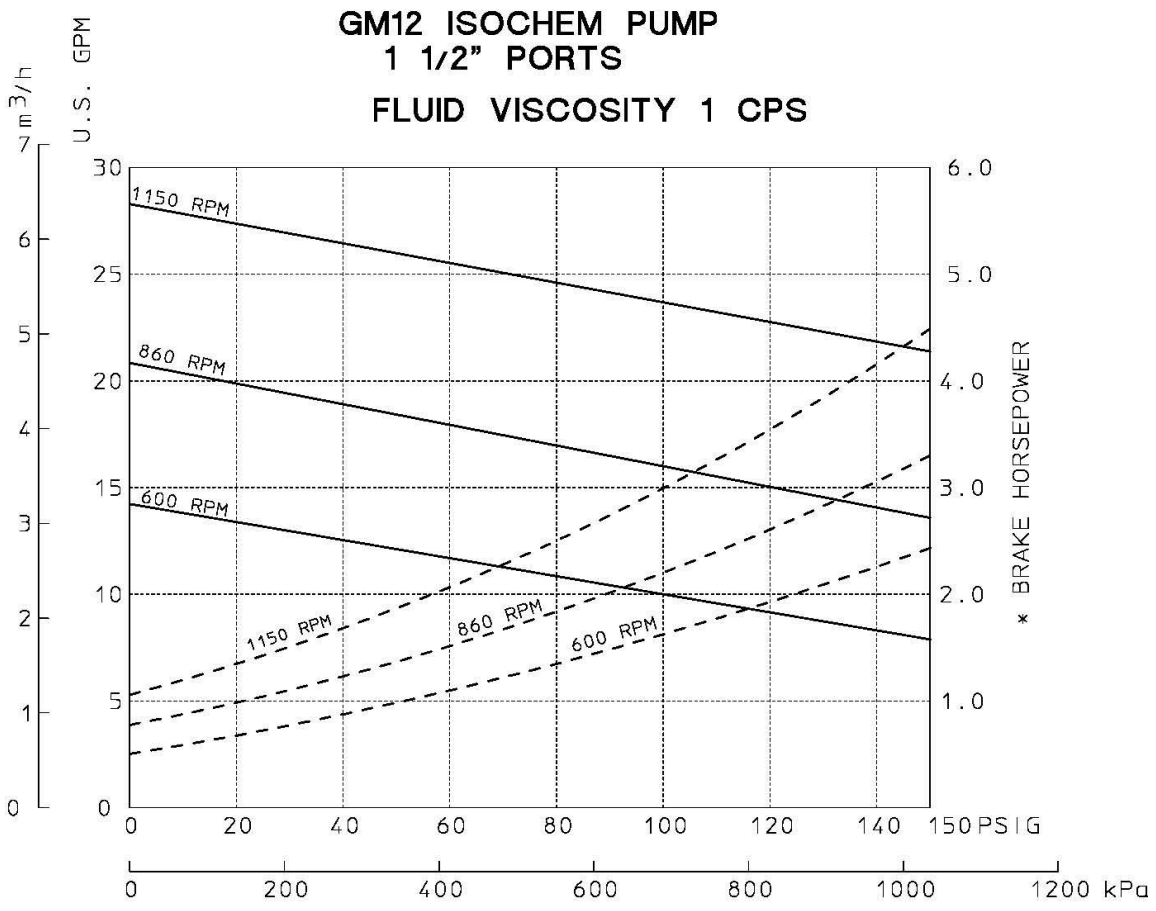
PERFORMANCE CURVE
GM12

| REV | REVISION UPDATE | DATE |
|---|---|---|
| A | UPDATE DRAWING | 09/22/09 |

| | |
|---|---|
| SECTION/PAGE | GM12 / 11 |
| EFFECTIVE | 09/22/09 |
| SUPERSEDES | 05/20/08 |

DWN BY: PTP
DATE: 02/11/98

AE00052-002

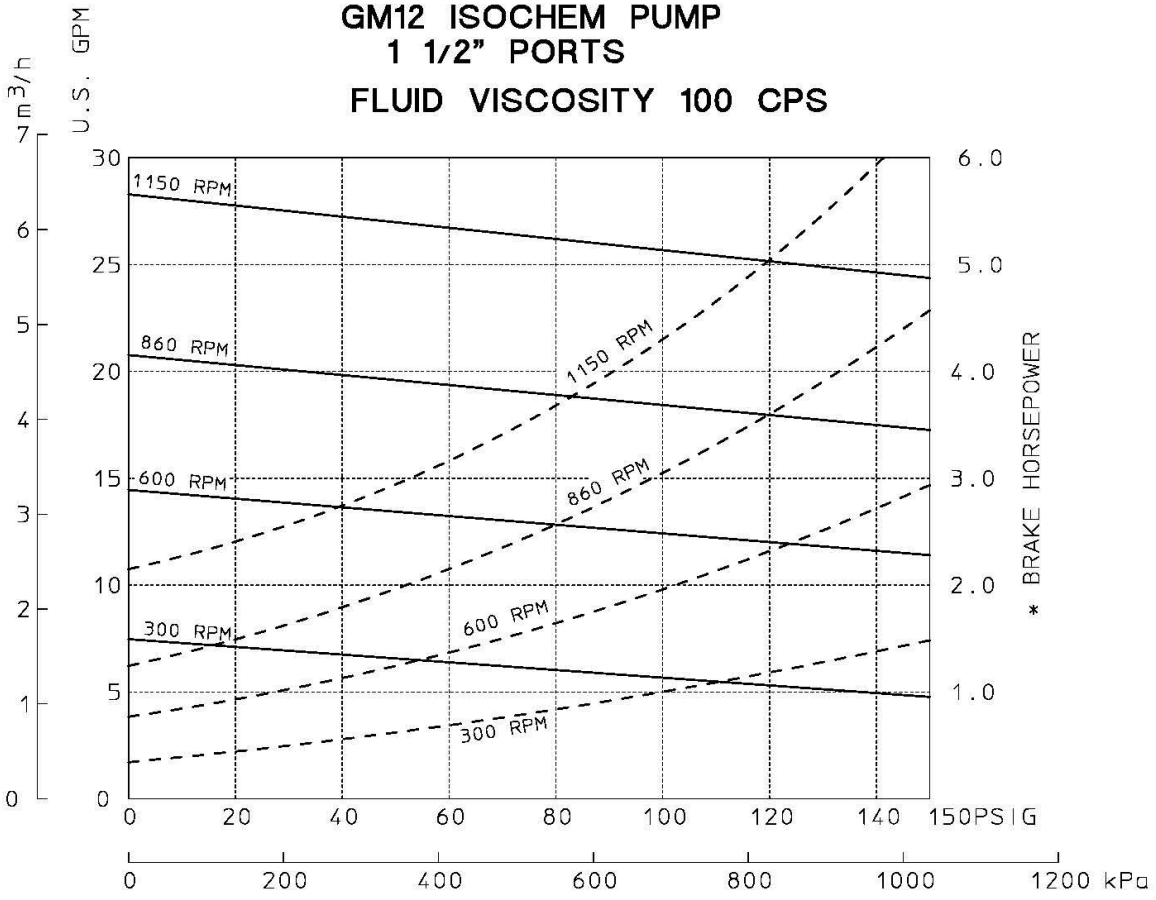



NOTES: 1. TFE GEARS LIMITED TO 100 PSIG

* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

| | | | | | |
|---|---|---|---|---|---|
| | | | SECTION/PAGE | GM12 / 12 | Isochem / PULSAFEEDER (A Unit of IDEX Corporation) |
| | | | EFFECTIVE | 07/15/13 | PERFORMANCE CURVE GM12 EXTENDED PRESSURE |
| A | REMOVED GMC12 FROM DESCRIPTION | 07/15/13 | | | |
| REF | REVISION UPDATE | DATE | SUPERSEDES | 12/01/97 | DWN BY: PTP / DATE: 02/11/98 / AE00052-003 |

# GM12 ISOCHEM PUMP
## 1 1/2" PORTS
## FLUID VISCOSITY 100 CPS




NOTES: 1. TFE GEARS LIMITED TO 100 PSIG

* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

| | | | | | |
|---|---|---|---|---|---|
| | | | SECTION/PAGE | GM12 / 13 | Isochem / PULSAFEEDER (A Unit of IDEX Corporation) |
| A | REMOVED GMC12 FROM DESCRIPTION | 07/15/13 | EFFECTIVE | 07/15/13 | PERFORMANCE CURVE GM12 EXTENDED PRESSURE |
| REF | REVISION UPDATE | DATE | SUPERSEDES | 12/01/97 | DWN BY: PTP / DATE: 02/11/98 — AE00052-004 |

ITEM CLASS GM12 = IZ
PRODUCT LINE = H / ISOCHEM

# ISOCHEM GM12 SERIES PUMP
# CONSOLIDATED B / M



**STRUCTURED WITH NO DASHES**
**EXAMPLE: GM12XXXXXX**

| DESCRIPTION | | QTY | STANDARD PUMP MATERIAL: 316 SS (A, K, OR U) PART NUMBER | 316 SS MATERIAL | ALLOY C (C, M, OR V) PART NUMBER | ALLOY C MATERIAL | ALLOY 20 (D, N, OR W) PART NUMBER | ALLOY 20 MATERIAL | ITEM |
|---|---|---|---|---|---|---|---|---|---|
| **POSITION 3** | **STANDARD PUMP - NON-VARIABLE COMPONENTS** | | | | | | | | |
| 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, RECIRCLATION | (.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

# ISOCHEM GM12 SERIES PUMP
# CONSOLIDATED B / M



| | | | | 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" | 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) | | | 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) | | | 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) | | | 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) | | | 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) | | | 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

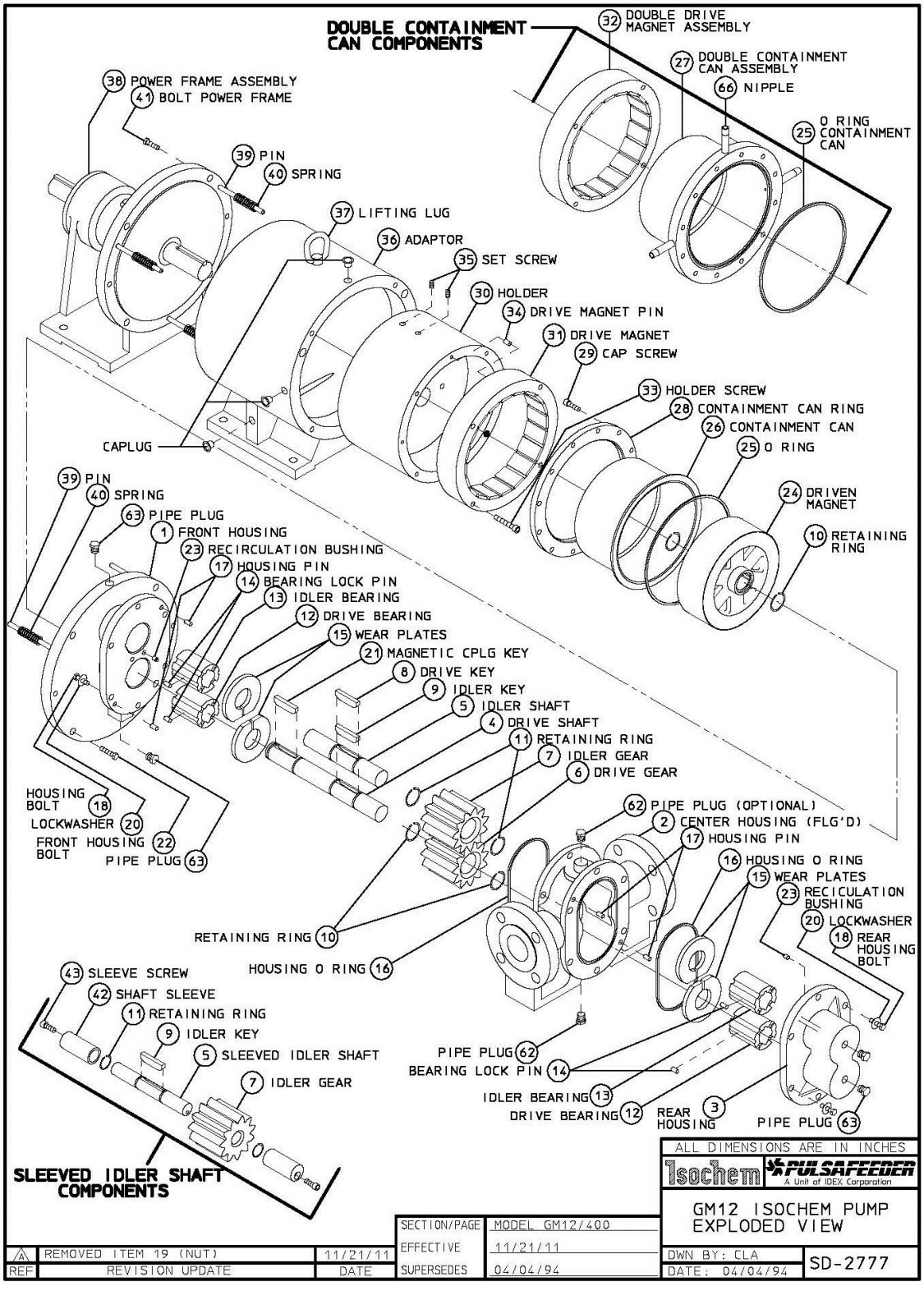


| | | | STANDARD PUMP MATERIAL | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | 316 SS (A, K, OR U) | | ALLOY C (C, M, OR V) | | ALLOY 20 (D, N, OR W) | | |
| | DESCRIPTION | QTY | PART NUMBER | MATERIAL | PART NUMBER | MATERIAL | PART NUMBER | MATERIAL | ITEM |
| **POSITION 8** | **MAGNETIC COUPLING COMPONENTS** | | | | | | | | |
| 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** | | | | | | | | | |
| **SINGLE CONTAINMENT CAN COMPONENTS** | | | | | | | | | |
| R | POWERFRAME µ1.125 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 µ1.125 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** | | | | | | | | | |
| **SINGLE CONTAINMENT CAN COMPONENTS** | | | | | | | | | |
| U | POWERFRAME µ28 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 µ28 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


DOUBLE CONTAINMENT CAN COMPONENTS
32 DOUBLE DRIVE MAGNET ASSEMBLY
27 DOUBLE CONTAINMENT CAN ASSEMBLY
66 NIPPLE
25 O RING CONTAINMENT CAN
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
CAPLUG
24 DRIVEN MAGNET
10 RETAINING RING
63 PIPE PLUG
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
HOUSING BOLT 18
LOCKWASHER 20
FRONT HOUSING BOLT 22
PIPE PLUG 63
62 PIPE PLUG (OPTIONAL)
2 CENTER HOUSING (FLG'D)
17 HOUSING PIN
16 HOUSING O RING
15 WEAR PLATES
23 RECICULATION BUSHING
20 LOCKWASHER
18 REAR HOUSING BOLT
RETAINING RING 10
HOUSING O RING 16
43 SLEEVE SCREW
42 SHAFT SLEEVE
11 RETAINING RING
9 IDLER KEY
5 SLEEVED IDLER SHAFT
7 IDLER GEAR
SLEEVED IDLER SHAFT COMPONENTS
PIPE PLUG 62
BEARING LOCK PIN 14
IDLER BEARING 13
DRIVE BEARING 12
REAR HOUSING 3
PIPE PLUG 63
ALL DIMENSIONS ARE IN INCHES
Isochem
PULSAFEEDER A Unit of IDEX Corporation
GM12 ISOCHEM PUMP EXPLODED VIEW
SECTION/PAGE MODEL GM12/400
EFFECTIVE 11/21/11
SUPERSEDES 04/04/94
DWN BY: CLA
DATE: 04/04/94
SD-2777
A REMOVED ITEM 19 (NUT) 11/21/11
REF REVISION UPDATE DATE

ITEM CLASS GM16 = IU
PRODUCT LINE = H / ISOCHEM

# ISOCHEM GM16 SERIES PUMP
# CONSOLIDATED B / M



**STRUCTURED WITH NO DASHES**
**EXAMPLE: GM16XXXXXX**

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

DWG: GM16P200

# DENOTES RECOMMENDED SPARE PART

# ISOCHEM GM16 SERIES PUMP
# CONSOLIDATED B / M

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

| | | | | STANDARD PUMP MATERIAL | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 316 SS (U) | | ALLOY C (V) | | ALLOY 20 (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" | 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 |
| | # 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 | 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 |
| 4 | # 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

DWG: GM16P201

# DENOTES RECOMMENDED SPARE PART

# ISOCHEM GM16 SERIES PUMP
# CONSOLIDATED B / M



| | | | STANDARD PUMP MATERIAL | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | 316 SS (U) | | ALLOY C (V) | | ALLOY 20 (W) | | |
| | DESCRIPTION | QTY | PART NUMBER | MATERIAL | PART NUMBER | MATERIAL | PART NUMBER | MATERIAL | ITEM |
| **POSITION 8** | **MAGNETIC COUPLING COMPONENTS** | | | | | | | | |
| 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 µ1.125 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 µ1.125 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 µ28 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 µ24 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 |

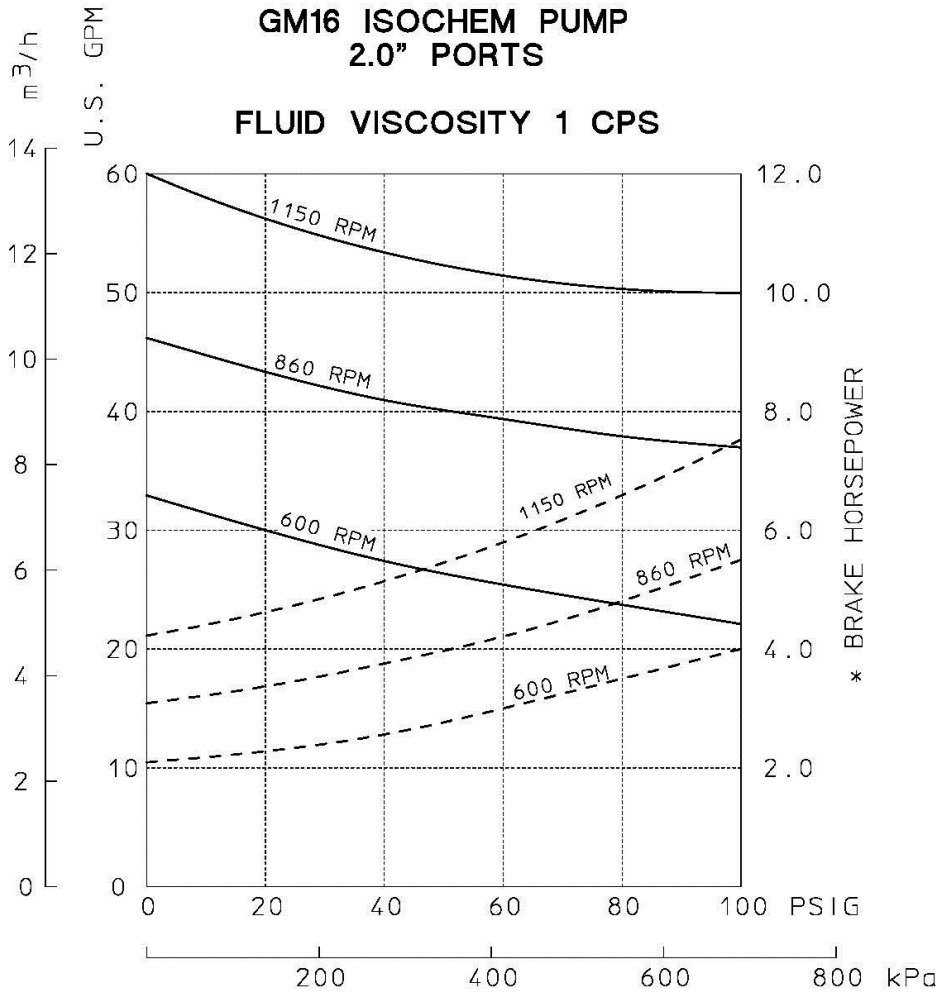
*COMPONENT QUANTITY MAY BE CUMULATIVE OVER ENTIRE B / M

# DENOTES RECOMMENDED SPARE PART

DWG: GM16P202

## GM16 ISOCHEM PUMP
## 2.0" PORTS

### FLUID VISCOSITY 1 CPS

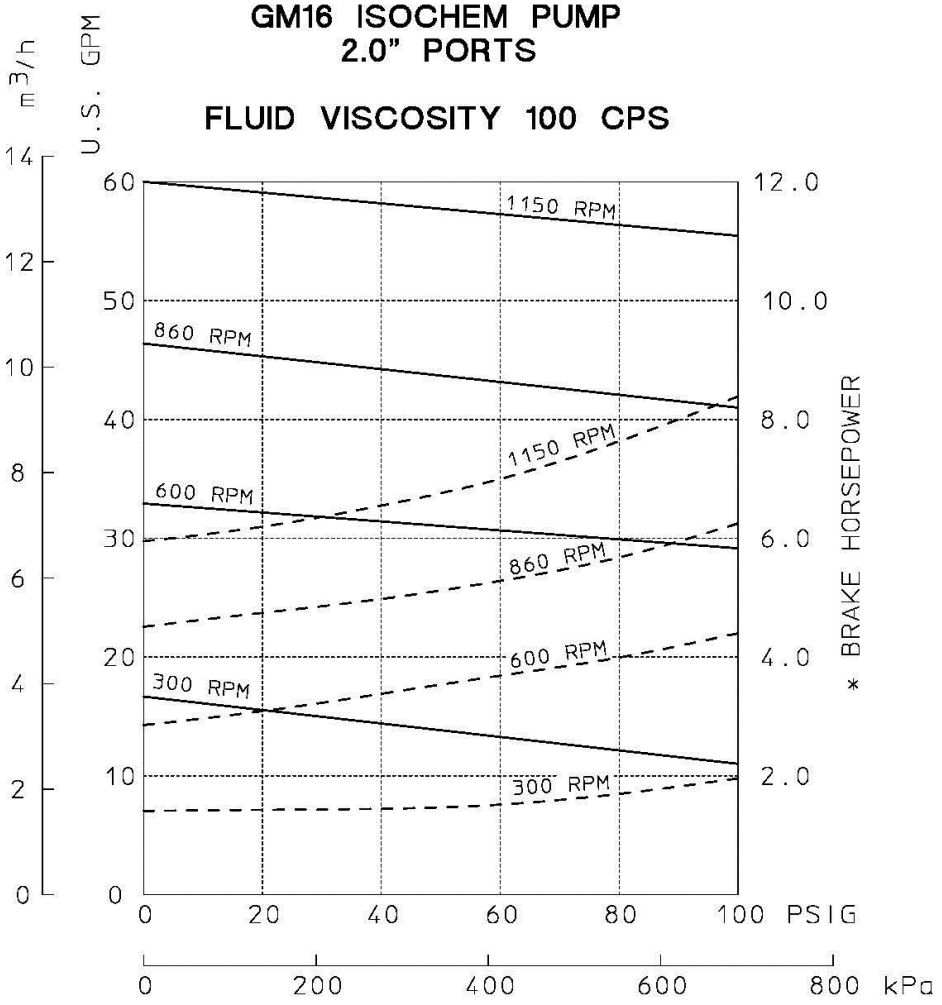



* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

| | | | | | |
|---|---|---|---|---|---|
| | | | SECTION/PAGE | GM16 / 10 | Isochem / PULSAFEEDER (A Unit of IDEX Corporation) |
| | | | EFFECTIVE | 09/22/09 | PERFORMANCE CURVE GM16 |
| A | UPDATE DRAWING | 09/22/09 | | | |
| REV | REVISION UPDATE | DATE | SUPERSEDES | 06/12/08 | DWN BY: PTP / DATE: 02/11/98 — AE00053-001 |

# GM16 ISOCHEM PUMP
## 2.0" PORTS

## FLUID VISCOSITY 100 CPS




* BRAKE HORSEPOWER SHOWN AS DASHED CURVES

| REV | REVISION UPDATE | DATE |
|---|---|---|
| A | UPDATE DRAWING | 09/22/09 |

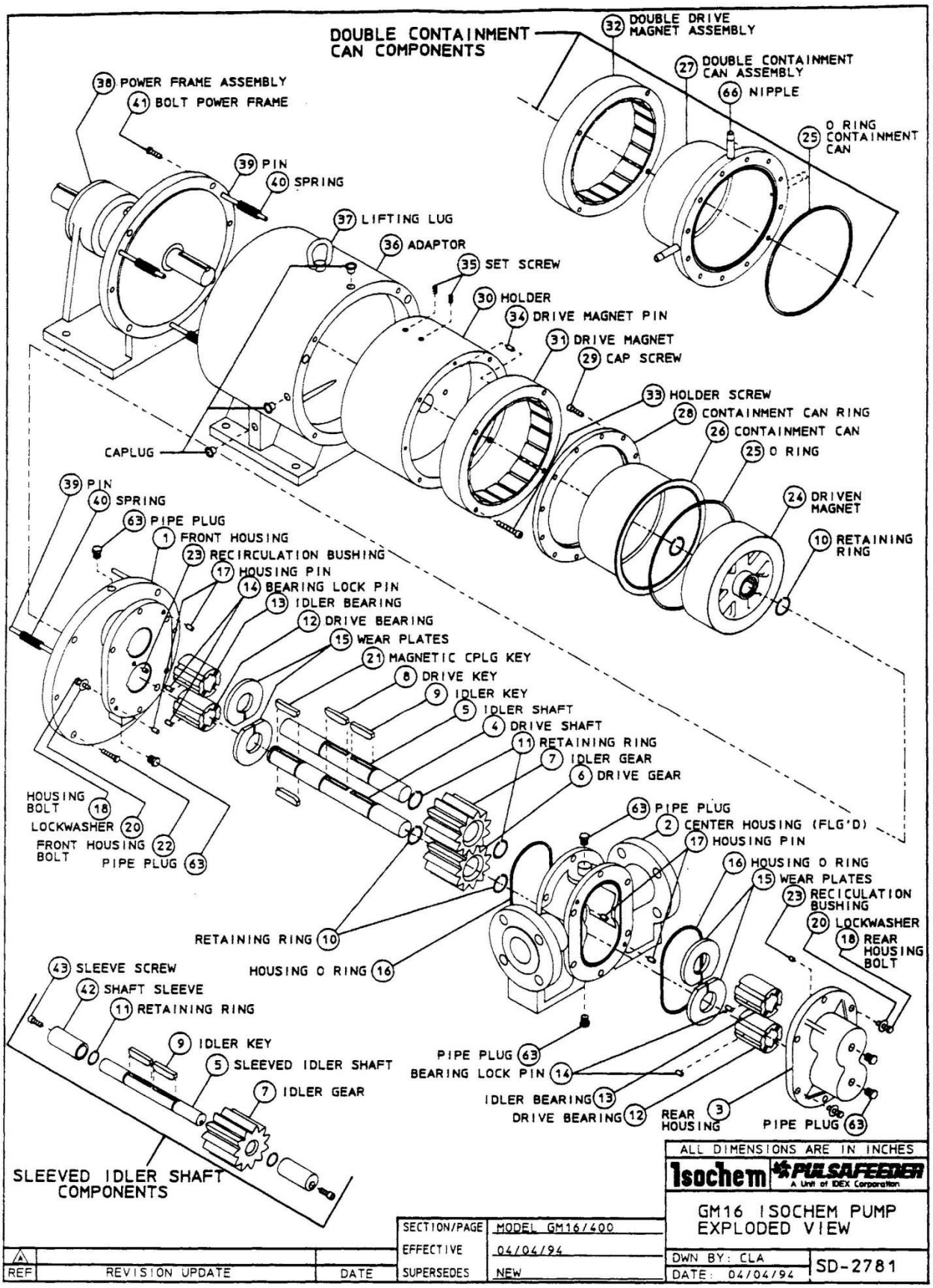
| | |
|---|---|
| SECTION/PAGE | GM16 / 11 |
| EFFECTIVE | 09/22/09 |
| SUPERSEDES | 06/12/08 |

Isochem | PULSAFEEDER — A Unit of IDEX Corporation

PERFORMANCE CURVE
GM16

DWN BY: PTP
DATE: 02/11/98

AE00053-002


DOUBLE CONTAINMENT CAN COMPONENTS
32 DOUBLE DRIVE MAGNET ASSEMBLY
27 DOUBLE CONTAINMENT CAN ASSEMBLY
66 NIPPLE
25 O RING CONTAINMENT CAN
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
CAPLUG
39 PIN
40 SPRING
63 PIPE PLUG
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
HOUSING BOLT 18
LOCKWASHER 20
FRONT HOUSING BOLT 22
PIPE PLUG 63
63 PIPE PLUG
2 CENTER HOUSING (FLG'D)
17 HOUSING PIN
16 HOUSING O RING
15 WEAR PLATES
23 RECICULATION BUSHING
20 LOCKWASHER
18 REAR HOUSING BOLT
RETAINING RING 10
HOUSING O RING 16
43 SLEEVE SCREW
42 SHAFT SLEEVE
11 RETAINING RING
9 IDLER KEY
5 SLEEVED IDLER SHAFT
7 IDLER GEAR
SLEEVED IDLER SHAFT COMPONENTS
PIPE PLUG 63
BEARING LOCK PIN 14
IDLER BEARING 13
DRIVE BEARING 12
REAR HOUSING 3
PIPE PLUG 63
ALL DIMENSIONS ARE IN INCHES
Isochem
PULSAFEEDER
A Unit of IDEX Corporation
GM16 ISOCHEM 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
A

ISOCHEM 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 -000 | DRIVE SHAFT | 1 | Y0701600-000 | STEEL | 2 |
| | BEARING, SINGLE ROW | * 2 | Y0800800-000 | STEEL | 9 |
| .875 DIA. OUTPUT SHAFT FOR UP TO 5 H.P. INPUT | | | | | |
| SUFFIX -001 | DRIVE SHAFT | 1 | Y0701800-000 | STEEL | 2 |
| | BEARING, SINGLE ROW | * 2 | Y0800800-000 | STEEL | 9 |
| .875 DIA. OUTPUT SHAFT FOR UP TO 10 H.P. INPUT | | | | | |
| SUFFIX -002 | DRIVE SHAFT | 1 | Y0701500-000 | STEEL | 2 |
| | 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 -003 | DRIVE SHAFT | 1 | Y0701700-000 | STEEL | 2 |
| | BEARING, DOUBLE ROW | * 2 | Y0800700-000 | STEEL | 10 |

* DENOTES RECOMMENDED SPARE PARTS

**GENERAL MAINTENANCE:**

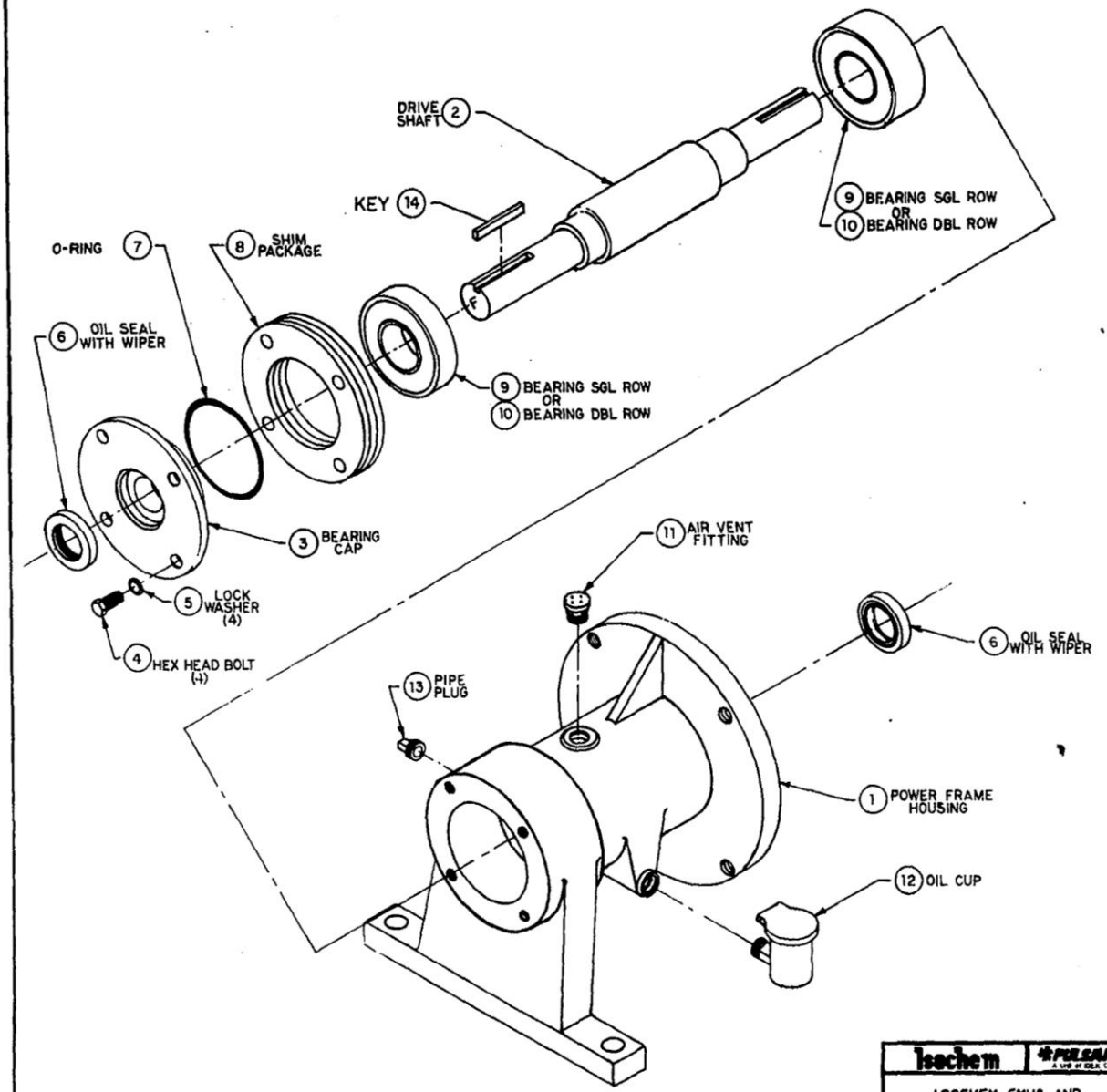
1. FILL POWER FRAME OIL CUP (ITEM #12) TO THE "OIL LEVEL" LINE, ABOUT 1/2 INCH FROM THE TOP OF THE CUP. USE STANDARD MOTOR OIL SAE 10W-40, 10W-30 OR 5W-30.
2. DRAIN AND CHANGE OIL AFTER EVERY 1000 HRS. OF OPERATION. SOONER IF WATER OR OTHER CONTAMINATION OCCURS.

**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.




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

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

Isochem — PULSAFEEDER

ISOCHEM GMH8 AND CENTRIFUGAL PUMP POWER FRAME ASSEMBLY EXPLODED VIEW

DWN BY DJF

DATE: 08/13/88

Y1028

**GENERAL MAINTENANCE:**

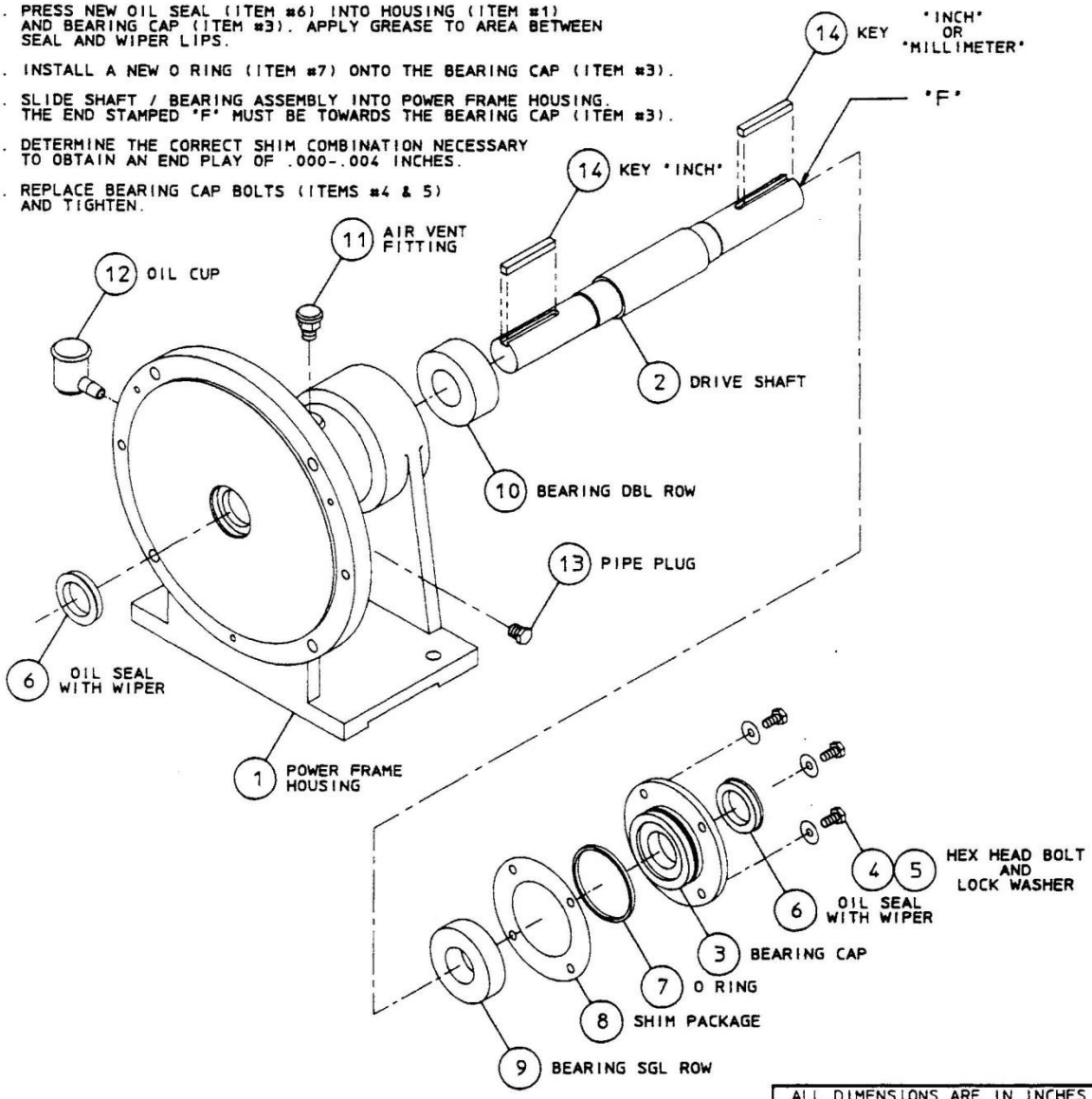
1. FILL POWER FRAME OIL CUP (ITEM #12) TO THE "OIL LEVEL" LINE. ABOUT 1/2" INCH FROM THE TOP OF THE CUP. USE STANDARD MOTOR OIL SAE 10W-40, 10W-30 OR 5W-30.
2. DRAIN AND CHANGE OIL AFTER EVERY 2000 HOURS OF OPERATION. SOONER IF WATER OR OTHER CONTAMINATION OCCURS.

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

| REF | REVISION UPDATE | DATE |
|---|---|---|
| A | | |

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|---|---|
| SECTION/PAGE | DRIVES/190 |
| EFFECTIVE | 04/04/94 |
| SUPERSEDES | NEW |

DWN BY: CLA
DATE: 04/04/94

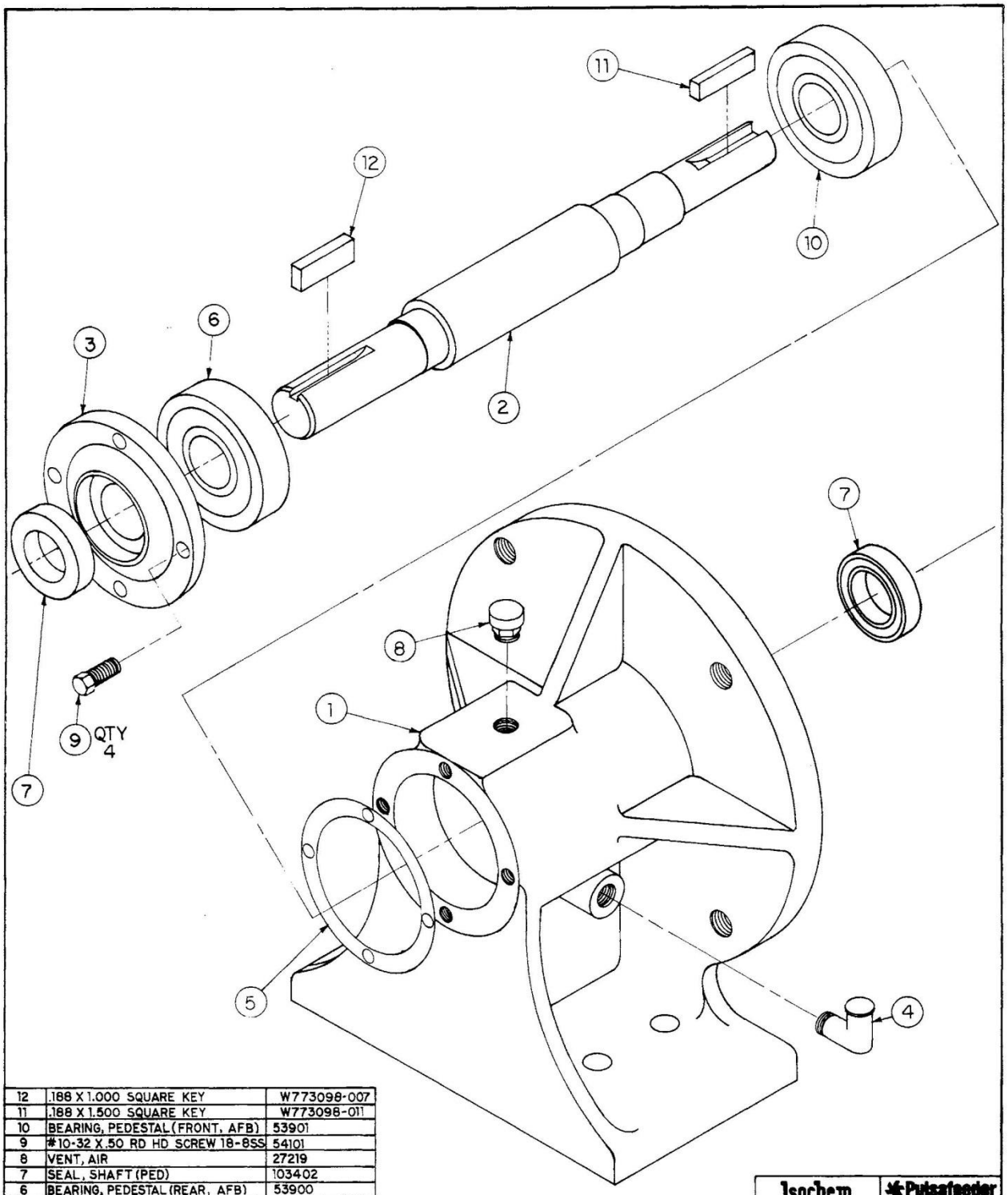
SD-2796

ISOCHEM 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 ø1.125 INPUT | 1 | 99646 | STL | 2 |
| SHAFT, POWER FRAME ø28 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.




| ITEM | DESCRIPTION | PART NUMBER |
|---|---|---|
| 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 |

SECTION / PAGE DRIVES / 280
EFFECTIVE 04/01/98
SUPERSEDES 08/01/91

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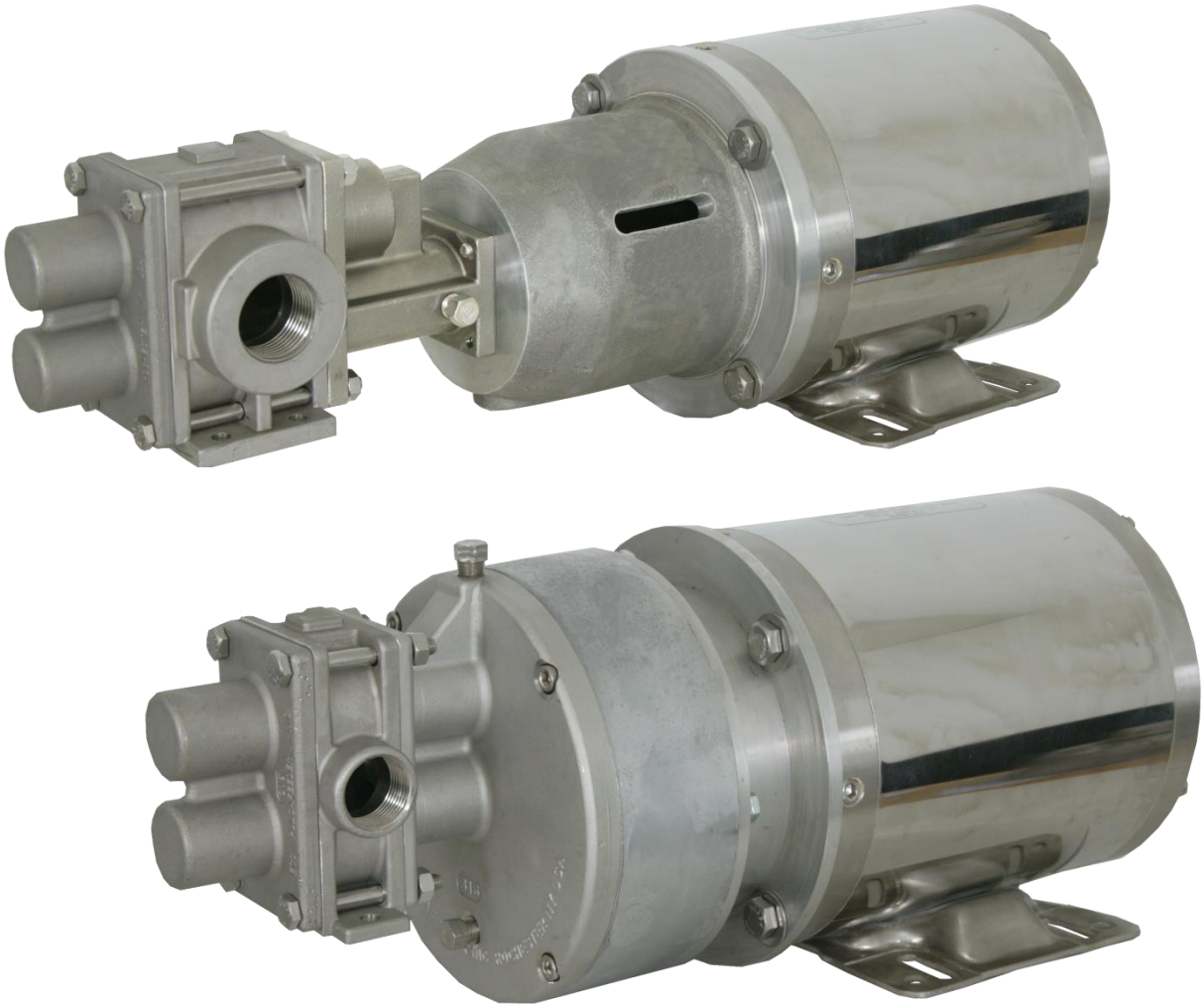
ISOCHEM GEAR PUMP
PEDESTAL ASSEMBLY
EXPLODED VIEW

DWN BY: D HYMAN
DATE: 1-30-87
DATE REV: 5/31/89

SD2582



# Isochem®

## GEARCHEM PUMPS

**Bulletin No. IOM-ISO-4000-Rev B**

PULSAFEEDER®
ENGINEERED PRODUCTS

Pulsafeeder, Inc.
A unit of IDEX Corporation
2883 Brighton Hnrietta Town Line Road
Rochester NY 14623
+1 (585) 292-8000
**www.pulsa.com**
pulsa@idexcorp.com

IDEX FLUID & METERING