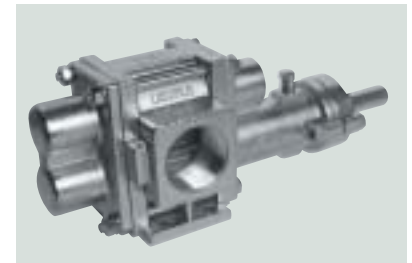


All pump components shown are available in a wide selection of materials to handle difficult chemical pumping applications.

- Bearings** Optional Silicon Carbide Bearings and hardened Shafts provide extended service life.
- Wear Plates** Allow pump to be rebuilt to like-new condition.
- Gears** Material selection includes metal/non-metal self-lubricating combinations for thin fluids.
- Housings** Available in several materials for a wide range of corrosion resistance.
- Stuffing Box** **Universal Stuffing Box** will accept packing, single-mechanical seal, double-mechanical seal and external mechanical seal arrangements.
- Mechanical Seal** Type 9 Seal: available in a wide selection of materials for pumping virtually any chemicals.

Liquiflo's Rotogear 3-series and H-series gear pumps handle flows from 0.1 to 58 GPM and up to 225 PSI* of pressure. They were specifically designed to meet the needs of the chemical processing industry and will handle a wide range of difficult pumping applications.

* For higher pressure applications, please contact factory.



WHY USE GEAR PUMPS?

Gear Pumps are positive displacement pumps that are frequently used for metering and transferring viscous as well as thin fluids at higher differential pressures.

Gear pumps are an economical alternative to Diaphragm pumps for metering applications and do not pulse or require an air source to operate. They generally last longer in continuous duty applications than Diaphragm, Progressive Cavity or Peristaltic pumps that require frequent part replacements. However, the real value of a gear pump derives from the flexibility and availability of materials of construction and the sealing arrangements which facilitate optimizing the pump for the given service.

Liquiflo has extended the useful range of gear pumps into low-viscosity fluids by using a wide variety of non-metallic self-lubricating components.

Advantages and attributes over other types of pumps are:

- ◆ Low flow and high discharge pressure
- ◆ Virtually no pulsations
- ◆ Self-priming
- ◆ Lower NPSHR
- ◆ Fewer wearing parts
- ◆ Less auxiliary equipment required (pulsation dampeners, compressors, dryers, etc.)
- ◆ Flow accuracies as low as 0.5% are achievable
- ◆ Easy to repair



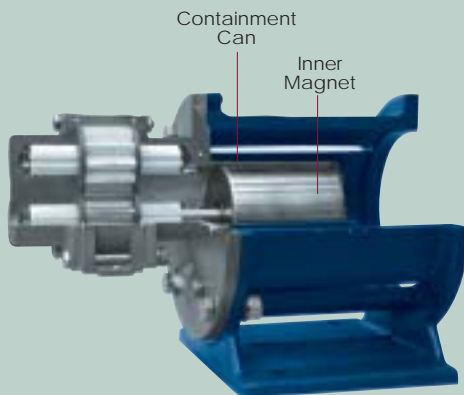
WHY USE MAG-DRIVE GEAR PUMPS?

Magnetically Coupled Pumps offer a simple and cost effective solution to sealing toxic, noxious, crystallizing or most other fluids that present problems for single seals and would therefore require use of a double mechanical seal. Magnetically-coupled pumps eliminate the need for cooling loops that are required by double mechanical seals. Two problems commonly associated with cooling loops are selecting a compatible barrier fluid and disposing of the barrier fluid in the event of an inboard seal failure.

Liquiflo has been producing magnetically coupled pumps for more than twenty years with tens of thousands of successful applications. Magnetically-coupled versions are available for all of Liquiflo's product lines including **2, 3, 4, & H-Series Gear Pumps**, and the **Centry® Series Centrifugal Pumps**.

Advantages of Mag-Drive Pumps:

- ◆ Less expensive than double-sealed arrangements
- ◆ Eliminates cooling loops required on double seal arrangements
- ◆ Eliminates the need to dispose of barrier fluids



- Containment Can** Available in 316 SS, Alloy-C or Tefzel-lined Alloy-C. Eliminates leakage associated with mechanical seals.
- Inner Magnets** Liquiflo's standard Inner Magnets are made from Samarium Cobalt which can be used at elevated temperatures.

MATERIALS AVAILABLE

Liquiflo's **Rotogear® 3-Series and H-Series Gear Pumps** come in a wide range of materials to meet all of your chemical processing applications.

HOUSINGS	GEARS	WEAR PLATES	BEARINGS	SHAFTS
316 SS	316 SS	Carbon	Carbon	316 SS
Alloy-C	Alloy-C	Ceramic	Teflon	Alloy-C
Titanium	Glass-filled PTFE	Teflon	Ryton	Titanium
	Delrin	Ryton	Silicon Carbide	Ceramic Coated
	Ryton	PEEK	PEEK	Tungsten Carbide Coated
	Carbon			

Liquiflo Gear Pumps handle a wide range of applications including the pumping of low-viscosity and high-viscosity fluids, as well as complex metering applications.

High-Viscosity Fluids

Water treatment polymers and food materials up to 80,000 cps are typical of the high-viscosity service of the Rotogear® Series of gear pumps. On high-viscosity applications, it is preferable and more efficient to use larger pumps running at slower speeds.

Low-Viscosity Fluids

Frequently, gear pumps are the preferred solution in low-viscosity pumping applications because of their hydraulics (low flow, high pressure and pulseless flow), compactness, efficiency and low cost. Liquiflo's wide selection of materials allow for pump customization to reduce premature shaft, gear, and bearing wear on low-viscosity fluids. Liquiflo has successfully pumped liquids with viscosities as low as 0.3 CPS.

Metering

Liquiflo gear pumps are used in variable flow systems where the motor RPM is controlled to regulate pump output. Flow rate, pH levels or RPM can trigger the control of feedback signals. (Refer to the Engineering section for more details on gear pumps in metering applications). The Rotogear® Series is available in a wide variety of flow ranges (11 sizes offered), simplifying selection for metering applications.

REPAIR KITS



Repair Kits simplify inventory and speed repair. All parts can also be purchased separately.

Repair kits contain all components to completely rebuild your Liquiflo Gear Pump to like-new condition (all items except the housings are included).

Repair Kits Include:

- Gears
- Shafts
- Keys
- Bearings
- Wear Plates
- Pins
- O-Rings
- Retaining Rings
- Seals (if applicable)

RELIEF VALVES



Positive displacement pumps should be installed with a relief valve in the discharge line. This will protect the pump and piping against any type of line blockage including the inadvertent closing of an isolation valve. Liquiflo manufactures two sizes of relief valves in both 316 SS and Alloy-C.

CARTRIDGE



A cartridge is a complete mag-drive pump less the outer magnet and pedestal. A cartridge replacement is a convenient way to quickly replace a pump that requires maintenance.

OPTIONS

Liquiflo has several options available for its complete line of Positive Displacement Gear Pumps, as well as offering a complete line of standard pumps. Liquiflo will custom engineer its pumps and options to fit your specific requirements.

SANITARY FITTINGS

Sanitary Fittings are available for food & drug applications



RAISED-FACE FLANGES

ANSI, DIN, JIS Flanges are available



CLAMP-ON TEMPERATURE CONTROL JACKET

Temperature Control Jackets can maintain the pump at either elevated or reduced temperatures. Commonly used when pumping liquids that solidify or become difficult to pump when the temperature decreases.



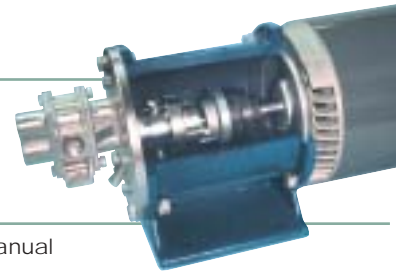
S-ADAPTER

The S-Adapter is available for long-coupling mag-drive pumps; it isolates the pump from the motor.



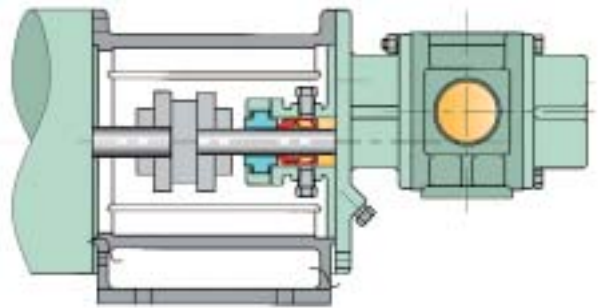
TYPICAL MOUNTING CONFIGURATIONS

Close-Coupled Option eliminates manual alignment of pump and motor.

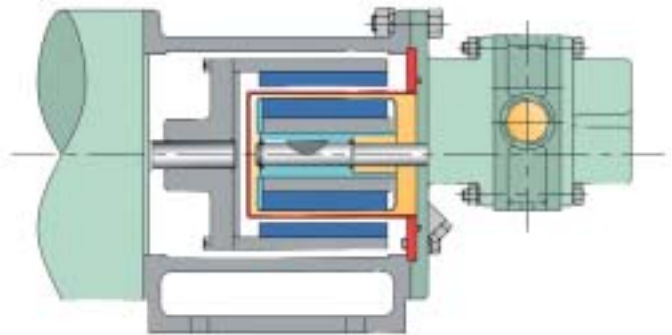


Features of Close-Coupled Design:

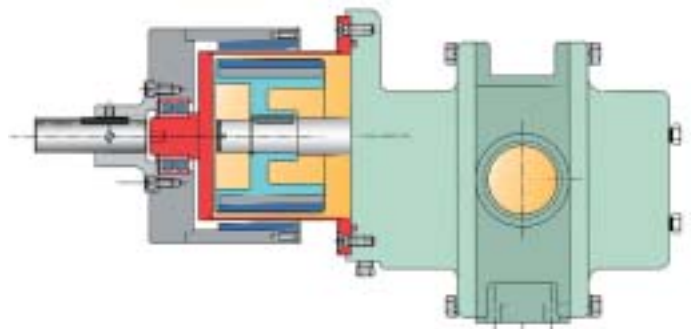
- Eliminates difficulties and inconvenience of manually aligning pump and motor
- Cast-iron bracket that rigidly supports pump & motor
- Dimensionally interchangeable with our Mag-Drive pumps
- Available for 56C, 143/145TC, IEC 71, 80, 90 frame motors
- Excellent for OEM applications
- Quickly and easily installed



CLOSE-COUPLED SEALED



CLOSE-COUPLED MAG-DRIVE



LONG-COUPLED MAG-DRIVE (312, 314 & H12 only)

SEAL CONFIGURATIONS

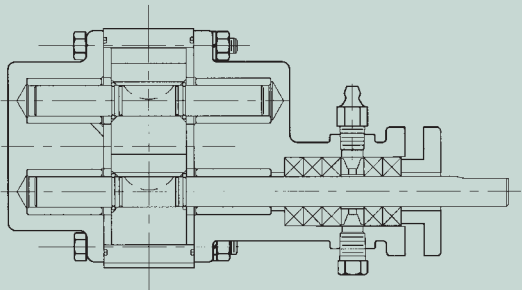


FIG.1 LANTERN RING/PACKING SEAL

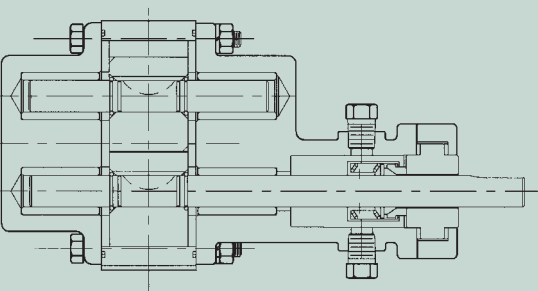


FIG.2 SINGLE MECHANICAL SEAL

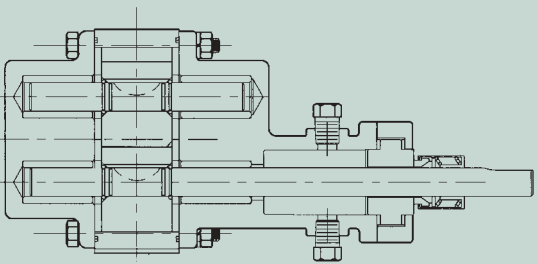


FIG.3 EXTERNAL MECHANICAL SEAL

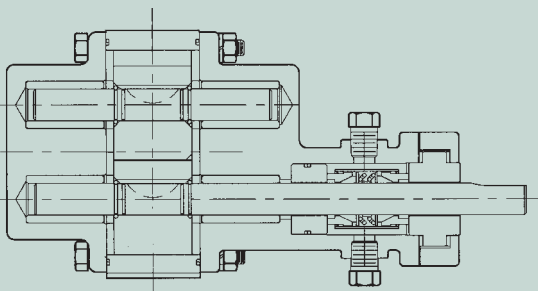


FIG.4 DOUBLE MECHANICAL SEAL

RANGE OF SEALS AVAILABLE

Liquiflo's Universal Front Housings will accommodate packing, as well as single and double mechanical seal configurations.

Fig. 1 Packing is suitable and the most economical for safe, non-hazardous liquids.

Fig. 2 Single Mechanical Seals are used when leakage needs to be minimized. Single seals have a viscosity limit of 5,000 cps and a temperature limit of 500 °F.

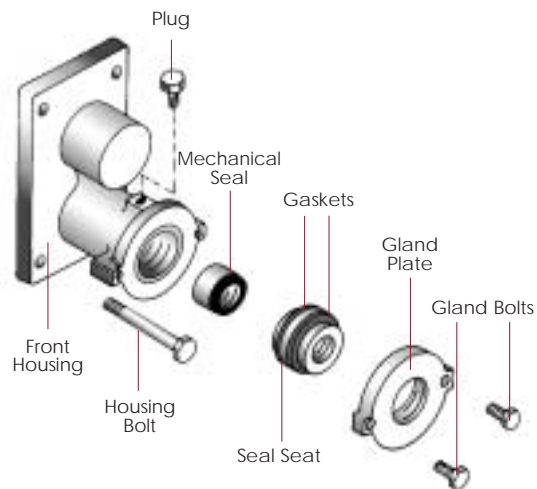
Fig. 3 External Mechanical Seals are used to isolate the seal body from the liquid being pumped or when pumping liquid under vacuum conditions.

Fig. 4 Double Mechanical Seals require a flushing system and are typically used when pumping liquids that are abrasive, crystallize on contact with air, or are very dangerous.

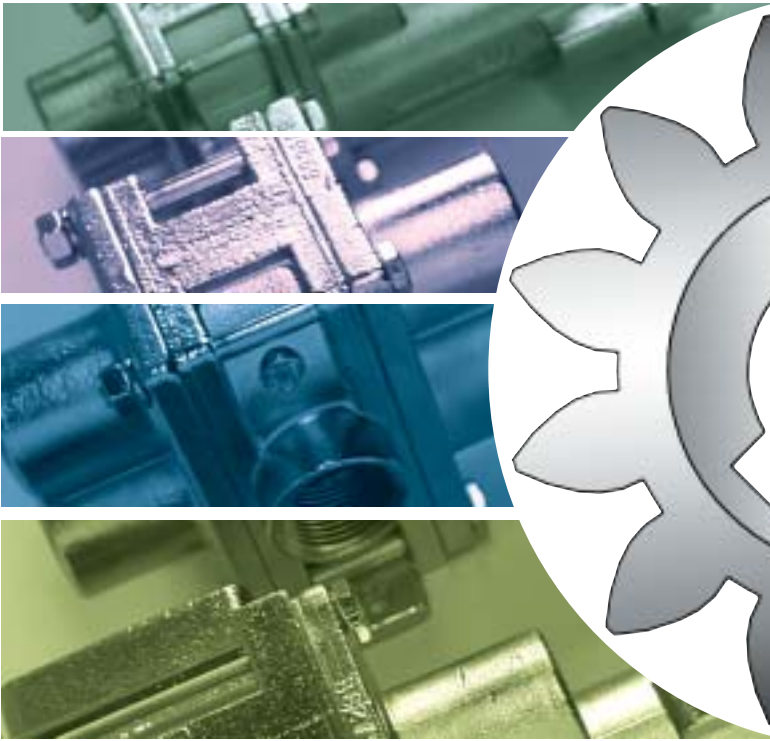
SEAL MATERIALS AVAILABLE

PACKING	SEAL WEDGES	SEAL FACES	SEAL SEATS
Braided Teflon Grafoil	Teflon Grafoil	Carbon Teflon Silicon Carbide	Ceramic Silicon Carbide Tungsten Carbide

FIG.5 EXPLODED VIEW OF SINGLE INTERNAL MECHANICAL SEAL

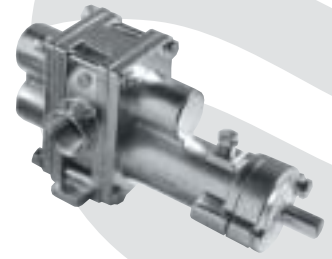


H-SERIES
ROTOGEAR® EXTERNAL GEAR PUMPS



H-SERIES

ROTOGEAR® EXTERNAL GEAR PUMPS



H-Series

Up to 225 PSI differential pressure

Liquiflo's **H-Series high-pressure** gear pumps are available in Sealed and Mag-Drive versions with flows up to approximately **30 GPM** and differential pressures up to **225 PSI***. With similar outside dimensions to the 3-Series, the H-Series has larger shafts, bearings and seals for extended service life. These features allow it to handle higher pressures and operate longer.

* 300 PSI possible on some models. Contact factory.

H-Series Specification Chart

SEALED						
MAG-DRIVE Close-Coupled						
SEALED MAG-DRIVE	H3F H3F-MC	H5R H5R-MC	H5F H5F-MC	H7N H7N-MC	H7R H7R-MC	H7F H7F-MC
Max Flow	1.4 GPM (5.3 LPM)	2.4 GPM (9.1 LPM)	3.4 GPM (13 LPM)	5.4 GPM (20.4 LPM)	8.6 GPM (32.5 LPM)	10.7 GPM (40.5 LPM)
Max Diff. Press.	225 PSI (15.5 BAR)	225 PSI (15.5 BAR)	225 PSI (15.5 BAR)	225 PSI (15.5 BAR)	225 PSI (15.5 BAR)	225 PSI (15.5 BAR)
Max Discharge	300 PSI (20.7 BAR)	300 PSI (20.7 BAR)	300 PSI (20.7 BAR)	225 PSI (15.5 BAR)	225 PSI (15.5 BAR)	225 PSI (15.5 BAR)
Max Temp.	500 °F (260 °C)	500 °F (260 °C)	500 °F (260 °C)	500 °F (260 °C)	500 °F (260 °C)	500 °F (260 °C)
Max Viscosity	100,000* CPS	100,000* CPS	100,000* CPS	100,000* CPS	100,000* CPS	100,000* CPS
Max Speed	1750 RPM	1750 RPM	1750 RPM	1750 RPM	1750 RPM	1750 RPM
NPSHR @ Max Speed	2 FT (0.6M)	2 FT (0.6M)	2 FT (0.6M)	5.2 FT (1.6M)	5.2 FT (1.6M)	5.2 FT (1.6M)
Weight (LBS) Sealed Mag-Drive	2.5 LBS (1.1 KGS) 31 LBS (14 KGS)	3.5 LBS (1.6 KGS) 32 LBS (15 KGS)	3.5 LBS (1.6 KGS) 32 LBS (15 KGS)	6.5 LBS (2.9 KGS) 36 LBS (16 KGS)	6.5 LBS (2.9 KGS) 36 LBS (16 KGS)	6.5 LBS (2.9 KGS) 36 LBS (16 KGS)

* Higher viscosities possible. Contact factory.

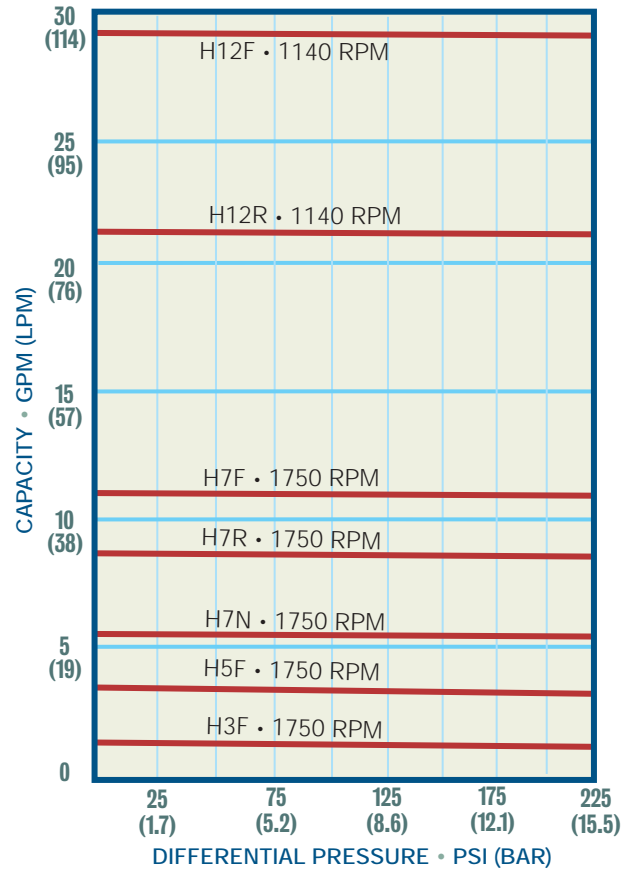
COMPOSITE
GEAR PUMP
PERFORMANCE
CURVES

TEST FLUID: OIL
(100 CPS)

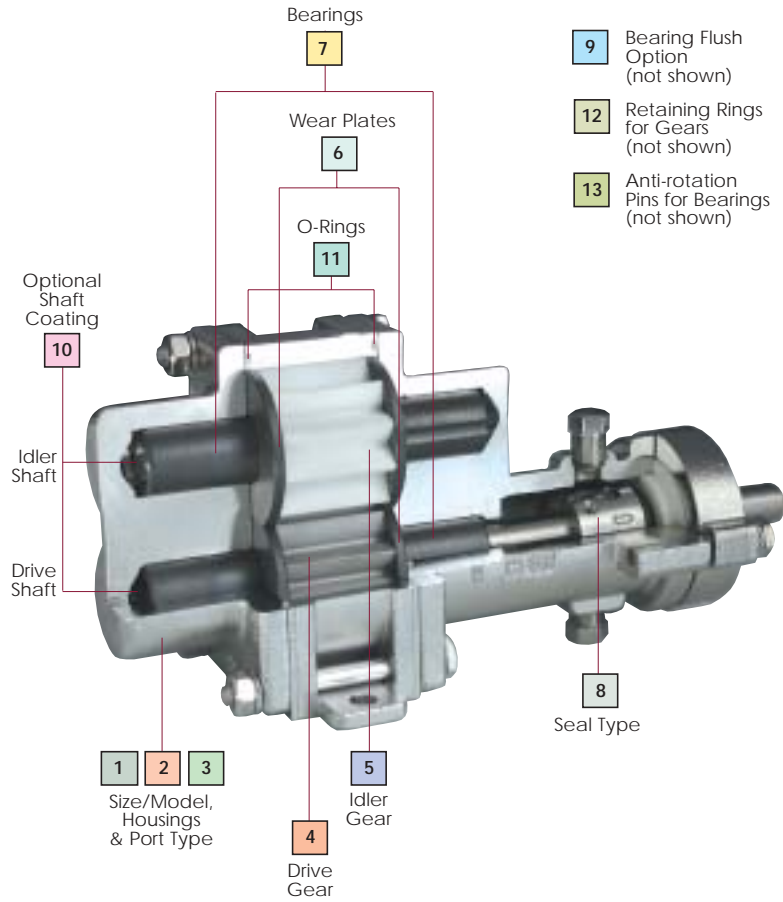


LONG-COUPLED ONLY

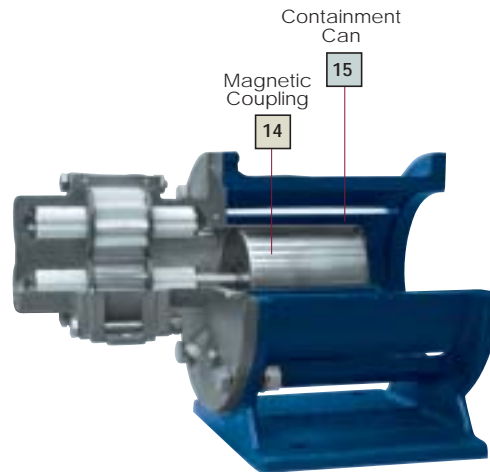
H12R H12R-MC	H12F H12F-MC
22 GPM (83 LPM)	29 GPM (110 LPM)
225 PSI (15.5 BAR)	225 PSI (15.5 BAR)
270 PSI (18.6 BAR)	270 PSI (18.6 BAR)
500 °F (260 °C)	500 °F (260 °C)
100,000* CPS	100,000* CPS
1150 RPM	1150 RPM
5 FT (1.5M)	5 FT (1.5M)
52 LBS (23.6 KGS) 70 LBS (32 KGS)	52 LBS (23.6 KGS) 70 LBS (32 KGS)



PUMP MODEL CODING



Sealed Pump



Other model code positions are the same as shown above for the sealed pump.

Mag-Drive Pump

PUMP MODEL CODING

EXAMPLE:

H5FS6PEEU00000, designates a Model H5F Pump with Single Mechanical Seal.

H5F	S	6	P	E	E	U	0	0	0	0	0	0	0	0	0	0	0	0
1&2	3	4	5	6	7	8	9	10	11	12	13	14	15					

Pos.	Description	Selection
1 & 2	Pump Model	H5E H5F Pump
3	Housing Mat'l	S 316 SS NPT
4	Drive Gear Mat'l	6 316 SS
5	Idler Gear Mat'l	P PEEK
6	Wear Plate Mat'l	E Carbon 60
7	Bearing Mat'l	E Carbon 60
8	Seal Type	U Single, Carbon-Ceramic
9	Bearing Flush	0 None
10	Shaft Coating	0 None
11	O-Rings	0 Teflon
12	Retaining Ring	0 Same mat'l as housings
13	Bearing Pins	0 Teflon
14	Mag Coupling	N/A
15	Options	N/A

Liquiflo's Model Code describes both the pump's size and material selected. This model code is required for the future identification of your pump when reordering either a pump or replacement parts. Model code is permanently stamped into pump housing.

- Available
- No longer available in new pumps. Parts available only for repair and replacement.
- ⊗ Not Available

Flanges available:

ANSI, DIN, JIS

Or slip joint flanges conforming to the dimensions of the standard.

	H3	H5	H7	H12
NPT/BSPT	1/4	1/2	3/4	1 1/4
ANSI 150# RF FLG	1/2	1/2	3/4	1 1/2
DIN PN16	10	15	20	40
JIS 10K	10	15	20	40

Liquiflo H-Series Gear Pumps Selection & Availability



Sample Model No. **H5 F S 6 P E E U 0 0 0 0 0 0 0 0 0**

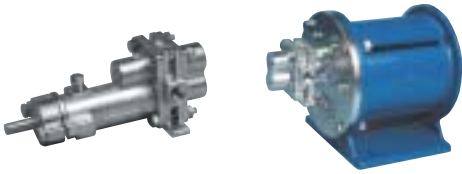
Position No. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Position Model	1 Pump Model	H3	H5	H7	H7N	H12
Position Model	2 F = Full Capacity R = Reduced Capacity	■	■	■	⊗	■
Position Basic Material & Port Type	3 S = 316 SS NPT H = Alloy-C NPT L = 316 SS Flanged C = Alloy-C Flanged X = 316 SS BSPT Y = Alloy-C BSPT	■	■	■	■	■
Position Drive Gear	4 1 = Alloy-C 6 = 316 SS P = PEEK	■	■	■	■	■
Position Idler Gear	5 1 = Alloy-C 6 = 316 SS 8 = Ryton P = PEEK	■	■	■	■	■
Position Wear Plates	6 E = Carbon 60 3 = Teflon 4 = Ceramic P = PEEK	■	■	■	■	■
Position Bearings	7 E = Carbon 60 B = Silicon Carbide P = PEEK	■	■	■	■	■
Position Outer Magnet Bore (Mag Drive ONLY)	8 0 = 0.625" (56C) 1 = 0.875" (143/145TC) 2 = 14 mm (IEC 71 - B5) 3 = 19 mm (IEC 80 - B5) 4 = 24 mm (IEC 90 - B5) 5 = 1.125" (182/184TC)	■	■	■	■	⊗
Position Seal Types (Sealed pumps ONLY)	8 U = Single-Int Carbon - Ceramic L = Packing Teflon R = Packing Grafoil	■	■	■	■	■
Position Bearing Flush	9 0 = Standard Housings 1 = Ext. Brg Flush 2 = Int. Brg Flush	■	■	■	■	⊗
Position Shaft Coating	10 0 = Material same as housing (uncoated) 1 = Ceramic 2 = Tungsten Carbide	■	■	■	■	■
Position O-Rings	11 0 = Teflon 6 = 316 SS / PFA encap. B = Buna-N E = EPDM V = Viton K = Kalrez	■	■	■	■	■
Position Retaining Rings	12 0 = Material same as housing	■	■	■	■	■
Position Bearing Pins	13 0 = Teflon 1 = Alloy-C 6 = 316 SS	■	■	■	■	⊗
Position Magnetic Coupling (Mag Drive)	14 S = 33 in-lbs B = 120 in-lbs C = 240 in-lbs K = 250 in-lbs J = 500 in-lbs	■	⊗	⊗	⊗	⊗
Position (Options)	15 8 = Temperature Trim 9 = Viscosity Trim S = Single Wall Can D = Dual-Kan	■	■	■	■	■

H3F SEALED H3F-MC MAG-DRIVE



**H - SERIES
ROTOGEAR®
GEAR PUMP**

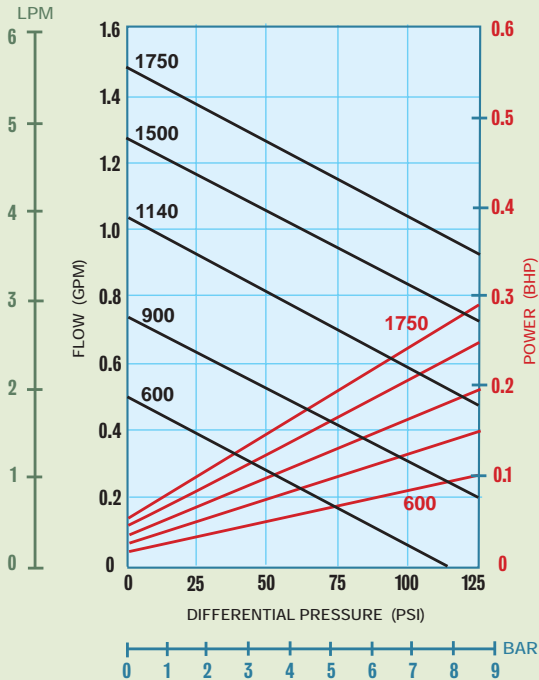


Sealed

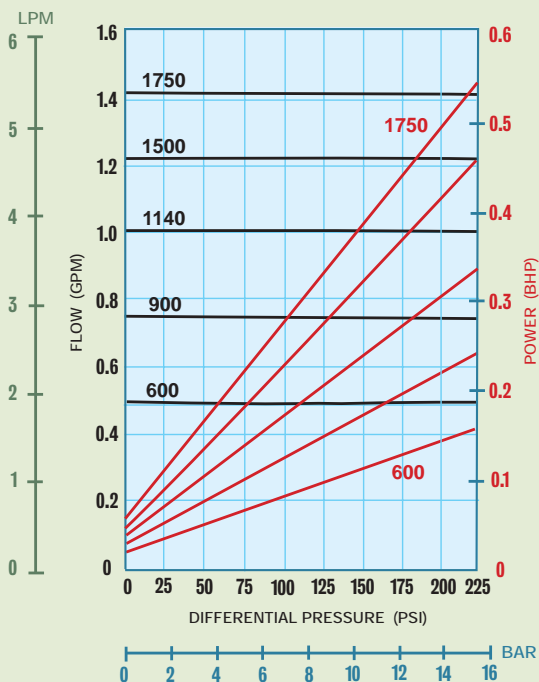
Close Coupled:
Sealed or Mag-Drive

PERFORMANCE CURVES

1 CPS Fluid (Water)



100 CPS Fluid (Oil)

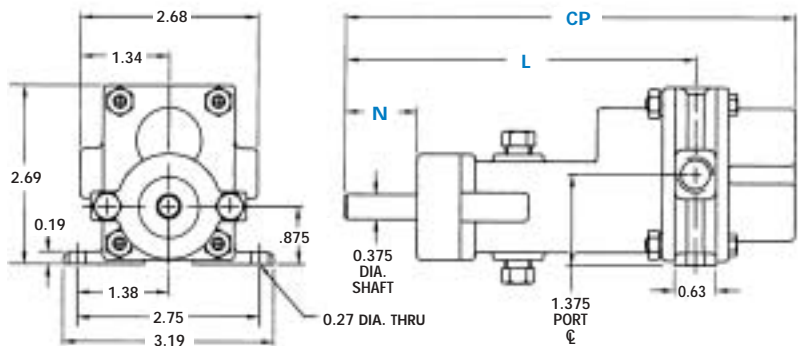


PORT SIZE	1/4" NPT/BSPT or 1/2" FLG
MAX FLOW	1.4 GPM; 5.3 LPM
MAX DIFFERENTIAL PRESSURE	225 PSI; 15.5 BAR
MAX DISCHARGE PRESSURE	300 PSI; 20.7 BAR
MAX TEMPERATURE	500°F; 260°C
MIN TEMPERATURE	-40°F; -40°C
MAX VISCOSITY	100,000* CPS
NPSHR @ 1750 RPM	2 FT; 0.6 M
LIFT (DRY)	1.5 FT; 0.45 M
WEIGHT (without motor)	
SEALED	2.5 LBS; 1.1 KGS
MAG-DRIVE	31 LBS; 14 KGS

* Higher viscosities possible. Contact factory.

Dimensional Data (inches)

Long-Coupled: H3F Sealed

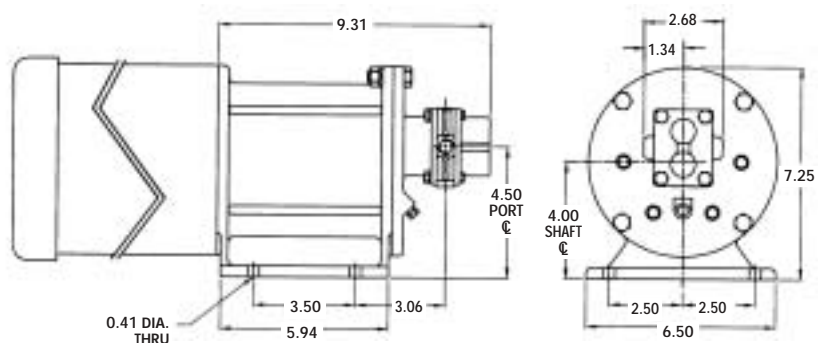


SEAL CONFIGURATIONS	
DIMENSION	PACKING SINGLE MECHANICAL SEAL DOUBLE MECHANICAL SEAL
CP(1)	6.94
N	0.81 (2)
L	5.44

NOTES: (1) Add .312 inches for Bearing Flush Plug.
(2) Minimum dimension.

Dimensional Data (inches)

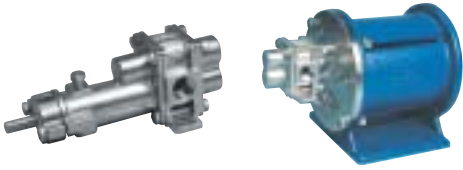
Close-Coupled: H3F-MC & H3F Sealed



H5R SEALED H5R-MC MAG-DRIVE



**H - SERIES
ROTOGEAR®
GEAR PUMP**

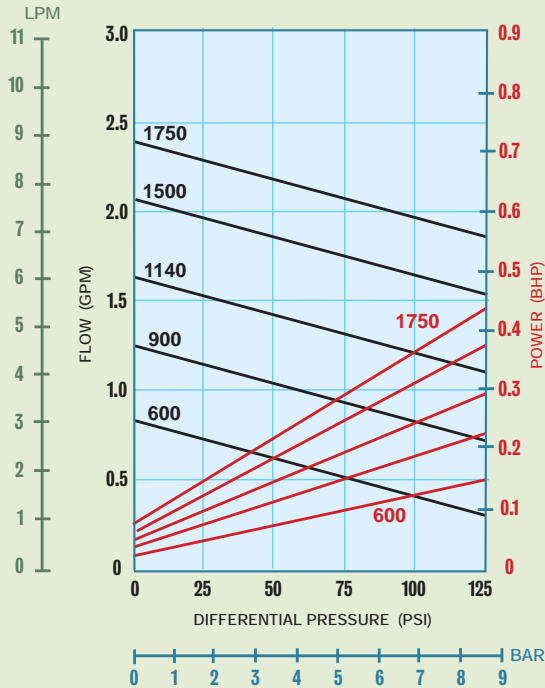


Sealed

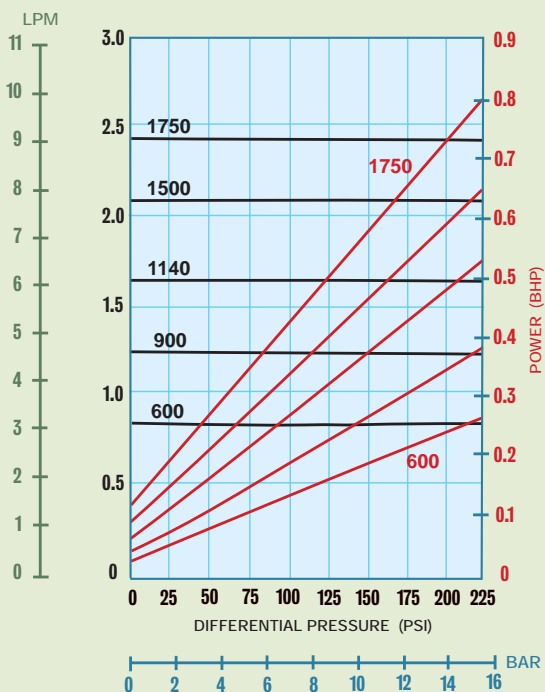
Close Coupled:
Sealed or Mag-Drive

PERFORMANCE CURVES

1 CPS Fluid (Water)



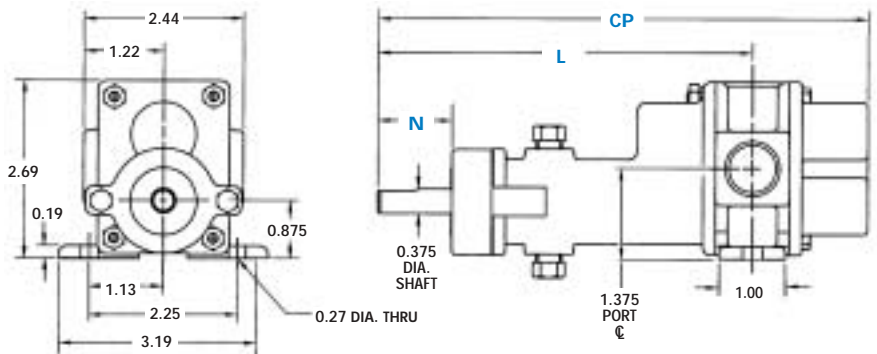
100 CPS Fluid (Oil)



PORT SIZE	1/2" NPT/BSPT/FLG
MAX FLOW	2.4 GPM; 9.1 LPM
MAX DIFFERENTIAL PRESSURE	225 PSI; 15.5 BAR
MAX DISCHARGE PRESSURE	300 PSI; 20.7 BAR
MAX TEMPERATURE	500°F; 260°C
MIN TEMPERATURE	-40°F; -40°C
MAX VISCOSITY	100,000* CPS
NPSHR @ 1750 RPM	2 FT; 0.6 M
LIFT (DRY)	2 FT; 0.6 M
WEIGHT (without motor)	
SEALED	3.5 LBS; 1.6 KGS
MAG-DRIVE	32 LBS; 15 KGS

* Higher viscosities possible. Contact factory.

Dimensional Data (inches)



Long-Coupled: H5R Sealed

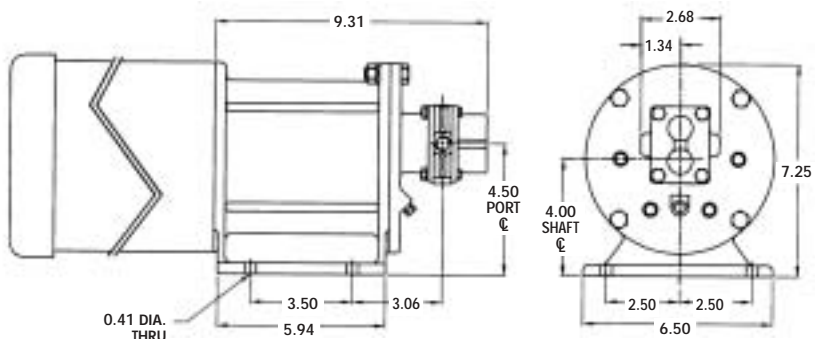
SEAL CONFIGURATIONS

DIMENSION	PACKING SINGLE MECHANICAL SEAL DOUBLE MECHANICAL SEAL
CP ⁽¹⁾	7.44
N	0.80 ⁽²⁾
L	5.67

NOTES: (1) Add .312 inches for Bearing Flush Plug.
(2) Minimum dimension.

Dimensional Data (inches)

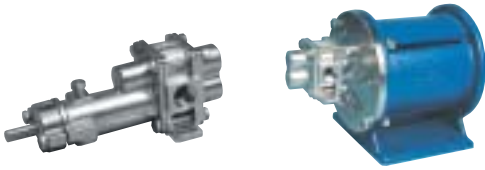
Close-Coupled: H5R-MC & H5R Sealed



H5F SEALED H5F-MC MAG-DRIVE



**H - SERIES
ROTOGEAR®
GEAR PUMP**

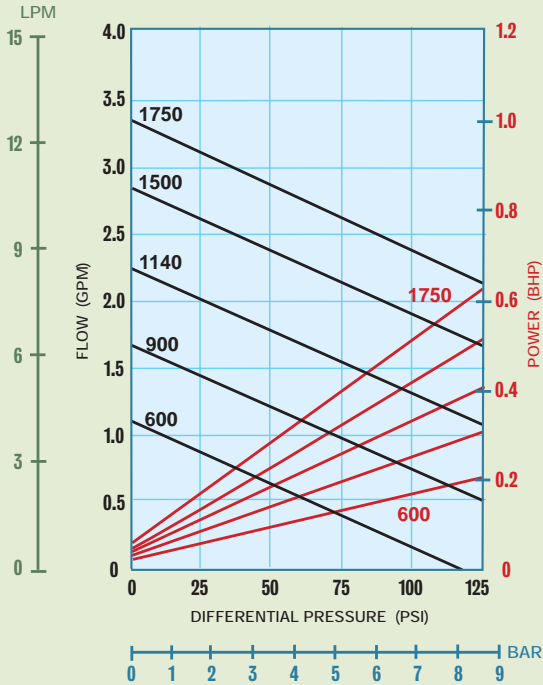


Sealed

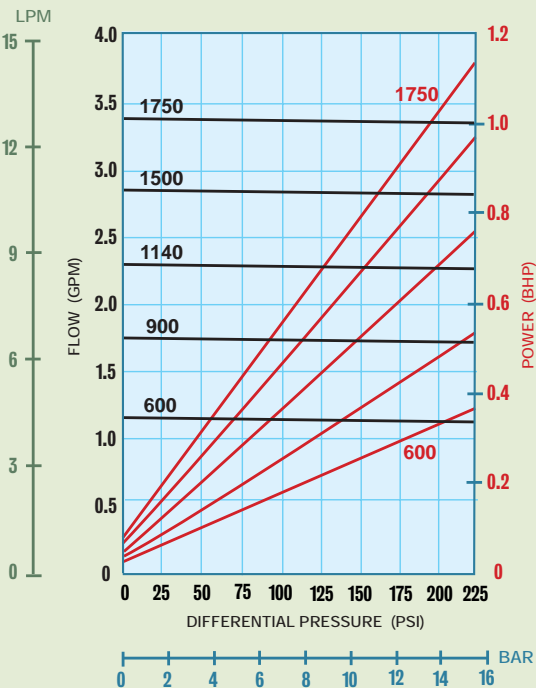
Close Coupled:
Sealed or Mag-Drive

PERFORMANCE CURVES

1 CPS Fluid (Water)



100 CPS Fluid (Oil)

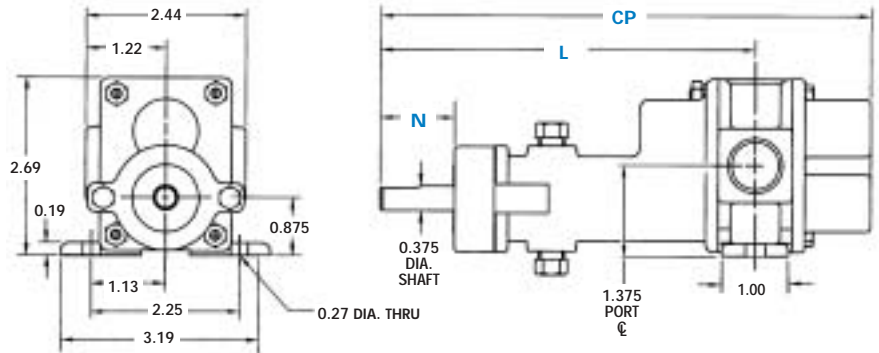


PORT SIZE	1/2" NPT/BSPT/FLG
MAX FLOW	3.4 GPM; 13 LPM
MAX DIFFERENTIAL PRESSURE	225 PSI; 15.5 BAR
MAX DISCHARGE PRESSURE	300 PSI; 20.7 BAR
MAX TEMPERATURE	500°F; 260°C
MIN TEMPERATURE	-40°F; -40°C
MAX VISCOSITY	100,000* CPS
NPSHR @ 1750 RPM	2 FT; 0.6 M
LIFT (DRY)	4 FT; 1.2 M
WEIGHT (without motor)	
SEALED	3.5 LBS; 1.6 KGS
MAG-DRIVE	32 LBS; 15 KGS

* Higher viscosities possible. Contact factory.

Dimensional Data (inches)

Long-Coupled: H5F Sealed



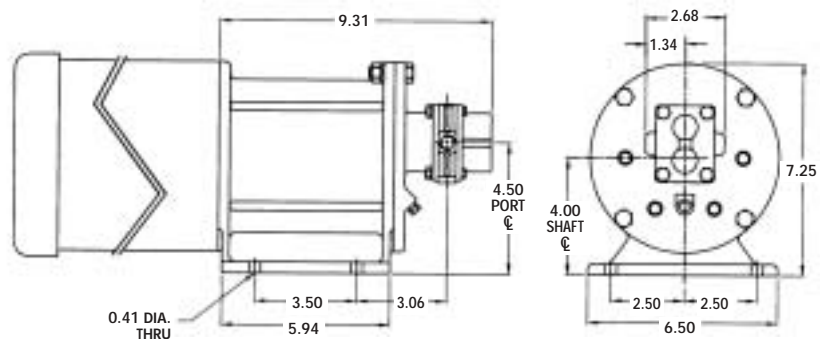
SEAL CONFIGURATIONS

DIMENSION	PACKING SINGLE MECHANICAL SEAL DOUBLE MECHANICAL SEAL
CP(1)	7.44
N	0.80 (2)
L	5.67

NOTES: (1) Add .312 inches for Bearing Flush Plug.
(2) Minimum dimension.

Dimensional Data (inches)

Close-Coupled: H5F-MC & H5F Sealed



H7N SEALED H7N-MC MAG-DRIVE



**H - SERIES
ROTOGEAR®
GEAR PUMP**



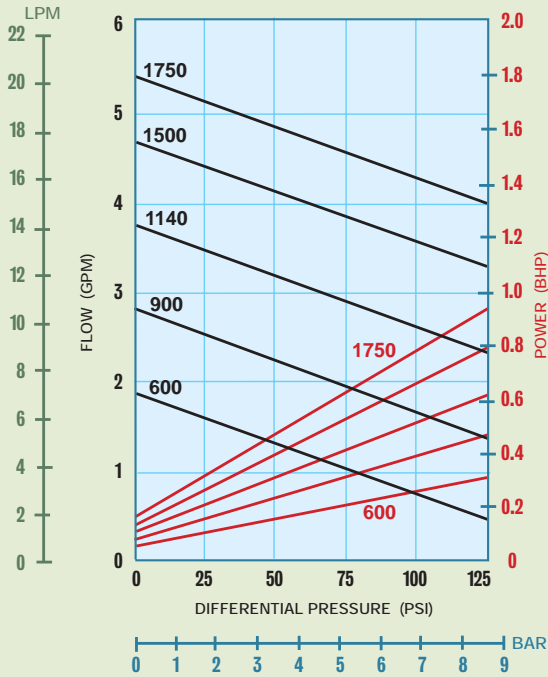
Sealed



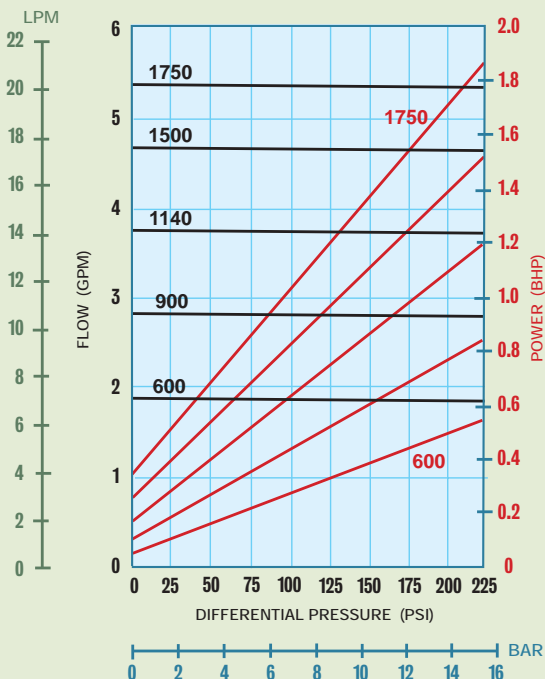
Close Coupled:
Sealed or Mag-Drive

PERFORMANCE CURVES

1 CPS Fluid (Water)



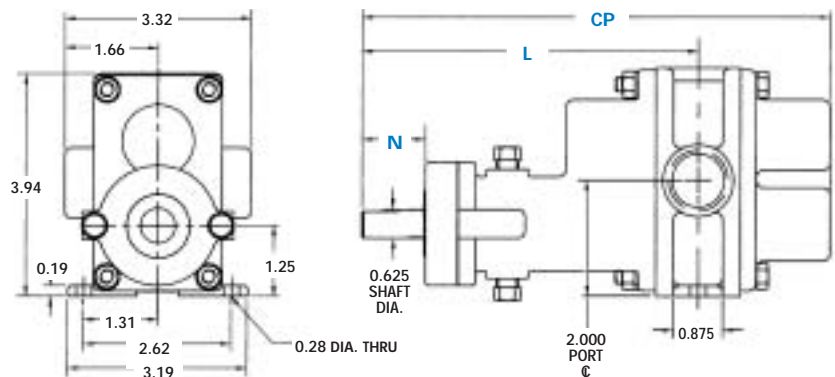
100 CPS Fluid (Oil)



PORT SIZE	3/4" NPT/BSPT/FLG
MAX FLOW	5.4 GPM; 20.4 LPM
MAX DIFFERENTIAL PRESSURE	225 PSI; 15.5 BAR
MAX DISCHARGE PRESSURE	225 PSI; 15.5 BAR
MAX TEMPERATURE	500°F; 260°C
MIN TEMPERATURE	-40°F; -40°C
MAX VISCOSITY	100,000* CPS
NPSHR @ 1750 RPM	5.2 FT; 1.6 M
LIFT (DRY)	6 FT; 1.8 M
WEIGHT (without motor)	
SEALED	6.5 LBS; 3 KGS
MAG-DRIVE	36 LBS; 16 KGS

* Higher viscosities possible. Contact factory.

Dimensional Data (inches)



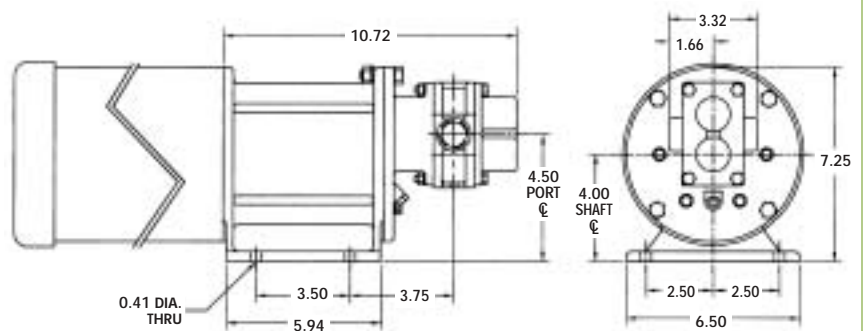
Long-Coupled: H7N Sealed

DIMENSION	SEAL CONFIGURATIONS	
	PACKING	DOUBLE MECHANICAL SEAL
CP(1)	8.20	
N	0.94 (2)	
L	5.98	

NOTES: (1) Add .312 inches for Bearing Flush Plug.
(2) Minimum dimension.

Dimensional Data (inches)

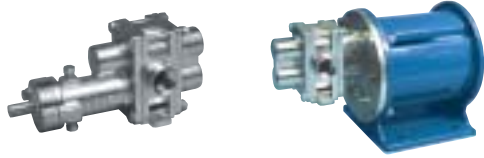
Close-Coupled: H7N-MC & H7N Sealed



H7R SEALED H7R-MC MAG-DRIVE



**H - SERIES
ROTOGEAR®
GEAR PUMP**

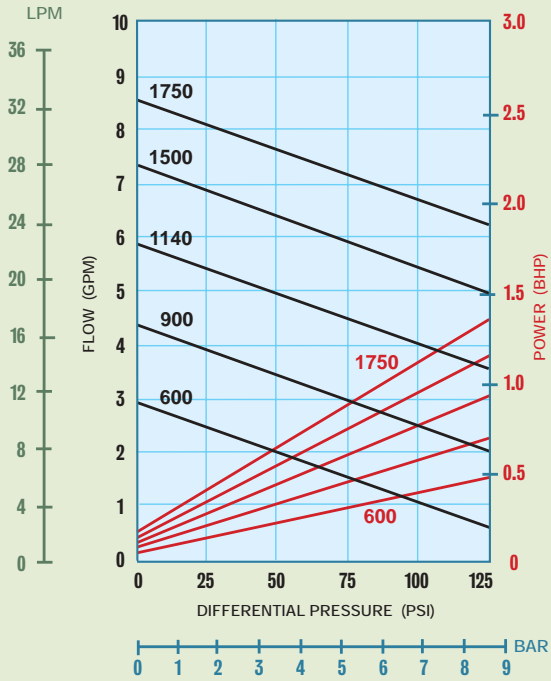


Sealed

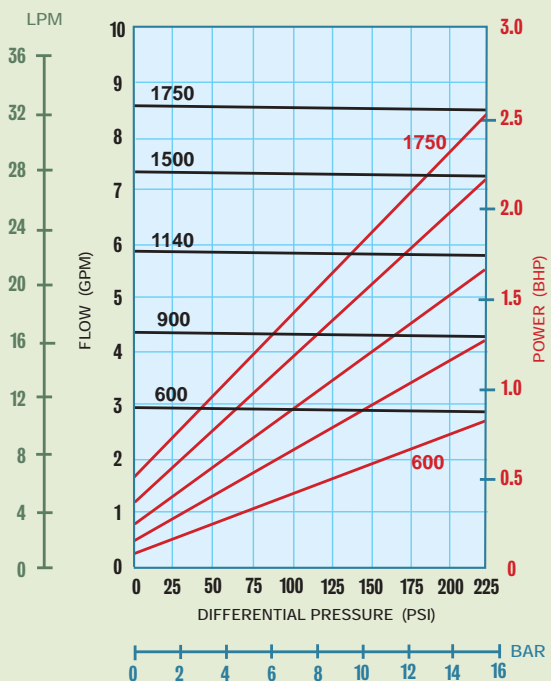
Close Coupled:
Sealed or Mag-Drive

PERFORMANCE CURVES

1 CPS Fluid (Water)



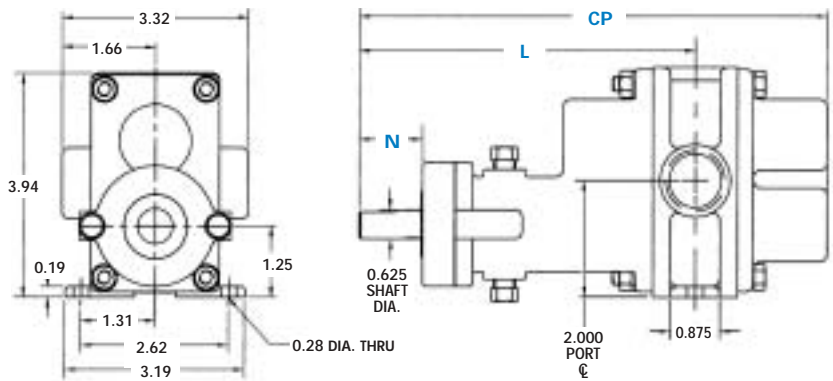
100 CPS Fluid (Oil)



PORT SIZE	3/4" NPT/BSPT/FLG
MAX FLOW	8.6 GPM; 32.5 LPM
MAX DIFFERENTIAL PRESSURE	225 PSI; 15.5 BAR
MAX DISCHARGE PRESSURE	225 PSI; 15.5 BAR
MAX TEMPERATURE	500°F; 260°C
MIN TEMPERATURE	-40°F; -40°C
MAX VISCOSITY	100,000* CPS
NPSHR @ 1750 RPM	5.2 FT; 1.6 M
LIFT (DRY)	6 FT; 1.8 M
WEIGHT (without motor)	
SEALED	6.5 LBS; 3 KGS
MAG-DRIVE	36 LBS; 16 KGS

* Higher viscosities possible. Contact factory.

Dimensional Data (inches)



Long-Coupled: H7R Sealed

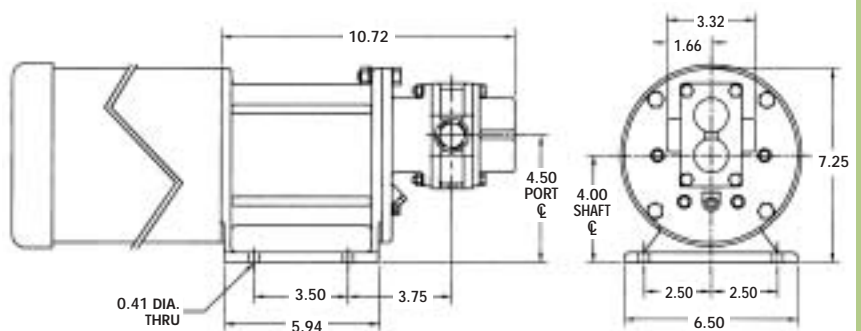
SEAL CONFIGURATIONS

DIMENSION	PACKING
	SINGLE MECHANICAL SEAL DOUBLE MECHANICAL SEAL
CP(1)	8.20
N	0.94 (2)
L	5.98

NOTES: (1) Add .312 inches for Bearing Flush Plug.
(2) Minimum dimension.

Dimensional Data (inches)

Close-Coupled: H7R-MC & H7R Sealed



H7F SEALED H7F-MC MAG-DRIVE



**H - SERIES
ROTOGEAR®
GEAR PUMP**



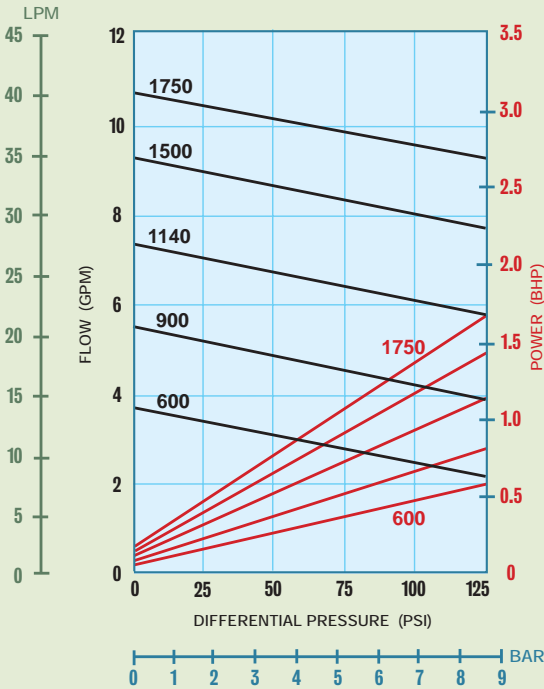
Sealed



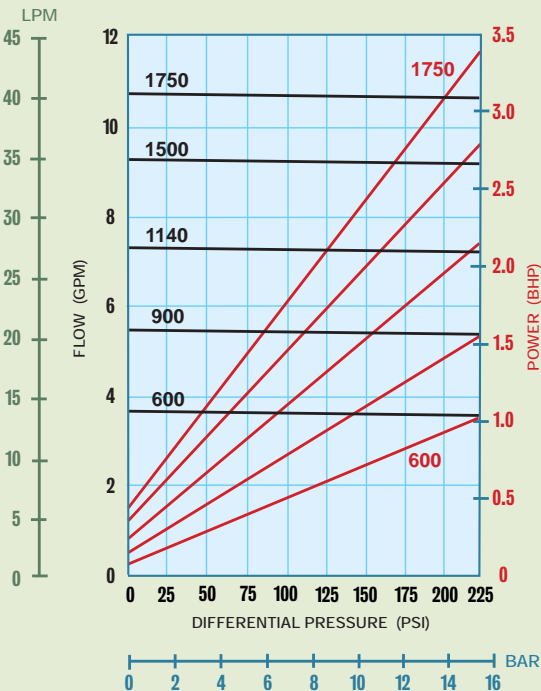
Close Coupled:
Sealed or Mag-Drive

PERFORMANCE CURVES

1 CPS Fluid (Water)



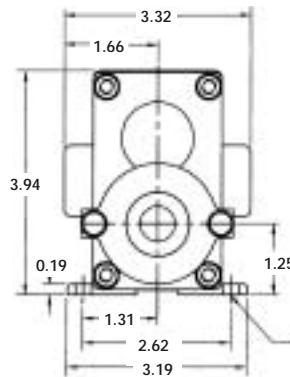
100 CPS Fluid (Oil)



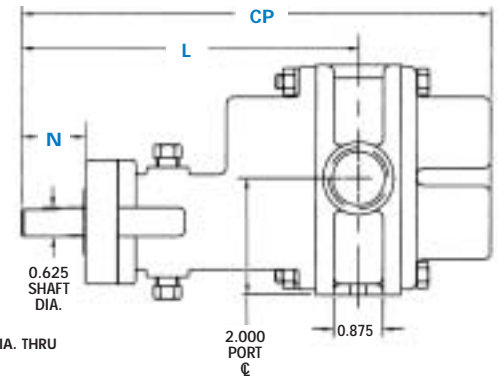
PORT SIZE	3/4" NPT/BSPT/FLG
MAX FLOW	10.7 GPM; 40.5 LPM
MAX DIFFERENTIAL PRESSURE	225 PSI; 15.5 BAR
MAX DISCHARGE PRESSURE	225 PSI; 15.5 BAR
MAX TEMPERATURE	500°F; 260°C
MIN TEMPERATURE	-40°F; -40°C
MAX VISCOSITY	100,000* CPS
NPSHR @ 1750 RPM	5.2 FT; 1.6 M
LIFT (DRY)	7 FT; 2.1 M
WEIGHT (without motor)	
SEALED	6.5 LBS; 3 KGS
MAG-DRIVE	36 LBS; 16 KGS

* Higher viscosities possible. Contact factory.

Dimensional Data (inches)



Long-Coupled: H7F Sealed



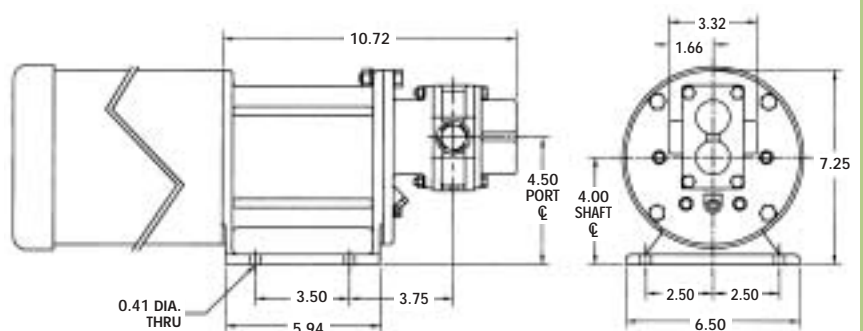
SEAL CONFIGURATIONS

DIMENSION	PACKING	SINGLE MECHANICAL SEAL	DOUBLE MECHANICAL SEAL
CP ⁽¹⁾		8.32	
N		0.94 ⁽²⁾	
L		5.98	

NOTES: (1) Add .312 inches for Bearing Flush Plug.
(2) Minimum dimension.

Dimensional Data (inches)

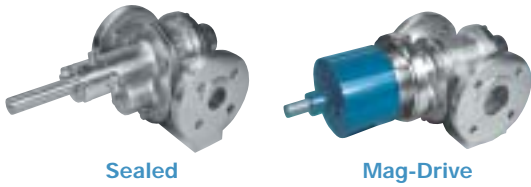
Close-Coupled: H7F-MC & H7F Sealed



H12R SEALED H12R-MC MAG-DRIVE



**H - SERIES
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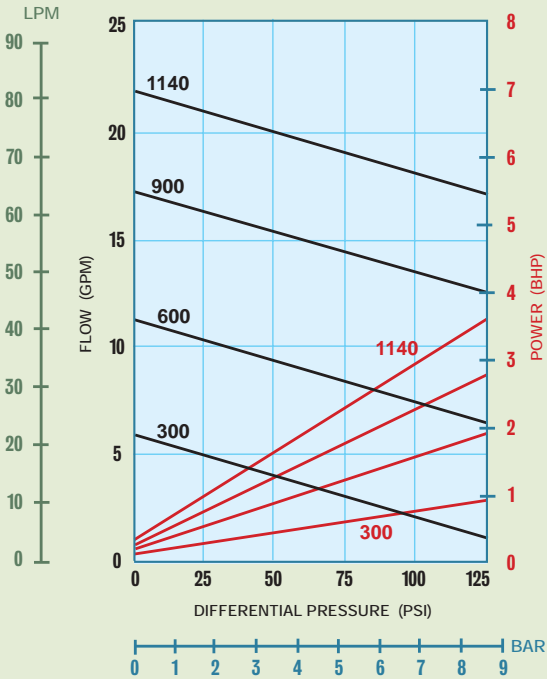


Sealed

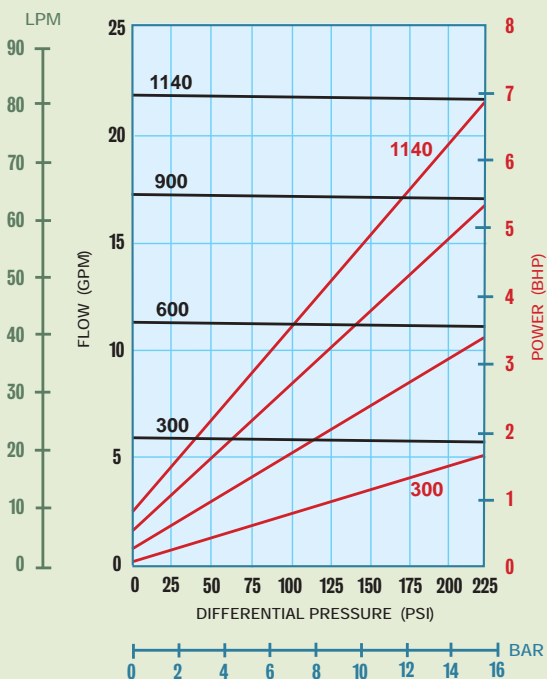
Mag-Drive

PERFORMANCE CURVES

1 CPS Fluid (Water)



100 CPS Fluid (Oil)

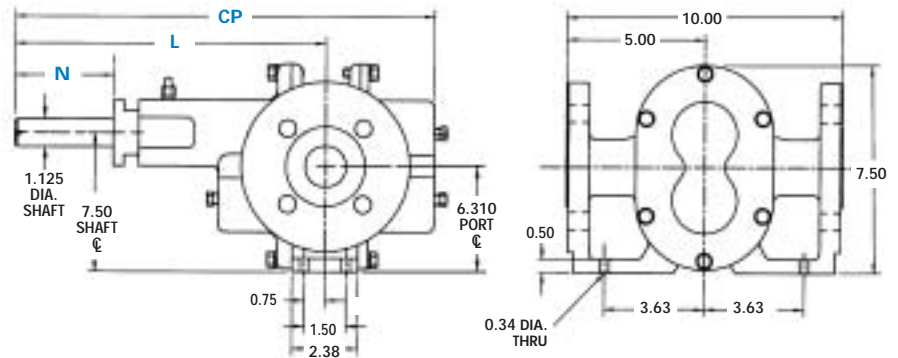


PORT SIZE	1 1/2" FLG or 1 1/4" NPT/BPST
MAX FLOW	22 GPM; 83 LPM
MAX DIFFERENTIAL PRESSURE	225 PSI; 15.5 BAR
MAX DISCHARGE PRESSURE	270 PSI; 18.6 BAR
MAX TEMPERATURE	500°F; 260°C
MIN TEMPERATURE	-40°F; -40° C
MAX VISCOSITY	100,000* CPS
NPSHR @ 1750 RPM	5 FT; 1.5 M
LIFT (DRY)	15 FT; 4.5 M
WEIGHT (without motor)	
SEALED	52 LBS; 24 KGS
MAG-DRIVE	70 LBS; 32 KGS

* Higher viscosities possible. Contact factory.

Dimensional Data (inches)

H12R Sealed (Long-coupled only)



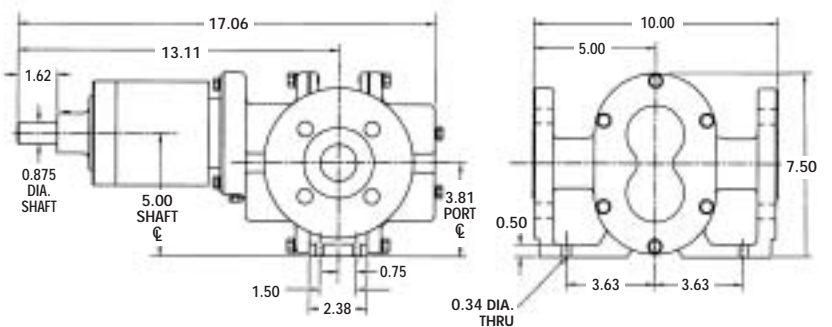
SEAL CONFIGURATIONS

DIMENSION	SEAL CONFIGURATIONS	
	SINGLE MECHANICAL SEAL DOUBLE MECHANICAL SEAL	PACKING
CP(1)	15.19	15.19
N	2.25 (2)	2.18
L	9.75	9.75

NOTES: (1) Add .312 inches for Bearing Flush Plug.
(2) Minimum dimension.

Dimensional Data (inches)

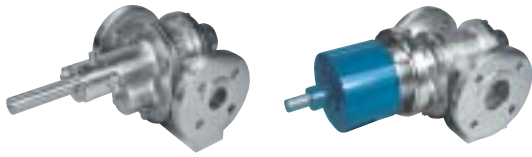
H12R-MC Mag-Drive (Long-coupled only)



H12F SEALED H12F-MC MAG-DRIVE



**H - SERIES
ROTOGEAR®
GEAR PUMP**

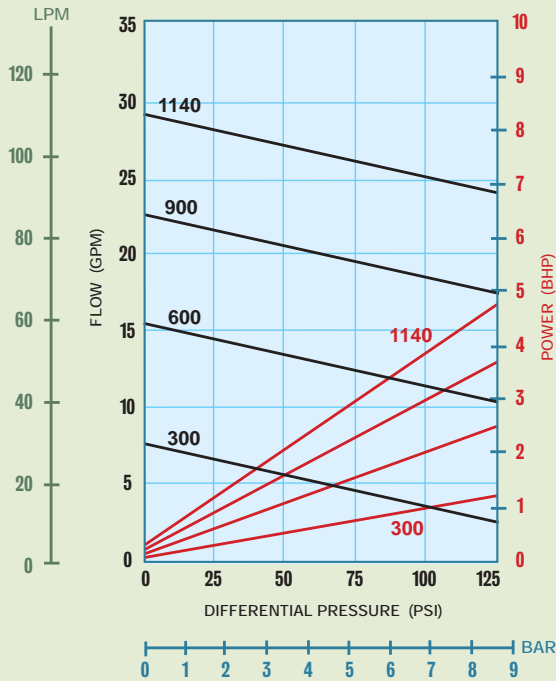


Sealed

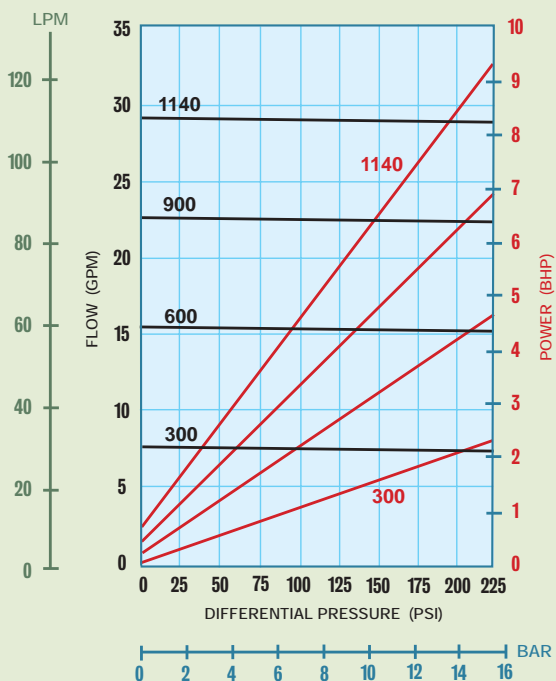
Mag-Drive

PERFORMANCE CURVES

1 CPS Fluid (Water)



100 CPS Fluid (Oil)

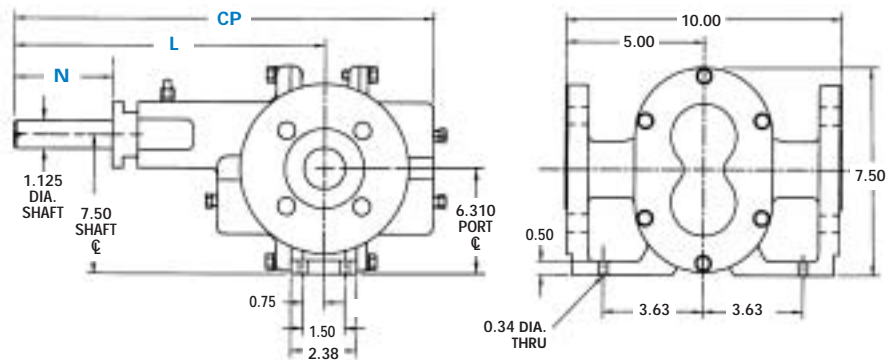


PORT SIZE	1 1/2" FLG or 1 1/4" NPT/BPST
MAX FLOW	29 GPM; 110 LPM
MAX DIFFERENTIAL PRESSURE	225 PSI; 15.5 BAR
MAX DISCHARGE PRESSURE	270 PSI; 18.6 BAR
MAX TEMPERATURE	500°F; 260°C
MIN TEMPERATURE	-40°F; -40°C
MAX VISCOSITY	100,000* CPS
NPSHR @ 1750 RPM	5 FT; 1.5 M
LIFT (DRY)	17 FT; 5.2 M
WEIGHT (without motor)	
SEALED	52 LBS; 24 KGS
MAG-DRIVE	70 LBS; 32 KGS

* Higher viscosities possible. Contact factory.

Dimensional Data (inches)

H12F Sealed (Long-coupled only)



SEAL CONFIGURATIONS

DIMENSION	SINGLE MECHANICAL SEAL DOUBLE MECHANICAL SEAL	PACKING
CP(1)	15.19	15.19
N	2.25 (2)	2.18
L	9.75	9.75

NOTES: (1) Add .312 inches for Bearing Flush Plug.
(2) Minimum dimension.

Dimensional Data (inches)

H12F-MC Mag-Drive (Long-coupled only)

