

# ECLIPSE® 05

## METALLIC EXTERNAL GEAR PUMP

**Eclipse pumps represent a dramatic advance in pump technology.** Combining proven design principles with state-of-the-art engineering, it is the most safe, simple, and reliable pump on the market today. Service only takes minutes, thus reducing process downtime and maintenance costs. It is commonly used for applications in industries such as chemical processing, petrochemical, and water treatment.



### Applications

pH control, odor control, acids, caustic, hydrogen peroxide, ammonia



### Flow

up to 1.6 gpm (6.1 lpm)



### Differential Pressure

up to 150 psi (10.3 bar)



### Temperature

up to 450°F (232°C)



- Available in 316LSS and Alloy C for chemical resistance
- Magnetically driven, eliminating the need for costly mechanical seals
- Patented replaceable housing liner reduces repair costs
- One-piece gear and shaft assembly eliminates common gear failures at the keyway
- Designed for easy maintenance

### Zero Leakage

- Sealless design
- Zero emissions of hazardous or regulated chemicals

### Built for the harshest environments

- Ideal fit for many medium to highly corrosive liquids
- Fully encapsulated magnets
- Superior chemical resistance

### Ease of maintenance

- Front pull-out design
- Quick and easy service
- Piping and electrical stay in place
- Reduced downtime
- KOPkit® (Keep on Pumping kit) saves time and money
- Simplified orders and inventory

### Controls

- Pulsafeeder RV Controller: intelligent motor speed

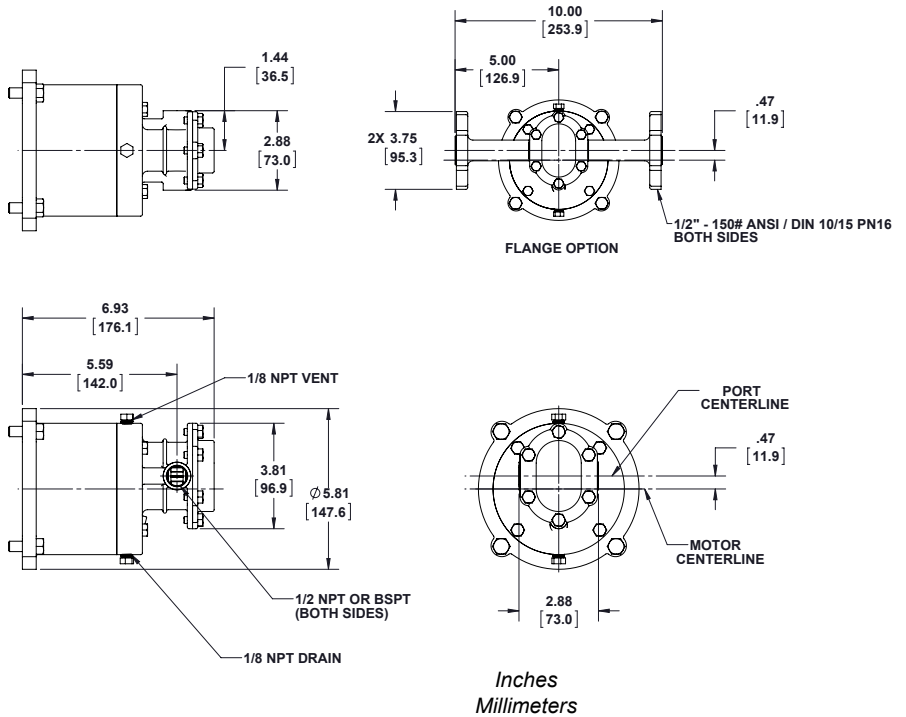
# SPECIFICATIONS

<b>Gear type</b>	External spur gear
<b>Port size &amp; type</b>	1/2" NPT or BSPT
<b>Flange</b>	150# ANSI DIN 10/15 PN 16
<b>Direction of rotation</b>	Bi-directional
<b>Theoretical displacement</b>	0.113 US gal / 100 Rev
<b>Max differential pressure</b>	150 psi (10.3 bar)
<b>Max allowable working pressure</b>	300 psi (20.7 bar)
<b>Max speed</b>	1750 RPM
<b>Max speed metal / metal gears</b>	1450 RPM
<b>Max flow</b>	1.6 gpm (6.1 lpm)
<b>Viscosity</b>	100,000 cPs
<b>Max temp</b>	up to 450°F (232°C)
<b>Min temp</b>	-40°F (-40°C)
<b>Bearing type</b>	Sleeve bearing
<b>Magnetic torque rating @ 68°F (20°C)</b>	Neodymium: 77 in/lb Samarium Cobalt: 75.6 in/lb
<b>Magnetic temp rating</b>	Neodymium: 300°F (149°C) Samarium Cobalt: 450°F (232°C)
<b>Motor frame size</b>	NEMA 56C, 143/5 TC IEC 71, 80 B3/B14
<b>Pump weight</b>	15.0 lbs. (6.8 kg) less motor, approximate
<b>Standards</b>	ATEX, CE

# MATERIALS OF CONSTRUCTION

<b>Base material</b>	316LSS, Alloy C
<b>Liner</b>	Carbon Reinforced PTFE
<b>Bearings</b>	Carbon (Graphite), Silicon carbide (Graphite-impregnated), or PTFE
<b>O-rings</b>	PTFE, Kalrez®
<b>Shafts</b>	316LSS, Alloy C, or Alumina Ceramic
<b>Drive gear</b>	316LSS, Alloy C, PEEK, PTFE
<b>Idler gear</b>	316LSS, Alloy C, PEEK, PTFE
<b>Magnet</b>	Neodymium, Samarium Cobalt

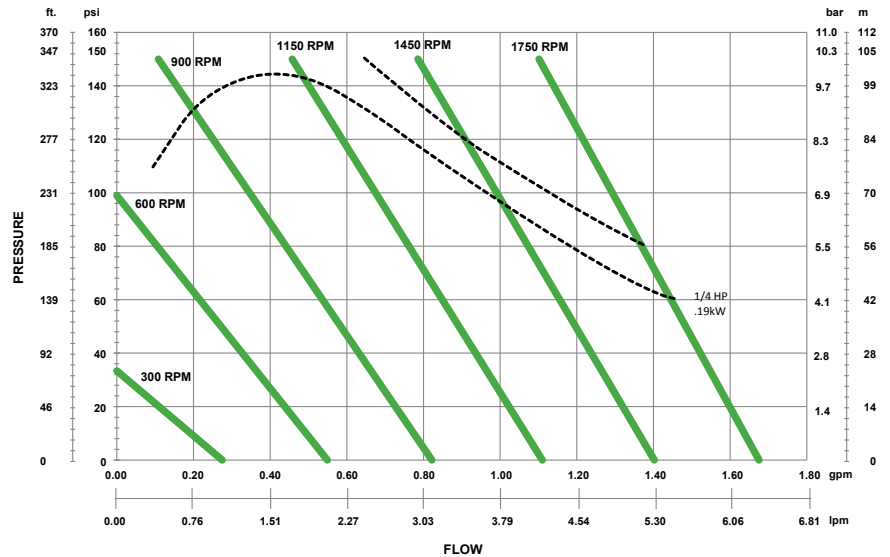
# DIMENSIONS



The dimensions given may differ depending on pump configuration.

# FLOW & PRESSURE ENVELOPE

(1 cPs, 1/2 HP / .55 kW, Specific Gravity 1.0)



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