Magnetic Drive Gear Pump

**Series 10K**

The Series 10K magnetic drive gear pump from Micropump is the result of years of experience developing and manufacturing the most advanced pumping technology. These cavity style gear pumps offer advantages like small size, leak-free performance, and exceptionally easy servicing. For high pressure jobs, choose the Series 10K with high system pressure capabilities to 103 Bar (1500 psi). Available in a wide range of chemically resistant materials and custom configurations, Series 10K pumps have the power to handle your toughest requirements.

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**Small Size**
The smaller package size of the Series 10K delivers performance that is usually found only in much larger pumps.

**Leak-Free**
The magnetic drive and O-ring seals keep the fluid securely inside the pump and potential contaminants out.

**Smooth Pulseless Delivery**
Positive displacement, helical gears provide smooth, accurate fluid delivery that is proportional to motor speed.

**Chemically Resistant**
An extensive range of wetted material options ensure compatibility with a wide range of chemicals.

**Easy to Service**
Series 10K pumps are easy to service using a Micropump service kit and simple hand tools.

**Wide Range of Options**
Product design offers the flexibility to configure the product to your specific needs. Some options include:
- Multiple gear, body, and O-ring materials
- High torque magnets
- NEMA and IEC drive mounts

**Advanced Pump Technology**
Micropump uses the latest engineering tools and manufacturing equipment to produce the most advanced pumping solutions available. Products are developed using state-of-the-art CAD, Finite Element Analysis (FEA), and rapid prototyping tools. Precision CMM and CNC manufacturing equipment ensure the highest level of product quality.

**Proven Reliability**
Over 40 years of experience solving the most difficult pumping problems go into the design and manufacture of every Micropump pump, ensuring the most reliable pumping solution available.

**OEM Configurations**
Series 10K pumps can be customized to meet your individual requirements.

**High System Pressure Capability**
Optional versions of the Series 10K are designed to withstand system pressures up to 103 Bar (1500 psi).
# PERFORMANCE SUMMARY

<table>
<thead>
<tr>
<th><strong>Flow Rate</strong></th>
<th><strong>at 1750 rpm</strong></th>
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</thead>
<tbody>
<tr>
<td>42 L/min</td>
<td>11.1 gpm</td>
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<table>
<thead>
<tr>
<th><strong>Displacement (ml/rev)</strong></th>
<th><strong>Gear Set</strong></th>
</tr>
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<tbody>
<tr>
<td>ml/rev</td>
<td>G35</td>
</tr>
<tr>
<td></td>
<td>24.5</td>
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</table>

<table>
<thead>
<tr>
<th><strong>Maximum Differential Pressure</strong></th>
<th><strong>6.9 Bar</strong></th>
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<tbody>
<tr>
<td></td>
<td>100 psi</td>
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</table>

<table>
<thead>
<tr>
<th><strong>Maximum System Pressure</strong></th>
<th><strong>103 Bar</strong></th>
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<tbody>
<tr>
<td></td>
<td>1500 psi</td>
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<table>
<thead>
<tr>
<th><strong>Temperature Range</strong></th>
<th><strong>-46 to 121° C</strong></th>
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<tbody>
<tr>
<td></td>
<td>-50 to 250° F</td>
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<thead>
<tr>
<th><strong>Viscosity Range</strong></th>
<th><strong>0.2 to 2500 cps</strong></th>
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</thead>
<tbody>
<tr>
<td>Maximum Speed</td>
<td>1750 rpm</td>
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</tbody>
</table>

## PUMP CONSTRUCTION
- Magnetic drive gear pump
- Cavity style
- Three helical, shafted gears
- Sleeve bushings
- O-ring seals

## WETTED MATERIALS
- **Base material**
  - 316 stainless steel
  - Alloy 20
  - Titanium
  - Hastelloy C-276®
  - Hastelloy B-2®
- **Gears**
  - PEEK
  - Teflon®
- **Static seals**
  - Viton®
  - Ethylene propylene
  - Buna N
  - TEV (Teflon encapsulated Viton)
  - Kalrez®

## MAGNETS
- Driven and driving
- Rare earth

## PRODUCT ENHANCEMENTS
- High system pressure
- Carbon bushings
- Hardened shafts
- ANSI flanges

## DIMENSIONS

### NEMA 56C Mount

### IEC 71-814 Mount

Units: mm [in]. Nominal dimensions shown.

## ORDER CODE

### DRIVE
- Base Code
- Gear Set
- Drive Mount
- Options

### BASE CALLS

### SERVICE KIT

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ACTUAL PERFORMANCE MAY VARY

Specifications are subject to change without notice.

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