Series GJR
MAGNETIC DRIVE GEAR PUMP

Series GJR pumps deliver exceptional pumping performance and long life in abrasive fluid applications. Abrasive fluids, such as pigmented paints and inks, often cause significant pump wear, dramatically shortening pump life. Micropump’s Series GJR pumps use advanced materials and design processes to extend pump life.

The Series GJR pumps deliver many of the exceptional pumping features that you’ve come to expect from Series GJ pumps. These compact magnetically driven gear pumps feature a cavity style design for smooth pulseless fluid delivery. The magnetic drive removes the need for direct drive connection to the pump gears, eliminating leak points associated with shaft seals, while providing energy-efficient fluid delivery. Series GJR pumps are ideal for a wide range of abrasive fluid applications.

CHEMICAL AND ABRASIVE RESISTANCE
Series GJR has a long-life in aggressive chemical and abrasive fluid environments.

NO LEAK-PRONE DYNAMIC SEALS
The magnetic drive static PTFE seals keep the fluid securely inside the pump and potential contaminants out.

SMOOTH PULSELESS DELIVERY
Positive displacement, precision gears provide consistent fluid delivery in continuous processes.

SMALL SIZE / HIGH-PERFORMANCE
The miniature size of the Series GJR coupled with the compact EagleDrive creates a high performance package that is easy incorporated into your system design.

CAVITY STYLE PUMPS
Cavity Style pumps are excellent for wide-ranging inlet and outlet operating conditions, and allow for intermittently pumping in reverse.
## PUMP PERFORMANCE

### PERFORMANCE SUMMARY

- **Flow Rate at 5500 RPM**
  - 3.4 L/min (0.89 US gpm)

### Displacement

- **Gear Set**
  - N21: 0.29 mL/rev
  - N23: 0.61 mL/rev
  - US gal/1000 rev: 0.08, 0.17

- **Maximum Rated Differential Pressure**
  - 4.0 Bar (58 psi)

- **Maximum Rated System Pressure**
  - 21 Bar (300 psi)

- **Temperature Range**
  - -46 to 132 °C (-50 to 270 °F)

- **Viscosity Range**
  - 0.5 to 1500 cps

- **Maximum Recommended Speed**
  - 5500 rpm

### PUMP CONSTRUCTION

- Magnetic drive gear pump
- Cavity style
- Spur gears
- PTFE seals

### WETTED MATERIALS

- **Base Material**
  - 316 stainless steel

- **Gears**
  - Nickel Carbide

- **Static Seals**
  - PTFE

- **Magnets**
  - Ferrite
  - Rare earth
  - Electromagnetic

### Flow Rate at 5500 RPM

**Flow Rate at 5500 RPM**

<table>
<thead>
<tr>
<th>Gear Set</th>
<th>N21</th>
<th>N23</th>
</tr>
</thead>
<tbody>
<tr>
<td>mL/rev</td>
<td>0.29</td>
<td>0.61</td>
</tr>
<tr>
<td>US gal/1000 rev</td>
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### Maximum Rated Differential Pressure

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<tr>
<th>Gear Set</th>
<th>4.0 Bar (58 psi)</th>
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### Maximum Rated System Pressure

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<tr>
<th>Gear Set</th>
<th>21 Bar (300 psi)</th>
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</table>

### Temperature Range

<table>
<thead>
<tr>
<th>Lower Limit</th>
<th>Upper Limit</th>
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</thead>
<tbody>
<tr>
<td>-46°C</td>
<td>132°C</td>
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</table>

### Viscosity Range

<table>
<thead>
<tr>
<th>Minimum Viscosity</th>
<th>Maximum Viscosity</th>
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</thead>
<tbody>
<tr>
<td>0.5 cps</td>
<td>1500 cps</td>
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</table>

### Maximum Recommended Speed

<table>
<thead>
<tr>
<th>Gear Set</th>
<th>5500 rpm</th>
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</table>

### PUMP CONSTRUCTION

- Magnetic drive gear pump
- Cavity style
- Spur gears
- PTFE seals

**Dimensions**

- **GJR-N21**
  - Gear Set: N21
  - N23
  - Size: 16.5 mm (0.65 in)
  - Flow Rate: 3.4 L/min (0.89 US gpm)

- **GJR-N23**
  - Gear Set: N21
  - N23
  - Size: 8.3 mm (0.325 in)
  - Flow Rate: 3.4 L/min (0.89 US gpm)

**Base Material**

- 316 stainless steel

**Gears**

- Nickel Carbide

**Static Seals**

- PTFE

**Magnets**

- Ferrite
- Rare earth
- Electromagnetic

**Actual performance may vary. Specifications are subject to change without notice. ©2016 Micropump, Inc., A Unit of IDEX Corporation.**

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