# Series GD

## Magnetic Drive Gear Pump

### **MICROPUMP**

When you need a pump that delivers highperformance while pumping harsh, abrasive fluids, Series GD is an excellent solution. Micropump® Series GD pumps provide precise, pulseless flow for applications like pipeline sampling by utilizing an abrasion-resistant, cavity-style pump chamber and hardened steel gears. As a result, Series GD pumps offer extended life in aggressive environments.

#### Cavity Style Pumps

Cavity style pumps are excellent for wide-ranging inlet and outlet operating conditions, and allow for intermittently pumping in reverse.

#### Small Size

The miniature package size of the Series GD is easily incorporated into the design of many systems.

#### Leak-Free

The magnetic drive and static o-ring seal(s) 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.

#### Chemically Resistant

Series GD has a long-life in aggressive environments.

#### Easy to Service

Series GD pumps are easy to service using a Micropump service kit and simple hand tools.



#### Wide Range of Options and Configurations

Micropump's designs offer the flexibility to customize products to meet your more challenging requirements including:

- Multiple gear, body, and o-ring materials
- Optional high torque magnets
- NEMA and IEC drive mounts
- Hybrid/abrasive resistant materials

#### Innovative Designs

Micropump uses the latest engineering tools and manufacturing equipment to produce the most innovative pumping solutions available. Products are developed using state-of-the-art CAD, Finite Element Analysis (FEA), and rapid prototyping tools to ensure the highest level of product quality and reliability.

#### **Enhanced Efficiency**

As part of the IDEX Health & Science Group, Micropump now offers fully-integrated liquid subassemblies, gas management systems, and precision components. Products include pumps, valves, manifolds, tubing, fittings, degassing/debubbling systems, air compressors, vacuum generators, and HPLC columns. Additional services are custom fluidic engineering and development, contract manufacturing, extrusion, molding, machining, and diffusion bonding.



#### **Performance Summary**

#### Flow Rate at 3,450 rpm

▶ 12,006 mL/min (3.17 gpm)

#### Displacement

Gear Set M35 ▶ mL/rev 3.48

#### Maximum Rated Differential Pressure

▶ 125 psi (8.7 bar)

#### Maximum Rated System Pressure

1,500 psi (103 bar)

#### Temperature Range

-46-121 °C (-51-250 °F)

#### Viscosity Range

▶ 0.5–1,500 cps

#### Maximum Speed

▶ 4,000 rpm

#### **Pump Construction**

- Magnetic drive gear pump
- Cavity style
- ► Three helical gears
- Stationary shafts
- O-ring seal

#### Wetted materials

#### Base material

▶ 316 stainless steel

#### Gears

- ▶ PEEK™
- PPS
- Hardened steel

#### Static seals

- Viton®
- ▶ TEV

#### Magnets

#### Driven and driving

- Ferrite
- Rare earth

#### **Product Enhancements**

Hybrid/abrasive resistant materials

ACTUAL PERFORMANCE MAY VARY.

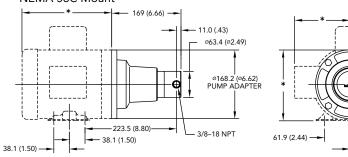
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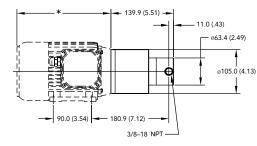
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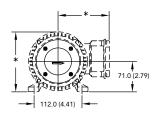
#### **Dimensions**

#### NEMA 56C Mount



#### IEC 71-B14-mount





88.9 (3.50)

**—** 61.9 (2.44)

Units: mm (in.) Nominal dimensions shown.

