

# Series GA/GAH

## Magnetic Drive Gear Pump

**MICROPUMP®**

When you need a low-flow pump that delivers high-performance in a small package, Series GA is an excellent solution. Series GA pumps provide precise, pulseless flow, and feature the patented Micropump® suction shoe design that allows the pumps to self-compensate for wear ensuring near zero slip and a long pump life. Series GAH extends Series GA to high-system pressure applications making Series GA pumps ideal for a wide-range of low-flow applications.

### Suction Shoe Style Pumps

Suction shoe style pumps self-compensate for wear, are excellent for continuous duty processes, and offer improved efficiencies when pumping at higher pressures.

### Small Size

The miniature package size of the Series GA/GAH 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 GA/GAH has a long life in aggressive environments.

### Easy to Service

Series GA/GAH pumps are easy to service using a Micropump® service kit and simple hand tools.

### High-System Pressure Capability

Series GAH pumps are designed to withstand system pressures up to 5,000 psi (345 bar).



### 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, IEC, I-Drive®, and Micropump drive mounts

### 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.



Precision Engineered Fluidics™

## Performance Summary

### Flow Rate at 6,000 rpm

- ▶ 552 mL/min (0.146 gpm)

### Displacement

- ▶ Gear Set X21 V21 T23
- ▶ mL/rev 0.017 0.042 0.092

### Maximum Rated Differential Pressure (with Hex Drive)

- ▶ 75 psi (5.2 bar)

### Maximum Rated System Pressure

- ▶ Standard Series GA 300 psi (21 bar)
- ▶ High-Pressure Series GAH 5,000 psi (345 bar)

### Temperature Range

- ▶ -46–177 °C (-50–350 °F)

### Viscosity Range

- ▶ 0.2–1,500 cps

### Maximum Speed

- ▶ 8,000 rpm

## Pump Construction

- ▶ Magnetic drive gear pump
- ▶ Suction shoe style
- ▶ Spur gears
- ▶ Stationary shafts
- ▶ PTFE bevel or o-ring seal

## Wetted Materials

### Base material

- ▶ 316 stainless steel

### Gears

- ▶ Carbon Graphite
- ▶ PEEK™
- ▶ PPS

### Static Seals

- ▶ Viton®
- ▶ PTFE

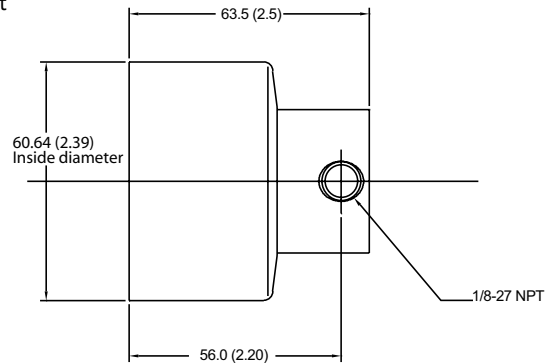
## Magnets

### Driven and driving

- ▶ Ferrite

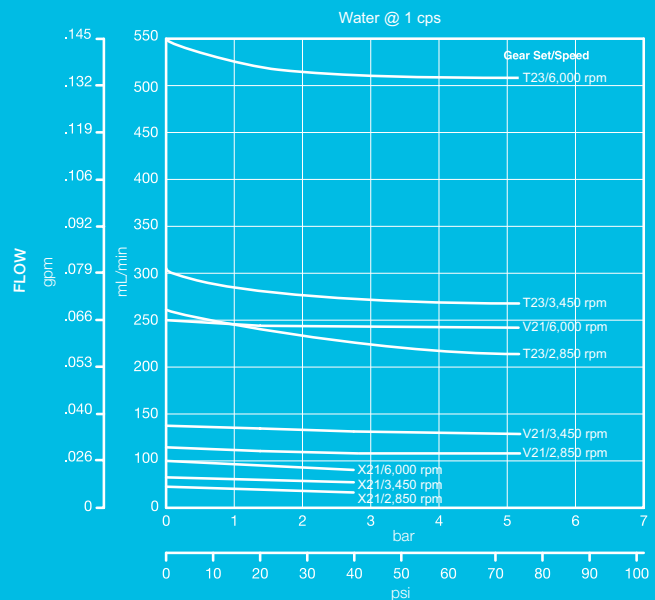
## Dimensions

### A-Mount



Units: mm (in.) Nominal dimensions shown.

## Pump Performance



DIFFERENTIAL PRESSURE  
Higher differential pressures available - consult factory  
Maximum differential pressure 7 bar (100 psi) with I-Drive option only

ACTUAL PERFORMANCE MAY VARY.

Specifications are subject to change without notice.

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