

# GA SERIES SUCTION SHOE TECHNOLOGY

Micropump's GA Series are the smallest, most compact size and offers the lowest displacement of the suction shoe family of pumps.

The GA Series is part of the patented suction shoe gear pump design offered exclusively by Micropump. The suction shoe technology offers best in class performance with industry-leading volumetric efficiency for fluid movement.

#### **SMALL SIZE**

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

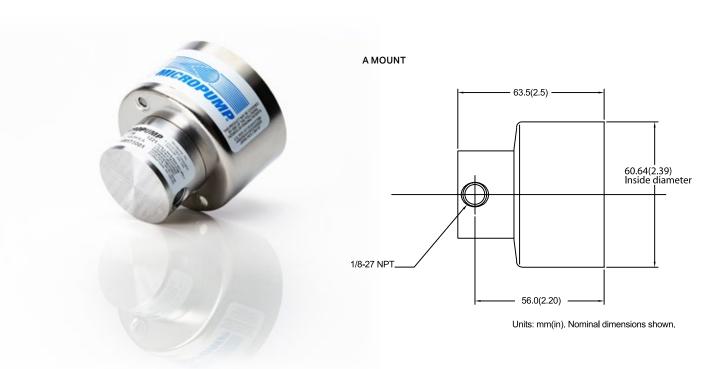
#### RELIABILITY

GA Series pumps self-compensate for wear, ensuring near zero slip and a longer pump life. The suction shoe technology delivers even longer reliability with higher differential pressures when compared to cavity style designs.

#### WIDE TEMPERATURE RANGE

Micropump's GA Series features the same hydraulic performance from the lowest temperature, even freezing, to the highest temperature allowed by the component materials.

## MAGNETIC DRIVE GEAR PUMP

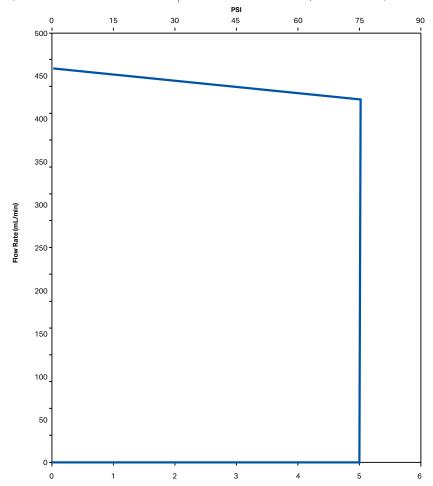




\*Units: mm(in). Nominal dimensions shown

# PUMP FLOW RANGE

# (Based on Constant Speed Curves at 4,000 RPM)



# MAGNETIC GEAR PUMP FEATURES

# SUCTION SHOE STYLE PUMPS

The suction shoe allows for consistent performance across a wide operating temperature range. The suction shoe pump, unlike any other gear pump on the market, self adjusts on the job for reliable, pulseless flow, and features easier maintenance with less downtime than standard pumps.

#### SMOOTH PULSELESS DELIVERY

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

#### **EASY TO SERVICE**

Our pumps are easy to service using a Micropump® service kit and simple hand tools.

#### LEAK FREE DESIGN

The magnetic drive and static o-ring seal(s) keep the fluid securely inside the pump and potential contaminants out.

#### CHEMICALLY RESISTANT

Chemically inert materials for harsh environments.

#### PERFORMANCE SUMMARY

#### FLOW RATE AT 5500 RPM

506 mL/min (0.134 US gpm)

#### DISPLACEMENT

Gear Set
 ML/rev
 US gal/1000 rev
 V21
 V23
 0.042
 0.092
 US gal/1000 rev
 0.045
 0.01
 0.02

#### MAXIMUM RATED DIFFERENTIAL PRESSURE

5.2 Bar (75 psi)

#### MAXIMUM RATED SYSTEM PRESSURE

21 Bar (300 psi)

#### TEMPERATURE RANGE

-46 to 177 °C (-50 to 350 °F)

#### VISCOSITY RANGE

• 0.5 to 1500 cps

#### MAXIMUM RECOMMENDED SPEED

■ 5500 rpm

#### **PUMP CONSTRUCTION**

- Suction shoe style
- Side Port
- Spur gears
- PTFE Seal

### WETTED MATERIALS

#### **BASE MATERIAL**

316 stainless steel

■ Titanium\*

Alloy 20\*

■ Hastalloy C-276\*

#### GEARS

Carbon Graphite

■ PEEK-Pin

■ PPS

PPS-Pin

PEEK

#### STATIC SEALS

PTFE

Viton

■ EP

Kalrez

#### **MAGNETS**

#### DRIVEN AND DRIVING

- Ferrite
- Rare Earth

#### PRODUCT ENHANCEMENTS

■ 1/4 - 18 NPT Side Ports

\*Denotes customization or materials that may require minimum order quantities.