



SERIES GA EAGLEDRIVE™

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.

MAGNETIC DRIVE GEAR PUMP

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.

ELECTROMAGNETIC DRIVE FEATURES

EASY DESIGN INTEGRATION

Supports wide range of power supply voltages (10-38V).
Error signals for easy error detection and diagnosis.

HIGH PERFORMANCE

Electromagnetic drive, with low inertia and high torque, for fast response times
Automotive grade electrical components for high temperature operation (up to 120°C) and durability.

LONG LIFE

Electromagnetic drive means fewer moving parts.

GA SERIES EAGLEDRIVE™

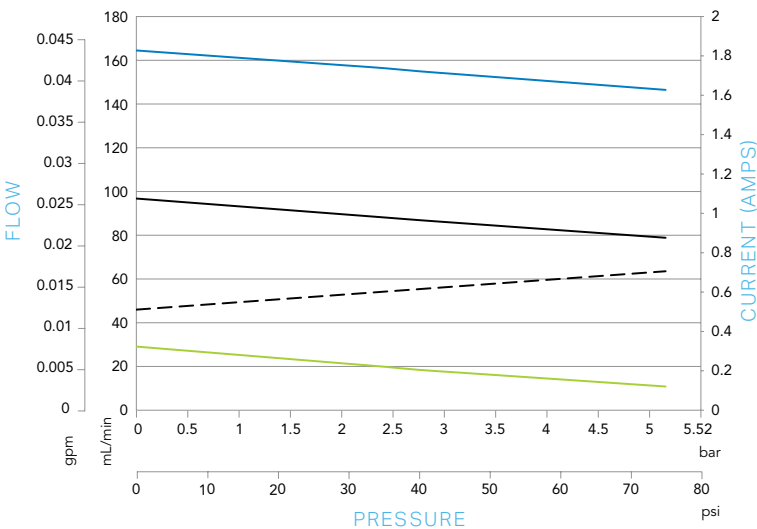
GA-X21 DEMSE & GA-V21 DEMSE

PERFORMANCE

Power Supply Voltage = 24 VDC
Water @ 1cps

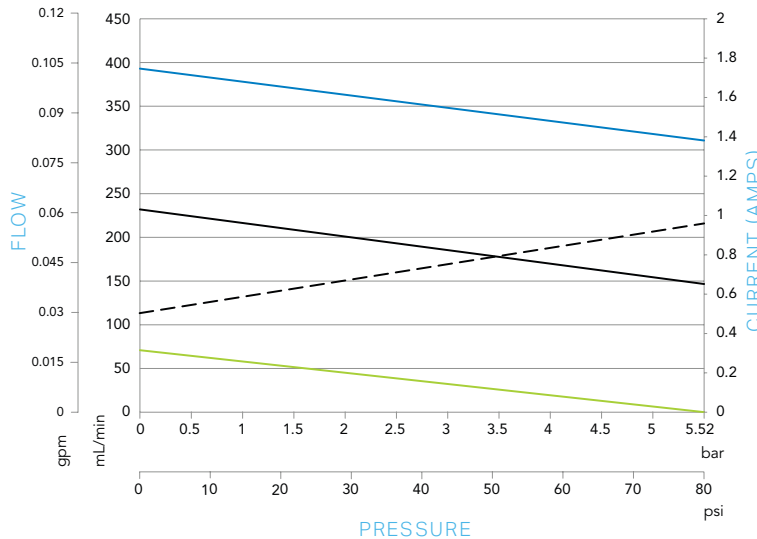
Speed control = 5V Speed control = 1V
Speed control = 3V Power Supply Current

GA-X21-DEMSE Performance

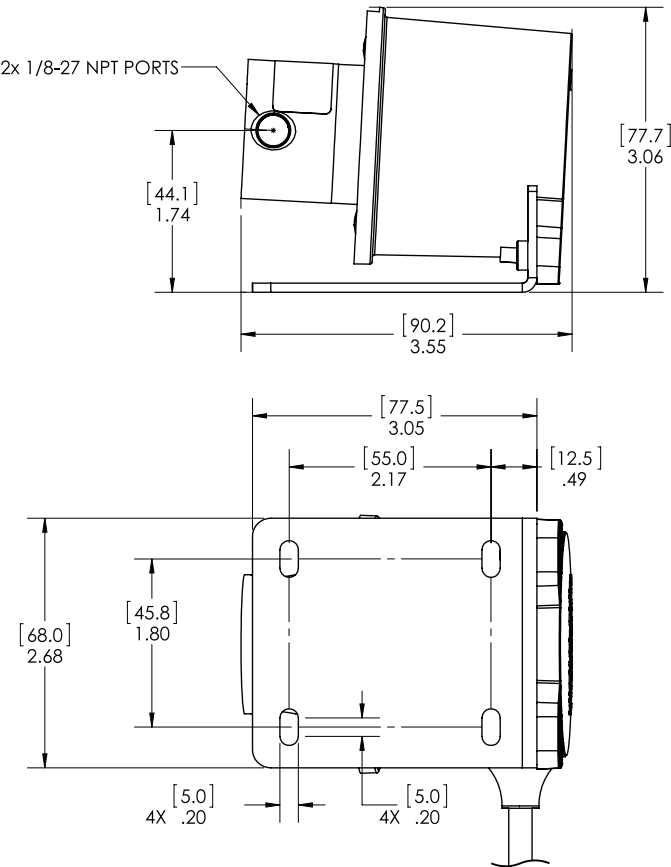


FLOW RATE NOMINAL: 86 mL/min @ 2.8 Bar, 3V
FLOW RATE MAX: 164 mL/min @ 0 Bar, 5V
DISPLACEMENT: 0.017 mL/rev

GA-V21-DEMSE Performance



FLOW RATE NOMINAL: 175 mL/min @ 2.8 Bar, 3V
FLOW RATE MAX: 395 mL/min @ 0 Bar, 5V
DISPLACEMENT: 0.042 mL/rev



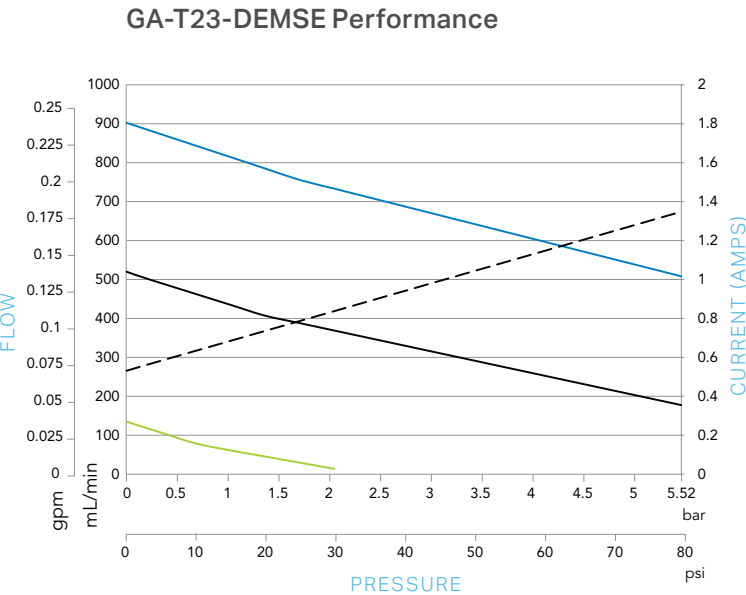
GA SERIES EAGLEDRIVE™

GA-T23 DEMSE

PERFORMANCE

Power Supply Voltage = 24 VDC
Water @ 1cps

Speed control = 5V Speed control = 1V
Speed control = 3V Power Supply Current



FLOW RATE NOMINAL: 330 mL/min @ 2.8 Bar, 3V
FLOW RATE MAX: 900 mL/min @ 0 Bar, 5V
DISPLACEMENT: 0.092 mL/rev

PERFORMANCE SUMMARY

DISPLACEMENT			
■ Gear Set	X21	V21	T23
■ mL/rev	0.017	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 DRIVE AMPS
■ 2.0 Amps

PUMP CONSTRUCTION

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

WETTED MATERIALS

- BASE MATERIAL**
- 316 stainless steel
 - Alloy 20*
 - Titanium*
 - Hastalloy C-276*

- GEARS**
- Carbon Graphite
 - PPS
 - PEEK
 - PEEK-Pin
 - PPS-Pin

- STATIC SEALS**
- TEV
 - EP
 - Viton
 - Kalrez*

MAGNETS

- DRIVEN**
- Ferrite

PRODUCT ENHANCEMENTS

- 1/4 - 18 NPT Side Ports