



GAF SERIES EAGLEDRIVE™

When you need a high-differential pressure, low-flow pump that delivers high performance in a small package, GAF Series is an excellent option.

GAF Series gear pumps provide precise, pulseless flow, and features Micropump's suction shoe design.

This pump, standard with an electromagnetic EagleDrive™, provides a highly efficient, compact pumping package that easily integrates into your design.

MAGNETIC DRIVE GEAR PUMP

SMALL SIZE

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

RELIABILITY

GAF 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 GAF 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.

GAF SERIES EAGLEDRIVE™

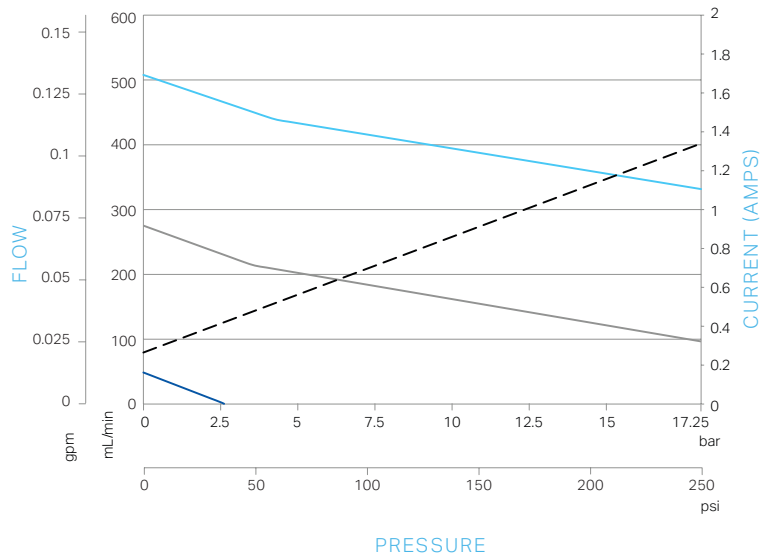
GAF-T23-DEMSE

PERFORMANCE

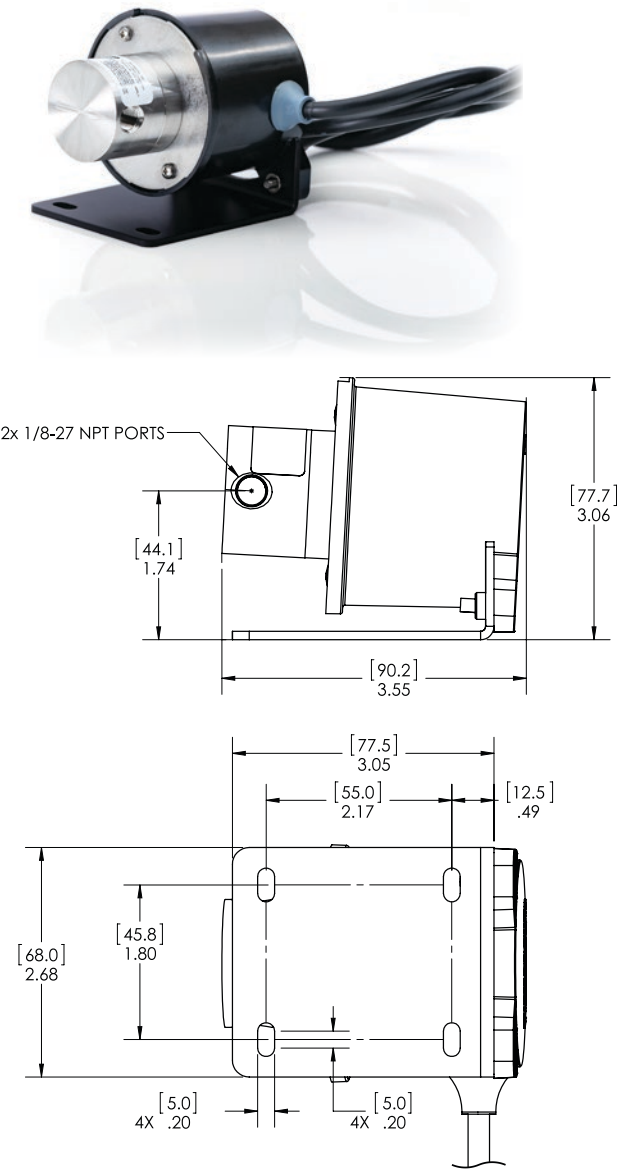
Power Supply Voltage = 24 VDC
Water @ 1cps

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

GAF-T23-DEMSE Performance



FLOW RATE NOMINAL: 190 mL/min (@ 8.6 Bar, 3V)
FLOW RATE MAX: 506 mL/min (@ 0 Bar, 5V)
DISPLACEMENT: 0.092 mL/rev (0.02 gal/1000 rev)



DRIVE SPECIFICATIONS FOR EAGLEDRIVE™ DEMSE

SPEED

- 1000 to 8000 rpm (36V)
- 500 to 5500 rpm (24V)
- 250 to 2660 rpm (12V)

SPEED (AT RATED TORQUE)

- 3750 rpm @ 10 oz-in (24V)

CURRENT (AT RATED TORQUE)

- 2A @ 10 oz-in (24V)

POWER SUPPLY

- 10V to 38V DC

TEMPERATURE RANGE

- -40 to 120 °C (-40 to 248 °F)

ACTUAL PERFORMANCE MAY VARY. Specifications are subject to change without notice.

PERFORMANCE SUMMARY

MAXIMUM RATED DIFFERENTIAL PRESSURE

- 17.2 Bar | 250 psi

MAXIMUM RATED SYSTEM PRESSURE

- 21 Bar | 300 psi

FLOW RATE AT 5500 RPM

- 506 mL/min (0.134 US gpm)

TEMPERATURE RANGE

- -40 to 120°C (-40 to 248°F)

VISCOSITY RANGE

- 0.5 to 1500 cps

MAXIMUM SPEED

- 8000 rpm

PUMP CONSTRUCTION

- Magnetic drive gear pump
- Stationary shafts
- Suction shoe style
- O-ring seal
- Spur gears

WETTED MATERIALS

BASE MATERIAL

- 316 stainless steel

GEARS

- PEEK

STATIC SEALS

- EPDM

MAGNETS

DRIVEN

- Rare earth

DRIVING

- Electromagnet

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