

Series GJ

MAGNETIC DRIVE GEAR PUMP
EAGLEDRIVE™



Series GJ pumps deliver exceptional pumping performance for any high-precision application. These compact magnetically driven gear pumps feature a cavity style design for smooth pulseless fluid delivery. The magnetic drive eliminates leak points associated with dynamic shaft seals, while providing energy-efficient fluid delivery. This pump, standard with an electromagnetic EagleDrive™, provides a highly efficient, compact pumping package that easily integrates into your system design.

PERFORMANCE SUMMARY

MAX RATED DIFFERENTIAL PRESSURE
5.6 Bar (80 psi)

MAX FLOW RATE (5500 RPM)
6.8 L/min (1.79 US gpm)

MAX RATED SYSTEM PRESSURE
21 Bar (300 psi)

TEMPERATURE RANGE
-40 to 77°C (-40 to 171°F)

VISCOSITY RANGE
0.5 to 1500 cps

HIGH PERFORMANCE OPERATION

- ▶ Positive displacement, precision gears for smooth pulseless fluid delivery
- ▶ Electromagnetic drive, with low inertia and high torque, for fast response times
- ▶ Cavity Style pumps are excellent for wide-ranging inlet and outlet operating conditions, and allow for intermittent reverse operation

FLUID PATH INTEGRITY

- ▶ The magnetic drive eliminates dynamic shaft seals, keeping the fluid in and contaminants out

LONG LIFE

- ▶ Precisely designed and manufactured gears stand the test of rugged duty
- ▶ Chemically resistant construction materials stand up to chemically aggressive fluids
- ▶ Electromagnetic drive means fewer moving parts
- ▶ Series GJ pumps are easy to service using a Micropump service kit and simple hand tools

EASY DESIGN INTEGRATION

- ▶ Series GJ pump and EagleDrive provides a compact package, enabling easy integration into system designs
- ▶ Supports wide range of power supply voltages (10-38V)
- ▶ Error signals for easy error detection and diagnosis

Series GJ

MAGNETIC DRIVE GEAR PUMP N21 & N23

EAGLEDRIVE™

PUMP PERFORMANCE

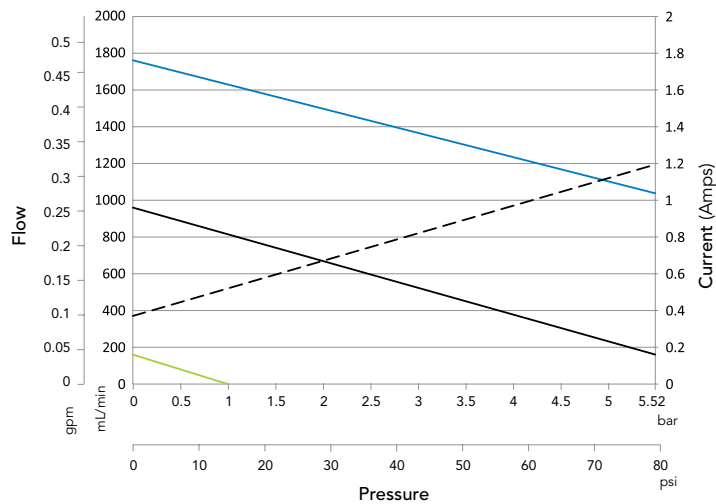
Power Supply Voltage = 24 VDC

Water @ 1cps

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

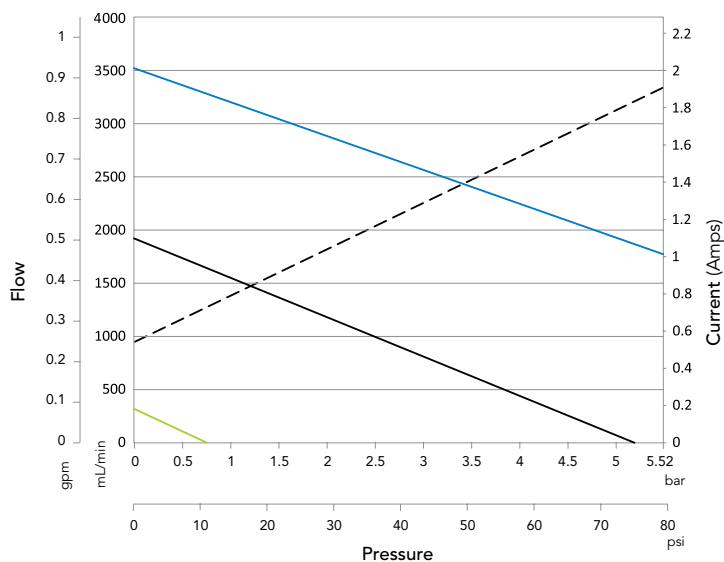


GJ-N21-DEMSE Performance



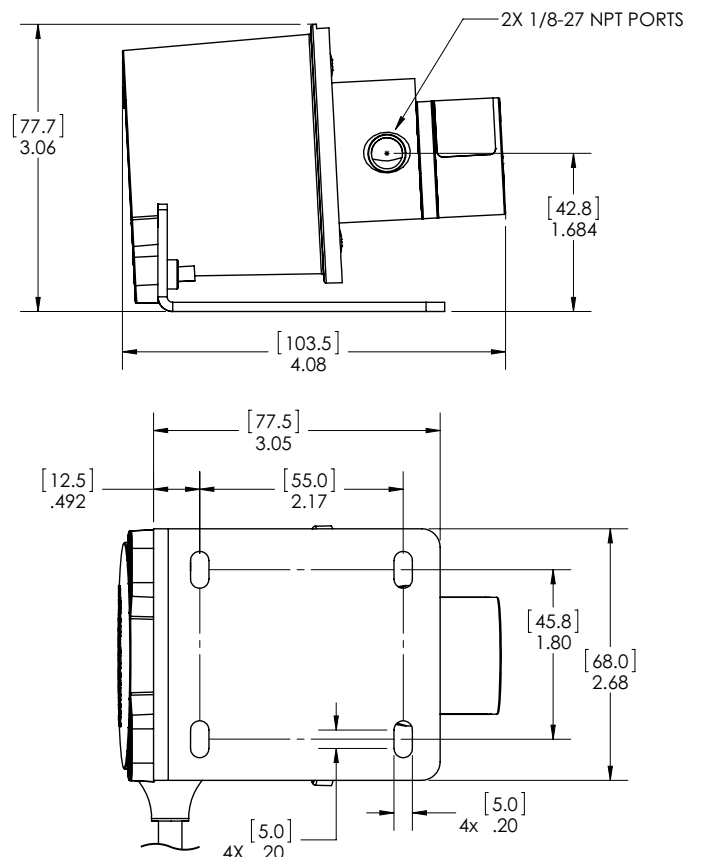
FLOW RATE NOMINAL: 600 mL/min (@ 2.8 Bar, 3V)
FLOW RATE MAX: 1760 mL/min (@ 0 Bar, 5V)
DISPLACEMENT: 0.32 mL/rev

GJ-N23-DEMSE Performance



FLOW RATE NOMINAL: 900 mL/min (@ 2.8 Bar, 3V)
FLOW RATE MAX: 3520 mL/min (@ 0 Bar, 5V)
DISPLACEMENT: 0.64 mL/rev

DIMENSIONS



*Units: mm(in). Nominal dimensions shown

Series GJ

MAGNETIC DRIVE GEAR PUMP N25 & N27

EAGLEDRIIVE™

PUMP PERFORMANCE

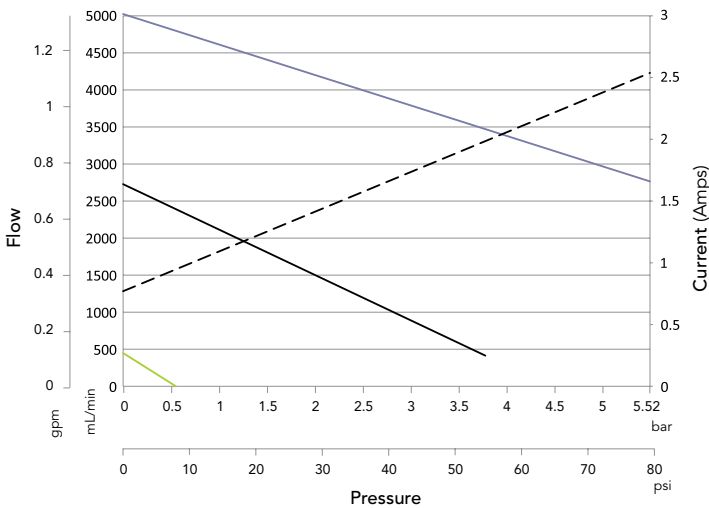
Power Supply Voltage = 24 VDC

Water @ 1cps

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

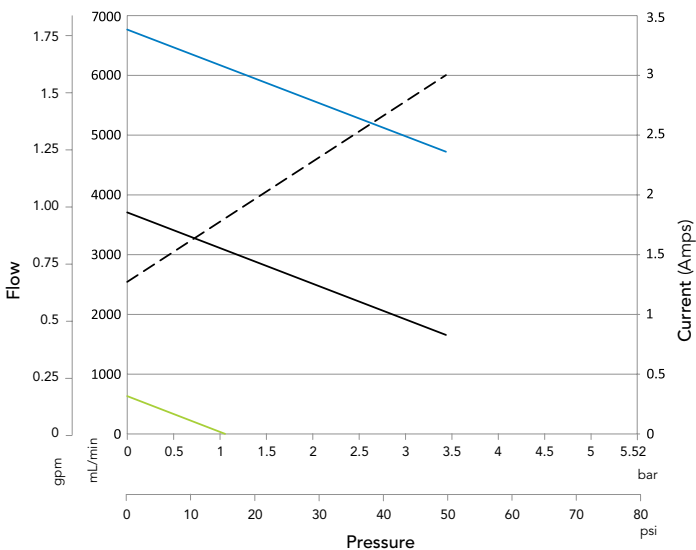


GJ-N25-DEELE Performance



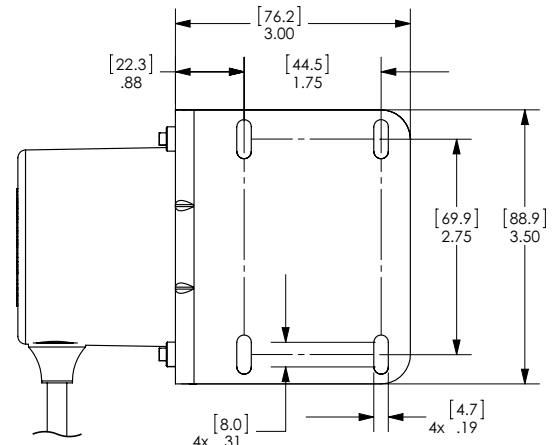
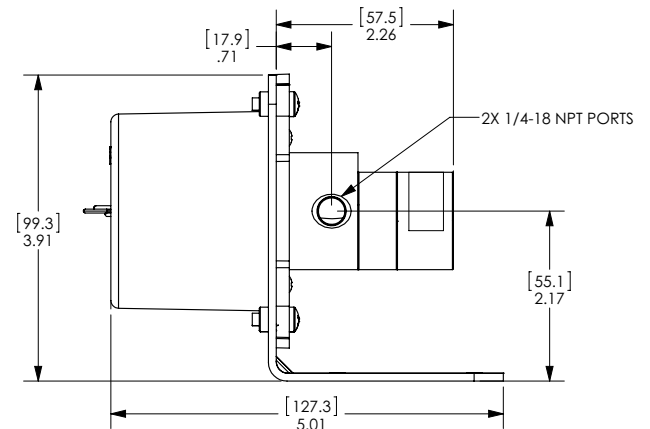
FLOW RATE NOMINAL: 1000 mL/min (@ 2.8 Bar, 3V)
FLOW RATE MAX: 5005 mL/min (@ 0 Bar, 5V)
DISPLACEMENT: 0.91 mL/rev

GJ-N27-DEELE Performance



FLOW RATE NOMINAL: 2700 mL/min (@ 1.7 Bar, 3V)
FLOW RATE MAX: 6765 mL/min (@ 0 Bar, 5V)
DISPLACEMENT: 1.23 mL/rev

DIMENSIONS



*Units: mm(in). Nominal dimensions shown

DRIVE SPECIFICATIONS - EAGLEDRIIVE™

SPEED

- ▶ 1000 to 8000 rpm (36V)
- ▶ 500 to 5500 rpm (24V)
- ▶ 250 to 2650 rpm (12V)

SPEED (AT RATED TORQUE)

- ▶ 3750 rpm @10 oz-in (24V) (DEMSE)
- ▶ 3750 rpm @20 oz-in (24V) (DEELE)

CURRENT AT RATED TORQUE

- ▶ 2A @10 oz-in (24V) (DEMSE)
- ▶ 2.9A @20 oz-in (24V) (DEELE)

POWER SUPPLY

- ▶ 10V to 38V DC

TEMPERATURE RANGE

- ▶ -40 to 120°C (-40 to 248°F)

Note: Series GJ come standard with an EagleDrive™ but mounting brackets are available for use with other drives.

PUMP CONSTRUCTION

- ▶ Magnetic drive gear pump
- ▶ Cavity style
- ▶ Two helical, shafted gears
- ▶ Sleeve bushings
- ▶ PTFE bevel or o-ring seal

WETTED MATERIALS

BASE MATERIAL

- ▶ 316 stainless steel

GEARS

- ▶ PEEK
- ▶ PPS
- ▶ PTFE

STATIC SEALS

- ▶ PTFE

MAGNETS

DRIVEN

- ▶ Rare earth

DRIVING

- ▶ Electromagnet

MICROPUMP®

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