

Magnetic Drive Gear Pump

SERIES 180

 **Series 180** When you need a low flow

pump that delivers high performance, Series 180 pumps have it all, providing precise and pulseless flows from as low as 1 ml/min. Featuring Micropump's patented suction shoe design, Series 180 pumps self-compensate for wear, ensuring near zero slip and a longer pump life, and are available in a wide range of materials and configurations. Don't trade low flow for high performance. Get it all with the Series 180 from Micropump.



Small Size

The miniature package size of the Series 180 delivers performance that is usually found only in much larger pumps.

Leak-Free

The magnetic drive and a single seal keep the fluid securely inside the pump and potential contaminants out.

Smooth Pulseless Delivery

Positive displacement, precision gears provide smooth, accurate fluid delivery that is proportional to motor speed.

Chemically Resistant

An extensive range of wetted material options ensure compatibility with a wide range of chemicals.

Easy to Service

Series 180 pumps are easy to service using a Micropump service kit and simple hand tools.

Wide Range of Options

Product design offers the flexibility to configure the product to your specific needs. Some options include:

- Four standard gear sizes
- Multiple gear, body, and O-ring materials
- Optional high torque magnets
- NEMA, IEC, and Micropump drive mounts

Advanced Pump Technology

Micropump uses the latest engineering tools and manufacturing equipment to produce the most advanced pumping solutions available. Products are developed using state-of-the-art CAD, Finite Element Analysis (FEA), and rapid prototyping tools. Precision CMM and CNC manufacturing equipment ensure the highest level of product quality.

Proven Reliability

Over 40 years of experience solving the most difficult pumping problems go into the design and manufacture of every Micropump pump, ensuring the most reliable pumping solution available.

OEM Configurations

Series 180 pumps can be customized to meet your individual requirements.

High System Pressure Capability

Optional versions of the Series 180 are designed to withstand system pressures up to 345 Bar (5000 psi).



SERIES 180

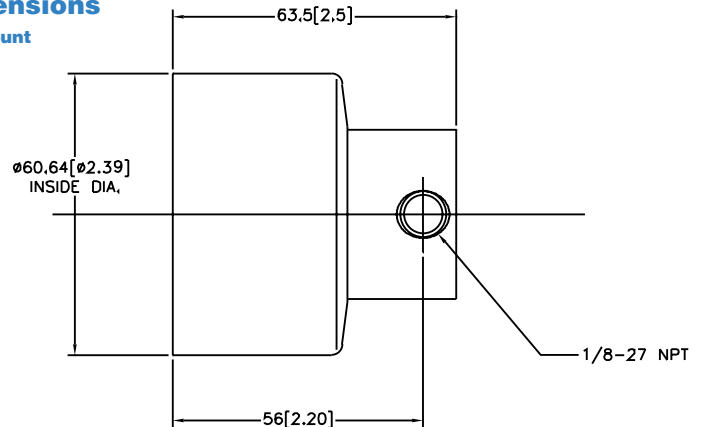
Magnetic Drive Gear Pump

Performance Summary

| | |
|--------------------------------------|----------------------------------|
| Flow Rate | |
| at 3450 rpm | |
| 0.32 L/min | 0.09 gpm |
| Displacement | |
| Gear Set | X21 V21 V23 T23 |
| ml/rev | 0.017 0.042 0.084 0.092 |
| Maximum Differential Pressure | |
| 5.2 Bar | 75 psi |
| Maximum System Pressure | |
| 21 Bar | 300 psi |
| Temperature Range | |
| -46 to 177° C | -50 to 350° F |
| Viscosity Range | |
| 0.2 to 1500 cps | Maximum Speed |
| | 8000 rpm |

Dimensions

"A" Mount



Units: mm[in]. Nominal dimensions shown.

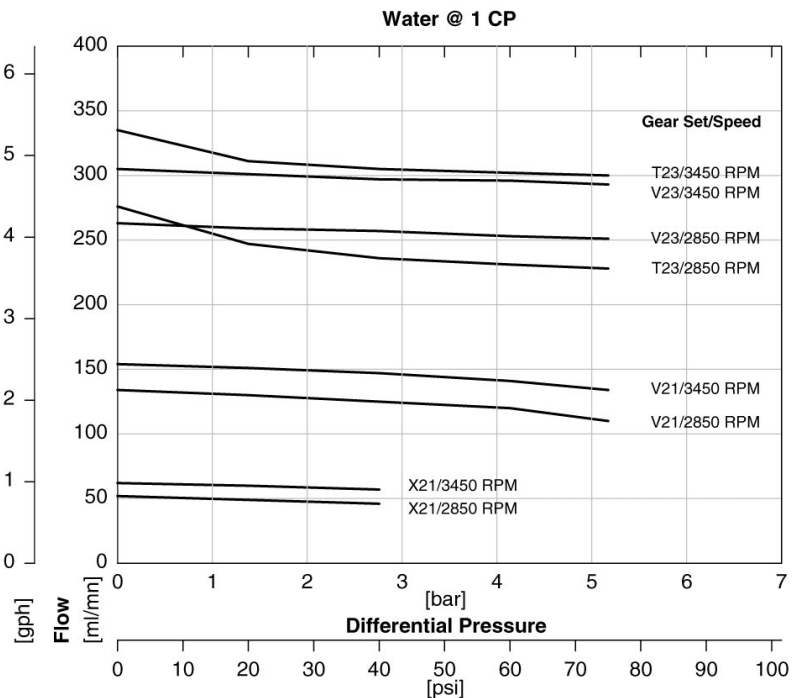
Pump Construction

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

Wetted Materials

- Base material
 - 316 stainless steel
 - Alloy 20
 - Titanium
 - Hastelloy C-276®
 - Hastelloy B-2®
- Gears
 - Carbon graphite
 - PEEK
 - Ryton® (PPS)
- Static seals
 - Teflon
 - Viton®
 - Ethylene propylene
 - Buna N
 - Kalrez®

Pump Performance



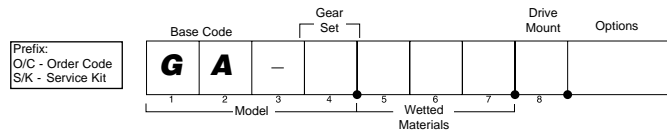
Magnets

- Driven and driving
 - Ferrite
 - Rare earth

Product Enhancements

- High system pressure to 345 Bar (5000 psi)
- Tri-clamp fittings

Order Code



ACTUAL PERFORMANCE MAY VARY

Specifications are subject to change without notice.

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