

The Pump People

Gear Pumps are designed primarily for metering and transfer applications. Their modular design allows a wide variation of flow ranges with a standard parts set. Gear pumps are self-priming and are “constant flow” pumps when RPM and differential pressure are constant. The materials of construction for bodies, gears, and seals provide a wide range of fluid compatibility.

Features:

- Long life
- High pressure
- Reversible
- Self-priming
- Pump assemblies made with PPS Polymers
- Compact and durable
- Excellent chemical compatibility
- Positive displacement



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Gear Pumps Overview

Pump Specifications:

Flow Rates: Range to 2000 ml/min

Max Pressure: 30 psi

Max. Fluid Temperature: Range to 180°F (82°C)

Motors: 12VDC, 24VDC, nominal, reversible, brush.

Wetted Materials: *Contact GRI for questions regarding chemical compatibility.*

- **Body** - PPS Polymer (Ryton®)
- **Seal** - Nitrile
- **Shafts** - 630 Stainless Steel
- **Hose Connectors** - Nylon
- **Gears** - PPS Polymer (Ryton®)
- **O-Rings (Elastomers)** - Nitrile

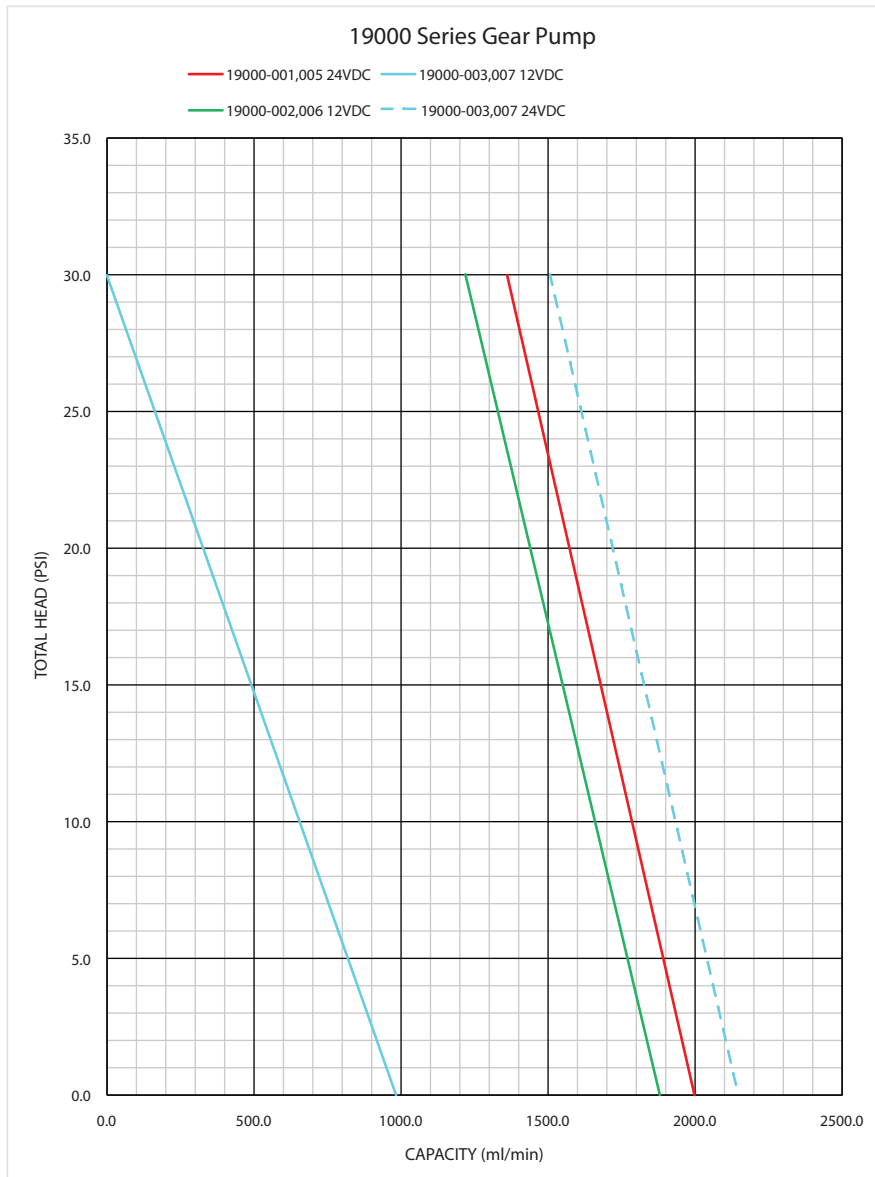
Selection Procedure: Determine the flow and discharge head requirements for your system. The performance curves on page 5 provide the flow rates for each gear pump model. Please consult GRI if the performance curve characteristics of a pump model do not meet the exact requirements of your application.

OEM Options: GRI specializes in the design and manufacturing of customized pumps for the OEM market. Other gear pumps are available with different flows and pressures. Please contact us to discuss custom OEM options.

Mesh Size Recommendation: A minimum 80 mesh screen is generally recommended for filtering such things as shavings, packaging materials, etc. in systems that are generally free of particulate contamination. For systems where sand, silt or other particle contamination is expected, a 400 mesh minimum screen is recommended.

To prevent pump starving and cavitation, a sufficient strainer area should be provided. The fluid flow rate and viscosity determine how much strainer area is needed. System design should always include testing with the inlet strainer blocked and with maximum fluid viscosity.

Model Number	Motor Voltage	Motor Type	Port Positions	Connection Size (inches)	Approx. Wt.	Max. Flow mL/min
19000-001	24 VDC	Brush	Front	3/16	8 oz.	2000
19000-002	12 VDC	Brush	Front	3/16	8 oz.	1875
19000-003	12/24 VDC	Brush	Front	3/16	8 oz.	975/2125
19000-005	24 VDC	Brush	Side	3/16	8 oz.	2000
19000-006	12 VDC	Brush	Side	3/16	8 oz.	1875
19000-007	12/24 VDC	Brush	Side	3/16	8 oz.	975/2125



Typical Dimensions Gear Pumps

