

GR Series

Between Bearing, External Herringbone Gear Pump





Smooth, Efficient Handling of Viscous Liquids

GR Series between bearing, herringbone gear pumps have long been workhorses within a multitude of industrial markets due to their dependability, efficiency and low total life cycle cost. GR Series pumps provide high-efficiency, pulse-free pumping, even under the most challenging conditions. They are designed to handle viscous fluids across a broad spectrum of flows and pressures.

GR Series pumps are available in two basic gear widths and with multiple options. With a modular design, GR Series pumps can be customized to satisfy a wide range of applications.

Applications

- · Oil circulation
- · Process industries
- 0EM
- · Filtration equipment
- · Fire foam systems
- Petrochemical blending and transfer
- Food and beverage processing
- · Asphalt and tars
- Grease

Features and Benefits

Two-Piece Doweled Construction on each side of the body ensures accurate alignment and facilitates maintenance by allowing faster access to pump internals without disturbing piping

Full Hydraulic Balance due to herringbone gears with dual stuffing boxes eliminates the need for specialized balancing devices or thrust bearings

Between Bearing Gear Design minimizes shaft deflection and reduces bearing loads. High-pressure and high-speed capabilities are improved, extending pump life, improving reliability and lowering total life cycle costs

Convertible Stuffing Box allows for greater flexibility in the use of packing or mechanical seals

Large, Unobstructed Suction and Discharge passages keep entrance losses and turbulence to a minimum

High-Capacity Double Row Roller Bearings are standard for long life

Carbon Sleeve Bushings may be used when handling liquids with poor lubricity or low viscosities. Also available in antimony impregnated carbon for high-temperature applications

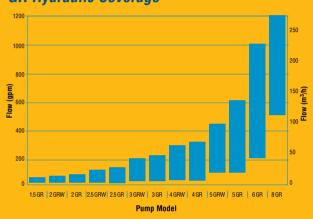
Shafts are fine-grain, hot rolled medium carbon steel and are generously sized to minimize deflection



Operating Parameters

- Flows to 275 m³/h (1200 gpm)
- Pressures to 35 bar (500 psi)
- Temperatures to 350°C (650°F)
- Viscosities to 33 000 cps (1 million ssu)
- Speeds to 1800 rpm
- Standard sizes from 40 mm to 200 mm (1.5 in to 8 in)

GR Hydraulic Coverage*



* Refer to the above chart for quick selection of the GR pump model corresponding to the desired flow rate. The ranges shown are based on typical viscosities and speeds and assume zero differential pressure. The chart's purpose is to direct the user to the appropriate performance curve, not to be a substitute for it.

Materials of Construction

Component	Cast Iron Model	Cast Steel Model
Body, Stuffing Box, Bearing Cover, Gland, Sideplates	ASTM A278, Class 35 Cast Iron (Typical)	ASTM A216, Cast Steel Grade WCB
Gears	Cast Iron	Cast Iron
Shaft	ASTM A576, Class 1040 Carbon Steel	
Packing	Graphited Filament Yarn	

Available Options

- · Inboard bearing with mechanical seal for V-belt drive
- · Jacketed pump body
- Integral safety relief valve (up to 3GR size)
- Mechanical seals (various materials available)
- · Jacketed stuffing box
- · Dual stuffing boxes with packing or mechanical seals
- INSUROCK® low-friction wearplates

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