

Runhe Hydraulic P50 Gear Pump: Empowering Industry with Robust Power

As a core power component in modern industrial hydraulic systems, the performance and reliability of gear pumps directly impact the operational efficiency and service life of entire equipment. Leveraging years of technical expertise and market experience, Runhe Hydraulic Technology Co., Ltd. is committed to delivering high-performance hydraulic solutions. Among its offerings, the [P50 gear pump](#) stands as a mature product showcasing Runhe Hydraulic's expertise in design and manufacturing, delivering stable and efficient hydraulic power support for diverse industrial equipment.

Since its inception, Runhe Hydraulic Technology Co., Ltd. has focused on technological R&D and product innovation within the hydraulic transmission field. The company maintains a comprehensive production system and professional R&D team, equipped with advanced precision machining equipment and testing instruments. A rigorous quality management system is implemented from raw material selection to finished product shipment. Leveraging deep expertise in hydraulic technology and precise market insight, Runhe Hydraulic's products are widely adopted across multiple industries, earning customer trust and recognition.

The P50 gear pump features an external gear design and a high-strength cast iron pump body, ensuring structural stability and durability. Its straight-tooth gears and standard tooth profile design facilitate smooth flow output with minimal pulsation. This classic and reliable structural design enables the [P50 gear pump](#) to adapt to diverse complex working environments, delivering outstanding performance particularly in hydraulic systems of construction machinery such as dump trucks.

In terms of performance, the P50 gear pump offers a displacement range from 20.9 ml/rev to 104.5 ml/rev, meeting the differentiated flow requirements of various equipment. It operates stably at rated pressures up to 207 bar and speeds ranging from 600 to 2400 rpm. To withstand high-pressure conditions, critical components are crafted from premium alloy steel and undergo precision carburizing, quenching, and grinding processes, significantly enhancing wear resistance and service life.

An outstanding gear pump requires not only robust performance but also excellent overall characteristics. The P50 gear pump prioritizes low-noise and low-pulsation operation in its design. Through optimized tooth profiles and precision machining, it minimizes vibration and noise during operation, contributing to a better equipment operating environment. Additionally, its compact structural design facilitates installation and layout within equipment, simplifying overall machine configuration.

The P50 gear pump exhibits broad adaptability to working fluid viscosities, smoothly conveying media such as hydraulic oil and lubricating oil. Its seals can be constructed from oil-resistant materials, ensuring reliable sealing performance across a wide temperature range. Furthermore, the pump offers both single-pump and multi-pump configurations, allowing users to select different combinations based on actual requirements for more flexible system design.

In application fields, Runhe Hydraulic's P50 gear pump has become the preferred component for many equipment manufacturers due to its reliable performance. It is suitable not only for dump trucks but also widely applicable in construction machinery, mining equipment, agricultural machinery, and numerous other sectors. Its mature technology and high market penetration also mean a relatively well-established parts supply and after-sales service network, ensuring users receive timely technical support and maintenance guarantees during operation.

We consistently prioritize customer-centricity, offering not only standardized premium products but also customized gear pump solutions tailored to specific client requirements. Our technical service team provides comprehensive support—from selection consultation and installation guidance to maintenance—ensuring an optimal user experience.

We will continue to uphold our business philosophy of “Quality First, Customer Supremacy, and Technological Innovation,” continuously optimizing the performance of products like the P50 gear pump to enhance reliability and environmental adaptability. We believe this P50 gear pump, embodying Runhe Hydraulic's craftsmanship and technological expertise, will prove to be a reliable power source for your equipment with its stable performance.

external gear pump

gear pump manufacturers

gear pump working principle

gear pump function

rotary gear pump

rotary pumps