

Arc Gear Pump for Fluid Transfer

This arc gear pump is designed for use as a transmission, booster, fuel, hydraulic, or lubricating oil pump. It is suitable for conveying non-solid particles and fibers at temperatures up to 300 .



Product Overview



Professional grade arc gear pump designed for high-performance industrial fluid handling.

High-Efficiency Arc Gear Pump

The YCB series arc gear pump utilizes a specialized double circular arc sine curve tooth profile, offering superior performance compared to traditional involute gears. This design ensures smooth operation with minimal wear, low noise, and high efficiency by eliminating trapping liquid phenomena. It serves as a reliable solution for fluid transfer, pressurization, and lubrication across various industrial applications.

Performance Metrics

Operational Limits

1.6 MPa

Max Pressure

80 m³/h

Max Flow Rate

300

Max Temperature

Technical Specifications

Viscosity Handling	5 - 1500 mm ² /s (up to 50000 mm ² /s at reduced speed)
Rotation	Clockwise (viewed from spindle extension)
Shaft Seals	Mechanical Seal, Packing Seal, Magnetic Drive (Optional)

Construction



Internal assembly showcasing the arc gear mechanism and housing components.

Primary Components

- Gear (Double Circular Arc)
- Shaft
- Pump Body
- Pump Cover
- Bearing Sleeve
- Shaft End Seal

Safety and Maintenance

Integrated Safety Valve

Overload protection set to 1.5 times the rated discharge pressure

Application

Industrial Applications

- Oil transportation systems
- Fuel systems (conveying, pressurizing, spraying)
- Hydraulic transmission systems
- Industrial lubrication