

6000HP Electric Fracturing Pump

This 6000HP electric fracturing pump integrates mechatronics, a medium voltage AC VF drive, and direct drive transmission. The pump unit's layout meets the high load and continuous working condition requirements for unconventional oil and gas resource development.



ADDITIONAL IMAGES



Product Overview

High-Efficiency Electric Fracturing Solution

The 6000HP Electric Fracturing Pump is engineered for large-scale hydraulic fracturing operations, offering a high-performance, mechatronics-integrated solution for unconventional oil and gas resources. By utilizing a direct-drive motor system, this unit eliminates the need for complex diesel engine and gearbox maintenance while providing superior power and displacement. Its advanced AC VF control system ensures precise, automatic regulation of flow and pressure, significantly reducing operational costs, energy consumption, and labor requirements compared to conventional equipment.

Key Performance Metrics

Performance Highlights

6000 HP

Input Power

140 MPa

Max Working Pressure

4.44 m³/min

Max Displacement

Technical Specifications

Detailed Specifications

Parameter	Value
Cylinder Number	5
Stroke Length	304.8 mm
Max Stroke Number	230 SPM
Max Connecting Rod Force	1,030 kN
Gear Ratio	5.6087:1
Motor Voltage	6,000 V
Motor Current	508 A
Motor Protection Grade	IP43

Operational Features

Key Operational Advantages

- Zero emissions and low noise for night operation
- Double overpressure protection system (electronic + mechanical)
- Stepless regulation of flow and pressure
- Constant pump pressure and constant displacement modes
- 50% reduction in energy consumption costs
- 40% reduction in consumable parts costs

Physical Dimensions

Dimensions & Weight

Unit Size: 5,800 x 2,600 x 3,112 mm | Weight: 36,838 kg