

MOTORS

Motors- Flotek Pump Services carries a wide selection of Submersible AC Inductions Motors. Most of Flotek's motor line is 460 Volts Three Phase electrical motors but Flotek also carries a wide range of different sizes and electrical configurations. Flotek can supply from ½ horsepower single phase motors up to 300 horsepower oilfield applications.

Franklin Motor – Flotek is a proud distributor of Franklin Electric Motors. The **Franklin** motors have set the standards in the water well industry and Franklin has redesigned their motor to run in the harsh conditions of the coal bed methane field. Flotek stocks the full CBM line of motors but can have any of Franklin's product brought in with a short lead time.

The key points to the Franklin design are hermetically sealed motors with a proprietary self-healing epoxy winding insulation, stainless steel construction for high corrosion resistance, use of a hydrodynamic bearing for a high thrust rating, water exchange with the well bore through filtered checks due to the hermetic seal and a diaphragm which equalizes pressure between the motor and well bore. In addition to these features Franklin has specifically addressed the challenges of the CBM Market by utilizing a silicon carbide seal for sand protection, upgrading the thrust bearing to a high thrust bearing rated at 1500 ft-lbs, and upgraded the bottom cap to a heavy duty cast iron cap for tag protection.

Franklin ensures quality in each of its products by highly engineering their product and extensively field test products before starting manufacture. At each point of manufacturing, Franklin tests each unit to high standards and rejects any unit that does not meet these high standards. This ensures that any manufacturing defect is found and corrected before shipping.

Features and Benefits

- Hermetic Sealed Motor- Windings are canned, seal welded and hermetically sealed with a proprietary self-healing epoxy insulation so motor can exchange water with the well bore.
- Stainless Steel Construction- All exposed components built with stainless steel for high corrosion resistance.
- Hydrodynamic Bearing- Kingsbury bearing which uses fluid within the motor to support the thrust load on the motor. CBM Type Motor is built with a high thrust 1500 lb-ft rated bearing.
- Silicon Carbide Seal – CBM Motors are built with a silicon carbide mechanical seal to deal with sand protection.
- NEMA Standard Bolt-Up- Franklin designs their motors with the NEMA standard 4” motor bolt-up pattern to ensure compatibility with most water well equipment.
- Replaceable Motor Lead Assembly- Motors are designed with a one time use replaceable motor lead assembly which utilizes a vulcanizing rubber seal to ensure a watertight connection.

Karlington Motor-Karlington Electric is a world-wide supplier of quality submersible motors. Karlington Electric prides itself on its outstanding customer service and is constantly innovating to meet the demands of its customers. Flotek Pump Services carries the 4" severe duty line of Karlington motors which was engineered for the challenges of the Coal Bed Methane fields. The Karlington Severe Duty Motors are a sealed wet type oil-filled motor design and utilizes heavy duty ball-bearings to support the pump thrust load. Karlington uses 304 grade stainless steel in the construction of the motor for corrosion resistance and utilizes a silicon carbide mechanical seal on the shaft for sand protection to deal with the harsh environments of the coal bed methane fields.

Features and Benefits

- Wet Stator Type Design- Oil filled wet wound motor design utilized for superior submergence capabilities.
- Stainless Steel Construction- Motors are built from 304 Stainless Steel for maximum corrosion resistance.
- Heavy Duty Ball Bearing- Motors utilize a heavy duty ball bearing for thrust load protection up to 1500 lb-ft.
- Silicon Carbide Mechanical Seal- Motors are built with a silicon carbide mechanical seal at the shaft for maximum protection from sand intrusion.
- NEMA Standard Bolt-Up- Karlington builds their motor with the standard 4" NEMA motor bolt up pattern to ensure compatibility with most water well equipment.
- Replaceable Motor Lead Assembly- Motors are designed with a one time use replaceable motor lead assembly which utilizes a vulcanizing rubber seal to ensure a watertight connection.

Coming Soon from Karlington Electric, "The Middle Man" Intermediate Bearing Thrust Elimination System.

6" Centri-Pro Motor – Flotek Pump Services carries the Centri-Pro 6" Submersible Motor for the highest protection available in liner-less wells. The motors are a canned type with the stator coil sealed in a stainless cylinder with moisture resistant insulation for a completely water-tight seal. The motor is filled with a mixture of water & anti-freeze so the motor can be stored in temperatures down to -22°F. The motor has removable plugs for monitoring and refilling the fluid during maintenance. Centri-Pro uses a hydrodynamic type bearing for thrust protection with a rating up to xxxx lbs-ft. All exposed cast iron components are coated with a baked epoxy in addition to the stainless steel housing for maximum corrosion resistance.

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Features and Benefits

- Encapsulated Motor- Windings sealed in a stainless steel cylinder, seal welded and the windings are filled with a moisture resistant insulation.
- High Corrosion Resistance- All exposed cast iron parts are coated with a baked epoxy coating and the housing is made from stainless steel for maximum corrosion resistance.
- Hydrodynamic Bearing- Bearing uses pivoting shoes against a carbon ring which creates a film of fluid between the shoes and ring that supports the thrust load placed on the motor shaft up to 1500 lb-ft.
- Silicon Carbide Seal – Centripro motors are built with a silicon carbide mechanical seal to deal with sand protection.
- NEMA Standard Bolt-Up- Centripro designs their motors with the NEMA standard 6" motor bolt-up pattern to ensure compatibility with most water well equipment. Flotek also carries adapters to bolt 4" NEMA motor patterned pumps to the 6" NEMA motor flange.
- Replaceable Motor Lead Assembly- Motors are designed with a one-time use replaceable motor lead assembly which utilizes a vulcanizing rubber seal to ensure a watertight connection.
- Dual Voltage- Centripro's motors are designed with two outlets for the motor leads to change the voltage rating of the motors. The motors are shipped in the 460V configuration.