

Char-Lynn Motors

With decades of proven reliability and performance, Char-Lynn low-speed, high-torque hydraulic motors help you build a reputation for dependability. Our motors are designed and manufactured (speeds up to 2000 rpm and from 270-192,410 Nm [200-142,000 lb-in] of torque) to exceed the demanding requirements of the mobile and industrial industries.

Known throughout the industry for being a fast and flexible supplier, Eaton produces Char-Lynn spool valve, disc-valve and high-performance motors for original equipment manufacturers (OEMs) and distributors.



Features and Benefits

Spool Valve Motors

- Broad range of application specific solutions and options
- Industry-leading motor life with very high performance

Valve-In-Star™ (VIS) Motors

- High torque output in a small package for tight mobile applications
- Uses patented Valve-In-Star (VIS) technology for superior efficiencies at high pressure

Disc Valve Motors

- World's most complete range of low speed high torque motors
- Many options and features to fit the specific needs of your applications

ME Series Motors

- Industry leading motor life; built to withstand thermal shock
- High efficiencies and starting torque; smooth rotation at extremely low speeds

Optional Feature	Benefit
2 Speed Motors	Allows motor to have two displacements (higher speed has lower torque)
Seal Guard	Prevents physical damage to shaft seal from foreign debris
High pressure Shaft Seal	More robust shaft seal that can withstand high case pressure spikes
Environmental Protection	Epoxy coating for demanding application in harsh environment
Integrated Parking Brake	Spring applied hydraulic release brake
Mechanical Disc Brake	Bolt on caliper brake for wheel motor applications
Free Running Option	Improved mechanical efficiency at high-speed / high-flow conditions
Speed Sensors	To collect speed and / or direction information from a motor and provide electric signal

Optional Feature	Benefit
Shuttle Valve	Redirects a portion of low pressure oil for increased cooling in closed loop applications
Case Port	To increase lubrication and flushing of the motor and reduce case pressure, extend seal life
Internal Check Valves	Relieves the case pressure to the low pressure port
Low Speed Valving	For better efficiency and smooth running at low speed conditions (<200 RPM)
Vented Two-Stage Seal	Extends shaft seal life
Viton Seals	For higher temp. Or chemical resistance applications
Integral Cross Over Valving	Cost effective design that limits the differential pressure across the motor
Metric Shafts, Ports, & Mounts	EU specific threads
Reverse Rotation	Allows clockwise shaft rotation with B port pressurized



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Spool Valve Motors

Spool valve motors transmit high torque at low speeds by means of a cylindrical valve and a geroter or Geroler®, special drive members that turn the output shaft.

Options include a variety of output shafts: straight with Woodruff key, splined, tapered or straight with cross holes; plus other mountings, displacements and ports.

Specifications

Speed Range: Up to 2000 rpm
Torque Range: Up to 565 Nm (5000 lb-in)



Valve-In-Star (VIS) Motors

High performance VIS 30, 40 and 45 motors deliver high torque in a compact envelope.

Patented design reduces leakage by incorporating a flexible, pressure-balanced wear plate.

Specifications

Speed Range: Up to 500 rpm
Torque Range: Up to 5085 Nm (45,000 lb-in)



Disc Valve Motors

Disc valve hydraulic motors are designed with a flat, disc-shaped valving system. They use Geroler exclusively, are effective at very low speeds, and are reversible.

Options include a wide variety of shafts, mountings, ports, displacements, speed sensors and bolt-on valves. Two-speed models are available in Series 2000 and 10000.

Specifications

Speed Range: Up to 900 rpm
Torque Range: Up to 3390 Nm (30,000 lb-in)



ME Series Motors

These double swash plate, opposed-piston, low-speed, high-torque hydraulic motors operate smoothly at low speed within the maximum ratings and cause very little torque ripple.

Specifications

Speed Range: Up to 1000 rpm
Pressure Range: 248 and 276 bar (3600 and 4000 psi)
Torque Range: Up to 16136 Nm (11,900 lb-ft)

