



Getting the job done
faster with more
torque, higher speeds

Eaton HP50 Track Motor



EATON

Powering Business Worldwide

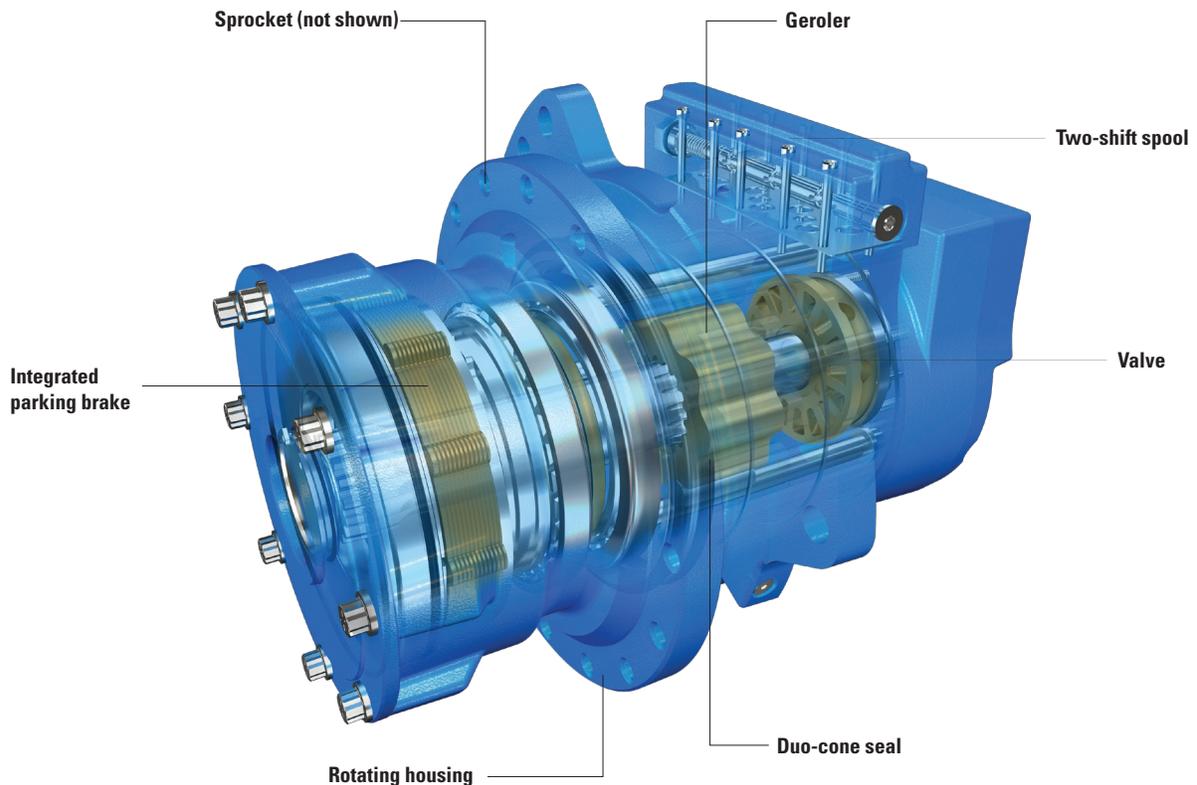
The next generation of hydraulic motors

Eaton's line of hydraulic motors boasts a proven track record of innovative solutions and trustworthy performance under demanding conditions. This tradition continues with the new HP50 track motor. Leveraging the widely adopted Eaton HP30 motor architecture, the HP50 represents the next generation of this proven Geroler® technology.

The HP50 track motor delivers the perfect combination of greater productivity, improved efficiency, and excellent reliability at an exceptional value. Now you can have it all, without spending more.

The HP50 powers the tracks on compact track loaders (CTL) with both single-speed and two-speed models and incorporates an integrated spring-applied, pressure release parking brake. The HP50 provides the most horsepower Eaton has delivered to date from its direct drive Geroler motor with a peak of 70 gallons per minute (GPM) and 6000 pounds per square inch differential (PSID). The motor also achieves higher speeds, lower parasitic pressure drop, and the highest starting torque in two-speed mode compared to other radial piston motors.

HP50 Motor Built for power

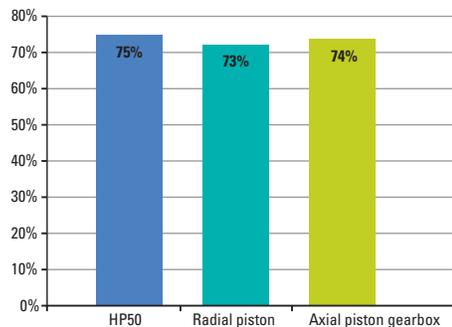


More starting torque in two-speed mode

With productivity as the market driver, the popularity of two-speed mode has become the standard on tracked machines. Typically, high-speed mode was used only for transport and low-speed mode for work functions such as plowing into a pile and starting off with a load. But that is changing as operators perform more work in high-speed mode to complete jobs faster.

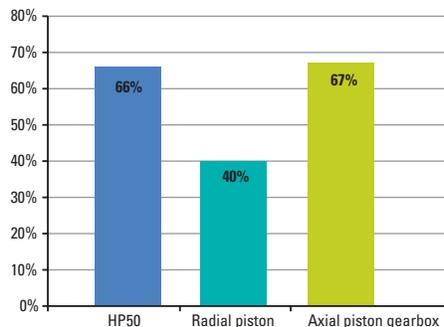
While the HP50 matches the performance of radial piston motors at low speed, results show that it surges ahead of the competition in two-speed mode. The HP50 generates as much as 23% more starting torque than competing radial piston motors when in two-speed mode. This means less shifting and a more efficient workflow.

Low speed starting torque efficiency



Note: Low speed - 5000 psi @ 1 rpm

High speed starting torque efficiency

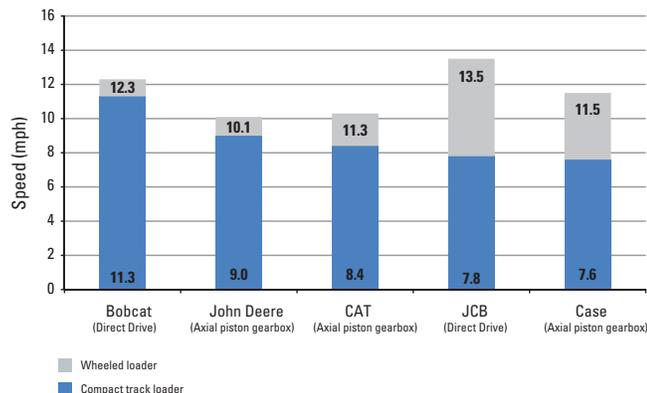


Note: High speed - 5000 psi @ 1 rpm

Increasing top speeds

CTL operators demand a lot from their equipment. Getting the job done quickly often means working at top speed. Eaton's direct drive solution reliably achieves higher speeds over the competition. The HP50 can put your machine at the top of the chart in terms of travel, and higher speed equals greater production.

Maximum ground speed comparison



Legend:
■ Wheeled loader
■ Compact track loader

Reference:
 Bobcat: <http://www.bobcat.com/loaders/compact-track-loaders/models/H500/specs-options>
 Deere: http://www.deere.com/en_US/products/equipment/compact_track_loaders/G29e/G29e.page
 CAT: http://www.cat.com/en_US/products/new/equipment/compact-track-and-multi-terrain-loaders/compact-track-loaders/1000002410.html
 CASE: http://www.casece.com/en_us/Gallery/Downloads/CTL_TR340/CTL-TR340-T4F-Specs.pdf
 JCB: <http://www.jcbna.com/products/Machines/Compact-Track-Loaders.aspx>

Eaton's HP50 motor benefits

- Highest starting torque efficiency in high-speed
- Low pressure drop
- Minimal heat generation
- Ideal combination of performance, reliability, and value

Technical specifications

- A high pressure (6000 psi) and high flow (70 GPM) Geroler motor
- Displacement: 42.5 – 95.0 in³/r (696 - 1557 cm³/r)
- Torque: Up to 50,000 in-lbs. (5650 Nm)
- Two-speed capabilities with the option of spring applied hydraulic release brake

Committed to excellence

Decision makers turn to Eaton for an unwavering commitment to personal support that makes customer success a top priority. Each product is independently tested and backed by industry-leading warranties, and the largest engineering and technical support teams in the industry.

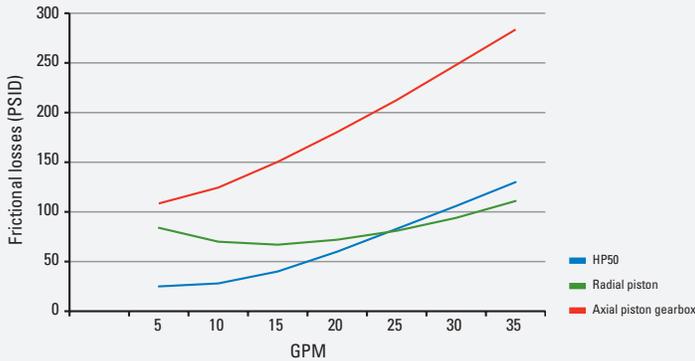


To learn more about Eaton's HP50 Series motors, visit eaton.com/HP50 or contact your Eaton sales representative.

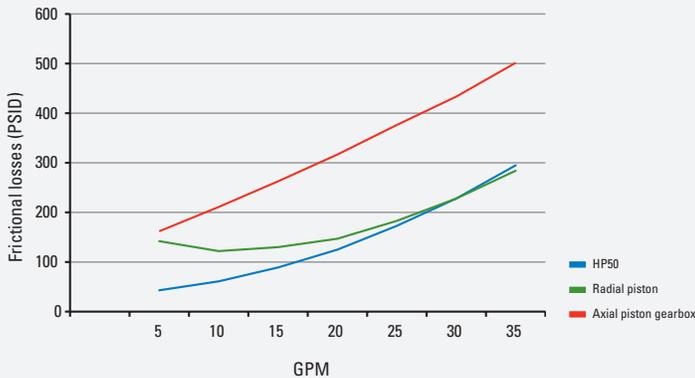
Minimal heat generation

The HP50 increases efficiency by reducing heat generation across all flow points by maintaining a low No-Load Pressure Drop (NLPD). As shown by the graph, lower pressure means less parasitic horsepower losses due to heat generation. This can save up to 1 HP by just switching the propel system to the HP50. Less heat means the motor operates at a lower temperature, reducing cooling costs and space requirements, and makes more power available to the machine's work circuits.

NLPD in low speed



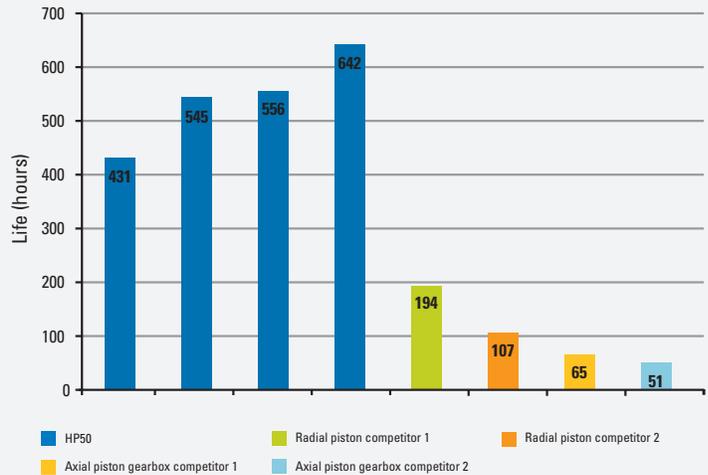
NLPD in high speed



Reliability through robust design

In accelerated durability tests simulating a high-pressure corner horsepower condition, the HP50 showed a significant gain in expected product life—up to four times the life of radial piston motors. (And up to ten times the life against axial piston gearbox motors.) The unique Geroler design profile and optimized driveline of the HP50 motor matches the power outputs of the new Tier 4 and 5 engine designs.

Eaton durability testing



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