

Press Release

Rexroth
Bosch Group

New radial piston motor from Rexroth: shorter, stronger, more efficient
MCR-T series with ten percent higher starting torque

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For Immediate Use



The new MCR-T radial piston motors from Rexroth: 20% shorter installation length, 10% higher starting torque and high travel speeds with low diesel rotational speeds.

Rexroth is expanding its range of direct drives for compact tracked loaders and other tracked vehicles with the new MCR-T radial piston motor in frame size 10. The newly designed unit is approximately 20% shorter than conventional radial piston motors on the market and offers around 10% higher starting torque for more tractive force. For improved efficiency, especially over long distances, the MCR-T units also allow for high travel speeds at very low diesel engine rotational speeds.

The compact new design complements the MCR-T family, which was previously offered in frame sizes 5 and 6. The compact dimensions mean that the motor completely fits in the track width of compact loaders. To do this, it was necessary to shorten the overall length by 20% compared to traditional designs, which is why Rexroth developers integrated the fail-safe, multi-disc holding brake into the outboard portion of the motor housing.

The high mechanical efficiency of the new series can also be seen in the starting torque, which has been improved by ten percent. The starting

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efficiency improvements will also shortly be rolled out to both of the other frame sizes, which have been produced in series since 2014.

In addition, the MCR-T can withstand higher radial forces thanks to its improved load distribution. The optimized position of the drive shaft allows for the use of a simpler sprocket in comparison to conventional radial piston motors. Larger bearings that are flushed with case oil achieve a service life that is up to 30% longer. An integrated flushing valve supports the cooling of the oil when used in closed hydraulic circuits, which therefore also lengthens the service life. The MCR-T's improved service life lowers the total cost of ownership of the mobile working machines in which it is fitted.

MCR-T radial piston motors are designed for continuous high rotational speeds so that compact tracked loaders can also cover longer distances. Via the control valve integrated in the motor, the operator can gently and smoothly shift between travel speeds with the soft shift mode operating in both directions. The motor then runs with reduced displacement, reducing oil flow in the circuit and improving system efficiency. Additionally, the direct drive of the MCR-T results in greater efficiency and lower noise than typical gearbox-based solutions.

MCR-T motors function with a differential pressure of up to 400 bar and the largest version achieves an output torque of up to 8,500 Nm. The displacement of the series ranges from 620 ccm to 1,340 ccm.

About Bosch Rexroth

Economical, precise, safe, and energy efficient: drive and control technology from Bosch Rexroth moves machines and systems of any size. The company bundles global application experience in the market segments of Mobile Applications, Machinery Applications and Engineering, and Factory Automation to develop innovative components as well as tailored system solutions and services. Bosch Rexroth offers its customers hydraulics, electric drives and controls, gear technology, and linear motion and assembly technology all from one source. With locations in over 80 countries, more than 33,700 associates generated sales revenue of approximately \$7.4 billion (5.6 billion euros) in 2014. To learn more, please visit www.boschrexroth-us.com

About Bosch

Having established a regional presence in 1906 in North America, the Bosch Group

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employs some 28,700 associates in more than 100 locations, as of April 1, 2015. In 2014, Bosch generated consolidated sales of \$11.3 billion in the U.S., Canada and Mexico. For more information, visit www.boschusa.com, www.bosch.com.mx and www.bosch.ca.

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The Bosch Group is a leading global supplier of technology and services. It employs roughly 360,000 associates worldwide (as per April 1, 2015). The company generated sales of \$65 billion (49 billion euros) in 2014. Its operations are divided into four business sectors: Mobility Solutions, Industrial Technology, Consumer Goods, and Energy and Building Technology. The Bosch Group comprises Robert Bosch GmbH and its roughly 440 subsidiary and regional companies in some 60 countries. Including its sales and service partners, Bosch is represented in roughly 150 countries. This worldwide development, manufacturing, and sales network is the foundation for further growth. In 2014, Bosch applied for some 4,600 patents worldwide. The Bosch Group's strategic objective is to create solutions for a connected life. Bosch improves quality of life worldwide with products and services that are innovative and spark enthusiasm. In short, Bosch creates technology that is "Invented for life." Additional information is available online at www.bosch.com and www.bosch-press.com, <http://twitter.com/BoschPresse>.*

*The sales figure disclosed for 2014 does not include the former joint ventures BSH Bosch und Siemens Hausgeräte GmbH (now BSH Hausgeräte GmbH) and ZF Lenksysteme GmbH (now Robert Bosch Automotive Steering GmbH), which have since been fully acquired.

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