



RG600 High-Torque Reduction Gearbox

Electric hydraulic replacement · 6,000 Nm rated · sealed, grease-free

The RG600 is a proprietary high-torque, low-speed reduction gearbox designed to replace hydraulic rams and greased knuckles on mobile equipment. Driven by a ~3 kW brushless DC motor, it delivers the same force through a sealed geartrain with greater rotation range and nothing to service — no bushes, no grease, no slop. Supplied to equipment manufacturers worldwide, with one-off private builds welcome.

SPECIFICATIONS

Maximum rated output torque	6,000 Nm continuous
Configurable output ceiling	Up to 8,000 Nm
Tested holding torque (to failure)	10,000 Nm
Maximum input power	3 kW
Input shaft	19 mm
Maximum output speed	2.8 rpm
Output interface	Quick-hitch torque key
Drive motor (recommended)	3 kW 48V BLDC
Maintenance	Sealed, grease-free — none*
Design	Proprietary Powered Motion

* No scheduled service items: no bushes to replace, no grease points.

WHY REPLACE THE RAM

- Drop-in for ~6,000 Nm hydraulic ram applications
- Greater degrees of rotation than a ram-driven joint
- Maintenance-free knuckle — no bushes, grease or slop
- Lower running cost than a hydraulic circuit
- Full drive package available: motor, controller, software
- Motors, gearing and software customisable to application

APPLICATIONS

- Excavators and earthmoving attachments
- Ute-back and vehicle-mounted cranes
- Material handling and access equipment
- Custom OEM electrification programs

COMPLETE DRIVE PACKAGE

Pair the RG600 with Powered Motion 48V BLDC motors (1–3 kW), integrated motor controllers with position feedback, and control software — one matched, pre-integrated drivetrain from a single supplier.

Request a quote

Tell us your application, required torque and speed, duty cycle, supply voltage and quantity:

www.poweredmotion.com.au/quote