

## Frameless motors for military robotics

Small, tracked military robots must be able to navigate rugged terrain, handle heavy-duty accessories and operate in harsh environments – and so should their motors.

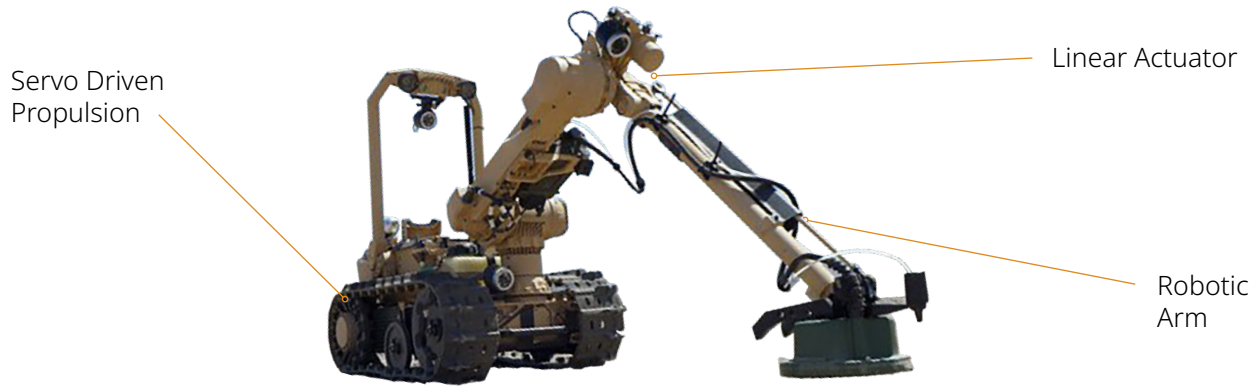
### Overcome obstacles in your design and in the field

- **A broad range of frameless motors.** Choose the ideal servo motor for your form factor and performance requirements to keep military robots precisely positioned and controlled.
- **Robust performance.** Compact, lightweight motors are engineered to endure the shock and vibration of rough terrain and exposure to extreme temperatures and environments.
- **Optimized for high torque in short axial lengths.** Rely on frameless motors that offer compact design without sacrificing torque performance.

### Count on consistent, scalable supply

- **Dependable quality and delivery.** Lean manufacturing processes and industry-leading quality programs at our AS9100 certified manufacturing site ensure delivery of specialized motors in the quantities you require now and in the future.
- **Long-term regional support.** Our global footprint of manufacturing, design, application and service centers provides all the support you need, anywhere in the world.

## Kollmorgen Servo Motor Application Examples



\*Image courtesy of Carnegie Robotics.

## Kollmorgen Motors Designed for Military Robotic Program Success

Choose from a broad range of frameless motor solutions with sizes and performance characteristics to meet any application, from mine sweeping to unmanned ground vehicles (UGVs), Explosive Ordnance Disposal (EOD) and more. All of these motors can be supplied in specialized designs for no-fail performance in your specific application.

	Explosive Ordnance Disposal (EOD)	Unmanned Ground Vehicles (UGVs)	Mine Sweeping	Combat and Reconnaissance	Search and Rescue
Motors	TBM, TBM2G, KBM	TBM, TBM2G, KBM	TBM, TBM2G, KBM	TBM, TBM2G, KBM	TBM, TBM2G, KBM
Temp	-20C° to 45C°	-20C° to 45C°	20C° to 45C°	20C° to 45C°	20C° to 45C°
Environment	All military working conditions including all terrain	All military working conditions including all terrain	All military working conditions including all terrain	All military working conditions including all terrain	All military working conditions including all terrain
Bus Voltages	24, 48, 80V	48-680 VDC	24, 48, 80V	48-680 VDC	24, 48, 80V
Typical Application Life	5+ Years	10+ Years	5+ Years	10+ Years	5+ Years
Typical Applications	Wheeled or track propulsion, articulated arm joints, accessory linear and rotary actuators	Wheeled or track propulsion, articulated arm joints, purpose-designed linear and rotary actuators, automated mast systems	Wheeled or track propulsion, articulated arm joints, accessory linear and rotary actuators	Wheeled or track propulsion, articulated arm joints, purpose-designed linear and rotary actuators, Remote Weapon Stations (RWS) and stabilized comms and sensor platforms	Wheeled or track propulsion, articulated arm joints, accessory linear and rotary actuators, automated mast systems

## About Kollmorgen

Kollmorgen, a Regal Rexnord Brand, has more than 100 years of motion experience, proven in the industry's highest-performing, most reliable motors, drives, AGV control solutions and automation platforms. We deliver breakthrough solutions that are unmatched in performance, reliability and ease of use, giving machine builders an irrefutable marketplace advantage.