TORQUE MOTORS

TMB+ is an evolution of the renowned TMB torque motor that provides a combination of increased performance and new features while maintaining the interfaces of existing motors.

The torque density of TMB+ is increased by up to 20% while keeping the exact same footprint and reducing the power losses by up to 30%. Speed range is also significantly increased.

TMB+ enables enhanced machine performance and allows for new processes to be achieved in existing machines without any design change effort. With its outstanding performance level, TMB+ will give access to direct drive technology for more applications while keeping quality and reliability at their highest level and reducing cost of ownership.

TMB+ CLOSED COOLING

All TMB+ variants are available with an optional cooling jacket. It consist of a precisely mounted metal jacket that ensures water tightness and guarantee exact same motor performance than with the conventional “open cooling” mounting. There are two different cooling jacket types to fit any machine design: radial or axial water inlet / outlet.

This new cooling concept brings the added value of direct drive torque motors to more applications with minimal efforts allowing a shorter time to market and lower costs.

The easy “wall mounting” of the TMB+ with cooling jacket will ease the replacement of conventional servo drives and thus increase the performance of your motion axes.

MAIN FEATURES

- Peak torque up to 42900 Nm
- Continuous torque up to 22300 Nm
- Speed up to 4590 rpm
- External diameter up to 1290 mm
- Large hollow shaft up to 1070 mm
- Active length up to 200 mm
- More than 60 standard sizes available
- Four different windings per diameter
- Nickel coating on stator and rotor
- Open or closed cooling variants
- 600 VDC bus voltage
- Very high continuous torque density
- Very high peak torque
- Low torque ripple
- Extendible speed range with flux weakening
- Compatible with IMTHP module for accurate thermal control

TMB+ MOTORS RANGE

![Graph showing continuous torque and maximum speed values for TMB+ motors]