

Brushless DC motor – pushing it to the limit.

When prototyping for applications with extreme requirements for brushless DC motors, fast condition monitoring is critical.

Motor applications with limited space available and comparatively large power requirements can push a motor very close to burning out. In theory, it is possible to use temperature calculations for the motor winding with the help of thermal resistance rating from the motor data sheets, ambient temperatures, heat sinking details and housing characteristics. This is always considered first and then tolerances and safety margins are considered. Following this thermal modelling software and imaging can be evaluated. However some applications push a motor so close to the edge, that only real product prototype testing can be relied upon. Simply installing motors and testing how hard you can push them can also be a costly exercise and does not give enough reliable data. Actual winding temperature sensing on the motor is a solution maxon motor offer for these extreme cases. By inserting sensors through ports in the magnetic return stack and in direct contact with the winding, maxon motor can give customers a device that monitors winding temperatures without the thermal time constant delays experienced when measuring winding resistance and using housing thermal time constants.

For more information please contact maxon motor Australia tel. +61 2 9457 7477.

Length of this press release: 220 words

The media release is available on the internet at: www.maxonmotor.com.au



*Brushless DC motor with
winding temperature sensors
© maxon motor*

maxon motor Australia Pty Ltd

Unit 1, 12-14 Beaumont Road

Mt Kuring-Gai NSW 2080

Tel: +61 2 9457 7477

Fax: +61 2 9457 8366

info.au@maxonmotor.com

www.maxonmotor.com.au

Twitter [@maxonmotoraust](https://twitter.com/maxonmotoraust)