

New generation position encoders for harsh environments

Traditional optical encoders are essential components in motion control systems. However, for reliable operation it is necessary to protect them from harsh environments. This limits the diversity of applications where encoders can be deployed and can add substantial cost – until now. Developed by Renishaw and its associate company RLS d.o.o., a new line of high-performance magnetic encoders provide many of the features of optical encoders but without increased robustness.



Renishaw's magnetic encoders are impervious to environmental contamination so dirt, grease, oils, dust and debris are no problem. Wet environment? - these encoders are fully submersible and sealed to IP68 protection. Shock and vibration? No problem. Renishaw's magnetic encoders are 100% solid state devices with no moving parts, no sensitive optics, no seals or bearings to wear out or become contaminated. They offer 100% non-contact operation for virtually unlimited life.

Renishaw's range of magnetic encoders provide a range of useful output formats, including AB quadrature, analogue voltage, UVW commutation, and linear voltage. They even provide absolute position output. Resolution is up to 13-bits – 8192 counts/rev, or 0.044 deg.

A wide range of package configurations makes them ideal for integration into OEM systems. From board level PCB assemblies to fully housed and IP68 sealed, there is a package for every application.

Furthermore all of this performance doesn't come at a premium price. Renishaw's magnetic encoders compare very favourably to the prices of optical encoders, and in many cases they are available at a substantially lower cost. What's more, they are intrinsically suited to high volume production.

For more information about Renishaw's full range of position encoders, including magnetic encoder modules, magnetic encoder chips, magnetic rotary encoders, magnetic linear encoders and magnetic ring encoders, plus optical linear encoders and optical angle encoders, please visit:

www.renishaw.com/encoder