



## **NEW Piezo LEGS® Rotary Motor type LR17 with integrated encoder**

**EMS are pleased to announce the very latest rotary Piezomotor developed by PiezoMotor in Uppsala, Sweden.**

Expanding on the successful Piezo LEGS rotary motor series LR50/80 is a new reduced dimension LR17 with integrated encoder. This is the first step in the long-term aim to broaden the range of rotary motors as demanded by the market place.

The LR17 is our smallest rotary Piezo motor yet, and the first in a new series of rotary LEGS motors with integrated absolute encoders.

This small compact designed motor with diameter of just 17mm has all the benefits already established with the Piezo LEGS technology and despite its small dimensions the motor develops an impressive stall torque of 30 mNm without any backlash. Conventional motors of a similar size can only reach these torque levels with the addition of a gearhead, which adds to the size and introduces backlash into the system.



The motor construction is based around the established friction drive method which results in good self-locking characteristics meaning that the motor can hold position without consuming any power. The integrated 15 bit magnetic absolute encoder gives a closed loop resolution of 0.2 milli-radians (0.01°), and as always with the Piezo LEGS technology, you get an amazing sub-micro-radian resolution in open loop.

“The LR17 is the first motor in a series of four different sizes, which offers high resolution together with sensor from a very compact size with simple system integration.

The Piezo LEGS technology makes it possible to continue improving existing customer designs when conventional motor technology has reached its limit.

Available exclusively in the UK from Electro Mechanical Systems Ltd.

For more information visit our website [www.ems-limited.co.uk](http://www.ems-limited.co.uk) or alternatively [www.piezomotor.se](http://www.piezomotor.se)).