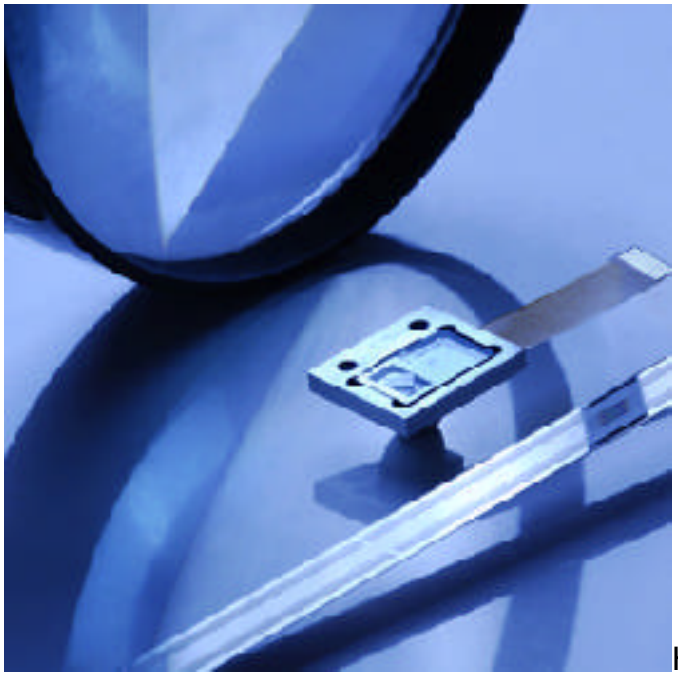
# Miniature Linear Scale Designed for Tight Spaces



Known for its high quality miniature scales, Numerik Jena offers the Kit L4 encoder, a minimum configuration of a length-measuring system for use in situations where installation space is limited. Now available in North America through HEIDENHAIN Corp., this extremely flat encoder allows for unusually wide mounting tolerances and a pre-alignment of the measuring module in an optional mechanical frame for user friendly installation. Typical fields of application for the Kit L4 are instruments and machines used in the microelectronic industry, X-Y and Piezo stages, precision devices and medical systems, to name a few. The kit is based on the miniaturized and multifunctional EPIFLEX measuring module from Numerik Jena and on graduated scales. The scales are scanned in reflected light.

The Numerik Jena Kit L4 encoder offers high resolution (up to 50 nm), high measuring speed (10 m/s), and high absolute accuracy (1.0 µm per m). It is especially noteworthy that after mechanical installation, electronic signal adjustment is possible to optimize measuring module output. This can result in a reduction of the interpolation error and activation of functional reserves.

The scale tape of the Kit L4 is available in two patented versions: a SINGLEFLEX scale tape, used in more basic applications where thermal expansion behavior is the same as steel (20 micron tape with self-adhesive tape), or a DOUBLEFLEX scale tape for applications with higher accuracy requirements and measuring lengths longer than 100 mm. The DOUBLEFEX system allows for mechanical isolation of the scale tape from the tape carrier resulting in a well defined thermal behavior.

The Numerik Jena Kit L4 is available in a wide variety of frames, as well as custom options. Signal interfaces offered are TTL or 1 Vpp.

**Source URL (retrieved on *12/22/2014 - 5:08am*):**
http://www.mdtmag.com/product-releases/2010/06/miniature-linear-scale-designed-tight-spaces?qt-most_popular=0