



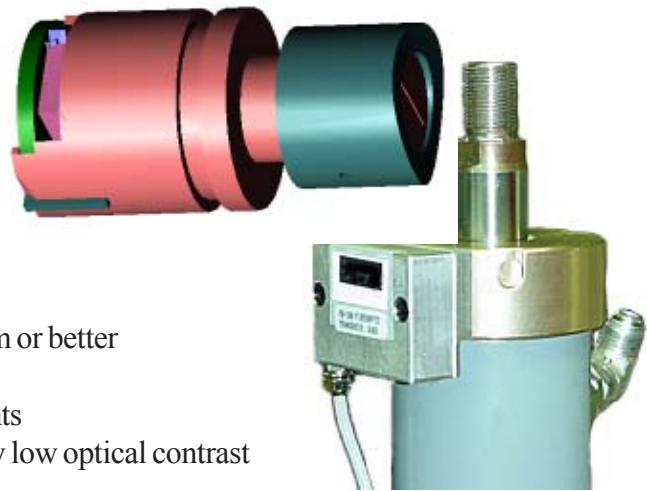
Application note 102: fiberoptic reflective transducer

This note describes an absolute position fiberoptic reflective transducer

Fiberoptic Systems manufactures fiberoptic reflective transducers for absolute linear position sensing of objects with metal surfaces such as hydraulic cylinders.

Key properties are:

- accurate position sensing with a resolution of 1mm or better
- a 'stroke' of 10 m minimum
- extremely rugged and reliable in harsh environments
- able to read laser scribed markings with extremely low optical contrast
- cost effective



The transducer consist of a fiberoptic 'line of light', integrating illumination and sensing fibers with a positional accuracy of 5 μm . A single LED, frequency optimized for the scanned surface properties, provides homogenous illumination over the length of the sensing line. A 128 pixel CCD array, tightly coupled with the sensing fibers, provides the signals that can be further processed to yield positional information.

For further information and assistance, please contact:

Fiberoptic Systems Inc.,
(800) 995 8016 technical assistance
sales@fiberopticsystems.com
www.fiberopticsystems.com