

Encoder Designed for Extreme Electromagnetic Fields



The MR318 Fiber Optic Rotary Encoder is the world's first and only commercially available, non-metallic rotary position sensor that can operate with complete "transparency" in extreme electromagnetic fields. The product concept grew out of requests from the magnetic resonance imaging (MRI) community for a non-metallic version of Micronor's existing fiber optic encoder products.

Prior to the MR318, engineers had no commercial solution for measuring continuous position within an MRI chamber. Motors or actuators could be hydraulic or pneumatic but no commercial, non-metallic position sensor existed. A homemade fiber optic proximity/limit switch was the best solution, but this was awkward to design, package, and could only provide position information at discrete points. The advent of the MR318 enabled fully-functional motion control apparatus with closed-loop feedback.

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