

Serie MR 314



Features:

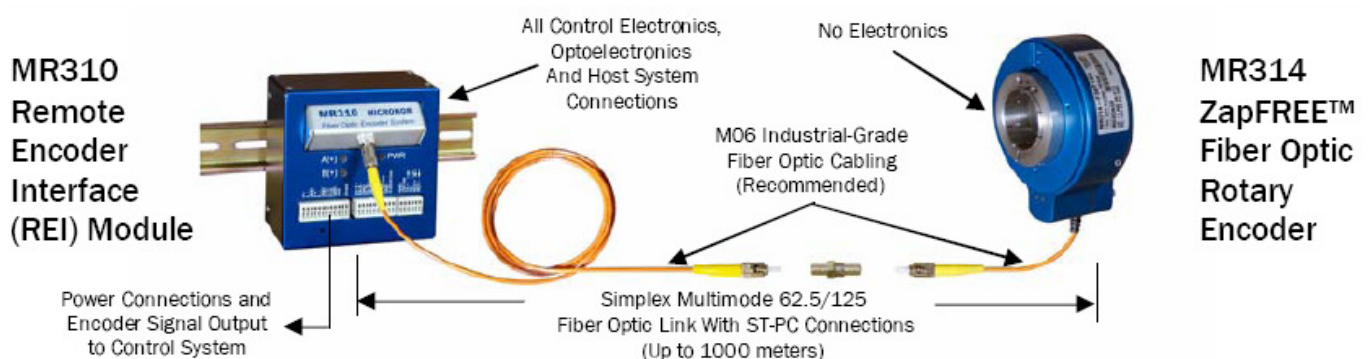
- 100% passive sensing design
- Intrinsically safe and inert for use in hazardous and explosive atmospheres
- Insensitive to EMI and RFI for use in and around medical equipment and „noisy“ industrial environments
- Immune to lightning and atmospheric static that „zaps“ conventional encoders
- Outdistances copper, link lengths to 1000m
- Standard model operates -40 °C bis +80 °C
Extended option covers -60 °C bis 150 °C
- Special versions can be engineered for radiation and thermal-vac environments

Product

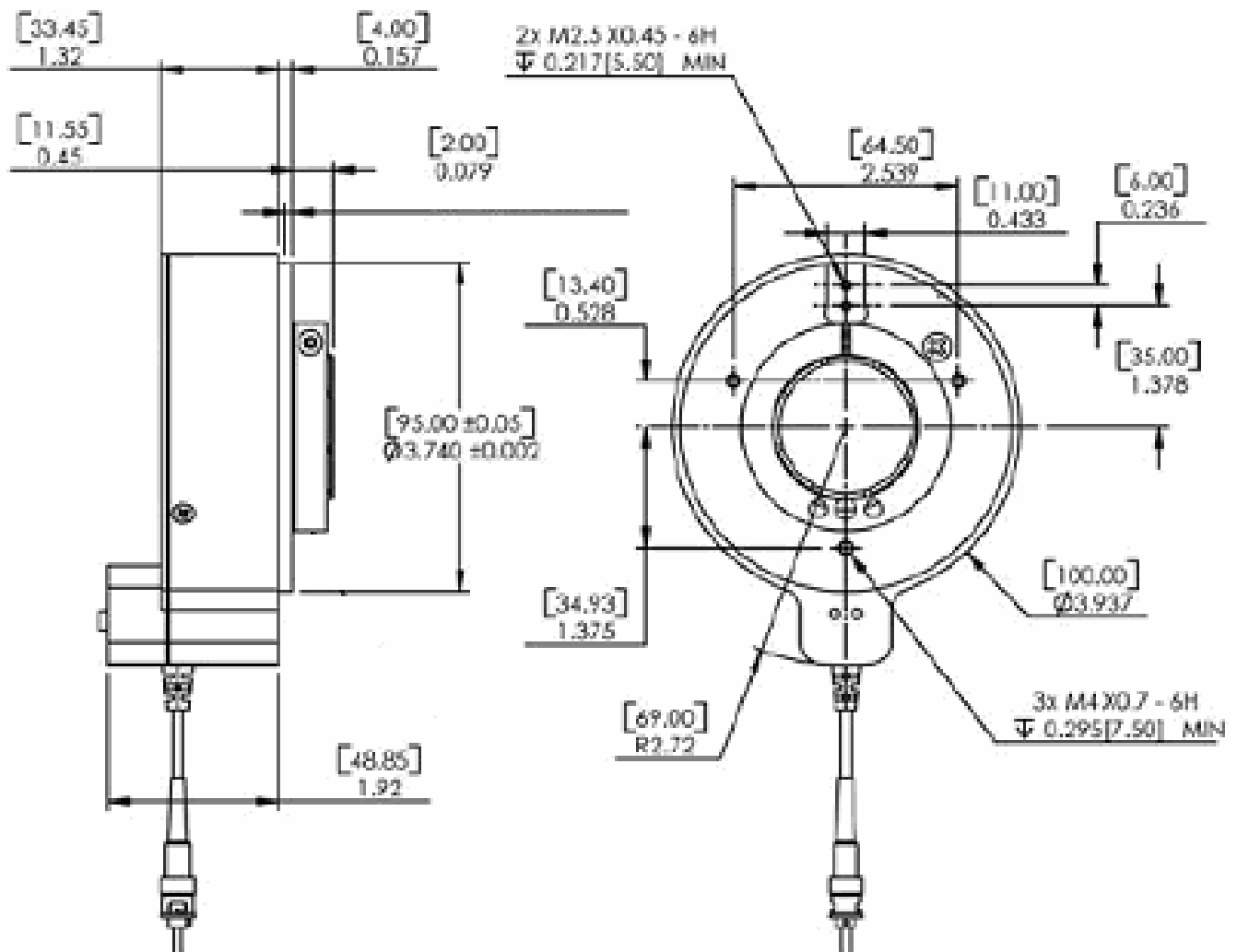
The MR 314 ZapFREE™ High Resolution (1024ppr) Hollow Shaft Rotary Encoder is an entirely passive, fiber optic incremental rotary encoder – ideal for a wide range of harsh and hazardous environmental applications. There are no integral electronics within the encoder housing and the all-optical design requires just a single 62.5/125 MM optical fiber connection – the utmost in simplicity, reliability and ease of installation.

Downstream, an MR310 Remote Encoder Interface (REI) module converts the optical signals to an array of standard electrical outputs (both quadrature and analog) for interfacing to conventional counters, PLC's or computer interface boards. An RS232 / RS422 / RS485 serial interface is also provided for ease of interface to computers and PC's.

Installation



1. Mount MR314 rotary encoder to the external equipment shaft using the optional Tether Arm. Consult the ZapFREE™ Encoder System User Guide for additional information.
2. Make MR 310 electrical connections (power, ground, quadrature signals, serial interface, etc.) to the control system via WAGO Quick-Connect plugs (supplied with the MR310).
3. Connect ZapFREE™ Encoder to MR310 Module via MR320 series ST-PC to ST-PC FO cable assembly (or equivalent).
4. The ZapFREE™ Fiber Optic Encoder System is now ready to operate!



Serie MR 314

Specifications

Resolution	1024ppr
Max Speed	2000 rpm (Contact Micronor for applications requiring higher speeds)
Mechanical & MR 310 direct quadrature Outputs for MR310 auxilliary functions	1250 rpm (Speed limitation if all processor-controlled auxiliary functions are being used at same time; e.g. Programmable Divider, Programmable Analog Outputs, etc. Individual functions may be usable at higher speeds with operational trade-offs. Contact Micronor for more information.)
Optical Interface	ST-PC (for connection to MR310 REI Module)
Fiber type	MM 62.5/125µm, Graded Index, 0.275NA
Fiber length (between MR310 and MR312)	Up to 1000m (3280ft)
Temperature range	
Standard Option	-40 °C bis +80 °C
Extended Option	-60 °C bis +150 °C
Humidity	0% bis 95% RH (nicht kondensierend)
Seal rating	IP64 (splash proof)
Shaft OD	Ø 38mm ID (other options available upon request)
Housing / Weight	Ø 100mm x 49mm; 655g (23 oz)

Order key

