Avtron M185 Encoders

Unipulser is a Single Pulse Per Revolution, Zero Speed Pulse Generator

Magnetic Durability in a Compact Encoder

No bearings or couplings

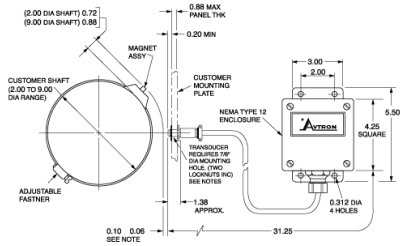
Sensor bolts directly to flange or bracket

1 Year No-Hassle Warranty

M185

The Model M185 Unipulser is a single pulse per revolution, zero speed (operational down to zero RPM) pulse generator which requires no coupling to the shaft for which rotational speed is being measured. The pulse generator consists of a magnet assembly which clamps around the shaft and a transducer assembly which mounts in proximity to the magnet assembly. Refer to the Outline Drawing for specific dimensional information.
The Model M185 is designed for applications where an end shaft is not available for coupling to other types of rotary pulse generators. When the M185 is used in conjunction with a speed measuring system like the Avtron Model K885, it is possible to measure roll surface speed to 0.01%, with a 1 second measurement period for any shaft speed from 60 to 3000 RPM.
The magnet assembly is supplied with an adjustable fastener and sufficient band material to accommodate shafts ranging in diameter from 2 inches to 9 inches. For smaller diameter shafts, a hose clamp (not included) with a 0.5 inch wide band may be used. For larger diameter shafts, longer lengths of band material are available from the factory.

OUTLINE DRAWING



MORE M185 ADVANTAGES

- Magnetoresistive Sensor gap up to 0.160" permitted
- Magnet ring can be added to existing shafts in place without the need to remove bearings or pillow blocks

MORE M185 SPECIFICATIONS

Operating Power: 5-15 VDC @ 30 mA
Pulses Per Revolution (PPR): 1
Max Frequency Output: 50 Hz
Speed Range: 0 to 3000 RPM
Operating Temperature: 32°F to 150° F
Output Signal:

- Wave Shape: Square
- Volts Out High: Supply Volts
- Volts Out Low: 0.5 VDC Max @ 10 mA

Impedance:

- 1.2 K pull up
- 10 mA sink

Duty Cycle: Normally high. Switches low when sensing magnet.
Weight:

- Magnet Assembly: 1 oz.
- Transducer Assembly: 2.5 lbs

Check out our website for more detailed specifications, drawings, and installation instructions. www.avtronencoders.com

AVTRON™ ENCODERS A Nidec BRAND

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SELECTION GUIDE

MODEL	CABLE LENGTH
M185	- Standard 36"/3'/0.9m cable assembly w/sensor -4 - Optional 48"/4'/1.2m cable assembly w/sensor -5 - Optional 60"/5'/1.5m cable assembly w/sensor -6 - Optional 72"/6'/1.8m cable assembly w/sensor -7 - Optional 84"/7'/2.1m cable assembly w/sensor -8 - Optional 96"/8'/2.4m cable assembly w/sensor -10 - Optional 120"/10'/3m cable assembly w/sensor -15 - Optional 15'/4.5m cable assembly w/sensor -20 - Optional 20'/6m cable assembly w/sensor -25 - Optional 25'/7.6m cable assembly w/sensor -30 - Optional 30'/9.1m cable assembly w/sensor -33 - Optional 33'/10m cable assembly w/sensor

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