



## VM 6

### Air Gap Capacitive Sensor

#### APPLICATIONS

- On-line air gap measurements for:
  - generators
  - synchronous condensers
  - large electric motors
- On-line proximity measurements
- Specified for gaps larger than 14 mm (*551.1 mils*)

#### FEATURES

- Minimal amount of stator ventilation holes blocked (VM 6 is smaller than usual air gap capacitive sensor)
- Range: 3 to 30 mm (*118.1 to 1181.1 mils*)  
5 to 50 mm (*196.8 to 1968.5 mils*)
- Used with LIN™-300 Series Linearization Module and ZOOM® Processing Unit (ZPU™) or PCU™ Programmable Monitor
- Highly immune to deposits of oil, carbon dust, and strong magnetic fields
- Easy to install on stator wall without removing the rotor or poles
- Non-contact, non-intrusive sensor
- **Over 25 years of field experience**

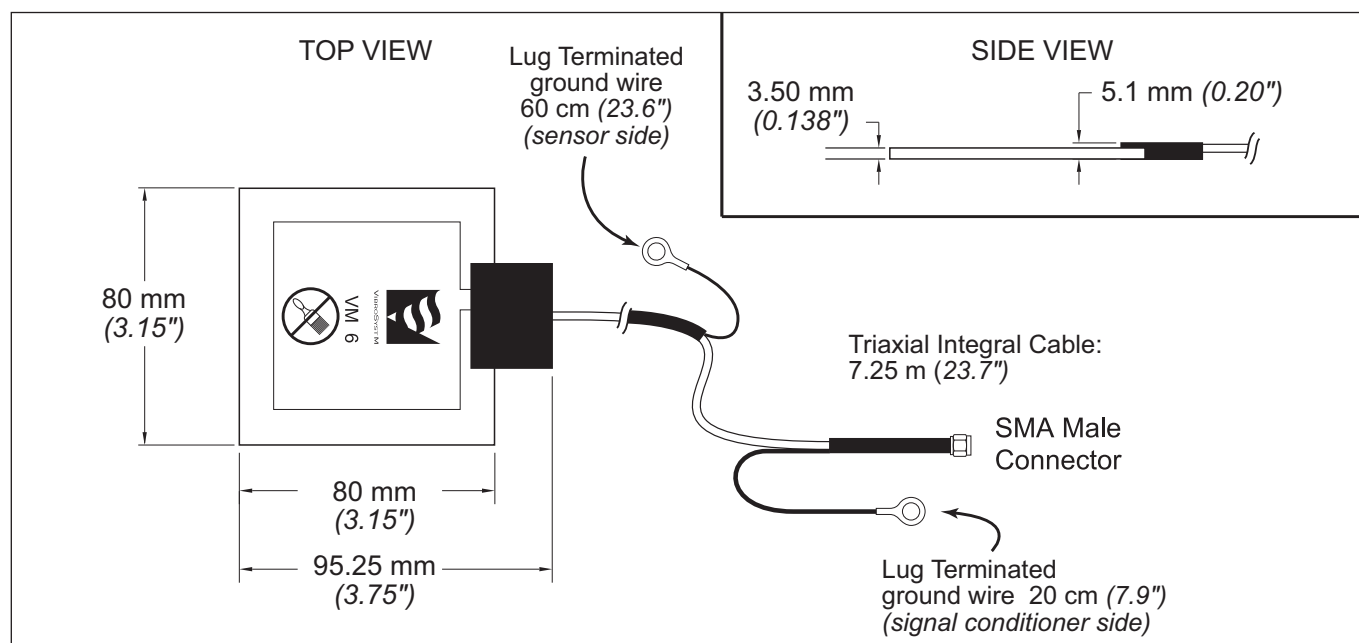
#### DESCRIPTION

The VM 6 Capacitive Sensor is a flat, noncontact type sensor which generates the necessary electric field to measure the distance between its surface and a target. The raw signal from the sensor is sent through a triaxial cable to the LIN™-300 Series Linearization Module to be conditioned and transmitted to a ZOOM® Processing Unit or a PCU™ Programmable Monitor.

Slim design and high immunity to strong magnetic fields make the VM 6 a universal proximity sensor. Its measuring range, accuracy, and reliability are unaffected by: deposits of oil, carbon dust and dirt, strong magnetic fields, high shock vibration, and EMI-RFI.

The VM 6 is a passive sensor, with no moving parts or active electronic elements, and is compatible with most types of conductive and semi-conductive target material.

#### DIMENSIONS



## VM 6 GENERAL SPECIFICATIONS

### Operation

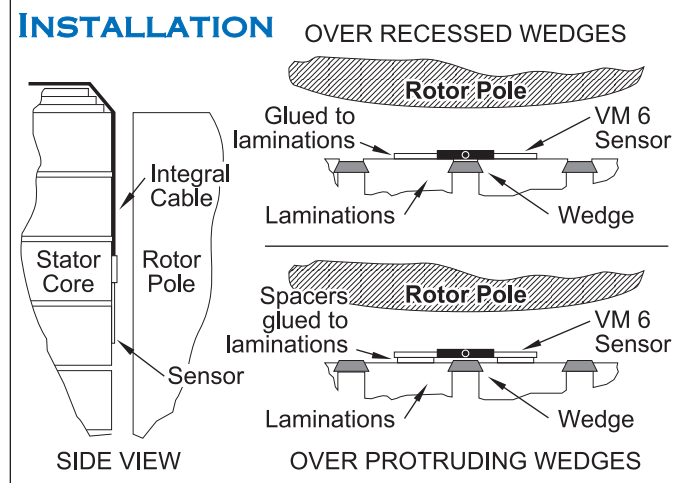
- Linear Measuring Range Determined by LIN™ Series-300 linearization module
- Power Source 455 kHz
- Frequency Response Limited by the LIN™-300 Series Linearization Module
- Interchangeability ±5%

### Environmental

- Temperature Range
  - Operating 0°C to 125°C (32°F to 257°F)
  - Storage 0°C to 85°C (32°F to 185°F)
- Magnetic Field Up to 2.0 tesla [50 Hz or 60 Hz]

### Connection

- Integral Cable Type PTFE (Teflon) triaxial
  - Connector Male SMA and ground lug
  - Length Fixed 7.25 m (23.7 ft)
  - Minimum bending radius 5 cm (2.0 in.)



### Physical Characteristics

- Dimensions
  - Height 95.25 mm (3.75 in.)
  - Width 80.00 mm (3.15 in.)
  - Thickness 3.50 mm (0.14 in.)
  - Clearance 5.10 mm (0.20 in.)
- Weight 212 grams (7.5 oz)

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## VIBROSYSTEM

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