Zero speed differential ferrostat sensor

Wind Cluster’s zero speed differential sensors for measurement of e.g. hub speed and shaft revolutions are engineered with an internal magnet to switch in the presence of ferrous targets such as gear teeth and blade tips down to absolute zero speed. The sensor detects fluctuations in the magnetic field and can also be configured so the output signal signifies either the presence or absence of a ferro-magnetic target (i.e. a gear tooth).

**SPECIFICATIONS:**

- **SUPPLY VOLTAGE** $V_s$: 3.5–30VDC @ 10mA MAX., REVERSE POLARITY PROTECTED
- **PULSE OUT** $V_o$: 0–$V_s$ @ 25 mA SINK
- **OPERATING FREQUENCY**: 0–25 kHz
- **AIRGAP**:
  - 24 dp, MODULE 1: 0.1 to 1.1mm
  - 12 dp, MODULE 2: 0.1 to 1.8mm
  - 5 dp, MODULE 5: 0.1 to 3.2mm
- **VIBRATION/SHOCK RESISTANCE**: 5 G’s @ 2000 Hz MIN.; IMPACT: 50 G’S MIN.
- **INGRESS PROTECTION**: IP68
- **TEMP. RANGE**: -40° TO 150°C
- **CONSTRUCTION**: STAINLESS STEEL HOUSING, SILICID EPOXY ENCAPSULATION

- Speed detection from zero speed to 100 kHz
- Digital output
- Extremely accurate
- Position or quadrature measuring capability
- Detects direction of rotation
- No special alignment requirement relative to the pole wheel or target gear
- Large air gap
- High temperature range (-40°C to 150°C)
- 2-year warranty
- Low cost