Rotational Speed Sensor T03

The T03 series rotational speed sensor features a built-in permanent magnet and utilizes magnetic reluctance sensing to convert the rotational speed of a moving object into an approximate sine wave signal. By adopting improved manufacturing processes and high-grade carbon-based materials, the sensor delivers outstanding performance and high sensitivity. It is widely used for speed detection in various rotating machinery and transportation equipment.

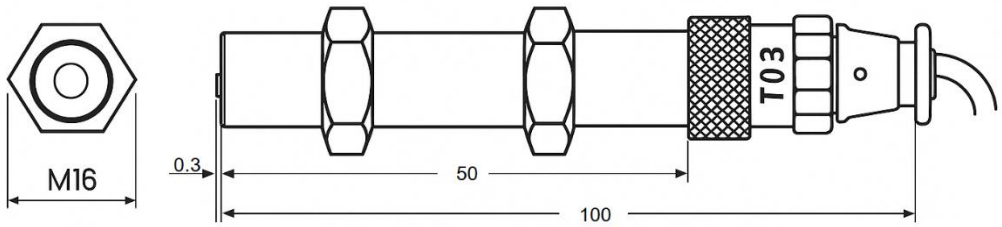
Parameters

Operating Parameters

- Coil Resistance: 150Ω/250Ω/customized, fully threaded
- Voltage Output:

RPM	10	20	50	100	200	500	1000	2000	5000
U_{out} (eff.)≥	50mV	100mV	250mV	500mV	1V	2.5V	5V	8V	10V

Outline & Interface



- Electrical Connection: X12K4P connector, RVVP 300V-2 x 0.5mm² shielded wire

Notes

- The output voltage data was obtained using a 60-tooth gear made of A3 steel with a module of 2.5 and an air gap of no more than 1 mm.
- To achieve higher output and a waveform closer to a sine wave, the gear should have a module greater than 2, and the distance between the sensor face and the gear tooth tip should be within 1 mm.
- When using an involute gear, the output is approximately a sine wave, while a slotted disk produces alternating positive and negative pulses.