TBT1B

Rotating Speed Sensor

Product Overview

TBT1B rotation speed sensor is a magnetoelectric rotation speed sensor, and it is installed the case or case cover of transmission gear, the tested rotary object is magnetic conductibility gea which has two signaling hole with diameter 4 mm (depth 3 mm). It is composed of permanent-magnet steel, electrical inductance coil, shell, shield cable, connector, etc. Output signal is similar to sine wave, adapting operation with other speed measuring control equipment in the various transport facilities. The sensor can detect the rotational speed of transmission gear and the speed of transport, applicable to various transport facilities.

Features

Wide temperature accommodation
Wide speed measuring range
Strong shock resistance
Good tightness
Non-contact with tested gear, without abrasion
Convenient installation, simple and reliable

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Main Technical Data

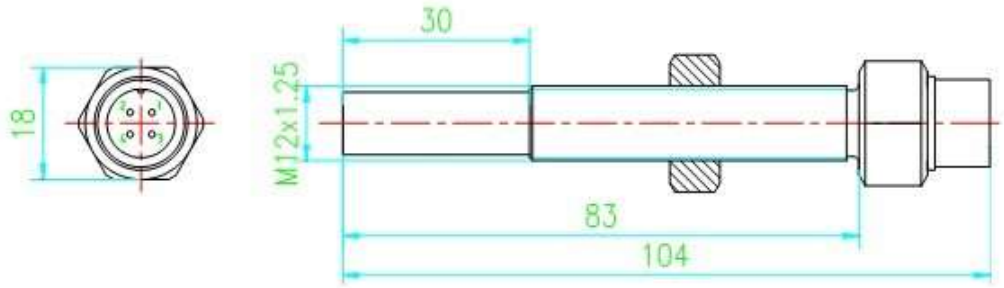
Supply Voltage : 12VDC~30VDC
Frequency range: 1.83Hz~2500Hz
Operating temperature: -25℃~+100℃
Speed measuring range: 1000rpm~33000rpm
Signaling hole: 2×Φ4, depth 3 mm
Operating air gap: 1mm
Output waveform: Similar to sine wave
Output channel: 1
Coil resistance:850?±10%
Output feature: Load resistance 10K? 0.5V≤Vp-p≤40V
Insulation resistance: ≥200M?(500V Megohmmeter)
Insulation strength: 500V/50Hz/60s
Output short - circuit protection: Available 2 2
Protection class: IP65
Vibration and shock: Vibration 5.9 m/s ; Shock 30 m/s
Interface: QJ1-4BF1

The definition of cable & connector output function

S/N	Shield cable	Connector	Output function
1	White wire	Pin 1、3	Output polarity −
2	Red wire	Pin 2、4	Output polarity +

Installation\operation and malfunction disposal. Forbidden contact between terminals; otherwise the permanent-magnet would be demagnetized greatly, even damaged. Output wire distribution as per the definition strictly, and ensure it correct, without short and open circuit; Strong recommend the air gap between gear and the head of sensor is adjusted to 1.0 mm, after adjusting the air gap, tighten these four fixed screws; When check the sensor, use the multimeter to measure DC resistance (connector pin1 and pin 3 or pin 2 and pin 4), the resistance should comply to 850?±10%, which shows the sensor work normally.

Outline and instal. drawing



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