

# **M12 INDUCTIVE SPEED VERY HIGH TEMPERATURE 290 ℃**



Inductive sensors give a voltage output when subjected to a changing magnetic field. The field is set up by a magnet inside the sensor body and changes when ferromagnetic teeth are passed beneath the sensor (no magnets are required in the target). The voltage increases with increasing speed and with a reduction of the gap between the sensor and the target. The sensors are suitable for use with interfaces that trigger on threshold or zero crossing. The body is totally enclosed and cab be used at very high temperatures.

Please request our installation datasheet for further details.

#### **Electrical**

- Resistance 115 to 160 ohm
- Cut-in speed is shown in the order details
- Cut-in speed is defined as the speed to achieve 200mV pk-pk @ 0.8mm air gap, with a 8.5mm diameter target wheel and a 3kohm load
- Output polarity follows tooth form, that is a rising metal edge on the wheel generates a rising voltage output from the sensor

#### **Cable and Connection Definition**

- 22 AWG un-screened cable
- Cable length is shown on the order details but any length is available on request
- Various automotive military standard connectors are available
- Connection

White wire Pin A Pin 1 Signal + Signal -Black wire Pin B Pin 2

## **Application**

· Turbo speed sensing

### Mechanical

- Air gap 0.5 to 1.0mm (0.8mm nominal)
- Body diameter 12mm
- Weight less than 95g (including cable)
- Sensor is axi-symmetric, special orientation is not required

Design and manufacture is in-house, so if our existing designs do not suit your application, we can provide cost effective customised parts to suit even the most demanding application. No engineering charges are made for simple modifications such as customer specific connectors, cable protection and cable lengths. Please contact our technical consultancy service who will be pleased to help.

### **Environmental**

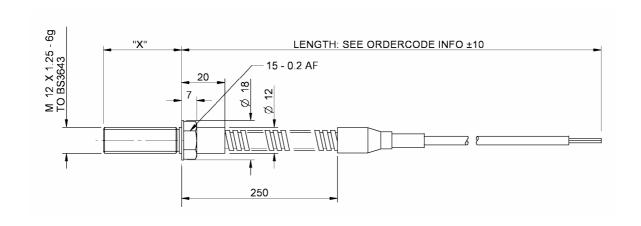
- Vibration 50 to 2500Hz @ 40g 8hrs per axis
- Resistant to standard motorsport fluids
- Maximum humidity 100%
- Operating temperature

Sensor Head -10 to +290 ℃ Cable -10 to +200°C

- Viton jacketed cable with stainless steel sheath
- Stainless steel body



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Cable Length	Dim "X"	Cut-In Speed 3kohm	Order Code
		Load	
1000mm	36mm	6000rpm	O 030 350 001 117

Email: mes@r-d.co.jp