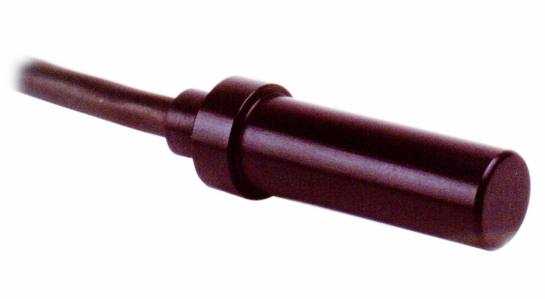
McLaren ELECTRONIC SYSTEMS

9.5mm INDUCTIVE SPEED
HIGH TEMPERATURE 200°C



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. Three different body styles are available: 1) totally closed; 2) eddy current reduction slot for increased sensitivity; 3) exposed core and eddy current reduction slot for maximum sensitivity.

Please request our installation datasheet for further details.

Electrical

- Resistance 580 to 700 ohm
- Cut-in speed is shown in the order details
- Cut-in speed is defined as the speed to achieve 400mV pk-pk @ 0.8mm air gap, with a 120mm diameter target wheel (3kohm load and no load values are given)
- 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 and military standard connectors are available
- Connection

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

Application

- Cam shaft, crank shaft and gear speed and position sensing. Wheel speed sensing.

Mechanical

- Air gap 1.0mm (max), 0.8mm (nominal)
- Body diameter 9.5mm
- Weight less than 40g (including cable)
- Aluminium alloy body, hard anodised and dyed black
- Polyester cable boss for strain relief to the sensor body
- 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%
- Sensor housing and element operating temperature -10°C to + 200°C
- Cable boss maximum operating temperature 150°C
- Viton jacketed cable maximum operating temperature 200°C

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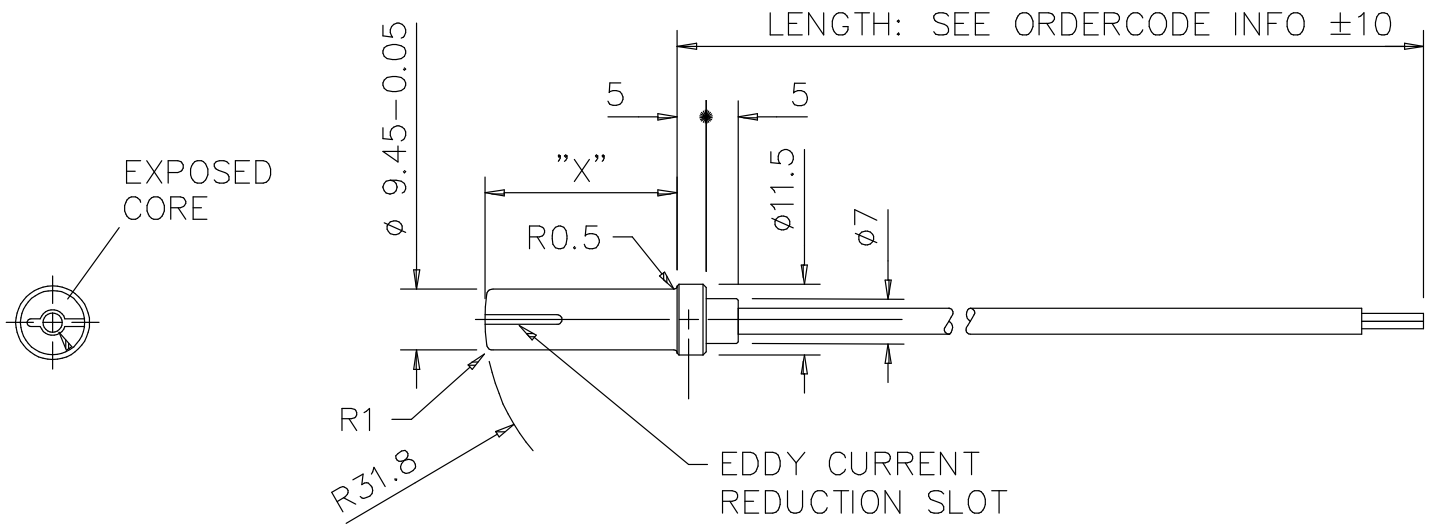
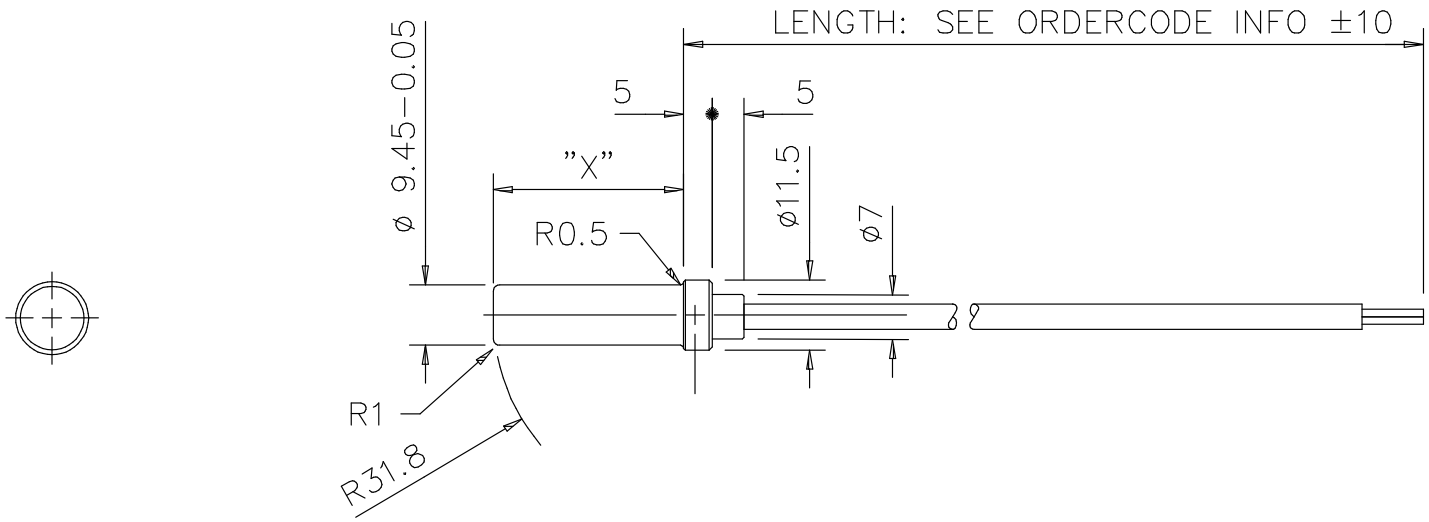


Cable Length	Dim "X"	Body Type	Cut-In Speed		Order Code
			3kohm Load	No Load	
1000mm	27mm	Exposed	66rpm	50rpm	O 030 350 001 082



Cable Length	Dim "X"	Body Type	Cut-In Speed		Order Code
			3kohm Load	No Load	
1000mm	27mm	Closed	161rpm	88rpm	O 030 350 001 092

23/08/06

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