

# MICRO PRESSURE AMPLIFIED



The miniature amplified pressure sensor has been developed and manufactured exclusively for McLaren Electronic Systems by GE Sensing.

The output voltage of this sensor changes with absolute pressure. An internal amplifier creates a single-ended, amplified output in the 0 to 5 Volt range, so the sensor can be connected directly to most control units. The body and diaphragm are impervious to chemical attack by standard motorsport fluids.

The Pressure connection is also available as M8x1.

Please request our installation datasheet for further details.

### Electrical

- Supply voltage 8 to 16V unregulated
- Supply current 5mA max
- Maximum output voltage 4.95V
- Span 4.5V  $\pm 0.05V$  @ 25°C
- Extrapolated zero offset  $\leq 0.2 \pm 0.05V$  @ 25°C
- Thermal shifts  
Sensitivity  $\leq \pm 2.5\% FSO$  @ 25°C<sup>1</sup>  
Zero offset  $\leq \pm 2.5\% FSO$  @ 25°C<sup>1</sup>  
Combined non-linearity, repeatability & hysteresis  $\leq \pm 0.25\% FSO$  @ 25°C BSL
- Insulation resistance >100MΩ @ 50Vdc
- Gain and offset values are measured at 25°C and will be supplied with the sensor

The sensor is protected against reverse bias or short circuit between output and ground but it may be damaged if the output is connected to the supply.

### Environmental

- Minimum pressure 0 bar
- Max pressure 2 times rated
- Burst pressure 4 times rated
- Resistant to standard motorsport fluids
- Maximum humidity 100%
- Operating Temperature -20 to +175°C
- Compensated temperature 0 to +175°C
- Viton jacketed cable
- Vibration 50 to 2500Hz @ 40g 8hrs per axis

<sup>1</sup> Over compensated temperature range

### Application

- Absolute pressure measurement of all media

### Cable and Connection Definition

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

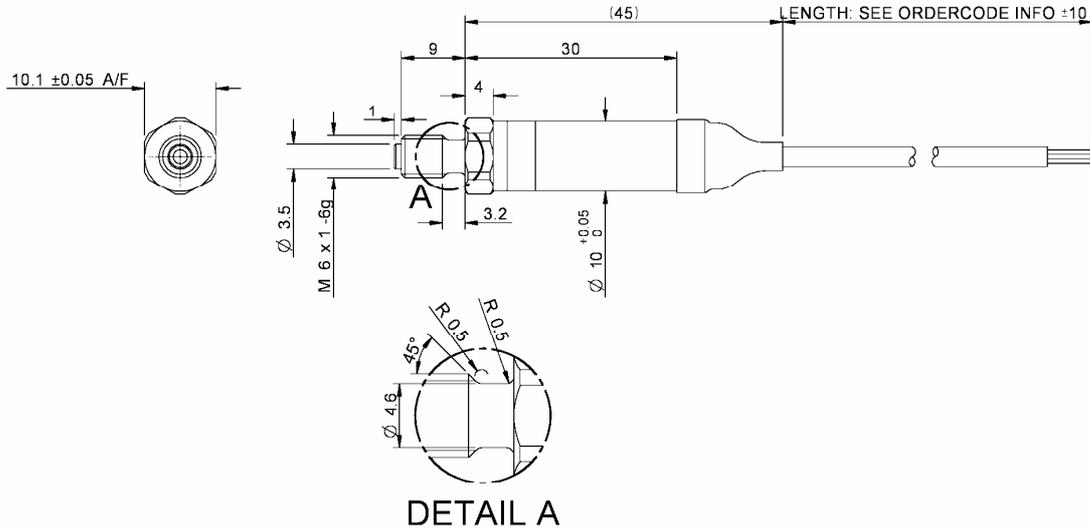
Red wire	Pin 1	Supply +ve
Black wire	Pin 2	Ground
White wire	Pin 3	Pressure Signal

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, pressure fittings, cable protection and cable lengths. Please contact our technical consultancy service who will be pleased to help.

### Mechanical

- Pressure connection also available as M8x1
- Stainless steel body 17-4PH and 316L
- Pressure ranges 5 to 250bar absolute (intermediate ranges available)
- Weight (including cable where fitted) is shown in the order details
- Maximum tightening torque 10Nm

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<b>Cable Length</b> 1000mm	<b>Weight</b> <30g	<b>Order Code</b> O 030 330 064 XXX
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