

MINIATURE PRESSURE HIGH TEMPERATURE AMPLIFIED



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.

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 ±0.05V @ 25℃
- Extrapolated zero offset ≤0.2±0.05V @ 25 °C
- Thermal shifts
 Sensitivity ≤2.5%FSO @ 25°C (0°C to 175°C)
 Zero offset ≤2.5%FSO @ 25°C (0°C to 175°C)
 Combined non-linearity, repeatability & hysteresis
 ≤0.25 FSO @ 25°C
- Output impedance <100Ω
- 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 (312.5bar max)
- Burst pressure 4 times rated (375bar max)
- Resistant to standard motorsport fluids compatible with Stainless steel 316L
- Maximum humidity 100%
- Operating Temperature -10 to +175 ℃
- Compensated temperature 0 to +175 °C
- DR25 jacketed cable (unless specified otherwise)
- Vibration 50 to 2500Hz @ 40g 8hrs per axis

Application

Absolute pressure measurement of all media

Cable and Connection Definition

- 24 AWG 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 (except where stated otherwise)

Red wire Pin 1 Supply
Black wire Pin 2 Ground
White wire Pin 3 Pressure Signal
N/A Pin 4 N/C
Screen Pin 5 N/C

The screen is connected to the sensor body. Either the sensor body or the cable screen should be connected to electrical earth but not both as this may create a ground loop.

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.

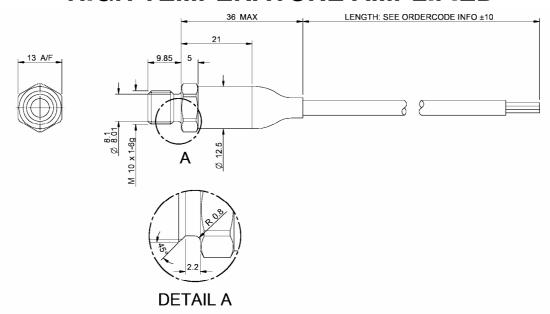
Mechanical

- Stainless steel body
- Pressure ranges 1.2 to 250bar (intermediate ranges available)
- Pressure connection also available as M8x1
- Weight (including cable where fitted) is shown in the order details
- Elastomer boot for strain relief to the sensor body

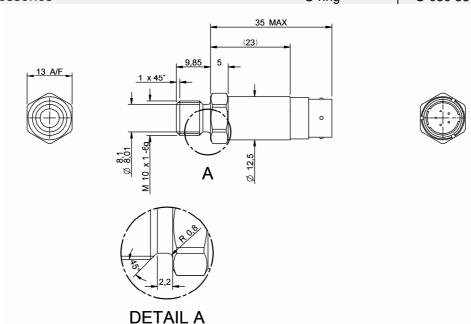
08/07/08



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| Cable Length | Body Material | Weight | Order Code | | |
|--|-----------------|--------|-------------------|--|--|
| 1000mm | Stainless Steel | <58g | O 030 330 054 XXX | | |
| Various pressure ratings are available up to maximum of 250bar. Please order using the above code | | | | | |
| stating your required pressure rating. Our technical consultancy service will then advise you of the | | | | | |
| full order code. | | | | | |
| Accessories | | O rina | O 030 330 990 000 | | |



| Integral Connector | Body Material | Weight | Order Code | | |
|--|-----------------|--------|-------------------|--|--|
| ASH04-05-PN-HE | Stainless Steel | <24g | O 030 330 060 XXX | | |
| Various pressure ratings are available up to maximum of 250bar. Please order using the above code | | | | | |
| stating your required pressure rating. Our technical consultancy service will then advise you of the | | | | | |
| full order code. | | | | | |
| Accessories | | O ring | O 030 330 990 000 | | |

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