

STANDARD 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 $\pm 0.05V$ @ 25°C
- Extrapolated zero offset $\leq 0.2 \pm 0.05V$ @ 25°C
- Thermal shifts
Sensitivity $\leq 2.5\%FSO$ @ 25°C (0°C to 175°C)
Zero offset $\leq 2.5\%FSO$ @ 25°C (0°C to 175°C)
- Combined non-linearity, repeatability & hysteresis
 $\leq 0.1\%FSO$ @ 25°C BSL for ranges up to 60bar
 $\leq 0.2\%FSO$ @ 25°C BSL for ranges above 60bar
- Output impedance $< 100\Omega$
- Insulation resistance $> 100M\Omega$ @ 50Vdc
- Long term ageing $< 0.10\%FSO/year$
- Temperature signal output 2.9V $\pm 0.5V$ @ 20°C
- Temperature signal sensitivity 7mV/°C $\pm 1mV/°C$
- 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 3 times rated
- Resistant to standard motorsport fluids compatible with Stainless steel 316L and Titanium IMI 160 (Titanium can be attacked by Methanol and some cleaning fluids)
- Maximum humidity 100%
- Operating Temperature -30 to +175°C
- Compensated temperature -10 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 A	Pin 1	Supply
Black wire	Pin B	Pin 2	Ground
White wire	Pin C	Pin 3	Pressure Signal
Blue wire	Pin D	Pin 4	Temp. Signal
Screen	Pin E	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.

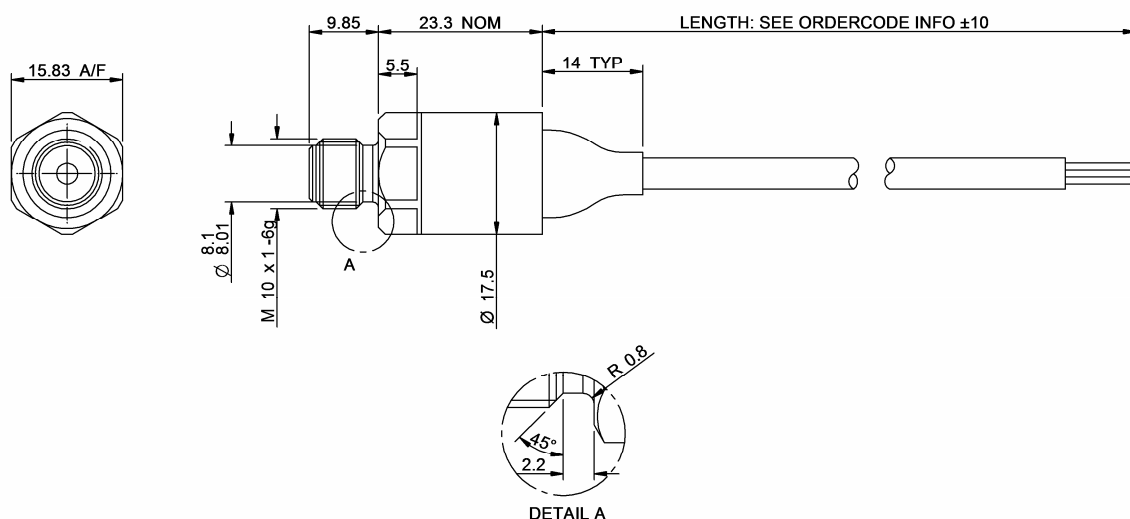
If our existing designs do not suit your application, we can provide cost effective customised parts to suit even the most demanding application. No engineering charges are made for simple modifications such as customer specific connectors, pressure fittings, cable protection and cable lengths. Please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

Mechanical

- Titanium or Stainless steel body
- Pressure ranges 1.6 to 250bar (intermediate ranges available)
- Weight (including cable where fitted) is shown in the order details
- Elastomer boot for strain relief to the sensor body

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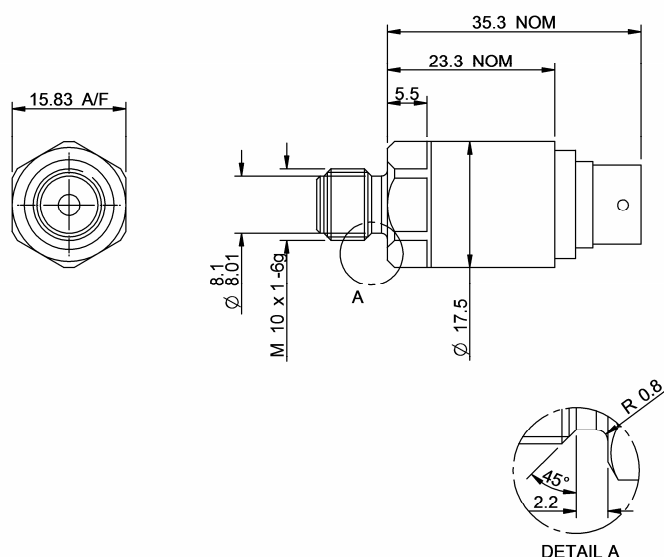
Cable Length	Body Material	Weight	Order Code
1000mm	Stainless Steel	<63g	O 030 330 052 XXX
1000mm	Titanium	<52g	O 030 330 059 XXX

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



Integral Connector	Body Material	Weight	Order Code
ASH04-05-PN-HE	Stainless Steel	<36g	O 030 330 055 XXX
ASH04-05-PN-HE	Titanium	<25g	O 030 330 058 XXX

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Accessories

O ring

O 030 330 990 000

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