

# Carbon Monoxide MediceLs<sup>®</sup>

## A2E/F Characteristics

<b>Nominal Range</b>	0-200ppm
<b>Maximum Overload</b>	1000ppm
<b>Output Signal</b>	10.15±0.03µA/ppm
<b>Typical Baseline Range (pure air)</b>	<3ppm
<b>Maximum Zero Shift (-20°C to +40°C)</b>	<5ppm
<b>Bias Voltage</b>	Zero
<b>Recommended Gain</b>	2.2
<b>Weight</b>	25g

## A3E/F Characteristics

<b>Nominal Range</b>	0-2000ppm
<b>Maximum Overload</b>	4000ppm
<b>Output Signal</b>	0.075±0.025µA/ppm
<b>Typical Baseline Range (pure air)</b>	-2 to +17ppm equivalent
<b>Bias Voltage</b>	±20 or +250mV
<b>Recommended Gain</b>	0.5 to 2.5
<b>Weight</b>	26g

Note 1: in recommended circuit with Gain=2.2

Note 2: User adjusts Gain to set H<sub>2</sub> to zero

## Performance Characteristics

<b>Inboard Filter</b>	To remove acid gases/alcohol
<b>Auxiliary Electrode</b>	To compensate for H <sub>2</sub> cross-interference
<b>Expected Operating Life</b>	3 years
<b>Resolution</b>	1ppm
<b>Temperature Range</b>	-20°C to +50 °C
<b>Pressure</b>	
<b>Operating Range</b>	800-1200mBar
<b>Storage Range</b>	800-1200mBar
<b>Max Diff (capillary to amb.)</b>	±100mBar
<b>Pressure Coefficient</b>	0.02% signal/mBar
<b>T<sub>90</sub> Response Time</b>	<40 seconds
<b>Relative Humidity Range</b>	15% to 90% non-condensing
<b>Long Term Output Drift</b>	<10% signal loss/year
<b>Repeatability</b>	2% of signal
<b>Output Linearity</b>	Linear

## A2E/F Cross Sensitivity Data

Gas	Response
Hydrogen (H <sub>2</sub> )	-4 to + 4%
Hydrogen Sulphide (H <sub>2</sub> S)	None
Sulphur Dioxide (SO <sub>2</sub> )	None
Nitric Oxide (NO)	None
Nitrogen Dioxide (NO <sub>2</sub> )	None
Hydrogen Chloride (HCl)	None

## A3E/F Cross Sensitivity Data

Gas	Response
Hydrogen (H <sub>2</sub> )	
<b>Bias: 0mV</b>	<5%
<b>Bias: 250mV</b>	<1%
Hydrogen Sulphide (H <sub>2</sub> S)	None
Sulphur Dioxide (SO <sub>2</sub> )	None
Nitric Oxide (NO)	None
Nitrogen Dioxide (NO <sub>2</sub> )	None
Hydrogen Chloride (HCl)	None

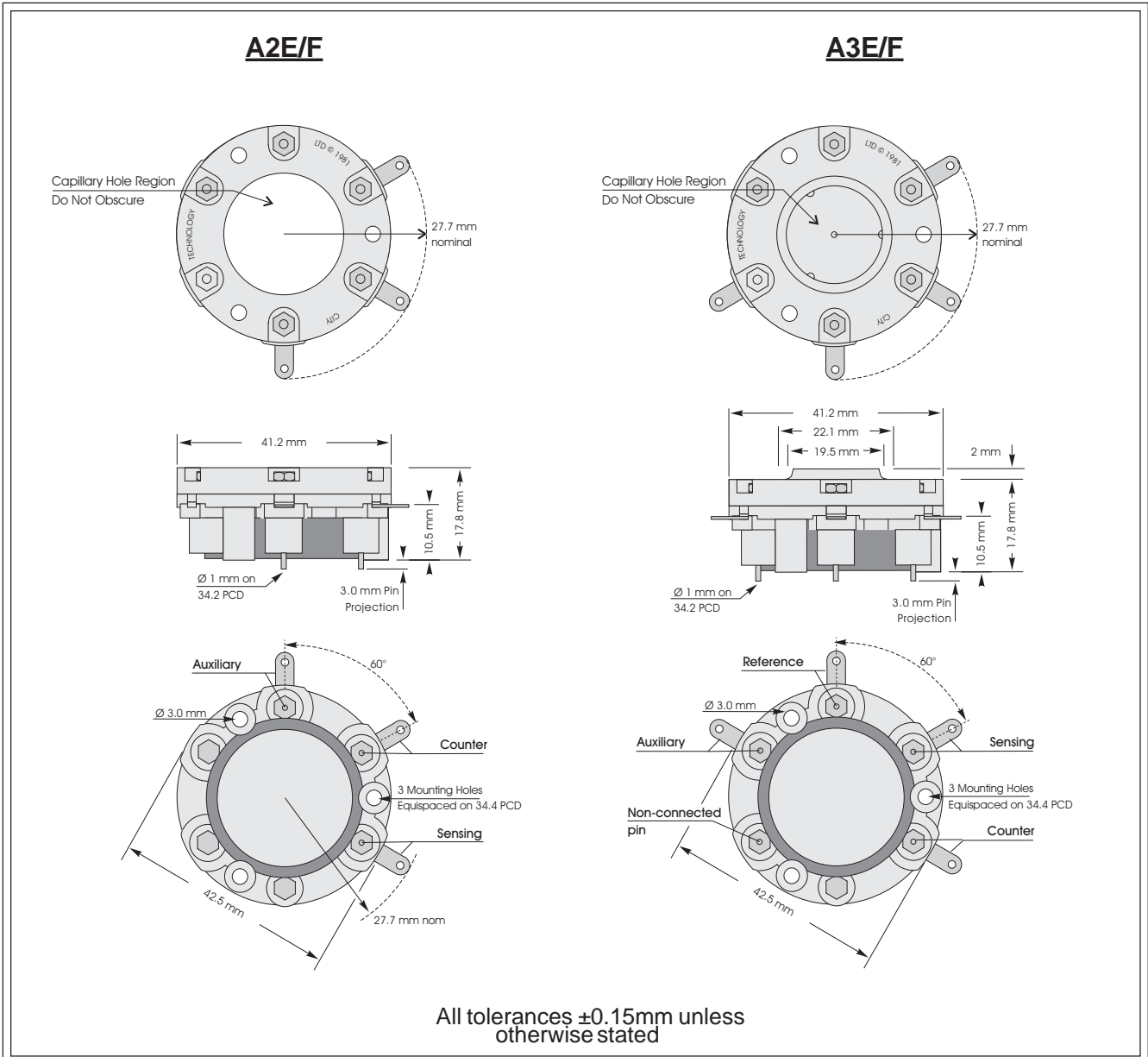
## Products

<b>A2E/F</b>	Two-electrode CO sensor with auxiliary electrode for H <sub>2</sub> compensation
<b>A3E/F</b>	Three-electrode CO sensor with auxiliary electrode for H <sub>2</sub> compensation

## Physical Characteristics

<b>Position Sensitivity</b>	None
<b>Storage Life</b>	Six months in CTL container
<b>Recommended Storage Temperature</b>	0-20°C
<b>Colour Coded Ring</b>	Red
<b>Warranty Period</b>	12 months from date of despatch

# Carbon Monoxide MediceL<sup>®</sup> Specification



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Performance characteristics on this data sheet outline the performance of newly supplied sensors. Output signal can drift below the lower limit over time.



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