Hydrogen MediceL® Specification



MHYT-1 MediceL®

With filter to remove trace alcohol levels

Performance Characteristics

Nominal Range 0-1000ppm **Maximum Overload** 2000ppm **Expected Operating Life** Two years in air **Output Signal** $0.03 \pm 0.01 \,\mu\text{A/ppm}$ Resolution 2ppm -20°C to +50°C **Temperature Range Pressure Range** Atmospheric ± 10% **Pressure Coefficient** 0.009 ± 0.003 % signal/mBar T_{oo} Response Time <50 seconds **Relative Humidity Range** 15 to 90% non-condensing **Typical Baseline Range** 0 to -15ppm equivalent (pure air) **Maximum Zero Shift** -35ppm equivalent (+20°C to +40°C) **Long Term Output Drift** <2% signal loss/month **Recommended Load** 10Ω Resistor **Bias Voltage Not required** Repeatability 2% of signal **Output Linearity** Linear

Outline Dimensions 41.2 mm 1 ┍┺┯ Ø 1 mm on 34.2 PCD 3.0 mm Pin Sensing 3 Mounting Holes Equispaced on 34.4 PCD Counter 27.7 mm nominal All tolerances ±0.15mm unless otherwise stated. Sensor shown with side tags and gold pins. Do not solder to pin connections

N.B. All performance data is based on conditions at 20°C, 50%RH, and 1013mBar

Filter Life | 400ppm/hrs Ethanol

Physical Characteristics

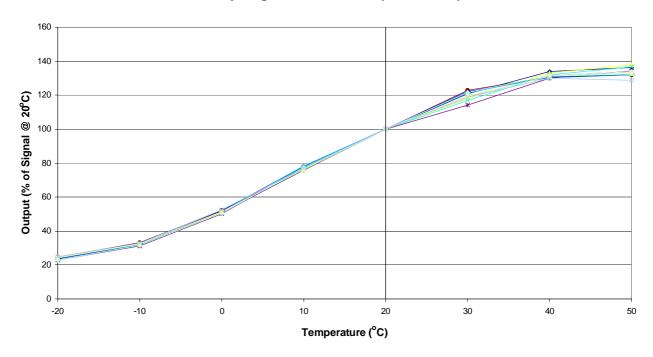
Weight Position Sensitivity None Storage Life Recommended Storage Temperature Warranty Period 12 month from date of despatch

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MHYT-1 Hydrogen MediceL - Output vs Temperature



Cross-sensitivity Data

MediceLs may exhibit a response to certain gases in a sample other than the target gas. MHYT-1 MediceLs have been tested with a number of commonly cross-interfering gases and the results are given below. The table shows the typical response to be expected from a sensor when exposed to a given test gas concentration (relevant to safety, e.g. TLV levels).

<u>Gas</u>	Conc.	MHYT-1	<u>Gas</u>	Conc.	MHYT-1	
Carbon monoxide: Hydrogen sulphide:	200ppm 20ppm	<40ppm <10ppm	Ethanol: Methanol:	200ppm 200ppm	0ppm TBD	
			For details of other possible cross-interfering gases contact City Technology.			

Ordering Information

The MHYT Hydrogen MediceL is available with gold-plated PCB pins.

Type MHYT-1: With gold-plated PCB pin connection - MHYT-1(G)

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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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