

HCM-200

Hydrogen Concentration Sensor

User manual



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I、 Introduction

HCM-200 vehicle-mounted hydrogen concentration sensor is equipped with a high-precision hydrogen detector, which can provide an analog voltage output proportional to the hydrogen concentration, and has the characteristics of good durability and high stability. This product adopts a moisture-proof coating and can be used with confidence in high humidity environments; this product has a wide temperature range of -20°C~50°C. It is suitable for the detection of the concentration of the combustible gas of fuel cell-hydrogen.

Features

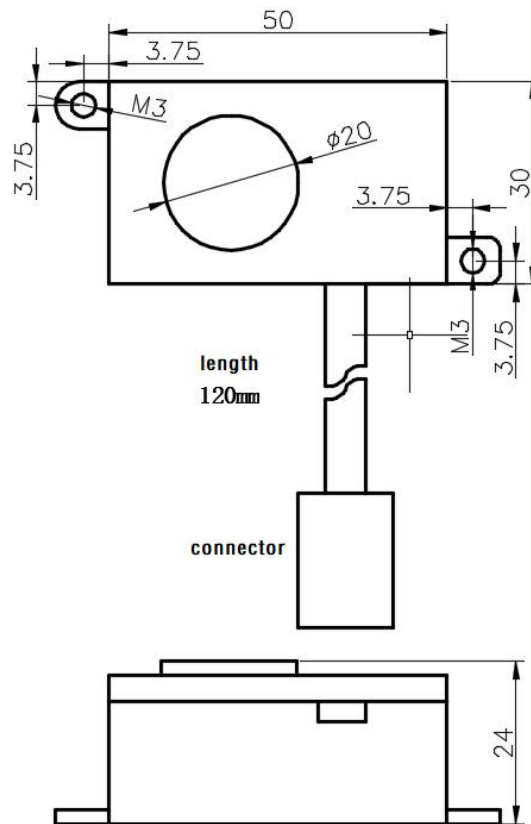
- Used for hydrogen concentration measurement on-board hydrogen energy vehicles
- Signal output: 0.5~4.5V
- Screw fixing
- IP65 protection level

II、 Technical specifications

● Technical parameters

Model	HCM-200
Measuring range	0~40000ppm
Precision	±5%
Response time	<30s(T90)
Operating temperature	-20~50°C
Working humidity	15~90%RH (Anti-condensation)
Working pressure	Normal atmospheric pressure ±10%
Signal output	0.5~4.5V
Voltage conversion	$V_{out} = 4 * [\text{Hydrogen concentration (ppm)} / 40000] + 0.5$
Power supply	12~24V
Power consumption	<0.5W
Installation method	Screw fixing

● **Dimensions**

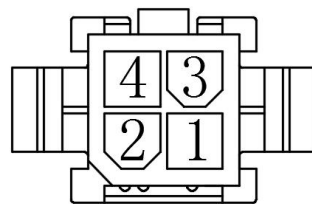


III、 Installation and use

● **Installtaion**

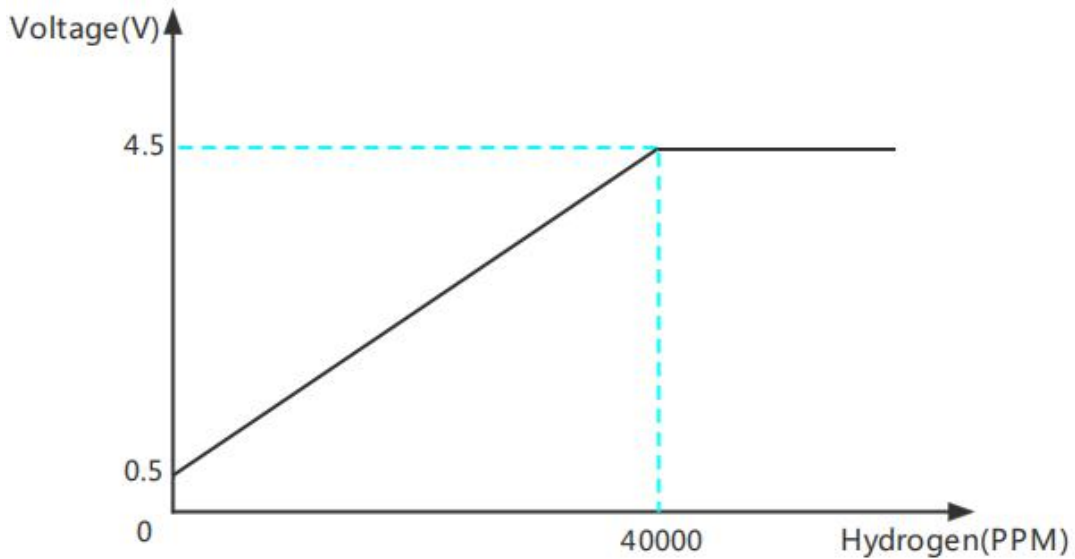
When installing the sensor, avoid damaging the measuring parts by excessive force or by collision with sharp objects, otherwise it will affect the measurement. After completing the wiring, check carefully before turning on the power to avoid damage caused by incorrect wiring.

● **Electrical connection**



1:GND (black) 3:VCC (red, 12~24V)
2:Vout (white) 4:NC (blue)

- **Output curve**



IV、Quality and service

- The company has advanced testing equipment and standardized inspection procedures. Before the products leaving the factory, they will conduct strict aging tests and stability tests in accordance with the inspection procedures.
- The product has been carefully debugged and calibrated before leaving the factory to ensure measurement accuracy.
- The company provides free after-sales service within one year from the date of sale, excluding damage caused by improper use. If you need to repair or debug, please contact customer service and send it back and make sure it is well packed to avoid damage in transit.