

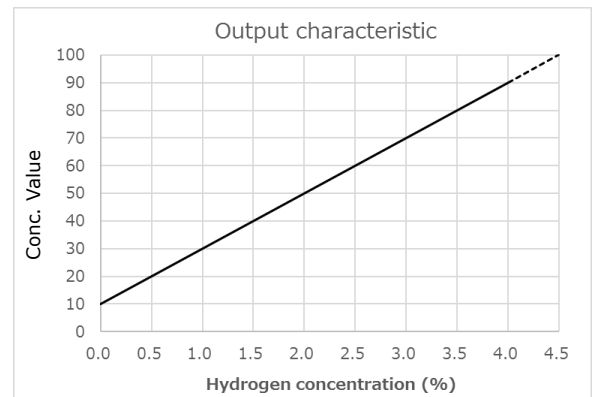
FH2-HY05

H₂ DETECTOR **FH2-HY05** for HYDROGEN LEAK DETECTION

The FH2-HY05 is a newly developed hydrogen detector, specifically designed for preventing hydrogen leaks in fuel-cell vehicles (FCV). For this application, a reliable hydrogen sensor is required and Nissha FIS has developed a new catalytic combustion type hydrogen sensor with a minimum mass and wide surface area using a unique technology.

The development of this sensor realizes a rapid response speed and strong poisoning resistance against silicone compounds. These features achieve the expected demands for long life in actual applications in automobiles, without any need for replacing detectors over a long period. In combination with sophisticated electronics and software design, Nissha FIS offers the following features in hydrogen leak detection.

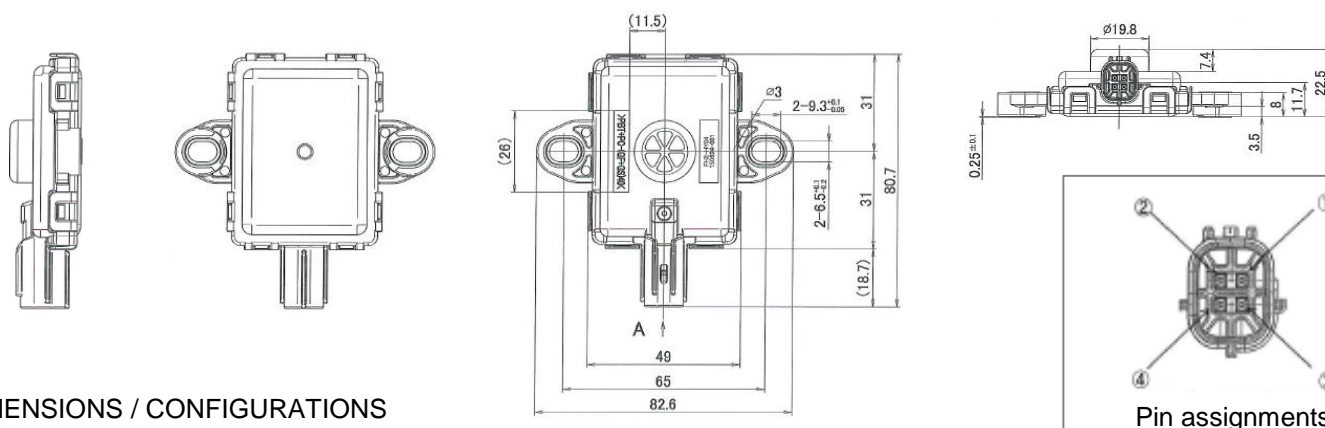
- **Rapid response speed**
- **High selectivity**
- **Long life**
- **Compact and light weight**



From CAN output, the Hydrogen concentration (%) is calculated with the following formula: $(\text{Conc. Value} - 10) / 20$

SPECIFICATIONS

Model	FH2-HY05	
SPECIFICATIONS-1 Sensing performance	Detection gas	Hydrogen
	Concentration range	0 ~ 4 vol.% in air
	Initial accuracy	± 3,000ppm (above 10000ppm)
	Speed of response (T90)	< 3 seconds
	Start-up time	3 seconds (CAN signal output is canceled for 3 seconds after power ON)
SPECIFICATION-2 Electrical	Supply voltage	12V (8 ~ 16 V) DC
	Power consumption	Approx. 0.3W
	Output signal	CAN (standard format) Baud rate: 500kbps
SPECIFICATION-3 Environmental	Operating temperature range	-35°C ~ 85°C
	Storage temperature range	-40°C ~ 105°C
	Humidity	< 95%RH (no condensation)
SPECIFICATION-4 Mechanical	Dimensions	62 (W) × 49 (D) × 22.5 (H) mm
	Weight	Approx. 58g
	Matching connector and Pin assignment	6189-1231: Sumitomo wiring Systems Inc. Pin 1: CAN High Pin 2: CAN Low Pin 3: DC 12V Pin 4: GND



DEMENSIONS / CONFIGURATIONS

Pin assignments

Please contact

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Nissha FIS, Inc.

2-4-28 Tagawa, Yodogawa-ku,

Osaka 532-0027, Japan

Tel: +81-6-7176-3911

Fax: +81-6-7176-3912

<http://www.fisinc.co.jp/en/>