

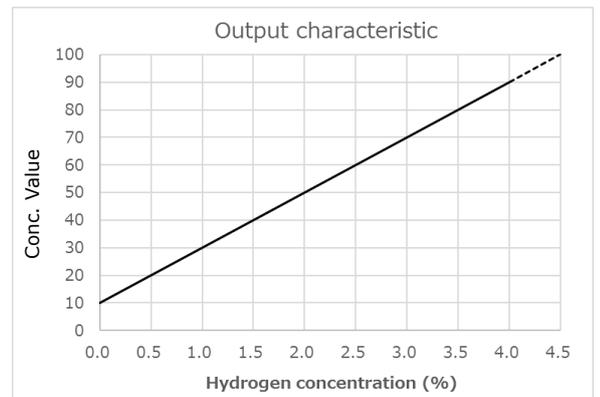
FH2-HY05

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 a 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.

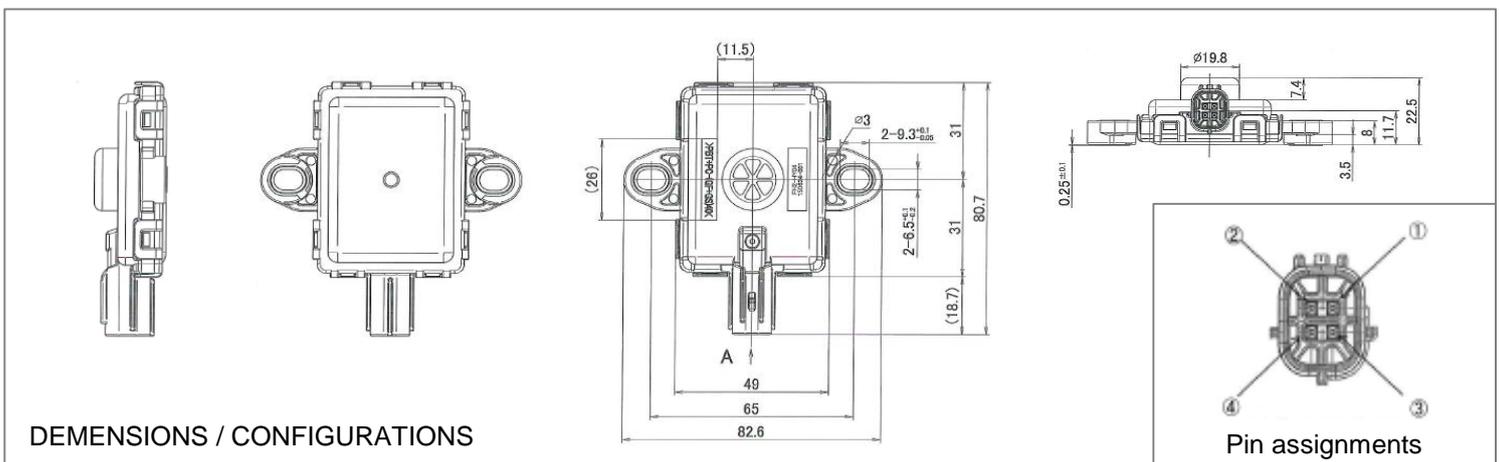
- **Rapid response speed**
- **High selectivity**
- **Long life**
- **Compact and light weight**



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 (without the attaching part)	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



Please contact

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