

H₂ DETECTOR (12V/PWM) FH2-HY04-GS2

for HYDROGEN LEAK DETECTION

FH2-HY04-GS2 is a hydrogen detector, specifically designed for detecting leaks in hydrogen-powered mobility solutions, such as fuel-cell vehicles (FCVs).

Equipped with a proprietary catalytic combustion-type gas sensor element developed by Nissha FIS specifically for FCV applications, this product offers rapid startup and response performance, along with long-term durability.

In combination with sophisticated electronics and software design, we offer the following features in hydrogen leak detection.

Features

- Quick Start-Up Time
- Rapid Response Speed
- Long Life
- High Selectivity

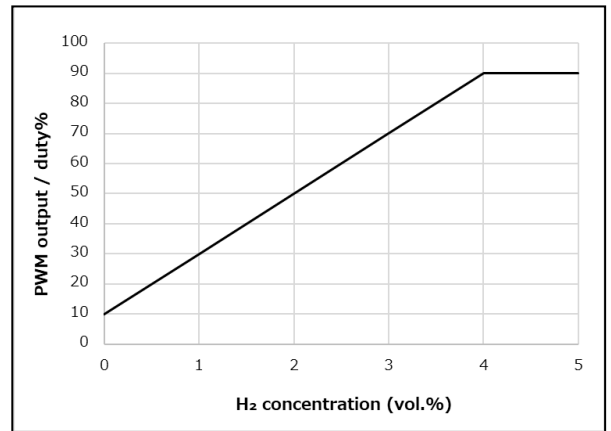


Figure 1: Output characteristics

Basic Operation

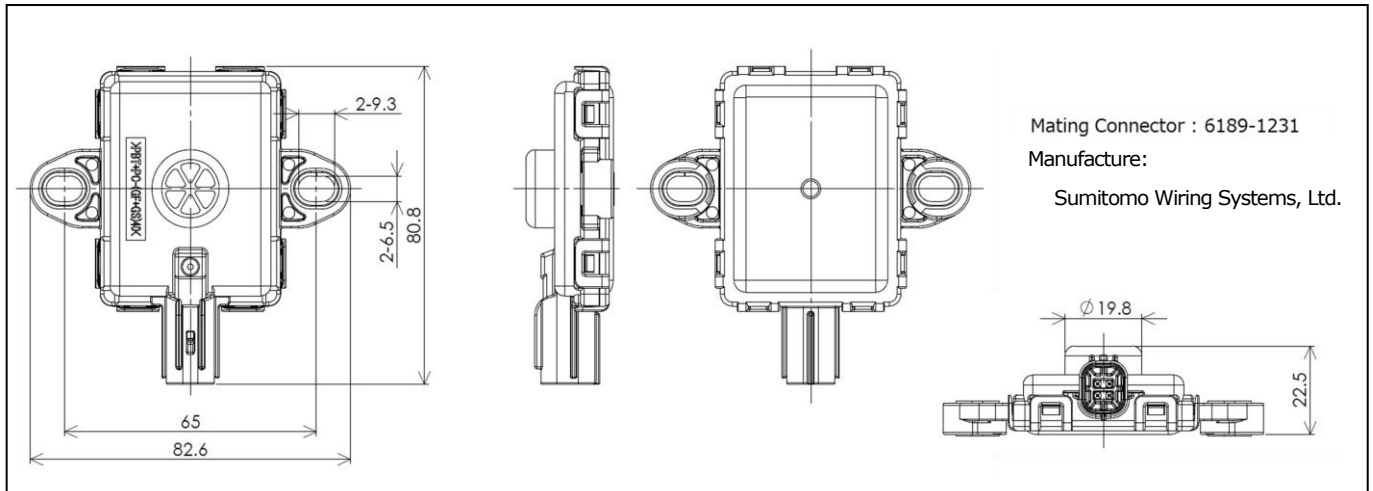
When a supply voltage (12VDC) is applied, hydrogen gas measurement begins within 1 second, and a PWM signal corresponding to the hydrogen concentration is output. (Figure 1)

SPECIFICATIONS

Specifications: FH2-HY04-GS2

Item	Specification
Sensing Principle	Catalytic combustion type
Detection Gas	Hydrogen
Concentration Range	0 ~ 4 vol.% in air
Initial Accuracy	± 10 % (above 1 vol.%)
Start-Up Time	≤ 1 second
Speed of Response (T90)	≤ 3 seconds
Supply Voltage	12 V (9 V ~ 16 V) DC
Power Consumption	≤ 1.0 W (stable)
Output Signal	PWM (250 Hz, 10 ~ 90 % duty); negative logic
Operating Temperature & Humidity	-35 °C ~ 85 °C / < 100 %RH (no condensation)
Storage Temperature & Humidity	-40 °C ~ 105 °C / < 100 %RH (no condensation)
IP Class	IP6K7
Dimensions	82.6 (W) × 80.8 (D) × 22.5 (H) mm
Weight	58 g

DIMENSIONS / CONFIGURATIONS



In the interest of continued product improvement, we reserve the right to change design features without prior notice.

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