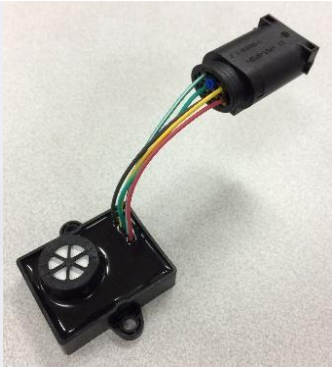
H_2 DETECTOR (5V/ANALOG)

FH2-HY11, FH2-HY11-HC

for HYDROGEN LEAK DETECTION

FH2-HY11,HC is a hydrogen detector, specifically designed for detecting hydrogen leaks in stationary fuel cell systems, including residential, commercial, and industrial applications. 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.

FH2-HY11



FH2-HY11-HC

Features

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

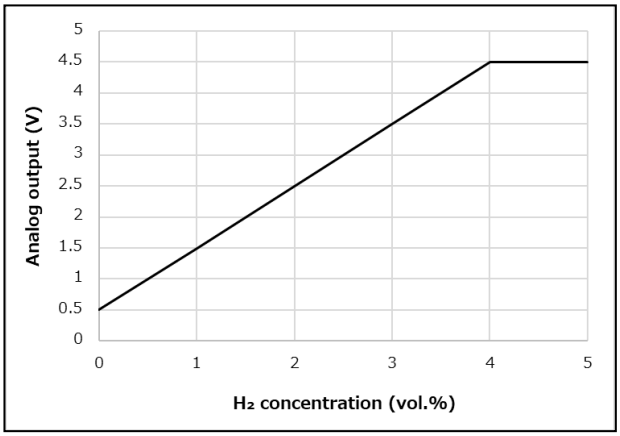


Figure 1: Output characteristics

Basic Operation

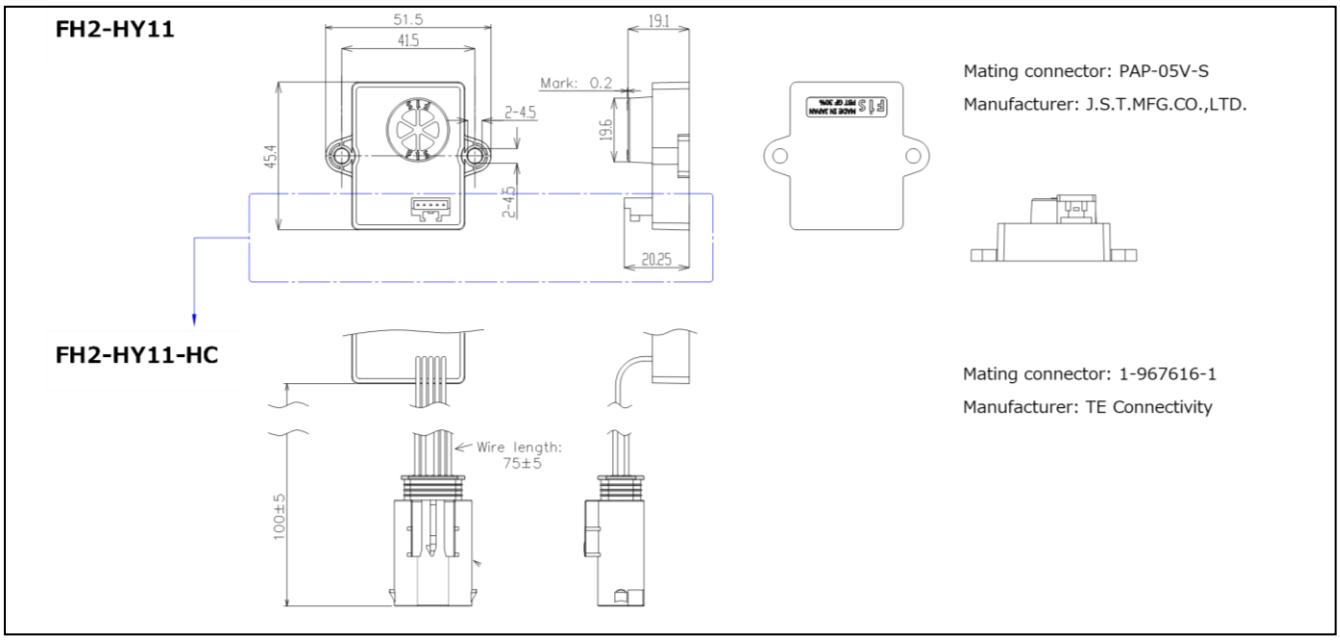
When a supply voltage (5VDC) is applied, hydrogen gas measurement begins within 1 second. An analog signal (voltage output: 0.5-4.5V) is generated according to the hydrogen concentration.

SPECIFICATIONS

Specifications: FH2-HY11, FH2-HY11-HC

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	5 V (4.75 V ～ 5.25 V) DC
Power Consumption	≦ 0.25 W (stable)
Output Signal	Analog 0.5 V ～ 4.5 V DC
Output Interval	100 msec
Operating Temperature & Humidity	-35 ℃ ～ 85 ℃ / < 100 %RH (no condensation)
Storage Temperature & Humidity	-40 ℃ ～ 85 ℃ / < 100 %RH (no condensation)
IP Class	—
Dimensions	〔 HY11 〕 51.5 (W) × 45.4 (D) × 20.25 (H) mm 〔 HY11-HC 〕 51.5 (W) × 45.4 (D) × 19.3 (H) mm *w/o Connector Cable
Weight	〔 HY11 〕 25 g ／〔 HY11-HC 〕36 g

DIMENSIONS / CONFIGURATIONS



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

Contact :

Nissha Co., Ltd. Devices Business Unit

3 Mibu Hanai-cho, Nakagyo-ku, Kyoto 604-8551, Japan

URL : https://connect.nissha.com/gassensor/en/product/hydrogendetector/

Mail : marketing.fis@nissha.com

Tel : +81 75 823 5217