



■ Description

The KP-35D is a 24VDC powered gas detector of combustible, liquefied petroleum gases (LPG) such as propane and butane, which are heavier than air. This detector is used with the KM-35B dedicated base in order to mount on the wall and an electrical junction box.

This detector incorporates a catalytic type gas sensor which is comprised of two elements; 1) element which is sensitive to combustible gases and 2) reference element which is not sensitive to combustible gases. When combustible gases touch with the element 1), they will be combusted on the element 1), causing the temperature and resistance to rise, while not on the element 2). The detector measures the differences of resistance between two elements so as to compensate changes in gas sensitivity corresponding to changes in relative temperature. This sensing method enables a stable sensitivity and prevents false alarms caused by high temperature, high humidity and non-targeted gases like an alcohol gas. The KP-35D can output 3-level voltages — 0V-6V-12V — depending on the status of the detector.

The output voltages can be converted into dry contact outputs by using the OC-3Ma signal converter (optional).

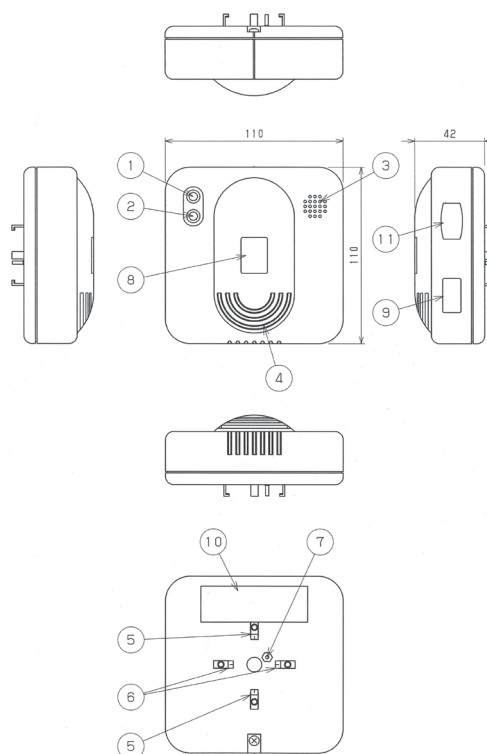
This detector is intended for use in non-hazardous, indoor locations such as residences, hotels, restaurants, stores, offices and institutional buildings.

The KP-35D has been approved by The High Pressure Gas Safety Institute of Japan as a suitable detector for LPG.

■ Features

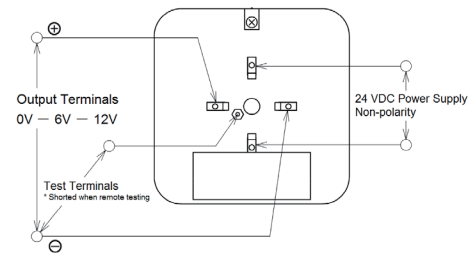
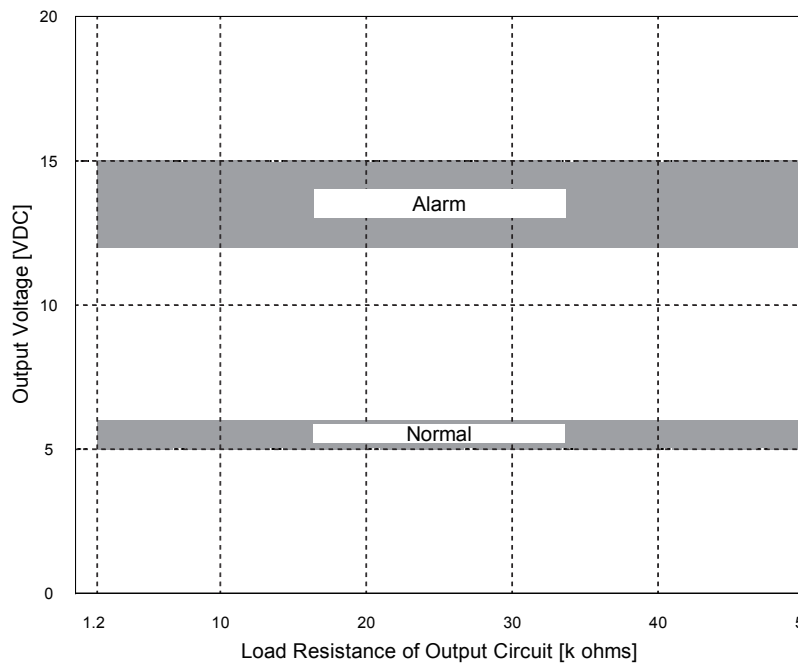
- Gas Detector of LP gases
- Catalytic combustion type gas sensor
- Temperature compensation element reduces false alarms
- 3-level voltage outputs for Alarm, Trouble and Normal indications
- Self-restoring from alarm status
- Input terminal for remote testing
- Surge protection circuit
- Sensor drift detection circuit
- 24 VDC Power Supply

■ Dimensions



1. Power supply LED (Green)
2. Alarm LED (Red)
3. Buzzer
4. Gas inlet hole
5. 24VDC power input terminals
6. 3-level voltage output terminals
7. Test input terminal
8. Logo plate
9. Replacement period indication
10. Name plate
11. Approval certification mark

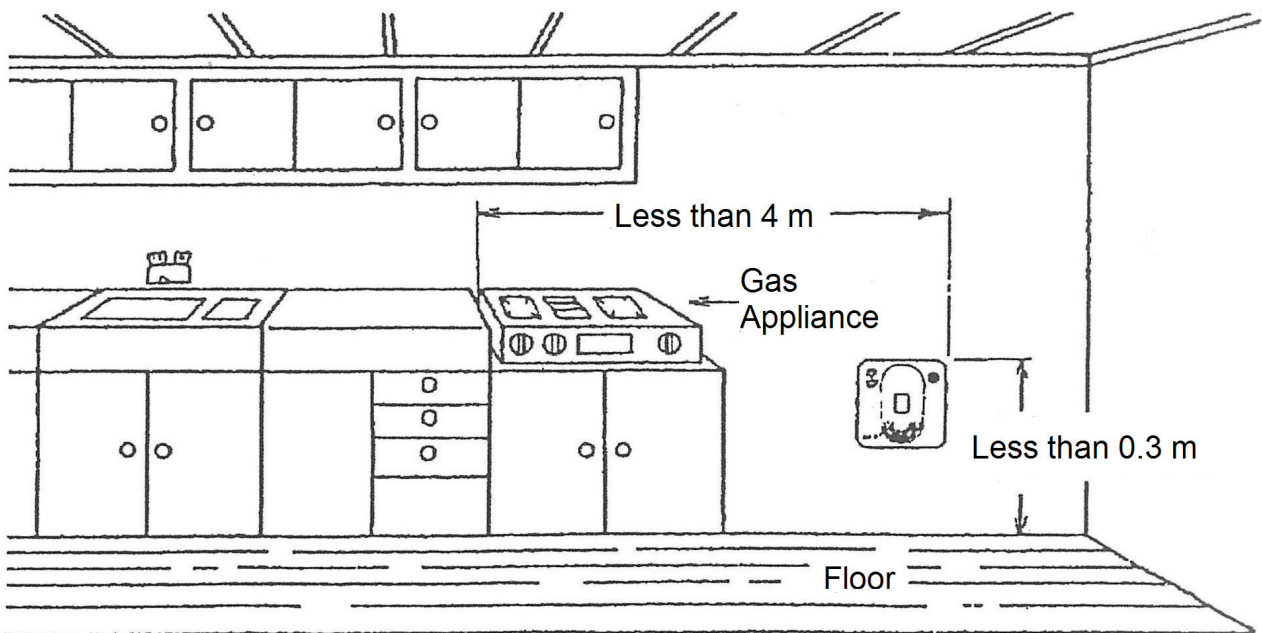
Output Voltage



Alarm Condition	Output Voltage (Range) [VDC]
Alarm	12 V (12V - 15V)
Normal	6 V (5V - 6V)
Trouble	0V

* Load resistance: 1.2 k ohms to 50 k ohms

Detector Location

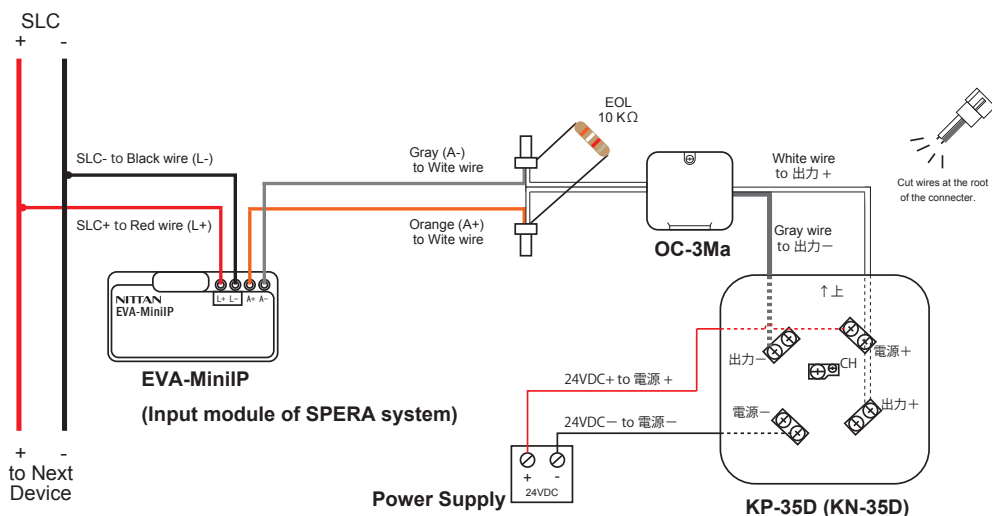


The KP-35D is used to detect an LP gas that is heavier than air. Therefore, please locate the detector near ground level on the wall.

The detector location is where;

- In the same room of the gas appliances.
- Within both a height of 30 cm from the floor and a distance of 4 m from gas appliances.
- Where easy to check the alarm indicators.
- Where easy to maintain the detectors.

Typical Wiring



Ordering Information

Model	Description
KP-35D	LP Gas Detector Head
KN-35D	Natural Gas Detector Head
KM-35B	Wall Mount Base
OC-3Ma	Signal Converter

Specifications

Specifications	KP-35D
Approval Number	GP3VBD (Approved by The High Pressure Gas Safety Institute of Japan)
Detection Principle	Catalytic Combustion
Target Gas	Liquefied Petroleum Gas (LPG, Propane)
Alarm Concentration	1/100 to 1/4 of Lower Explosive Limit (LEL)
Alarm Notification	Green LED : Power Red LED : Alarm Buzzer : Alarm (automatically restorable)
Startup Time	40 sec. (Red LED On)
Rated Voltage	24 VDC
Operating Voltage	17 VDC to 35 VDC
Power Consumption	Normal: Approx. 0.8 W Alarm: Approx. 1.0 W
Output Voltage (Range)	Normal : 6 V (5V - 6V) Alarm : 12 V (12V - 15V) Trouble : 0 V
Operating Temperature	-10°C to +40°C
Relative Humidity	85% RH and less
Body Material	Flame retardant resin
Weight	140 g (without Base)
Mounting Base	KM-35B wall-mount base (optional)
Accessory	Test gas x 1 pc

Distributed By

All specifications are subject to change without any notice.
For more information, contact with NITTAN.

NITTAN

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