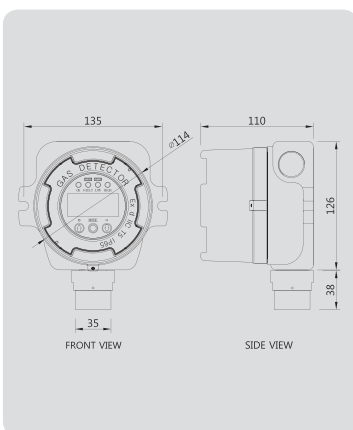


Fixed Gas Detector KGD-SI100

Explication and Features

KGD-SI100 is a fixed gas detector installed in a place where potential gas hazard exists to measure oxygen, toxic gas and combustible gas. It shows not only the concentration of gas but also diagnostic result of the unit itself through the LCD display and can be connected to the controller with a standard 4-20mA analog output communication or RS-485 digital communication.



- KGD-SI100 measures the concentration of the flammable gas, toxic gas, oxygen and display with LCD
- Easy magnetic bar operation
- Big digital LCD installed with a blue backlight
- Explosive proof structure
- Water/dust proof structure
- Simple gas calibration

Applications

Steelworks, Petrochemical plant, Shipbuilding yard, Sewage treatment plant, Mine, Power supply works, Hermetically sealed area (manhole, tank)



Specification

※ Varicus gas sensors can be applied

Model	KGD-SI100			
Measuring gas	Combustible gas	O ₂	CO, H ₂ S, SO ₂ , NH ₃	H ₂
Measuring type	Diffusion Type			
Measuring method	Catalytic	Electrochemical cell	Electrochemical cell	Electrochemical cell
Measuring range	0~100%LEL	0~30%VOL	CO:0~500ppm, H ₂ S:0~100ppm, SO ₂ :0~20ppm, NH ₃ :0~100ppm	0~1,000ppm
Sensor life time	> 2 years	> 18Month	> 2 year	> 2 year
Response time	<15sec/90%scale	<15sec/90%scale	<30sec/90%scale	<30sec/90%scale
Accuracy	±3%/Full scale			
Resolution	1%LEL	0.1%VOL	1PPM	1PPM
Parameter Control	Front 3 magnetic switch(calibration, maintenance, alarm setting)			
Operation mode display	Digital LCD display, LCD Backlight, 4 Indicator LED			
Measuring value display	Digital LCD Display(4-digit)			
Alarm display	Visual : LCD alarm display, LCD Backlight, Indicator LED			
Alarm output signal	Relay contact(Max 30Vdc, 5A) when Alarm occurred			
Alarm level set	Programmable within dectection range			
Output signal	Analog : 4-20mA, Digital : RS-485(Optional)			
PC interace	RS_485(Optional)			
Cable/Distance	Power + Signal cable : 3-wire 1.5sq(AWG16)/2,500m max RS-485 data communication cable : 1 pair(UL2919 RS-485)/1,200m max			
Conduit connection	NPT 3/4" (2way)			
Mounting type	Wall mount			
Program set mode	Alarm value(1,2,3 alarm)	Alarm time(instant&delay)1~30min	Alarm dead band	Relay output on/off
Operating temperature	-20°C~50°C			
Operating humidity	5% to 95% RH(Non-condensing)			
Operating power	10~30Vdc 600mA			
Material	Aluminium, Stainless steel(STS304)			
LCD size	55(W) × 30(H) mm			
Dimensions	135(W) × 164(H) × 110(D)mm			
Weight	1.9kg			
Approval	Ex d IIC T5 IP65(IECEx)			

Gas Chart

※ It is available to order various sensor including below list.

Type		Sensor	Range	A1	A2	Resolution
Oxygen	O2	Electrochemical	0~30%VOL	19.0%VOL	23.0%VOL	0.1%VOL
Carbon Monoxide	CO	Electrochemical	0~500ppm	30ppm	60ppm	1ppm
Sulfur dioxide	SO2	Electrochemical	0~20ppm	2ppm	5ppm	0.1ppm
Hydrogen	H2	Catalytic	0~100%LEL	0~10%LEL	20%LEL	1%LEL
Hydrogen	H2	Electrochemical	0~1000ppm	100ppm	500ppm	within 5ppm
Hydrogen sulfide	H2S	Electrochemical	0~100ppm	10ppm	15ppm	1ppm
Hydrogen sulfide	H2S	PID	0~50ppm	10ppm	15ppm	0.1ppm
Combustible	-	Catalytic	0~100%LEL	10%LEL	20%LEL	1%LEL
Combustible	-	IR	0~100%LEL	10%LEL	20%LEL	1%LEL
Ammonia	NH3	Electrochemical	0~100ppm	25ppm	35ppm	1ppm
Acetylene	C2H2	Catalytic	0~100%LEL	10%LEL	20%LEL	1%LEL
Ethanol	C2H5OH	Catalytic	0~100%LEL	10%LEL	20%LEL	1%LEL
Toluene	C6H5CH3	IR	0~100%LEL	10%LEL	20%LEL	1%LEL
Toluene	C6H5CH3	Catalytic	0~100%LEL	10%LEL	20%LEL	1%LEL
Acetic acid	CH3COOH	Catalytic	0~100%LEL	10%LEL	20%LEL	1%LEL
Methane	CH4	IR	0~9999ppm	500ppm	6000ppm	within 20ppm
Methane	CH4	IR	0~100%LEL	10%LEL	20%LEL	1%LEL
Methane	CH4	IR	0~100%VOL	5%VOL	6%VOL	1%VOL
Chlorine	Cl2	Electrochemical	0~5ppm	0.5ppm	1.0ppm	0.1ppm
Chlorine	Cl2	Electrochemical	0~20ppm	0.5ppm	1.0ppm	0.1ppm
Carbon Dioxide	CO2	IR	0~2000ppm	100ppm	1500ppm	within 3ppm
Carbon Dioxide	CO2	IR	0~5000ppm	300ppm	5000ppm	within 3ppm
Carbon Dioxide	CO2	IR	0~5%VOL	0.5%VOL	3.0%VOL	0.1%VOL
Hydrogen Chloride	HCl	Electrochemical	0~10ppm	1ppm	2ppm	0.1ppm
Xylene	C6H4(CH3)2	IR	0~100%LEL	10%LEL	20%LEL	1%LEL