

Model GD-A2400 & SD-2500/2600/2700

Gas Monitor For Inside Furnace

- · Long sensor head (250mm in length)
- Operating in high temperature
- · 0-250oC: SD-2700
- 0-200oC: SD-2600
- 0-150oC: SD-2500, GD-A2400
- Integrated with indicator unit:
 - SD-2500, SD-2600, SD-2700
- Easy operation with control key: SD-2500, SD-2600, SD-2700
- ATEX approval

Ex d IIC T3Gb (GD-A2400 & SD-2500)

Overview

Gas Monitor for Inside Furnace Model GD-A2400 & SD-2500/2600/2700 are direct insert and diffusion sampling detectors.

They have long sensor nose (250mm), and the nose can be installed in high temperature. These models are the perfect detectors for monitoring combustible gases inside furnace and duct.

- Able to detect high boiling point solvents
- Flame-proof testing temperature range:

0 to +160°C GD-A2400 AND SD-2500

0 to +200°C SD-2600

- Can be used at 200°C or more (Operating temperature range: 0 to 250°C SD-2700)
- Accurately detects concentration at center of equipment
- Concentration display area integrated into main unit

(no need for dedicated indicator unit SD-2700)

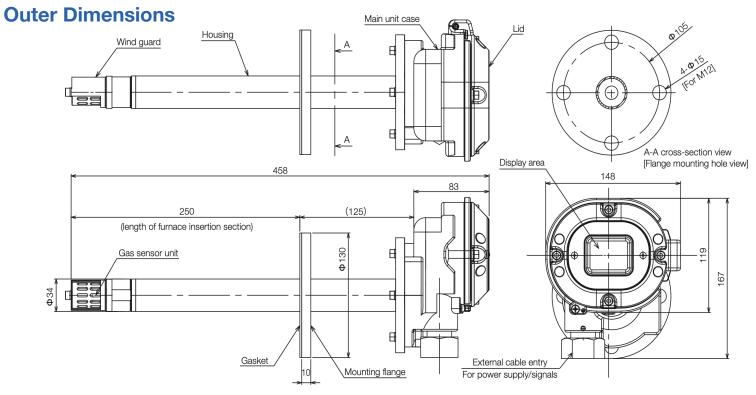
Easily make adjustments by simply tapping control keys



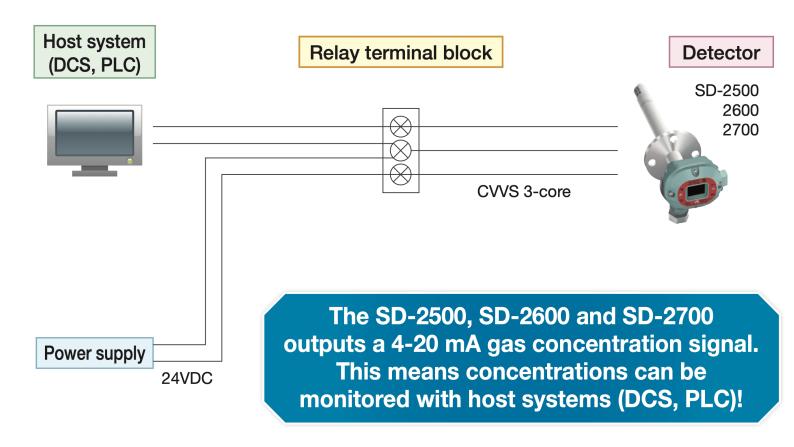
Applications

- Dry furnace for solvent (especially high poling solvent)
- Lithium Ion battery factory
- Gravure Printing
- Engine test laboratory

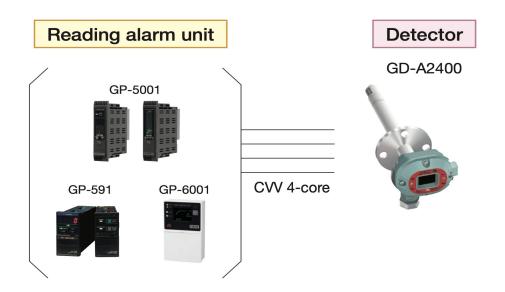
Common Specifications				
Model	GD-A2400	SD-2500	SD-2600	SD-2700
Detection principle	Catalytic combustion type			
Target gas	Combustible gas			
Detection Method	Direct insertion type			
Type of protection	Flame-proof enclosure			Non-explosion
Explosion-proof class	IECEx Ex db IIC T3 Gb ATEX II2G Ex db IIC T3 Gb Japan Ex Ex d IIC T3		IECE Ex db IIC T2 Gb ATEX II2G Ex db IIC T2 Gb Japan Ex Ex d IIC T2	-
Operating temp range	Furnace insertion section: 0 to +160°C (no sudden changes) Main unit case (ambient temperature): 0 to +50°C(no sudden chages)		Furnace insertion section: 0 to +200°C (no sudden changes) Main unit case (ambient temperature): 0 to +50°C (no sudden changes	Furnace insertion section: 0 to +250°C (no sudden changes) Main unit case (ambient temperature): 0 to +50°C (no sudden changes)
Detection range	0 to 100%LEL*1	0 to 100%LEL		
Display	Depending on reading alarm unit	7 segment LED (4 digit) display		
Alarm delay	Within 30 second(s time taken for an alarm to be issued when gas with 1.6-times the alarm setting concentration is detected.) *1	Within 30 seconds (Time taken for an alarm to be issued when gas with 1.6-times the alarm setting concentration is detected.)		
External output	Depending on reading alarm unit	Gas concentration signal/alarm contact (Gas alarm or fault alarm, or common gas/fault alarm)		
Transmission cable	CVVS, 1.25 sq, 4-core	CVVS, 1.25 sq, 3-core(CVVS, 1.25 sq, 5-core for alarm contact)		
Power supply	Supplied from reading alarm unit	t 24VDC ± 10%, power consumption approx. 3 W(MAX)		
Outer dimensions/weight	Approx.148(W)×167(H)× 458(D)mm(excluding protrusions) Furnace insertionsection: Φ34 × 250/Approx. 4.6kg			
Standard accessories	Dedicated control lever, flange gasket, exhaust direction nameplate	Dedicated control lever, dedicated control key, flange gasket, exhaust direction nameplate		



Example of connection with host system (DCS, PLC)



Example of connection with reading alarm unit



GD-A2400 has the same output signal as that of GD-A250, so concentrations can be monitored using existing reading alarm units!

Why does equipment need to be explosion proof?

High boiling point solvents are vaporized inside drying equipment, and can generate a mixture of explosive gases



Locations inside dry equipment can be dangerous

Class 1 hazardous zone: A location where an explosive atmosphere can be generated under normal conditions Class 2 hazardous zone: A location where an explosive atmosphere is not generated under normal conditions and will be present for only a short time even if it is generated



Electrical machinery and equipment used in dangerous locations must have explosion-proof performance (Industrial Safety and Health Act Article 280)

Explosion-proof electrical equipment must be selected to suit the ambient temperature (Explosion Prevention Guidelines)



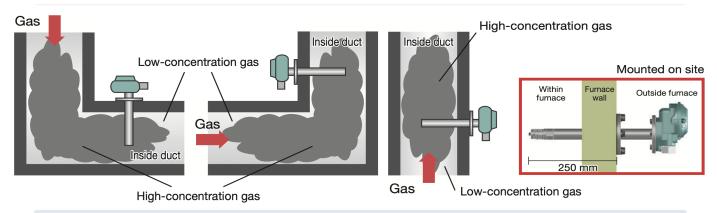
The explosion-proof performance (pressure-resistant explosion-proof structure) of this device means it can be used in dangerous locations!

It has a wide operating temperature range of up to 160°C for the GD-A2400 and SD-2500, and up to 200°C for the SD-2600!

Can be used safely within drying equipment!

Why is a long insertion section required?

Gas concentrations within drying equipment or exhaust ducts may not be even



For safety reasons, high concentrations of gases within drying equipment or exhaust ducts must be detected



The insertion section of the gas detector needs to be a certain length in order to detect locations with high concentrations of gas



The length of the insertion section of this device is 250 mm! This enables detection of locations with high concentrations of gases within drying equipment or exhaust ducts!