

## **GAS DETECTOR HEAD**

### **GD-F88Ai (Oxygen Deficiency Alarm) SPECIFICATION**

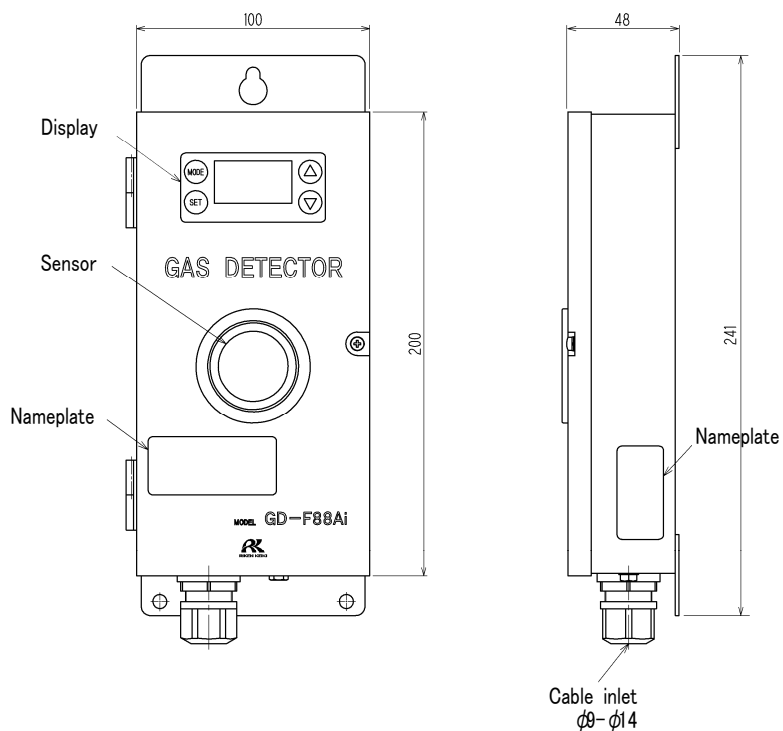
Model	GD-F88Ai
Detection principle	Galvanic cell method
Gas to be detected	O <sub>2</sub>
Concentration display	7-segment LCD (4 digits)
Detection range	0~25vol%
Detection method	Diffusion type
Alarm preset point* <sup>1</sup>	18vol% (1st<L>) 【Standard】 18vol% (2nd<LL>) 【Standard】
Indicate accuracy* <sup>2</sup> (under an identical condition)	Within ±0.7vol%
Response time* <sup>2</sup> (under an identical condition)	Within 30sec (T <sub>90</sub> )
Accuracy of Alarm setpoint* <sup>2</sup>	Difference between Alarm setpoint and indicated value of warning alarm are zero.
Alarm-delay time* <sup>2</sup> (under an identical condition)	By anoxia alarm (Alarm setpoint value: 18vol%), Within 5sec (when introducing 10~11vol% gas)
Gas alarm type	Two-step alarm (L-LL)
Gas alarm indication	Alarm message (AL1/AL2)
Gas alarm action* <sup>1</sup>	Latching or non latching
Trouble alarm·Self diagnosis	System failure/Sensor failure
Trouble alarm indication	Content display
Trouble alarm action	Non latching
Transmission method	2-wire analog transmission + digital transmission (HART Communication)
Transmission specifications	4-20mADC (load resistance: 300Ω or less)
Communication scheme	HART 7
Power supply	24VDC ±10%
Power consumption	Approx. 0.6W
Transmission cable	Shielded cable of CVVS, etc. (1.25mm <sup>2</sup> ) - 2-core
Transmission distance	Up to 1km with CVVS 1.25 mm <sup>2</sup> (up to 600m between the detector head and Zener Barrier)
Safety maintaining device* <sup>3</sup>	Zener Barrier (MTL7728ac/MTL7728+/MTL7728-) or insulating barrier (MTL5541/RN221N-J1/KFD2-STC4-Ex1)
Operating temperature	-10°C to +40°C (non-rapidly-vary)
Operating humidity	Less than 95%RH (non-condensing)
Structure	Wall mounted type
Explosion-proof structure	Intrinsically safe explosion-proof structure, with safety maintaining device (barrier) used
Explosion-proof class	Ex ia IIC T4 Ga
External dimensions	Approx. 100 (W) x 241 (H) x 48 (D) mm (projection portions excluded)
Weight	Approx. 1.0kg
Material* <sup>1</sup>	SECC or SUS304
Paint	Bake-coated with melamine
Outer color	Munsell 2.5Y9/2

\*1 Please specify your request when ordering.

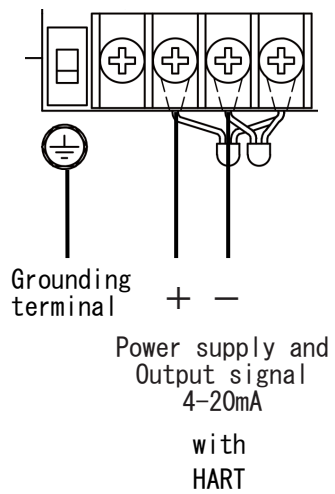
\*2 In conformity to JIS T8201 2010 (Oxygen deficiency indicator).

\*3 Recommended item

**Outline Drawings**



**Terminal Drawings**



## **GAS DETECTOR HEAD**

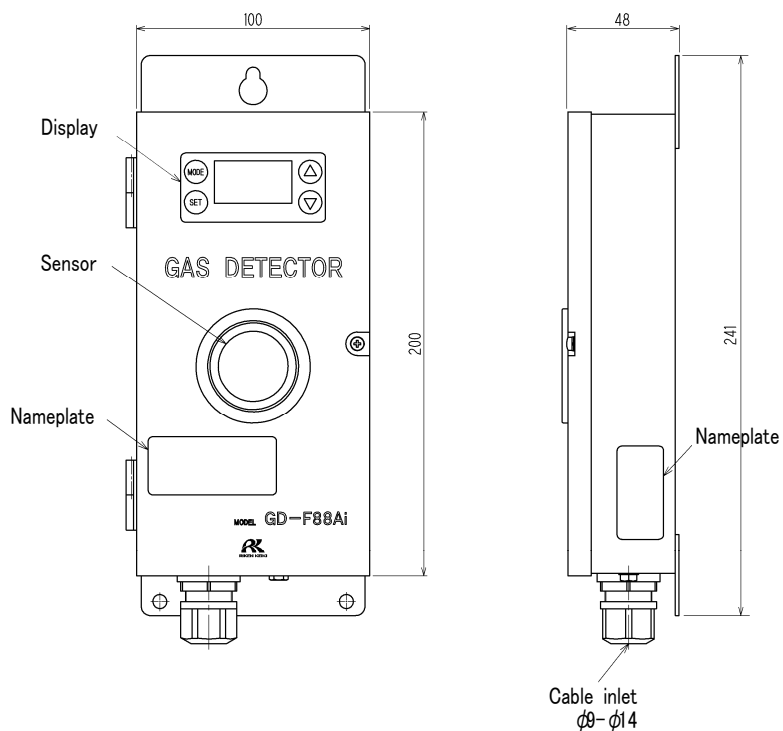
### **GD-F88Ai (Gas monitoring) SPECIFICATION**

Model	GD-F88Ai
Detection principle	Galvanic cell method
Gas to be detected	O <sub>2</sub>
Concentration display	7-segment LCD (4 digits)
Detection range	0~5vol%/0~10vol%/0~25vol%
Detection method	Diffusion type
Alarm preset point* <sup>1</sup>	Depend on measuring range
Indicate accuracy (under an identical condition)	Within $\pm 0.7\text{vol}\%$ (below 25vol% range)
Response time (under an identical condition)	Within 30sec(T <sub>90</sub> )
Gas alarm type* <sup>1</sup>	Two-step alarm (H-HH, L-H, and L-LL)
Gas alarm indication	Alarm message (AL1/AL2)
Gas alarm action* <sup>1</sup>	Latching or non latching
Trouble alarm·Self diagnosis	System failure/Sensor failure
Trouble alarm indication	Content display
Trouble alarm action	Non latching
Transmission method	2-wire analog transmission + digital transmission (HART Communication)
Transmission specifications	4-20mADC (load resistance: 300Ω or less)
Communication scheme	HART 7
Power supply	24VDC $\pm 10\%$
Power consumption	Approx. 0.6W
Transmission cable	Shielded cable of CVVS, etc. (1.25mm <sup>2</sup> ) - 2-core
Transmission distance	Up to 1km with CVVS 1.25 mm <sup>2</sup> (up to 600m between the detector head and Zener Barrier)
Safety maintaining device* <sup>2</sup>	Zener Barrier (MTL7728ac/MTL7728+/MTL7728-) or insulating barrier (MTL5541/RN221N-J1/KFD2-STC4-Ex1)
Operating temperature	-10°C to +40°C (non-rapidly-vary)
Operating humidity	Less than 95%RH (non-condensing)
Structure	Wall mounted type
Explosion-proof structure	Intrinsically safe explosion-proof structure, with safety maintaining device (barrier) used
Explosion-proof class	Ex ia IIC T4 Ga
External dimensions	Approx. 100(W)x241(H)x48(D)mm (projection portions excluded)
Weight	Approx. 1.0kg
Material* <sup>1</sup>	SECC or SUS304
Paint	Bake-coated with melamine
Outer color	Munsell 2.5Y9/2

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\*2 Recommended item

**Outline Drawings**



**Terminal Drawings**

