RIKEN KEIKI

Alternative product to a gas detection tube !!

Gas leak checker
Model: SP-220 series

CE Marking

■ *For fumigation gas*
  (TYPE FUM)

■ *For super toxic gas*
  combustible gas
  freon gas
  (TYPE SC)

SP-220

・Target gas is selectable
   Direct reading is selectable from a each list (FUM: 7 gases, SC: 40 gases).
   Calibration to only 1 gas(PH3) is needed.

・Easy grip & Robust structure
   Ingress proof IP 55, Protection rubber cover is available (Standard accessory).

・High speed low concentration reading
   A new sensor can be detected a low concentration (0.1ppm~).

・Data logging function available
   Alternative product to the gas detection tube.

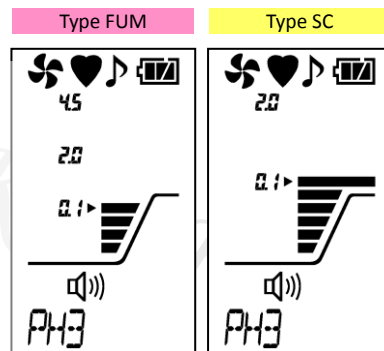**・LED light available**
   Easy to leak check in confined space.

RIKEN KEIKI Co.,Ltd.

Specification

Model	SP-220	
Type	TYPE FUM (Fumigation)	TYPE SC (Super toxic, combustble, freon)
Target gas	Refer to the gas list	
Detection principle	Hot-wire semiconductor method	
Sensor	SH-8662	
Measuring range	Depends on target gas	
Alarm set point	Depends on target gas	
Accuracy	Displays 0.1 ppm-bar when applied PH3 0.3 ppm.	
Alarm pattern	Gas alarm : Gas concentration reached or over the setting point. Trouble alarm: Sensor connection / breaking, Low battery, Low flow, Circuit error, Calibration error	
Alarm method	Non-latching	
Display of alarm	Gas alarm: Flashing LED, Buzzer Trouble alarm: Flashing LED, Buzzer, Display of error message	
Alarm delay time	0 sec.	
Sampling method	Sample draw	
Response time	10 sec.: Time to reach 0.1 ppm when applied PH3 0.3 ppm.	
Output signal	IrDA	
Switch	「AIR」「MODE」「POWER」	
Display device	LCD	
Display contents	Gas name, Gas concentration, Time, Battery, Pilot indicator, Pump driving indicator	
Power source	2 AA dry cell batteries	
Continuous operation	More than 12 hrs.	
Operating temp. & humidity	-20〜+55℃ (-4℉~+131℉), 0~95%RH (Non-condensing)	
Dimension & weight	200mm(H) x 44mm(D) x 47mm(W), 215g	
Ingress proof	IP 55	
Function	Manual LCD backlight (Automatically ON when alarming), Peak value, Snap logging, Time, Cal alarm	
Standard accessories	Hand strap, Taper nozzle, Protection rubber cover	

Gas sensitivity level & Display

SP-220 automatically changes gas sensitivity level depends on target gas.

Gas sensitivity level can be set on 2 (Type SC) or 3(Type FUM) scales. *Refer to right figures.

◆How to change the level◆ Push both 「AIR」+「MODE」buttons at the same time

Type FUM / Type SC

●SP-220（TYPE FUM）GAS LIST

No.	Gas name	Display	Conc. Display1 (ppm)	Display2 (ppm)	Display3 (ppm)
1	Phosphine	PH3	0.1	2	4.5
2	Methyl bromide	CH3Br	1	20	100
3	Carbon disulfide	CS2	0.1	-	-
4	Methyl iodide	CH3l	1	10	30
5	Hydrogen cyanide	HCN	1	-	-
6	Sulfuryl fluoride	SO2F2	-	-	800
7	Ethylene dibromide	C2H4Br2	1	10	30

●SP-220（TYPE SC）GAS LIST

No.	Gas name	Display	Conc. Display1 (ppm)	Conc. Display2 (ppm)
1	Phosphine	PH3	0.1	2
2	Acetone	C3H6O	1	10
3	Arsine	AsH3	0.2	-
4	Ammonia	NH3	10	-
5	Isobutane	i-C4H10	1	10
6	Isopropyl alcohol	IPA	1	10
7	Carbon monoxide	CO	10	30
8	Ethyl alcohol	C2H5OH	1	10
9	Ethylene	C2H4	1	10
10	Vinyl chloride	VCM	1	-
11	Methyl chloride	CH3CL	1	10
12	Xylene	C8H10	1	10
13	Ethylene oxide	EO	1	10
14	Silane	SiH4	0.5	-
15	Methyl bromide	CH3Br	1	20
16	Hydrogen	H2	1	10
17	Trichloroethylene	C2HCL3	10	-
18	Toluene	C7H8	1	10
19	1,2-Dichloroethane	EDC	1	10
20	Sulfur dioxide	SO2	1	-
21	Propane	C3H8	5	20
22	R-134a	R-134a	50	250
23	R-22	R-22	10	50
24	R-32	R-32	10	50
25	n-hexane	n-C6H14	10	50
26	Benzene	C6H6	0.5	10
27	Formaldehyde	HCHO	10	50
28	Methane	CH4	1	20
29	Methyl alcohol	CH3OH	1	10
30	Methyl ethyl ketone	MEK	1	10
31	Hydrogen sulfide	H2S	0.1	-
32	Diborane	B2H6	0.1	-
33	Germane	GeH4	0.2	-
34	Hydrogen bromide	HBr	10	-
35	Hydrogen chloride	HCL	10	-
36	R-407C	R-407C	10	50
37	Hydrogen selenide	H2Se	0.5	-
38	R-410A	R-410A	10	50
39	R-404A	R-404A	10	50
40	2,3,3,3-Tetrafluoropropene	CH2C2F4	10	30

Note 1) 「—」: It means that have sensitivity, but there is no value.
Note 2) Alarm accuracy, response time etc. are confirmed with calibration gas(PH3)
Note 3) The measuring results of the gas selection are intended for guidance only. For the most accurate measurement is for calibration gas(PH3).

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