

NAP-50A

NAP-50A is a miniature & low power consumption type sensor. NAP-50A is mainly used for gas detectors. Compared to NAP-55A, NAP-50A has a lower alcohol sensitivity to eliminate false alarms caused by alcohol, thus more reliable gas detectors can be produced with NAP-50A. The following are the basic characteristics but it is recommended to refer to the individual user's manual for further information. See NAP-66A for measuring circuit for sensor evaluation.

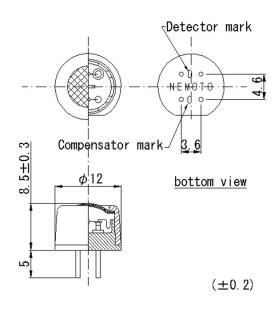
* Target gases and detection range

Gases		Detection range
Methane	CH_4	$0.05 \sim 5\%$ $(0.05 \sim 2\%)$
Ethane	C_2H_6	$0.05 \sim 3.2\% \ (0.05 \sim 1.5\%)$
Iso-butane	Iso-C ₄ H ₁₀	$0.03 \sim 1.8\% \ (0.03 \sim 0.8\%)$
Hydrogen	H_2	$0.05 \sim 4\% (0.05 \sim 1.5\%)$
Hydrocarbons	C_nH_{2n+2}	1~100% LEL (1~50%LEL)

) is a detection range in high accuracy

* Ratings

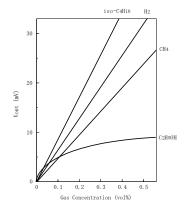
Items	Ratings	
Supply Voltage	DC 2.5 ± 0.25V AC 2.5 ± 0.25V (r.m.s. 50~60Hz)	
Current (When 2.0V is applied)	DC 150 ~ 170mA AC 150 ~ 170mA (r.m.s. 50~60Hz)	
Ambient Temperature	In operation $-10 \sim +50^{\circ}$ C In storage $-10 \sim +50^{\circ}$ C	
Ambient humidity	In operation 95%RH or less In storage 99%RH or less (No dew condensation)	

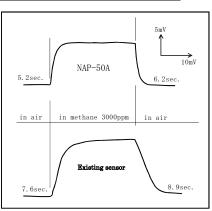


Structure & appearance of NAP-50A

* Gas sensitivity characteristics

Gases & concentration	Output voltage
Output in air	$-35 \sim +35 \text{mV}$
Methane 3000ppm	10 ∼ 16mV
Iso-butane 1400ppm	9 ~ 14mV
Hydrogen 1400ppm	7 ~ 12mV
Ethanol 1%	Less than 10mV





Gas sensitivity characteristics

Response characteristics