

MK217-2 Heat tone sensor for combustible gases and vapours

Measurement range / resolution	0...100 % LEL / 0,5 %LEL			
Setting time	t_{50} :	$\leq 5 \text{ s (CH}_4\text{)}, \leq 7 \text{ s (C}_3\text{H}_8\text{)}, *1$	with wind protection: $\leq 9 \text{ s (CH}_4\text{)}, \leq 9 \text{ s (C}_3\text{H}_8\text{)}, *1$	
	t_{90} :	$\leq 10 \text{ s (CH}_4\text{)}, \leq 12 \text{ s (C}_3\text{H}_8\text{)}, *1$	with wind protection: $\leq 18 \text{ s (CH}_4\text{)}, \leq 21 \text{ s (C}_3\text{H}_8\text{)}, *1$	
Pressure influence	80...110 kPa:	max. $\pm 3\%$ of the measurement range or $\pm 7\%$ of the display (in terms of 100kPaC) *3		
Humidity influence	5%...90% relative h	max. $\pm 5\%$ of the measurement range or $\pm 15\%$ of the display (in terms of 50% relative humidity and 40°C) *3		
Temperature influence	-10...+40°C:	max. $\pm 5\%$ of the measurement range or $\pm 15\%$ of the display (in terms of 20°C) *3		
Cross-sensitivity factors		<u>Methane – measurement range</u>	<u>Propane – measurement range</u>	<u>Hydrogen – measurement range</u>
	at 50% LEL:	(#) *2.	*2.	(#) *2
		2.20 Vol.% CH ₄ : = 100%	0.85 Vol.% C ₃ H ₈ : = 100%	2.00 Vol.% H ₂ : = 100%
		2.00 Vol.% H ₂ : approx. 115%	2.00 Vol.% H ₂ : approx. 188%	2.20 Vol.% CH ₄ : approx. 86%
		0.85 Vol.% C ₃ H ₈ : approx. 65%	2.20 Vol.% CH ₄ : approx. 162%	0.85 Vol.% C ₃ H ₈ : approx. 53%
Special features:	If the sensor is exposed to a gas concentration that was significantly above 100% LEL, the zero point and the sensitivity of the sensor must be checked once this concentration has subsided.			
Expected service life:	5 years			

Explanation:

Regarding *1: Longer setting times apply for other gases, especially for nonane.

Regarding *2: The cross-sensitivities can significantly vary from sensor to sensor and depend upon the gas concentration as well as the age of the sensor. Other combustible gases that are not listed also lead to a display increase.

Regarding *3: This specification applies to methane and propane.