Crowcon Technical Note

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Document applies to: Gasman & Tetra 3

Release Date: 28th April 2023

Subject: Gasman & Tetra 3 - Flammable sensor Correction Factors (Issue 3)

The tables on the following page show the variation in response of the 4-series pellistor flammable sensor, on exposure to a range of gases and vapours at the same %LEL concentration.
The figures are experimentally derived and expressed relative to the methane response (methane = 100).

Relative response data are shown in the table below, based on the LEL values stated in EN60079-20-1:2010.

IMPORTANT NOTE: The relative response data shown below does not form part of the product specification and is supplied for guidance only. For the most accurate measurements, an instrument should be calibrated using the gas under investigation.

PLEASE NOTE:

The data in the following table is specific to the 4P75C & 4P75 sensors. The responses and correction factors listed must not be applied to other types of flammable sensor.

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"4P75C" Flammable Sensor (*standard version – with built-in filter*)

"4P75" Flammable Sensor (*unfiltered version*)

response to 100% LEL methane	EN60079-20-1:2010	Calibration Correction Factor - With respect to Methane		EN60079-20-1:2010	Calibration Correction Factor - With respect to Methane
	4P75C (*Filtered*)			**4P75 (*Unfiltered*)**	
methane	100	1.0		100	1.0
propane	59	1.7		61	1.6
n-butane	56	1.8		58	1.7
n-pentane	66	1.5		69	1.4
n-hexane	53	1.9		55	1.8
n-heptane	*No Response*			62	1.6
n-octane	*No Response*			33	3.0
methanol	*No Response*			95	1.1
ethanol	*No Response*			89	1.1
iso propyl alcohol	*No Response*			71	1.4
acetylene	94	1.1		94	1.1
carbon monoxide	130	0.8		123	0.8
acetone	*No Response*			74	1.4
methyl ethyl ketone	*No Response*			64	1.6
toluene	*No Response*			44	2.3
ethyl acetate	*No Response*			72	1.4
hydrogen	136	0.7		134	0.7
ammonia	164	0.6		159	0.6
-	59	1.7		60	1.7
unleaded petrol	*No Response*			68	1.5
ethylene	89	1.1		92	1.1
ethane	68	1.5		68	1.5
propylene	88	1.1		91	1.1

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