

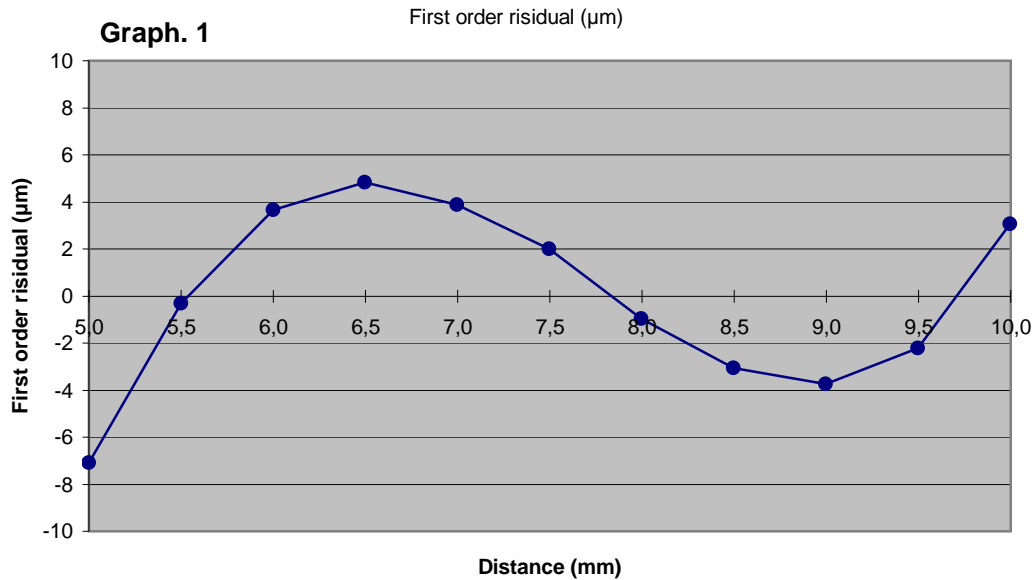
H7DC-043

Date : 19/12/2012

First order linearization

First order regression coefficients

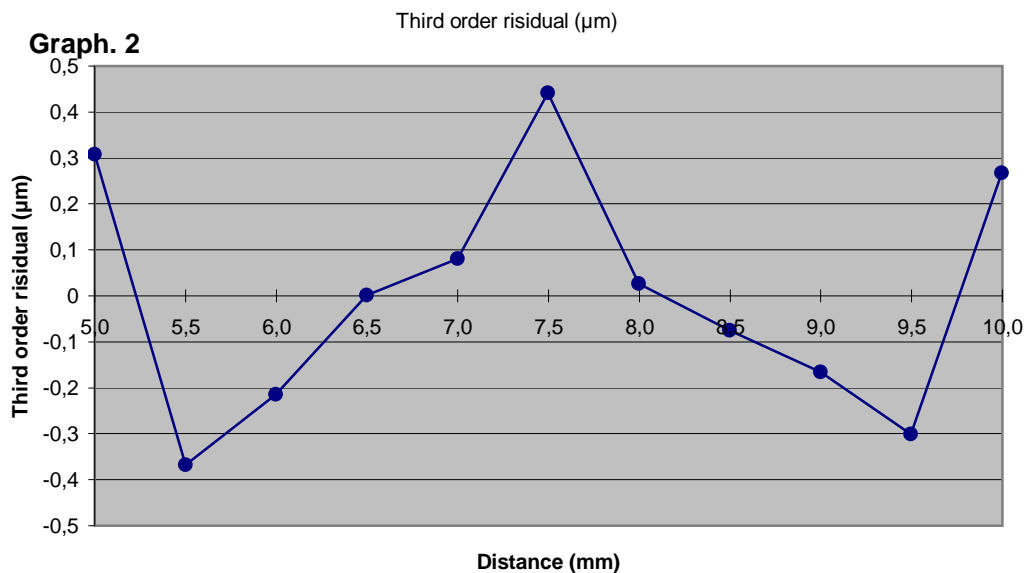
$$d = 5,0069 + 0,49881 V$$



Third order linearization

Third order regression coefficients

$$d = 4,9995 + 0,50844 V - 0,002278 V^2 + 0,0001417 V^3$$



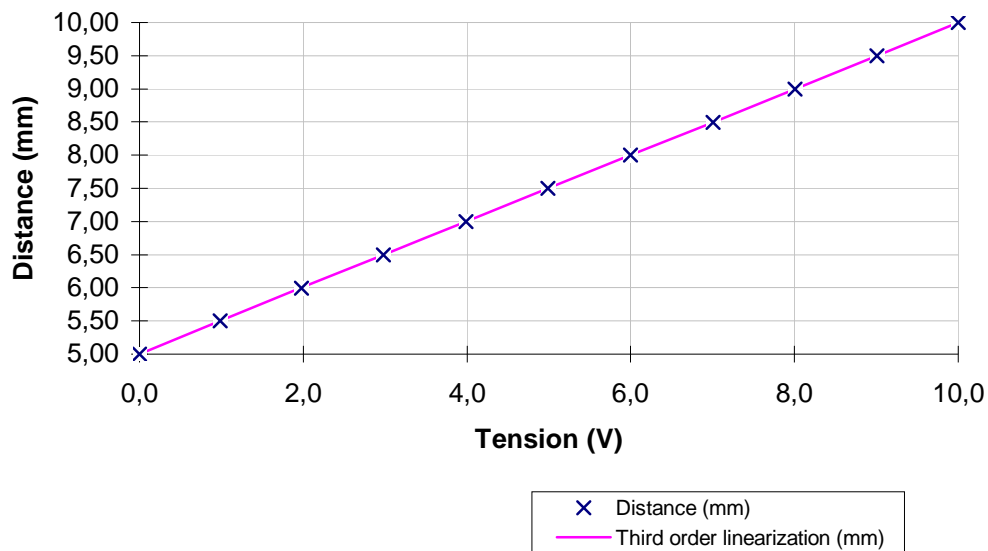
Legend : Linearization polynoms express distance d as a fonction of voltage V

- Distance is in mm
- Voltage is in V

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Sensor linearization



Résults

Distance (mm)	Voltage (V)
4,9993	-0,0010
5,4992	0,9876
5,9990	1,9816
6,4975	2,9786
6,9981	3,9841
7,4974	4,9889
7,9982	5,9988
8,4972	7,0034
8,9982	8,0092
9,4975	9,0071
9,9981	10,0000