

Uncertainty of Fluke Calibration 7250HP

Technical Note

The Fluke Calibration 7250HP is a special variant of the Fluke Calibration 7250 Series Pressure Controllers that has a full scale of 21 MPa (3000 psi). The technology used to measure pressure is different than that used on other Fluke Calibration 7250 series instruments. As such, the expanded uncertainty for this instrument is calculated differently than other 7250 instruments. The uncertainty component breakdown is as follows:

Component	Value	Type	Confidence	Distribution	Notes	
Full scale	21000	kPa	n/a	n/a		
Cal standard	0.0030 %	Reading	K=2	Normal	Ruska 2470 per NVLAP Scope of Accreditation 200491-0	
Cal standard barometer	0.014	kPa	K=2	Normal	Required to calibrate 7250HP in Absolute Mode (optional)	
Conformance (whichever is greater)	0.012 %	Reading	K=3	Triangular	Per "Guide to Determining Pressure Measurement Uncertainty for Q-RPT Based Products" Technical Note	
	0.0036 %	Full scale				
Repeatability (whichever is greater)	0.003 %	Reading	K=2	Normal		
	0.0009%	Full scale				
Temperature	0.0005 %	Reading	K=2	Rectangular		
Temperature	0.00025 %	Full scale	K=2	Rectangular		
Slope stability	0.005 %	Reading	K=2	Rectangular		
Zero stability	Negligible	n/a	n/a	n/a		Assumes stable atmospheric pressure in gauge mode. Assumes regular use of zeroing with a barometer equal to or better than 0.1%.
Expanded uncertainty	0.013 %	Reading	K=2	Normal		Whichever is greater
	0.004 %	Full scale				

The above expanded uncertainty assumes calibration by the original manufacturer or equivalent and a calibration interval for one year. For more information, please see "Guide to Determining Pressure Measurement Uncertainty for Q-RPT Based Products" Technical Note. The expression of uncertainty conforms with the recommendations of the ISO guide to the expression of uncertainty in measurement.

Fluke Calibration. *Precision, performance, confidence.™*

Electrical	RF	Temperature	Pressure	Flow	Software
------------	----	-------------	----------	------	----------

Fluke Calibration
 PO Box 9090,
 Everett, WA 98206 U.S.A.

Fluke Europe B.V.
 PO Box 1186, 5602 BD
 Eindhoven, The Netherlands

For more information call:

In the U.S.A. (877) 355-3225 or Fax (425) 446-5116
 In Europe/M-East/Africa +31 (0) 40 2675 200 or Fax +31 (0) 40 2675 222
 In Canada (800)-36-FLUKE or Fax (905) 890-6866
 From other countries +1 (425) 446-5500 or Fax +1 (425) 446-5116
 Web access: <http://www.flukecal.com>

©2011 Fluke Corporation. Specifications subject to change without notice.
 Printed in U.S.A. 8/2011 4057579A A-EN-N

Pub-ID 11804-eng

Modification of this document is not permitted without written permission from Fluke Corporation.