

Certificate of Calibration

Reference No R123106148
 Date of Issue 22 Jun 2023
 Customer PRO LAB ENGINEERING SERVICES SDN BHD
 ID: 039228 No.21-g
 Jalan Bidara 8 saujana utama 3
 47000 Sungai Buloh
 Selangor
 Instrument Dial Caliper
 Model N/A
 Serial No GF792943
 Control No CA8852J
 Equipment ID N/A
 Capacity/Range 0 mm to 150 mm
 Date of Receipt 15 Jun 2023
 Date of Calibration 22 Jun 2023
 Recalibration Date Customer to Determine
 (Specified by Customer) The User should be aware there are many factors may cause this instrument to drift out of calibration limits prior to the stated recalibration date.
 Condition of Instrument Before Calibration Item scratched
 After Calibration Calibrated and Serviceable
 Location of Calibration Trescal Laboratory
 Calibration Environment $(20 \pm 1) ^\circ\text{C}$, $(55 \pm 15) \% \text{rh}$
 Calibration Method LCP 01409

Cert. No. PSYP- 23042937

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Reference Standard Used

Reference Instrument	Equipment ID	Control No	Certificate No	Traceable to	Due Date
Caliper Checker	PH-DS-CC2	C4161E	PSYP-23004317	NMIM	25 Jan 2024
Standard Gauge	PH-DS-SG4	C8001R	PSYP-22060958	NMIM	05 Sep 2023
Gauge Block	PH-DS-GB3	CZ9900	PSYP-23000459	NMIM	05 Jan 2024

Calibrated By

Hayati Binti Seman

Approved Signatory

Aida Binti Ismail

The reported expanded measurement uncertainty is stated as the standard measurement uncertainty multiplied by the coverage factor k such that the coverage probability corresponds to approximately 95%

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Control No. CA8852J

Cert. No. PSYP-23042937

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Instrument Calibrated

Resolution	0.010	mm
Readability	0.002	

ACCURACY TEST							
INDICATION ERROR				UUT mm		SPECIFICATION ± mm	
Partial Surface Contact Error, E_{MPE}				0.004		0.030	
Scale Shift Error, S_{MPE}				0.002		0.030	
Repeatability of Partial Surface Contact Error, R_{MPE}				0.000		N/A	
Line Contact Error, L_{MPE}				0.002		N/A	
EXTERNAL				INTERNAL			
REFERENCE VALUE	UUT MEASURED VALUE	UUT INDICATION ERROR	SPEC ±	REFERENCE VALUE	UUT MEASURED VALUE	UUT INDICATION ERROR	SPEC ±
0.000	0.000	0.000	0.030	0.000	0.000	0.000	0.030
9.999	10.001	0.002	0.030	9.999	9.999	0.000	0.030
20.000	20.002	0.002	0.030	20.000	19.999	-0.001	0.030
50.000	50.001	0.001	0.030	50.000	49.999	-0.001	0.030
99.999	99.999	0.000	0.030	99.999	100.001	0.002	0.030
149.999	150.003	0.004	0.030	150.000	150.001	0.001	0.030
Measurement Uncertainty = 0.006 mm							$k = 2$

Remark : (*) mean Out of Specification

Info :

1. UUT : Unit Under Test ; SPEC : Specification
2. E_{MPE} : The error of indication of the external measurement in the case of partial measuring face contact.
3. S_{MPE} : The error of indication of the internal measurement in the case of full measuring face contact.
4. R_{MPE} : The closeness of agreement between the results of successive measurements of the same measurand carried out at any position on the jaws under the same conditions of measurement.
5. L_{MPE} : The error of indication when using external measuring face line contact is employed.
6. Uncertainty : Parameter, associated with the result of measurement, that characterises the dispersion of the value that reasonably be attributed to the measurand.

ACCEPTABLE TO USE

Izatul Azira
Lab Manager
Pro Lab Engineering Services Sdn Bhd

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