

Calibration Certificate of Digital Caliper

Certificate No. : M /23-24/ 3256-02
ULR No. : CC236323000035939F
Date of issue : 21-11-2023
Date of Calibration : 20-11-2023
Next Calibration Due : 19-11-2024

NAME AND ADDRESS OF CUSTOMER:

xx
xx
xx

DESCRIPTION OF INSTRUMENT:

Range : 0 - 200 mm
Leastcount : 0.01 mm
Identification No. : KDV194
Sl . No : A22341809
Make : Mitutoyo

Customer's Reference : D.C./P.O. No: 205110 Date: 03-11-2023
Date of Receipt : 15-11-2023 Our Inward No.: M /SER/23-24/ 3256-2
Condition On Receipt : Satisfactory Calibration done at : Dimension Lab
Calibration Procedure No. : M-CP-001 [Based on IS 16491 - Part 1(2016)]
Environmental Condition during calibration : Temperature : 20.9 °C Humidity : 50.2 %RH
Uncertainty of Measurement : $\pm 10.7 \mu\text{m}$ (At 95.45% confidence level with coverage factor $k = 2$)

Reference Standards & Equipments Used For Calibration

Sr. No.	Name of the Master Used	Id. No.	Calibration Report No.	Valid Upto	Traceability
1	Caliper Checker, 600mm	MMT-RS-07	M/22-23/INH-025	24-01-25	NABL Lab. No. CC-2363
2	Gauge Block Set Grade '0'	MMT-RS-54	KCP/01/23-24/2535	09-06-25	NABL Lab. No. CC-2323
3	Cylindrical Setting Master	MMT-RS-24	M/23-24/INH-019	01-12-25	NABL Lab. No. CC-2363
4	Setting Ring Gauges, 4 - 100mm	MMT-RS-22	M/23-24/INH-006	28-04-25	NABL Lab. No. CC-2363

MECHANICAL CALIBRATION (DIMENSION) CALIBRATION RESULTS

(All values are in mm)

PARTIAL CONTACT ERROR - EXTERNAL MEASUREMENT		
Reference Size	Observed Reading on Caliper	Error
0	0	0
21.24	21.23	-0.01
51.36	51.35	-0.01
90.00	89.99	-0.01
120.00	119.99	-0.01
150.00	149.99	-0.01
180.00	179.99	-0.01
200.00	199.99	-0.01

PARTIAL CONTACT ERROR - INTERNAL MEASUREMENT		
Reference Size	Observed Reading on Caliper	Error
20.00	20.01	0.01
50.00	50.01	0.01
80.00	80.01	0.01
110.00	110.01	0.01
140.00	140.01	0.01
170.00	170.01	0.01
200.00	200.01	0.01

PARTIAL CONTACT ERROR - DEPTH MEASUREMENT		
Reference Size	Observed Reading on Caliper	Error
20.00	20.01	0.01
50.00	50.01	0.01
100.00	100.01	0.01
150.00	150.01	0.01
200.00	200.01	0.01

ERROR OF INDICATION	
Scale Shift Error (External Vs Internal)	0
Scale Shift Error (External Vs Depth)	0.01
Line Contact Error	0.01
Full Surface Contact Error	0
Error due to crossed knife edge distance	0.01
Repeatability of Partial Surface Contact error	0.01

... END OF CERTIFICATE ...

AUTHORISED BY

Calibrated By: B.Manikandan
Designation: (Calibration Engineer)

R.Balamuralikrishnan
(Quality Manager)