ŠTEVILKA CERTIFIKATA
Certificte number
202302141

KALIBRACIJSKI CERTIFIKAT
Calibration certificate

NAROČNIK Costumer	5Labs d.o.o. Legen 112, 2380 Slovenj Gradec
LASTNIK Owner	5Labs d.o.o. Legen 112, 2380 Slovenj Gradec

MERILO Object	Dvotočkovni mikrometer za zunanje merjenje • A two-point micrometer for external measurement

IDENTIFIKACIJA Identification	67395718	PROIZVAJALEC Manufacturer	Mitutoyo
TIP Type	293-240-30	MERILNI OBSEG Meas. range	(0 - 25) mm
LOČLJIVOST Resolution	0,001 mm	VRSTA MIKROMETRA Type of micrometer	Digitalno • Digital

SLOVENSKA AKREDITACIJA
SIST EN ISO/IEC 17025
LK-034

Slovenska akreditacija je podpisnica večstrankarskih sporazumov o priznavanju akreditacijskih organov z Evropsko akreditacijo (EA - MLA) in Mednarodnim združenjem za akreditacijo laboratorijev (ILAC - MRA). Slovenian Accreditation is signatory to the multilateral agreemnts on recognition of accreditation bodies with the European Accreditation (EA - MLA) and International Laboratory Accreditation Cooperation (ILAC - MRA).

KRAJ KALIBRACIJE Place of calibration	Slovenj Gradec
DATUM KALIBRACIJE Date of calibration	18. 11. 2023
DATUM PREJEMA Date of receipt	18. 11. 2023
OPOMBE Notes	
ODOBRIL Approved by	Petra Oprešnik

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1. KALIBRACIJSKI POSTOPEK • Calibration procedure

Kalibracija mikrometra je narejena v skladu z interno proceduro KL-5Labs-3 in standardom SIST EN ISO 3611:2011. Obsega pregled funkcionalnosti, določitev pogreškov kazanja mikrometra in morebitnih merilnih vstavkov.
Calibration of the micrometer is made in accordance with internal procedure KL-5Labs-3 and standard SIST EN ISO 3611:2011. Includes review of functionality, determination of indication errors and micrometer measuring inserts, if they exist.

2. KALIBRACIJSKI POGOJI • Calibration conditions

Temperatura • Temperature (20 ± 1) °C

3. SLEDLJIVOST • Traceability

Identifikacije pri kalibraciji uporabljenih etalonov
Standards identification used at calibration

1200907		

Ta kalibracijski certifikat dokumentira sledljivost do (inter) nacionalnih etalonov v skladu z mednarodnim sistemom merskih enot (SI).
This calibration certificate documents the traceability to (inter) national standards, which realize the units of measurement according to the International System of Units (SI).

Kalibracijski certifikati zgoraj navedene opreme uporabljene pri kalibraciji so javno objavljeni na naši spletni strani pod https://www.5labs.si/index.php/open_documents
The calibration certificates of the above mentioned equipment used at calibration are publicly available on our website at https://www.5labs.si/index.php/open_documents

4. MERILNA NEGOTOVOST • Measuring uncertainty

$$U = 1{,}6\ \mu m + 0{,}00001 * L$$

Merilna negotovost je podana kot standardna negotovost meritve pomnožena s faktorkem k = 2, ki pri normalni porazdelitvi ustreza verjetnosti 95%. Standardna merilna negotovost je določena v skladu s publikacijo EA-4/02.
The specification indicates the expanded measuring uncertainty resulting from multiplication of standard measuring uncertainty by the factor k = 2. It was determined in conformity with EA-4/02. The values of the measuement parameter lie within the specified range with a probability of 95%.

5. RAZLAGA REZULTATOV • Result explanation

Pogrešek = Izmerjena vrednost - Referenčna vrednost
Error = Measured value - Reference value

Podani merilni rezultati in pripadajoča merilna negotovost se nanašajo samo na to kalibirano merilo. Izmerjene vrednosti veljajo v času meritev in ne zagotavljajo dolgotrajne stabilnosti.
The measurement results and uncertainties quoted refer only to this calibrated gauge. The measurment results are valid at the time of measurement and do not guarantee long-term stability.

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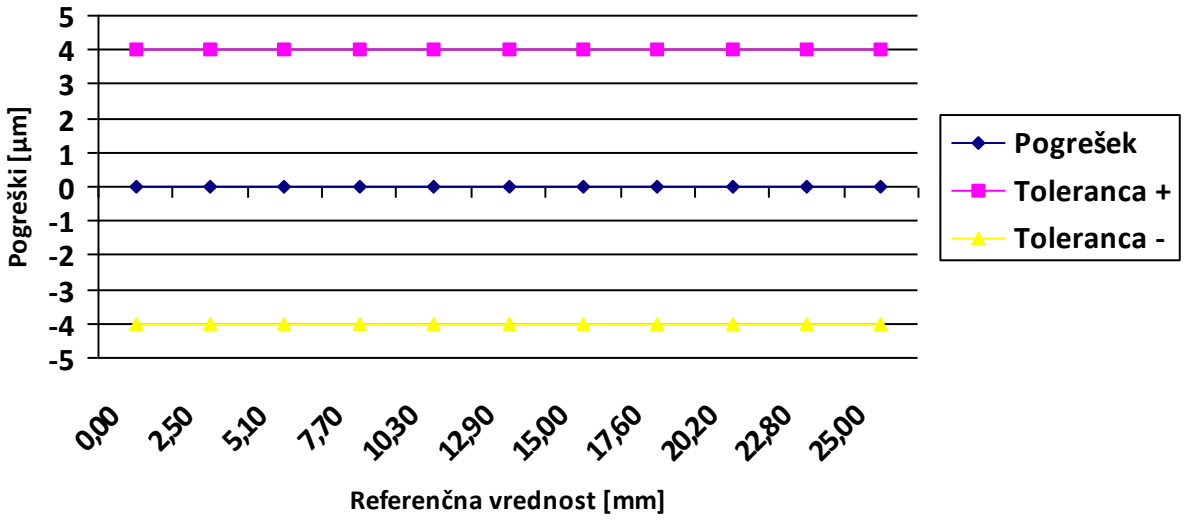
6. MERILNI REZULTATI • Measurement results

Odstopanje ničelne lege pred nastavitvijo • Deviation before the zero position adjustment [mm]	0 mm

Ref. dolžina L • Ref. length L [mm]	Izmerjena vrednost • Measured value [mm]	Pogrešek • Error [µm]	Toleranca • Tolerance (DIN 863-1:2017) [µm]
0,000	0,000	0	4
2,500	2,500	0	4
5,100	5,100	0	4
7,700	7,700	0	4
10,300	10,300	0	4
12,900	12,900	0	4
15,000	15,000	0	4
17,600	17,600	0	4
20,200	20,200	0	4
22,800	22,800	0	4
25,000	25,000	0	4



UGOTOVITEV
Findings

Pogreški merila ustrezajo zahtevam podanim v DIN 863-1:2017, brez upoštevanja merilne negotovosti. • The measurement errors meet the requirements given in DIN 863-1: 2017, without taking measurement uncertainty into account.

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