KALIBRACIJSKA OZNAKA
Calibration mark
**202601035**

# KALIBRACIJSKI CERTIFIKAT
# Calibration certificate

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|---|---|
| NAROČNIK<br>Costumer | 5Labs d.o.o.<br>Legen 112, 2380 SLOVENJ GRADEC, Slovenija |
| LASTNIK<br>Owner | 5Labs d.o.o.<br>Legen 112, 2380 SLOVENJ GRADEC, Slovenija |

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|---|---|
| MERILO<br>Object | Merilni obroč • Plain ring gauge |

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|---|---|---|---|
| IDENTIFIKACIJA<br>Identification | 90-01 | PROIZVAJALEC<br>Manufacturer | / |
| TIP<br>Type | | MERILNI OBSEG<br>Meas. range | 90,000 mm |

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).

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| KRAJ KALIBRACIJE<br>Place of calibration | Kalibracijski laboratorij 5Labs (Slovenj Gradec) |
| DATUM KALIBRACIJE<br>Date of calibration | 25. 06. 2026 |
| DATUM PREJEMA<br>Date of receipt | 25. 06. 2026 |
| OPOMBE<br>Notes | |
| ODOBRIL<br>Approved by | Petra Oprešnik |

Dovoljeno je razmnoževanje le celotnega certifikata. Verodostojnost podpisa je mogoče preveriti v elektronski obliki certifikata. Only the reproduction of the complete certificate is allowed. Signature validity can be verified in electronic version of certificate.



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## 1. KALIBRACIJSKI POSTOPEK • Calibration procedure

Kalibracija je narejena v skladu z internim postopkom KL-5Labs-9 in obsega določitev pogreška premera gladkega obroča.
Calibration is made in accordance with the internal calibration procedure KL-5Labs-9 and comprises the determination of ring gauge diameter error.

## 2. KALIBRACIJSKI POGOJI • Calibration conditions

Temperatura • Temperature (20 ± 1) °C

## 3. SLEDLJIVOST • Traceability

Oznake certifikatov pri kalibraciji uporabljenih etalonov
Calibration marks of standards used at calibration

| | | | |
|---|---|---|---|
| 1812 | | 411-100 | |

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

$$U = 0{,}7\ \mu m + 0{,}0000043 \cdot D$$

Merilna negotovost je podana kot standardna negotovost meritve pomnožena s faktorkem k = 2, ki pri normalni porazdelitvi ustrza 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%.

## 6. RAZLAGA REZULTATOV • Result explanation

Povp. pogrešek = povprečje petih oz. štirih pogreškov
Average error = the average of five or four errors

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 • Messergebnisse

| Referenčna vrednost • Reference value / mm | Izmerjena vrednost • Measured value / mm | Pogrešek • Error / mm | Povp. pogrešek • Average error / mm |
|---|---|---|---|
| 90,0000 | 89,9990 | -0,0010 | -0,0010 |
| | 89,9988 | -0,0012 | |
| | 89,9990 | -0,0010 | |
| | 89,9992 | -0,0008 | |



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