

CALIBRATION CERTIFICATE

Customer : Johs. Boss GmbH & Co. KG
Identification number : 123456789
Gauge application : Incoming inspection
Standard of thread : Metric ISO threads acc. to ISO 965:1998/ISO 1502:1996
Type of gauge : GO thread ring gauge (solid)
Thread designation : M 6x1-6g
Pitch : 1,0000 mm
Measuring method : Measure with IAC Master Scanner
Measurement traceability : Mahr 828 Nr.31
Measurement traceability : Set of setting rings ID 8138 101590 D-K-15089-01-01 2016-09

Gauge nominal values

Major diameter min. : 6,0550 mm
 Pitch diameter max. : 5,3290 mm
 Pitch diameter min. : 5,3150 mm
 Minor diameter max. : 4,8980 mm
 Minor diameter min. : 4,8840 mm

Measuring values Pitch

Parameter	Nominal value [mm]	Actual value [mm]	Valuation
Pitch	1,0000 ± 5,0 µm	1,0000	ok

Measuring values Thread angle and flank angle

Parameter	Nominal value	Actual value	Valuation
Thread angle	60 ° 00 ' 00 "	60 ° 00 ' 01 "	ok
left flank angle	30 ° 00 ' 00 " ± 14 '	29 ° 59 ' 59 "	ok
right flank angle	30 ° 00 ' 00 " ± 14 '	30 ° 00 ' 03 "	ok

Measuring values Pitch diameter

Plane	Axial section	PitchØ [mm]	Out of tolerance [µm]
1	0 Degree	5,3210	-
3	0 Degree	5,3210	-
1	90 Degree	5,3210	-
3	90 Degree	5,3210	-

Measuring values Minor diameter

Plane	Axial section	MinorØ [mm]	Out of tolerance [µm]
2	0 Degree	4,8910	-
2	90 Degree	4,8910	-

Valuation: usable

Operator: _____

JBO
(JBO)

Date: 22.02.2017

Uncertainty of measurement: $U = 2.5 \mu\text{m} + 10 \cdot 10^{-6} \cdot d$. The uncertainty stated is the expanded uncertainty of measurement obtained by multiplying the standard uncertainty by the coverage factor $k = 2$. They were established according to DAkkS-DKD-3. The value of the measured variable is within the assigned value range with 95 % probability.
Ref.temp: (20 ± 1) °C. **Inspection requirement:** The inspections procedure was based on recognised German inspection specifications (VDI/VDE/DGQ/2618). The measuring equipment and standards used are compared regularly with reference standards calibrated by a calibration service accredited by the European Cooperation for Accreditation (EA) and therefore traceable to the national standards of the PTB. Hence the inspection certificate complies with the traceability requirements of DIN EN ISO 9001.