

CALIBRATION CERTIFICATE

Customer : 0155600
Identification number : 138901048
Gauge application : Incoming inspection
Standard of thread : Unified threads acc. to ANSI/ASME B1.1-1989(R2001), B1.2
Type of gauge : GO/NOT GO thread plug gauge
Thread designation : 1/2 - 20 UNF -2B
Pitch : 1,2700 mm
Measuring method : Three wires method
Wire diameter : 0,7252 mm
second wire diameter : 0,7252 mm
Measuring force : 4,10 N
Measurement traceability : Mahr 828 Nr.31
Measurement traceability : single gauge ID 316275 033416 D-K-15048-01-00 2020-06

Gauge nominal values	Go side	Not Go side
Major diameter max.	: 12,7127 mm	12,5679 mm
Major diameter min.	: 12,7000 mm	12,5552 mm
Pitch diameter max.	: 11,8821 mm	12,0167 mm
Pitch diameter min.	: 11,8745 mm	12,0091 mm
Minor diameter max.	: 11,0490 mm	11,1836 mm

Measuring values Pitch diameter - Go side

Plane	Axial section	PitchØ [mm]	Out of tolerance [µm]
2	0 Degree	11,8772	-

Measuring values Pitch diameter - Not go side

Plane	Axial section	PitchØ [mm]	Out of tolerance [µm]
2	0 Degree	12,0129	-

Valuation: usable

Operator:  Date: 27.11.2020
(Ammann-Mayer)

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: $(20 \pm 1) ^\circ\text{C}$. **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.