

CALIBRATION CERTIFICATE

Customer : 0155600
Identification number : 123013005
Gauge application : Incoming inspection
Standard of thread : Cyl. pipe threads "NPSM" acc. to ANSI/ASME B1.20.1-2013
Type of gauge : GO/NOT GO thread plug gauge
Thread designation : 1/4 - 18 NPSM-2B
Pitch : 1,4110 mm
Measuring method : Three wires method
Wire diameter : 0,8658 mm
second wire diameter : 0,8658 mm
Measuring force : 9,60 N
Measurement traceability : Mahr 828 Nr.22
Measurement traceability : Parallelendmaß Nr. 316275 014252 D-K-15048-01-00 2019-03

Gauge nominal values	Go side	Not Go side
Major diameter max.	: 13,4158 mm	13,2451 mm
Major diameter min.	: 13,4031 mm	13,2324 mm
Pitch diameter max.	: 12,4943 mm	12,6340 mm
Pitch diameter min.	: 12,4866 mm	12,6263 mm
Minor diameter max.	: 11,6723 mm	11,6723 mm

Measuring values Pitch diameter - Go side

Plane	Axial section	PitchØ [mm]	Out of tolerance [µm]
2	0 Degree	12,4932	-

Measuring values Pitch diameter - Not go side

Plane	Axial section	PitchØ [mm]	Out of tolerance [µm]
2	0 Degree	12,6320	-

Valuation: usable

Operator:  Date: 02.07.2020
(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.