



CALIBRATION CERTIFICATE

Customer : 0155600
Identification number : 131757077
Gauge application : Incoming inspection
Standard of thread : Metric ISO threads acc. to ISO 965:2013/ISO 1502:1996
Type of gauge : GO/NOT GO thread plug gauge
Thread designation : M 4x0.5-6H
Pitch : 0,5000 mm
Measuring method : Three wires method
Wire diameter : 0,2906 mm
second wire diameter : 0,2906 mm
Measuring force : 4,10 N
Measurement traceability : Mahr 828 Nr.31
Measurement traceability : Parallelendmaß Nr. 316275 014252 D-K-15048-01-00 2019-03

| Gauge nominal values | Go side | Not Go side |
|----------------------|-------------|-------------|
| Major diameter max. | : 4,0150 mm | 3,8885 mm |
| Major diameter min. | : 3,9970 mm | 3,8705 mm |
| Pitch diameter max. | : 3,6855 mm | 3,7840 mm |
| Pitch diameter min. | : 3,6765 mm | 3,7750 mm |
| Minor diameter max. | : 3,3870 mm | 3,3870 mm |

Measuring values Pitch diameter - Go side

| Plane | Axial section | PitchØ [mm] | Out of tolerance [µm] |
|-------|---------------|-------------|-----------------------|
| 2 | 0 Degree | 3,6826 | - |

Measuring values Pitch diameter - Not go side

| Plane | Axial section | PitchØ [mm] | Out of tolerance [µm] |
|-------|---------------|-------------|-----------------------|
| 2 | 0 Degree | 3,7800 | - |

Valuation: usable

Operator: *Buckenmayer* (Buckenmayer) Date: 19.05.2020

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.