



CALIBRATION CERTIFICATE

Customer : 0155600
Identification number : 111536003
Gauge application : Incoming inspection
Standard of thread : Trapezoidal threads acc. to ISO 2901/2903 (DIN 103-9:1985)
Type of gauge : NO GO thread ring gauge (solid)
Thread designation : Tr 20x4-7e
Pitch : 4,0000 mm
Measuring method : "Three balls" method (using T-probe)
Used ball diameter : 2,0514 mm
Constant of T-shaped probe : 12,8240 mm
Measurement traceability : Mahr 828 ID 381
Measurement traceability : Gauge block set ID 3997 57308 D-K-15190-01-00 2015-06

Gauge nominal values

Major diameter min. : 20,5000 mm
Pitch diameter max. : 17,6400 mm
Pitch diameter min. : 17,6070 mm
Minor diameter max. : 16,8565 mm
Minor diameter min. : 16,7905 mm

Measuring values Pitch diameter

Plane	Axial section	PitchØ [mm]	Out of tolerance [µm]
2	0 Degree	17,6119	-

Valuation: usable

Operator: i.A. Salvaggio Date: 25.04.2018
 (Salvaggio)

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.