

## CALIBRATION CERTIFICATE

**Customer** : 0155600  
**Identification number** : 140261004  
**Gauge application** : Incoming inspection  
**Standard of thread** : Metric thread inserts acc. to DIN 8140:1999/2017  
**Type of gauge** : GO/NOT GO thread plug gauge  
**Thread designation** : EG M 20x2.5-6H mod  
**Pitch** : 2,5000 mm  
**Measuring method** : Three wires method  
**Wire diameter** : 1,4440 mm  
**second wire diameter** : 1,4440 mm  
**Measuring force** : 9,90 N  
**Measurement traceability** : Mahr 828 Nr.31  
**Measurement traceability** : single gauge ID 316275 014252 D-K-15048-01-00 2019-03

Gauge nominal values	Go side	Not Go side
Major diameter max.	: 23,2710 mm	22,2950 mm
Major diameter min.	: 23,2490 mm	22,2730 mm
Pitch diameter max.	: 21,6415 mm	21,7895 mm
Pitch diameter min.	: 21,6305 mm	21,7785 mm
Minor diameter max.	: 20,1810 mm	20,3290 mm

### Measuring values Pitch diameter - Go side

Plane	Axial section	PitchØ [mm]	Out of tolerance [µm]
2	0 Degree	21,6369	-

### Measuring values Pitch diameter - Not go side

Plane	Axial section	PitchØ [mm]	Out of tolerance [µm]
2	0 Degree	21,7862	-

**Valuation: usable**

Operator:

  
 (Sahan-Bitzer)

Date: 05.11.2020

**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.