

## CALIBRATION CERTIFICATE

**Customer** : 0155600  
**Identification number** : 136616014  
**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 22x1.5-6H  
**Pitch** : 1,5000 mm  
**Measuring method** : Three wires method  
**Wire diameter** : 0,8662 mm  
**second wire diameter** : 0,8662 mm  
**Measuring force** : 9,60 N  
**Measurement traceability** : Mahr 828 Nr.22  
**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.  | : 22,0230 mm | 21,5325 mm  |
| Major diameter min.  | : 22,0010 mm | 21,5105 mm  |
| Pitch diameter max.  | : 21,0435 mm | 21,2270 mm  |
| Pitch diameter min.  | : 21,0325 mm | 21,2160 mm  |
| Minor diameter max.  | : 20,1590 mm | 20,1590 mm  |

### Measuring values Pitch diameter - Go side

| Plane | Axial section | PitchØ [mm] | Out of tolerance [µm] |
|-------|---------------|-------------|-----------------------|
| 2     | 0 Degree      | 21,0383     | -                     |

### Measuring values Pitch diameter - Not go side

| Plane | Axial section | PitchØ [mm] | Out of tolerance [µm] |
|-------|---------------|-------------|-----------------------|
| 2     | 0 Degree      | 21,2245     | -                     |

Valuation: usable

Operator:

*A. Eisde*  
(Ammann)

Date: 18.03.2020

**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 ± 1) °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.