



CALIBRATION CERTIFICATE

Customer : 0155600
Identification number : 139254002
Gauge application : Incoming inspection
Standard of thread : Gas cylinder conn. acc. to DIN 477-1:2012
Type of gauge : GO/NOT GO thread plug gauge
Thread designation : W 21.80 x 1/14 (DIN 477)
Pitch : 1,8140 mm
Measuring method : Three wires method
Wire diameter : 1,0104 mm
second wire diameter : 1,0104 mm
Measuring force : 4,50 N
Measurement traceability : Zeiss ULM 600-C Nr.439
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.	: 21,8180 mm	21,2190 mm
Major diameter min.	: 21,8050 mm	21,1840 mm
Pitch diameter max.	: 20,6560 mm	20,7860 mm
Pitch diameter min.	: 20,6430 mm	20,7730 mm
Minor diameter max.	: 19,4960 mm	19,4960 mm

Measuring values Pitch diameter - Go side

Plane	Axial section	PitchØ [mm]	Out of tolerance [µm]
2	0 Degree	20,6520	-

Measuring values Pitch diameter - Not go side

Plane	Axial section	PitchØ [mm]	Out of tolerance [µm]
2	0 Degree	20,7824	-

Valuation: usable

Operator:

(Stark)

Date: 29.01.2020

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.