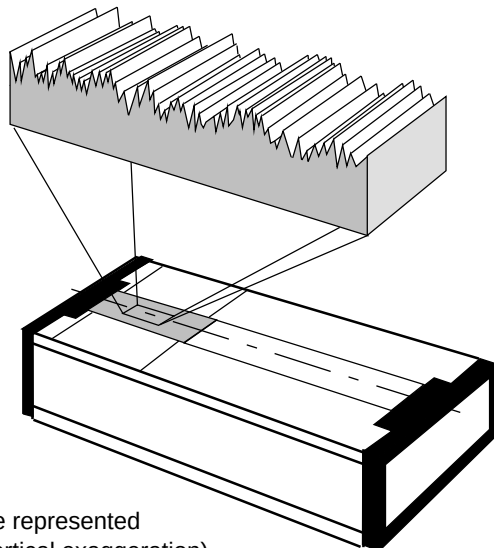
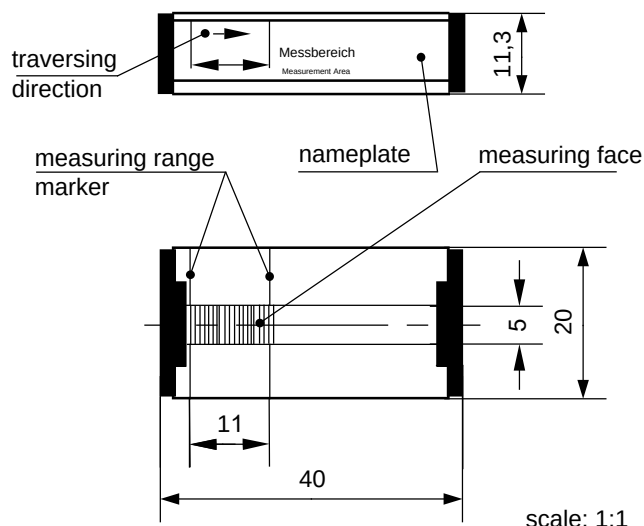


Roughness measurement standards

line of products KNT 4058/03 (low-priced version, with the same precision as 4058/01, by a smaller measuring face)
corresponding to Physikalisch-Technische Bundesanstalt (PTB)-measurement standards
for calibrating and checking of the complete contact stylus instrument from the stylus to the read-out display.



(Profile represented with vertical exaggeration)



The roughness measurement standards are made of hardened stainless steel of dimensions 40 x 20 x 11,3 mm. They have a rectangular measuring face size with 5 x 11 mm and it has an irregular ground surface profile which repeated every 2 or 4 mm in longitudinal direction of the specimen. Crosswise to the measuring direction of the specimen, the production grooves on the measuring face have constant profile form (details regarding the profile characteristics: see also page 2.0). At the front sides the standards are limited by plastic caps.

A set consists of 3 roughness standards with the following nominal values:

Grade :	1	2	3	
Ra :	0,2	0,5	1,5	
Rz :	1,5	3,0	8,5	
Rmax :	1,5	4,0	9,5	Values in μm

The exact values of the preference parameters Ra, Rz and Rmax according to ISO 4287-1(DIN 4768) using a phase correct profile filter according to ISO 16610-21:2013-06 are determined. Cut off: $\lambda_c = 0,8 \text{ mm}$.

The roughness measurement standards are available in the Classes A and C.

The standard deviation s on basis of n measurements, distributed on the measuring face, is $s \leq 3\%$ (class A) and $s \leq 5\%$ (class C) of Ra and Rz.

Class A corresponds to ISO 5436. Class C is similar to ISO 5436 as there is a higher standard deviation.

Two variations of the calibration:

1. Accredited calibration laboratory (DAkkS calibration)
Amount of the measurements $n = 12$, relative uncertainty: 5 - 7 %
2. HALLE Präzisions-Kalibriernormale GmbH (in-house calibration)
The exact values are determined with a contact stylus instrument, with the PTB-calibrated depth setting standards calibrated and is therefore connected to the PTB.
Amount of the measurements: $n = 12$, relativ uncertainty of measurement: 6 - 10 %.

Calibration certificates are issued for calibrated standards.

Other nominal values are available as special execution for roughness measurement standards.

All pick-up systems of the contact stylus instruments can be used.

Measurement standards are available also as single standards as well as without calibration.

Laterally, the standards are provided with nameplates.

A special wooden case for the safe storage of the measurement standard belongs to the scope of delivery.

Price list (with times of delivery, article No. ...etc): see pages No.: 13.1 and 13.2

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