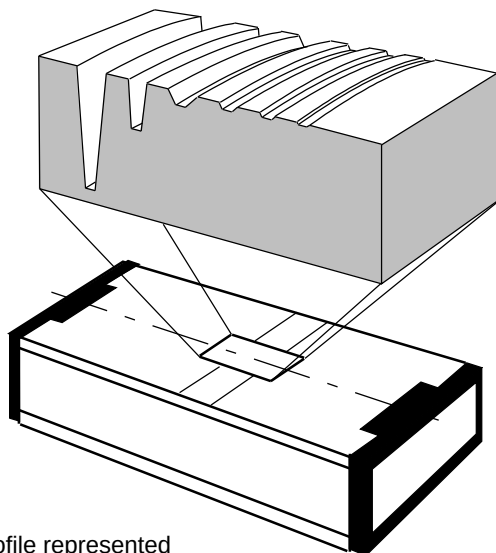


Depth-Setting Standards with planar base grooves

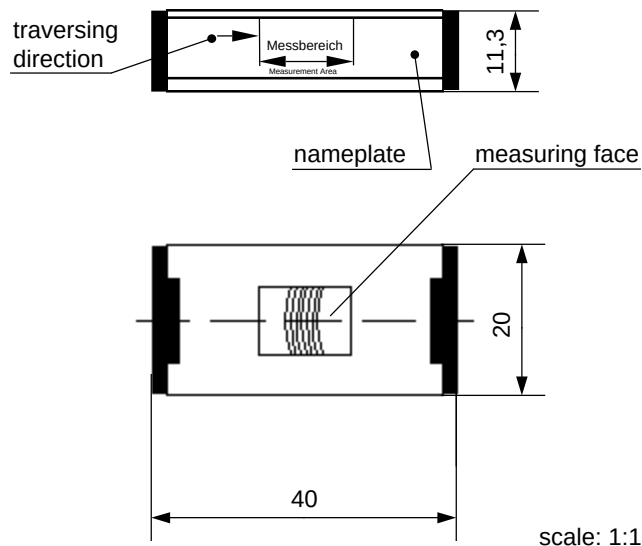
Line of products: KNT 4080/03

according to PTB-Standards

for adjustment and calibration of vertical magnification for contact stylus instruments and opt. measurement instruments.



(Profile represented
with vertical exaggeration)



The body of the standard is made of hardened stainless steel, with dimensions of 40 x 20 x 11,3mm. In this body is a rectangular measuring area with the dimensions used 9 x 12 mm, consisting of a hard nickel (P)-layer (Hardness 540HV). In this layer are 6 grooves according to the table below introduced. The measuring face (9 x 12 mm) and the bearing surface (40 x 20 mm) lie in one plane.

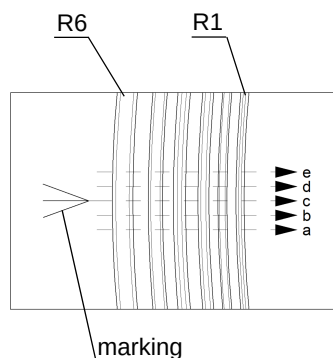
Special Features:

planar surfaces: a prerequisite for in the software of optical measuring instruments contained calibration routines.

oblique groove flanks: showed clear results in the evaluation of the interference.

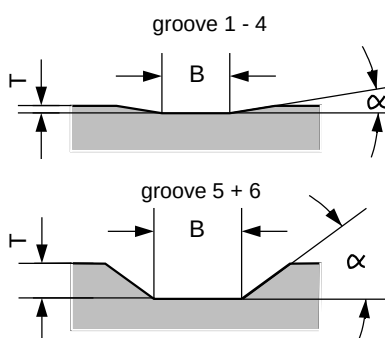
High reflectivity of the measurement surfaces: results in better noise ratio in sampling process.

measuring point plan



location of contact trace a - e

groove geometrie



Roughness of the
measurement surface: Rz ~15 nm

table

groove	T	α°	B	U
1	0,24	3,4°	100	± 0,012
2	0,75	3,4°	100	± 0,013
3	2,4	3,4°	100	± 0,014
4	7,5	3,4°	150	± 0,018
5	24	36°	150	± 0,023
6	75	36°	250	± 0,025

T: nominal depth (μm)

α : flank angle

B: groove base width (μm)

U: uncertainty (μm)

Measurement standards are available with or 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 page No.: 11.5

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