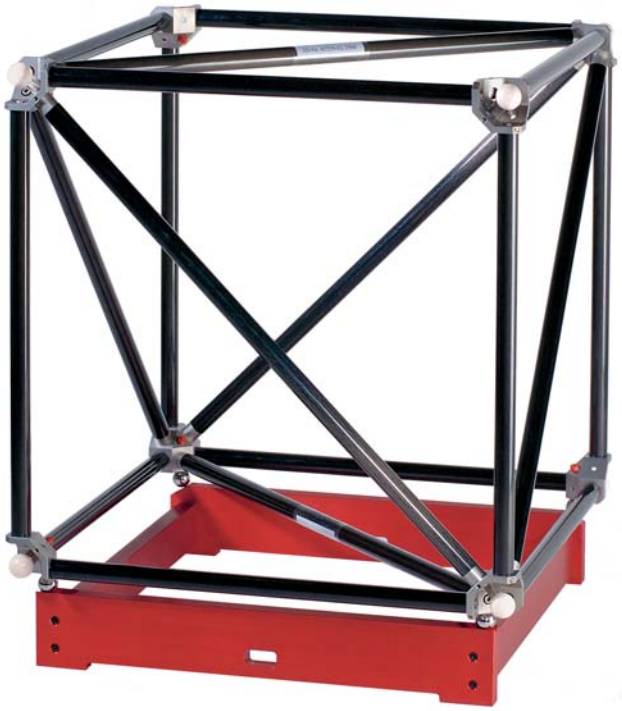
Ball Cube

KOBA-*Q3*

Quick monitoring system for co-ordinate measuring machines



DELIVERY PROGRAMME AND SERVICE:

- gauge blocks
- accessories
- step gauge KOBA-step
- sphere plate KOBA-check
- ball bar
- optical scale KOBA-optima
- opto-tactile calibration standards
- thread gauges
- feeler gauges
- plug gauges
- ring gauges
- precision parts
- KOBA-calibration service
- DKD-calibration laboratory for length

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Made in Germany

Catalogue No. 6500/E/01/2008

Properties

- High degree on short and long term stability
- Very low coefficient of thermal expansion
- Easiest handling
- Low weight
- Quick measuring sequences
- Competitively priced
- Evaluation software GUK-Q

Range of Application

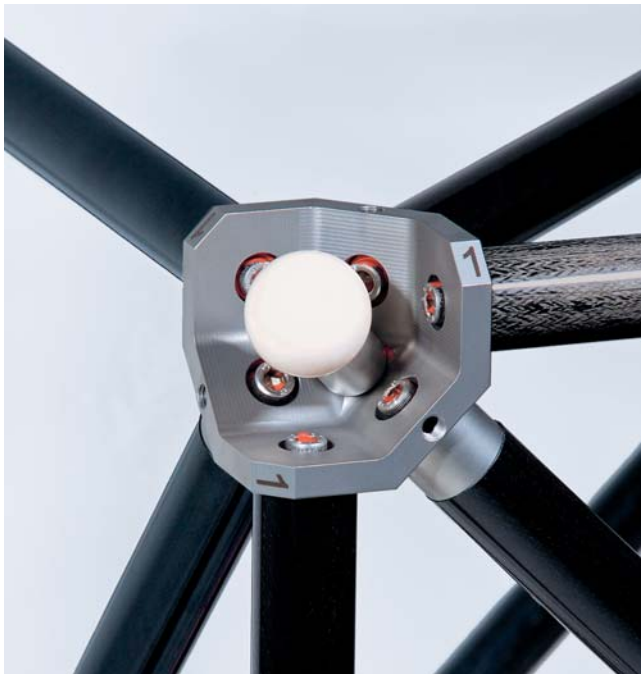
- The ball cube KOBA-***Q3*** provides 28 distances which give significant results on the measuring accuracy from volumetric measurements especially when using multi-axis or swivel stylus probe systems.
- Very fast measuring cycles permit monitoring without having to accept disturbing influence on the availability of the coordinate measuring machine.
- In case the ball cube is used as a monitoring standard a calibration is not necessary. In such a case the results from rotational monitoring measurements are referred to the initial measurement of the cube after having carried through a complete calibration of the coordinate measuring machine.
- By using the ball cube KOBA-***Q3*** costs can be reduced significantly in the field of inspection equipment monitoring.

Technical Data

Re-calibration intervals for measuring machines can be clearly extended as long as the inspection with the ball cube does not show any unacceptable deviations.

Design features

- Extremely rigid framework construction out of CFC-tube with angular joints of stainless steel.
- Using high modular carbon fibre results in highest stiffnes at low weight.
- The specially manufactured CFC-tubes are free from variation in length caused by humidity.
- The combination of material used guarantees a low coefficient of thermal expansion.
- The probing elements are high precision ceramic balls of Al_2O_3.



Nominal size	300 x 300 x 300 mm	400 x 400 x 400 mm	600 x 600 x 600 mm
Nominal lengths provided	300 / 424 / 520 mm	400 / 566 / 693 mm	600 / 849 / 1039 mm
Sphere diameter	30 mm (other diameters on request)		
Weight (approximately)	5 kg	6 kg	7 kg
Coefficient of thermal expansion	$\alpha = 3.6 \cdot 10^{-6}\ K^{-1}$	$\alpha = 2.7 \cdot 10^{-6}\ K^{-1}$	$\alpha = 1.7 \cdot 10^{-6}\ K^{-1}$