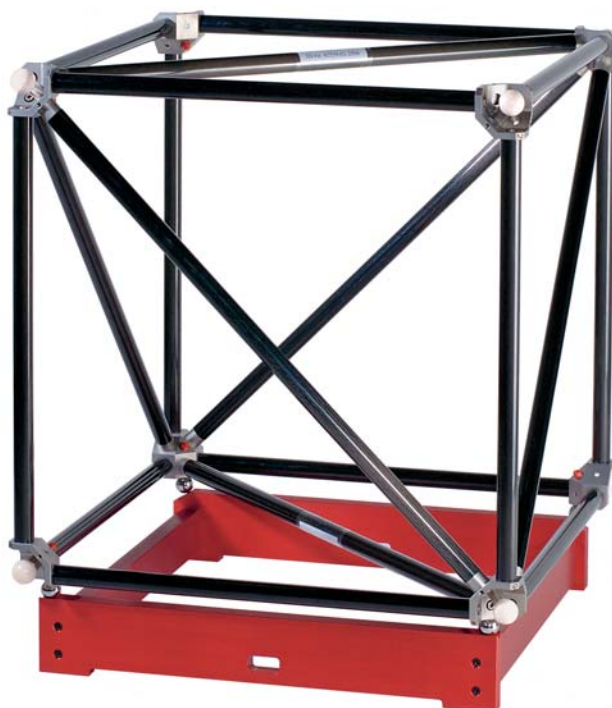


Ball Cube KOBA-Q3

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

KOLB & BAUMANN GMBH & CO. KG
PRECISION MEASURING TOOLS MAKERS
DE-63741 ASCHAFFENBURG · DAIMLERSTR. 24
GERMANY

PHONE +49 (6021) 3463-0 · FAX +49 (6021) 3463-40
www.koba.de · messzeuge@koba.de



Made in Germany

Catalogue No. 6500/E/01/2008

ST
STANDARD TOOLS
GROUP



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.

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.

Design features

- Extremely rigid framework construction out of CFC-tube with angular joints of stainless steel.
- Using high modular carbon fibre results in highest stiffness 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 Al₂O₃.



Technical Data

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	$\alpha = 3.6 \cdot 10^{-6} \text{ K}^{-1}$	$\alpha = 2.7 \cdot 10^{-6} \text{ K}^{-1}$	$\alpha = 1.7 \cdot 10^{-6} \text{ K}^{-1}$