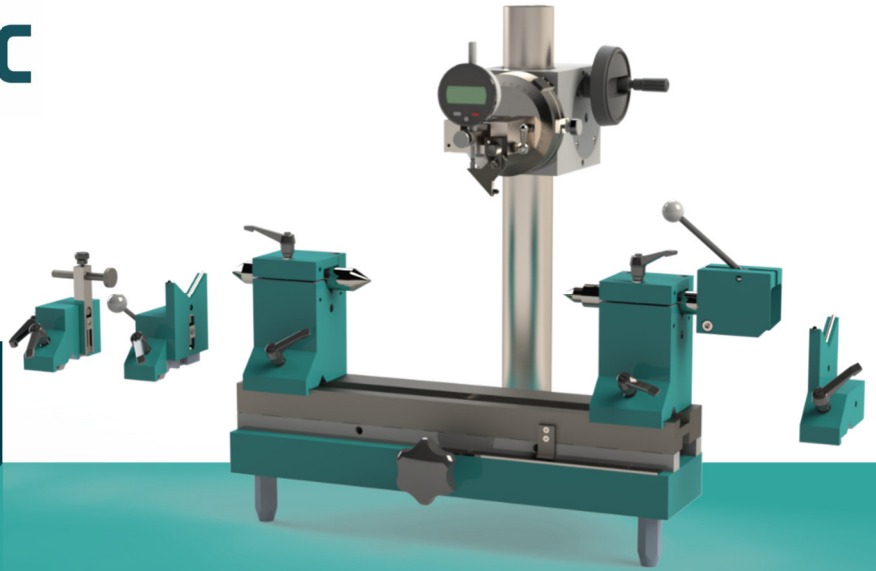


Manual Concentricity measuring device

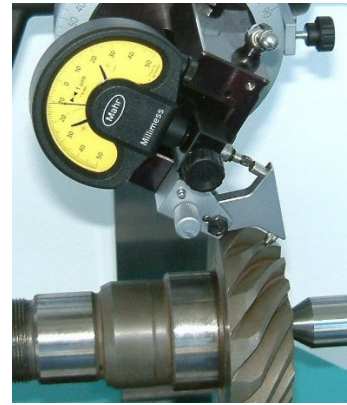


- Measuring device for determining concentricity, axial runout, straightness/parallelism on rotationally symmetrical parts
- Measuring principle:
 - The test piece is turned on its own axis or moved longitudinally by hand and simultaneously scanned by a dial gauge





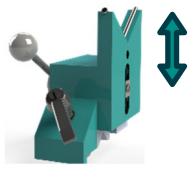
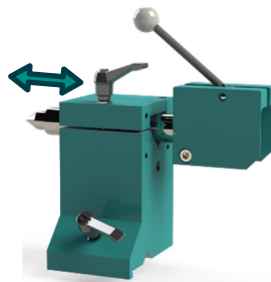
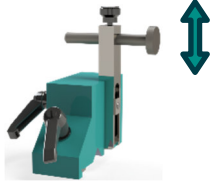








- Highlights:
 - Measuring carriage can be moved horizontally, allowing for straightness and parallelism of the test piece to be determined
 - Test pieces can be quickly changed by swivelling out the dial gauge
 - Angular adjustment of the measuring head
 - Deflection lever for axial runout measurement and for measurement of spherical surfaces, running surfaces, bevel gears etc.
 - Individual equipment with accessories (see page 3)







- Attention!
- Accurate measurement of straightness/parallelism is only guaranteed if the test piece is clamped in blocks with tips.
 - No changes may be made to the measuring head during a measurement (no height adjustment, no angle adjustment).



Technical Data

Test pieces	Turned parts in general External and internal gears (spur, bevel, worm gears) Cutting tools (cylindrical milling cutters, cutting wheels)
Test pieces with centring hole	
Length	0...245 mm
Test diameter	0...195 mm
Test pieces without centring hole	
Length	30...315 mm
Test diameter	0...195 mm (depending on the bearing journal)
Bearing journal diameter	3...85 mm
Diameter difference	0...16 mm (bearing journal)
Realisable measuring tasks	
Shape tolerance determination:	Roundness, concentricity, total runout Axial runout Straightness, parallelism
Gear thickness:	Radial single-ball dimension
Self-tolerance of the device	
Coaxiality of the centring tips	Ø0.003 mm
Scatter range of the measurements	0.003mm
Measuring head	
Vertical movement	0...160 mm
Stroke	5 mm (to be disengaged when changing the test piece)
Swivelling	± 90°
Measuring carriage	
Horizontal movement	0...200 mm
Scale value	1mm
Storage	
Tip height	100mm
Tip width	0...245 mm
Dimensions	
Width x depth x height	470 x 340 x 490 mm
Weight	approx. 54 kg

Basic unit				
	Basic unit BK720-100	Individual equipment with: <ul style="list-style-type: none"> • 2 prisms + stop • 2 blocks with tips (1x spring-loaded, 1x fixed) • 1 block with tip + 1 prism + 1 stop • Dial gauge • Measuring insert • Deflection lever for axial runout measurement • Special designs and accessories on request 		
Prisms and stop		Blocks with tip		
	Fixed prism BK720-230 Ø bearing journal 3...85 mm		Block with tip with fixed centring tip BK720-210 Centring tip one side pointed and one side with inner cone	
	Prism height adjustable BK720-240 Ø bearing journal 3...85 mm Adjustment range ±10 mm		Block with tip with spring-loaded centring tip BK720-220 Test piece clamping in with spring force Centring tip pointed	
	Stop height adjustable BK720-250 For axial fixing of test piece			
Dial gauges				Deflection lever
				
Mechan. dial comparator KT001510	Mechan. dial gauge KT000313	Digital dial gauge KT001172	Digital dial gauge KT004826	Deflection lever BK720-310
Meas. range ±50 µm Scale value 1 µm	Meas. range 10 mm Scale value 10 µm	Meas. range 12.5 mm Readout 10 µm	Meas. range 12.5 mm Readout 1 µm	90° deflection for axial runout meas.
Measuring inserts				
				
Measuring insert Disc ø10 KT012228	Measuring insert Crowned ø10 KT005622	Measuring insert Ball ø3 KT001165	Measuring insert Ball ø2 KT003299	Measuring insert Transverse cylinder KT005176

Wear parts	
	Standard centring tip BK720-210-005
	Spring-loaded centring tip BK720-221-000
	Spring-loaded tip BK720-221-001
	Prism BK720-231-000
	Sliding prism BK720-241-000
	Stop flange BK720-250-003