

01–110 Measuring, boring and honing cylinder bores

Data

Engine	115.923/926	115.951
	115.938/939	115.954
Standard dimension	87.000	93.750
	87.022	93.772
	87.500	94.150
	87.522	94.172
Repair stages	88.000	94.550
	88.022	94.572
	88.500	—
	88.522	—
Max. wear limit in forward or transverse direction	0.10	
Perm. out-of-true and conicity	when new	0.013
	wear limit	0.05
Permissible deviation vertically in relation to crankshaft center line, with reference to cylinder height	0.05	
Perm. roughness	0.002–0.004	
Perm. waviness	50 % of roughness	
Chamfer of cylinder bores	refer to fig. item 2	

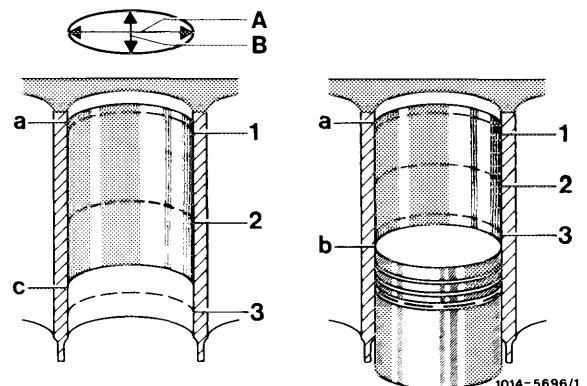
Note

Measure the clean cylinder bores with internal measuring instrument at measuring point 1, 2 and 3 in longitudinal direction A (piston pin center line) and in transverse direction B.

When pistons are not removed, the measuring point 3 is just above piston, which should be at BDC.

Measuring points 1–3

- A longitudinal direction
- B transverse direction
- a Upper reversing point of 1st piston ring
- b BDC of piston
- c Lower reversing point of oil wiper ring



Chamfer cylinder bores after boring.

For honing, the material allowance should not exceed 0.05 mm.

