KES

Limit Gauge Precision Check Standard

KES Q – B234B

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1. Scope of Application

This standard shall regulate performing precision check and calibration inspection of limit gauge.

2. Check Method

Perform precision check according table 1.

3. Decision Standard

For precision check standard, follow table 2.

4. Calibration Check Standard

Period of calibration inspection shall be 12 month.

5. Record and Management

Follow KMS M030000(Measurement instrument precision control method).

Table 1 Precision check method

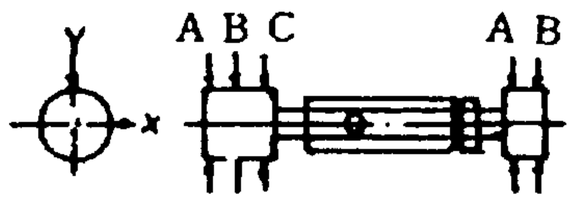
No	Check item		Check method	Figure	Used tool	Check standard
1	Appearance		Check shape, scar, carve of each part with eye.			No defect
2	Cylind-rical plug gauge	Outer diame-ter	Measure by side measuring gauge and compare it with gauge block.	 Passing side : 6 positions of A, B, C in two directions of X and Y. Stop side : 4 positions of A, B Measurement exception span : 1 mm from the end of gauge	Indicating side measuring gauge, gauge block, flow air micrometer, electric micrometer	Follow additional table 2.
		Circle degree	Calculate it by measuring outer diameter by diameter method.			
		Cylin-der degree	Follow outer diameter measurement method			

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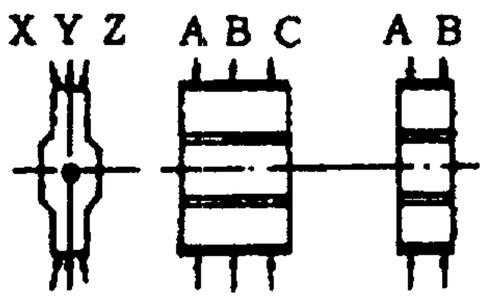
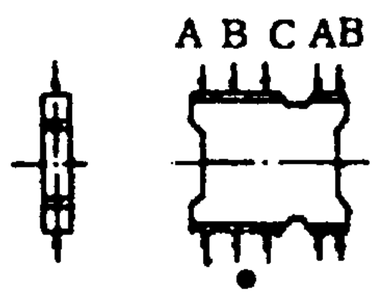
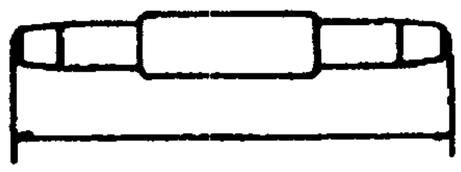
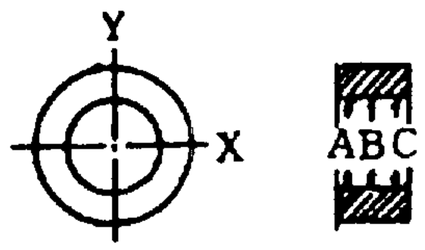
Table 1 Precision check method(Continued)

No	Check item		Check method	Figure	Used tool	Check standard
3	Para-llel plug gauge	Outer diame-ter	Measure by side measuring gauge and compare it with gauge block.	 Passing side : 9 positions of A,B,C in 3 directions of X, Y, Z. Stop side : 6 positions of A, B in 3 directions of X, Y, Z measurement exception span : • Less than size 180 : 2 mm • More than size 180 : 3 mm	Indicating side measuring gauge, gauge block, flow air micrometer, electric micrometer	Follow additional table 2.
		Cyli-nder degree	Follow outer diameter measurement method			
4	Plate plug gauge	Outer diame-ter	Measure by side measuring gauge and compare it with gauge block	 Passing side : 3 positions of A, B, C Stop side : 2 positions of A, B Measurement exception span : Follow parallel plug gauge.	〃	Follow precision standard.
		Cyli-nder degree	Follow outer diameter measurement method.			
5	Pipe gauge	Length	Measure by side measuring gauge and compare it with gauge block.		〃	〃
6	Ring gauge	Inner diame-ter	Measure by length meter or same precision inner diameter measurer and compare it with gauge block.	 Passing side : 6 positions of A, B, C in 2 directions of X, Y. Stop side : Follow passing side.	Length meter, inner diameter measurer, gauge block	〃
		Circle degree	Measure inner diameter by diameter method		Length meter, inner diameter measurer	
		Cyli-nder degree	Calculate by inner diameter measurement method.		〃	

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