

Spline Micrometers

SERIES 331, 111



331-251



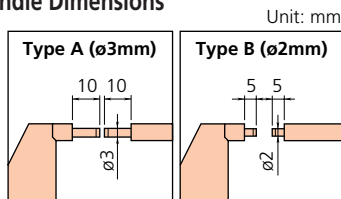
111-115



FEATURES

- IP65 water/dust protection level (331 series).
- The anvil and spindle have a small diameter for measuring splined shafts, slots, and keyways.

Anvil/Spindle Dimensions



- Carbide-tipped measuring faces.
- With Ratchet Stop for constant force.
- Provided with a standard except for 25mm (1") model.
- The 331 series is provided with SPC output.

SPECIFICATIONS

Metric		Digital model		
Range	Order No.	Resolution	Accuracy	Remarks
0 - 25mm	331-251	0.001mm	±2µm	Type A
	331-261	0.001mm	±2µm	Type B
25 - 50mm	331-252	0.001mm	±2µm	Type A
	331-262	0.001mm	±2µm	Type B
50 - 75mm	331-253	0.001mm	±2µm	Type A
	331-263	0.001mm	±2µm	Type B
75 - 100mm	331-254	0.001mm	±3µm	Type A
	331-264	0.001mm	±3µm	Type B

Excluding quantizing error

Inch/Metric		Digital model		
Range	Order No.	Resolution	Accuracy	Remarks
0 - 1"	331-351	.00005"/0.001mm	±.0001"	Type A
	331-361	.00005"/0.001mm	±.0001"	Type B
1" - 2"	331-352	.00005"/0.001mm	±.0001"	Type A
	331-362	.00005"/0.001mm	±.0001"	Type B
2" - 3"	331-353	.00005"/0.001mm	±.0001"	Type A
	331-363	.00005"/0.001mm	±.0001"	Type B
3" - 4"	331-354	.00005"/0.001mm	±.00015"	Type A
	331-364	.00005"/0.001mm	±.00015"	Type B

Excluding quantizing error

Metric				
Range	Order No.	Graduation	Accuracy	Remarks
0 - 25mm	111-115	0.01mm	±3µm	Type A
	111-215	0.01mm	±3µm	Type B
25 - 50mm	111-116	0.01mm	±3µm	Type A
50 - 75mm	111-117	0.01mm	±3µm	Type A
75 - 100mm	111-118	0.01mm	±4µm	Type A
100 - 125mm	111-119	0.01mm	±4µm	Type A
125 - 150mm	111-120	0.01mm	±4µm	Type A
150 - 175mm	111-121	0.01mm	±5µm	Type A
175 - 200mm	111-122	0.01mm	±5µm	Type A

Inch				
Range	Order No.	Resolution	Accuracy	Remarks
0 - 1"	111-166	.0001"	±.00015"	Type A
1" - 2"	111-142	.001"	±.00015"	Type A
2" - 3"	111-143	.001"	±.00015"	Type A

Note: .0001" reading is obtained with vernier.

Measuring faces

- Flatness: 0.3µm (.000012")
 - Parallelism: (2+L/100)µm [(0.00008+.00004 (L/4))"]*
- *L=Maximum measuring length (mm) [(inch)], Fraction rounded up

