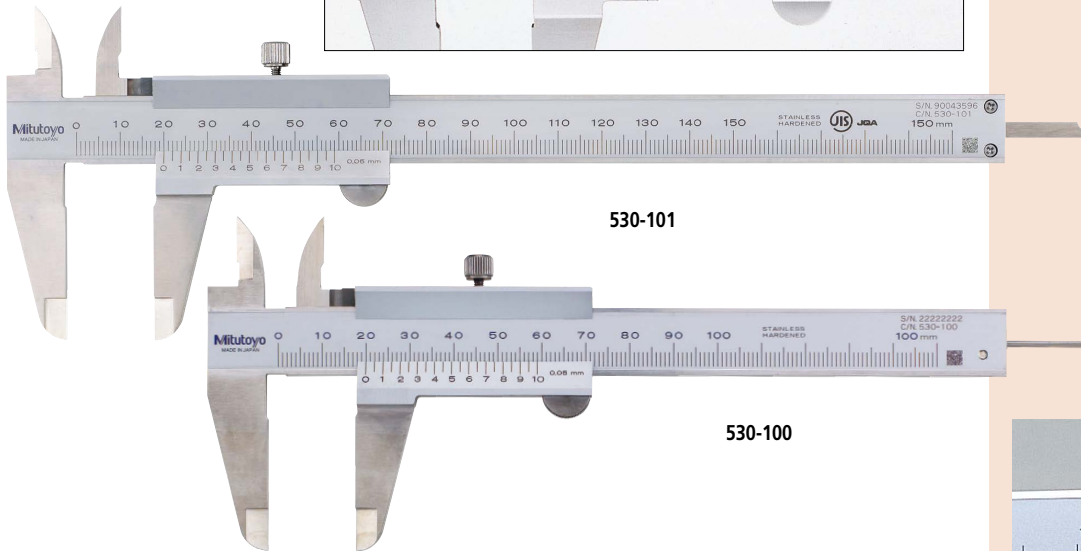
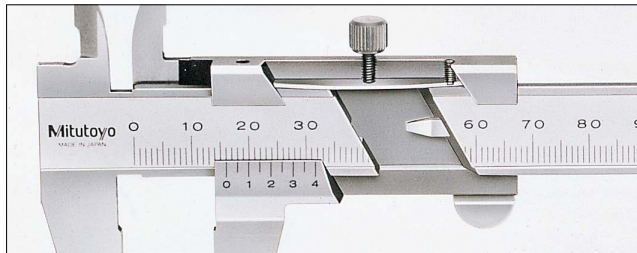
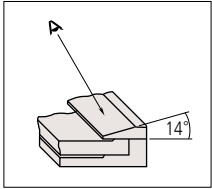


# Calipers

An industry standard measuring tool

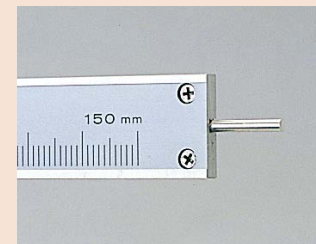
## Vernier Caliper SERIES 530 — Standard model

- Plain and basic design.
- Stepped graduation face prevents dust ingress between the main scale and slider.
- The small vernier face angle (14°) provides easy reading.
- Can measure steps, since the end faces of the beam and slider are the zero reference point (measuring face). Standard calipers allow four types of measurement, i.e. outside, inside, depth, and step.
- Carbide-tipped jaw calipers are optimal for rough finished parts, castings, grinding stones, etc.
- Decimal and fractional graduated scales (metric/inch and inch models only).



530-101

530-100



530-102 (Round depth bar type)



530-320  
(Carbide-tipped jaws for outside measurement)

## DIMENSIONS

Unit: mm

Range (mm)	A	B	D	E	F	H	L
0 - 100	17	21.5	40	53.5	30	16	182
0 - 150	17	21.5	40	53.5	30	16	229
0 - 200	20.5	25	50	53.5	30	16	288
0 - 300	22	27.5	64	66.5	36	20	404
0 - 600	38	47	90	89	50	25	780
0 - 1000	50	60	130	111	61	32	1240

Range (mm)	Outside jaw thickness
0 - 100	3
0 - 150	
0 - 200	
0 - 300	3.8
0 - 600	6
0 - 1000	8

Note: 530-100 and 530-102 incorporate a round depth bar (ø1.9 mm).  
The depth bar shown in the illustration above is a different type.

## SPECIFICATIONS

Metric					
Order No.	Range (mm)	Maximum Permissible Error* (mm) • EMPE (outside measurement) • SMPE (inside measurement)	Depth bar	Graduation (mm)	Remarks
530-101	0 - 150	±0.05	Blade	0.05	—
530-102		±0.03		0.02	High accuracy model
530-108	0 - 200	±0.05		0.05	—
530-123		±0.03		0.02	High accuracy model
530-109	0 - 300	±0.08		0.05	—
530-124		±0.04		0.02	High accuracy model

Order No.	Range (mm)	Accuracy (mm)	Depth bar	Graduation (mm)	Remarks
530-100	0 - 100	±0.05	ø1.9 mm rod	0.05	—
530-102	0 - 100	±0.05			—
530-320	0 - 150	±0.05	Blade		Carbide-tipped jaws for outside measurement
530-335		±0.05			Carbide-tipped jaws for outside and inside measurement
530-321	0 - 200	±0.05	Carbide-tipped jaws for outside measurement		
530-322	0 - 300	±0.08	Carbide-tipped jaws for outside measurement		
530-501	0 - 600	±0.10	—	—	
530-502	0 - 1000	±0.15	—	—	

\* Partial Measuring Face Contact Error EMPE/Scale Shift Error SMPE are terms (notations) used in JIS B 7507: 2016, revised based on ISO 13385-1: 2011. The measurement method is the same as before. Refer to page D-40 for details.

Metric/Inch with metric/inch double scale

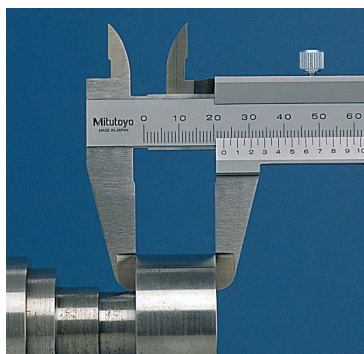
Order No.	Range (mm)	Accuracy (mm)	Depth bar	Graduation	Remarks
530-104	0 - 150	±0.05	Blade	0.05 mm (1/128 in)	—
530-316		±0.03		0.02 mm (0.001 in)	Clamping screw below the slider
530-312		±0.05		0.05 mm (1/128 in)	High accuracy model: ±0.03 mm
530-114	0 - 200	±0.03		0.02 mm (0.001 in)	—
530-118		±0.08		0.05 mm (1/128 in)	High accuracy model: ±0.03 mm
530-115	0 - 300	±0.04		0.02 mm (0.001 in)	—
530-119		±0.04	0.02 mm (0.001 in)	High accuracy model: ±0.04 mm	

Inch with inch/inch double scale

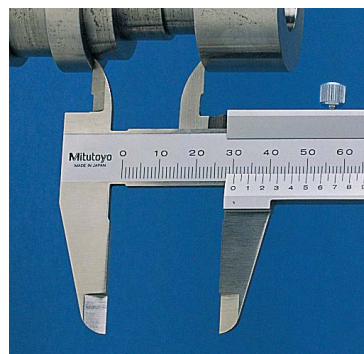
Order No.	Range (in)	Accuracy (in)	Depth bar	Graduation (in)	Remarks
530-105	0 - 6	±0.5/128	Blade	0.001	—
530-116	0 - 8	±0.5/128			

## Measurement Applications

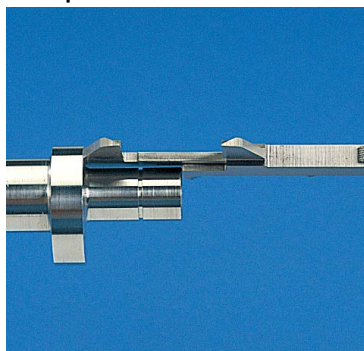
### 1. Outside measurement



### 2. Inside measurement



### 3. Step measurement



### 4. Depth measurement

