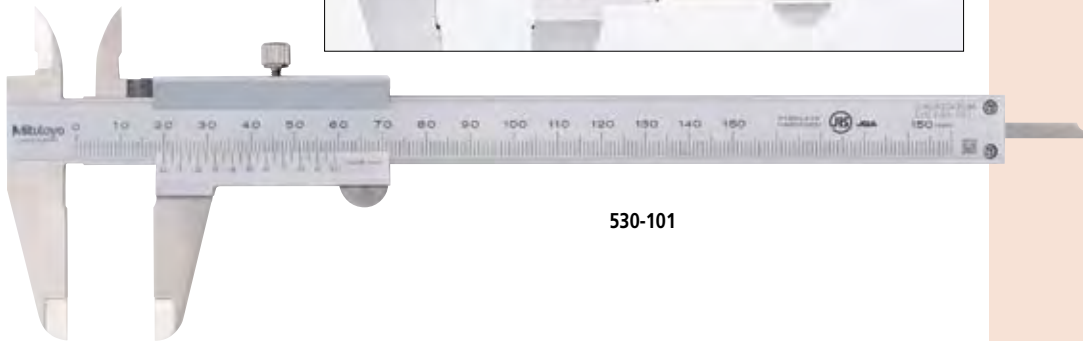
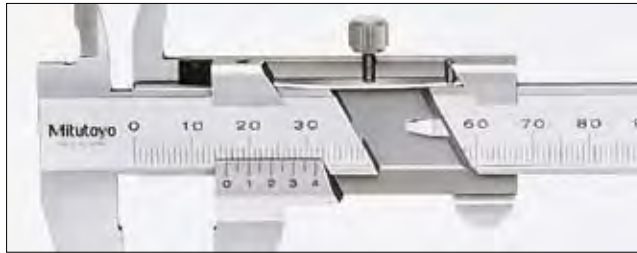
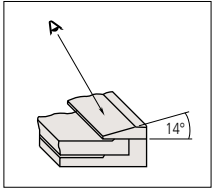


Calipers

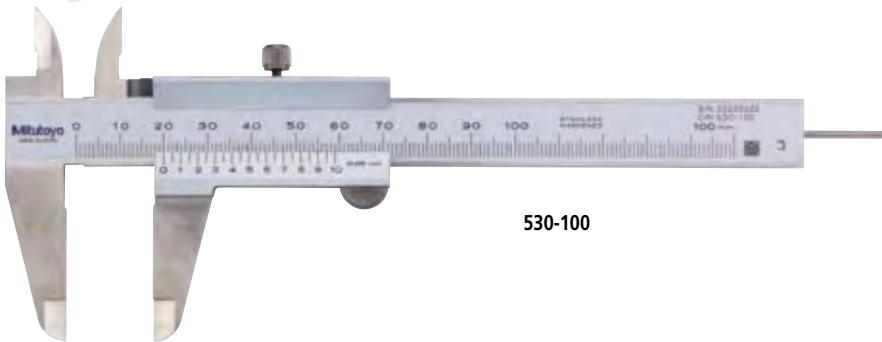
An industry standard in measuring tools

Vernier Caliper 530 Series — 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 outside and inside dimensions, depth, and steps.
- 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 jaw type)

DIMENSIONS

Unit: mm

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

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

* Code No.530-100 and No.530-102 incorporate a round depth bar (ø1.9mm).
The depth bar shown in the illustration above is a different type.

Technical Data

Accuracy: $\pm 0.05\text{mm}$ ($\leq 200\text{mm}$), $\pm 0.08\text{mm}$ ($\leq 300\text{mm}$)
 $\pm 0.10\text{mm}$ ($\leq 600\text{mm}$), $\pm 0.15\text{mm}$ ($\leq 1000\text{mm}$)
 High accuracy type:
 $\pm 0.03\text{mm}$ ($\leq 200\text{mm}$), $\pm 0.04\text{mm}$ ($\leq 300\text{mm}$)
 Graduation: 0.05mm , 0.05mm ($1/128''$) or $.001''$ ($1/128''$)
 High accuracy type:
 0.02mm or 0.02mm ($.001''$)

SPECIFICATIONS

Metric				
Order No.	Range	Depth bar	Remarks	
530-100	0 - 100mm	ø1.9mm rod	—	
530-102			—	
530-101	0 - 150mm	Blade	—	
530-320			Carbide-tipped jaws for outside measurement	
530-335			Carbide-tipped jaws for outside and inside measurement	
530-122*			High accuracy model: $\pm 0.03\text{mm}$	
530-108			—	
530-321	0 - 200mm	Blade	Carbide-tipped jaws for outside measurement	
530-123*			High accuracy model: $\pm 0.03\text{mm}$	
530-109			—	
530-322	0 - 300mm	Blade	Carbide-tipped jaws for outside measurement	
530-124*			High accuracy model: $\pm 0.04\text{mm}$	
530-501	0 - 600mm	—	—	
530-502	0 - 1000mm	—	—	

* Graduation: 0.02mm

Metric/Inch with metric/inch double scale				
Order No.	Range	Depth bar	Inch graduation	Remarks
530-104	0 - 150mm	Blade	1/128"	—
530-316			1/128"	Clamping screw below the slider
530-312*			.001"	High accuracy model: $\pm 0.03\text{mm}$
530-114	0 - 200mm	Blade	1/128"	—
530-118*			.001"	High accuracy model: $\pm 0.03\text{mm}$
530-115	0 - 300mm	Blade	1/128"	—
530-119*			.001"	High accuracy model: $\pm 0.04\text{mm}$

* Graduation: 0.02mm

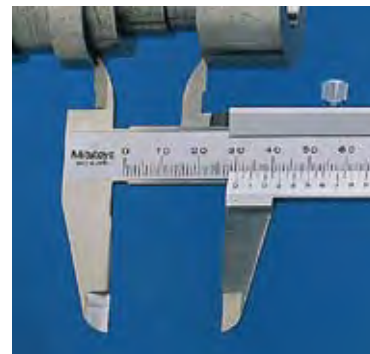
Inch with inch/inch double scale				
Order No.	Range	Depth bar	Inch graduation	Remarks
530-105	0 - 6"	Blade	1/128"	—
530-116	0 - 8"			

Measurement Applications

1. Outside measurement



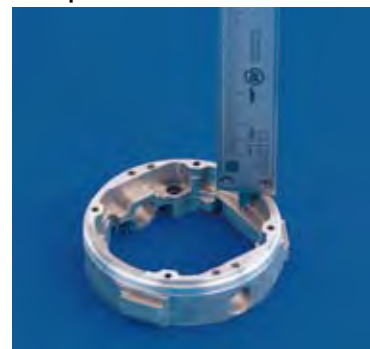
2. Inside measurement



3. Step measurement



4. Depth measurement

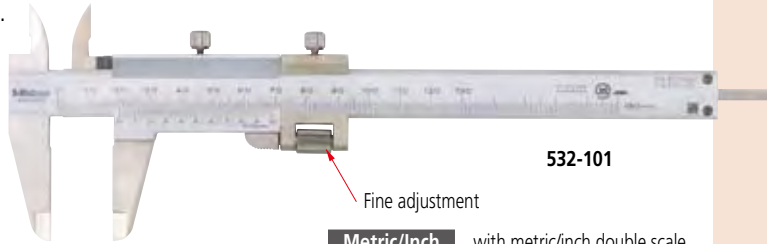


Calipers

An industry standard in measuring tools

Vernier Caliper 532 Series — with fine adjustment

- Fine-adjustment aids slider positioning.
- Allows step measurement.



532-101

Fine adjustment

Technical Data

Accuracy: $\pm 0.03\text{mm}$ ($\leq 180\text{mm}$), $\pm 0.04\text{mm}$ ($\leq 280\text{mm}$)
Graduation: 0.02mm, 0.02mm (.001") or .001" (1/128")

SPECIFICATIONS

Metric				
Order No.	Range	Depth bar	Remarks	
532-101	0 - 130mm	Blade	with fine adjustment	
532-102	0 - 180mm			
532-103	0 - 280mm			

Metric/Inch with metric/inch double scale					
Order No.	Range	Depth bar	Inch graduation	Remarks	
532-119	0 - 130mm	Blade	.001"	with fine adjustment	
532-120	0 - 180mm				
532-121	0 - 280mm				

DIMENSIONS

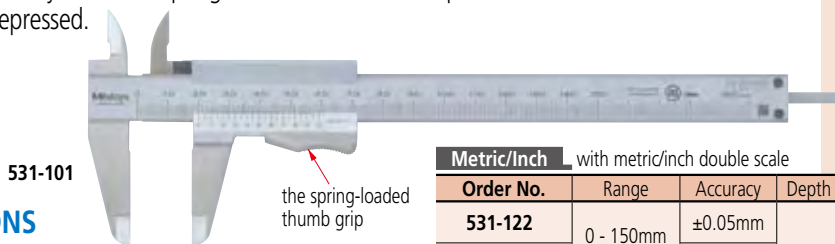
Unit: mm

Range	A	B	D	E	F	H	L
0 - 130mm/0 - 5"	17	21.5	40	53.5	31.2	16	229
0 - 180mm/0 - 7"	20.5	25	50	53.5	31.2	16	288
0 - 280mm/0 - 11"	22	27.5	64	66.5	38	20	404

Jaw thickness: 3.5mm for 0 - 130mm/0 - 5" and 0 - 180mm/0 - 7" models
3.8mm for 0 - 280mm/0 - 11" model

Vernier Caliper 531 Series — with thumb clamp

- The slider moves only when the spring-loaded thumb grip is depressed.
- Allows step measurement.



531-101

the spring-loaded thumb grip

Technical Data

Accuracy: Refer to the list of specifications.
Graduation: 0.05mm, 0.05mm (1/128") or .001" (1/128")
High accuracy type:
0.02mm or 0.02mm (.001")

SPECIFICATIONS

Metric				
Order No.	Range	Accuracy	Depth bar	Remarks
531-101	0 - 150mm	$\pm 0.05\text{mm}$	Blade	—
531-102	0 - 200mm			
531-103	0 - 300mm			

* Graduation: 0.02mm

Metric/Inch with metric/inch double scale					
Order No.	Range	Accuracy	Depth bar	Inch graduation	Remarks
531-122	0 - 150mm	$\pm 0.05\text{mm}$	Blade	1/128"	with inch/mm conversion label
531-128*		$\pm 0.03\text{mm}$.001"	High accuracy model
531-108	0 - 200mm	$\pm 0.05\text{mm}$		1/128"	—
531-129*		$\pm 0.03\text{mm}$.001"	High accuracy model
531-109	0 - 300mm	$\pm 0.08\text{mm}$		1/128"	—
531-112*		$\pm 0.04\text{mm}$.001"	High accuracy model

* Graduation: 0.02mm

DIMENSIONS

Unit: mm

Range	A	B	D	H	L
0 - 150mm/0 - 6"	17	21.5	40	16	229
0 - 200mm/0 - 8"	20.5	25	50	16	288
0 - 300mm/0 - 12"	22	27.5	64	20	404

Jaw thickness: 3.5mm for 0 - 150mm/0 - 6" and 0 - 200mm/0 - 8" models
3.8mm for 0 - 300mm/0 - 12" model

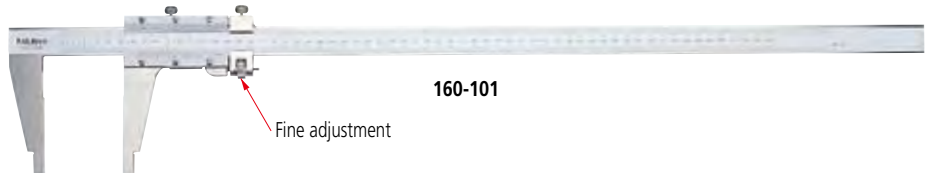
*(): Dimension in 0 - 300mm/0 - 12" model

Vernier Caliper SERIES 160 — with Nib Style Jaws and Fine Adjustment

- Inside and outside measurements can be read directly from the upper and lower vernier scales.
- The jaws have radiused measuring faces for accurate inside diameter (ID) measurement.
- With fine adjustment (except for 160-130/131/132/133/134).

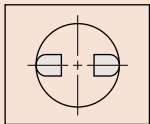
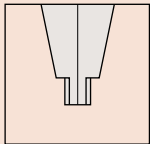


160-131



160-101

Fine adjustment



Radiused jaws for accurate ID measurement

SPECIFICATIONS

Metric with inside measurement vernier scale

Order No.	Range*	Accuracy	Graduations	Remarks
160-130	0 (20.1) - 450mm	±0.10mm	0.05mm	without fine adjustment
160-131	0 (20.1) - 600mm			
160-132	0 (20.1) - 1000mm			
160-133	0 (20.1) - 1500mm			
160-134	0 (20.1) - 2000mm			

* () : Minimum dimension in ID measurement

Metric with inside measurement vernier scale

Order No.	Range*	Accuracy	Graduations	Remarks
160-127	0 (10.1) - 300mm	±0.04mm	0.02mm	with fine adjustment
160-128	0 (20.1) - 450mm	±0.05mm		
160-101	0 (20.1) - 600mm	±0.05mm		
160-104	0 (20.1) - 1000mm	±0.07mm		
160-110	0 (20.1) - 1500mm	±0.1mm		
160-113	0 (20.1) - 2000mm	±0.12mm		

* () : Minimum dimension in ID measurement

Metric/Inch with metric/inch double scale

Order No.	Range*	Accuracy	Graduations	Remarks
160-150	0 (10.1) - 300mm	±0.04mm	0.02mm/.001"	+10mm/.394" to reading in inside measurement
160-151	0 (20.1) - 450mm	±0.05mm		+20mm/.787" to reading in inside measurement
160-153	0 (20.1) - 600mm	±0.05mm		
160-155	0 (20.1) - 1000mm	±0.07mm		
160-157	0 (20.1) - 1500mm	±0.1mm		
160-159	0 (20.1) - 2000mm	±0.12mm		

* () : Minimum dimension in ID measurement

Inch with inside measurement vernier scale

Order No.	Range*	Accuracy	Graduations	Remarks
160-124	0 (.304") - 12"	±.0015"	.001"	—
160-116	0 (.504") - 18"	±.002"		
160-102	0 (.504") - 24"			
160-105	0 (1.004") - 40"	±.003"		
160-111	0 (1.004") - 60"	±.004"		
160-114	0 (1.004") - 80"	±.005"		

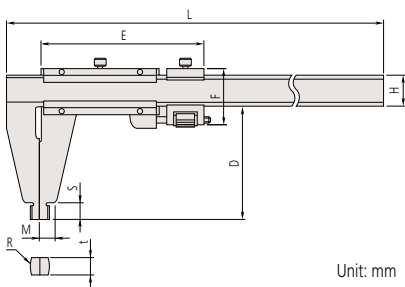
* () : Minimum dimension in ID measurement

Inch/Metric with inch/metric double scale

Order No.	Range*	Accuracy	Graduations	Remarks
160-125	0 (.304") - 12"	±.0015"	.001"/0.02mm	+3"/7.62mm to reading in inside measurement
160-119	0 (.504") - 18"	±.002"		+1"/25.4mm to reading in inside measurement
160-103	0 (.504") - 24"	±.002"		
160-106	0 (1.004") - 40"	±.003"		
160-112	0 (1.004") - 60"	±.004"		
160-115	0 (1.004") - 80"	±.005"		

* () : Minimum dimension in ID measurement

DIMENSIONS



Unit: mm

Range	D	E	F	H	L	M	R	S	t
0-300mm/0-12"	75	103	38	20	445	10	R 5	12	3.8
0-450mm*	100	89	—	25	630	14.8	R10	18	6
0-450mm/0-18"	100	112	51	—	—	—	R10	18	6
0-600mm*	100	89	—	25	780	14.8	R10	18	6
0-600mm/0-24"	100	112	51	—	—	—	R10	18	6
0-1000mm*	140	111	—	32	1240	17	R10	24	8
0-1000mm/0-40"	140	150	62.5	—	—	—	R10	24	8
0-1500mm*	180	129	—	32	1800	19	R10	30	8
0-1500mm/0-60"	180	170	62.5	—	—	—	R10	30	8
0-2000mm*	180	129	—	40	2300	23	R10	30	12
0-2000mm/0-80"	180	180	78	—	—	—	R10	30	12

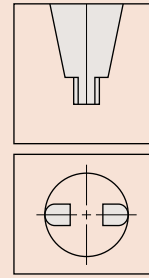
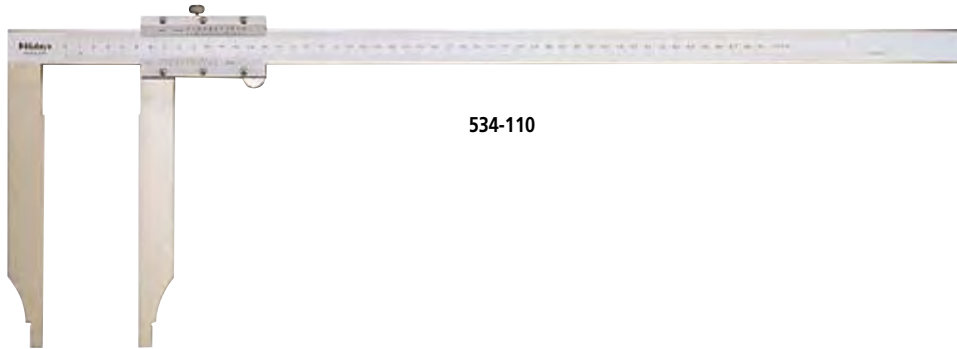
*: without fine adjustment

Calipers

An industry standard in measuring tools

Long Jaw Vernier Caliper SERIES 534

- Long jaws for measuring hard-to-reach workpiece features.
- Inside and outside measurements can be read directly from the upper and lower vernier scales.



Round jaws for accurate ID measurement

SPECIFICATIONS

Metric _____ with inside measurement vernier scale

Order No.	Range*	Accuracy	Graduation	Remarks
534-109	0 (10.1) - 300mm	±0.07mm	0.05mm	without fine adjustment
534-110	0 (20.1) - 500mm	±0.13mm		

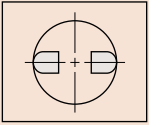
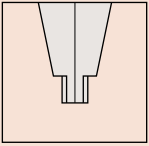
* (): Minimum dimension in inside measurement

Metric/Inch _____ with metric/inch double scale

Order No.	Range*	Accuracy	Graduation	Remarks
534-101	0 (10.1) - 300mm	±0.07mm	0.05mm/ 1/128"	+10mm/.394" to reading in inside measurement without fine adjustment
534-105		±0.04mm	0.02mm/.001"	
534-102	0 (20.1) - 500mm	±0.13mm	0.05mm/ 1/128"	+20mm/.787" to reading in inside measurement without fine adjustment
534-106		±0.06mm	0.02mm/.001"	
534-103	0 (20.1) - 750mm	±0.16mm	0.05mm/ 1/128"	
534-107		±0.08mm	0.02mm/.001"	
534-104	0 (20.1) - 1000mm	±0.20mm	0.05mm/ 1/128"	
534-108		±0.10mm	0.02mm/.001"	

* (): Minimum dimension in inside measurement

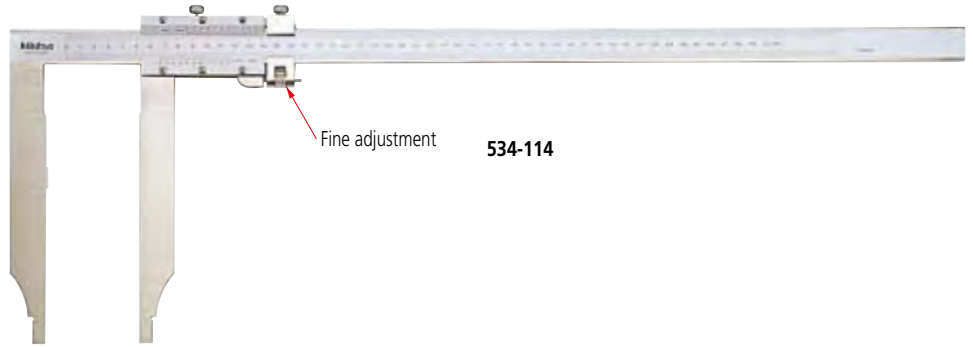
Long Jaw Vernier Caliper SERIES 534



Radiused jaws for accurate ID measurement

- Long jaws for measuring hard-to-reach workpiece features.

- Inside and outside measurements can be read directly from the upper and lower vernier scales.



SPECIFICATIONS

Metric _____ with inside measurement vernier scale

Order No.	Range*	Accuracy	Graduation	Remarks
534-113	0 (10.1) - 300mm	±0.04mm	0.02mm	with fine adjustment
534-114	0 (20.1) - 500mm	±0.06mm		
534-115	0 (20.1) - 750mm	±0.08mm		
534-116	0 (20.1) - 1000mm	±0.10mm		

* (): Minimum dimension in inside measurement

Inch _____ with inside measurement vernier scale

Order No.	Range*	Accuracy	Graduation	Remarks
534-117	0 (.304") - 12"	±.002"	.001"	with fine adjustment
534-118	0 (.804") - 20"	±.003"		
534-119	0 (.804") - 30"	±.004"		
534-120	0 (.804") - 40"			

* (): Minimum dimension in inside measurement

DIMENSIONS

Unit: mm

Range	D	E	F	H	L	M	R	S	t
0-300mm*	90	76.5	—	20	445	7	R5	12	3.8
0-300mm/0-12"		103	38				R5		3.8
0-500mm*	112	89	—	25	682	12	R10	18.5	6
0-500mm/0-20"		112	51				R10		6
0-750mm*	150	—	—	32	995	12	R10	18.5	6
0-750mm/0-30"							62.5		R10
0-1000mm*	150	—	—	32	1230	12	R10	18.5	8
0-1000mm/0-40"							62.5		R10

* Without fine adjustment