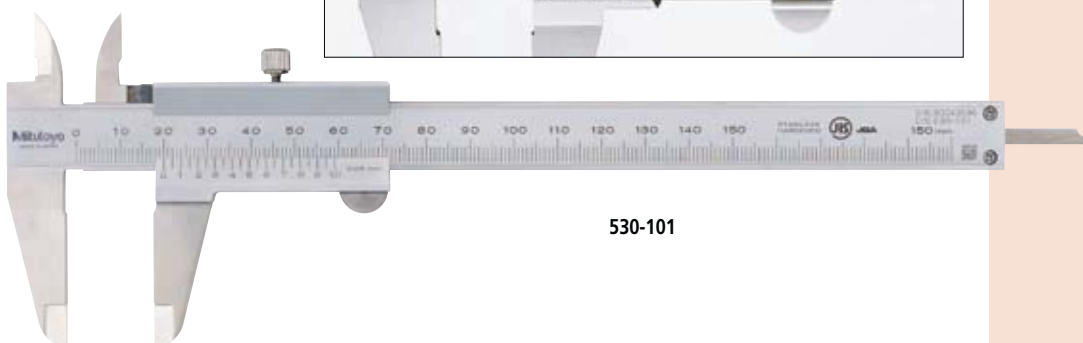
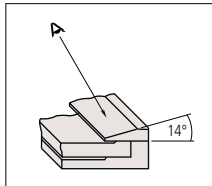


Calipers

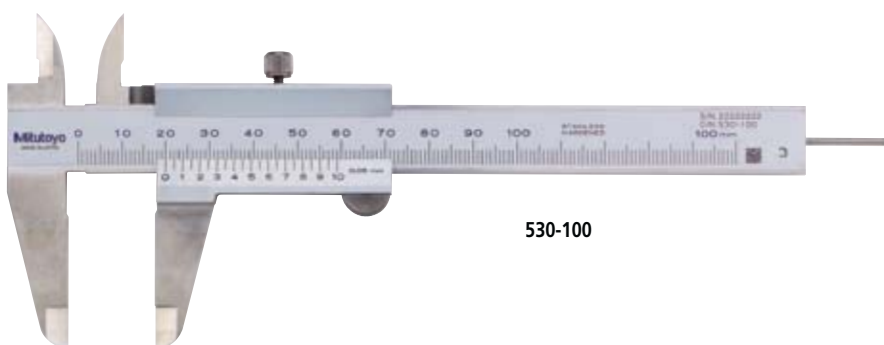
A standard measuring tool of industry

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

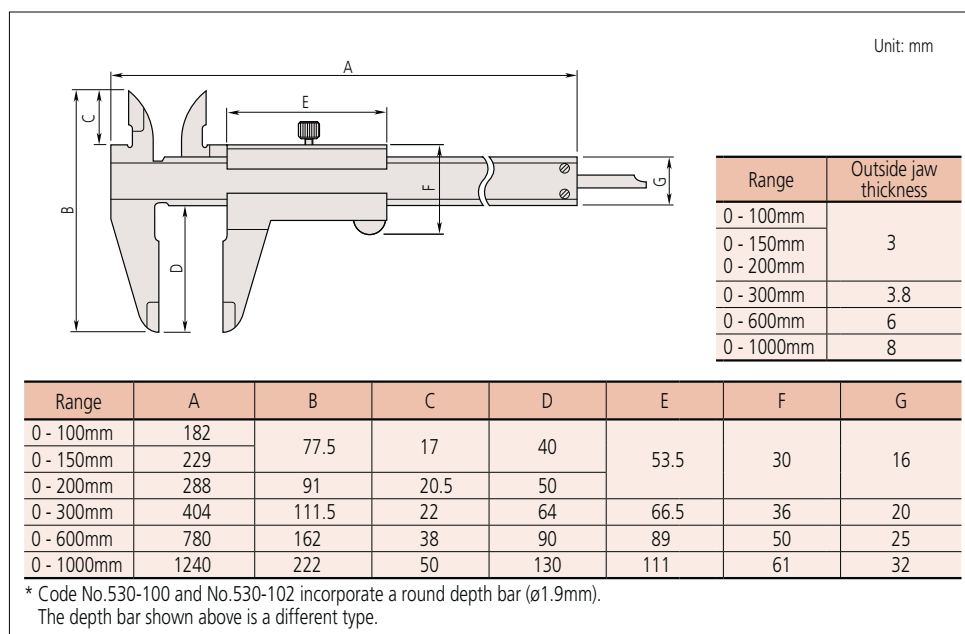


530-100



530-102 (Round depth bar type)

DIMENSIONS



530-320 (Carbide-tipped jaw 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			—
530-320	0 - 150mm	Blade	Carbide-tipped jaws for outside measurement
530-335			Carbide-tipped jaws for outside and inside measurement
530-122*			High accuracy model: ±0.03mm
530-108	0 - 200mm		—
530-321			Carbide-tipped jaws for outside measurement
530-123*			High accuracy model: ±0.03mm
530-109	0 - 300mm		—
530-322			Carbide-tipped jaws for outside measurement
530-124*			High accuracy model: ±0.04mm
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: ±0.03mm
530-114	0 - 200mm		1/128"	—
530-118*			.001"	High accuracy model: ±0.03mm
530-115	0 - 300mm		1/128"	—
530-119*			.001"	High accuracy model: ±0.04mm

* Graduation: 0.02mm

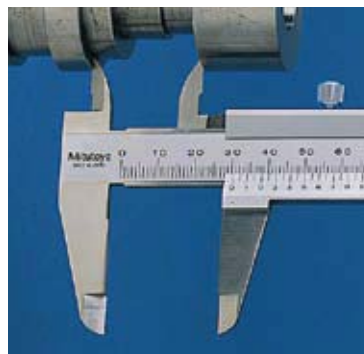
Inch with inch/inch double scale				
Order No.	Range	Depth bar	Inch graduation	Remarks
530-105	0 - 6"	Blade	$1/128''$	—
530-116	0 - 8"			

Measurement Applications

1. Outside measurement



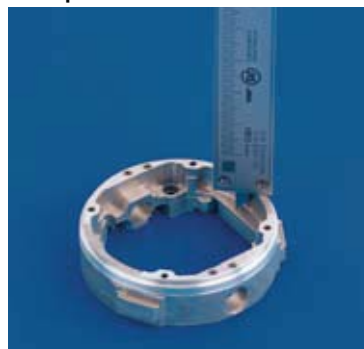
2. Inside measurement



3. Step measurement



4. Depth measurement

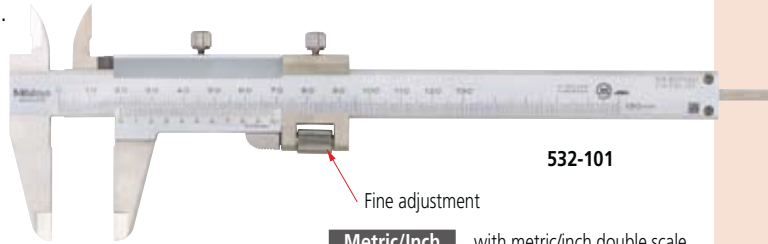


Calipers

A standard measuring tool of industry

Vernier Caliper 532 Series — with fine adjustment

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



Technical Data

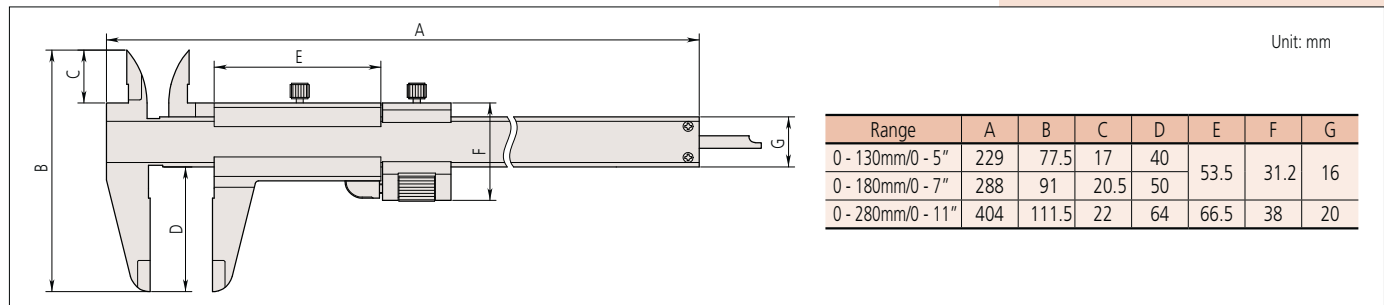
Accuracy: $\pm 0.03\text{mm}$ ($\leq 180\text{mm}$), $\pm 0.04\text{mm}$ ($\leq 280\text{mm}$)
 Graduation: 0.02mm, 0.02mm (.001") or .001" (1/128")

SPECIFICATIONS

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

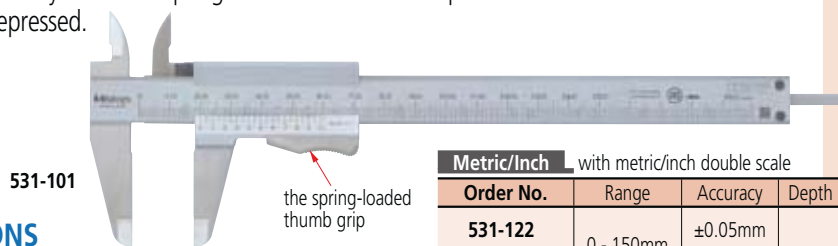
Metric/Inch with metric/inch double scale				
Order No.	Range	Depth bar	Inch graduation	Remarks
532-119	0 - 130mm	Blade	.001"	with fine adjustment
532-120	0 - 180mm			
532-121	0 - 280mm			

DIMENSIONS



Vernier Caliper 531 Series — with thumb clamp

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



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

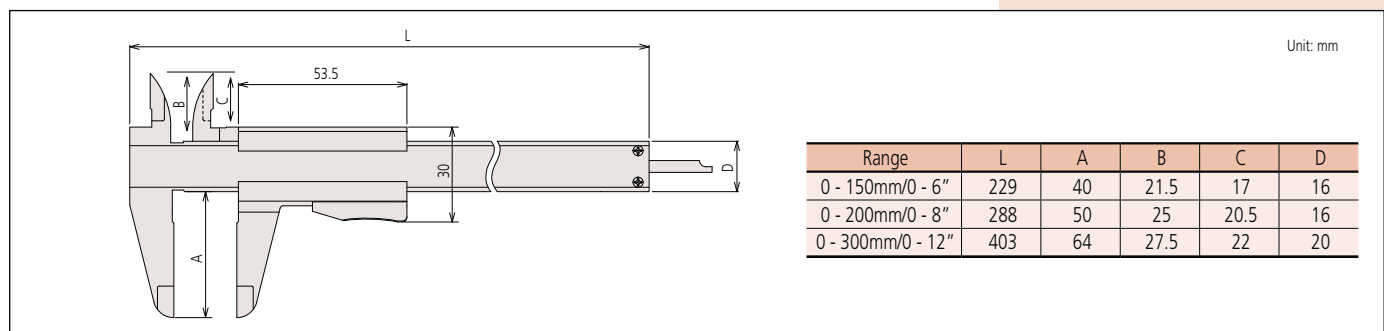
Metric				
Order No.	Range	Accuracy	Depth bar	Remarks
531-101	0 - 150mm	$\pm 0.05\text{mm}$	Blade	—
531-102	0 - 200mm			
531-103	0 - 300mm			

* 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

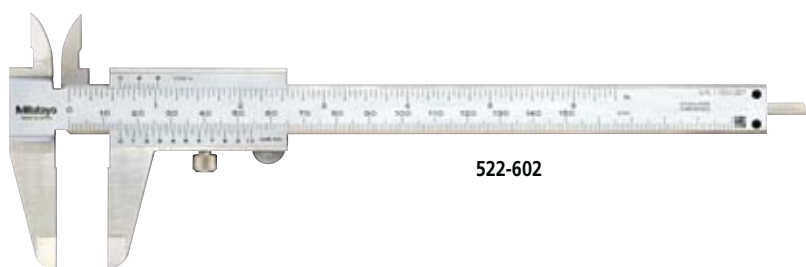


Technical Data

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

Vernier Caliper SERIES 522 — Parallax-Free Type

- The main and vernier scales are flush-fitted to eliminate parallax errors because of the diamond-shape (octagonal) cross section of the main scale.
- Can measure outside and inside diameter (OD and ID), depth, and steps.
- With locking screw below the slider.



SPECIFICATIONS

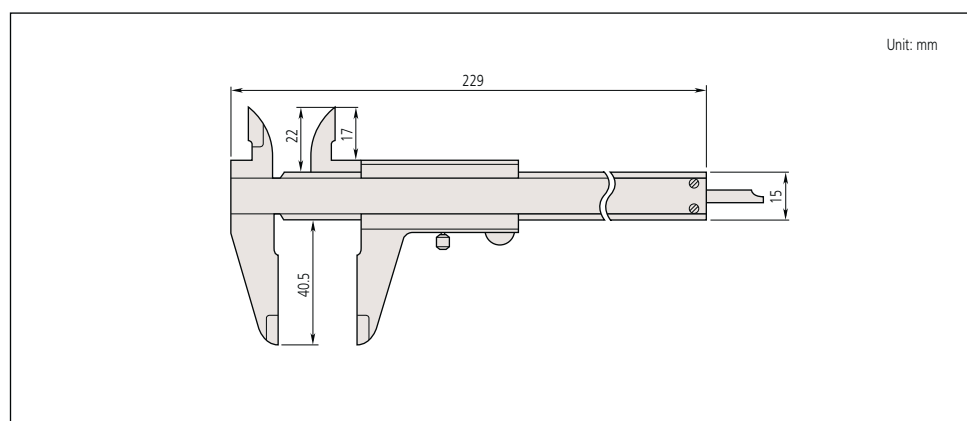
Metric				
Order No.	Range	Accuracy	Depth bar	Remarks
522-600	0 - 150mm	±0.05mm	Blade	—
522-606*		±0.03mm		High accuracy model

* Graduation: 0.02mm

Metric/Inch with metric/inch double scale					
Order No.	Range	Accuracy	Depth bar	Inch resolution	Remarks
522-601	0 - 150mm	±0.05mm	Blade	1/128"	—
522-602*		±0.03mm		.001"	High accuracy model

* Graduation: 0.02mm

DIMENSIONS



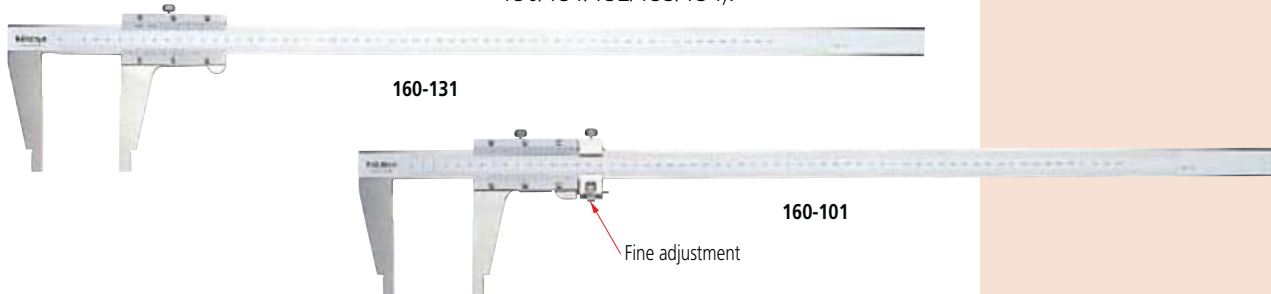
Calipers

A standard measuring tool of industry

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).



SPECIFICATIONS

Metric with inside measurement vernier scale

Order No.	Range*	Accuracy	Graduations	Remarks
160-130	0 (20) - 450mm	±0.10mm	0.05mm	without fine adjustment
160-131	0 (20) - 600mm			
160-132	0 (20) - 1000mm			
160-133	0 (20) - 1500mm			
160-134	0 (20) - 2000mm			

* (): Minimum dimension in ID measurement

Metric with inside measurement vernier scale

Order No.	Range*	Accuracy	Graduations	Remarks
160-127	0 (10) - 300mm	±0.04mm	0.02mm	—
160-128	0 (20) - 450mm	±0.05mm		
160-101	0 (20) - 600mm	±0.05mm		
160-104	0 (20) - 1000mm	±0.07mm		
160-110	0 (20) - 1500mm	±0.1mm		
160-113	0 (20) - 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) - 300mm	±0.04mm	0.02mm/.001"	+10mm/.394" to reading in inside measurement
160-151	0 (20) - 450mm	±0.05mm		+20mm/.787" to reading in inside measurement
160-153	0 (20) - 600mm	±0.05mm		
160-155	0 (20) - 1000mm	±0.07mm		
160-157	0 (20) - 1500mm	±0.1mm		
160-159	0 (20) - 2000mm	±0.12mm		

* (): Minimum dimension in ID measurement

Inch with inside measurement vernier scale

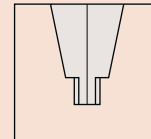
With Inside Measurement Vernier Scale				
Order No.	Range*	Accuracy	Graduations	Remarks
160-124	0 (.3") - 12"	±.0015"	.001"	—
160-116	0 (.5") - 18"	±.002"		
160-102	0 (.5") - 24"			
160-105	0 (1") - 40"	±.003"		
160-111	0 (1") - 60"	±.004"		
160-114	0 (1") - 80"	±.005"		

* (): Minimum dimension in ID measurement

Inch/Metric with inch/metric double scale

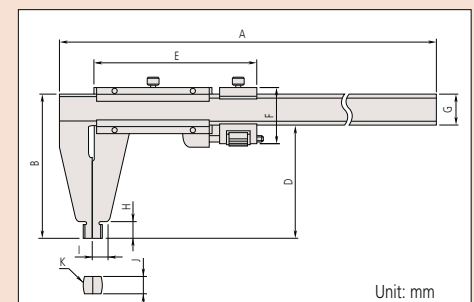
Order No.	Range*	Accuracy	Graduations	Remarks
160-125	0 (.3") - 12"	±.0015"	.001"/0.02mm	+ .3"/7.62mm to reading in inside measurement
160-119	0 (.5") - 18"	±.002"		+ .5"/12.7mm to reading in inside measurement
160-103	0 (.5") - 24"	±.002"		
160-106	0 (1") - 40"	±.003"		+ 1"/25.4mm to reading in inside measurement
160-112	0 (1") - 60"	±.004"		
160-115	0 (1") - 80"	±.005"		

* (): Minimum dimension in ID measurement



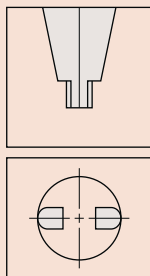
Radiused jaws for accurate ID measurement

DIMENSIONS



Range	A	B	D	E	F	G	H	I	J	K			
0-300mm/0-12"	445	95	75	103	38	20	12	10	3.8	R5			
0-450mm*	630	125	100	89	—	25	18	14.8	6	R10			
0-450mm/0-18"				112	51								
0-600mm*	780			89	—	32	24	19	8				
0-600mm/0-24"				112	51								
0-1000mm*	1240	172	140	111	—	40	30	23	12				
0-1000mm/0-40"				150	62.5								
0-1500mm*	1800	212	180	129	—	40	30	23	12				
0-1500mm/0-60"				170	62.5								
0-2000mm*	2300	220	180	129	—	40	30	23	12				
0-2000mm/0-80"				180	78								

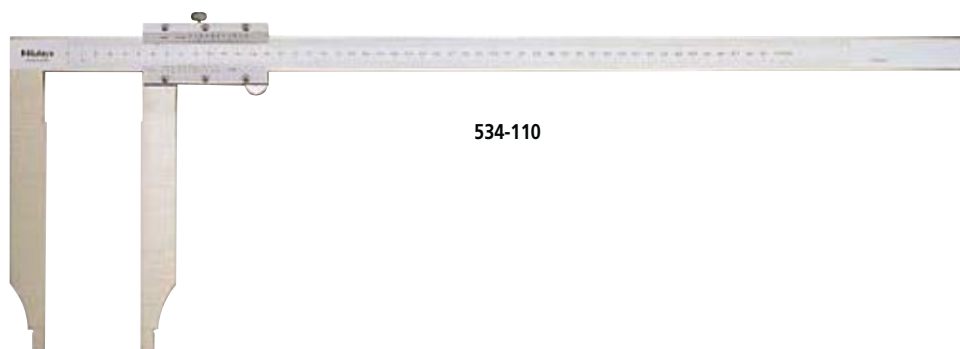
*: without fine adjustment



Radiused jaws for accurate ID measurement

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.



534-110

SPECIFICATIONS

Metric with inside measurement vernier scale

Order No.	Range*	Accuracy	Graduation	Remarks
534-109	0 (10) - 300mm	±0.07mm	0.05mm	without fine adjustment
534-110	0 (20) - 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) - 300mm	±0.07mm	0.05mm/ 1/128"	+10mm/.394" to reading in inside measurement
534-105		±0.04mm	0.02mm/.001"	
534-102	0 (20) - 500mm	±0.13mm	0.05mm/ 1/128"	+20mm/.787" to reading in inside measurement
534-106		±0.06mm	0.02mm/.001"	
534-103	0 (20) - 700mm	±0.16mm	0.05mm/ 1/128"	
534-107		±0.08mm	0.02mm/.001"	
534-104	0 (20) - 1000mm	±0.20mm	0.05mm/ 1/128"	
534-108		±0.10mm	0.02mm/.001"	

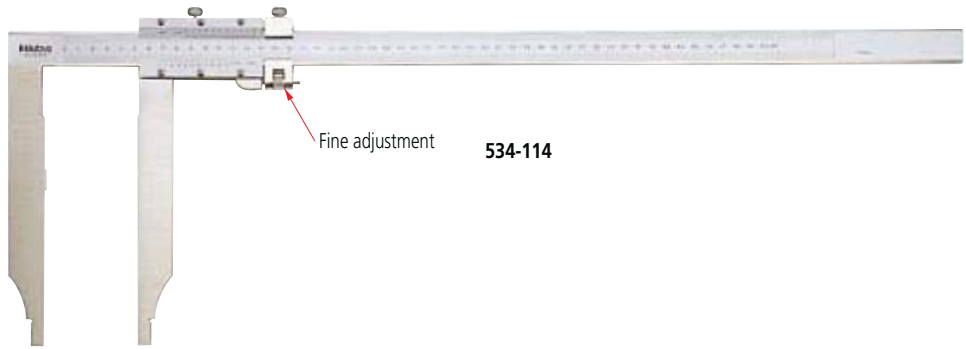
* (): Minimum dimension in inside measurement

Calipers

A standard measuring tool of industry

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.



SPECIFICATIONS

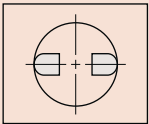
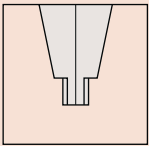
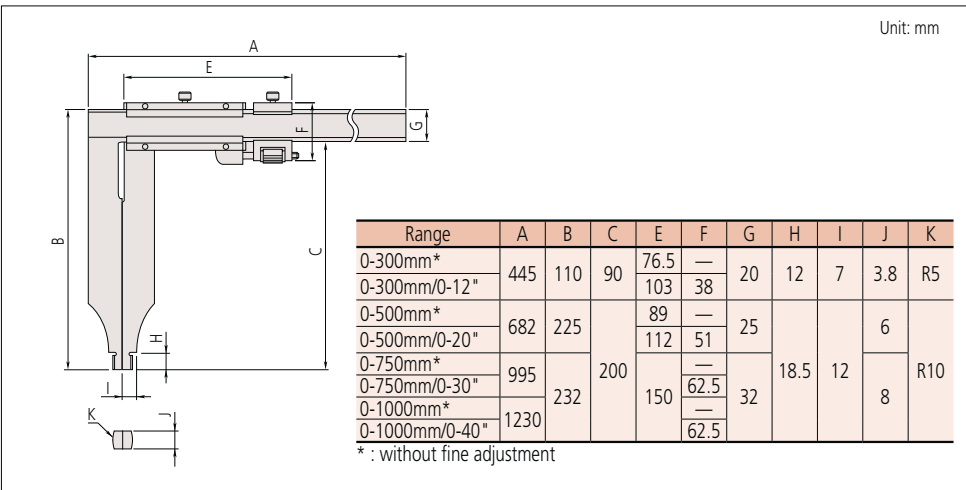
Metric with inside measurement vernier scale				
Order No.	Range*	Accuracy	Graduation	Remarks
534-113	0 (10) - 300mm	±0.04mm	0.02mm	with fine adjustment
534-114	0 (20) - 500mm	±0.06mm		
534-115	0 (20) - 750mm	±0.08mm		
534-116	0 (20) - 1000mm	±0.10mm		

* () : Minimum dimension in inside measurement

Inch with inside measurement vernier scale				
Order No.	Range*	Accuracy	Graduation	Remarks
534-117	0 (.3") - 12"	±.002"	.001"	with fine adjustment
534-118	0 (.8") - 20"	±.003"		
534-119	0 (.8") - 30"	±.004"		
534-120	0 (.8") - 40"			

* () : Minimum dimension in inside measurement

DIMENSIONS



Radiused jaws for accurate ID measurement