Absolute Coolant Proof Caliper

SERIES 500 — with Dust/Water Protection Conforming to IP66/67 Level



FEATURES

- Can be used in workshop conditions exposed to coolant, water, dust or oil.
- Easy to use no need to wipe or clean the scale.
- Advanced design styling.
- Incorporates absolute measurement system.
- Automatic power-on/off.
- Data output function.

Technical Data

Display:

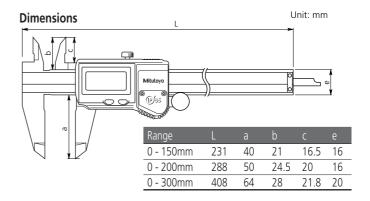
Functions: Origin-Set, Automatic power on/off, inch/mm conversion

Battery: SR44 (2 pc.) (938882)
Battery life: Approx. 1.5 years under normal use
Maximum response speed: Unlimited

Dust/Water protection level: Conforming to IP66/IP67 Alarm: Low voltage, counting value composition error Operating temperature: 0°C to 40°C



		Inspection result/R				0.000
Product name/Désignation	Digimatic Calper/Fled & coulsse Digimatic	Measuring length	Permissible values	Instrumental entirs/Enr		
Model No /Modèle	CO-15PS	Position de mesure	Eneur admissible	Esterna/Esterne	Internal/Interne	
Code No./ Référence	500-622	- 04	+0.01	-	-0.01	_
Sensi No./No. de sêne	03416811	21	70.03	1000	1000	
Measuring range/Capacité de mesure	0-150mm	- 50 - 100		0.00	0.01	1
Minimum indication/Résolution	0.01mm	100	±0.02	-0.01	0.00	
Standard Temperature /	20°C	150	T0.05	-0.01	0.00	Unitmm
Température de Référence		200	7.76.00			Unité mo
QC Manager/Responsable Qualité Contro	o of gation		+0.0005			Q-110-111
	0.0	Ø 0.16	-0.0015	_	711	
Inspection standard : Mitutoyo standar		0		-		
Based on: JISB7507:1993.DIN862:198		2	A 9/10/2005		***	
	0030 NIST via 821/268634-03.	4	±0,0010	-	***	No.
PTB via 3785 PTB 02.4		6	45533000	-	***	Unit inch
				· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	Unité inch
		Park Source Property S		Passed /Passed C	onformité: conforme	
	Mituto	yo Corporati				









SPECIFICATIONS

Metric	IP66 model				
Range	Order No.	Resolution	Accuracy	Mass	Remarks
0 - 150mm	500-622	0.01mm	±0.02mm	168g	With thumb roller
	500-626	0.01mm	±0.02mm	164g	_
	500-632	0.01mm	±0.02mm	168g	With data output and thumb roller
	500-637	0.01mm	±0.02mm	164g	With data output
0 - 200mm	500-623	0.01mm	±0.02mm	198g	With thumb roller
	500-627	0.01mm	±0.02mm	194g	_
	500-633	0.01mm	±0.02mm	198g	With data output and thumb roller
	500-638	0.01mm	±0.02mm	194g	With data output
0 - 300mm	500-624	0.01mm	±0.02mm	350g	With thumb roller
	500-628	0.01mm	(≤200mm)	345g	_
	500-634	0.01mm	±0.03mm	350g	With data output and thumb roller
	500-639	0.01mm	(>200mm)	345g	With data output

Excluding quantizing error

_ IP66 model				
Order No.	Resolution	Accuracy	Mass	Remarks
500-672	.0005"/0.01mm	±.001"	.37 lbs.	With thumb roller
500-682	.0005"/0.01mm	±.001"	.37 lbs.	With data output and thumb roller
500-673	.0005"/0.01mm	±.001"	.43 lbs.	With thumb roller
500-683	.0005"/0.01mm	±.001"	.43 lbs.	With data output and thumb roller
500-674	.0005"/0.01mm	±.001" (≤8")	.77 lbs.	With thumb roller
500-684	.0005"/0.01mm	±.0015" (>8")	.77 lbs.	With data output and thumb roller
	500-672 500-682 500-673 500-683 500-674	Order No. Resolution 500-672 .0005 "/0.01mm 500-682 .0005 "/0.01mm 500-673 .0005 "/0.01mm 500-683 .0005 "/0.01mm 500-674 .0005 "/0.01mm	Order No. Resolution Accuracy 500-672 .0005"/0.01mm ±.001" 500-682 .0005"/0.01mm ±.001" 500-673 .0005"/0.01mm ±.001" 500-683 .0005"/0.01mm ±.001" 500-674 .0005"/0.01mm ±.001" (≤8")	Order No. Resolution Accuracy Mass 500-672 .0005"/0.01mm ±.001" .37 lbs. 500-682 .0005"/0.01mm ±.001" .37 lbs. 500-673 .0005"/0.01mm ±.001" .43 lbs. 500-683 .0005"/0.01mm ±.001" .43 lbs. 500-674 .0005"/0.01mm ±.001" (≤8") .77 lbs.

Excluding quantizing error

Metric	IP67 model							
Range	Order No.	Resolution	Accuracy	Mass	Remarks			
0 - 150mm	500-702	0.01mm	±0.02mm	168g	With thumb roller			
	500-706	0.01mm	±0.02mm	164g	_			
	500-712	0.01mm	±0.02mm	168g	With data output and thumb roller			
	500-716	0.01mm	±0.02mm	164g	With data output			
0 - 200mm	500-703	0.01mm	±0.02mm	198g	With thumb roller			
	500-707	0.01mm	±0.02mm	194g	_			
	500-713	0.01mm	±0.02mm	198g	With data output and thumb roller			
	500-717	0.01mm	±0.02mm	194g	With data output			

Excluding quantizing error

Inch/Metric	IP67 model				
Range	Order No.	Resolution	Accuracy	Mass	Remarks
0 - 6" (0 - 150mm)	500-752	.0005"/0.01mm	±.001"	.37 lbs.	With thumb roller
	500-762	.0005"/0.01mm	±.001"	.37 lbs.	With data output and thumb roller
0 - 8" (0 - 200mm)	500-753	.0005"/0.01mm	±.001"	.43 lbs.	With thumb roller
	500-763	.0005"/0.01mm	±.001"	.43 lbs.	With data output and thumb roller

Absolute Digimatic Caliper

SERIES 500 — with Exclusive Absolute Encoder Technology



Mitutoyo's absolute Digimatic Caliper is the next generation of electronic calipers. It keeps track of its origin point once set. Whenever turned on, the large LCD screen displays the actual slider position ready to start measurement. No more repeated zero setting is necessary with the absolute encoder technology as well as no more care for overspeed errors.

FEATURES

- Large and clear LCD readout.
- The ZERO/ABS key allows the display to be Zero-Set at any slider position along the scale for incremental comparison measurements. This switch will also allow return to the absolute (ABS) coordinate and display of the true position from the origin point (usually jaws-closed point).
- Data Hold Unit (959143) is optional.
- Carbide-tipped jaw type calipers are also available.

Technical Data

Display:

Origin-Set, Zero-Set, power on/off, inch/mm conversion (inch/mm type only), SPC data output, data hold (optional) SR44 (1 pc.) (938882) **Functions:**

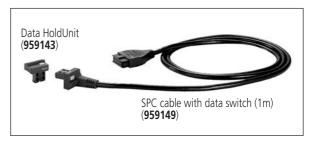
Battery:

Battery life: Approx. 3.5 years under normal use **Maximum response speed:** Unlimited

Alarm: Low battery voltage, scale contamination, counting value

composition error

Operating temperature: 0°C to 40°C

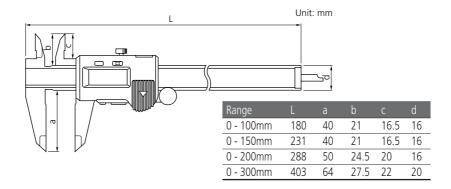


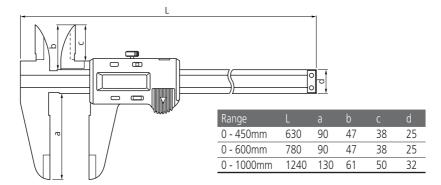
OPTIONAL ACCESSORIES

Order No.	Description
959143	Data Hold Unit
959149	SPC cable with data switch (1m)
959150	SPC cable with data switch (2m)



Dimensions





SPECIFICATIONS

Metric

Range	Order No.	Resolution	Accuracy	Mass	Remarks
0 - 100mm	500-150	0.01mm	±0.02mm	137g	With depth measuring rod (ø1.9mm)
0 - 150mm	500-151	0.01mm	±0.02mm	162g	With depth measuring bar (blade)
	500-154*	0.01mm	±0.02mm	162g	With depth measuring bar (blade)
	500-155**	0.01mm	±0.02mm	162g	With depth measuring bar (blade)
	500-158	0.01mm	±0.02mm	162g	With depth measuring rod (ø1.9mm)
0 - 200mm	500-152	0.01mm	±0.02mm	192g	With depth measuring bar (blade)
	500-156*	0.01mm	±0.02mm	192g	With depth measuring bar (blade)
	500-157**	0.01mm	±0.02mm	192g	With depth measuring bar (blade)
0 - 300mm	500-153	0.01mm	±0.03mm	350g	With depth measuring bar (blade)
0 - 450mm	500-500-10	0.01mm	±0.05mm	1170g	_
0 - 600mm	500-501-10	0.01mm	±0.05mm	1350g	_
0 - 1000mm	500-502-10	0.01mm	±0.07mm	3300g	_

Excluding quantizing error

Inch/Metric

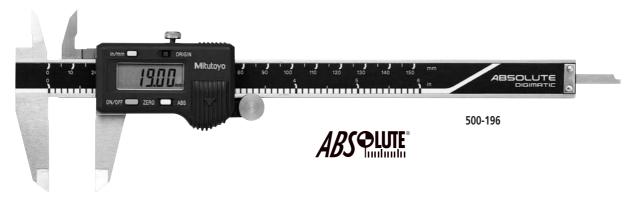
Range	Order No.	Resolution	Accuracy	Mass	Remarks
0 - 4" (0 - 100mm)	500-170	.0005"/0.01mm	±.0010"	.30 lbs.	With depth measuring rod (ø3/40")
0 - 6" (0 - 150mm)	500-171	.0005"/0.01mm	±.0010"	.36 lbs.	With depth measuring bar (blade)
	500-174*	.0005"/0.01mm	±.0010"	.36 lbs.	With depth measuring bar (blade)
	500-155**	.0005"/0.01mm	±.0010"	.36 lbs.	With depth measuring bar (blade)
	500-178	.0005"/0.01mm	±.0010"	.36 lbs.	With depth measuring rod (ø3/40")
0 - 8" (0 - 200mm)	500-172	.0005"/0.01mm	±.0010"	.42 lbs.	With depth measuring bar (blade)
	500-176*	.0005"/0.01mm	±.0010"	.42 lbs.	With depth measuring bar (blade)
	500-177**	.0005"/0.01mm	±.0010"	.42 lbs.	With depth measuring bar (blade)
0 - 12" (0 - 300mm)	500-173	.0005"/0.01mm	±.0015"	.77 lbs.	With depth measuring bar (blade)
	500-167*	.0005"/0.01mm	±.0015"	.77 lbs.	With depth measuring bar (blade)
	500-168**	.0005"/0.01mm	±.0015"	.77 lbs.	With depth measuring bar (blade)
0 - 18" (0 - 450mm)	500-505-10	.0005"/0.01mm	±.0020"	2.57 lbs.	_
0 - 24" (0 - 600mm)	500-506-10	.0005"/0.01mm	±.0020"	2.97 lbs.	_
0 - 40" (0 - 1000mm)	500-507-10	.0005"/0.01mm	±.0030"	7.26 lbs.	_

^{*}Provided with carbide-tipped jaws for OD measurement.
**Provided with carbide-tipped jaws for OD & ID measurements.

^{*}Provided with carbide-tipped jaws for OD measurement.
**Provided with carbide-tipped jaws for OD & ID measurements.

Absolute Digimatic Caliper

SERIES 500 — with Economical Design



FEATURES

- Large and clear LCD readout.
- Low price due to the design featuring only essential functions.
- ZERO/ABS key: Allows the display to be Zero-Set at any slider position along the scale for incremental comparison measurements. This switch will also allow return to the absolute mode and display of the true position from the origin point.



Technical Data

Display:

Functions: Origin-Set, Zero-Set, power on/off, inch/mm conversion (inch/

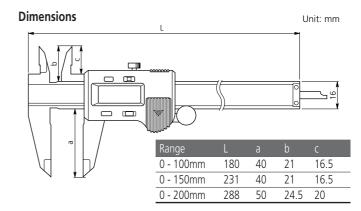
mm type only) SR44 (1 pc.) (**938882**) Battery:

Battery life: Approx. 3.5 years under normal use

Maximum response speed: Unlimited

Low voltage, scale contamination, counting value composition Alarm:

Operating temperature: 0°C to 40°C



SPECIFICATIONS

Metric

Range	Order No.	Resolution	Accuracy	Mass	Remarks
0 - 100mm	500-180	0.01mm	±0.02mm	137g	With depth measuring rod (ø1.9mm)
0 - 150mm	500-181	0.01mm	±0.02mm	162g	With depth measuring bar (blade)
0 - 200mm	500-182	0.01mm	±0.02mm	192g	With depth measuring bar (blade)

Excluding quantizing error

Inch/Metric

	_				
Range	Order No.	Resolution	Accuracy	Mass	Remarks
0 - 4" (0 - 100mm)	500-195	.0005"/0.01mm	±.0010"	.30 lbs.	With depth measuring rod (ø3/40")
0 - 6" (0 - 150mm)	500-196	.0005"/0.01mm	±.0010"	.36 lbs.	With depth measuring bar (blade)
	500-159*	.0005"/0.01mm	±.0010"	.36 lbs.	With depth measuring bar (blade)
	500-160**	.0005"/0.01mm	±.0010"	.36 lbs.	With depth measuring bar (blade)
0 - 8" (0 - 200mm)	500-197	.0005"/0.01mm	±.0010"	.42 lbs.	With depth measuring bar (blade)
	500-163*	.0005"/0.01mm	±.0010"	.42 lbs.	With depth measuring bar (blade)
	500-164**	.0005"/0.01mm	±.0010"	.42 lbs.	With depth measuring bar (blade)
0 - 12" (0 - 300mm)	500-193	.0005"/0.01mm	±.0015"	.77 lbs.	With depth measuring bar (blade)
	500-165*	.0005"/0.01mm	±.0015"	.77 lbs.	With depth measuring bar (blade)
	500-166**	.0005"/0.01mm	±.0015"	.77 lbs.	With depth measuring bar (blade)

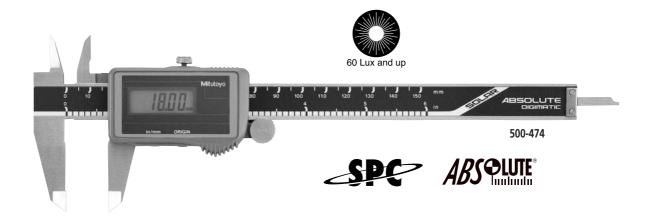
^{*}Provided with carbide-tipped jaws for OD measurement.
**Provided with carbide-tipped jaws for OD & ID measurements.



Mitutoyo

Absolute Solar Caliper

SERIES 500 — Allowing No Need for Battery Replacement



Mitutoyo's Absolute Solar Digimatic Caliper retains its origin point even the display turns off for the entire life of the caliper. At 60 Lux and up the "MyCAL SOLAR-ABSOLUTE" is turned on ready to start measurement.

FEATURES

- No more repeated zero setting caused by the shortage of light intensity.
- Hard-coated solar panel for safe operation.
- No fear for overspeed errors.

Technical Data

Display: LCD

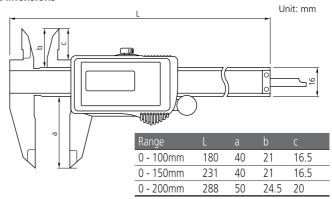
Functions: Origin-Set, inch/mm conversion (inch/mm type only)
Light intensity: 60Lux and up for operation (300Lux and up for origin setting)

Maximum response speed: Unlimited

Alarm: Scale contamination, counting value composition error

Operating temperature: 0°C to 40°C

Dimensions



OPTIONAL ACCESSORIES

Order No.	Description
959143	Data Hold Unit
959149	SPC cable with data switch (1m)
959150	SPC cable with data switch (2m)

Available for SPC data output model only.

SPECIFICATIONS

Metric

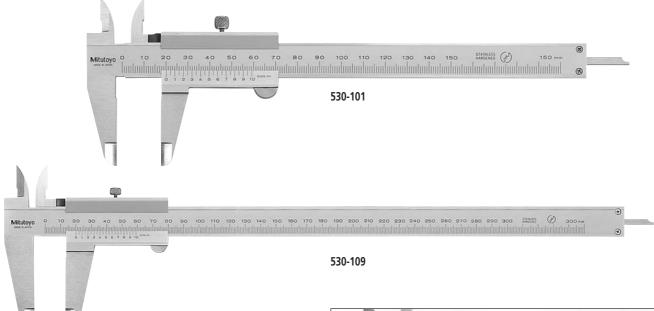
Range	Order No.	Resolution	Accuracy	Mass	Remarks
0 - 100mm	500-443	0.01mm	±0.02mm	145g	With depth measuring rod (ø1.9mm)
	500-453*	0.01mm	±0.02mm	125g	With depth measuring rod (ø1.9mm)
0 - 150mm	500-444	0.01mm	±0.02mm	170g	With depth measuring bar (blade)
	500-454*	0.01mm	±0.02mm	150g	With depth measuring bar (blade)
0 - 200mm	500-445	0.01mm	±0.02mm	200g	With depth measuring bar (blade)
	500-455*	0.01mm	±0.02mm	180g	With depth measuring bar (blade)

Excluding quantizing error

Inch/Metric

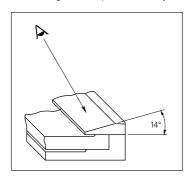
Range	Order No.	Resolution	Accuracy	Mass	Remarks
0 - 4" (0 - 100mm)	500-463	0005"/0.01mm	±.001"	.32 lbs.	With depth measuring rod (ø3/40")
	500-473*	0005"/0.01mm	±.001"	.28 lbs.	With depth measuring rod (ø3/40")
0 - 6" (0 - 150mm)	500-464	0005"/0.01mm	±.001"	.37 lbs.	With depth measuring bar (blade)
	500-474*	0005"/0.01mm	±.001"	.33 lbs.	With depth measuring bar (blade)
0 - 8" (0 - 200mm)	500-465	0005"/0.01mm	±.001"	.44 lbs.	With depth measuring bar (blade)
	500-475*	0005"/0.01mm	±.001"	.40 lbs.	With depth measuring bar (blade)

^{*}Without SPC data output

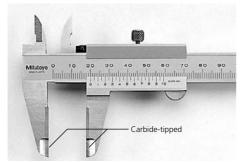


FEATURES

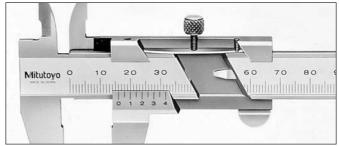
- Plain and basic design.
- Can measure OD (outside diameter), ID (inside diameter), depth, and steps.
- The small vernier face angle (14°) provides easy reading.

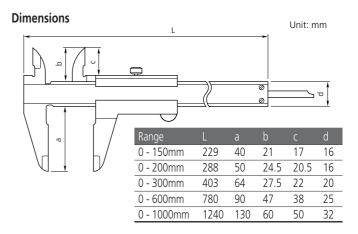


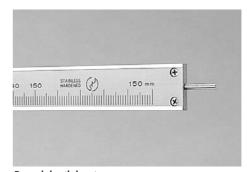
- Clamping screw atop the slider.
- Carbide-tipped jaw type calipers are also available.



Carbide-tipped jaw type







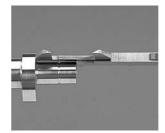
Round depth bar type



• Measurement applications











Depth measurement

SPECIFICATIONS

Metric							
Range Lower scale	Range Upper scale	Order No.	Vernier reading Lower scale	Vernier reading Upper scale	Accuracy	Mass	Remarks
0 - 150mm	_	530-102	0.05mm	_	±0.05mm	145g	With depth measuring rod (ø1.9mm)
		530-101	0.05mm	_	±0.05mm	145g	With depth measuring bar (blade)
		530-320*	0.05mm	_	±0.05mm	145g	With depth measuring bar (blade)
		530-335**	0.05mm	_	±0.05mm	145g	With depth measuring bar (blade)
		530-319 [†]	0.05mm	_	±0.05mm	145g	With depth measuring bar (blade)
		530-122	0.02mm	_	±0.03mm	145g	With depth measuring bar (blade)
0 - 200mm	_	530-108	0.05mm	_	±0.05mm	180g	With depth measuring bar (blade)
		530-321*	0.05mm	_	±0.05mm	180g	With depth measuring bar (blade)
		530-123	0.02mm	_	±0.03mm	180g	With depth measuring bar (blade)
0 - 300mm	_	530-109	0.05mm	_	±0.08mm	355g	With depth measuring bar (blade)
		530-322*	0.05mm	_	±0.08mm	355g	With depth measuring bar (blade)
		530-124	0.02mm	_	±0.04mm	355g	With depth measuring bar (blade)
0 - 600mm	_	530-501	0.05mm	_	±0.10mm	1300g	_
0 - 1000mm	_	530-502	0.05mm	_	±0.15mm	3300g	_

^{*}Provided with carbide-tipped jaws for OD measurement. **Provided with carbide-tipped jaws for OD & ID measurements. †Clamping screw below the slider.

Metric/Inch

Range Lower scale	Range Upper scale	Order No.	Vernier reading Lower scale	Vernier reading Upper scale	Accuracy	Mass	Remarks
0 - 150mm	0 - 6"	530-104	0.05mm	1/128"	±0.05mm	145g	With depth measuring bar (blade)
		530-316 [†]	0.05mm	1/128"	±0.05mm	145g	With depth measuring bar (blade)
		530-125**	0.05mm	1/128"	±0.05mm	145g	With depth measuring bar (blade)
		530-312	0.02mm	.001"	±0.03mm	145g	With depth measuring bar (blade)
0 - 200mm	0 - 8"	530-114	0.05mm	1/128"	±0.05mm	180g	With depth measuring bar (blade)
		530-118	0.02mm	.001"	±0.03mm	180g	With depth measuring bar (blade)
0 - 300mm	0 - 12"	530-115	0.05mm	1/128"	±0.08mm	355g	With depth measuring bar (blade)
		530-119	0.02mm	.001"	±0.04mm	355g	With depth measuring bar (blade)

[†]Clamping screw below the slider. ^{††}Inch/mm conversion table is labeled on the back of the slider.

Inch

Range Lower scale	Range Upper scale	Order No.	Vernier reading Lower scale	Vernier reading Upper scale	Accuracy	Mass	Remarks
0 - 6"	_	530-105	.001"	1/128"	±.0015"	.32 lbs.	With depth measuring bar (blade)
		530-314*	.001"	1/128"	±.0015"	.32 lbs.	With depth measuring bar (blade)
0 - 8"	_	530-116	.001 "	1/128"	±.0015"	.40 lbs.	With depth measuring bar (blade)

^{*}Provided with carbide-tipped jaws for OD measurement.