MeasurLink ENABLED Data Management Software by Mitutoyo ABSOLUTE™

Long ABSOLUTE Digimatic Caliper
SERIES 500 — with Exclusive ABSOLUTE Encoder Technology

- Long Digital caliper incorporating an ABSOLUTE scale and available with a measuring range from 450 mm to 1000 mm.
- Allows integration into statistical process control and measurement systems for models with measurement data output connector. (Refer to page A-3.)

500-500-10

SPECIFICATIONS

Metric

Order No.	Range (mm)	Maximum permissible error (mm)*		Resolution (mm)	Mass (g)
		E_{MPE}	S_{MPE}		
500-500-10	0 - 450	±0.05	±0.07	0.01	1170
500-501-10	0 - 600	±0.05	±0.07		1350
500-502-10	0 - 1000	±0.07	±0.09		3300

Inch / Metric

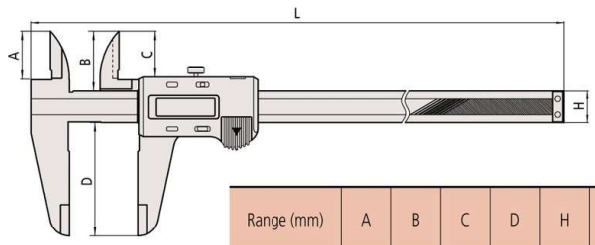
Order No.	Range	Maximum permissible error*		Resolution	Mass (g)
		E_{MPE}	S_{MPE}		
500-505-10	0 - 18 in/0 - 450 mm	±0.002 in/±0.05 mm	±0.003 in/±0.07 mm	0.0005 in/0.01 mm	1170
500-506-10	0 - 24 in/0 - 600 mm				1350
500-507-10	0 - 40 in/0 - 1000 mm	±0.003 in/±0.07 mm	±0.004 in/±0.09 mm		3300

- Battery: SR44 (1 pc.), **938882**, for initial operational checks (standard accessory)
- Battery life: Approx. 3.5 years under normal use
- Max. response speed: Unlimited

* Partial Surface Contact Error, E_{MPE} and Shift Error, S_{MPE} are terms (notations) used in ISO 13385-1:2019.

DIMENSIONS

Unit: mm

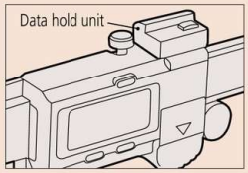


Range (mm)	A	B	C	D	H	L	Outside jaw width
0 - 450	38	47	35.9	90	25	630	6
0 - 600						780	
0 - 1000	50	60	49.8	130	32	1240	8

Optional Accessories

Order No.	Type	Description
959149	C	Connecting cables for **IT/DP/MUX** (1 m)
959150	C	Connecting cables for **IT/DP/MUX** (2 m)
06AFM380C	C	USB Input Tool Direct (2 m)
02AZD790C	C	Connecting cables for **U-WAVE-T** (160 mm)
02AZE140C	C	Connecting cables for **U-WAVE-T**

- **Data hold unit**

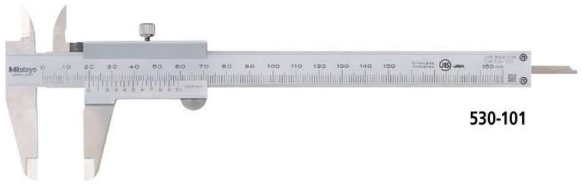


959143

D

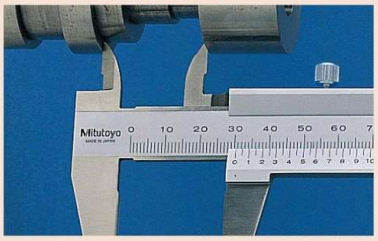
Vernier Caliper
SERIES 530 — Standard model

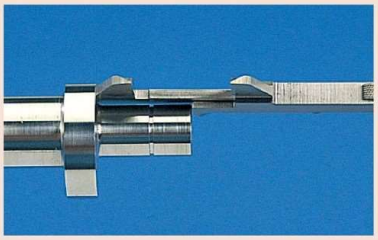
- Stepped graduation face prevents dust ingress between the main scale and slider.
- The small vernier face angle (14°) provides easy reading.
- Can measure steps, since the end faces of the beam and slider are the zero reference point (measuring face). Standard calipers allow four types of measurement,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



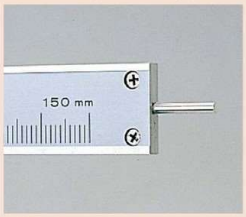
530-101

Measurement example



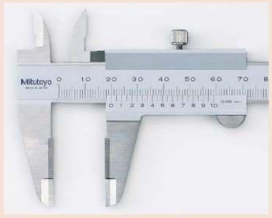


Round depth bar type



530-102

Carbide-tipped jaws for outside measurement



530-320

SPECIFICATIONS

Metric

Order No.	Range (mm)	Maximum permissible error (mm)*1 • E_{MPE} (outside measurement) • S_{MPE} (inside measurement)	Depth bar	Graduation (mm)	Remarks
530-101	0 - 150	±0.05	Blade	0.05	—
530-122		±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)	Maximum permissible error (mm)*2 E_{MPE}	Maximum permissible error (mm)*2 S_{MPE}	Depth bar	Graduation (mm)	Remarks
530-100	0 - 100	±0.05	±0.07	ø1.9 mm rod	0.05	—
530-102	0 - 150	±0.05	±0.07			—
530-320		±0.05	±0.07	Blade		Carbide-tipped jaws for outside measurement
530-335		±0.05	±0.07			Carbide-tipped jaws for outside and inside measurement
530-321	0 - 200	±0.05	±0.07			Carbide-tipped jaws for outside measurement
530-322	0 - 300	±0.08	±0.10			Carbide-tipped jaws for outside measurement
530-501	0 - 600	±0.10	±0.12	—		—
530-502	0 - 1000	±0.15	±0.17			

Metric/Inch with metric/inch double scale

Order No.	Range	Maximum permissible error E_{MPE}	Maximum permissible error S_{MPE}	Depth bar	Graduation	Remarks
530-104	0 - 150 mm/ 0 - 6 in	±0.05 mm/ ±0.5/128 in	±0.07 mm/ ±0.5/128 in	Blade	0.05 mm (1/128 in)	—
530-316						Clamping screw below the slider
530-312					0.02 mm (0.001 in)	High accuracy model: ±0.03 mm
530-114	0 - 200 mm/ 0 - 8 in				0.05 mm (1/128 in)	—
530-118					0.02 mm (0.001 in)	High accuracy model: ±0.03 mm
530-115	0 - 300 mm/ 0 - 12 in	±0.08 mm/ ±0.5/128 in	±0.010 mm/ ±0.5/128 in		0.05 mm (1/128 in)	—
530-119					0.02 mm (0.001 in)	High accuracy model: ±0.04 mm

Inch with inch/inch double scale

Order No.	Range (in)	Maximum permissible error (in) E_{MPE}	Maximum permissible error (in) S_{MPE}	Depth bar	Graduation (in)	Remarks
530-105	0 - 6	±0.5/128	±0.5/128	Blade	0.001	—
530-116	0 - 8	±0.5/128	±0.5/128			

*1 Partial Measuring Face Contact Error, E_{MPE} and Shift Error, S_{MPE} are terms (notations) used in JIS B 7507: 2016, revised based on ISO 13385-1: 2011. Refer to page D-45 for details.
*2 Partial Surface Contact Error, E_{MPE} and Shift Error, S_{MPE} are terms (notations) used in ISO 13385-1:2019.

D