

ABSOLUTE Calipers



Pages 110–116

ABSOLUTE Special Purpose Calipers



Pages 117–134

Dial Calipers



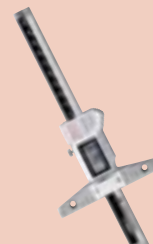
Page 135

Nonius Calipers



Pages 136–143

ABSOLUTE Depth Gauges



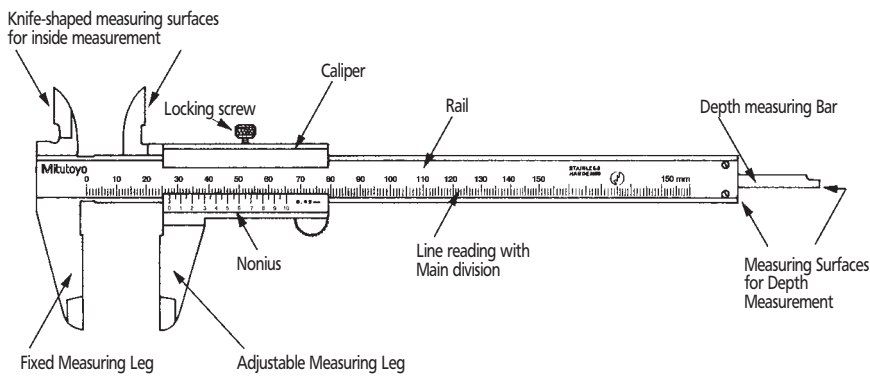
Pages 145–148

Height Gauges



Pages 149–161

Basic information Caliper



Special Function keys

- ON / OFF
- ORIGIN = Preset origin of measuring range
- ZERO = Display to "0.000"
- ZERO / ABS = Display to "0.000" for comparison measurement / display back to actual measuring position in relation to the preset origin of the measuring range (standard mode).
- OFFSET = same as ZERO / ABS
- INCH / MM = imperial / metric
- PRESET = presetting option for starting value or random value for comparison measurement.
- HOLD = to hold the measurement value indicated last.



IP-67-Display



Super Caliper



"QUADRI"-Type

Four basic types of measurements: outside, inside, step and depth measurement may be executed.

1. Outside Measurement



2. Inside Measurement



3. Step Measurement (Height)



4. Depth Measurement



Caliper

Mitutoyo's calipers of the series 500, 550, 551, 552 and 573 are manufactured with IP-40 protection as a standard (see table below). Exception: IP 66 IP 67 versions.

IP40

IP65

IP66

IP67

International Protection	Index of degree of protection according to DIN EN 60 529 (approximate)	International Protection	Index of degree of protection according to DIN EN 60 529 (approximate)
Protection against foreign substances and dust		Protection against wetness	
Particles > 50,0 mm	IP 1 x	Drip-water vertical	IP x 1
Particles > 12,5 mm	IP 2 x	Drip-water oblique	IP x 2
Particles > 2,5 mm	IP 3 x	Spray-water	IP x 3
Particles > 1,0 mm	IP 4 x	Splash-water	IP x 4
Dust residue	IP 5 x	Hose-water	IP x 5
Dust intrusion	IP 6 x	Strong hose water	IP x 6
		Temporarily immersed	IP x 7
		Permanently immersed (immersion depth in m)	IP x 8

Example:

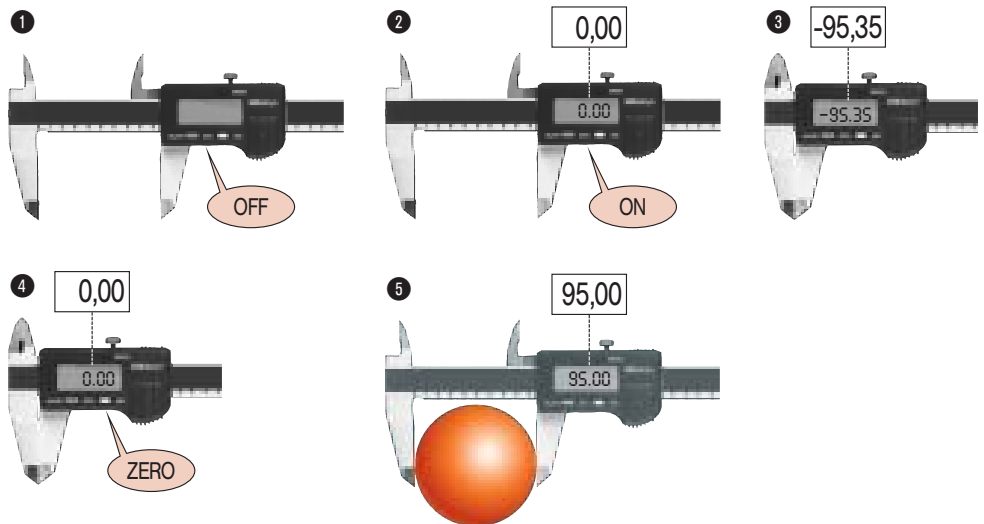
IP-65 = "Dust intrusion" and "hose-water"
(More detailed information can be obtained from our IP protection leaflet).

ABSOLUTE

Conventional measuring methods

ABSOLUTE™

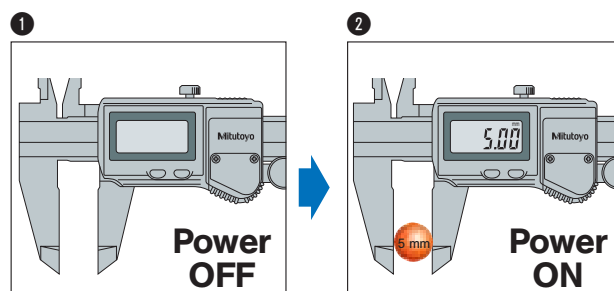
Absolute System Patented by MITUTOYO



ABSOLUTE measuring methods

Absolutely safe, absolutely ingenious: The ABSOLUTE system

All Mitutoyo measuring instruments with this logo have the ingenious ABSOLUTE system. Their built-in absolute scale only needs to be have the zero position set once, which from this moment is used for all future measurements. This guarantees maximum measuring precision even at maximum travel speed. Absolutely certain! Absolutely without complication!



™ Patent numbers see page 464

ABSOLUTE DIGIMATIC Caliper

acc. to protection rating IP-66 and IP-67

Characteristics:

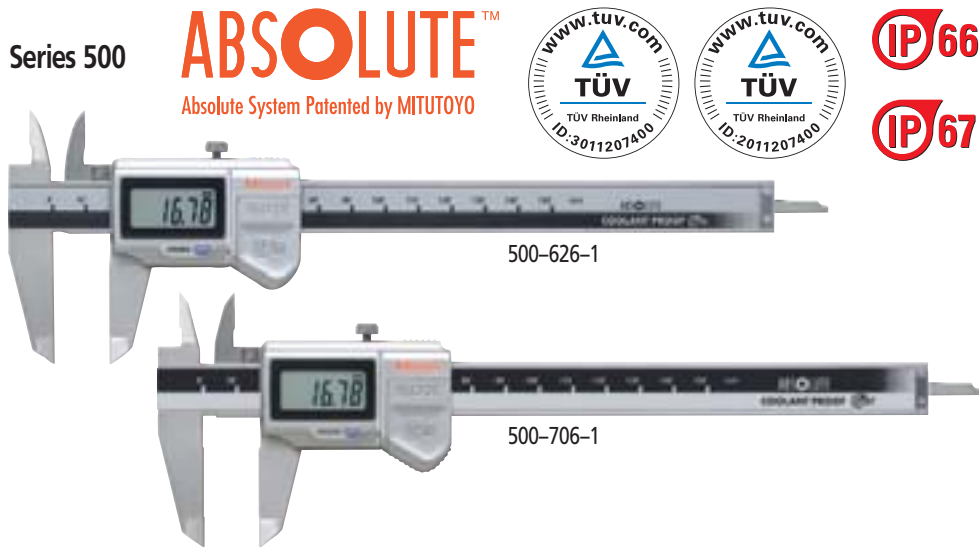
- Spray-water protected for heavy-duty work with coolants and lubricants.
- ABSOLUTE system for reliable measurement.
- Extremely resistant to coolants and lubricants.
- Optimum caliper sliding properties.

Digital caliper IP-66

- The IP 66 digital calliper with integrated absolute scale meets the most stringent safety specifications according to DIN EN 60 529 against dust and strong hose water. For example, it will easily withstand a strong water jet flowing at a rate of 100 litres per minute from any direction, for at least three minutes.

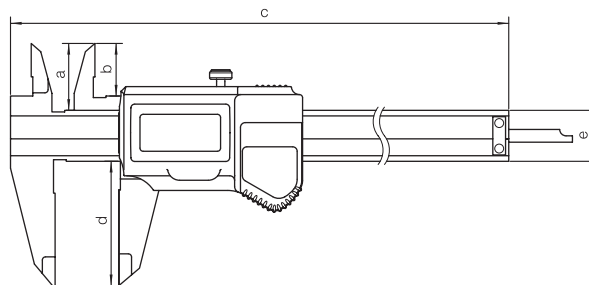
Digital caliper IP-67

- The IP-67 digital calliper extends the moisture protection of the IP-66 version with a further feature: it will even withstand temporary complete immersion in water or coolant, without suffering any damage.



Measuring range mm	No.	Resolution mm	Error limits	Depth gauge	Data output	Mass g
IP-66						
0-150	500-626-1	0,01	DIN 862	Flat		164
0-200	500-627-1	0,01	DIN 862	Flat		194
0-300*	500-628	0,01	DIN 862	Flat		345
0-150	500-637-1	0,01	DIN 862	Flat	●	164
0-200	500-638-1	0,01	DIN 862	Flat	●	194
0-300*	500-639	0,01	DIN 862	Flat	●	345
0-150	500-657-1	0,01	DIN 862	Round Ø 1,9 mm		164
IP-67						
0-150	500-706-1	0,01	DIN 862	Flat		164
0-200	500-707-1	0,01	DIN 862	Flat		194
0-150	500-716-1	0,01	DIN 862	Flat	●	164
0-200	500-717-1	0,01	DIN 862	Flat	●	194
0-150	500-709-1	0,01	DIN 862	Round Ø 1,9 mm		164

* without TÜV certification



Measuring range mm	a mm	b mm	c mm	d mm	e mm
0-150	21,0	16,5	231	40	16
0-200	24,5	20,0	288	50	16
0-300	28,0	21,8	408	64	20

™ Patent numbers see page 464

Specifications

Accuracy: DIN 862
 Protection: IP-66, IP-67 (DIN EN 60 529)
 Resolution: 0,01 mm
 Delivered in soft case, including 1 or 2 batteries and factory certificate

Optional accessories

- No. 05CZA624 Signal cable with data switch (1 m)
- No. 05CZA625 Signal cable with data switch (2 m)
- Extension for depth measurement see page 144

Consumables Spares

- No. 938882 Battery (SR 44)



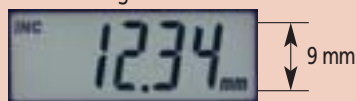
Functions	Series 500
ON / OFF	●
ZERO setting	●
ORIGIN	●

ABSOLUTE DIGIMATIC Caliper

- Electronic caliper with built-in absolute scale.
- One-time setting of origin that remains as the absolute zero position until the battery has to be changed.
- Extraordinary precision even with high speed movement.
- Extra large display digits with character height 9 mm.
- Optimum caliper sliding properties.

Specifications

Accuracy: DIN 862
Resolution: 0,01 mm
Character height: 9 mm



Illustrated to original scale

Delivered in soft case,
including 1 battery and factory certificate

Optional accessories

- No. 050083 Extension for depth measurement (see page 144)
No. 050084 Extension for depth measurement (see page 144)

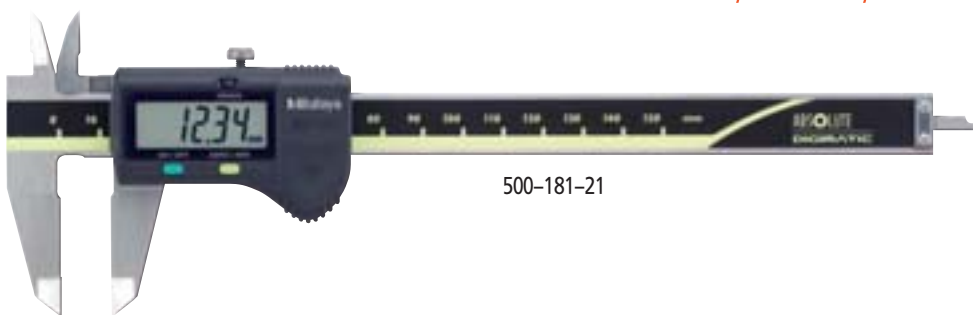
Consumables Spares

- No. 938882 Battery (SR 44)

Series 500

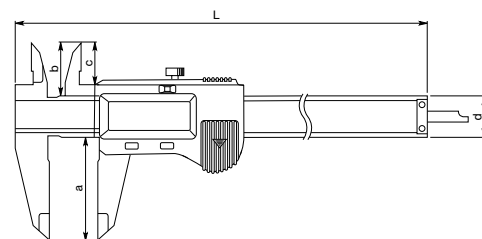
DIN 862 Standard design, without data output

ABSOLUTE™
Absolute System Patented by MITUTOYO



500-181-21

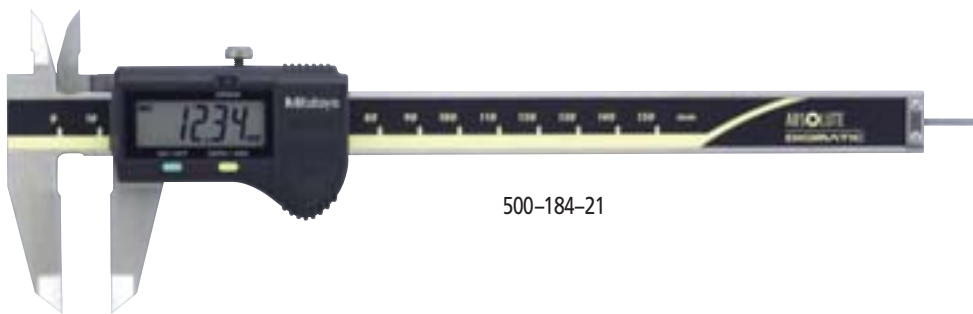
Measuring range mm	No.	Comments	L mm	a mm	b mm	c mm	d mm	Mass g
0-150	500-181-21	with extension for depth measurement	231	40	21,0	16,5	16	164
0-200	500-182-21	with extension for depth measurement	288	50	24,5	20,0	16	194



Series 500

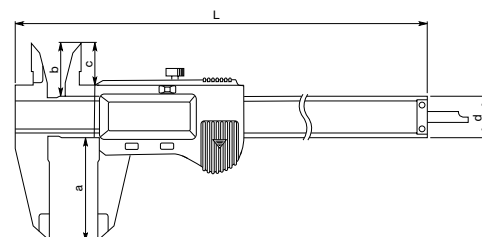
DIN 862 Standard design, without data output,
with round depth gauge

ABSOLUTE™
Absolute System Patented by MITUTOYO



500-184-21

Measuring range mm	No.	Comments	L mm	a mm	b mm	c mm	d mm	Mass g
0-150	500-184-21	with round depth gauge \varnothing 1,9 mm	231	40	21	16,5	16	164



With round depth gauge for small bores

™ Patent numbers see page 464

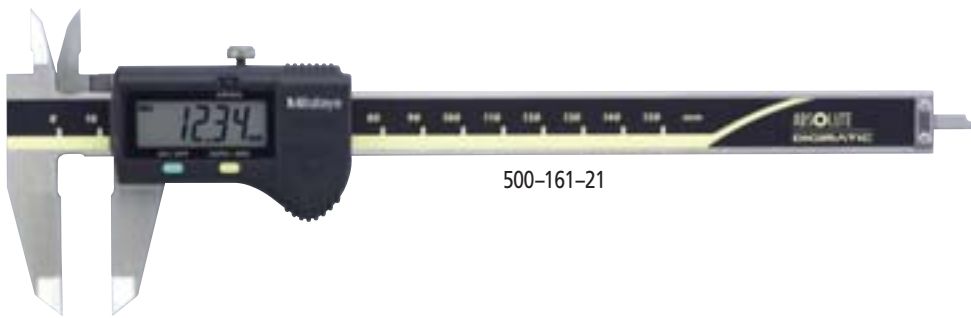
ABSOLUTE DIGIMATIC Caliper

- Electronic caliper with built-in absolute scale.
- One-time setting of origin that remains as the absolute zero position until the battery has to be changed.
- Extraordinary precision even with high speed movement.
- Extra large display digits with character height 9 mm.
- Optimum caliper sliding properties.

Series 500

DIN 862, Standard design in a great many versions, with data output

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Absolute System Patented by MITUTOYO



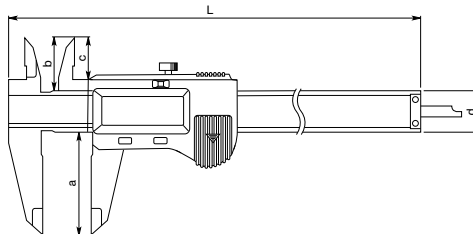
500-161-21

Measuring range	No.	Drive roller	Depth gauge	Round extension (depth measuring Ø 1,9 mm)	mm/inch conversion	carbide-tipped measuring surfaces for outside measurement	carbide-tipped measuring surfaces for inside measurement	Mass g
0-100	500-150-20	●		●				137
0-150	500-161-21		●					164
0-150	500-151-21	●	●					164
0-150	500-158-20	●		●				164
0-150	500-171-21	●	●		●			164
0-150	500-154-20	●	●			●		164
0-150	500-155-20	●	●			●	●	164
0-200	500-162-21		●					194
0-200	500-152-21	●	●					194
0-200	500-172-21	●	●		●			194
0-200	500-156-20	●	●			●		194
0-200	500-157-20	●	●			●	●	194
0-300	500-153	●	●					350

Measuring range mm	L mm	a mm	b mm	c mm	d mm
0-100	180	40	21,0	16,5	16
0-150	231	40	21,0	16,5	16
0-200	288	50	24,5	20,0	16
0-300	403	64	27,5	21,8	20



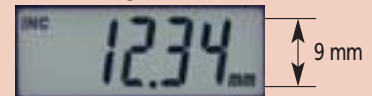
Sample application Hold-Unit



Functions	Series 500
ON / OFF	●
ZERO setting	●
ORIGIN	●
Data output	●

Specifications

Accuracy: DIN 862
Resolution: 0,01 mm
Character height: 9 mm



Illustrated to original scale

Delivered in soft case, including 1 battery and factory certificate

Optional accessories

No. 959149 Signal cable with data switch (1 m)

No. 959150 Signal cable with data switch (2 m)

No. 959143 Hold-Unit

No. 050083 Extension for depth measurement (see page 144)

No. 050084 Extension for depth measurement (see page 144)

No. 050085 Extension for depth measurement (see page 144)

Consumables Spares

No. 938882 Battery (SR 44)



500-150-20 and 500-158-20 with round depth gauge Ø 1,9 mm for small bores

Functions	500-772-1	500-773-1	500-778-1	500-779-1	500-444	500-445	500-457	500-458
ORIGIN	●	●	●	●	●	●	●	●
Data output			●	●	●	●	●	●

Specifications

Accuracy: DIN 862
Resolution: 0,01 mm
Level of illumination (operation): 60 Lux
Delivered in soft case, incl. factory certificate

Optional accessories

Super Caliper

No. 05CZA624 Signal cable (1 m)

No. 05CZA625 Signal cable (2 m)

Solar Caliper with data output

No. 959149 Signal cable with data switch (1 m)

No. 959150 Signal cable with data switch (2 m)

No. 959143 Hold-Unit (only 500-444 / -445)

All types

No. 050083 Extension for depth measurement (see page 144)

No. 050084 Extension for depth measurement (see page 144)

ABSOLUTE DIGIMATIC Solar Caliper

- Digital measurement without battery.
- ABSOLUTE system for reliable measurement.
- Optimum caliper sliding properties.

Series 500

Super Caliper DIN 862

- Protection IP-67
- Extremely resistant to coolants and lubricants
- Impact-resistant design



500-772-1

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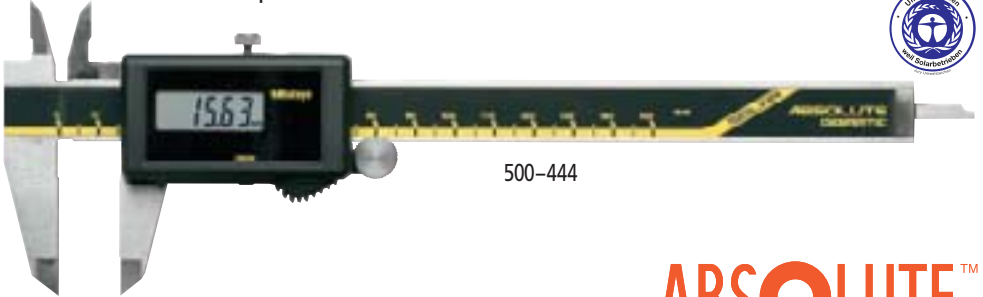
Absolute System Patented by MITUTOYO

IP67



Series 500

DIN 862 with data output



500-444

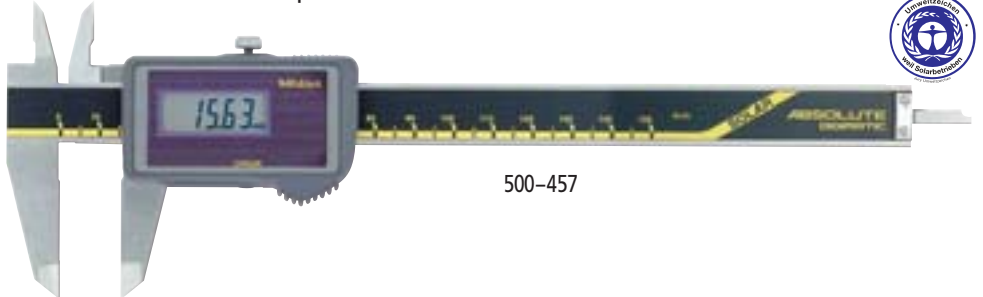
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Absolute System Patented by MITUTOYO



Series 500

DIN 862 without data output



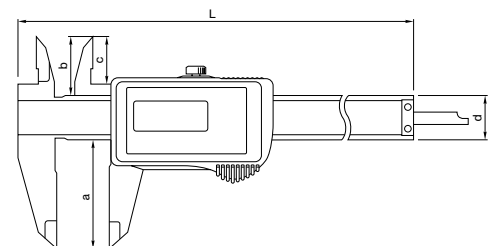
500-457

ABSOLUTE™

Absolute System Patented by MITUTOYO



Measuring range mm	No.	Comments	Protection IP-67	Data output	L mm	a mm	b mm	c mm	d mm	Mass g
0-150	500-772-1	-	●		233	40	21,0	16,5	16	176
0-200	500-773-1	-	●		290	50	24,5	20,0	16	206
0-150	500-778-1	-	●	●	233	40	21,0	16,5	16	176
0-200	500-779-1	-	●	●	290	50	24,5	20,0	16	206
0-150	500-444	with drive roller		●	231	40	21,0	16,5	16	170
0-200	500-445	with drive roller		●	288	50	24,5	20,0	16	200
0-150	500-457	-			231	40	21,0	16,5	16	150
0-200	500-458	-			288	50	24,5	20,0	16	180



™ Patent numbers see page 464

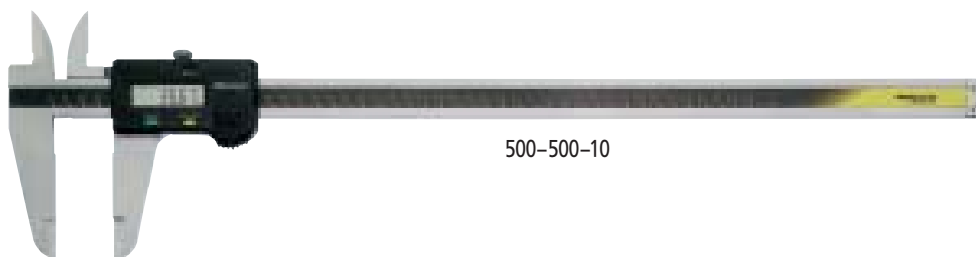
ABSOLUTE DIGIMATIC Caliper

- Electronic caliper with built-in absolute scale.
- One-time setting of origin that remains as the absolute zero position until the battery has to be changed.
- Extraordinary precision even with high speed movement. Large display digits are easy to read.
- Optimum caliper sliding properties.

Series 500

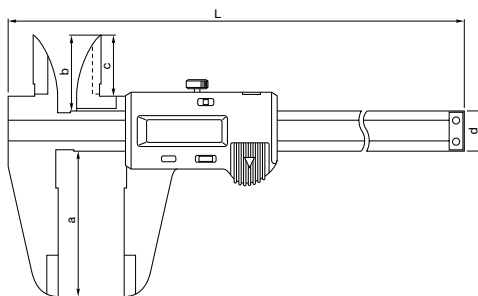
Robust design for large measuring ranges, with data output

ABSOLUTE™
Absolute System Patented by MITUTOYO



500-500-10

Measuring range mm	No.	Error limits mm	L mm	a mm	b mm	c mm	d mm	Mass g
0- 450	500-500-10	0,05	630	90	47	38	25	1170
0- 600	500-501-10	0,05	780	90	47	38	25	1350
0-1000	500-502-10	0,07	1240	130	60	50	32	3300



Functions	Series 500
ON / OFF	●
ZERO / ABS	●
ORIGIN	●
Data output	●

Specifications

Accuracy: Factory specification
Resolution: 0,01 mm
Delivered in soft case, including 1 battery

Optional accessories

- No. 959149 Signal cable with data switch (1 m)
- No. 959150 Signal cable with data switch (2 m)
- No. 959143 Hold-Unit

Consumables Spares

- No. 938882 Battery (SR 44)

ABSOLUTE DIGIMATIC Caliper

	551-201-20	551-231-10	551-204-10	551-206-10	551-207-10
Functions					
ON / OFF	●	●	●	●	●
ZERO / ABS	●	●	●	●	●
ORIGIN	●	●	●	●	●
OFFSET		●			
PRESET (two values)		●			
Data output	●	●	●	●	●

Specifications

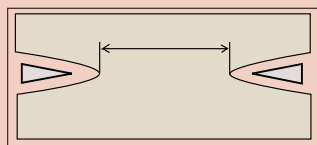
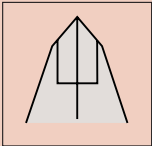
Accuracy: Factory specification
Resolution: 0,01 mm
Delivered in soft case,
including 1 battery

Optional accessories

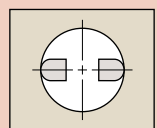
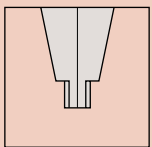
- No. 959149 Signal cable with data switch (1 m)
- No. 959150 Signal cable with data switch (2 m)
- No. 959143 Hold-Unit

Consumables Spares

- No. 938882 Battery (SR 44)



Knife-shaped measuring surfaces
for outside measurement



Rounded measuring surfaces
for measuring inside dimensions

Series 551

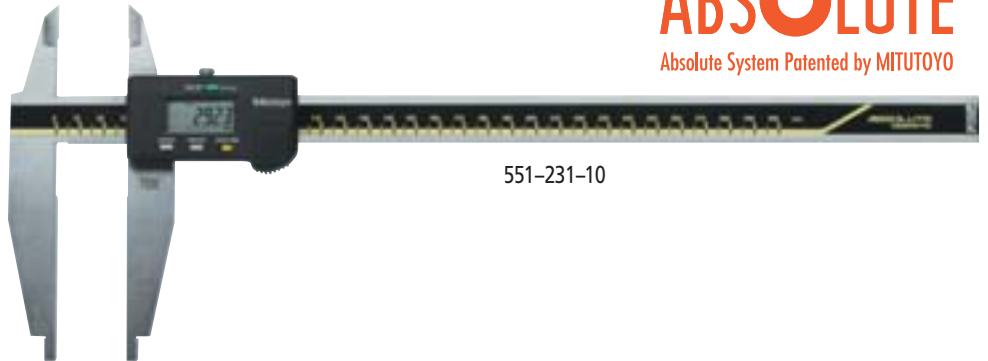
With knife-shaped measuring surfaces for outside measurement and with rounded measuring surfaces for the measurement of inside dimensions.

With data output

ABSOLUTE™
Absolute System Patented by MITUTOYO



551-201-20

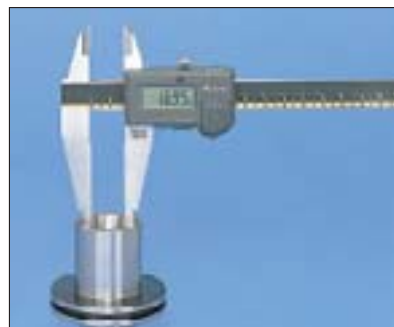


551-231-10

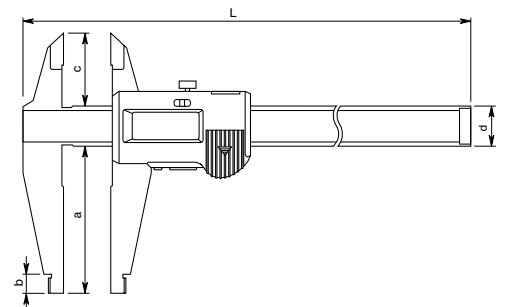
ABSOLUTE™
Absolute System Patented by MITUTOYO

Measuring range mm	No.	Inside measurements mm	Error limits mm	L mm	a mm	b mm	c mm	d mm	Mass g
0- 200	551-201-20	10	0,03	290	60	8	30	16	196
0- 300	551-231-10*	10	0,04	403	90	10	40	20	420
0- 500	551-204-10	20	0,06	680	150	18	56	25	1060
0- 750	551-206-10	20	0,06	963	150	18	56	25	1410
0-1000	551-207-10	20	0,07	1230	150	20	56	32	3430

* With OFFSET function for direct reading in the case of inside measurements
With PRESET function for storing 2 preset values



Sample application



™ Patent numbers see page 464

ABSOLUTE DIGIMATIC Caliper

- Electronic caliper with built-in absolute scale.
- One-time setting of origin that remains as the absolute zero position until the battery has to be changed.
- Extraordinary precision even with high speed movement. Large display digits are easy to read.
- Best caliper sliding properties.

Series 550

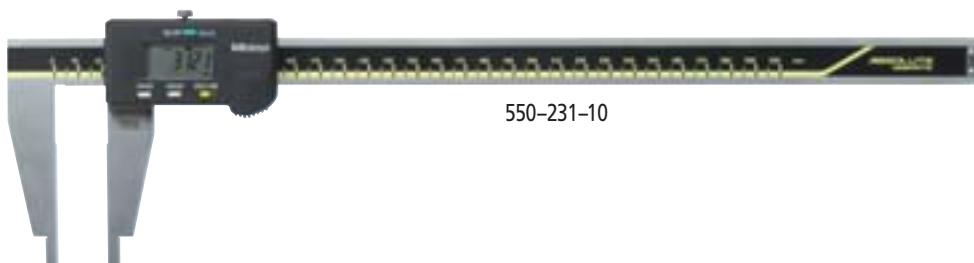
With rounded measuring surfaces for the measurement of inside dimensions.
With data output



550-201-20

ABSOLUTE™

Absolute System Patented by MITUTOYO



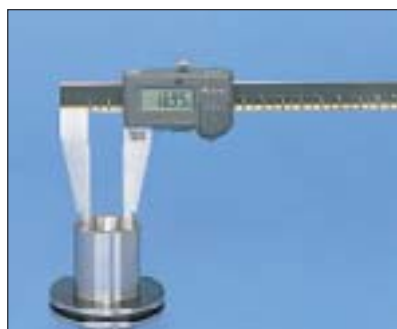
550-231-10

ABSOLUTE™

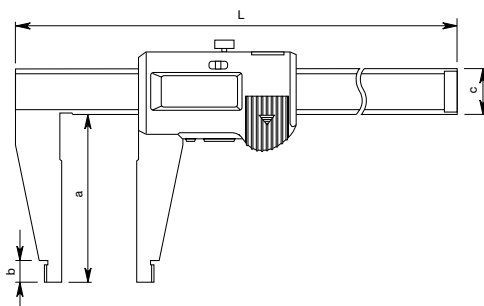
Absolute System Patented by MITUTOYO

Measuring range mm	No.	Inside measurements mm	Error limits mm	L mm	a mm	b mm	c mm	Mass g
0- 200	550-201-20	10	0,03	290	60	8	16	186
0- 300	550-231-10*	10	0,03	403	75	12	20	380
0- 450	550-203-10	20	0,05	630	100	18	25	1110
0- 600	550-205-10	20	0,05	780	100	18	25	1290
0-1000	550-207-10	20	0,07	1240	140	24	32	3350

* With OFFSET function for direct reading in the case of inside measurements
With PRESET function for the storage of 2 preset values



Sample application



™ Patent numbers see page 464

	550-201-20	550-231-10	550-203-10	550-205-10	550-207-10
Functions					
ON / OFF	●	●	●	●	●
ZERO / ABS	●	●	●	●	●
ORIGIN	●	●	●	●	●
OFFSET		●			
PRESET (two values)		●			
Data output	●	●	●	●	●

Specifications

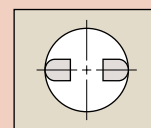
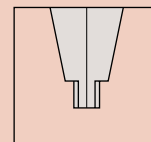
Accuracy: Factory specification
Resolution: 0,01 mm
Delivered in soft case,
including 1 battery

Optional accessories

- No. 959149 Signal cable with data switch (1 m)
- No. 959150 Signal cable with data switch (2 m)
- No. 959143 Hold-Unit

Consumables Spares

- No. 938882 Battery (SR 44)



Rounded measuring surfaces
for the measurement of inside dimensions

ABSOLUTE DIGIMATIC Special Purpose Calipers

Functions	Series 573
ON / OFF	●
ZERO setting	●
ORIGIN	●
Data output	●

Specifications

Accuracy: Factory specification
 Resolution: 0,01 mm
 Measuring force: 0,5–1 N

Delivered in soft case,
 including 1 battery

Optional accessories

- No. 959149 Signal cable with data switch (1 m)
- No. 959150 Signal cable with data switch (2 m)
- No. 959143 Hold-Unit

Consumables Spares

- No. 938882 Battery (SR 44)

Series 573

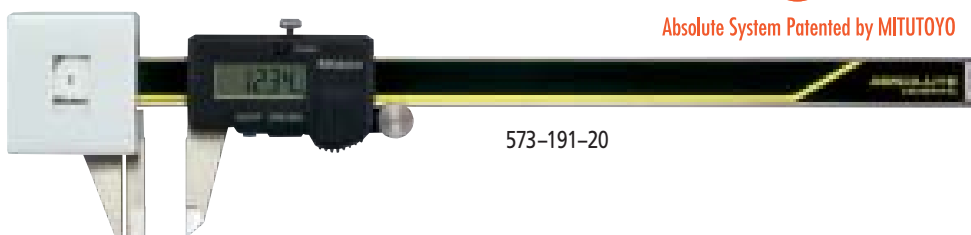
Caliper with constant measuring force with drive roller, for the measurement of flexible materials

Measuring method:



The measured value is read off when the pointer is between the 2 lines of the measuring force indication.

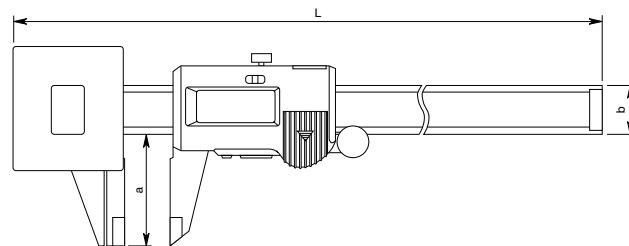
ABSOLUTE™
 Absolute System Patented by MITUTOYO



Measuring range mm	No.	Error limits mm	L mm	a mm	b mm	Mass g
0–180	573-191-20	0,05	299	40	16	253



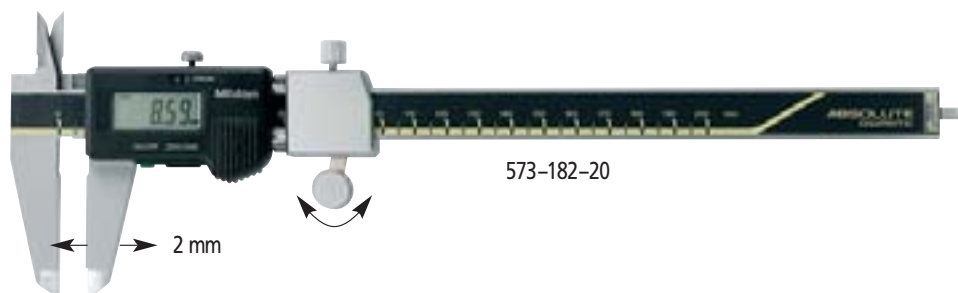
Sample application



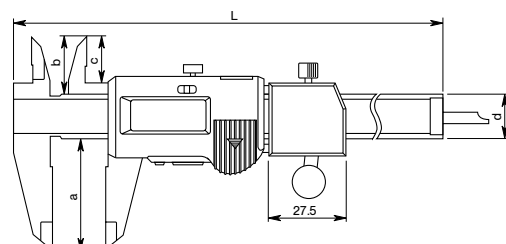
Series 573

Caliper for tolerance measurement with depth gauge, for the series/input test

ABSOLUTE™
 Absolute System Patented by MITUTOYO



Measuring range mm	No.	Error limits mm	L mm	a mm	b mm	c mm	d mm	Mass g
0–150	573-182-20	0,03	290	50	24,5	20	16	233



™ Patent numbers see page 464

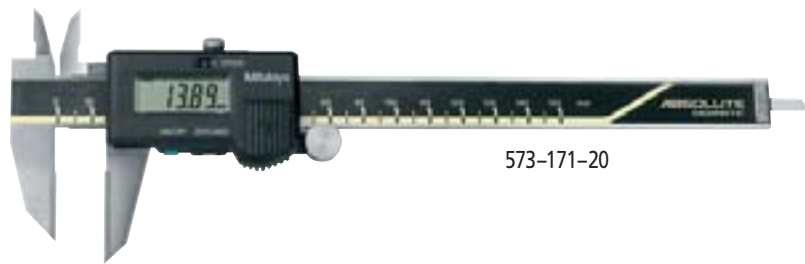
ABSOLUTE DIGIMATIC Special Purpose Calipers

- Electronic caliper with built-in absolute scale.
- One-time setting of origin that remains as the absolute zero position until the battery has to be changed.
- Extraordinary precision even with high speed movement. Large display digits are easy to read.
- Optimum caliper sliding properties.

Series 573

Scribe Caliper with carbide tipped measuring surfaces, depth gauge and drive roller

ABSOLUTE™
Absolute System Patented by MITUTOYO



573-171-20

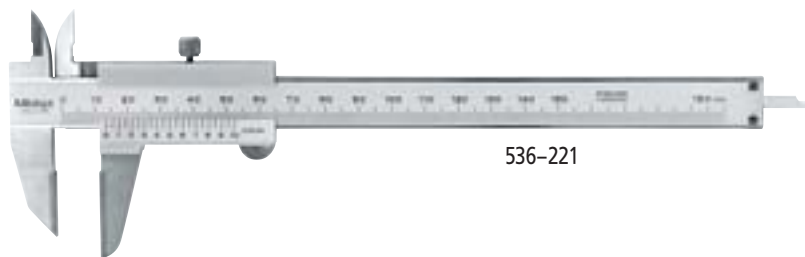
Measuring range mm	No.	Error limits mm	L mm	a mm	b mm	c mm	d mm	e mm	Mass g
0-150	573-171-20	0,03	233	40	21,0	16,5	16	33	166
0-200	573-172-20	0,03	290	50	24,5	20,0	16	43	196
0-300	573-173-10	0,04	403	64	27,5	22,0	20	54	400



Sample application

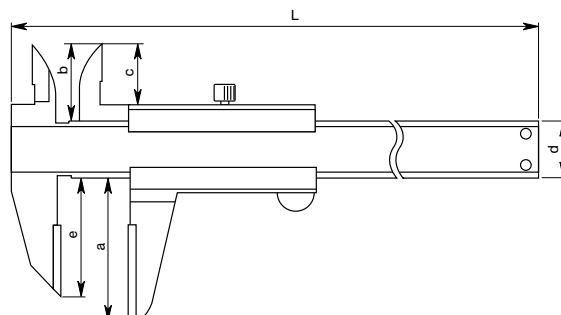
Series 536

Scribe Caliper with carbide tipped measuring surfaces and depth gauge



536-221

Measuring range mm	No.	Error limits mm	L mm	a mm	b mm	c mm	d mm	e mm	Mass g
0-150	536-221	0,05	229	40	21,5	17,0	16	33	150
0-200	536-222	0,05	288	50	25,0	20,5	16	43	180
0-300	536-223	0,08	403	64	27,5	22,0	20	54	400



™ Patent numbers see page 464

Functions	Series 573
ON / OFF	●
ZERO setting	●
ORIGIN	●
Data output	●

Specifications

Accuracy: Factory specification
Resolution: 0,01 mm

Delivered in soft case,
including 1 battery

Optional accessories

No. 959149 Signal cable
with data switch (1 m)

No. 959150 Signal cable
with data switch (2 m)

No. 959143 Hold-Unit

Consumables Spares

No. 938882 Battery (SR 44)

Specifications

Nonius value: 0,05 mm

Delivered in soft case

ABSOLUTE DIGIMATIC Special Purpose Calipers

Functions	Series 573
ON / OFF	●
ZERO setting	●
ORIGIN	●
Data output	●

Specifications

Accuracy: Factory specification
Resolution: 0,01 mm

Delivered in soft case,
including 1 battery

Optional accessories

No. 959149 Signal cable
with data switch (1 m)

No. 959150 Signal cable
with data switch (2 m)

No. 959143 Hold-Unit

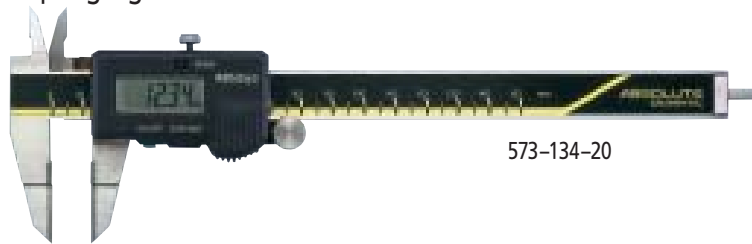
Consumables Spares

No. 938882 Battery (SR 44)

Series 573

Inside groove caliper
Carbide-tipped measuring surfaces,
depth gauge and driver roller

ABSOLUTE™
Absolute System Patented by MITUTOYO



573-134-20

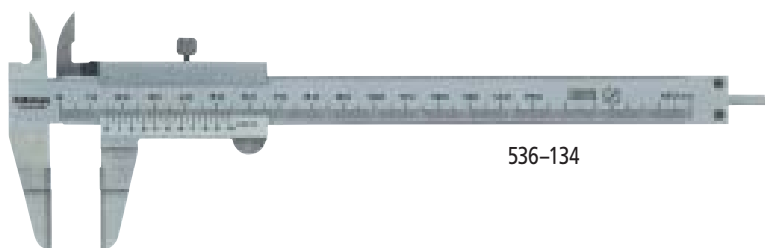
Measuring range mm	No.	Error limits mm	L mm	a mm	b mm	c mm	d mm	e mm	Mass g
0-150	573-134-20	0,03	233	20	40	0,75	16	3	168



Sample application

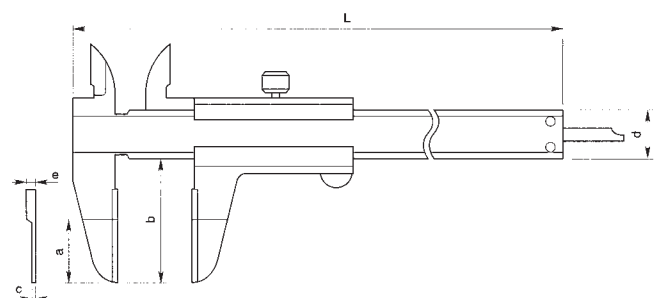
Series 536

Inside groove caliper
Carbide-tipped measuring surfaces and depth gauge



536-134

Measuring range mm	No.	Error limits mm	L mm	a mm	b mm	c mm	d mm	e mm	Mass g
0-150	536-134	0,05	229	20	40	0,75	16	3	140
0-200	536-135	0,05	286	25	50	0,75	16	3	180



™ Patent numbers see page 464

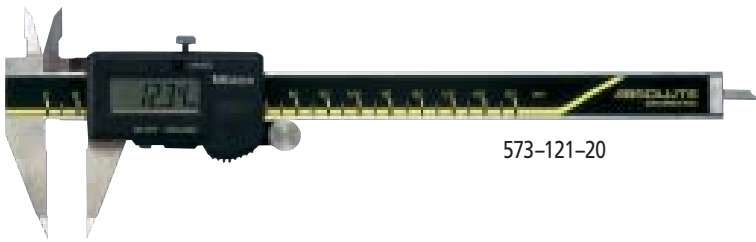
ABSOLUTE DIGIMATIC Special Purpose Calipers

- Electronic caliper with built-in absolute scale.
- One-time setting of origin that remains as the absolute zero position until the battery has to be changed.
- Extraordinary precision even with high speed movement. Large display digits are easy to read.
- Optimum caliper sliding properties.

Series 573

Pointed caliper with depth gauge and drive roller

ABSOLUTE™
Absolute System Patented by MITUTOYO



573-121-20

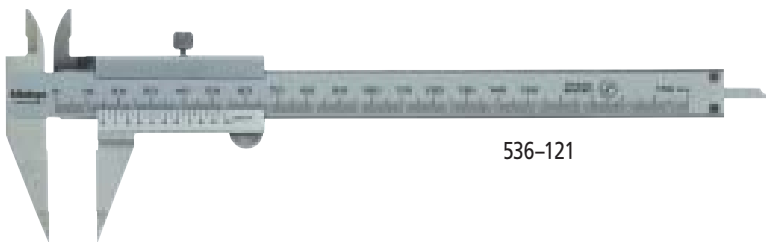
Measuring range mm	No.	Error limits mm	L mm	a mm	b mm	c mm	d mm	e mm	Mass g
0-150	573-121-20	0,03	233	40	21,5	17	16	0,3	163



Sample application

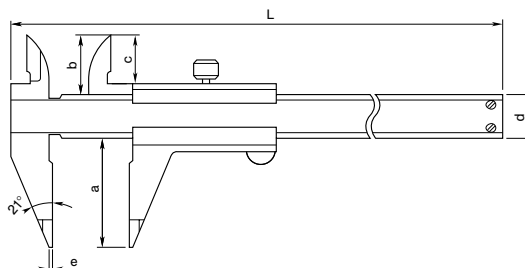
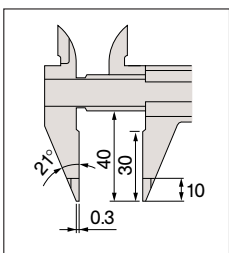
Series 536

Pointed caliper with depth gauge



536-121

Measuring range mm	No.	Error limits mm	L mm	a mm	b mm	c mm	d mm	e mm	Mass g
0-150	536-121	0,05	229	40	21,5	17	16	0,3	150



™ Patent numbers see page 464

Functions	Series 573
ON / OFF	●
ZERO setting	●
ORIGIN	●
Data output	●

Specifications

Accuracy: Factory specification
Resolution: 0,01 mm

Delivered in soft case,
including 1 battery

Optional accessories

No. 959149 Signal cable
with data switch (1 m)

No. 959150 Signal cable
with data switch (2 m)

No. 959143 Hold-Unit

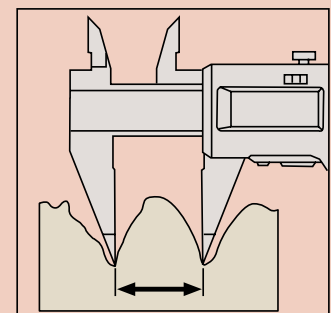
Consumables Spares

No. 938882 Battery (SR 44)

Specifications

Nonius value: 0,05 mm

Delivered in soft case



ABSOLUTE DIGIMATIC Special Purpose Calipers

Functions	Series 573
ON / OFF	●
ZERO setting	●
ORIGIN	●
Data output	●

Specifications

Accuracy: Factory specification
Resolution: 0,01 mm

Delivered in soft case,
including 1 battery

Optional accessories

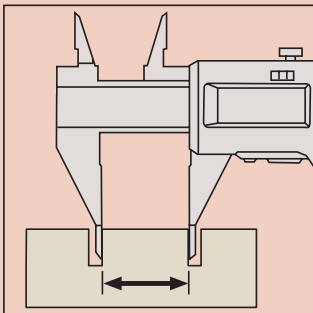
No. 959149 Signal cable
with data switch (1 m)

No. 959150 Signal cable
with data switch (2 m)

No. 959143 Hold-Unit

Consumables Spares

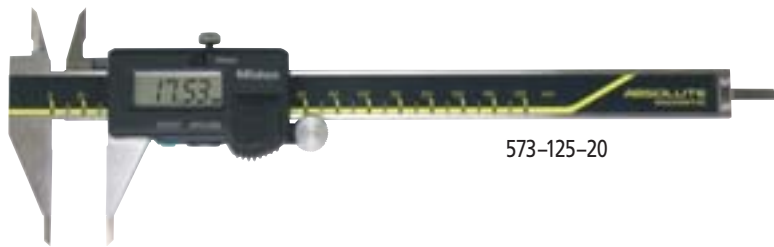
No. 938882 Battery (SR 44)



Series 573

Caliper with pointed measuring jaw and depth gauge
and drive roller

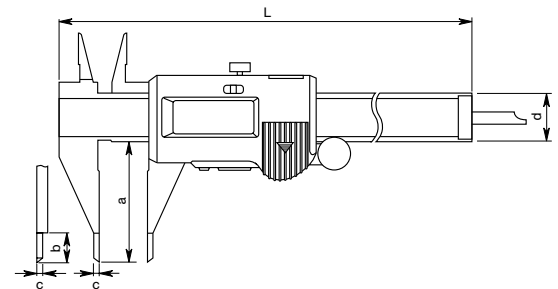
ABSOLUTE™
Absolute System Patented by MITUTOYO



Measuring range mm	No.	Error limits mm	L mm	a mm	b mm	c mm	d mm	Mass g
0-150	573-125-20	0,03	233	40	10	2	16	163



Sample application



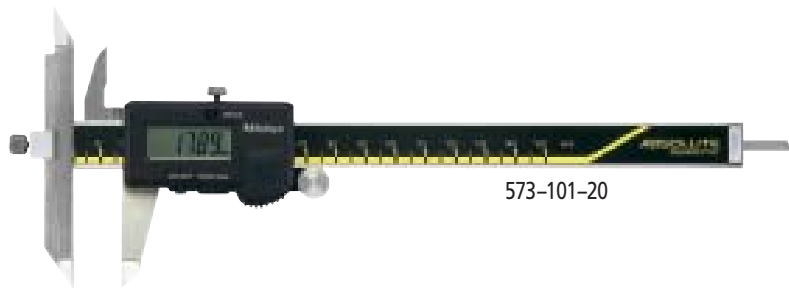
ABSOLUTE DIGIMATIC Special Purpose Calipers

- Electronic caliper with built-in absolute scale.
- One-time setting of origin that remains as the absolute zero position until the battery has to be changed.
- Extraordinary precision even with high speed movement. Large display digits are easy to read.
- Optimum caliper sliding properties.

Series 573

Caliper with adjustable measuring jaw, depth gauge and driver roller

ABSOLUTE™
Absolute System Patented by MITUTOYO



573-101-20

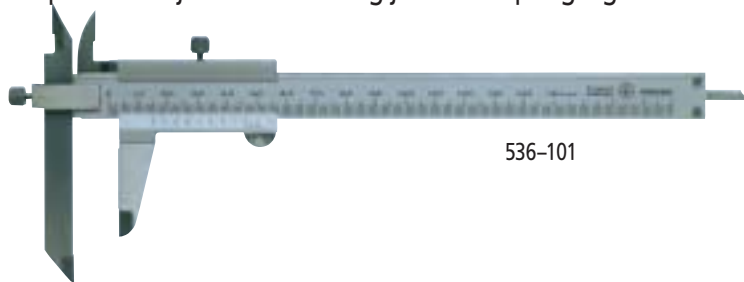
Measuring range mm	No.	Error limits mm	L mm	a mm	b mm	c mm	d mm	e mm	Mass g
0-150	573-101-20	0,03	234	95	40	10	16	7,5	168
0-200	573-102-20	0,03	291	95	50	10	16	8,5	198
0-300	573-103-10	0,04	403	135	64	15	20	12,0	370



Sample application

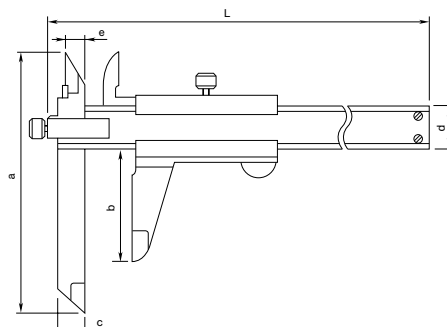
Series 536

Caliper with adjustable measuring jaw and depth gauge



536-101

Measuring range mm	No.	Error limits mm	L mm	a mm	b mm	c mm	d mm	e mm	Mass g
0-150	536-101	0,05	229	95	40	10	16	7,5	150
0-200	536-102	0,05	286	95	50	10	16	8,5	200
0-300	536-103	0,08	403	135	64	15	20	12,0	400



™ Patent numbers see page 464

Functions	Series 573
ON / OFF	●
ZERO setting	●
ORIGIN	●
Data output	●

Specifications

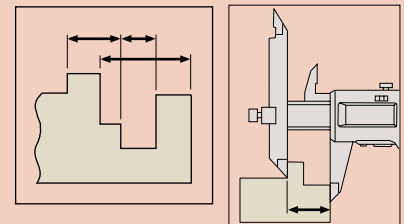
Accuracy: Factory specification
Resolution: 0,01 mm
Delivered in soft case, including 1 battery

Optional accessories

- No. 959149 Signal cable with data switch (1 m)
- No. 959150 Signal cable with data switch (2 m)
- No. 959143 Hold-Unit

Consumables Spares

- No. 938882 Battery (SR 44)



Specifications

Nonius value: 0,05 mm
Delivered in soft case

Special Purpose Calipers

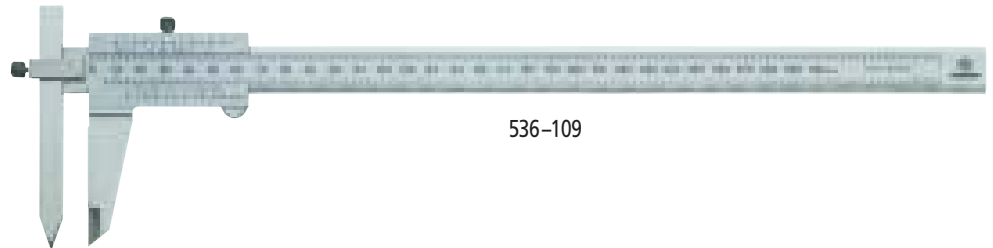
Series 536

Caliper for measuring distance between edge and bore

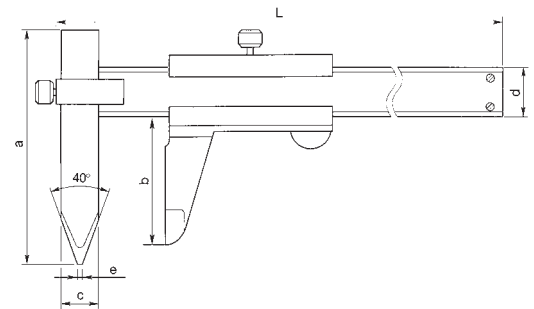
Specifications

Nonius value: 0,05 mm

Delivered in soft case



Measuring range mm	No.	Error limits mm	L mm	a mm	b mm	c mm	d mm	e Ø mm	Mass g
5-300	536-109	0,05	393	100	64	10	20	1	320



ABSOLUTE DIGIMATIC Special Purpose Calipers

- Electronic caliper with built-in absolute scale.
- One-time setting of origin that remains as the absolute zero position until the battery has to be changed.
- Extraordinary precision even with high speed movement. Large display digits are easy to read.
- Optimum caliper sliding properties.

Series 573

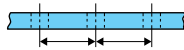
Caliper with adjustable measuring jaws for distance between bores

ABSOLUTE™
Absolute System Patented by MITUTOYO



573-105-20

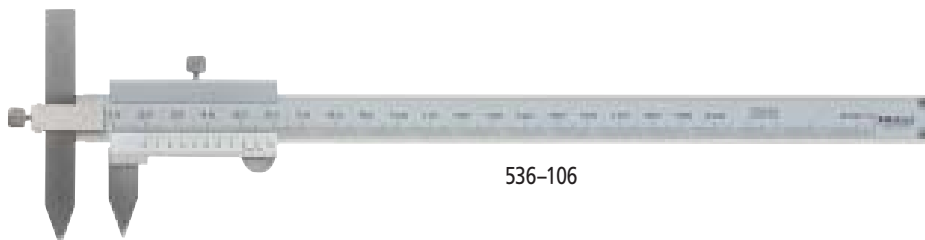
Measuring range mm	No.	Error limits mm	L mm	a mm	b mm	c mm	d mm	e mm	Mass g
10-150	573-105-20	0,03	230	75	30	10	16	1	153
10-200	573-106-20	0,03	285	75	30	10	16	1	173



Sample application

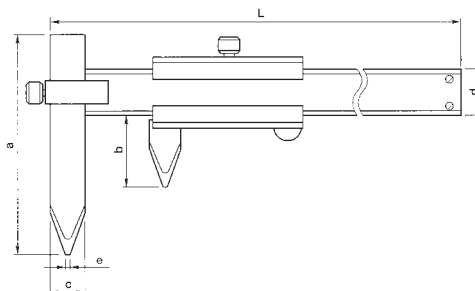
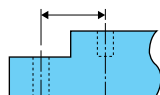
Series 536

Caliper with adjustable measuring jaws for distance between bores



536-106

Measuring range mm	No.	Error limits mm	L mm	a mm	b mm	c mm	d mm	e mm	Mass g
10-150	536-105	0,05	229	75	30	10	16	1	140
10-200	536-106	0,05	282	75	30	10	16	1	160
10-300	536-107	0,08	383	100	30	10	20	1	320



™ Patent numbers see page 464

Functions	Series 573
ON / OFF	●
ZERO setting	●
ORIGIN	●
Data output	●

Specifications

Accuracy: Factory specification
Resolution: 0,01 mm

Delivered in soft case,
including 1 battery

Optional accessories

No. 959149 Signal cable
with data switch (1 m)

No. 959150 Signal cable
with data switch (2 m)

No. 959143 Hold-Unit

Consumables Spares

No. 938882 Battery (SR 44)

Specifications

Nonius value: 0,05 mm

Delivered in soft case

ABSOLUTE DIGIMATIC Special Purpose Calipers

Functions	Series 573
ON / OFF	●
ZERO setting	●
ORIGIN	●
Data output	●

Specifications

Accuracy: Factory specification
Resolution: 0,01 mm
Delivered in soft case,
including 1 battery

Optional accessories

- No. 959149 Signal cable
with data switch (1 m)
- No. 959150 Signal cable
with data switch (2 m)
- No. 959143 Hold-Unit

Consumables Spares

- No. 938882 Battery (SR 44)

Series 573

Caliper with inside angled measuring tips

ABSOLUTE™
Absolute System Patented by MITUTOYO



Measuring range mm	No.	Error limits mm	L mm	a mm	b mm	c mm	d mm	e mm	Mass g
0-150	573-152-20	0,03	243	38	5	5	16	2	153



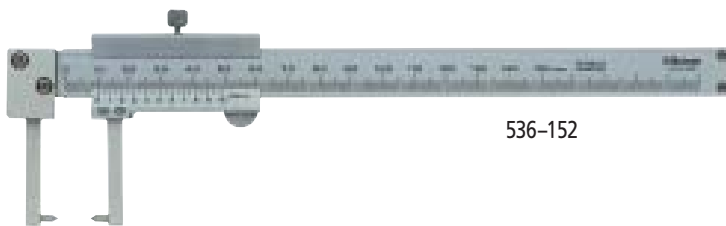
Sample application

Series 536

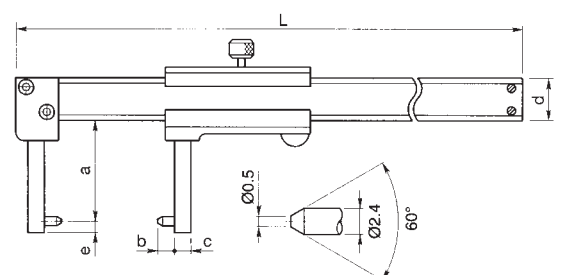
Caliper with inside angled measuring tips

Specifications

Nonius value: 0,05 mm
Delivered in soft case



Measuring range mm	No.	Error limits mm	L mm	a mm	b mm	c mm	d mm	e mm	Mass g
0-150	536-152	0,05	229	38	5	5	16	2	140



™ Patent numbers see page 464

ABSOLUTE DIGIMATIC Special Purpose Calipers

- Electronic caliper with built-in absolute scale.
- One-time setting of origin that remains as the absolute zero position until the battery has to be changed.
- Extraordinary precision even with high speed movement. Large display digits are easy to read.
- Optimum caliper sliding properties.

Series 573

Caliper with inside angled tips



573-151-20

ABSOLUTE™
Absolute System Patented by MITUTOYO

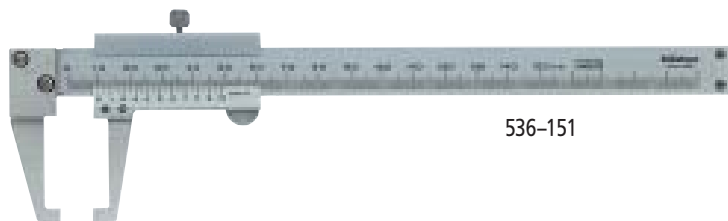
Measuring range mm	No.	Error limits mm	L mm	a mm	b mm	c mm	d mm	e mm	Mass g
0-150	573-151-20	0,03	233	35	5	5	16	3,5	153



Sample application

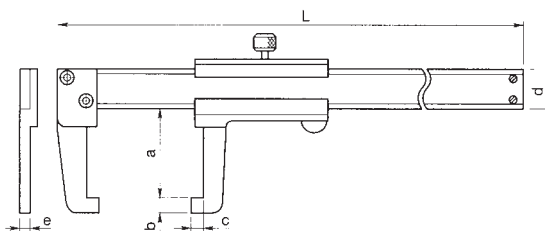
Series 536

Caliper with inside angled tips



536-151

Measuring range mm	No.	Error limits mm	L mm	a mm	b mm	c mm	d mm	e mm	Mass g
0-150	536-151	0,05	229	35	5	5	16	3	140



™ Patent numbers see page 464

Functions	Series 573
ON / OFF	●
ZERO setting	●
ORIGIN	●
Data output	●

Specifications

Accuracy: Factory specification
Resolution: 0,01 mm

Delivered in soft case,
including 1 battery

Optional accessories

No. 959149 Signal cable
with data switch (1 m)

No. 959150 Signal cable
with data switch (2 m)

No. 959143 Hold-Unit

Consumables Spares

No. 938882 Battery (SR 44)

Specifications

Nonius value: 0,05 mm

Delivered in soft case

ABSOLUTE DIGIMATIC Special Purpose Calipers

Functions	Series 573
ON / OFF	●
ZERO setting	●
ORIGIN	●
Data output	●

Specifications

Accuracy: Factory specification
Resolution: 0,01 mm

Delivered in soft case,
including 1 battery

Optional accessories

No. 959149 Signal cable
with data switch (1 m)

No. 959150 Signal cable
with data switch (2 m)

No. 959143 Hold-Unit

Consumables Spares

No. 938882 Battery (SR 44)

Series 573 Caliper with outside angled tips

ABSOLUTE™
Absolute System Patented by MITUTOYO



573-146-20

Measuring range mm	No.	Error limits mm	L mm	a mm	b mm	c mm	d mm	Mass g
20-150	573-146-20	0,03	233	40	38	10	16	153



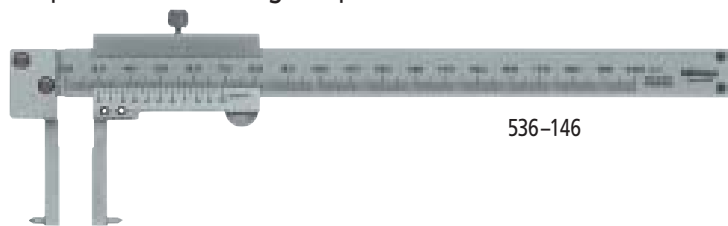
Sample application

Series 536 Caliper with outside angled tips

Specifications

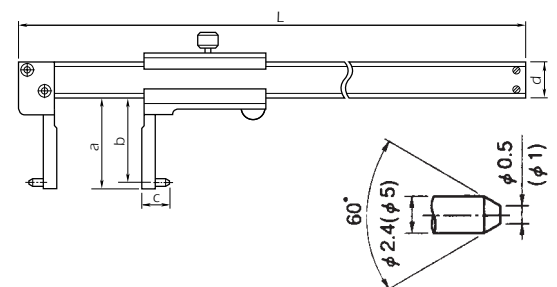
Nonius value: 0,05 mm

Delivered in soft case



536-146

Measuring range mm	No.	Error limits mm	L mm	a mm	b mm	c mm	d mm	Mass g
20-150	536-146	0,05	229	40	38	10	16	140
30-300	536-147	0,08	403	100	98	15	20	370
70-450	536-148	0,10	610	150	145	35	25	1250
70-600	536-149	0,12	750	150	145	35	25	1430



() = 536-148 / 149

™ Patent numbers see page 464

ABSOLUTE DIGIMATIC Special Purpose Calipers

- Electronic caliper with built-in absolute scale.
- One-time setting of origin that remains as the absolute zero position until the battery has to be changed.
- Extraordinary precision even with high speed movement. Large display digits are easy to read.
- Optimum caliper sliding properties.

Series 573

Caliper with outside angled tips



573-145-20

ABSOLUTETM
Absolute System Patented by MITUTOYO

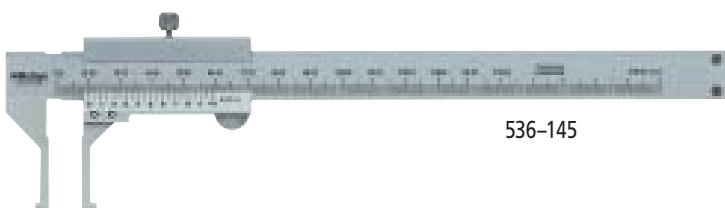
Measuring range mm	No.	Error limits mm	L mm	a mm	b mm	c mm	d mm	e mm	f mm	Mass g
10-150	573-145-20	0,05	233	35	20	3	16	5	3	143



Sample application

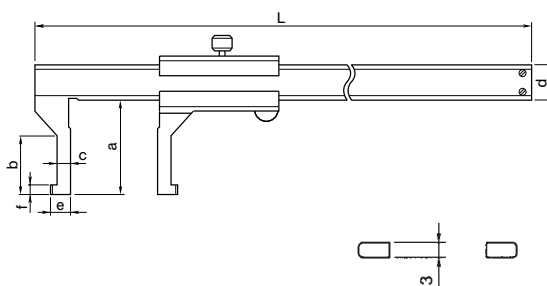
Series 536

Caliper with outside angled tips



536-145

Measuring range mm	No.	Error limits mm	L mm	a mm	b mm	c mm	d mm	e mm	f mm	Mass g
10-150	536-145	0,05	229	35	20	3	16	5	3	130



TM Patent numbers see page 464

Functions	Series 573
ON / OFF	●
ZERO setting	●
ORIGIN	●
Data output	●

Specifications

Accuracy: Factory specification
Resolution: 0,01 mm
Delivered in soft case, including 1 battery

Optional accessories

- No. 959149 Signal cable with data switch (1 m)
- No. 959150 Signal cable with data switch (2 m)
- No. 959143 Hold-Unit

Consumables Spares

- No. 938882 Battery (SR 44)

Specifications

Nonius value: 0,05 mm
Delivered in soft case

ABSOLUTE DIGIMATIC Special Purpose Calipers

Functions	Series 573
ON / OFF	●
ZERO setting	●
ORIGIN	●
Data output	●

Specifications

Accuracy: Factory specification
Resolution: 0,01 mm

Delivered in soft case,
including 1 battery

Optional accessories

No. 959149 Signal cable
with data switch (1 m)

No. 959150 Signal cable
with data switch (2 m)

No. 959143 Hold-Unit

Consumables Spares

No. 938882 Battery (SR 44)

Series 573 Wall thickness measuring caliper

ABSOLUTE™
Absolute System Patented by MITUTOYO



573-161-20

Measuring range mm	No.	Error limits mm	L mm	a mm	b mm	c Ø mm	d mm	Mass g
0-150	573-161-20	0,05	235	40	32	3	16	163



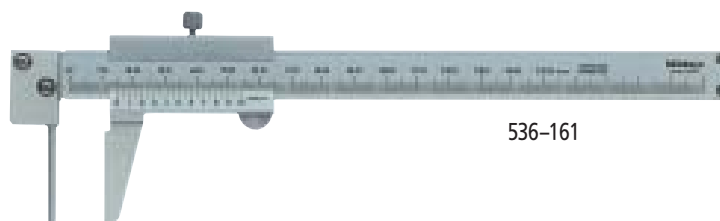
Sample application

Series 536 Wall thickness measuring caliper

Specifications

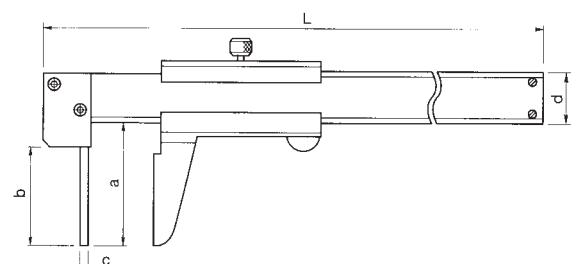
Nonius value: 0,05 mm

Delivered in soft case



536-161

Measuring range mm	No.	Error limits mm	L mm	a mm	b mm	c Ø mm	d mm	Mass g
0-150	536-161	0,05	229	40	32	3	16	150



™ Patent numbers see page 464

ABSOLUTE DIGIMATIC Special Purpose Calipers

- Electronic caliper with built-in absolute scale.
- One-time setting of origin that remains as the absolute zero position until the battery has to be changed.
- Extraordinary precision even with high speed movement. Large display digits are easy to read.
- Optimum caliper sliding properties.

Series 573

Caliper for Inside measurement with long narrow jaws

ABSOLUTE™
Absolute System Patented by MITUTOYO

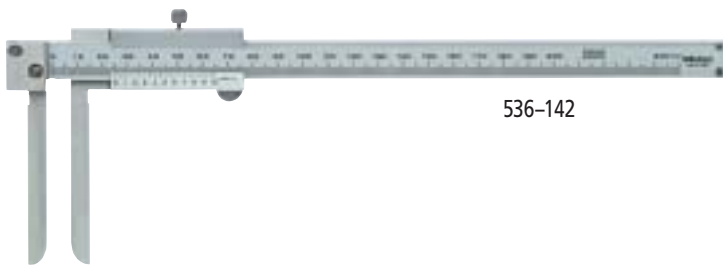


573-142-20

Measuring range mm	No.	Error limits mm	L mm	a mm	b mm	c mm	Mass g
10-200	573-142-20	0,05	290	70	8	16	223

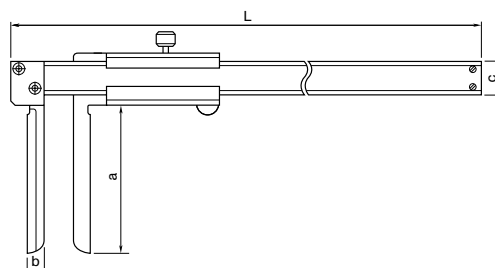
Series 536

Caliper for Inside measurement with long narrow jaws



536-142

Measuring range mm	No.	Error limits mm	L mm	a mm	b mm	c mm	Mass g
10-200	536-142	0,12	288	70	8	16	210



™ Patent numbers see page 464

Functions	Series 573
ON / OFF	●
ZERO setting	●
ORIGIN	●
Data output	●

Specifications

Accuracy: Factory specification
Resolution: 0,01 mm

Delivered in soft case, including 1 battery

Optional accessories

No. 959149 Signal cable with data switch (1 m)

No. 959150 Signal cable with data switch (2 m)

No. 959143 Hold-Unit

Consumables Spares

No. 938882 Battery (SR 44)

Specifications

Nonius value: 0,05 mm

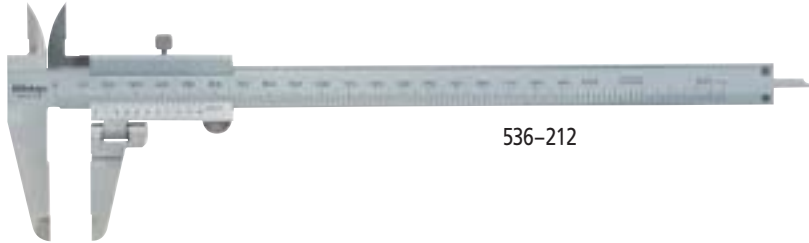
Delivered in soft case

	536-212	536-171	536-172
Functions			
Fine adjustment			●

Special Purpose Calipers

Series 536

Caliper with swivelling jaw and depth gauge

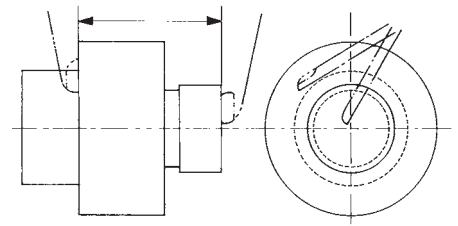


536-212

Measuring range mm	No.	Error limits mm	Nonius value mm	Rotation of	Mass g
0-200	536-212	0,05	0,05	± 90°	190

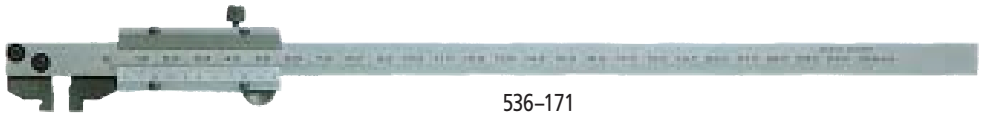


Sample application



Series 536

Inside cross-groove caliper

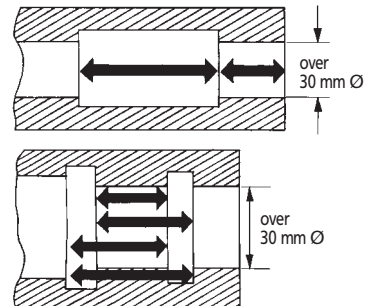


536-171

Measuring range mm	No.	Error limits mm	Nonius value mm	L mm	a mm	b mm	c mm	d mm	e mm	Mass g
Outside 0-200 Inside 10-200	536-171	0,03	0,02	320	12	28	4	11	5	170

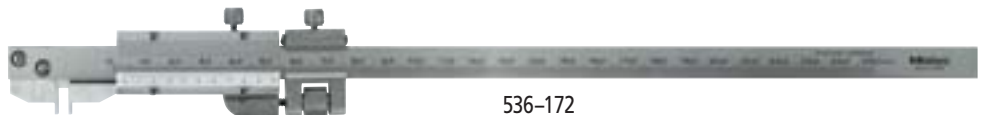


Sample application



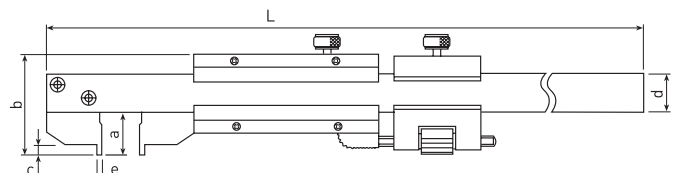
Series 536

Caliper with short hooked jaws and fine adjustment



536-172

Measuring range mm	No.	Error limits mm	Nonius value mm	L mm	a mm	b mm	c mm	d mm	e mm	Mass g
Outside 0-200 Inside 2-200	536-172	0,03	0,02	320	12	28	4	11	1	200



Specifications

Nonius value: 0,02 mm
Delivered in soft case

Specifications

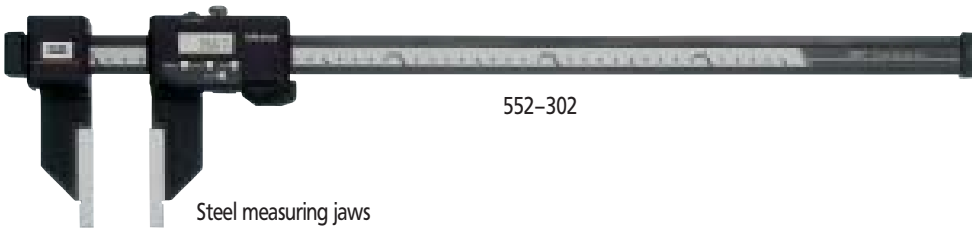
Nonius value: 0,02 mm
Delivered in soft case

DIGIMATIC Workshop Caliper

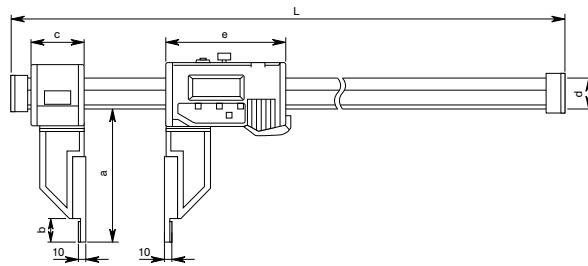
- The ultra light-weight design (with carbon fiber reinforced material) saves up to 50 % of total weight.
- Exchangeable measuring jaws available as optional accessories.
- Large digits allow for easy reading.
- Capacitance measuring system with dustwiper on the slide, power supply with battery SR-44.
- OFFSET function for direct reading in the case of inside measurements.

Series 552

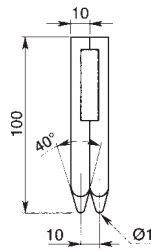
Ultra light-weight composite design



Measuring range mm	No.	Jaw length mm	Error limits mm	L mm	a mm	b mm	c mm	d mm	e mm	Mass g
0- 300	552-301	100	0,04	490	100	18	41,2	25	91,8	530
0- 450	552-302	100	0,05	640	100	18	41,2	25	91,8	600
0- 600	552-303	100	0,05	790	100	18	41,2	25	91,8	670
0-1000	552-304	150	0,07	1240	150	24	62,8	32	113,8	2100
0-1500	552-305	150	0,09	1740	150	24	62,8	32	113,8	2400



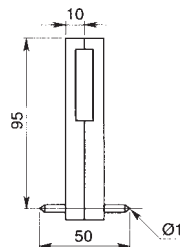
914055



914055



914057



914057

Functions	Series 552
ON / OFF	●
ZERO	●
PRESET	●
OFFSET	●
DATA / HOLD	●
Data output	●

Specifications

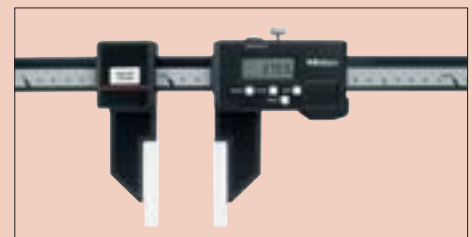
Accuracy: Factory specification
 Resolution: 0,01 mm
 Distance of measuring surfaces for inside measurement: 20 mm
 Max. drive speed: 1600 mm/s
 Delivered in soft case, including 1 battery

Optional accessories

- No. 905338 Signal cable (1 m)
- No. 905409 Signal cable (2 m)
- No. 914055 Pair of jaws for measuring distance of bores
- No. 914057 Pair of jaws for measuring inside grooves
- No. 914053 Holders (pair) for special measurement jaws up to a measuring range of 600 mm
- No. 914054 Holders (pair) for special measurement jaws for range over 1000 mm

Consumables Spares

- No. 938882 Battery (SR 44)



Application: displacement of both sides is possible

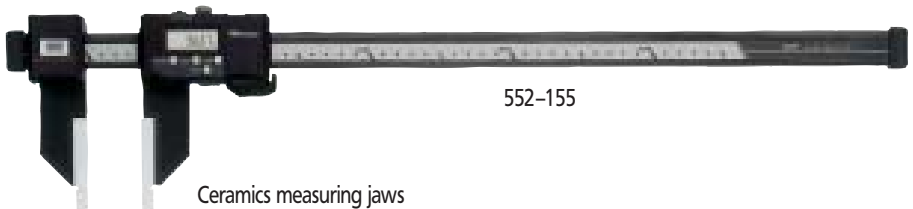
Functions	Series 552
ON / OFF	●
ZERO	●
PRESET	●
OFFSET	●
DATA / HOLD	●
Data output	●

DIGIMATIC Workshop Caliper

- The ultra light-weight design (with carbon fiber reinforced material) saves up to 50 % of total weight. Workshop type with large measuring range of up to 600 mm.
- Measuring surfaces made of ceramic, equipped with data output.
- Exchangeable measuring jaws available as optional accessory.
- Large digit display for easy reading.
- Capacitance measuring system with dustwiper on slide.

Series 552

Ultra light-weight composite design with ceramics measuring surfaces

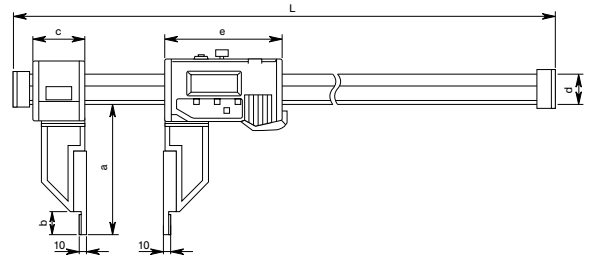


Ceramics measuring jaws

Measuring range mm	No.	Jaw length mm	Error limits mm	L mm	a mm	b mm	c mm	d mm	e mm	Mass g
0-450	552-155	100	0,05	640	100	18	41,2	25	91,8	600
0-600	552-156	100	0,05	790	100	18	41,2	25	91,8	670



Sample application



Specifications

Accuracy: Factory specification
 Resolution: 0,01 mm
 Distance of measuring surfaces for inside measurement: 20 mm
 Max. drive speed: 1600 mm/s
 Delivered in soft case, including 1 battery

Optional accessories

- No. 905338 Signal cable (1 m)
- No. 905409 Signal cable (2 m)
- No. 914055 Pair of jaws for measuring distance of bores
- No. 914057 Pair of jaws for measuring inside grooves
- No. 914053 Holders (pair) for special measurement jaws up to a measuring range of 600 mm

Consumables Spares

- No. 938882 Battery (SR 44)

Specifications

Accuracy: Factory specification
 Resolution: 0,01 mm
 Distance of measuring surfaces for inside measurement: 20 mm
 Max. drive speed: 1600 mm/s
 Delivered in soft case, including 1 battery

Optional accessories

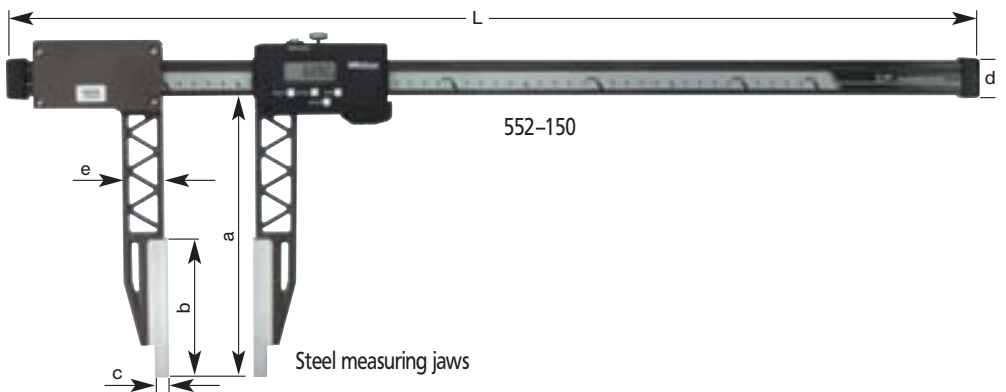
- No. 905338 Signal cable (1 m)
- No. 905409 Signal cable (2 m)

Consumables Spares

- No. 938882 Battery (SR 44)

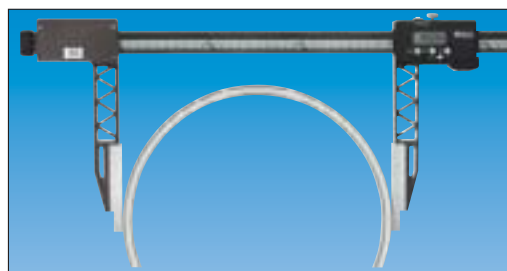
Series 552

Ultra light-weight composite design with extra long jaws



Steel measuring jaws

Measuring range mm	No.	Error limits mm	L mm	a mm	b mm	c mm	d mm	e mm	Mass g
0-450	552-150	0,07	680	200	100	10	25	30	1170
0-600	552-151	0,07	830	200	100	10	25	30	1370



Sample application

DIGIMATIC Workshop Caliper

- The ultra light-weight design (with carbon fiber reinforced material) saves up to 50 % of total weight. Workshop type with large measuring range of up to 600 mm.
- Measuring surfaces made of ceramic, equipped with data output.
- Exchangeable measuring jaws available as optional accessory.
- Large digit display for easy reading.
- Capacitance measuring system with dustwiper on slide.

Series 552

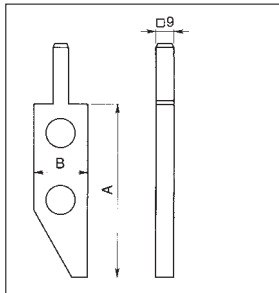
Ultra light-weight composite design with exchangeable measuring tips



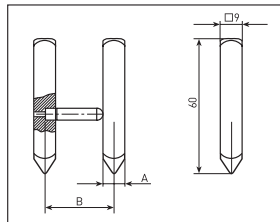
552-181

Measuring range mm	No.	Error limits mm	Mass g
0-450	552-181	0,05	730
0-600	552-182	0,05	770

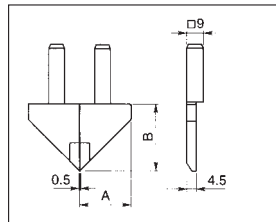
Exchangeable measuring tips



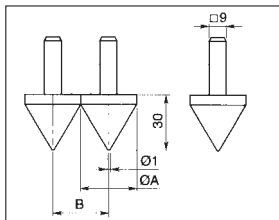
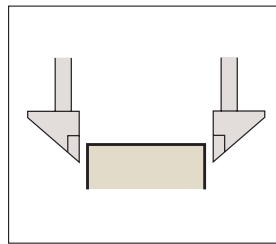
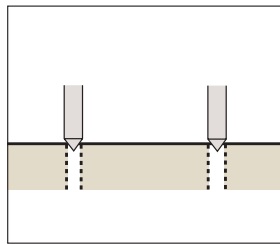
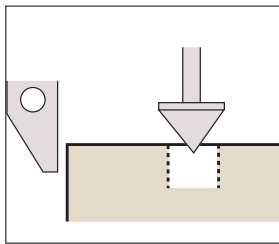
No.	A mm	B mm
07CZA044	90	28



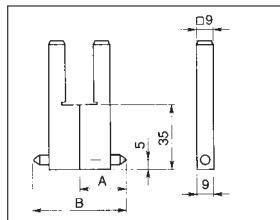
No.	A mm	B mm
07CZA055	8	30



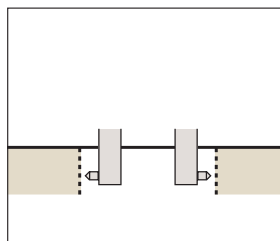
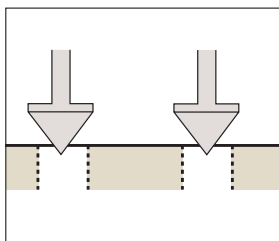
No.	A mm	B mm
07CZA056	28	30



No.	A mm	B mm
07CZA057	30	30



No.	A mm	B mm
07CZA058	25	50



Functions	Series 552
ON / OFF	●
ZERO	●
PRESET	●
OFFSET	●
DATA / HOLD-Taste	●
Data output	●

Specifications

Accuracy: Factory specification
 Resolution: 0,01 mm
 Max. drive speed: 1600 mm/s

Delivered in soft case, including 1 battery

Standard accessory

No. 05GZA033 Clamp holders for measuring tips, U-shaped version, metal (2 pieces)



Optional accessories

- No. 905338 Signal cable (1 m)
- No. 905409 Signal cable (2 m)
- No. 07CZA044 Insert for flats
- No. 07CZA055 Scribe insert (pair)
- No. 07CZA056 Knife edge (pair)
- No. 07CZA057 Inserts for bore measuring (pair)
- No. 07CZA058 Inserts for inside groove (pair)
- No. 07GZA002 Clamp holders for measuring tips (1 piece)

Consumables Spares

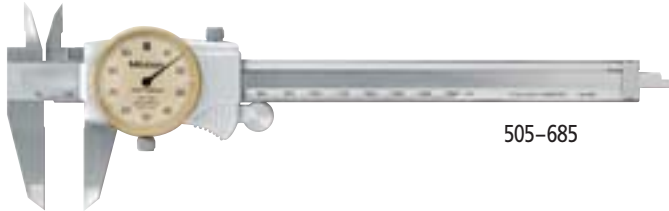
No. 938882 Battery (SR 44)

Functions	Series 505
Drive roller	●
Depth gauge	●
Locking screw	●

Dial Caliper

- Guidance titanium coated. Wear resistant and easy moving (up to measuring range 200 mm).
- High precision.
- Easy to read.
- Measuring scale satin chrome finished.
- All parts made from corrosion-free steel.

Series 505



505-685

Specifications

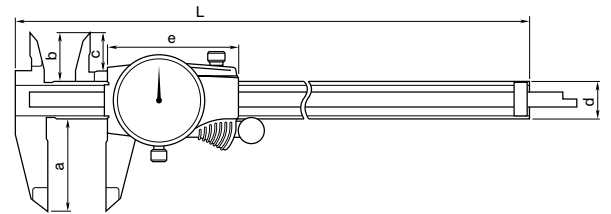
Accuracy: Factory specification
 Delivered in soft case and up to 200 mm with factory certificate

Optional accessories

Extension for depth measurement see page 144

Measuring range mm	No.	Graduation mm	Jaw length mm	Error limits mm	L mm	a mm	b mm	c mm	d mm	e mm	Mass g
0-150	505-685	0,01	40	0,03	231	40	21,0	16,5	16	57,2	176
0-150	505-671	0,02	40	0,03	231	40	21,0	16,5	16	57,2	175
0-150	505-711	0,02	40	0,03	231	40	21,0	16,5	16	57,2	175
0-200	505-686	0,01	50	0,03	288	50	24,5	20,0	16	57,2	186
0-200	505-672	0,02	50	0,03	288	50	24,5	20,0	16	57,2	185
0-300	505-673	0,02	64	0,04	403	64	27,5	22,0	20	70,2	370

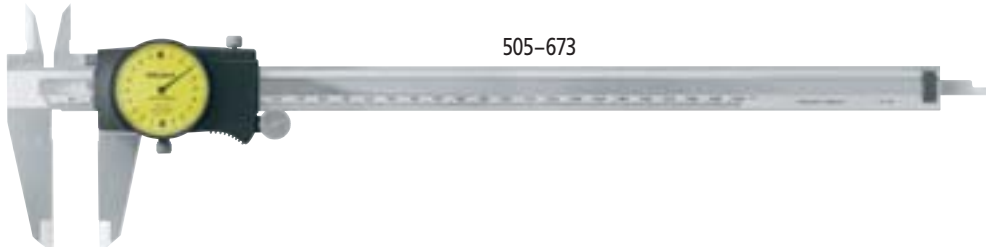
No.	1 dial rotation = 1 mm, Easy reading of 0,01 mm increments	Sliding titanium coated	Measuring surfaces for outside measurement carbide-tipped	Measuring surfaces for inside measurement carbide-tipped
505-685	●	●		
505-671		●		
505-711		●	●	●
505-686	●	●		
505-672		●		
505-673				



505-671



505-711



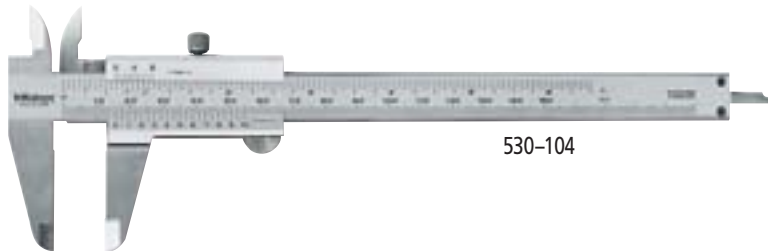
505-673

Caliper

- With depth gauge.
- Caliper and slide made of hardened, corrosion-free steel.
- Measuring surface and nonius satin chrome finished.
- Raised sliding surfaces.

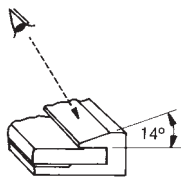
Series 530

with upper locking screw

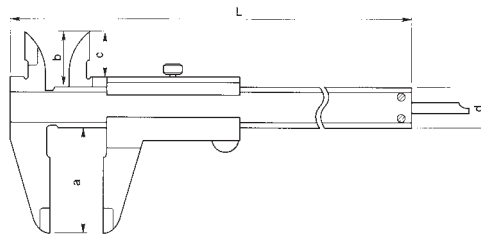


530-104

Measuring range mm	No.	Jaw length mm	Nonius		L mm	a mm	b mm	c mm	d mm	Mass g
			top	bottom						
0-150	530-104	40	1/128"	0,05 mm	231	40	21,0	16,5	16	143
0-200	530-114	50	1/128"	0,05 mm	288	50	24,5	20,0	16	180
0-300	530-115	64	1/128"	0,05 mm	403	64	27,5	22,0	20	355
0-150	530-312	40	1/1000"	0,02 mm	231	40	21,0	16,5	16	143
0-200	530-118	50	1/1000"	0,02 mm	288	50	24,5	20,0	16	180
0-300	530-119	64	1/1000"	0,02 mm	403	64	27,5	22,0	20	355
0-150	530-102	40	-	0,05 mm	231	40	21,0	16,5	16	144

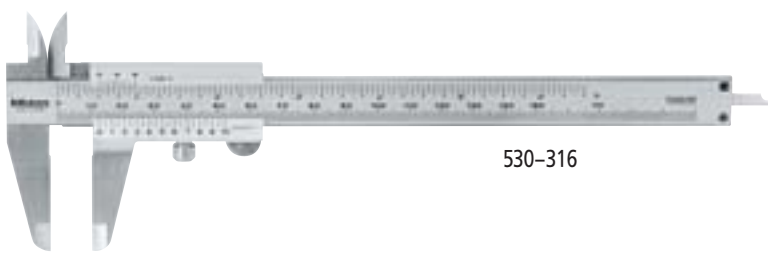


Easy reading due to nonius scale inclined by 14 degrees



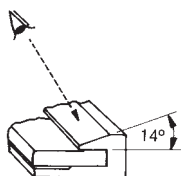
Series 530

with lower locking screw

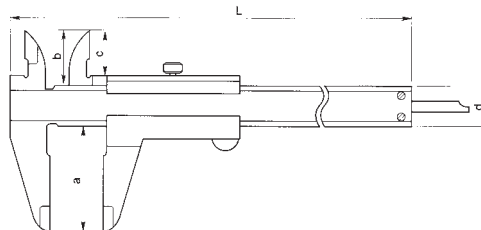


530-316

Measuring range mm	No.	Jaw length mm	Nonius		L mm	a mm	b mm	c mm	d mm	Mass g
			top	bottom						
0-150	530-316	40	1/128"	0,05 mm	231	40	21	16,5	16	145
0-150	530-319	40	-	0,05 mm	231	40	21	16,5	16	145



Easy reading due to nonius scale inclined by 14 degrees



Functions

Depth gauge

Series 530

Specifications

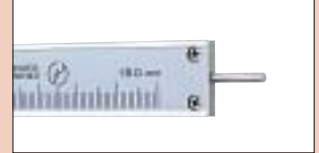
Accuracy: DIN 862

Delivered in soft case

Optional accessories

Extension for depth measurement see page 144

530-102
with round depth gauge Ø 1,9 mm



Specifications

Accuracy: DIN 862

Delivered in soft case

Optional accessories

Extension for depth measurement see page 144

Metr. ISO-Gew			
Nenn- est. extr. φ mm	Stig. Passo Pas mm	Kern- fend. nucleo φ mm	Bohr- trag- meche broca φ mm
3	0,5	2,46	2,9
4	0,7	3,24	3,8
5	0,8	4,13	4,2
6	1	4,92	5
8	1,25	6,65	6,8
10	1,5	8,38	8,5
12	1,75	10,11	10,2
16	2	13,84	14
20	2,5	17,59	17,5
Whitworth			
φ in	Gg/in	φ mm	φ mm
1/4	20	4,72	5,0
5/16	18	6,35	6,4
3/8	16	7,43	7,7
1/2	12	9,99	10,25
5/8	11	12,92	13,25
3/4	10	15,8	16,25
7/8	9	18,61	19
1	8	21,34	21,75
		101995	

With Thread table
No. 101995 D
on the back side,
530-316 only

Functions	Series 531	Series 532
Depth gauge	●	●

Caliper

- With depth gauge.
- Caliper and slide made of hardened, corrosion-free steel.
- Measuring surface and nonius satin chrome finished.
- Raised sliding surfaces.

Specifications

Accuracy: DIN 862
Delivered in soft case

Optional accessories

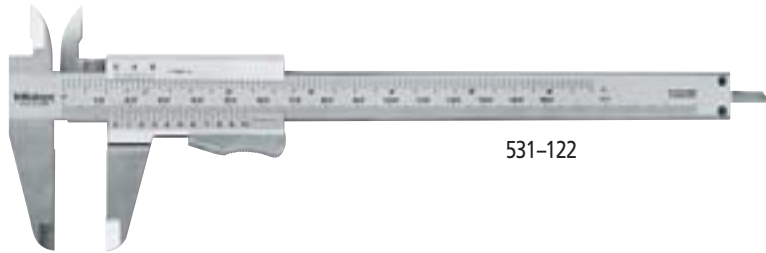
Extension for depth measurement see page 144

Metr. ISO-Gew			
Nenn- est. ext. φ mm	Stg. Passo Pas mm	Kern- fond int. nucleo φ mm	Bohr- trap meche broca φ mm
3	0,5	2,46	2,5
4	0,7	3,24	3,3
5	0,8	4,13	4,2
6	1	4,92	5
8	1,25	6,65	6,8
10	1,5	8,38	8,5
12	1,75	10,11	10,2
16	2	13,54	14
20	2,5	17,49	17,5
Whitworth			
φ in	G9/in	φ mm	φ mm
5/16	18	6,19	6,4
3/8	16	7,49	7,7
1/2	12	9,53	10,25
5/8	11	12,92	13,25
3/4	10	15,8	16,25
7/8	9	18,61	19
1	8	21,34	21,75
		101935	

With Thread table
No. 101995 D
on the back side,
531-122 only

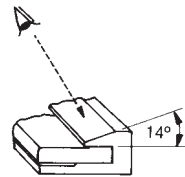
Series 531

with moment adjustment

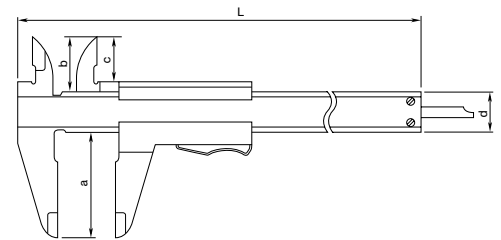


531-122

Measuring range mm	No.	Jaw length mm	Nonius		L mm	a mm	b mm	c mm	d mm	Mass g
			top	bottom						
0-150	531-122	40	1/128"	0,05 mm	231	40	21,0	16,5	16	142
0-200	531-108	50	1/128"	0,05 mm	288	50	24,5	20,0	16	175
0-300	531-109	64	1/128"	0,05 mm	403	64	27,5	22,0	20	350

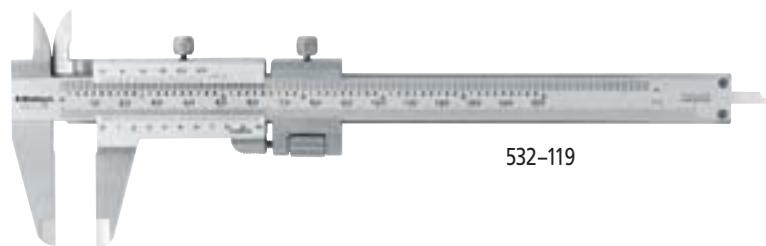


Easy reading due to nonius
scale inclined by 14 degrees



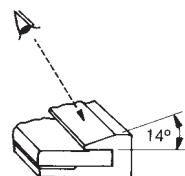
Series 532

with fine adjustment

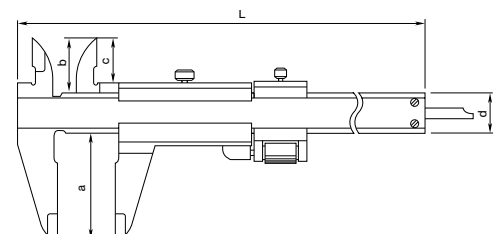


532-119

Measuring range mm	No.	Jaw length mm	Nonius		L mm	a mm	b mm	c mm	d mm	Mass g
			top	bottom						
0-130	532-119	40	1/1000"	0,02 mm	231	40	21,0	16,5	16	165
0-180	532-120	50	1/1000"	0,02 mm	288	50	24,5	20,0	16	202
0-280	532-121	64	1/1000"	0,02 mm	403	64	27,5	22,0	20	395



Easy reading due to nonius
scale inclined by 14 degrees

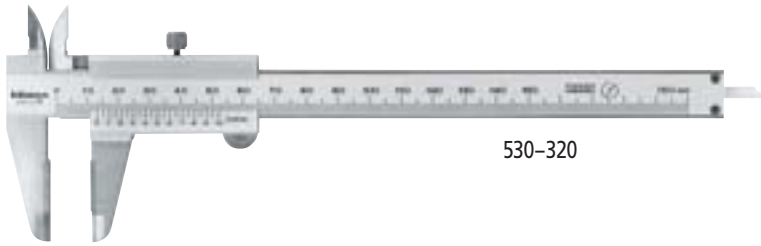


Caliper

- With depth gauge.
- Caliper and slide made of hardened, corrosion-free steel.
- Measuring surface and nonius satin chrome finished.
- Raised sliding surfaces.

Series 530

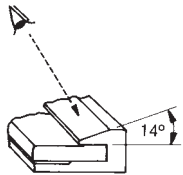
Caliper with carbide-tipped measuring surfaces



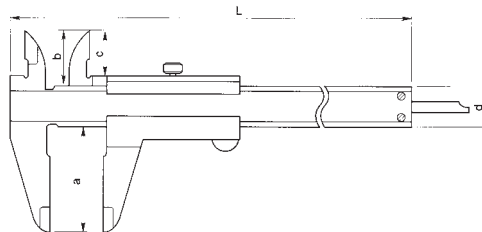
530-320

Measuring range mm	No.	Jaw length mm	Nonius	L mm	a mm	b mm	c mm	d mm	Mass g
0-150	530-320	40	0,05 mm	231	40	21,0	16,5	16,0	145
0-200	530-321	50	0,05 mm	288	50	24,5	20,0	16,0	181
0-300	530-322	64	0,05 mm	403	64	27,5	22,0	20,0	355
0-150	530-335	40	0,05 mm	231	40	21,0	16,5	16,0	145

No.	Measuring surfaces for outside measurement carbide-tipped	Measuring surfaces for inside measurement carbide-tipped
530-320	●	
530-321	●	
530-322	●	
530-335	●	●

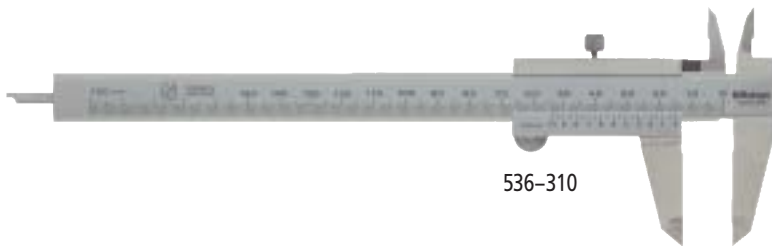


Easy reading due to nonius scale inclined by 14 degrees



Series 536

Lefthander Caliper with depth gauge



536-310

Measuring range mm	No.	Jaw length mm	Error limits mm	Nonius mm	Mass g
0-150	536-310	40	0,05	0,05	150

Functions	Series 530	Series 536
Depth gauge	●	●

Specifications

Accuracy: DIN 862

Delivered in soft case

Optional accessories

Extension for depth measurement see page 144


Specifications

Nonius value: 0,05 mm

Delivered in soft case

Characteristics:

- The rounded vernier allows for parallax free reading
- Slide and caliper made of hardened, corrosionfree steel
- Scale and nonius with satin chrome finish
- Lapped measuring surfaces
- Upper locking screw

Functions	Series 560
Depth gauge	

Calipers

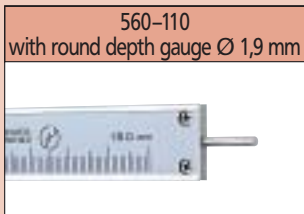
- With depth gauge.
- Caliper and slide made of hardened, corrosion-free steel.
- Measuring surface and nonius satin chrome finished.
- Raised sliding surfaces.

Specifications

Accuracy: DIN 862
Delivered in soft case

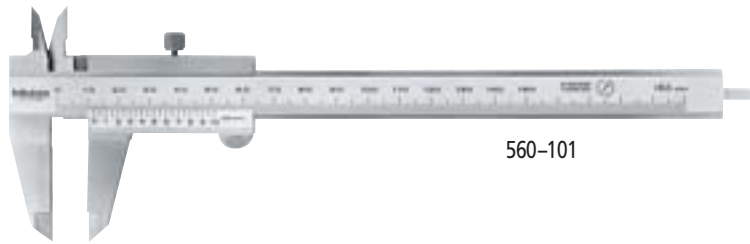
Optional accessories

Extension for depth measurement see page 144



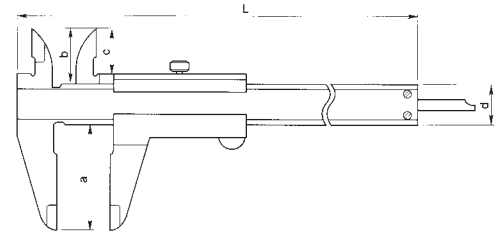
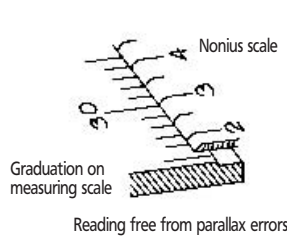
Series 560

with upper locking screw
reading free from parallax



560-101

Measuring range mm	No.	Jaw length mm	Nonius		L mm	a mm	b mm	c mm	d mm	Mass g
			top	bottom						
0-100	560-110	40	-	0,05 mm	180	40	21,0	16,5	16	133
0-150	560-101	40	-	0,05 mm	231	40	21,0	16,5	16	152
0-150	560-122	40	-	0,02 mm	231	40	21,0	16,5	16	150
0-150	560-312	40	1/1000"	0,02 mm	231	40	21,0	16,5	16	150
0-200	560-108	50	-	0,05 mm	288	50	24,5	20,0	16	190
0-200	560-118	50	1/1000"	0,02 mm	288	50	24,5	20,0	16	190
0-300	560-109	64	-	0,05 mm	403	64	27,5	22,0	20	374
0-300	560-119	64	1/1000"	0,02 mm	403	64	27,5	22,0	20	374



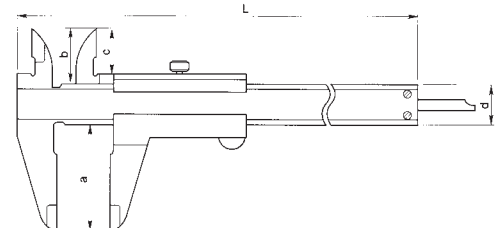
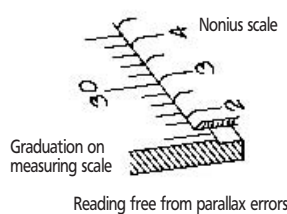
Series 560

with upper locking screw
reading free from parallax



560-104

Measuring range mm	No.	Jaw length mm	Nonius		L mm	a mm	b mm	c mm	d mm	Mass g
			top	bottom						
0-150	560-104	40	1/128"	0,05 mm	231	40	21	16,5	16	150



"DIAMOND" Caliper

- With double prism guide, line scale and nonius are on one level so that reading is free from parallax.
- Caliper and slide made of hardened, corrosion-free steel.
- Measuring scale and nonius satin chrome finished.

Series 522

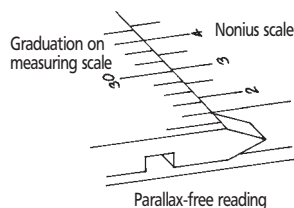
Parallax-free, nonius 0,05 mm



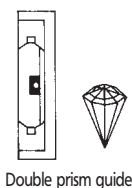
522-601

Measuring range mm	No.	Jaw length mm	Nonius		a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	Mass g
			top	bottom									
0-150	522-600	40	-	0,05 mm	229	77,5	17	40,5	53,5	30	15	21	145
0-150	522-601*	40	1/128"	0,05 mm	229	77,5	17	40,5	53,5	30	15	21	145

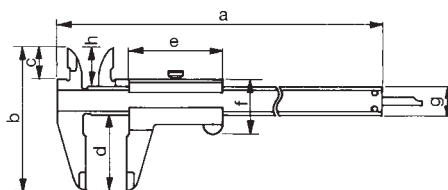
* with thread table No. 101995 D



Parallax-free reading

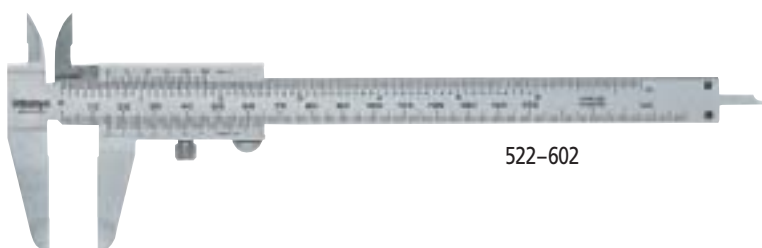


Double prism guide



Series 522

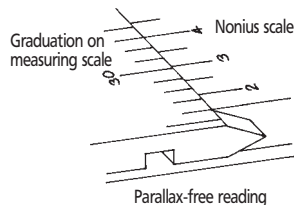
Parallax-free, nonius 0,02 mm



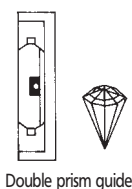
522-602

Measuring range mm	No.	Jaw length mm	Nonius		a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	Mass g
			top	bottom									
0-150	522-602*	40	1/1000"	0,02 mm	229	77,5	17	40,5	53,5	30	15	21	145
0-150	522-606	40	-	0,02 mm	229	77,5	17	40,5	53,5	30	15	21	145

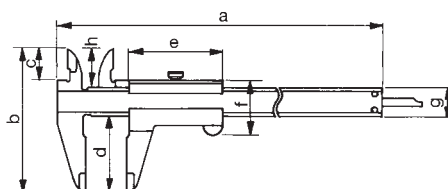
* with thread table No. 101995 D



Parallax-free reading



Double prism guide



Functions

Depth gauge

Series 522

Specifications

Accuracy: DIN 862

Delivered in soft case

Optional accessories

Extension for depth measurement see page 144

Metr. ISO-Gew			
Nenn- est. extr. φ mm	Stg. Paso mm	Kern- fond. núcleo φ mm	Bohr- trap. mecha broca φ mm
3	0,5	2,46	2,5
4	0,7	3,24	3,3
5	0,8	4,13	4,2
6	1	4,92	5
8	1,25	6,65	6,8
10	1,5	8,38	8,5
12	1,75	10,11	10,2
16	2	13,84	14
20	2,5	17,59	17,5
Whitworth			
φ in	Gg/in	φ mm	φ mm
1/4	20	4,72	5,0
5/16	18	6,13	6,4
3/8	16	7,43	7,7
1/2	12	9,99	10,25
5/8	11	12,62	13,25
3/4	10	15,3	16,25
7/8	9	18,11	19
1	8	21,34	21,75
		101995	

With Thread table
No. 101995 D
on the back side,
522-601 only

Specifications

Accuracy: DIN 862

Delivered in soft case

Optional accessories

Extension for depth measurement see page 144

Metr. ISO-Gew			
Nenn- est. extr. φ mm	Stg. Paso mm	Kern- fond. núcleo φ mm	Bohr- trap. mecha broca φ mm
3	0,5	2,46	2,5
4	0,7	3,24	3,3
5	0,8	4,13	4,2
6	1	4,92	5
8	1,25	6,65	6,8
10	1,5	8,38	8,5
12	1,75	10,11	10,2
16	2	13,84	14
20	2,5	17,59	17,5
Whitworth			
φ in	Gg/in	φ mm	φ mm
1/4	20	4,72	5,0
5/16	18	6,13	6,4
3/8	16	7,43	7,7
1/2	12	9,99	10,25
5/8	11	12,62	13,25
3/4	10	15,3	16,25
7/8	9	18,11	19
1	8	21,34	21,75
		101995	

With Thread table
No. 101995 D
on the back side,
522-601 only

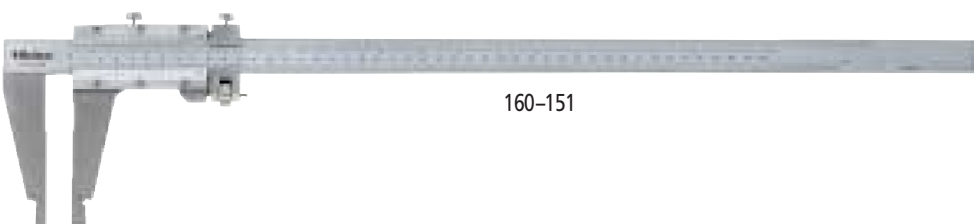
Workshop Caliper

- With top offset nonius for direct reading during inside measurement without addition of the jaw blade thickness.
- Measuring surface and nonius satin chrome finished.
- Caliper and slide made of hardened, corrosion-free steel.
- Raised sliding surfaces.
- With rounded measuring surfaces for measuring inside dimensions.

Series 160



160-170



160-151

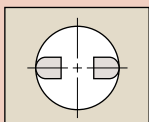
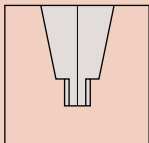
Specifications

Accuracy: Factory specification

Delivered in soft case

Measuring range mm	No.	Nonius	Error limits mm	L mm	a mm	b mm	d mm	Inside measuring from mm	Mass g
without fine adjustment									
0- 200	160-170*	0,02 mm	0,03	288	60	8	16	10	200
0- 300	160-180*	0,02 mm	0,04	445	75	12	20	10	350
with fine adjustment									
0- 300	160-127*	0,02 mm	0,04	445	75	12	20	10	450
0- 450	160-128	0,02 mm	0,05	632	100	18	25	20	1200
0- 600	160-101	0,02 mm	0,05	780	100	18	25	20	1400
0-1000	160-104	0,02 mm	0,07	1240	140	24	32	20	3500
0-1500	160-110	0,02 mm	0,09	1800	180	30	32	20	4850
0-2000	160-113	0,02 mm	0,12	2300	180	30	40	20	10200
with fine adjustment									
0- 300	160-150*	1/1000" x 0,02 mm	0,04	445	75	12	20	10	450
0- 450	160-151	1/1000" x 0,02 mm	0,05	632	100	18	25	20	1200
0- 600	160-153	1/1000" x 0,02 mm	0,05	780	100	18	25	20	1400
0-1000	160-155	1/1000" x 0,02 mm	0,07	1240	140	24	32	20	3500
0-1500	160-157	1/1000" x 0,02 mm	0,09	1800	180	30	32	20	4850
0-2000	160-159	1/1000" x 0,02 mm	0,12	2300	180	30	40	20	10200

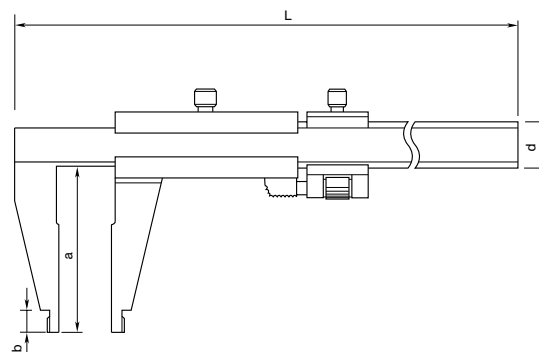
* up to 300 mm parallax-free design



Rounded measuring surfaces for measuring inside dimensions



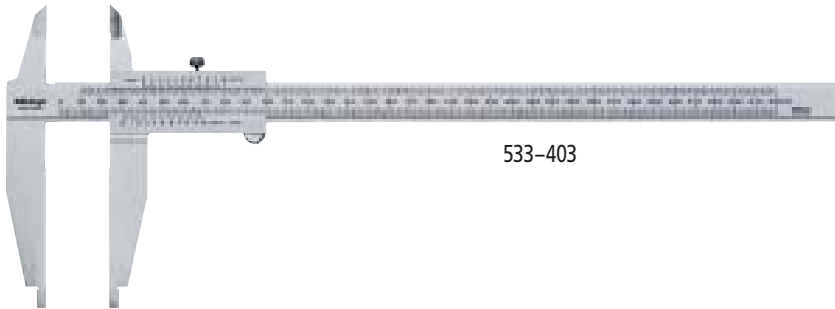
Sample application



Workshop Caliper

- With top offset nonius for direct reading during inside measurement without addition of the jaw blade thickness.
- Caliper and slide made of hardened, corrosion-free steel.
- Measuring surface and nonius satin chrome finished.
- With rounded measuring surfaces for measuring inside dimensions.
- With knife-shaped measuring surfaces for outside measurement.

Series 533



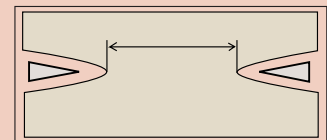
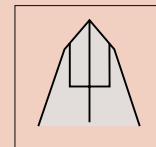
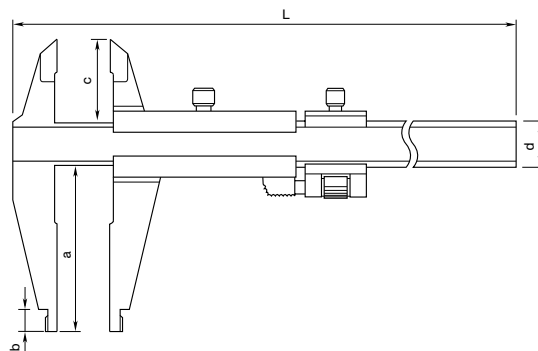
533-403

Measuring range mm	No.	Nonius	Error limits mm	L mm	a mm	b mm	c mm	d mm	Inside measuring from mm	Mass g
0- 200	533-401*	0,05	0,05	294	60	8	30	16	10	220
0- 300	533-403*	0,05	0,08	410	90	10	40	20	10	370
0- 500	533-404	0,05	0,10	680	150	15	56	25	20	1200
0- 750	533-405	0,05	0,12	963	150	15	56	25	20	1500
0-1000	533-406	0,05	0,15	1230	150	20	56	32	20	3300
with fine adjustment										
0- 280	533-503*	0,02	0,04	410	90	10	40	20	10	405
0- 500	533-504	0,02	0,06	680	150	15	56	25	20	1250
0- 750	533-505	0,02	0,07	963	150	15	56	25	20	1550
0-1000	533-506	0,02	0,08	1230	150	20	56	32	20	3450

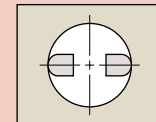
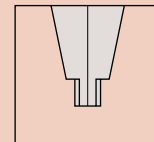
* up to 300 mm parallax-free design



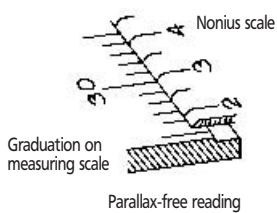
Sample application



Knife-shaped measuring surfaces for outside measurement



Rounded measuring surfaces for measuring inside dimensions



Specifications

Accuracy: Factory specification
Delivered in soft case

Functions
Fine adjustment

Series 534

Workshop Caliper

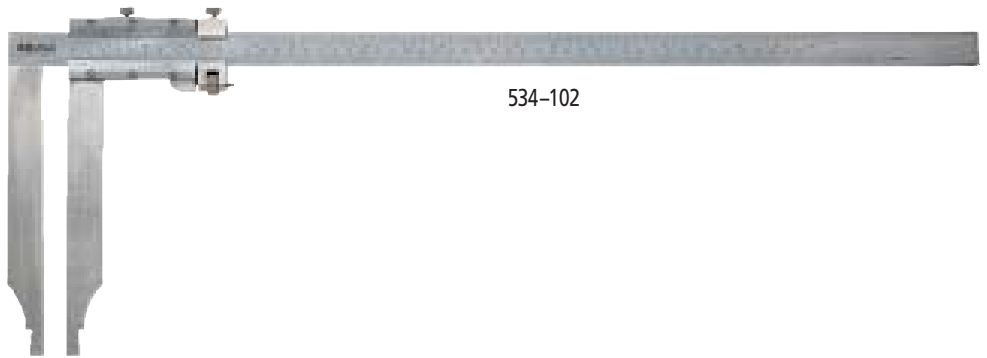
- Measuring surface and nonius satin chrome finished.
- Caliper and slide made of hardened, corrosion-free steel.
- Raised sliding surfaces.

Specifications

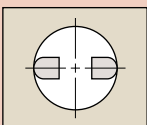
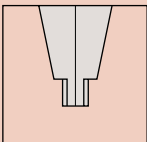
Accuracy: Factory specification
Delivered in soft case

Series 534

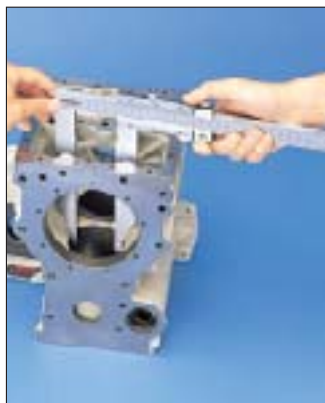
with extra long measuring jaw
with fine adjustment



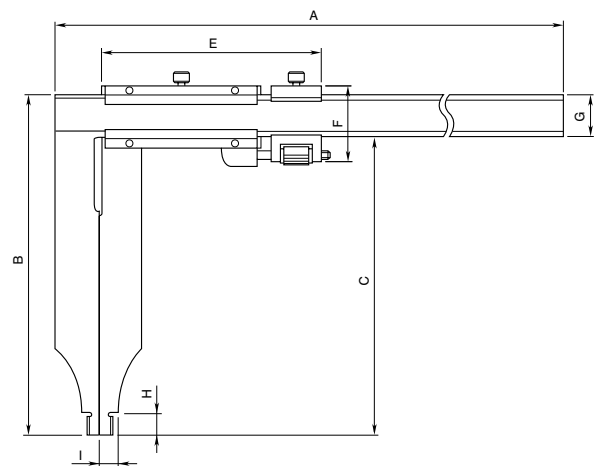
Measuring range	No.	Nonius	Error limits	Jaw length	Inside measuring from	A	B	C	E	F	G	H	I	Mass
mm			mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	g
with fine adjustment														
0- 300	534-101	1/128" x 0,05 mm	0,07	90	10	445	110	90	103	38,0	20	12,0	7	460
0- 500	534-102	1/128" x 0,05 mm	0,13	200	20	682	225	200	112	51,0	25	18,5	12	1500
0- 750	534-103	1/128" x 0,05 mm	0,16	200	20	995	232	200	150	62,5	32	18,5	12	3100
0-1000	534-104	1/128" x 0,05 mm	0,20	200	20	1230	232	200	150	62,5	32	18,5	12	3700
0- 300	534-113	0,02 mm	0,04	90	10	445	110	90	103	38,0	20	12,0	7	460
0- 500	534-114	0,02 mm	0,06	200	20	682	225	200	112	51,0	25	18,5	12	1500
0- 750	534-115	0,02 mm	0,08	200	20	995	232	200	150	62,5	32	18,5	12	3100
0-1000	534-116	0,02 mm	0,10	200	20	1230	232	200	150	62,5	32	18,5	12	3700
0- 300	534-105	1/100" x 0,02 mm	0,04	90	10	445	110	90	103	38,0	20	12,0	7	460
0- 500	534-106	1/100" x 0,02 mm	0,06	200	20	682	225	200	112	51,0	25	18,5	12	1500
0- 750	534-107	1/100" x 0,02 mm	0,08	200	20	995	232	200	150	62,5	32	18,5	12	3100
0-1000	534-108	1/100" x 0,02 mm	0,10	200	20	1230	232	200	150	62,5	32	18,5	12	3700



Rounded measuring surfaces
for measuring inside dimensions



Sample application



Test Set for Calipers

- Calibration set for testing error limits of calipers according to DIN 862 or VDI/VDE/DGQ 2618.
- Consisting of 3 gauge blocks (tolerance grade 1) and two setting rings of steel or ceramics.
- Incl. factory certificate.

Series 516

Delivered in soft case



516-124-10

516-150-10

No.	Dimensions mm	Material
516-124-10	30 mm, 41,3 mm and 131,4 mm setting rings Ø 4 mm and 25 mm including glove	Steel
516-150-10	30 mm, 41,3 mm and 131,4 mm setting rings Ø 4 mm and 25 mm including glove	Ceramics

Additional equipment for testing calipers
see page 312

Contents:

516-124-10 (Material: steel)

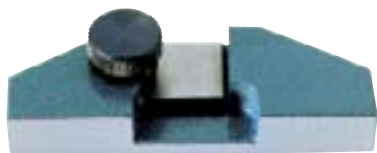
- No. 611673-031 Gauge block 30 mm
- No. 611857-031 Gauge block 41,3 mm
- No. 611858-031 Gauge block 131,4 mm
- No. 177-204 Setting ring Ø 4 mm
- No. 177-139 Setting ring Ø 25 mm
- No. 600009 Glove

516-150-10 (Material: ceramics)

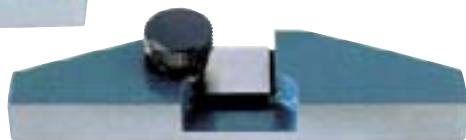
- No. 613673-031 Gauge block 30 mm
- No. 613857-031 Gauge block 41,3 mm
- No. 613858-031 Gauge block 131,4 mm
- No. 177-418 Setting ring Ø 4 mm
- No. 177-430 Setting ring Ø 25 mm
- No. 600009 Glove

Extensions for Depth Measurement for Calipers

- To fit all DIGIMATIC caliper gauges, dial caliper gauges and analogue caliper gauges with depth gauge and measuring range 150, 200, 300 mm.



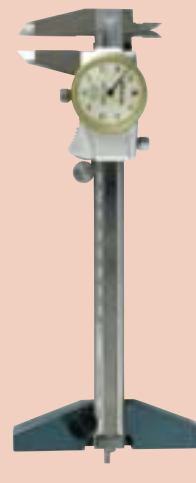
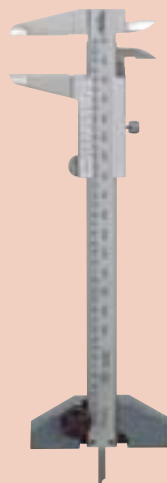
050083



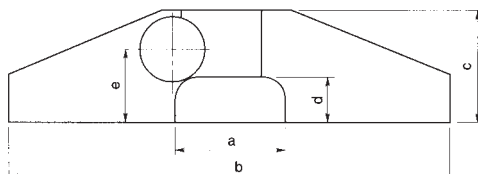
050084



050084



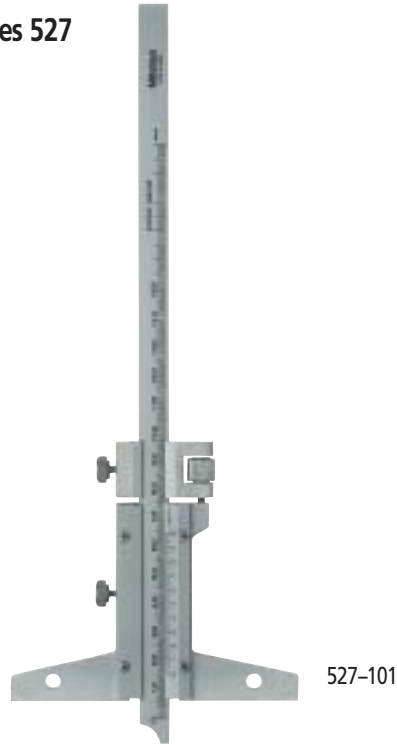
No.	Dimensions of supporting surface mm	a mm	b mm	c mm	d mm	e mm
050083	75 x 12 (for measuring range 100 mm, 150 mm and 200 mm)	25	75	24,5	9,0	16
050084	100 x 12 (for measuring range 100 mm, 150 mm and 200 mm)	25	100	24,5	9,0	16
050085	125 x 14 (for measuring range 300 mm)	30	125	28,5	11,5	20



Depth Gauges

- To measure the depth of bores, recesses and steps.
- The measuring surfaces and guideways are hardened and micro-lap finished.
- Stainless.

Series 527



527-101

Specifications

Accuracy: Factory specification

Optional accessories

Interchangeable bases*



No. 900370 base length 180 mm



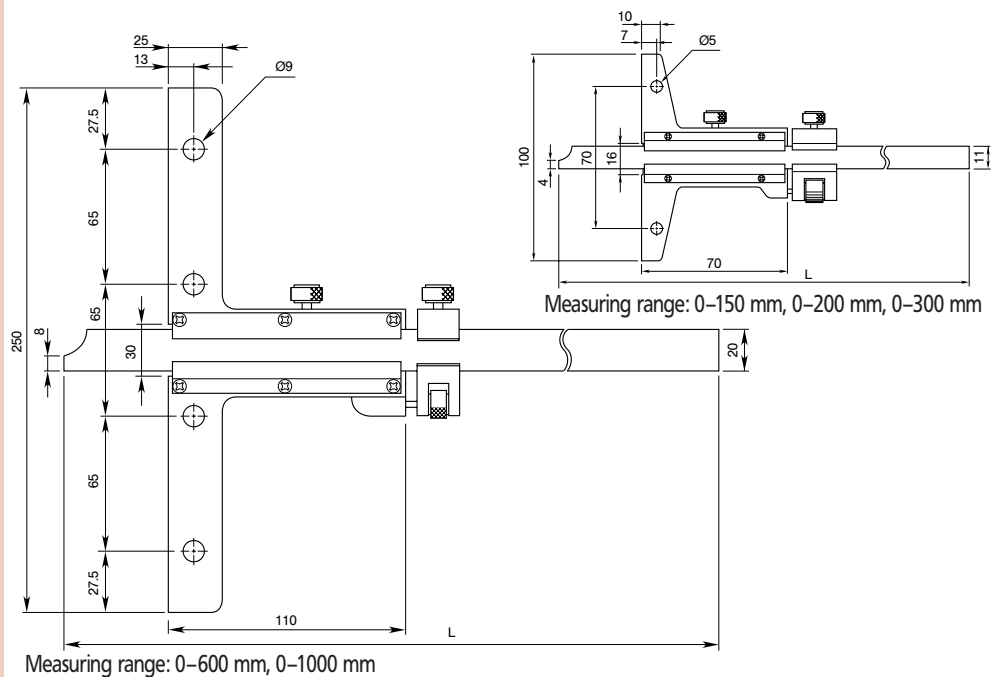
No. 900371 base length 260 mm



No. 900372 base length 320 mm

* (not for measuring range 0-600, 0-1000 mm)

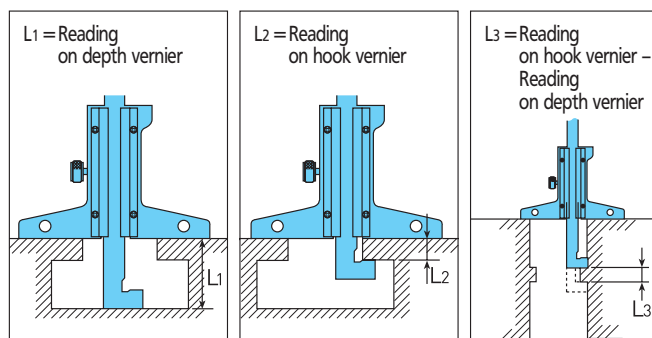
Measuring range mm	No.	Nonius value mm	Error limits mm	L mm
with fine adjustment				
0- 150	527-101	0,02	0,03	260
0- 200	527-102	0,02	0,03	310
0- 300	527-103	0,02	0,04	410
0- 600	527-104	0,02	0,05	800
0-1000	527-105	0,02	0,07	1200
without fine adjustment				
0- 150	527-201	0,05	0,05	260
0- 200	527-202	0,05	0,05	310
0- 300	527-203	0,05	0,08	410
0- 600	527-204	0,05	0,10	800
0-1000	527-205	0,05	0,15	1200



Depth Gauges

- To measure the depth of bores, recesses and steps.
- The measuring surfaces and guideways are hardened and micro-lap finished.
- Stainless.

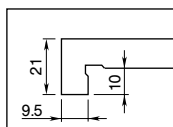
Series 527 with hooks



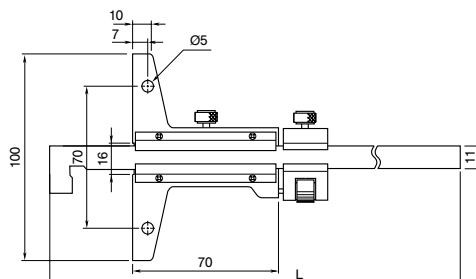
Reading on hook vernier and depth vernier

527-401

Measuring range mm	No.	Nonius value mm	Error limits mm	L mm
with fine adjustment				
0-150	527-411	0,02	0,03	260
0-200	527-412	0,02	0,03	310
0-300	527-413	0,02	0,04	410
without fine adjustment				
0-150	527-401	0,05	0,05	260
0-200	527-402	0,05	0,05	310
0-300	527-403	0,05	0,08	410



Hook detail



Measuring range: 0-150 mm, 0-200 mm, 0-300 mm

Specifications

Accuracy: Factory specification

Optional accessories

Interchangeable bases



No. 900370 base length 180 mm



No. 900371 base length 260 mm



No. 900372 base length 320 mm

Depth Gauges

- To measure the depth of bores, recesses and steps.
- The measuring surfaces and guideways are hardened and micro-lap finished.
- Stainless.

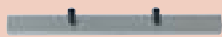
Series 527 with dial gauge

Specifications

Accuracy: Factory specification

Optional accessories

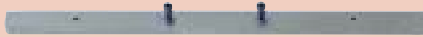
Interchangeable bases



No. 900370 base length 180 mm



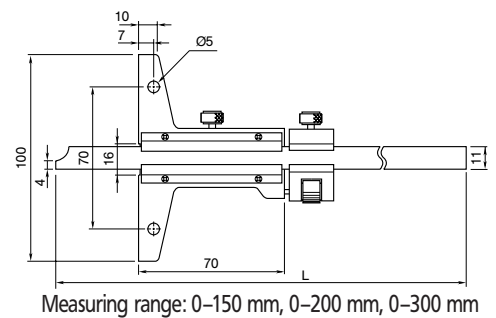
No. 900371 base length 260 mm



No. 900372 base length 320 mm



Measuring range mm	No.	Nonius value mm	Error limits mm	L mm
with fine adjustment				
0- 150	527-301-50	0,05	0,05	260
0- 200	527-302-50	0,05	0,05	310
0- 300	527-303-50	0,05	0,08	410



ABSOLUTE DIGIMATIC Depth Gauges

- Electronic caliper with built-in absolute scale.
- One-time setting of origin that remains as the absolute zero position until the battery has to be changed.
- Extraordinary precision even with high speed movement.
Large display digits are easy to read.
- Optimum caliper sliding properties.

ABSOLUTE™

Absolute System Patented by MITUTOYO

IP67

Series 571 with data output



571-201-10

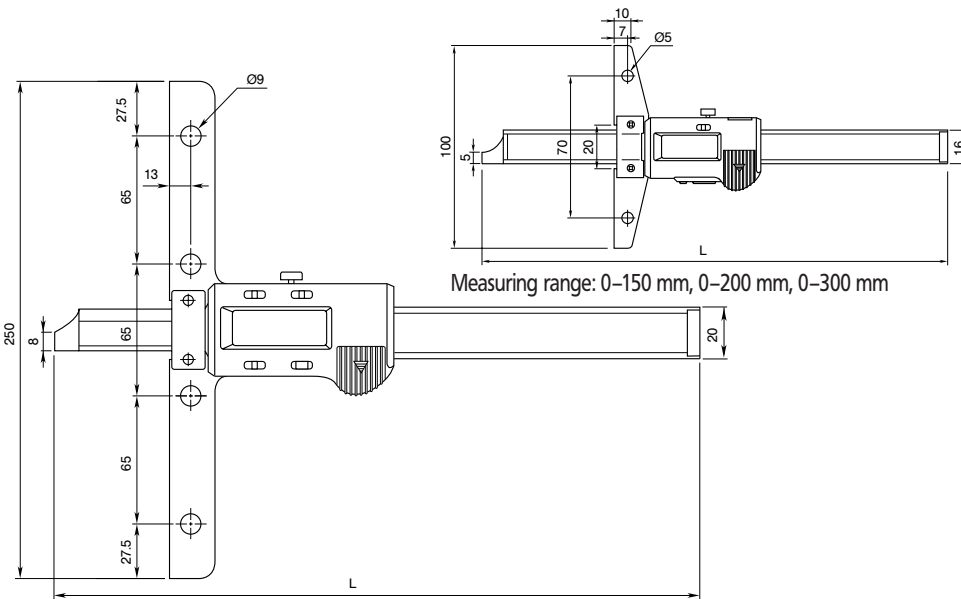


571-251

Measuring range mm	No.	Error limits mm	L mm	Mass g
0- 150	571-201-10	0,03	237	200
0- 200	571-202-10	0,03	287	220
0- 300	571-203-10	0,04	403	260
0- 450	571-204-10	0,05	635	1270
0- 600	571-205-10	0,05	785	1400
0- 750	571-206-10	0,06	935	1530
0-1000	571-207-10	0,07	1200	1760

IP-67

0- 150	571-251	0,03	237	365
0- 200	571-252	0,03	287	408



Measuring range: 0-450 mm, 0-600 mm, 0-750 mm, 0-1000 mm

™ Patent numbers see page 464

Functions	Series 571
ON / OFF	●
ZERO setting	●
ORIGIN	●
Data output	●

Specifications

Accuracy: Factory specification

Resolution: 0,01 mm

5 digit LCD display

Optional accessories

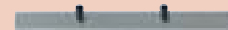
No. 959149 Signal cable with data switch (1 m)

No. 959150 Signal cable with data switch (2 m)

No. 05CZA624 Signal cable (1 m)
for IP-67 type

No. 05CZA625 Signal cable (2 m)
for IP-67 type

Interchangeable bases*



No. 900370 base length 180 mm



No. 900371 base length 260 mm



No. 900372 base length 320 mm

* (not for measuring range 0-450, 0-600, 0-750, 0-1000 mm)

Consumables Spares

No. 938882 Battery SR-44

Functions
Fine adjustment

Series 506

Vernier Height Gauges

- Accurate and fast reading from scale and vernier with satin chrome finish.
- Hardened and precision ground scale.
- Cranked, carbide-tipped scribe.

Specifications

Accuracy: Factory specification
Nonius value: 0,02 mm
Delivered including scriber
and scriber holder

Scriber and Scriber holder see page 157

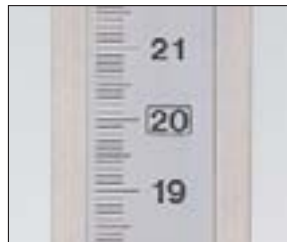
Series 506

Light version
with fine adjustment



506-207

Measuring range mm	No.	Error limits mm	Mass kg
0-200	506-207	0,03	1,4



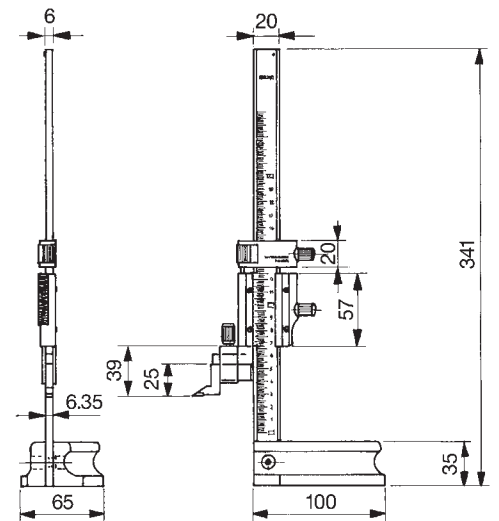
Large digit



Fine adjustment



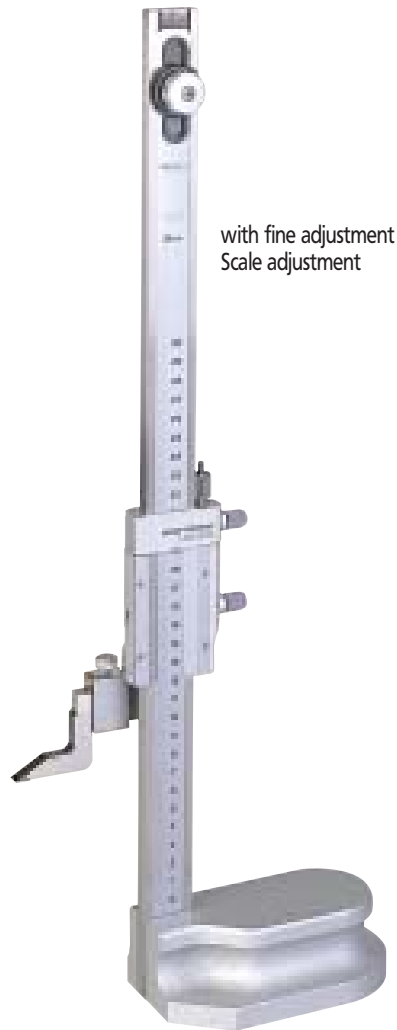
Scribing position



Vernier Height Gauges

- Accurate and fast reading from scale and vernier with satin chrome finish.
- Hardened and precision ground scale.
- Cranked, carbide-tipped scribe.

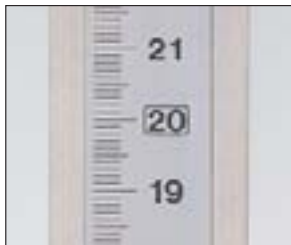
Series 514



with fine adjustment
Scale adjustment

514-102

Measuring range	No.	Error limits	Scale adjustment	A	B	C	D	H	h	Mass
mm		mm	mm	mm	mm	mm	mm	mm	mm	kg
0- 300	514-102	0,04	15	32	20	70	28	525	45	3,1
0- 600	514-106	0,05	15	32	24	85	35	870	54	7,4
0-1000	514-108	0,07	25	42	30	110	45	1340	65	20,0



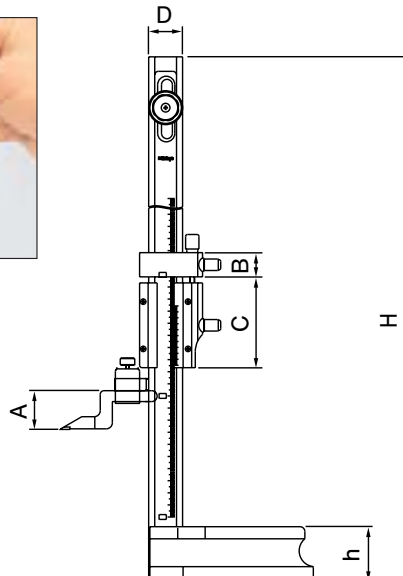
Large digit



Fine adjustment



Ergonomic grip



Functions

Fine adjustment

Series 514

Specifications

Accuracy: Factory specification
Nonius value: 0,02 mm

Delivered including scriber
and scriber holder

Optional accessories:

No. 07GZA003 Magnifier reading glass
for 514-102, 514-106

No. 07GZA015 Magnifier reading glass
for 514-108

Scriber and Scriber holder see page 157

ABSOLUTE DIGIMATIC-HDS Height Gauges

Functions	Series 570	
	570-227	570-230
ORIGIN (ABS zero point setting)	●	●
PRESET	●	●
ABS (absolute measurement)	●	●
Inc (incremental)	●	●
Measuring function	●	●
HOLD	●	●
Reversal of counting direction	●	●
Alarm when battery power is low	●	●
Data output	●	●

Specifications

Accuracy: Factory specification
Delivered including 1 battery, scriber
and scriber holder

Optional accessories

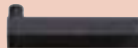
No. 905338 Signal cable (1 m)
No. 905409 Signal cable (2 m)

Optional accessories for 570-230

No. 900321 Clamping device (with dovetail
guidance and holder dia. 8 and 4 mm)
No. 953638 Holder (9 x 9 mm) for securing dial
indicators or probe gauges to the
height gauge and scriber devices,
length: 50 mm



Clamping device
(with dovetail guidance)



Holder

Consumables Spares

No. 938882 Battery SR-44

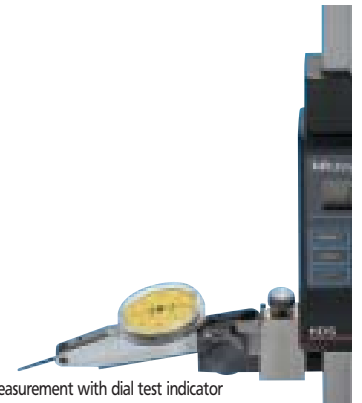
Scriber and Scriber holder see page 157

Series 570



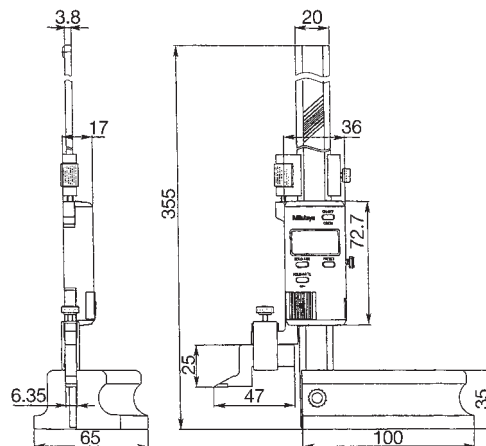
570-227

ABSOLUTE™
Absolute System Patented by MITUTOYO

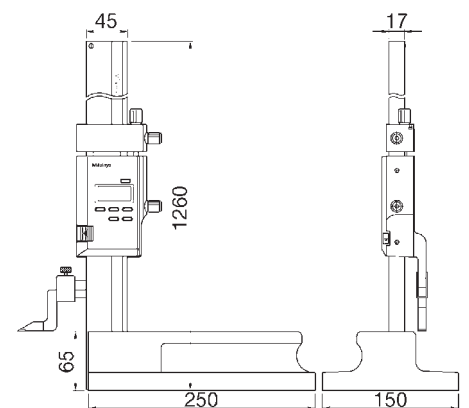


Measurement with dial test indicator

Measuring range mm	No.	Resolution mm	Error limits mm	Mass kg
0- 200	570-227	0,01	0,04	1,3
0-1000	570-230	0,01	0,08	16,8



570-227



570-230

™ Patent numbers see page 464

ABSOLUTE DIGIMATIC-HDS Height Gauges

Series 570



570-302

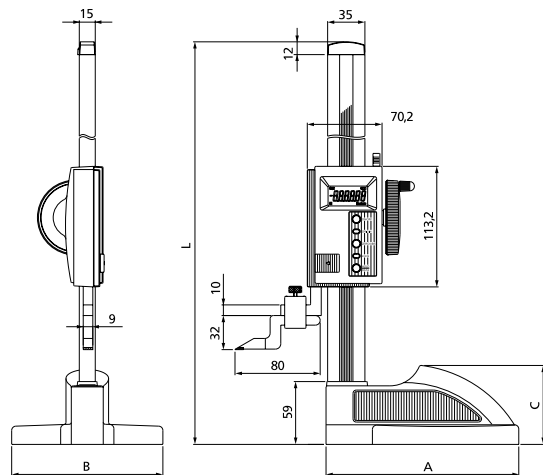


Measurement with dial test indicator

ABSOLUTE™

Absolute System Patented by MITUTOYO

Measuring range mm	No.	Resolution mm	Error limits mm	L mm	A mm	B mm	C mm	Mass kg
0- 300	570-302	0,01	0,04	507	160	122	72,6	4,6
0- 600	570-304	0,01	0,06	812	181	142	74,1	6,4



570-302 / 570-304

™ Patent numbers see page 464

Functions	Series 570	
	570-302	570-304
ORIGIN (ABS zero point setting)	●	●
ABS (absolute measurement)	●	●
Inc (incremental) Measuring function	●	●
HOLD	●	●
Alarm when battery power is low	●	●
Data output	●	●

Specifications

Accuracy: Factory specification
Delivered including 1 battery, scriber
and scriber holder

Optional accessories

- No. 905338 Signal cable (1 m)
- No. 905409 Signal cable (2 m)
- No. 900321 Clamping device (with dovetail guidance and holder dia. 8 and 4 mm)
- No. 953638 Holder (9 x 9 mm) for securing dial indicators or probe gauges to the height gauge and scriber devices, length: 50 mm



Clamping device
(with dovetail guidance)



Holder

Consumables Spares

- No. 938882 Battery SR-44
- Scriber and Scriber holder see page 157

Caliper adjustment wheel

The hand wheel enables precise movement of the caliper over the measuring range.



Large clamping lever

This lever ensures secure fixing of the caliper.



Large display

- Character height: 10 x 3,8 mm
- Also easily legible in darkened rooms



Illustrated to original scale

Digit Height Gauges

- Most simple and accurate reading.
- Zero point setting is possible in any position.
- Carbide-tipped scribe.
- The digit height gauge with double counter and dial gauge allows for fast and accurate measurements.
- One of the counters works in the plus direction, the other in the minus direction, so that the desired position can be reached by either upward or downward movement. Millimeters are read off the counters, tenths and hundredths off the dial gauge.

Series 192

with double counter and dial gauge

Specifications

Accuracy: Factory specification

Delivered including scriber, scriber holder, and cover

Optional accessories

No. 900321 Clamping device (with dovetail guidance and holder dia. 8 and 4 mm)

No. 953638 Holder (9 x 9 mm) for securing dial indicators or probe gauges to the height gauge and scriber devices, length: 50 mm

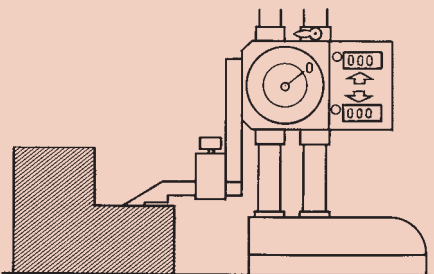


Clamping device (with dovetail guidance)

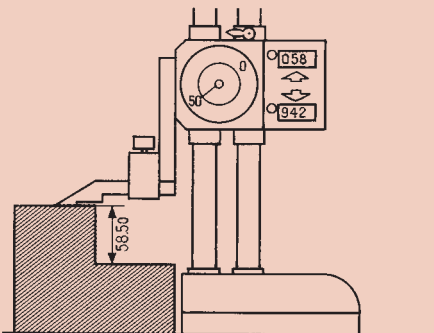


Holder

Scriber and Scriber holder see page 157



Zero setting of counter and dial gauge



Measurement

Reading of

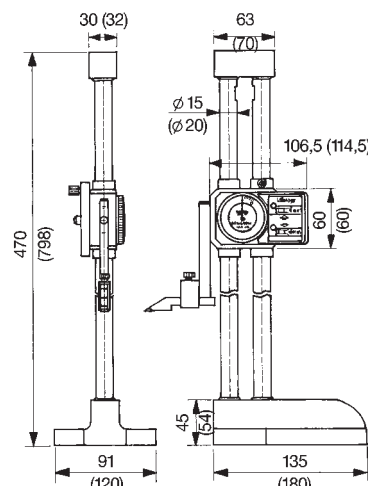
Counter	58.00 mm
Dial Gauge	0.50 mm
Result	58.50 mm



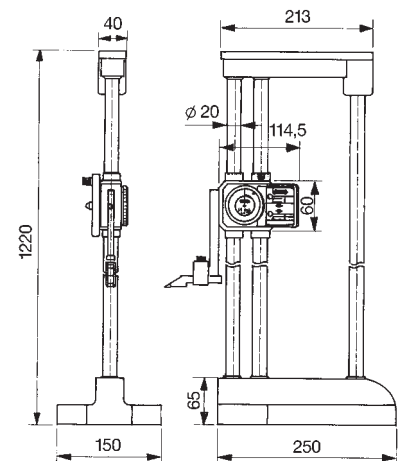
192-130



Measuring range mm	No.	Resolution mm	Error limits mm	Column diameter mm	Mass kg
0- 300	192-130	0,01	0,03	15	4,2
0- 600	192-132	0,01	0,05	20	9,8
0-1000	192-133	0,01	0,07	20	17,0



192-130 / Dimensions in brackets = 192-132



192-133

„DIGIMATIC“ HD-A Height Gauges

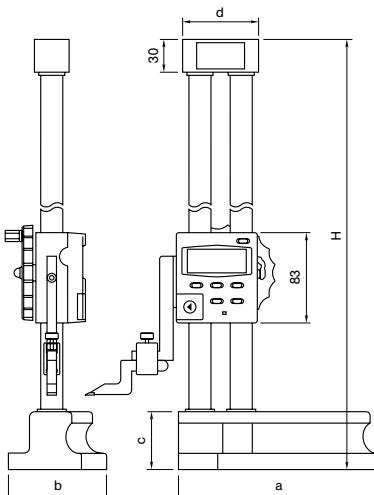
- Standard type in column form without data output.
- Zero-setting by simple button operation in any position.
- By means of the PRESET key, the first digital character (= hundredth) can be set to any value.

Series 192

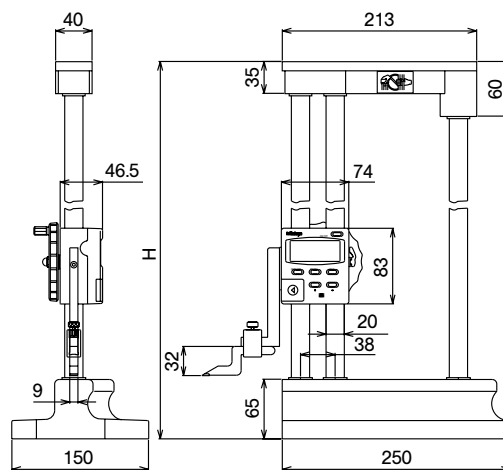


192-613

Measuring range mm	No.	Resolution mm	Error limits mm	a mm	b mm	c mm	d mm	H mm	Mass kg
0- 300	192-613	0,01	0,02	135	91	45	63	475	4,7
0- 600	192-614	0,01	0,05	180	120	54	70	802	9,5
0-1000	192-615	0,01	0,07	250	150	65	213	1228	19,8



192-613 / -614



192-615

Functions	Series 192
ZERO	●
HOLD	●
PRESET	●

Specifications

Accuracy: Factory specification

Protection: IP-40

Display: 6 digit LCD display plus sign (-), Character height 10 mm

Delivered including scriber, scriber holder, 1 battery and cover

Optional accessories

No. 900321 Clamping device (with dovetail guidance and holder dia. 8 and 4 mm)

No. 953638 Holder (9 x 9 mm) for securing dial indicators or probe gauges to the height gauge and scriber devices, length: 50 mm



Clamping device
(with dovetail guidance)



Holder

Consumables Spares

No. 055AA217D Battery CR 2032

No. 450291 Cover (300 mm)

No. 450292 Cover (600 mm)

No. 450290 Cover (1000 mm)

Scriber and Scriber holder see page 157

„DIGIMATIC“ HDM-A Height Gauges

- Robust type in column form with data output and connection facility for a signal contact (optional accessory).

Series 192

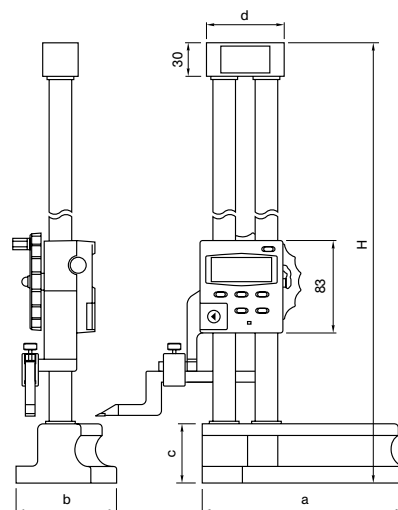


192-663

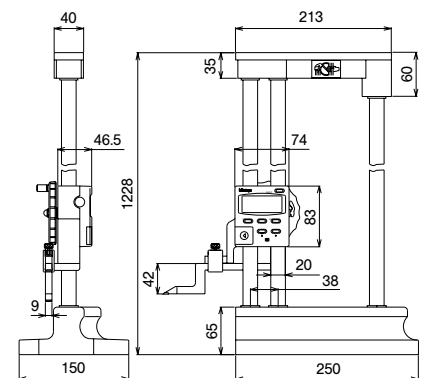


Height gauge with electronic probe

Measuring range mm	No.	Resolution mm	Error limits mm	a mm	b mm	c mm	d mm	H mm	Mass kg
0- 300	192-663	0,01	0,02	149	100	48	70	510	6,5
0- 600	192-664	0,01	0,04	180	120	54	70	802	9,5
0-1000	192-665	0,01	0,06	250	150	65	213	1228	19,8



192-663 / -664



192-665

Functions	Series 192
ZERO	●
HOLD	●
PRESET	●
ABS (absolute measurement)	●
Battery control	●
Data output	●

Specifications

Accuracy: Factory specification
 Protection: IP-40
 Display: 6 digit LCD display plus sign (-),
 Character height 10 mm

Delivered including scriber, scriber holder,
 1 battery and cover

Optional accessories

- No. 192-007 Electronic probe
- No. 192-005 Scribing probe
- No. 905338 Signal cable (1 m)
- No. 905409 Signal cable (2 m)
- No. 900321 Clamping device (with dovetail guidance and holder dia. 8 and 4 mm)
- No. 953638 Holder (9 x 9 mm) for securing dial indicators or probe gauges to the height gauge and scriber devices, length: 50 mm
- No. 900209 Holder (9 x 9 mm) for securing dial indicators or probe gauges to the height gauge and scriber devices, length: 100 mm



Clamping device
(with dovetail guidance)



Holder

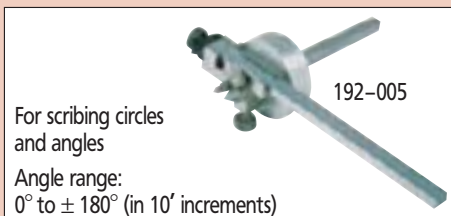
Consumables Spares

- No. 055AA217D Battery CR 2032
- No. 450291 Cover (300 mm)
- No. 450292 Cover (600 mm)
- No. 450290 Cover (1000 mm)

Scriber and Scriber holder see page 157



No. 192-007 electronic probe (set with holder
 No. 953638 and clamping device with dovetail
 guidance No. 900321)



For scribing circles
 and angles
 Angle range:
 0° to ± 180° (in 10' increments)

Optional accessories for Height Gauges

Depth measurement attachment

- This attachment enables to measure depth of bores, shoulder steps and other workpieces.
- The depth measurement stopper is provided with a steel ball as contact point.
- The holding arm has a cross section of 9 x 9 mm.
- Replaceable probe points.



900764



Sample application

Specifications

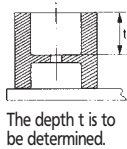
Minimum bore diameter: 5,5 mm
Maximum measuring depth: 80 mm

Electrical contact probe

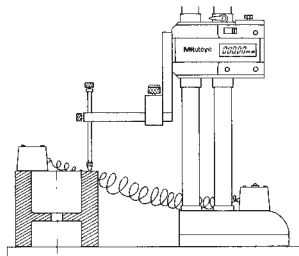
- For measuring and scribing on hard stone plates.
- The red control lamp lights up when the scriber or feeler has touched the workpiece. This prevents damages of the workpiece surface and increases the measuring accuracy.



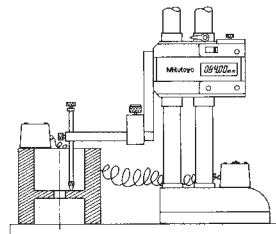
900872



The depth t is to be determined.



Probing of the upper surface. Reset the display when the control lamp lights up.



Probing the lower surface. Read the value when the control lamp lights up.

Specifications

2 magnetic feet: \varnothing 35 mm
Power supply: Battery H-2 D
or 2 x PR 44; 1,4 V
(optional accessory)
Cable length: 1,5 m (\varnothing 1 mm)
Mass: 60 g

Optional accessories:

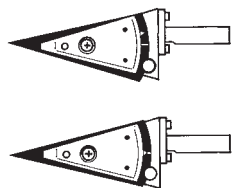
No. 011372 Battery PR 44; 1,4 V
No. 905353 Battery Adapter

Center master

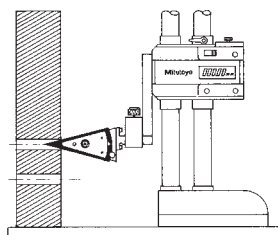
- Center probe to determine the center distance between bores. The bore is centered when the pointer matches the white line.



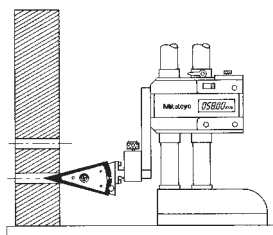
951144



The center distance between the bores is to be determined.



Centering of the first bore and zero-setting of the display.



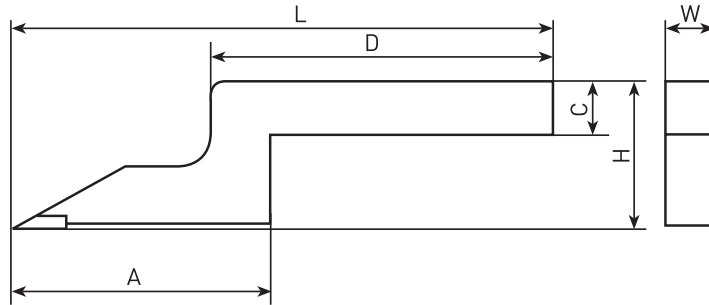
Centering of the second bore. The center distance of the bore can be read from the display.

Specifications

Maximum bore to be measured: \varnothing 38 mm
Minimum bore to be measured: \varnothing 1 mm
Stem: 9 x 9 mm

Optional accessories for Height Gauges

Selection
of scribers and scriber holders.



Scriber No.	L mm	H mm	A mm	C mm	D mm	W mm	Scriber holder No.	Height Gauges No.
07GZA000	80	32 ± 0,1	43	9 ± 0,1	47	9 ⁰ _{0,03}	07GZA002 or 05GZA033	192-130 192-132 192-133 192-613 192-614 192-615 514-102 514-106 (570-228) (570-229) 570-302 570-304
900173	47	25 ± 0,1	22	12,7 ⁰ _{0,05}	32	6,35 ⁰ _{0,03}	07GZA004 or 901338	506-207 570-227
905200	150	42 ± 0,1	58	9 ± 0,1	105	9 ⁰ _{0,03}	07GZA002 or 05GZA033	192-663 192-664 192-665 514-108 570-230

Scriber holder plastic



07GZA002

Scriber holder Metal u-shaped design



05GZA033

Linear height gauge LH-600 C / CG "Linear Height"

- Excellent accuracy.
- Pneumatic drive mechanism.
- Self-explanatory control pad with menu control in display.
- Easy to read LCD-Display allows.
- Automatic sequences of pre-learnt part programs.
- GO/NG-display at each measurement.
- Mains-independent operation with rechargeable battery.
- Simple handling with low weight.
- RS-232 C data output port.
- DIGIMATIC data input for digital indicators e.g. for perpendicularity.

Series 518



$(1.3 + 0.6 L/600) \mu\text{m}$



Holding grip

518-331D-21 without grip
518-332D-21 with grip

No.	Measuring range mm	Stroke mm	Measuring force N	Mass kg
518-331 D-21	0-972	600	1	24
518-332 D-21*	0-972	600	1	24

* with grip



Specifications

Measuring range:	0-972 mm
Travel range:	600 mm
Resolution (selectable):	0,0001/0,001/0,01/0,1 mm
Accuracy	
Measuring accuracy:	$(1,3 + 0,6L/600) \mu\text{m}$ L = measuring length in mm
Repeatability (2 σ):	plane: 0,5 μm bore: 1 μm
Squareness :	6 μm
Straightness :	4 μm
Drive method:	manual/motor-driven (5-40 mm, 7 steps)
Carriage weight compensation:	compensation weights
Method of movement:	suspension/semi-suspension; air bearing
Air supply:	built-in compressor
LCD-Display:	graphic LCD, 320 x 240 dots (with backlight)
Display language:	english / german / french / portuguese / italian / dutch / spanish / swedish / japanese / czech / slovenian / hungarian / polish / traditional chinese / korean
Number of programs:	50 (maximum)
Number of data:	60.000 (maximum)
Power supply:	AC adapter/rechargeable battery (Ni-MH)
Operation time:	approx. 5 hours

Functions for 1D/ 2D measurement/calculation

- Height measurement (upper/lower surface)
- Diameter (bore/shaft)
- Width measurement (internal/external)
- Max./min. height measurement (top/bottom surface)
- Angle calculation
- Distance calculation
- 2D element calculation:
- Angle calculation (element/element)
- Angle calculation (element/X-axis)
- 2D distance calculation (element/element)
- 2D distance calculation (element/reference point)
- Pitch circle calculation
- 2D coordinate system setting
- Polar coordinate system support
- Squareness, straightness, inclination and flatness determination
- Arithmetical calculations
- DIGIMATIC data input

Tolerance judgement

- Tolerance/nominal value setting
- Tolerance judgement result output
- Alarm for out of tolerance

Probe operation

- Probe type setting
- Probe tip diameter measurement
- Probe data registration/recall
- Probe position change

Statistic processing

- Basic statistical processing
- Histogram

Optional accessories for "Linear Height"

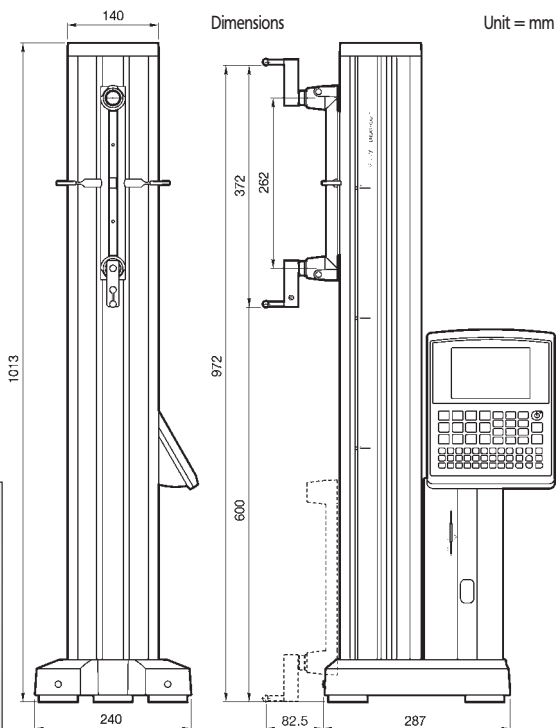
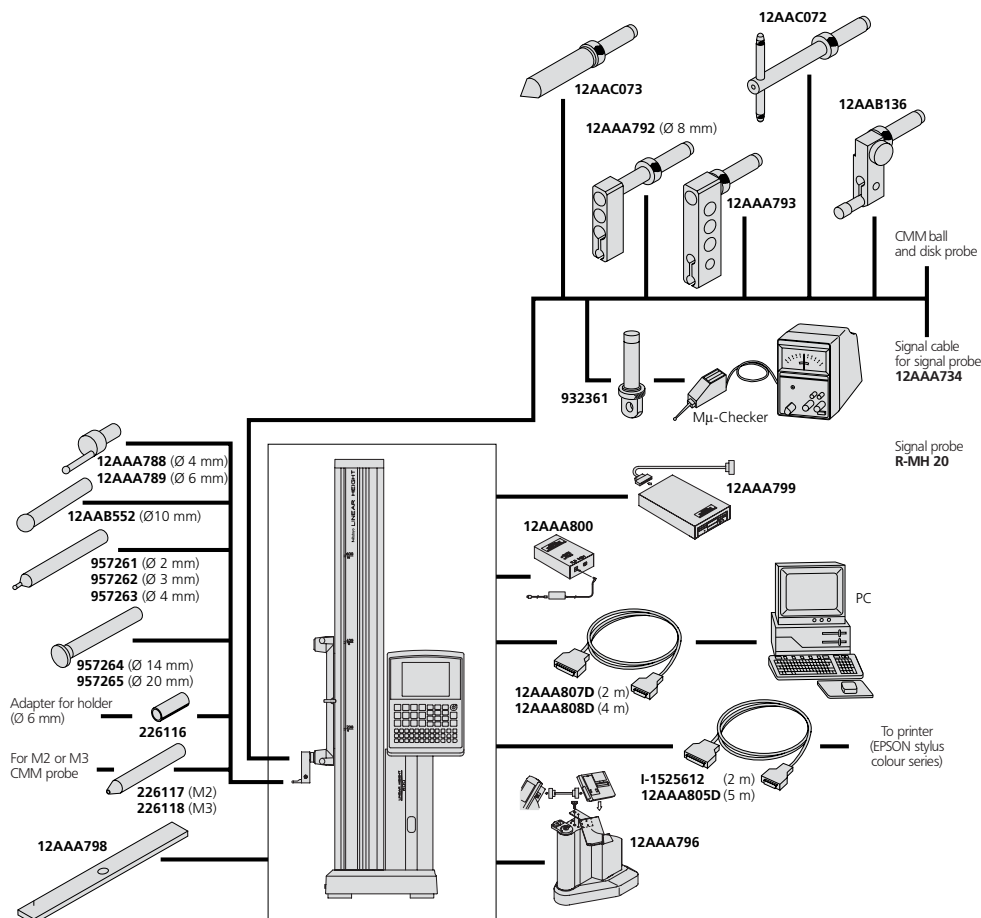
Standard accessories

- No. 12AAC080 Ball probe \varnothing 5 mm with receptacle
- No. 12AAA715 Setting block
- No. 357651 Mains adapter
- No. 223587 Cover
- No. 12AAA786 Spare battery pack

Optional accessories

Bestell-No.	Description
12AAA787	Setting block (also for conical probes)
12AAF666	Ball probe \varnothing 1 mm
957261	Ball probe \varnothing 2 mm
12AAF667	Ball probe \varnothing 2 mm (with ruby ball)
957262	Ball probe \varnothing 3 mm
957263	Ball probe \varnothing 4 mm
12AAF672	Ball offset probe \varnothing 1 mm (eccentric type)
12AAF673	Ball offset probe \varnothing 3 mm (eccentric type)
12AAA788	Ball offset probe \varnothing 4 mm (eccentric type)
12AAA789	Ball offset probe \varnothing 6 mm (eccentric type)
12AAF670	Disk probe \varnothing 5 mm
12AAF671	Disk probe \varnothing 10 mm
957264	Disk probe \varnothing 14 mm
957265	Disk probe \varnothing 20 mm
226116	Adapter for holder of probes with \varnothing 6 mm
226117	Adapter for Renishaw probes with M2 thread
226118	Adapter for Renishaw probes with M3 thread
12AAB552	Ball probe \varnothing 10 mm (coaxial type)
12AAF668	Ball probe \varnothing 10 mm (coaxial type), stem length 82 mm
12AAF669	Ball probe \varnothing 10 mm (coaxial type), stem length 120 mm
12AAB136	Cylindrical probe \varnothing 10 mm with receptacle
12AAC072	Depth probe
12AAC073	Taper probe \varnothing 20 mm
12AAA793	Probe extension holder
12AAA792	Dial indicator (stem \varnothing 8 mm) holder
932361	Mu-Checker lever head holder
12AAF674	Compensation weight
12AAA796	Thermal receipt printer (230 V)
12AAA802	Thermal print paper (10 rolls)
Printer	Page printer recommended: EPSON Stylus Color Series
I-1525612	Connecting cable for printer (2 m)
12AAA805D	Connecting cable for printer (5 m)
12AAA799	Floppy disk drive unit The floppy disk drive allows for storage and retrieval of measuring programs, measurement results, and measuring conditions
12AAA800	Battery charger
12AAF675	Spare battery pack
12AAA807 D	RS-232 C cable (2 m)
12AAA808 D	RS-232 C cable (5 m)
12AAA879	Workpiece for training (plastics)

Series 518



ABSOLUTE Linear height gauge „QM-Height“

- The QM-Height achieves maximum accuracy and offers all data processing functions necessary for height measurement and its analysis.
- It is just as easy to use as conventional height gauges.
- For a wide range of measurement tasks, various size models are available as are a large selection of special accessories.
- With the new ABSOLUTE scale, positional data is retained even when the instrument is switched off and then on again. The zero point does not have to be reset after switching on.
- Unlimited travel speed.
- Icons on the keys facilitate function selection. Frequently-used calculations of inside diameters, outside diameters and distances are integrated into the keypad as icons.
- Measurement of inside/outside diameters in a single measurement process (determination of maximum point on the circle and processing with scribing measurement).
- Easy-to-read display with large figures.
- The results of the tolerance evaluation are numerically and visually displayed by the red and green background illumination and with “-NG, GO” or “+NG”.
- With the slide lifting device in combination with unlimited travel speed, even long travel distances are quick and effortless to reset.
- Both DIGIMATIC and RS-232 C outputs are standard.

Series 518

ABSOLUTE™
Absolute System Patented by MITUTOYO

No.	Measuring range Stroke mm	Perpendicularity *2	Mass
		μm	kg
518-224	0-350	8	22
518-226	0-600	13	27

*2 When using the inductive probe (519-321) and Mμ-Checker (519-411).



„NG“



„GO“



518-226

Grip (standard accessories)



Inside measurement



Height measurement



DIGIMATIC- and RS-232 C data output port (standard)

Specifications

Permitted length deviations:	(2,8 + 0,5 L/100) μm
Resolution:	0,001/0,005 mm
Repeatability *1:	1,8 μm (2 σ)
Guiding method:	Rolling bearing
Driving method:	Manual
Measuring system:	Electrostatic capacitance linear encoder
Measuring force:	1,6 ± 0,5 N
Display:	LCD
Battery:	LR6 x 4 / AC adapter (optional)
Battery life:	Appr. 800 hours (depending on measuring mode)
Temperatur (operation):	10 – 30 °C
Humidity (operation):	20 – 90 %
Temperature (storage):	-10 – 50 °C
Humidity (storage):	5 – 90 %

*1 When using the standard Ø 5 mm stepped probe in normal mode (display 1 μm).

Optional Accessories for „QM-Height“

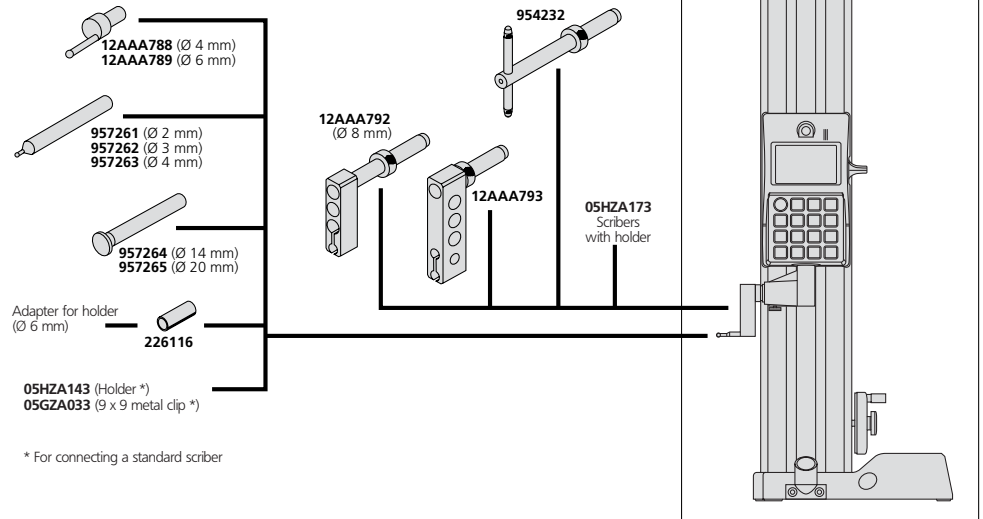
Series 518

Standard accessories

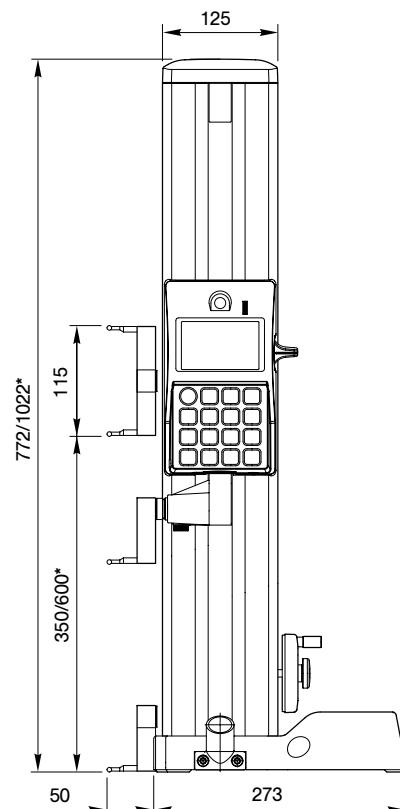
- No. 12AAA715 Setting block
- No. 05HZA148 Ball probe Ø 5 mm with receptacle
- No. 011037 Batteries 4 x LR6
- Grip
- Rubber cap

Optional accessories

Bestell-No.	Description
957261	Ball probe Ø 2 mm
957262	Ball probe Ø 3 mm
957263	Ball probe Ø 4 mm
12AAA788	Ball contact point Ø 4 mm (eccentric type)
12AAA789	Ball contact point Ø 6 mm (eccentric type)
957264	Disk probe Ø 14 mm
957265	Disk probe Ø 20 mm
226116	Adapter for holder for probe with 6 mm diameter
12AAC072	Depth probe
12AAA793	Probe extension holder
12AAA792	Dial indicator holder
05HZA173	Scriber with holder
05HZA143	Holder for securing scribers 9 x 9 mm
05GZA033	Scriber holder (metal clip) to secure scribers 9 x 9 mm
936937	DIGIMATIC cable (1 m)
965014	DIGIMATIC cable (2 m)
264-504 D	DIGIMATIC Mini Processor DP-1VR
526688 D	AC adapter

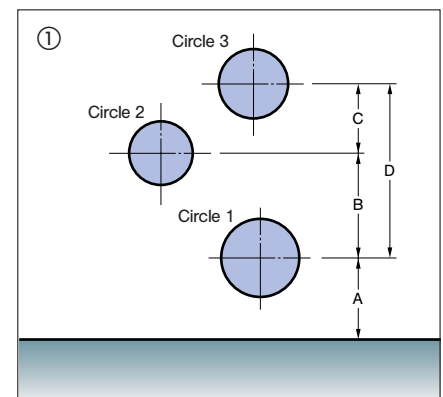


* For connecting a standard scriber



Function selection:

- ① Distances A, B, C and D can be outputted by calling up the internal memory.



- ② Max. - min or difference measurement

