BOMBAY TOOLS SUPPLYING AGENCY

Calipers

An industry standard measuring tool

ABSOLUTE Inside Caliper SERIES 573, 536 — Knife-edge/Inside Groove/Point Jaw Type

MeasurLink® ENABLED
Data Management Software by Mitutoyo

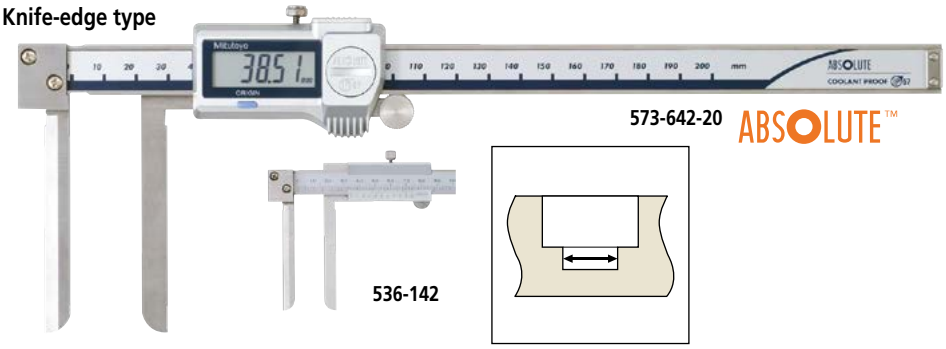
Products equipped with the measurement data output function can be connected to the measurement data network system MeasurLink (refer to page A-5 for details).

IP67

TÜVRheinland CERTIFIED
www.tuv.com
ID 0000045042

- Dedicated caliper for inside measurement.
- Digimatic models are IP67 Absolute type. Slider action is smooth, firm and comfortable.
- Allows integration into statistical process control and measurement systems for models with measurement data output connector. (Refer to page A-3.)
- Digimatic models **573-645-20** and **573-646-20** need the compensation value (engraved on the fixed jaw) added to the displayed value for correct measurement. However, the featured Offset function enables this to be done easily just by pressing the OFFSET button after the jaws are brought together and the ORIGIN button is pressed.

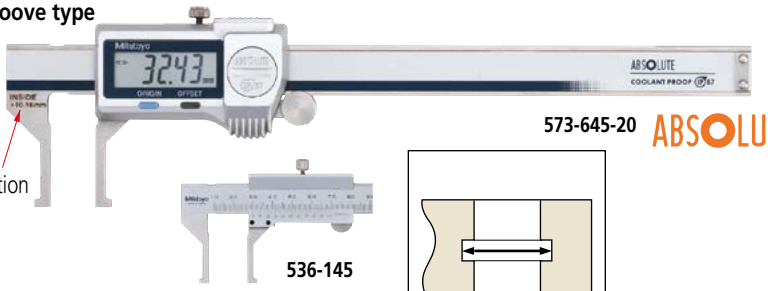
Knife-edge type



573-642-20 ABSOLUTE™

536-142

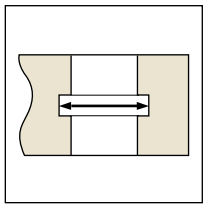
Inside groove type



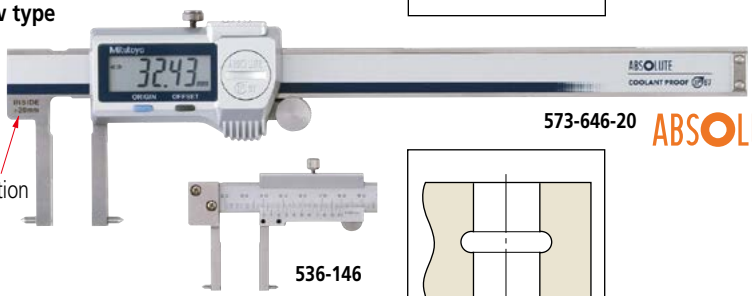
573-645-20 ABSOLUTE™

Compensation value

536-145



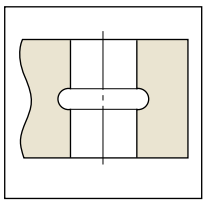
Point jaw type



573-646-20 ABSOLUTE™

Compensation value

536-146



Technical Data

- Accuracy: Refer to the list of specifications. (excluding quantizing error for Digimatic models)
- Resolution*1: 0.01 mm or 0.00005 in/0.01 mm
- Graduation*2: 0.05 mm
- Display*1: LCD
- Scale type*1: ABSOLUTE electromagnetic induction linear encoder
- Max. response speed*1: Unlimited
- Battery: SR44 (1 pc), **938882**, for initial operational checks (standard accessory)
- Battery life*1: Approx. 5 years under normal use
- Dust/Water protection level*1: IP67 (IEC 60529)*3

*1 Digimatic models
*2 Analog models
*3 Rustproofing shall be applied after use if caliper was in contact with coolant.

Optional Accessories for Digimatic Models

For details, refer to page A-27.

- Connecting cables for **IT/DP/MUX**
  05CZA624: SPC cable with data button (1 m)
  05CZA625: SPC cable with data button (2 m)
- USB Input Tool Direct
  06AFM380A: SPC cable for **USB-ITN-A** (2 m)
- Connecting cables for **U-WAVE-T**
  02AZD790A: SPC cable with data button (160 mm)
  02AZE140A: SPC cable for foot switch

Wireless Data Output U-WAVE fit

- **U-WAVE-TC**: **264-620** (IP67 type)
  264-621 (Buzzer type)
- **U-WAVE-TCB Transmitter**
  (**Mitutoyo *Bluetooth*® U-WAVE**)
  264-624 (IP type)
  264-625 (Buzzer type)
  Refer to page A-15 for details.
- Connecting unit for **U-WAVE-TC/TCB**
  02AZF310 (IP67 type)
  Note: IP67 model is water/dust-proofed suitable for the factory floor.
  Buzzer type is not water/dust-proofed.
  Refer to pages A-16 and A-18 for details.
  Note: Cannot be used with **573-642-20**, **573-643-20** and **573-742-20**

SPECIFICATIONS

Metric Digimatic model

Order No.	Range (mm)	Accuracy (mm)	Remarks
573-642-20	10 - 200	±0.05	Knife-edge type, Measurable min.
573-643-20*1	10 - 200	±0.05	Knife-edge type, Measurable min.
573-645-20*2	10.1 - 160	±0.05	Inside groove type, Measurable min.
573-647-20*1	10.1 - 160	±0.05	Inside groove type, Measurable min.
573-646-20*2	20.1 - 170	±0.05	Point jaw type, Measurable min.
573-648-20*1	20.1 - 170	±0.05	Point jaw type, Measurable min.

*1 Without thumb roller
*2 Includes the offsetting function, which indicates the actual measurement value.

Metric Analog model

Order No.	Range (mm)	Accuracy (mm)	Remarks
536-142	10 - 200	±0.12	Knife-edge type, Measurable min.
536-145	10.1 - 150	±0.05	Inside groove type, Measurable min.
536-146	20.1 - 150	±0.05	Point jaw type, Measurable min.
536-147	30.1 - 300	±0.08	Point jaw type, Measurable min.
536-148	70.1 - 450	±0.10	Point jaw type, Measurable min.
536-149	70.1 - 600	±0.12	Point jaw type, Measurable min.

Inch/Metric Digimatic model

Order No.	Range (in)	Accuracy (in)	Remarks
573-742-20	0.4 - 8	±0.002	Knife-edge type, Measurable min.
573-745-20*	0.404 - 6.4	±0.002	Inside groove type, Measurable min.
573-746-20*	0.804 - 6.8	±0.002	Point jaw type, Measurable min.

* Includes the offsetting function, which indicates the actual measurement value.

Mitutoyo reserves the right to change any or all aspects of any product specification, including prices, designs and service content, without notice.

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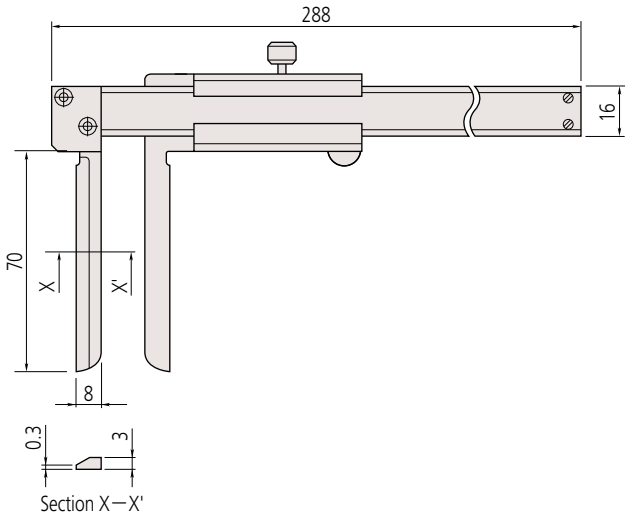
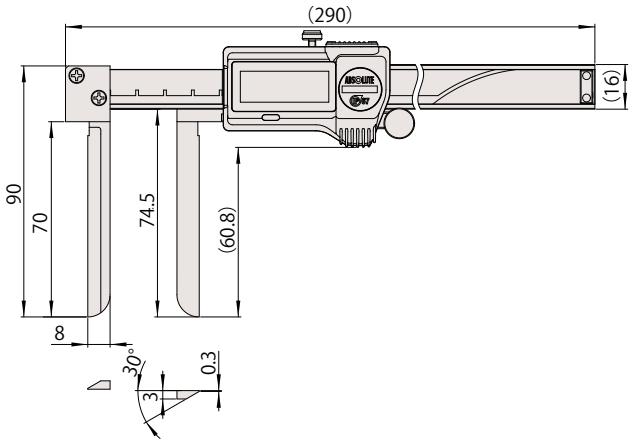
DIMENSIONS

Unit: mm

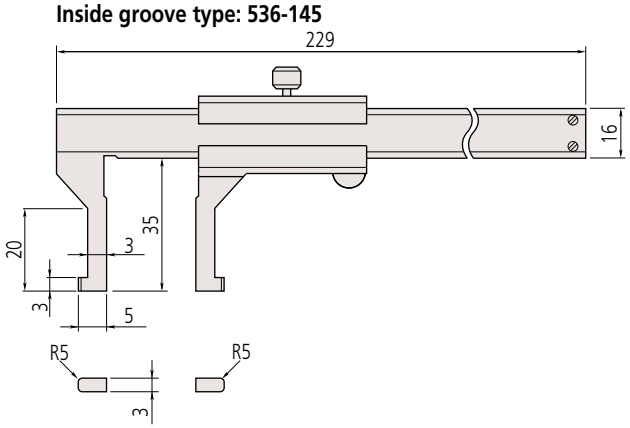
Knife-edge type: 536-142



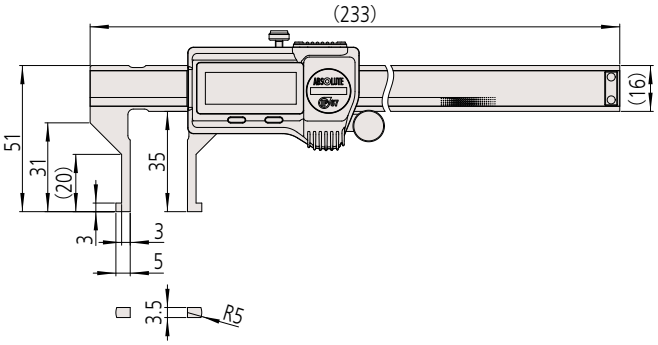
Knife-edge type: 573-642-20, 573-643-20, 573-742-20



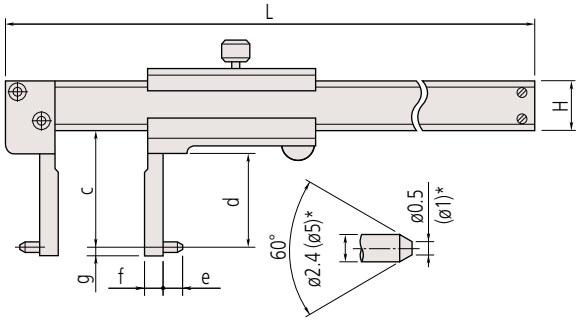
Inside groove type: 536-145



Inside groove type: 573-645-20, 573-647-20, 573-745-20

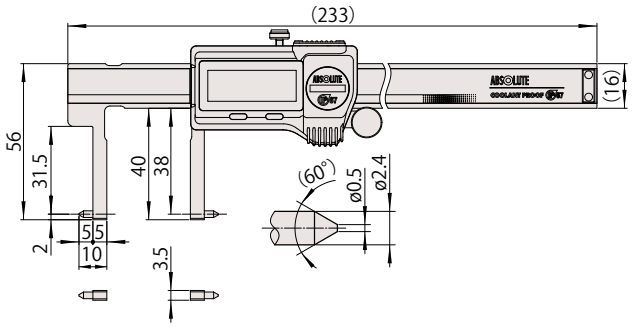


Point jaw type: 536-146, 147, 148, 149



*Applies to **536-148** or **149**

Point jaw type: 573-646-20, 573-648-20, 573-746-20



Range (mm)	c	d	e	f	g	H	L
150	38	31	5	5	2	16	229
300	98	89	5	10	2	20	403
450	145	136	10	25	5	25	610
600	145	136	10	25	5	25	750

Note: Models with a measuring range of more than 300 mm have slightly different appearance. For details, contact our Customer Support Center.

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