

Calipers

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

- Specially designed for inside measurements. Select the right model for your workpiece shape.

Knife-edge type



573-642-20

Inside groove type



573-645-20

Point jaw type



573-646-20

SPECIFICATIONS

Metric		Digimatic model			
Code No.	Range (mm)	Resolution (mm)	Maximum permissible error (mm)*3		Remarks
			EMPE	SMPE	
573-642-20	10 - 200	0.01		±0.05	Knife-edge type, Measurable min.
573-643-20*1	10 - 200				Knife-edge type, Measurable min.
573-645-20*2	10.1 - 160				Inside groove type, Measurable min.
573-647-20*1	10.1 - 160				Inside groove type, Measurable min.
573-646-20*2	20.1 - 170		±0.03		Point jaw type, Measurable min.
573-648-20*1	20.1 - 170				Point jaw type, Measurable min.

Inch / Metric		Digimatic model			
Code No.	Range	Resolution	Maximum permissible error*3		Remarks
			EMPE	SMPE	
573-742-20	0.4 - 8 in/ 10 - 200 mm	0.0005 in/ 0.01 mm		±0.002 in/ ±0.05 mm	Knife-edge type, Measurable min.
573-745-20*2	0.404 - 6.4 in/ 10.26 - 160.16 mm			±0.0015 in/ ±0.03 mm	Inside groove type, Measurable min.
573-746-20*2	0.804 - 6.8 in/ 20.42 - 170.32 mm				Point jaw type, Measurable min.

- Dust/Water protection level: IP67 (IEC 60529)*4
- Power source: SR44 battery (1 pc.), **938882** included as standard (for operational checks)
- Battery life: Approx. 5 years under normal use
- Position detection method: ABSOLUTE electromagnetic induction linear encoder
- Response speed: Unlimited
- *1 Without thumb roller
- *2 Includes the offsetting function, which indicates the actual measurement value.
- *3 The Partial Surface Contact Error (EMPE) and Shift Error (SMPE) are terms defined by ISO 13385-1:2019.
- *4 Rustproofing shall be applied after use if caliper was in contact with coolant.

MeasurLink[®] ENABLED Data Management Software by Mitutoyo

U-WAVE^{fit}

ABSOLUTE[™]

IP67

TÜV Rheinland
CERTIFIED
Dust- and
Water-
Protected
www.tuv.com
ID 000044942

Measurement example



Optional Accessories

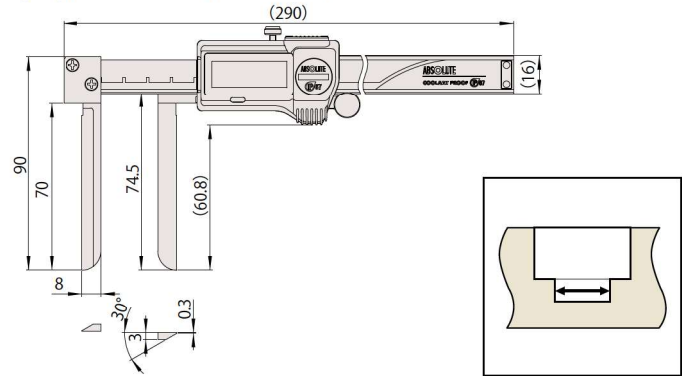
Code No.	Type	Description
264-020	—	USB Input Tool Series USB Keyboard Signal Conversion Type IT-020U
05CZA624	A	Connection cable for IT/DP/MUX (1 m)
05CZA625	A	Connection cable for IT/DP/MUX (2 m)
06AFM380A	A	USB Input Tool Direct (2 m)
02AZD730G	IP67	U-WAVE-T
02AZD880G	Buzzer	U-WAVE-T
02AZE200	—	U-WAVE-T mounting bracket
02AZD790A	A	Connection cable for U-WAVE-T (160 mm)
02AZE140A	A	Connection cable for U-WAVE-T For foot switch
264-620	IP67	U-WAVE-TC
264-621	Buzzer	U-WAVE-TC
264-624	IP67	U- WAVE-TCB Transmitter
264-625	Buzzer	U- WAVE-TCB Transmitter
02AZF310	IP67	Connecting unit for U-WAVE-TC/TCB

Note: **U-WAVE-TC/TCB** cannot be used with Knife-edge Type (573-642-20, 573-643-20 and 573-742-20).

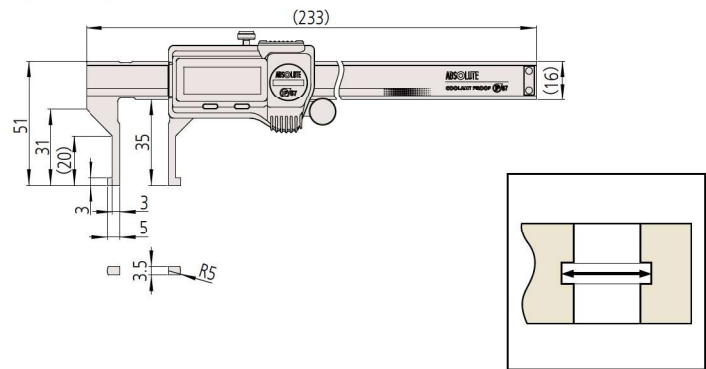
DIMENSIONS

Unit: mm

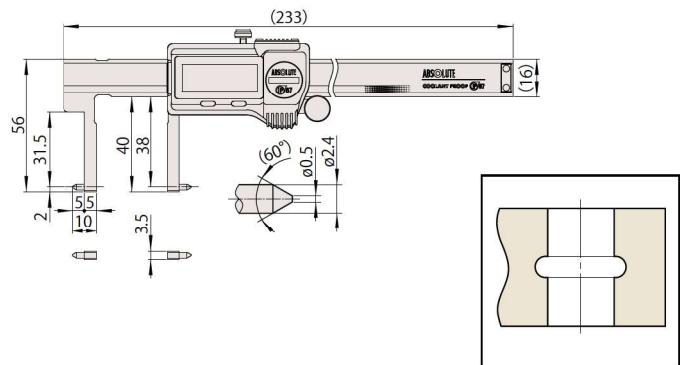
Knife-edge type: 573-642-20, 573-643-20, 573-742-20



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



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

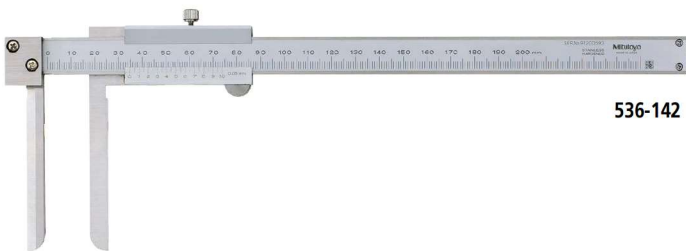


Calipers

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

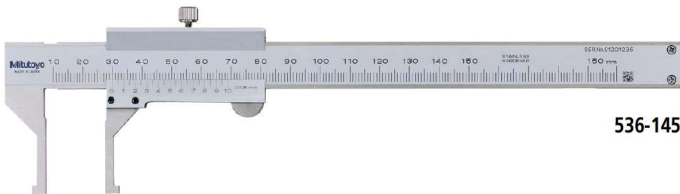
- Specially designed for inside measurement.
Select the right model for your workpiece shape.

Knife-edge type



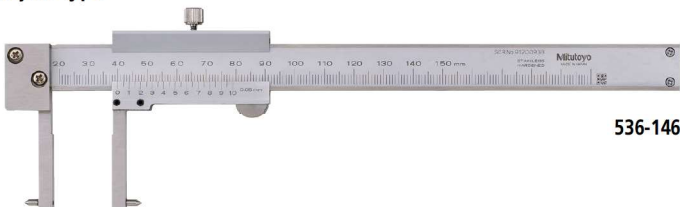
536-142

Inside groove type



536-145

Point jaw type



536-146

SPECIFICATIONS

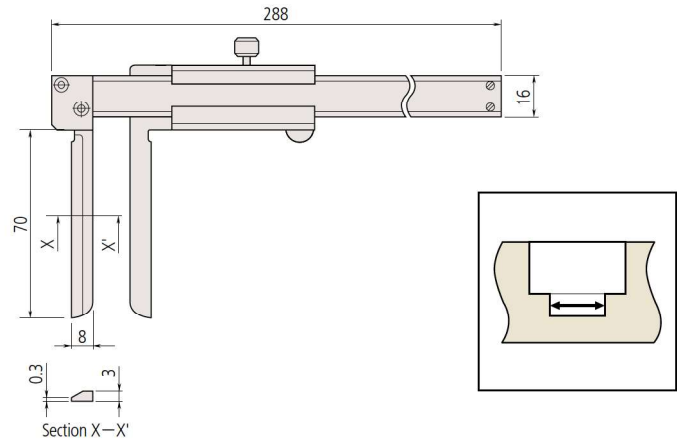
Metric		Analog model			
Code No.	Range (mm)	Graduation (mm)	Maximum permissible error (mm)*		Remarks
			EMPE	SMPE	
536-142	10 - 200	0.05		±0.12	Knife-edge type, Measurable min.
536-145	10.1 - 150			±0.05	Inside groove type, Measurable min.
536-146	20.1 - 150				Point jaw type, Measurable min.
536-147	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.

* The Partial Surface Contact Error (EMPE) and Shift Error (SMPE) are terms defined by ISO 13385-1:2019.

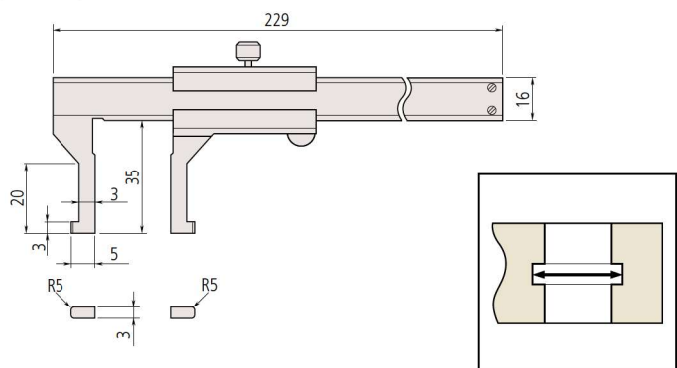
DIMENSIONS

Knife-edge type: 536-142

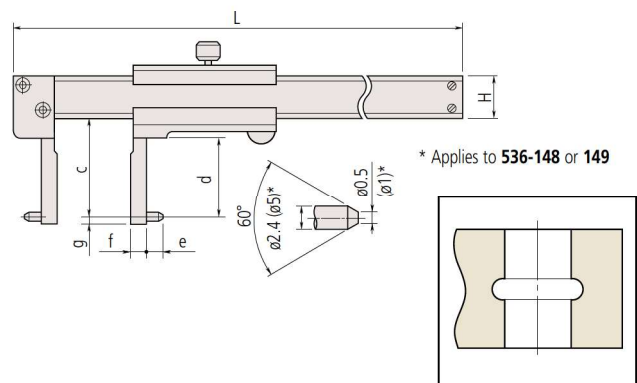
Unit: mm



Inside groove type: 536-145



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



* Applies to 536-148 or 149

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							750

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