

# Calipers

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

- Dedicated caliper for inside measurement.
- Digimatic models are IP67 Absolute type. Slider action is smooth, firm and comfortable.

Knife-edge type



573-642-20

Inside groove type



573-645-20

Point jaw type



573-646-20

## SPECIFICATIONS

| Metric       |            | Digimatic model |                                  |       |                                     |
|--------------|------------|-----------------|----------------------------------|-------|-------------------------------------|
| Order 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   |                 |                                  | ±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 |                 |                                  | ±0.03 | Point jaw type, Measurable min.     |
| 573-648-20*1 | 20.1 - 170 |                 |                                  | ±0.03 | Point jaw type, Measurable min.     |

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

- Dust/Water protection level: IP67 (IEC 60529)\*4
- Battery: SR44 (1 pc.), **938882**, for initial operational checks (standard accessory)
- Battery life: Approx. 5 years under normal use
- Scale type: ABSOLUTE electromagnetic induction linear encoder
- Max. response speed: Unlimited
- \*1 Without thumb roller
- \*2 Includes the offsetting function, which indicates the actual measurement value.
- \*3 Partial Surface Contact Error, EMPE and Shift Error, SMPE are terms (notations) used in ISO 13385-1:2019.
- \*4 Rustproofing shall be applied after use if caliper was in contact with coolant.

### Measurement example



### Optional Accessories

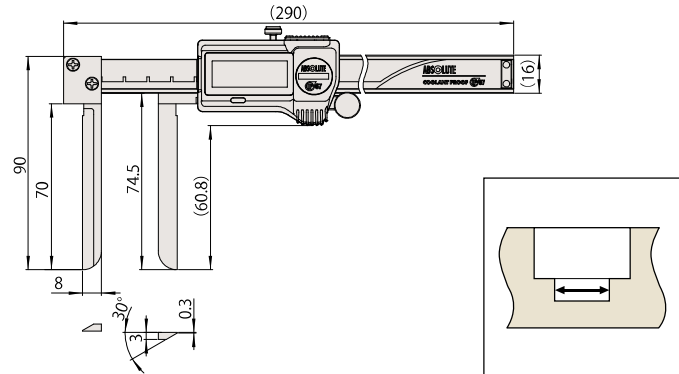
| Order No. | Type   | Description                                    |
|-----------|--------|--|
| 05CZA624  | A      | Connecting cables for IT/DP/MUX (1 m)          |
| 05CZA625  | A      | Connecting cables for IT/DP/MUX (2 m)          |
| 06AFM380A | A      | USB Input Tool Direct (2 m)                    |
| 02AZD790A | A      | Connecting cables for U-WAVE-T (160 mm)        |
| 02AZE140A | A      | Connecting cables 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).

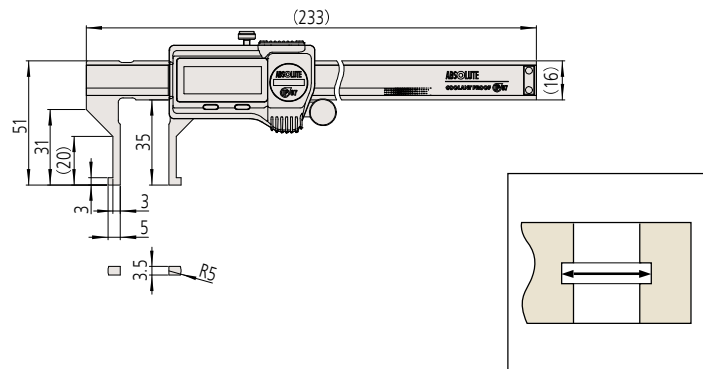
## DIMENSIONS

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

