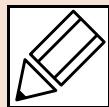


# Quick Guide to Precision Measuring Instruments



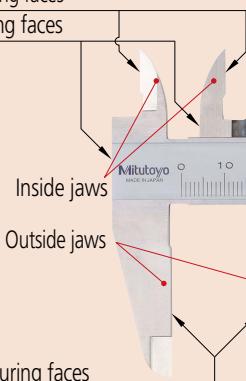
## Calipers

### Nomenclature

#### Vernier Caliper

Inside measuring faces

Step measuring faces



Screw, gib setting

Gib, slider

Locking screw

Screw, gib pressing

Beam

Main scale  
Reference surface



Inside jaws

Outside jaws

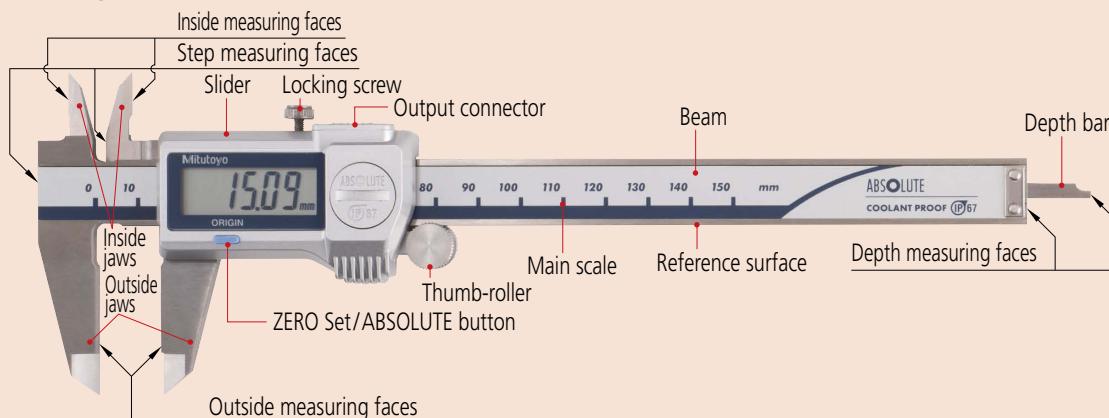
Outside measuring faces

Depth bar

Thumbwheel

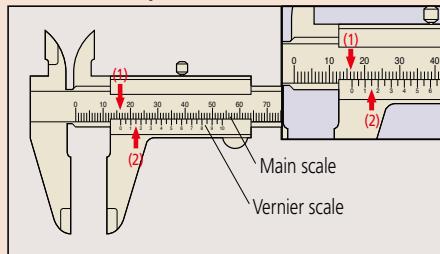
Vernier scale  
Slider

#### Absolute Digimatic Caliper



### How to Read the Scale

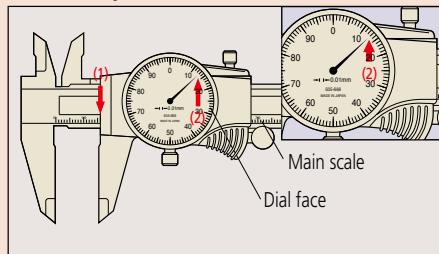
#### • Vernier Calipers



**Graduation** 0.05 mm

(1) Main scale	16 mm
(2) Vernier	0.15 mm
Reading	16.15 mm

#### • Dial Calipers



**Graduation** 0.01 mm

(1) Main scale	16 mm
(2) Dial face	0.13 mm
Reading	16.13 mm

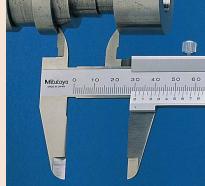
Note: Above left, 0.15 mm (2) is read at the position where a main scale graduation line corresponds with a vernier graduation line.

### Measurement examples

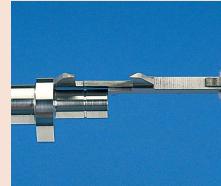
#### 1. Outside measurement



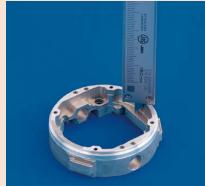
#### 2. Inside measurement



#### 3. Step measurement

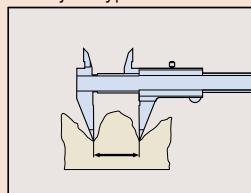


#### 4. Depth measurement



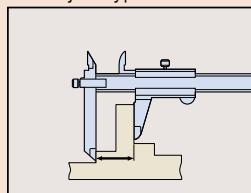
### Special Purpose Caliper Applications

#### Point jaw type



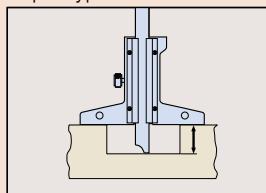
For uneven surface measurement

#### Offset jaw type



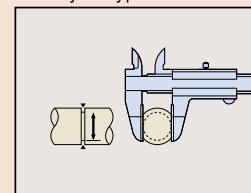
For stepped feature measurement

#### Depth type



For depth measurement

#### Blade jaw type



For diameter of narrow groove measurement