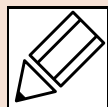


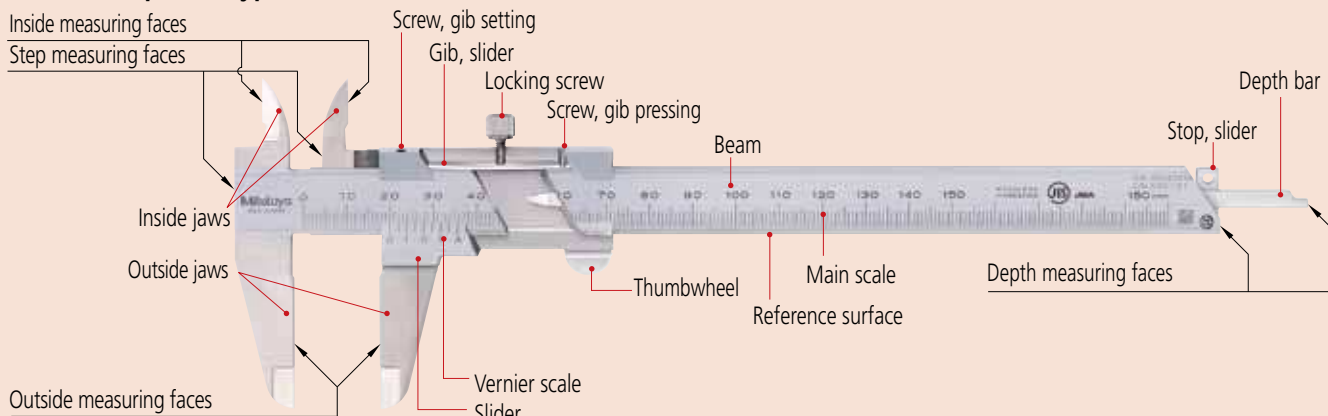
Quick Guide to Precision Measuring Instruments



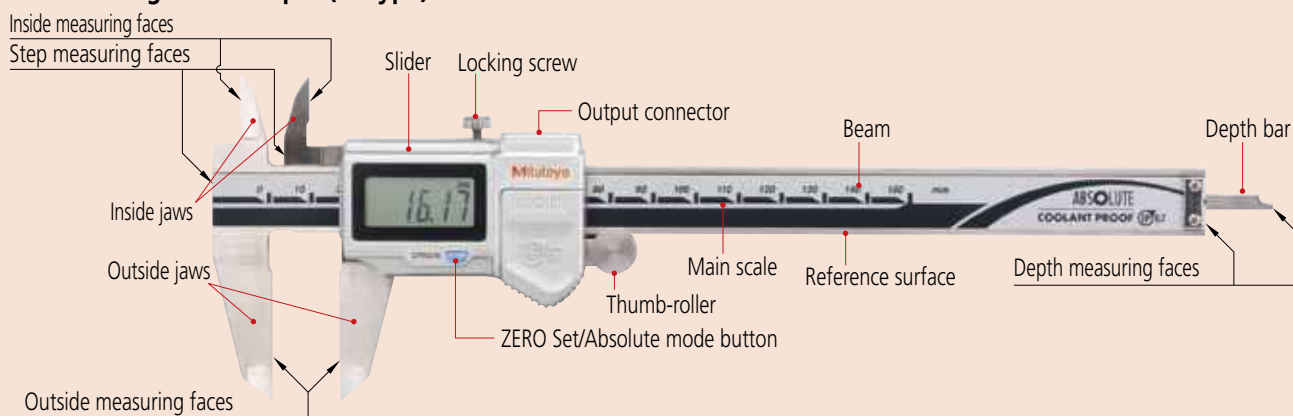
Calipers

Nomenclature

Vernier Caliper (M-type)

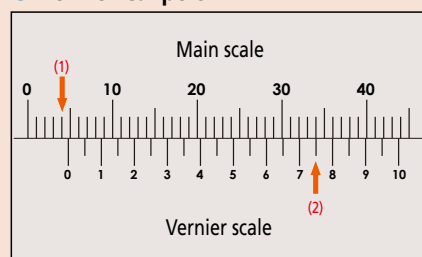


Absolute Digimatic Caliper (M-type)



How to Read the Scale

Vernier Calipers

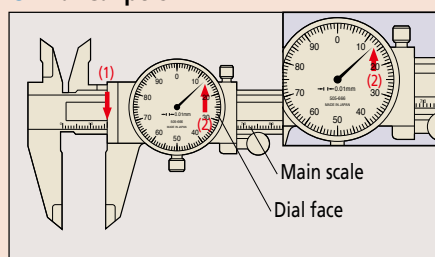


Graduation 0.05 mm

(1) Main scale reading	4.00 mm
(2) Vernier scale reading	0.75 mm
Caliper reading	4.75 mm

Note) Above left, 0.75 mm (2) is read at the position where a main scale graduation line corresponds with a vernier graduation line.

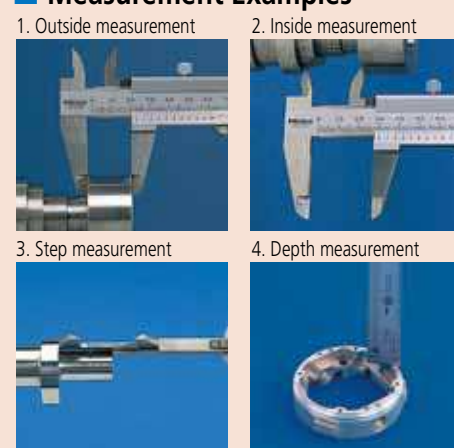
Dial Calipers



Graduation 0.01 mm

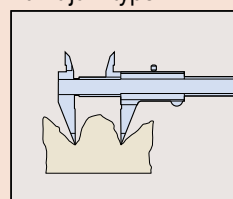
(1) Main scale reading	16 mm
(2) Dial face reading	0.13 mm
Dial Caliper reading	16.13 mm

Measurement Examples



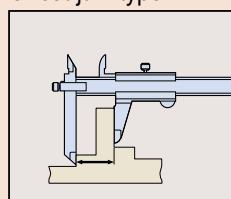
Special Purpose Caliper Applications

Point jaw type



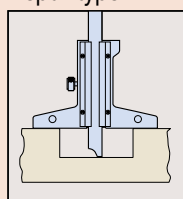
For uneven surface measurement

Offset jaw type



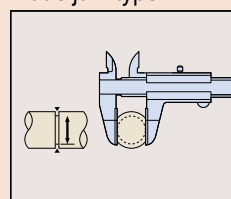
For stepped feature measurement

Depth type



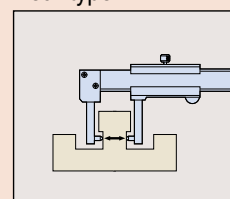
For depth measurement

Blade jaw type



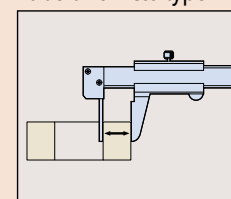
For diameter of narrow groove measurement

Neck type



For outside diameter measurement such as behind a shrouded recess

Tube thickness type



For tube or pipe thickness measurement