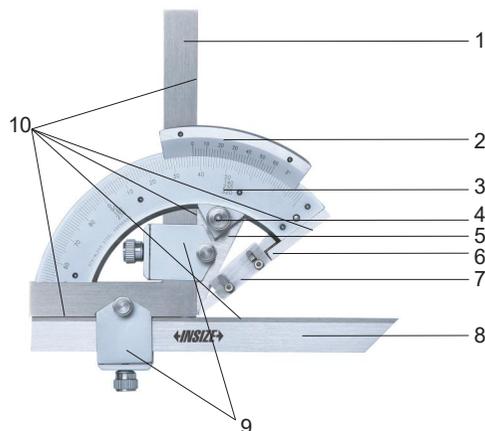


## Protractors

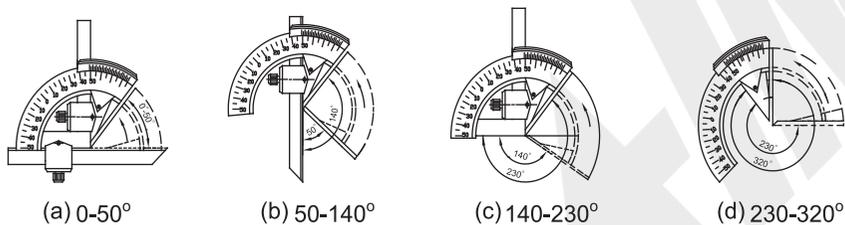
Code	Range	Graduation	Accuracy	Remark
2374-320	0-320°	2'	±2'	without positioning block
2374-320D	0-320°	2'	±2'	with positioning block



- 1- Square ruler
- 2- Cursor
- 3- Master ruler
- 4- Brake head
- 5- Sector plate
- 6- Base ruler
- 7- Positioning block
- 8- Ruler
- 9- Jam
- 10- Measuring surface

### 1. Combined protractor

Different measurement ranges require different combinations for measurement. The following diagram can be used for reference.



### 2. Wipe the surface of workpiece and the protractor with a clean cotton cloth before use.

---Visually observe the size of the measured angle, and then combine the protractor according to the size of the measured angle.

---For example, when measuring a workpiece, the angle is about 20°. You can combine the protractor according to the "combination when measuring 0°~50°" (see figure (a)).

---Adjust the relative position of square ruler and ruler, fasten them with the screws in the jam. Loosen the nut on the brake head and move the master ruler to adjust the angle between base ruler and ruler.

---when the angle is slightly larger than the measured angle, put the measured part of the workpiece between the measurement surfaces, and then turn the micro-motion device on the back of the sector plate until the measuring surfaces are in contact with the measured surface.

---Read the result when the measuring surfaces are in contact with the measured surface; the other method is to tighten the nut on the brake head to lock the master ruler, and take off the protractor for reading.

---When positioning is required, the positioning block can be moved down for positioning and move up when it is not needed, as shown in the right.

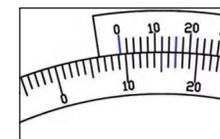


### 3. Reading (keep the line of sight perpendicular to the scale surface)

The reading result = the augend + the reading value of master ruler + the reading value of cursor.

Angle range	Augend
0-90°	0°
90-180°	90°
180-270°	180°
270-320°	270°

Master ruler reading: 9°  
 Cursor reading : 16'  
 Augend : 0°  
 reading: 9°16'



4. When using, please handle with care and do not turn the ruler too fast or too violently. Wipe clean with cotton cloth after use, put it in the box and store in a dry place. The verification must be performed regularly.

### 5. Application example diagram

