# Standard Dial Gauges

JIS B 7503

## 0.01mm

### Dial Gauges are widely used manufacturing plants.

- The stem, made of SK quench hardened with strength, is malfunction-free due to fastening.
- The shock-proof mechanism prevents gears from damage due to shocks arisen by abruptly pushing up the spindle.
- The turning section of the outer frame sealed by the O-ring and the back inside sealed by the packing are waterproof and dust-proof in construction.
- The back is increased in strength by four screws, and the lug can be turned 90 degrees in the installation way.

### <HG>

### High Precision Type

**107-HG**

**Graduation: 0.01mm**
**Range: 10mm**

- Indication error ±10μm
- Retrace error 4μm
- Includes accuracy certification
- Lug back

**107-DX**

**Graduation: 0.01mm**
**Range: 10mm**

- Durable type (Spindle $\phi$ 5mm)
- Lug back

**107**

**Graduation: 0.01mm**
**Range: 10mm**

- Lug back

**107F**

**Graduation: 0.01mm**
**Range: 10mm**

- Flat back

**107-SWA**

**Graduation: 0.01mm**
**Range: 10mm**

- Oil-proof type
- Flat crystal
- Contact point (X-2A)
- Lug back

**107-BL**

**Graduation: 0.01mm**
**Range: 10mm**

- Spindle pull-up back lever
- Lug back

**107F-RE**

**Graduation: 0.01mm**
**Range: 10mm**

- Spindle pull-up release (RE-1) 280 mm long
- Flat back

**107-LL**

**Graduation: 0.01mm**
**Range: 10mm**

- Spindle lifting lever (LL-1)
- Lug back

## 107W

**Graduation: 0.01mm**
**Range: 10mm**

- Two center pointers
  (The hand is long enough to facilitate easy reading of measured values.)
- Lug back

## 107F-T

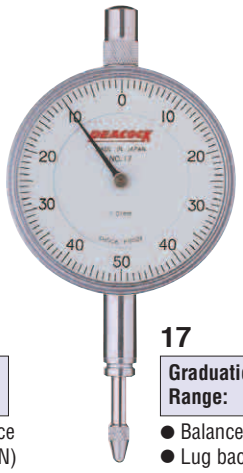
**Graduation: 0.01mm**
**Range: 10mm**

- Reversed dial
- Flat back

## 107-E

**Graduation: 0.01mm**
**Range: 10mm**

- Low-measuring force (initial pressure 0.4N)
- Lug back



## 17

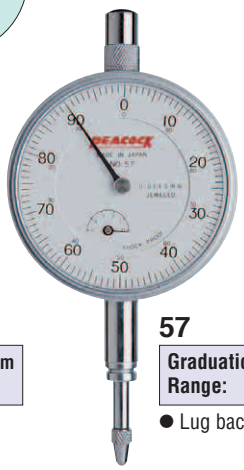
**Graduation: 0.01mm**
**Range: 1mm**

- Balanced dial
- Lug back

## 57-SWA

**Graduation: 0.01mm**
**Range: 5mm**

- Oil-proof type
- Flat crystal
- Contact point (X-2)
- Lug back



## 57

**Graduation: 0.01mm**
**Range: 5mm**

- Lug back

## 57F

**Graduation: 0.01mm**
**Range: 5mm**

- Flat back

## 57B

**Graduation: 0.01mm**
**Range: 5mm**

- Balanced dial
- Flat back

## Specifications

(unit: $\mu$m)

| Model | Graduation (mm) | Range (mm) | Reading | Indication error | | | | | Retrace error | Repeatability | Measuring force less than (N) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1/10 revolution | 1/2 revolution | One revolution | Two revolutions | Whole measuring range | | | |
| **107-HG** | 0.01 | 10 | ±0 - 50 - 100 | 6 | ±7 | ±8 | ±10 | ±10 | 4 | 5 | 1.4 |
| **107-DX** | 0.01 | 10 | ±0 - 50 - 100 | 8 | ±9 | ±10 | ±15 | ±15 | 5 | 5 | 1.4 |
| **107** | 0.01 | 10 | ±0 - 50 - 100 | 8 | ±9 | ±10 | ±15 | ±15 | 5 | 5 | 1.4 |
| **107F** | 0.01 | 10 | ±0 - 50 - 100 | 8 | ±9 | ±10 | ±15 | ±15 | 5 | 5 | 1.4 |
| **107-SWA** | 0.01 | 10 | ±0 - 50 - 100 | 8 | ±9 | ±10 | ±15 | ±15 | 5 | 5 | 1.4 |
| **107-BL** | 0.01 | 10 | ±0 - 50 - 100 | 8 | ±9 | ±10 | ±15 | ±15 | 5 | 5 | 1.4 |
| **107F-RE** | 0.01 | 10 | ±0 - 50 - 100 | 8 | ±9 | ±10 | ±15 | ±15 | 5 | 5 | 1.4 |
| **107-LL** | 0.01 | 10 | ±0 - 50 - 100 | 8 | ±9 | ±10 | ±15 | ±15 | 5 | 5 | 1.4 |
| **107W** | 0.01 | 10 | ±0 - 50 - 100 | 8 | ±9 | ±10 | ±15 | ±15 | 5 | 5 | 1.4 |
| **107F-T** | 0.01 | 10 | ±100 - 50 - 0 | 8 | ±9 | ±10 | ±15 | ±15 | 5 | 5 | 1.4 |
| **107-E** | 0.01 | 10 | ±0 - 50 - 100 | 8 | ±9 | ±10 | ±15 | ±15 | 5 | 5 | initial pressure 0.4 |
| **17** | 0.01 | 1 | 0 - 50 - 0 | 8 | ±9 | ±10 | — | — | 5 | 5 | 1.4 |
| **57-SWA** | 0.01 | 5 | ±0 - 50 - 100 | 8 | ±9 | ±10 | ±15 | ±15 | 5 | 5 | 1.4 |
| **57** | 0.01 | 5 | ±0 - 50 - 100 | 8 | ±9 | ±10 | ±15 | ±15 | 5 | 5 | 1.4 |
| **57F** | 0.01 | 5 | ±0 - 50 - 100 | 8 | ±9 | ±10 | ±15 | ±15 | 5 | 5 | 1.4 |
| **57B** | 0.01 | 5 | 0 - 50 - 0 | 8 | ±9 | ±10 | ±15 | ±15 | 5 | 5 | 1.4 |