

# Dial Indicators

## SERIES 2 – 0.01 mm Graduation Dial Indicators

- Standard 0.01 mm graduation dial gauges having a bezel with an outside diameter of 57 mm. All types come with limit markers and a bezel clamp as standard.
- The bezel clamp and lifting lever (optional) can be attached to either the right or left side. These parts can be easily installed and removed without tools.
- Secure adhesion between the bezel and crystal as well as the use of an O-ring prevents water or oil penetration.
- The stem and plunger are made of high-strength quench-hardened stainless steel suitable for heavy-duty use.
- A carbide contact point is used.
- The grand gear is made of stainless steel with high resistance to wear and deformation.
- Application of a hard coating on the surface of the crystal makes it highly resistant to scratching and chemical attack.



2047S



2902S



2310S-10



2044S

### Specifications

#### Metric

Code No.	Graduation	Range (range/rev)	Accuracy				Repeat-ability	Scale	Measuring force
			Overall	Retrace	1/10 rev	1 rev			
2046S	0.01 mm	10 mm (1 mm)	13 μm	3 μm	5 μm	10 μm	3 μm	±0-100	1.4 N or less
2046S-60								2.5 N or less	
2047S								0-50-0	1.4 N or less
2902S								100-0	
2310S-10		5 mm (1 mm)	12 μm	3 μm	5 μm	10 μm	3 μm	±0-100	2.5 N or less
2044S									
2044S-60									13 μm
2044S-09	12 μm								1.4 N or less
2045S							0-50-0		

## Features

### Metric

Code No.							
2044S	✓	—	—	—	—	—	—
2044S-09	✓	—	✓	—	—	—	—
2044S-60	✓	—	—	✓	—	—	—
2045S	—	✓	—	—	—	—	—
2046S	✓	—	—	—	—	—	—
2046S-60	✓	—	—	✓	—	—	—
2047S	—	✓	—	—	—	—	—
2310S-10	✓	—	—	—	✓	✓	—
2902S	✓	—	—	—	—	—	✓

## Optional Accessories

Contact points for Mitutoyo's dial indicators refer to pages F-37 to F-40 for details.

Interchangeable backs refer to page F-41 for details.

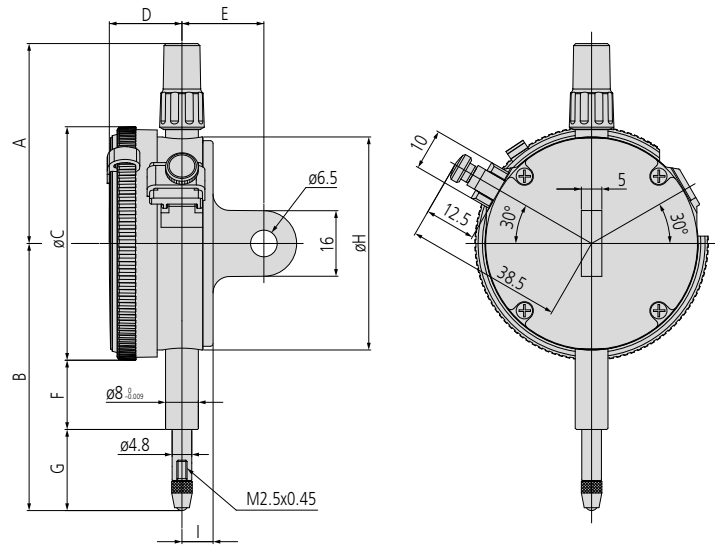
Plunger lifting aids refer to page F-42 for details.

Measuring stands refer to pages F-67 to F-72 for details.

## Dimensions

Unit: mm

ISO/JIS type



Note 1: Dimensions of the inch (ANSI/AGD type) dial indicator partly differ from those of the metric (ISO/JIS type) indicator.

Note 2: Inch (ANSI/AGD type) dial indicator is provided with a stem of 3/8" dia. and #4-48UNF thread mount for the contact point.

Code No.	A	B	C	D	E	F	G	H	I
2044S	48.8	65.2	57	17.7	20	16.9	19.8	52	7.6
2044S-09		70				12.3	29.2		
2044S-60						16.9	19.8		
2045S		70				12.3	29.2		
2046S						16.9	19.8		
2046S-60		65.2				12.3	29.2		
2047S						16.9	19.8		
2310S-10	16.9	19.8							
2902S									

F