

# Dial Indicators

## SERIES 3 and 4 – Long Stroke Large Dial Indicators

- Dial indicators with a large-diameter dial face for easy reading.
- Models with longer measuring ranges are also available.
- Both the stem and the plunger are made of high-strength quench-hardened stainless steel suitable for heavy-duty use.
- All types are supplied with limit markers and a bezel clamp as standard.
- The bezel clamp and lifting lever (optional)\*1 can be attached to either the right or left side. These parts can be easily installed and removed without tools.

\*1: Can be attached only to Code No. 3046S, 3047S, 3050S, 3109S-10 and 4046S.



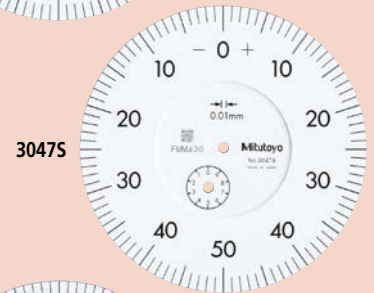
3109S-10



4046S



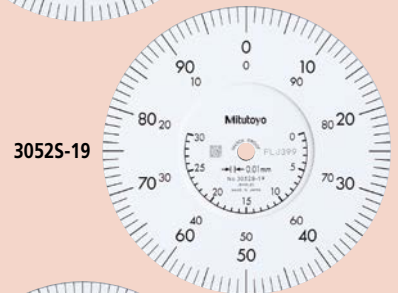
3046S



3047S



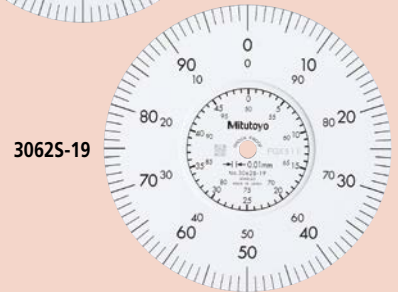
3050S



3052S-19



3060S-19



3062S-19

### Specifications

Metric									
Code No.	Graduation	Range (range/rev)	Accuracy				Repeat-ability	Scale	Measuring force
			Overall	Retrace	1/10 rev	1 rev			
3046S	0.01 mm	10 mm (1 mm)	15 µm	3 µm	5 µm	10 µm	3 µm	±0-100	1.4 N or less
3047S								0-50-0	
3050S		20 mm (1 mm)	20 µm	5 µm	8 µm	15 µm	4 µm	±0-100	2.0 N or less
3052S-19		30 mm (1 mm)	25 µm	7 µm	10 µm	5 µm	±0-100	2.5 N or less	
3058S-19		50 mm (1 mm)	30 µm	8 µm	3.0 N or less				
3060S-19 <sup>*2</sup>		80 mm (1 mm)	45 µm	9 µm	12 µm			20 µm	3.2 N or less
3062S-19 <sup>*2</sup>	100 mm (1 mm)	50 µm	5 µm	2 µm	2 µm	4 µm	0.5 µm	0-100-0	1.5 N or less
3109S-10	0.001 mm	1 mm (0.2 mm)	5 µm	2 µm	2 µm	4 µm	0.5 µm	0-100-0	1.5 N or less
4046S	0.01 mm	10 mm (1 mm)	15 µm	3 µm	5 µm	10 µm	3 µm	±0-100	1.4 N or less

Inch									
Code No.	Graduation	Range (range/rev)	Accuracy			Repeat-ability	Scale	Measuring force	
			First rev / 2.5 rev / 10 rev	Retrace					
3414S	.001"	.5" (.1")	±.001" / ±.001" / ±.001"			.0002"	±.0002"	±0-100	1.8 N or less
3415S								0-50-0	
3416S		1" (.1")	±.001" / ±.001" / ±.002"			.00033"	±0-100	±0-100	
3417S								0-50-0	
3424S-19	2" (.1")	±.001" / ±.001" / ±.002" / ±.003" (20 rev)			.00033"	±0-100	3.0 N or less		
3426S-19 <sup>*2</sup>	3" (.1")	±.001" / ±.001" / ±.002" / ±.003" (20 rev)					3.2 N or less		
3428S-19 <sup>*2</sup>	4" (.1")	±.001" / ±.001" / ±.002" / ±.003" (20 rev) / ±.005" (over 20 rev)					3.2 N or less		
3802S-10	.0001"	.025" (.01")	±.0001" / ±.0001" / —			.0001"	±.00003"	0-10	2.0 N or less
3803S-10								0-5-0	
4887S-19 <sup>*2</sup>	.001"	3" (.1")	±.001" / ±.001" / ±.002" / ±.003" (20 rev) / ±.005" (over 20 rev)			.00033"	±.0002"	±0-100	3.0 N or less

\*2 Use in a vertical orientation only (contact point downward).

## Features

Metric						
Code No.						
3046S	✓	—	—	—	—	—
3047S	—	✓	—	—	—	—
3050S	✓	—	—	✓	—	—
3052S-19	✓	—	✓	—	✓	✓
3058S-19	✓	—	✓	—	✓	✓
3060S-19	✓	—	✓	—	✓	✓
3062S-19	✓	—	✓	—	✓	✓
3109S-10	—	✓	✓	—	✓	—
4046S	✓	—	—	—	—	—

Inch						
Code No.						
3414S	✓	—	—	—	—	—
3415S	—	✓	—	—	—	—
3416S	✓	—	—	—	—	—
3417S	—	✓	—	—	—	—
3424S-19	✓	—	✓	—	✓	✓
3426S-19	✓	—	✓	—	✓	✓
3428S-19	✓	—	✓	—	✓	✓
3802S-10	✓	—	✓	—	✓	—
3803S-10	—	✓	✓	—	✓	—
4887S-19	✓	—	✓	—	✓	✓

## 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.

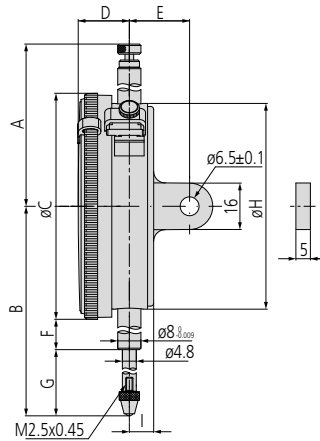


3058S-19

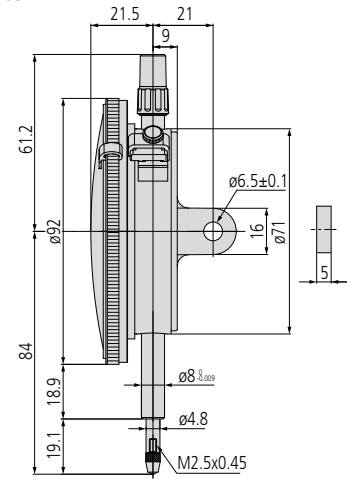
## Dimensions

Unit: mm

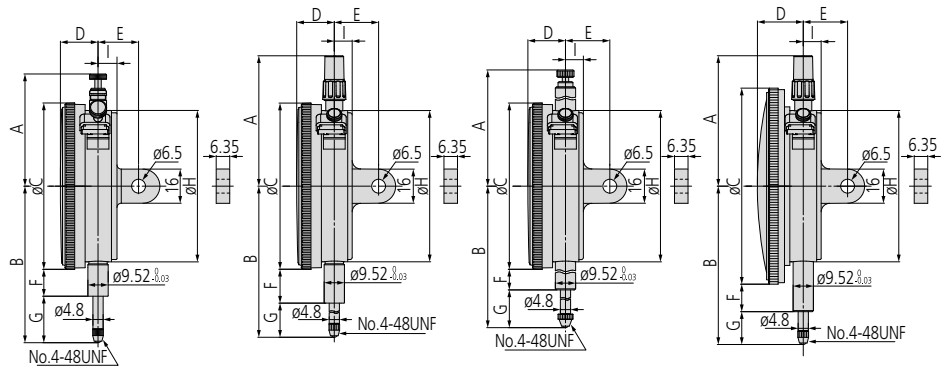
### ISO/JIS type



### 4046S



### ANSI/AGD type



Code No.	A	B	C	D	E	F	G	H	I
ISO/JIS type									
3046S	61.2	75.5				15.9	20.6		
3047S									
3050S	52.6	94				25.9	29.1		
3052S-19	72.9	104.3				43.9	59.4	71	9
3058S-19	81.9	142.3	78	17.7	21	73.9	89.4		
3060S-19	120.9	202.3				94.9	109.4		
3062S-19	141.9	243.3				25.9	14.1		
3109S-10	61.2	79							
ANSI/AGD type									
3414S		73.4					21.8		
3415S									
3416S	52.6	86.1				12.6	34.5		
3417S									
3424S-19	84	149.3	78	17.7	19	50.6	59.7	71	9
3426S-19	123	198.1				73.9	85.2		
3428S-19	144	244.5				94.9	110.6		
3803S-10						12.6	8.1		
3802S-10	61.2	59.7							
4887S-19	123	198.1	92	21.5		66.9	85.2		