

Dial Indicators

Comparison measuring instruments which ensure high quality, high accuracy and reliability.

SERIES 3, 4 — Long Stroke Type, Large Diameter

- Dial indicators with a large-diameter dial face for easy reading.
- Models with longer measuring ranges are also available.
- All types are supplied with limit markers and a bezel clamp as standard.
- Both the stem and the spindle are made of high-strength quench-hardened stainless steel suitable for heavy-duty use.
- 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**.



An inspection certificate is supplied as standard. Refer to page X for details.

3109S-10
Continuous scale
Graduation: 0.01mm, Measuring range: 30mm

3058S-19
Balanced scale
Graduation: 0.01mm, Measuring range: 10mm

3047S
Continuous scale
Graduation: 0.01mm, Measuring range: 10mm

3050S
Continuous scale
Graduation: 0.01mm, Measuring range: 20mm

3062S-19
Continuous scale
Graduation: 0.01mm, Measuring range: 100mm

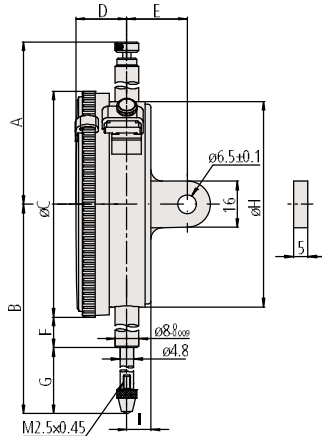
3065S-19
Continuous scale
Graduation: 0.01mm, Measuring range: 80mm

3109S-10
Balanced scale
Graduation: 0.001mm, Measuring range: 1mm

4046S
Continuous scale
Graduation: 0.01mm, Measuring range: 10mm

DIMENSIONS

ISO/JIS Type



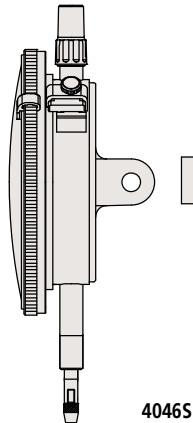
Unit: mm

Order No.	A	B	C	D	E	F	G	H	I
3046S	61.2	75.5	78	17.7	21	15.9	20.6	71	9
3047S	61.2	75.5	78	17.7	21	15.9	20.6	71	9
3050S	52.6	94	78	17.7	21	25.9	29.1	71	9
3052S-19*	72.9	104.3	78	17.7	21	25.9	39.4	71	9
3058S-19*	81.9	142.3	78	17.7	21	43.9	59.4	71	9
3060S-19*	120.9	202.3	78	17.7	21	73.9	89.4	71	9
3062S-19*	141.9	243.3	78	17.7	21	94.9	109.4	71	9
3109S-10	61.2	79	78	17.7	21	25.9	14.1	71	9
4046S	61.2	84	92	21.5	21	18.9	19.1	71	9

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

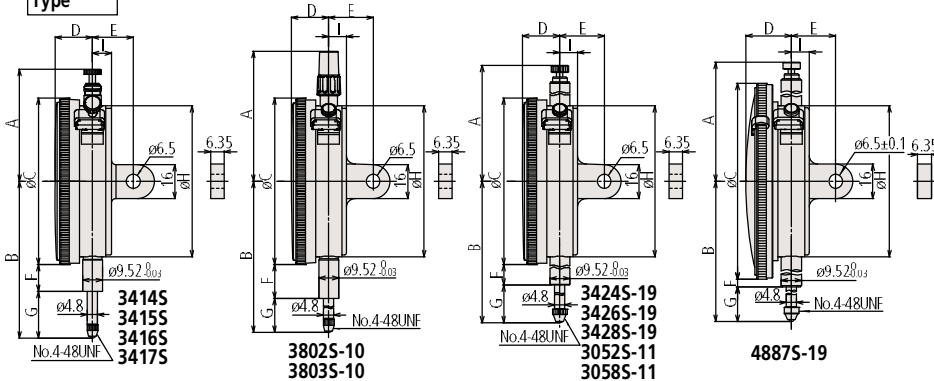
Note 2: Inch (ANSI/AGD Type) dial indicators are provided with a stem of 3/8" dia. and #4-48UNF thread mount for the contact point.

* The shoulder on a contact point (standard accessory) acts as a stop to prevent spindle overrun that may otherwise damage the indicator. For this reason, if you need to install an optional contact point with an outside diameter smaller than 7mm, use a washer (with outside diameter of at least 7mm, inside diameter of 3mm, and thickness of approx. 0.5mm) placed between the contact point and the spindle.



4046S

ANSI/AGD Type



Unit: mm

Order No.	A	B	C	D	E	F	G	H	I
3414S	52.6	73.4	78	17.7	19	12.6	21.8	71	9
3415S	52.6	73.4	78	17.7	19	12.6	21.8	71	9
3416S	52.6	86.1	78	17.7	19	12.6	34.5	71	9
3417S	52.6	86.1	78	17.7	19	12.6	34.5	71	9
3424S-19*	84	149.3	78	17.7	19	50.6	59.7	71	9
3426S-19*	123	198.1	78	17.7	19	73.9	85.2	71	9
3428S-19*	144	244.5	78	17.7	19	94.9	110.6	71	9
3803S-10	61.2	59.7	78	17.7	19	12.6	8.1	71	9
3802S-10	61.2	59.7	78	17.7	19	12.6	8.1	71	9
3052S-11*	72.9	102.4	78	17.7	19	25.9	37.5	71	9
3058S-11*	81.9	147.1	78	17.7	19	50.6	57.5	71	9
4887S-19*	123	198.1	92	21.5	19	66.9	85.2	71	9

FEATURES

Metric

Order No.	w/ lug	Flat-back	ISO/JIS	ANSI/AGD	Flat-back	ANSI/AGD	Flat-back	ANSI/AGD
3046S	3046SB	—	—	—	—	—	—	—
3047S	3047SB	—	—	—	—	—	—	—
3050S	3050SB	—	—	—	—	—	—	—
3052S-19	3052SB-19	✓	—	—	—	—	—	—
3058S-19	3058SB-19	✓	—	—	—	—	—	—
3060S-19*	3060SB-19*	✓	—	—	—	—	—	—
3062S-19*	3062SB-19*	✓	—	—	—	—	—	—
3109S-10	3109SB-10	✓	—	—	—	—	—	—
4046S	4046SB	—	—	—	—	—	—	—

Inch

Order No.	w/ lug	Flat-back	ANSI/AGD	ANSI/AGD	Flat-back	ANSI/AGD	Flat-back	ANSI/AGD
3414S	3414SB	—	—	—	—	—	—	—
3415S	3415SB	—	—	—	—	—	—	—
3416S	3416SB	—	—	—	—	—	—	—
3417S	3417SB	—	—	—	—	—	—	—
3424S-19	3424SB-19	✓	—	—	—	—	—	—
3426S-19	3426SB-19	✓	—	—	—	—	—	—
3428S-19	3428SB-19	✓	—	—	—	—	—	—
3802S-10	3802SB-10	✓	—	—	—	—	—	—
3803S-10	3803SB-10	✓	—	—	—	—	—	—
4887S-19	4887SB-19	✓	—	—	—	—	—	—

SPECIFICATIONS

Metric

Order No.	w/ lug	Flat-back	Graduation	Range (range/rev)	Accuracy			Repeatability	Dial reading	Measuring force	
					Overall	Retrace	1/10 Rev				
3046S	3046SB	—	0.01mm	10mm (1mm)	15µm	3µm	5µm	10µm	3µm	±0-100	1.4N or less
3047S	3047SB	—	0.01mm	10mm (1mm)	15µm	3µm	5µm	10µm	3µm	0-50-0	1.4N or less
3050S	3050SB	—	0.01mm	20mm (1mm)	20µm	5µm	8µm	15µm	4µm	±0-100	2.0N or less
3052S-19	3052SB-19	—	0.01mm	30mm (1mm)	25µm	7µm	10µm	15µm	5µm	±0-100	2.5N or less
3058S-19	3058SB-19	—	0.01mm	50mm (1mm)	30µm	8µm	10µm	15µm	5µm	±0-100	3.0N or less
3060S-19*	3060SB-19*	—	0.01mm	80mm (1mm)	45µm	9µm	12µm	20µm	5µm	±0-100	3.0N or less
3062S-19*	3062SB-19*	—	0.01mm	100mm (1mm)	50µm	9µm	12µm	20µm	5µm	±0-100	3.2N or less
3109S-10	3109SB-10	—	0.001mm	1mm (0.2mm)	5µm	2µm	2µm	4µm	0.5µm	0-100-0	1.5N or less
4046S	4046SB	—	0.01mm	10mm (1mm)	15µm	3µm	5µm	10µm	3µm	±0-100	1.4N or less

*1 Use in a vertical position (contact point downward) for the long stroke model.

*2 Completed products inspection is performed in the vertical position (contact point downward) and the stated accuracy is guaranteed.

Inch

Order No.	w/ lug	Flat-back	Graduation	Range (range/rev)	Accuracy		Repeatability	Dial reading	Measuring force
					First 1 Rev / 2.5 Rev / 10 Rev	Retrace			
3414S	3414SB	—	.001"	.5" (.1")	±.001" / ±.001" / ±.001"	.0002"	±.0002"	±0-100	1.8N or less
3415S	3415SB	—	.001"	.5" (.1")	±.001" / ±.001" / ±.001"	.0002"	±.0002"	0-50-0	1.8N or less
3416S	3416SB	—	.001"	1" (.1")	±.001" / ±.001" / ±.002"	.0002"	±.0002"	±0-100	1.8N or less
3417S	3417SB	—	.001"	1" (.1")	±.001" / ±.001" / ±.002"	.0002"	±.0002"	0-50-0	1.8N or less
3424S-19	3424SB-19	—	.001"	2" (.1")	±.001" / ±.001" / ±.002" / ±.003" (20Rev)	.00033"	±.0002"	±0-100	3.0N or less
3426S-19*	3426SB-19*	—	.001"	3" (.1")	±.001" / ±.001" / ±.002" / ±.003" (20Rev) / ±.005" (Over 20Rev)	.00033"	±.0002"	±0-100	3.0N or less
3428S-19*	3428SB-19*	—	.001"	4" (.1")	±.001" / ±.001" / ±.002" / ±.003" (20Rev) / ±.005" (Over 20Rev)	.00033"	±.0002"	±0-100	3.2N or less
3802S-10	3802SB-10	—	.0001"	.025" (.01")	±.0001" / ±.0001" / —	.0001"	±.00003"	0-10	2.0N or less
3803S-10	3803SB-10	—	.0001"	.025" (.01")	±.0001" / ±.0001" / —	.0001"	±.00003"	0-5-0	2.0N or less
4887S-19*	4887SB-19*	—	.001"	3" (.1")	±.001" / ±.001" / ±.002" / ±.003" (20Rev) / ±.005" (Over 20Rev)	.00033"	±.0002"	±0-100	3.0N or less

*1 Use in a vertical position (contact point downward) for the long stroke model.

*2 Completed products inspection is performed in the vertical position (contact point downward) and the stated accuracy is guaranteed.