

# Dial Indicators

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



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

## SERIES 1 — Compact Type, Small Diameter

- Compact dial indicators with bezel diameters of  $\varnothing 40\text{mm}$  for restricted-space applications in gaging jigs.



10445

Continuous scale



Graduation: 0.01mm, Measuring range: 3.5mm **1040S**  
 Double scale spacing

Balanced scale



Graduation: 0.01mm, Measuring range: 3.5mm **1041S**  
 Double scale spacing

Continuous scale



Graduation: 0.01mm, Measuring range: 5mm **1044S**  
**1044S-15**  
 Jeweled bearing

Balanced scale



Graduation: 0.01mm, Measuring range: 5mm **1045S**



1109S-10

Balanced scale



Graduation: 0.001mm, Measuring range: 1mm **1109S-10**  
 Shockproof  
 Jeweled bearing

Balanced scale



Graduation: 0.002mm, Measuring range: 1mm **1013S-10**  
 Shockproof  
 Jeweled bearing

Continuous scale



Graduation: 0.005mm, Measuring range: 3.5mm **1124S**

F



10445-60

Continuous scale



Graduation: 0.01mm, Measuring range: 5mm 10445-60 Waterproof

## SPECIFICATIONS

Order No.		Graduation	Range (range/rev)	Accuracy				Repeatability	Dial reading	Measuring force
w/ lug	Flat-back			Overall	Retrace	1/10 Rev	1 Rev			
1013S-10	1013SB-10	0.002mm	1mm (0.2mm)	6µm	2.5µm	2.5µm	5µm	1µm	0-100-0	1.5N or less
1040S	1040SB	0.01mm	3.5mm (0.5mm)	13µm	4µm	8µm	11µm	3µm	±0-50	1.4N or less
1041S	1041SB	0.01mm	3.5mm (0.5mm)	13µm	4µm	8µm	11µm	3µm	0-25-0	1.4N or less
1044S	1044SB	0.01mm	5mm (1mm)	13µm	4µm	8µm	11µm	3µm	±0-100	1.4N or less
1044S-15	1044SB-15	0.01mm	5mm (1mm)	13µm	4µm	8µm	11µm	3µm	±0-100	0.4N or less*
1044S-60	1044SB-60	0.01mm	5mm (1mm)	13µm	4µm	8µm	11µm	3µm	±0-100	2.0N or less
1045S	1045SB	0.01mm	5mm (1mm)	13µm	4µm	8µm	11µm	3µm	0-50-0	1.4N or less
1109S-10	1109SB-10	0.001mm	1mm (0.2mm)	5µm	2µm	2.5µm	4.5µm	1µm	0-100-0	1.5N or less
1124S	1124SB	0.005mm	3.5mm (0.5mm)	12µm	3.5µm	6µm	10µm	3µm	±0-50	1.4N or less

ISO/JIS type

## FEATURES

Order No.				
w/ lug	Flat-back			
1013S-10	1013SB-10	—	✓	—
1040S	1040SB	✓	—	—
1041S	1041SB	✓	—	—
1044S	1044SB	—	—	—
1044S-15	1044SB-15	—	✓	—
1044S-60	1044SB-60	—	—	✓
1045S	1045SB	—	—	—
1109S-10	1109SB-10	—	✓	—
1124S	1124SB	—	—	—

Order No.		Graduation	Range (range/rev)	Accuracy		Repeatability	Dial reading	Measuring force
w/ lug	Flat-back			First 1 Rev / 2.5 Rev / 10 Rev	Retrace			
1410S	1410SB	.001"	.25" (.1")	±.001" / ±.001" / —	.0002"	±.0002"	0-100	1.4N or less
1411S	1411SB	.001"	.25" (.1")	±.001" / ±.001" / —	.0002"	±.0002"	0-50-0	1.4N or less
1410S-10	1410SB-10	.001"	.25" (.1")	±.001" / ±.001" / —	.0002"	±.0002"	0-100	1.4N or less
1780S	1780SB	.001"	.125" (.05")	±.001" / ±.001" / —	.0002"	±.0002"	0-50	1.4N or less
1781S	1781SB	.001"	.125" (.05")	±.001" / ±.001" / —	.0002"	±.0002"	0-25-0	1.4N or less
1506S	1506SB	.0005"	.125" (.05")	±.0005" / ±.0005" / —	.00016"	±.0001"	0-50	1.4N or less
1507S	1507SB	.0005"	.125" (.05")	±.0005" / ±.0005" / —	.00016"	±.0001"	0-25-0	1.4N or less
1670S	1670SB	.0005"	.1" (.04")	±.0005" / ±.0005" / —	.00016"	±.0001"	0-40	1.4N or less
1671S	1671SB	.0005"	.1" (.04")	±.0005" / ±.0005" / —	.00016"	±.0001"	0-20-0	1.4N or less
1802S-10	1802SB-10	.0001"	.025" (.01")	±.0001" / ±.0001" / —	.0001"	±.00003"	0-10	1.5N or less
1803S-10	1803SB-10	.0001"	.025" (.01")	±.0001" / ±.0001" / —	.0001"	±.00003"	0-5-0	1.5N or less

ANSI/AGD type

Order No.			
w/ lug	Flat-back		
1410S	1410SB	—	—
1411S	1411SB	—	—
1410S-10	1410SB-10	✓	—
1780S	1780SB	—	—
1781S	1781SB	—	—
1506S	1506SB	—	—
1507S	1507SB	—	—
1670S	1670SB	—	—
1671S	1671SB	—	—
1802S-10	1802SB-10	✓	✓
1803S-10	1803SB-10	✓	✓

## DIMENSIONS

**ANSI/AGD 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 indicators are provided with a stem of 3/8" dia, and #4-48UNF thread mount for the contact point.

**ISO/JIS Type**

Order No.	A	B	C	D	E	F	G	H	I
1410S	32.5	47.6	40	14.5	19	12.8	14.8	38	6.6
1411S	32.5	47.6	40	14.5	19	12.8	14.8	38	6.6
1410S-10	32.5	47.6	40	14.5	19	12.8	14.8	38	6.6
1780S	32.5	44.1	40	14.5	19	12.8	11.3	38	6.6
1781S	32.5	44.1	40	14.5	19	12.8	11.3	38	6.6
1506S	32.5	44.1	40	14.5	19	12.8	11.3	38	6.6
1507S	32.5	44.1	40	14.5	19	12.8	11.3	38	6.6
1670S	32.5	43.4	40	14.5	19	12.8	10.6	38	6.6
1671S	32.5	43.4	40	14.5	19	12.8	10.6	38	6.6
1802S-10	32.5	41.3	40	14.5	19	12.5	8.5	38	6.6
1803S-10	32.5	41.3	40	14.5	19	12.5	8.5	38	6.6

Order No.	A	B	C	D	E	F	G	H	I
1013S-10	32.5	49	40	14.5	20	13.8	15.2	38	6.6
1040S	32.5	46	40	14.5	20	13.8	12.2	38	6.6
1041S	32.5	46	40	14.5	20	13.8	12.2	38	6.6
1044S	32.5	47.5	40	14.5	20	13.8	13.7	38	6.6
1044S-15**	32.5	47.5	40	14.5	20	13.8	13.7	38	6.6
1044S-60	32.5	57	40	14.5	20	12.2	24.8	38	6.6
1045S	32.5	47.5	40	14.5	20	13.8	13.7	38	6.6
1109S-10	32.5	49	40	14.5	20	13.8	15.2	38	6.6
1124S	32.5	46	40	14.5	20	13.8	12.2	38	6.6

Unit: mm

Unit: mm

\*2 Use in a vertical position (contact point downward) for the low measuring force model.