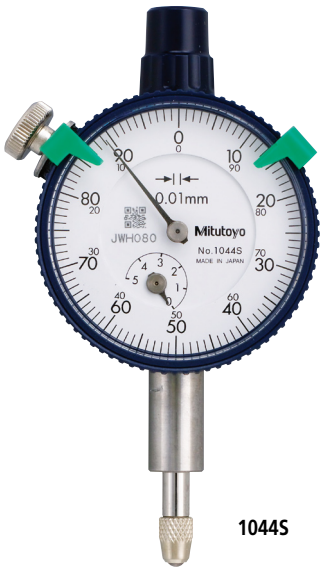
Dial Indicators

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

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

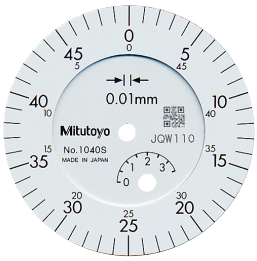
SERIES 1 — Compact Type, Small Diameter

- Compact dial indicators with bezel diameters of 40 mm for restricted-space applications in gaging jigs.
- All models come with limit markers and a bezel clamp.
- Secure adhesion between the bezel and crystal as well as the use of an O-ring prevents water or oil penetration.
- The stem and spindle are made of high-strength quench-hardened stainless steel which resists arduous use.
- A carbide contact point is used.
- Application of a hard coating on the surface of the crystal makes the gauge highly scratch- and chemical-resistant.



1044S

Continuous scale

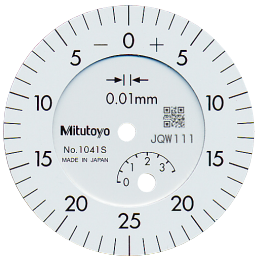


Graduation: 0.01 mm, Measuring range: 3.5 mm

1040S

Double scale spacing

Balanced scale

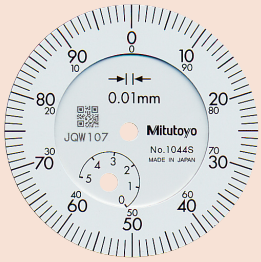


Graduation: 0.01 mm, Measuring range: 3.5 mm

1041S

Double scale spacing

Continuous scale



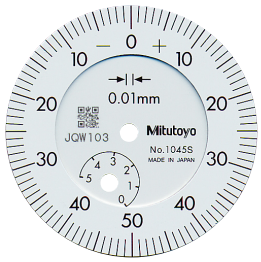
Graduation: 0.01 mm, Measuring range: 5 mm

1044S

1044S-15

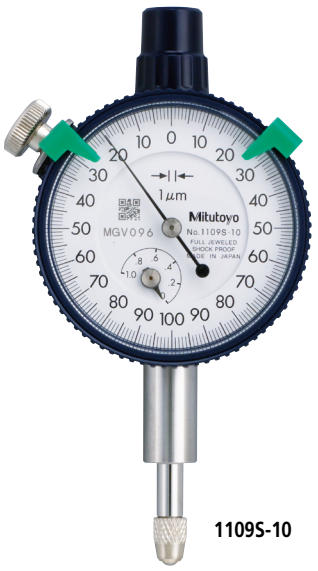
Jeweled bearing

Balanced scale



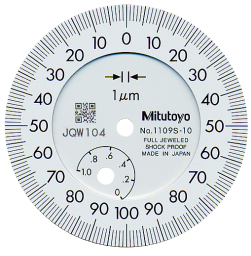
Graduation: 0.01 mm, Measuring range: 5 mm

1045S



1109S-10

Balanced scale



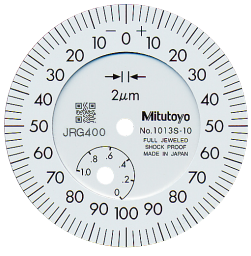
Graduation: 0.001 mm, Measuring range: 1 mm

1109S-10

Shockproof

Jeweled bearing

Balanced scale



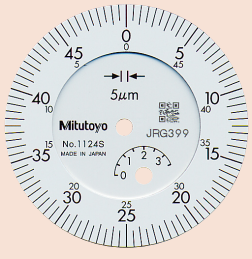
Graduation: 0.002 mm, Measuring range: 1 mm

1013S-10

Shockproof

Jeweled bearing

Continuous scale

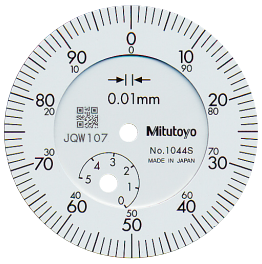


Graduation: 0.005 mm, Measuring range: 3.5 mm

1124S

1044S-60

Continuous scale



Graduation: 0.01 mm,
Measuring range: 5 mm

1044S-60
Waterproof

SPECIFICATIONS

Metric

ISO/JIS type

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

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

Inch

ANSI/AGD type

Order No.		Graduation	Range (range/rev)	Accuracy*		Repeat-ability	Dial reading	Measuring force
w / lug	Flat-back			First 1 Rev / 2.5 Rev / 10 Rev	Retrace			
1410S	**1410SB**	0.001 in	0.25 in (0.1 in)	±0.001 in / ±0.001 in / —	0.0002 in	±0.0002 in	0-100	1.4 N or less
1411S	**1411SB**	0.001 in	0.25 in (0.1 in)	±0.001 in / ±0.001 in / —	0.0002 in	±0.0002 in	0-50-0	1.4 N or less
1410S-10	**1410SB-10**	0.001 in	0.25 in (0.1 in)	±0.001 in / ±0.001 in / —	0.0002 in	±0.0002 in	0-100	1.4 N or less
1780S	**1780SB**	0.001 in	0.125 in (0.05 in)	±0.001 in / ±0.001 in / —	0.0002 in	±0.0002 in	0-50	1.4 N or less
1781S	**1781SB**	0.001 in	0.125 in (0.05 in)	±0.001 in / ±0.001 in / —	0.0002 in	±0.0002 in	0-25-0	1.4 N or less
1506S	**1506SB**	0.0005 in	0.125 in (0.05 in)	±0.0005 in / ±0.0005 in / —	0.00016 in	±0.0001 in	0-50	1.4 N or less
1507S	**1507SB**	0.0005 in	0.125 in (0.05 in)	±0.0005 in / ±0.0005 in / —	0.00016 in	±0.0001 in	0-25-0	1.4 N or less
1670S	**1670SB**	0.0005 in	0.1 in (0.04 in)	±0.0005 in / ±0.0005 in / —	0.00016 in	±0.0001 in	0-40	1.4 N or less
1671S	**1671SB**	0.0005 in	0.1 in (0.04 in)	±0.0005 in / ±0.0005 in / —	0.00016 in	±0.0001 in	0-20-0	1.4 N or less
1802S-10	**1802SB-10**	0.0001 in	0.025 in (0.01 in)	±0.0001 in / ±0.0001 in / —	0.0001 in	±0.00003 in	0-10	1.5 N or less
1803S-10	**1803SB-10**	0.0001 in	0.025 in (0.01 in)	±0.0001 in / ±0.0001 in / —	0.0001 in	±0.00003 in	0-5-0	1.5 N or less

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

FEATURES

Metric

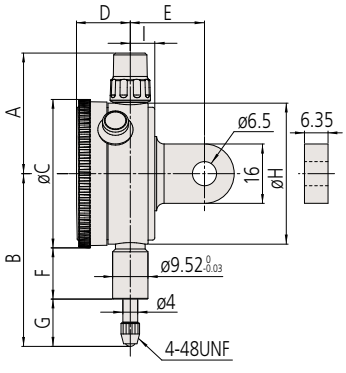
Order No.				
w / lug	Flat-back			
1013S-10	**1013SB-10**	—	✔	—
1040S	**1040SB**	✔	—	—
1041S	**1041SB**	✔	—	—
1044S	**1044SB**	—	—	—
1044S-15	**1044SB-15**	—	✔	—
1044S-60	**1044SB-60**	—	—	✔
1045S	**1045SB**	—	—	—
1109S-10	**1109SB-10**	—	✔	—
1124S	**1124SB**	—	—	—

Inch

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

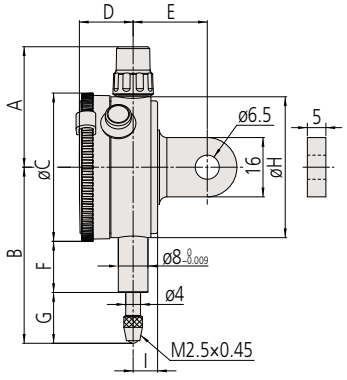


Unit: mm

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

ISO/JIS Type

Unit: mm



Unit: mm

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*2	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

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

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 inch dia. and #4-48UNF thread mount for the contact point.

F