



SERIES 2 — Standard Type, 0.001 mm & 0.005 mm Graduation

- Standard 0.001 mm and 0.005 mm graduation dial indicators have a bezel with an outside diameter of 57 mm. These indicators provide excellent accuracy and durability.
- The indicator is highly durable thanks to its oil- and water-tight design, quenched hardened stainless-steel, carbide contact point, and a grand gear made of wear- and deformation-resistant material.
- Application of an anti-reflective and hard surface coating improves scale visibility along with scratch and chemical resistance.
- The indicator uses jeweled bearings, providing excellent indication sensitivity and durability.



2109A-10

SPECIFICATIONS

Metric		ISO/JIS type									
Code No.		Graduation (mm)	Range (range/rev) (mm)	Maximum permissible error (MPE) (μm)						Dial reading	Measuring force (N)
w/lug	Flat-back			Indication error				Hysteresis	Repeat-ability		
				1/10 Rev	1/2 Rev	1 Rev	Measuring range				
2109A-10	2109AB-10	0.001	1 (0.2)	2	3	4	5	2	0.5	0-100-0	1.5 or less
2110A-10	2110AB-10	0.001	1 (0.1)	2	3	4	5	2	0.5	±0-100	1.8 or less
2113A-10	2113AB-10	0.001	2 (0.2)	2	4	5	7	2	0.5	0-100-0	1.5 or less
2118A-10	2118AB-10	0.001	5 (0.2)	3.5	5	6	10	3	1	0-100-100	1.5 or less
2119A-10	2119AB-10	0.001	5 (0.2)	3.5	5	6	10	3	1	0-100-0	1.5 or less
2124A-10	2124AB-10	0.005	5 (0.5)	5	8	9	12	3	3	±0-50	1.5 or less

Note: Completed products inspection is performed in the vertical orientation (contact point downward) and the stated accuracy is guaranteed.

DIMENSIONS

ISO/JIS
Type

Unit: mm

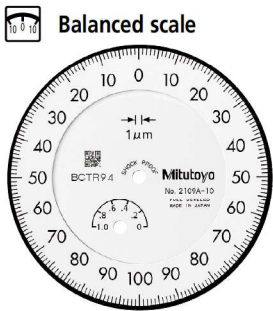
Technical drawing of a dial indicator showing dimensions A through I and mass specifications. The drawing includes a side view and a detail view of the contact point. Dimensions are: A (total height), B (height to the start of the dial), C (dial diameter), D (dial thickness), E (height to the start of the stem), F (height to the start of the contact point), G (height to the start of the contact point), H (height to the start of the contact point), I (height to the start of the contact point). The contact point is a ball with a diameter of 6.5 mm. The stem has a diameter of 8 mm with a tolerance of 0.009 mm. The contact point has a diameter of 4.8 mm. The mounting hole has a diameter of 6.5 mm. The detail view shows a contact point with a diameter of 5 mm.

Code No.	A	B	C	D	E	F	G	H	I	Mass (g)	
										w/lug	Flat-back
2109A-10	47.2	60.5	57	18.1	20	16.9	15.1	52	7.6	148	139
2110A-10	47.2	66.5	57	18.1	20	16.9	21.1	52	7.6	149	140
2113A-10	47.2	61	57	18.1	20	16.9	15.6	52	7.6	148	139
2118A-10	47.2	60.7	57	18.1	20	16.9	15.3	52	7.6	146	137
2119A-10	47.2	60.7	57	18.1	20	16.9	15.3	52	7.6	146	137
2124A-10	47.2	60.7	57	18.1	20	16.9	15.3	52	7.6	146	137

Note: Refer to pages 07-63 to 07-68 for details of contact points.

Dial Indicators

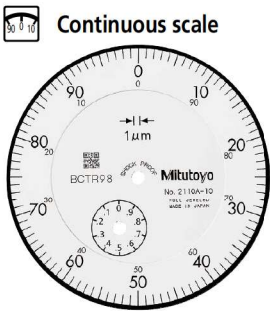
SERIES 2 — Standard Type, 0.001 mm & 0.005 mm Graduation



Graduation: 0.001 mm,
Measuring range: 1 mm

Shockproof

Jeweled bearing

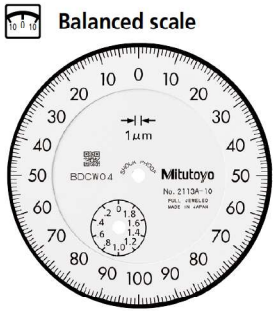


Graduation: 0.001 mm,
Measuring range: 1 mm

Double scale spacing

Shockproof

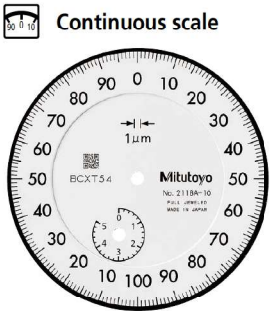
Jeweled bearing



Graduation: 0.001 mm,
Measuring range: 2 mm

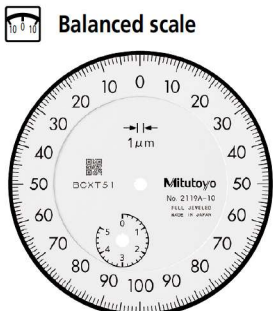
Shockproof

Jeweled bearing



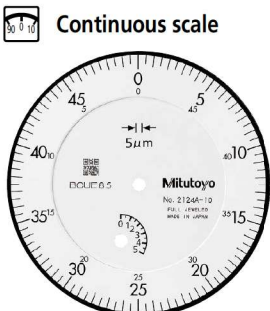
Graduation: 0.001 mm,
Measuring range: 5 mm

Jeweled bearing



Graduation: 0.001 mm,
Measuring range: 5 mm

Jeweled bearing



Graduation: 0.005 mm,
Measuring range: 5 mm

Jeweled bearing

Optional Accessories

- Limit hand (2 pcs.), Bezel clamp
- Refer to page 07-27 for details.

FEATURES

Metric		ISO/JIS type					
Code No.							
w/lug	Flat-back						
2109A-10	2109AB-10		✓	✓		✓	
2110A-10	2110AB-10	✓		✓		✓	✓
2113A-10	2113AB-10		✓	✓		✓	
2118A-10	2118AB-10	✓				✓	
2119A-10	2119AB-10		✓			✓	
2124A-10	2124AB-10	✓				✓	