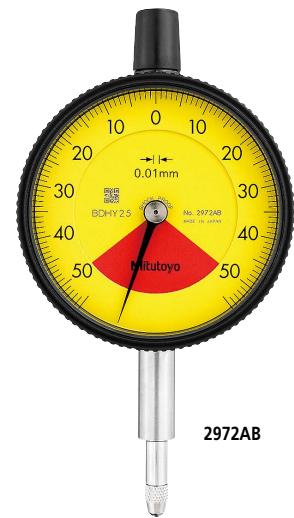




SERIES 2 — Standard One Revolution Type for Error-free Reading, Lightweight Type

- The one revolution dial indicator (lightweight type) prevents the possibility of reading errors.
- Mitutoyo's unique shock-proof mechanism is incorporated, providing improved resistance to shock due to sudden spindle retraction caused by impact.
- Lightweight type (70 g).
- It is highly durable thanks to a hardened stainless-steel stem and spindle, carbide probe, and a large gear made of wear- and deformation-resistant materials.
- Application of an anti-reflective and hard surface coating improves scale visibility along with scratch and chemical resistance.
- The red dead zone in the middle of the dial face is separated from the bezel and doesn't cover the graduations. Therefore, users can always see the range where accuracy is not guaranteed even if the bezel is rotated.



SPECIFICATIONS

Metric		ISO/JIS type										ANSI/AGD 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						
—	2971AB	0.01	0.5 (0.7)	5	—	—	8	3	3	25-0-25	1.4 or less		
—	2972AB	0.01	1 (1.4)	5	—	—	8	3	3	50-0-50	1.4 or less		
—	2973AB	0.02	1.6 (2)	8	—	—	16	6	5	80-0-80	1.4 or less		

Inch													
Code No.		Graduation (in)	Range (range/rev) (in)	Accuracy (in)				Repeat-ability (in)	Dial reading	Measuring force (N)			
w/lug	Flat-back			First 1 Rev/2.5 Rev/10 Rev		Retrace							
—	2976AB	0.0005	0.02 (0.028)	±0.0005/—/—		0.00016	±0.0001	10-0-10	1.4 or less				
—	2977AB	0.0005	0.04 (0.055)	±0.0005/—/—		0.00016	±0.0001	20-0-20	1.4 or less				
—	2978AB	0.001	0.06 (0.079)	±0.001/—/—		0.0002	±0.0002	30-0-30	1.4 or less				

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

Special specifications

Upon request, we can manufacture custom types with changed graduation numbers, graduation lines, dead zones, etc. Please contact your local Mitutoyo Sales Office for more information.

Dial Indicators

SERIES 2 — Standard One Revolution Type for Error-free Reading, Lightweight Type

DIMENSIONS

ISO / JIS
Type

Unit: mm

Flat back lid and internal frame are integral molding.

Optional Back lid installation holes (4 locations)

Installation example of back lid with lug

ANSI / AGD
Type

Unit: in

Flat back lid and internal frame are integral molding.

Optional Back lid installation holes (4 locations)

Ball contact (Ø0.12)
21BZB005
(thread: No. 4-48 UNF)

Note 1: When installing an optional back (refer to pages 07-69 to 07-70 for details) 4 retaining screws must also be obtained (546666: Self-tapping screw only for plastic).
Do not apply a tightening torque of more than 20 N·cm in order to avoid stripping the screw threads.

Note 2: An optional lifting lever, release or bezel clamp cannot be installed.

Metric									
Code No.	A	B	C	D	F	G	H	I	Mass (g)
2971AB	43.2	65.6	57	16.9	20.3	16.8	55	7.6	70
2972AB	43.2	66	57	16.9	20.3	17.2	55	7.6	
2973AB	43.2	66.3	57	16.9	20.3	17.5	55	7.6	

Inch									
Code No.	A	B	C	D	F	G	H	I	Mass (g)
2976AB	1.70	2.55	2.24	0.67	0.80	0.63	2.17	0.30	70
2977AB	1.70	2.56	2.24	0.67	0.80	0.64	2.17	0.30	
2978AB	1.70	2.57	2.24	0.67	0.80	0.65	2.17	0.30	

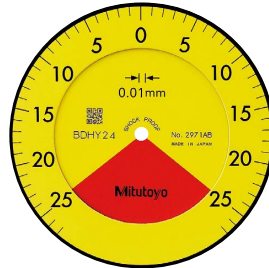
Note: Refer to pages 07-63 to 07-68 for details of contact points.

Optional Accessory
• Limit hand (2 pcs.): 21AZB195





Balanced scale



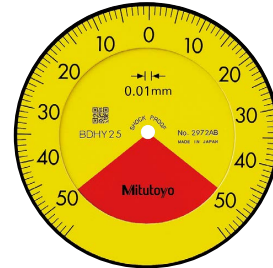
Graduation: 0.01 mm,
Measuring range: 0.5 mm

2971AB

- One revolution
- Shockproof
- Dustproof



Balanced scale



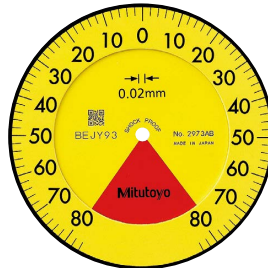
Graduation: 0.01 mm,
Measuring range: 1 mm

2972AB

- One revolution
- Shockproof
- Dustproof



Balanced scale







Graduation: 0.02 mm,
Measuring range: 1.6 mm

2973AB





- One revolution
- Shockproof
- Dustproof

FEATURES

Metric ☐ ISO/JIS type ☐ ANSI/AGD type

Code No.					
w/lug	Flat-back				
—	2971AB	✓	✓	✓	✓
—	2972AB	✓	✓	✓	✓
—	2973AB	✓	✓	✓	✓

Inch

Code No.					
w/lug	Flat-back				
—	2976AB	✓	✓	✓	✓
—	2977AB	✓	✓	✓	✓
—	2978AB	✓	✓	✓	✓