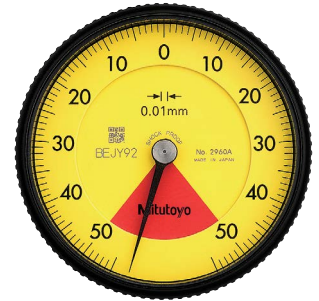




Dial Indicators

Back Plunger Type Dial Indicators SERIES 2

- The one revolution dial indicator (back plunger type) prevents the possibility of reading errors.
- Back plunger type dial indicators are suitable for mounting onto leveling machine tool tables or inspection jigs, and for use in situations where standard dial indicators are difficult to read.
- Proprietary Mitutoyo shockproof mechanism provides excellent durability and shock resistance.
- Model **2990A-10** provides 0.001 mm graduation.
- 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.



2960A



Holding bar (optional)

Order No.	øD (mm)	L (mm)
21AAA166	ø6	42
136567	ø6	81
124625	ø6.35	81
21AAA167	ø6.35	42
21AAA168	ø8	42
136568	ø8	81

Note: øD and L: detail shown in drawing below.

Optional Accessory

- Limit hand (2 pcs.)
Refer to page F-41 for details.

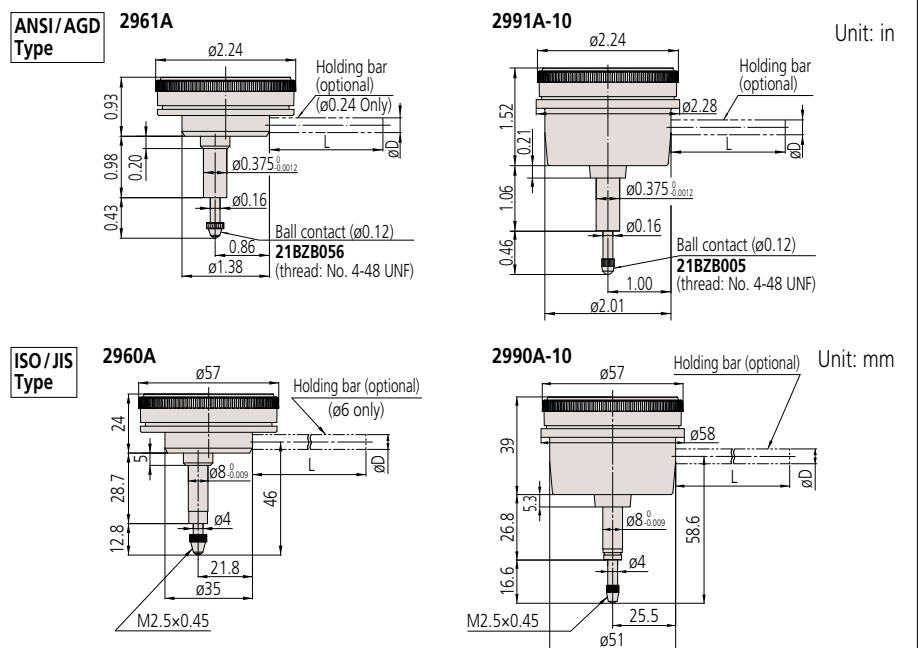
SPECIFICATIONS

Inch		Stem ø3/8", #4-48 UNF		ANSI/AGD type		ISO/JIS type		
Order No.	Graduation (in)	Range (range/rev) (in)	Accuracy (in)			Repeatability (in)	Dial reading	Measuring force (N)
			First 1 Rev/2.5 Rev/10 Rev	Retrace				
2961A	0.0005	0.04 (0.05)	±0.0005/—/—	0.00016		±0.0001	20-0-20	1.4 or less
2991A-10	0.0001	0.008 (0.01)	±0.0002/—/—	0.0001		±0.00005	4-0-4	1.5 or less

Metric		Stem ø8mm, M2.5x0.45 Thread		ANSI/AGD type		ISO/JIS type				
Order No.	Graduation (mm)	Range (range/rev) (mm)	Accuracy (µm)				Hysteresis	Repeat-ability	Dial reading	Measuring force (N)
			1/10 Rev	1/2 Rev	1 Rev	Measuring range				
2960A	0.01	1 (1.27)	8	—	—	14	4	3	50-0-50	1.4 or less
2990A-10	0.001	0.1 (0.14)	2.5	—	—	5	2	1	50-0-50	1.5 or less

Note 1: The bezel clamp cannot be used.

DIMENSIONS



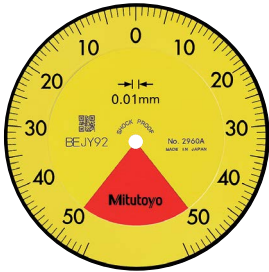
- Note 1: The shoulder on a contact point (standard accessory) for **2960A** and **2961A** acts as a stop to prevent spindle overrun that may otherwise damage the indicator. When replacing it with an optional contact point with a connector not exceeding ø7 mm in outside diameter, insert a washer (with ø7 mm outside diameter, ø3 mm inside diameter, and approximately 0.5 mm thickness) above the contact point.
- Note 2: Refer to pages F-63 to F-68 for details of contact points.

Special specifications

Upon request, we can manufacture custom types with changed graduation numbers, graduation lines, dead zones, etc. Please contact your nearest M³ Solution Center for more information.

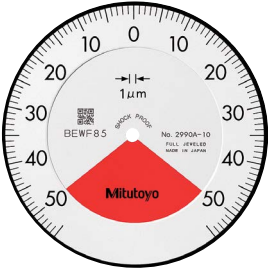
Dial Indicators

 **Balanced scale**



- Graduation: 0.01 mm,
 Measuring range: 1 mm
-  **One revolution**
-  **Shockproof**
-  **Back Plunger**

 **Balanced scale**



- Graduation: 0.001 mm,
 Measuring range: 1 mm
-  **One revolution**
-  **Shockproof**
-  **Back Plunger**
-  **Jeweled bearing**

FEATURES

Inch	ANSI/AGD type					ISO/JIS type				
Order No.										
2961A	✓	✓	✓		✓					
2991A-10	✓	✓	✓	✓	✓					

Metric	ANSI/AGD type					ISO/JIS type				
Order No.										
2960A	✓	✓	✓		✓					
2990A-10	✓	✓	✓	✓	✓					



Need Service?