



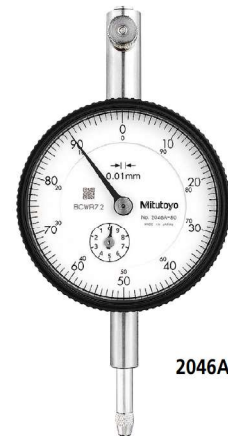
Optional Accessories

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

SERIES 2 — Special Dial Indicators

- A mechanism holds the pointer and the spindle at the position of maximum depression and hence displays the maximum value.

Note: Clearance of peak hold: Push the nut in the direction of the arrow indicated in the dimensional drawing for **2046A-80**.



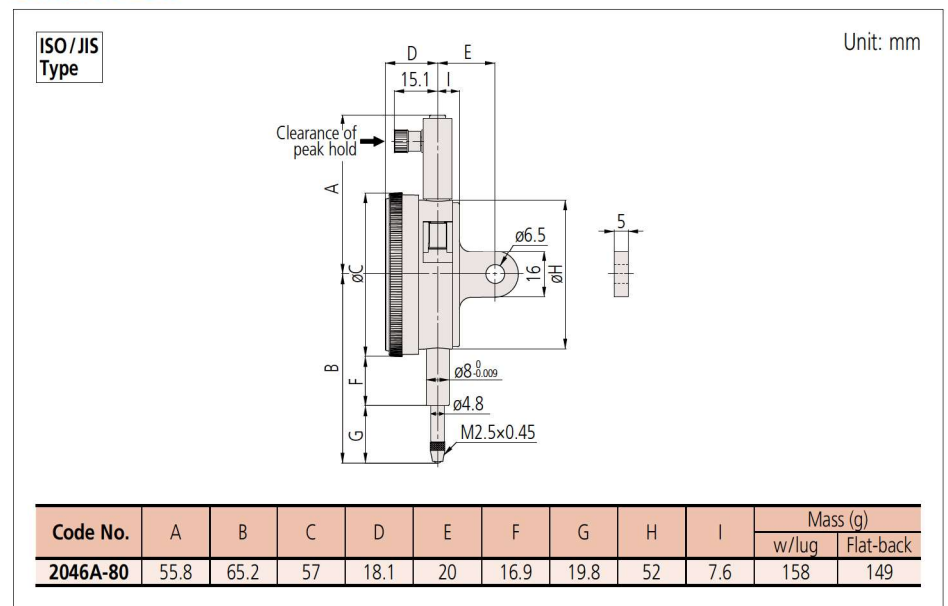
2046A-80

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				
2046A-80	2046AB-80	0.01	10 (1)	5	9	10	15	—	—	±0-100	5.0 or less

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

DIMENSIONS



Continuous scale



Graduation: 0.01 mm,
Measuring range: 10 mm

2046A-80

Peak retaining

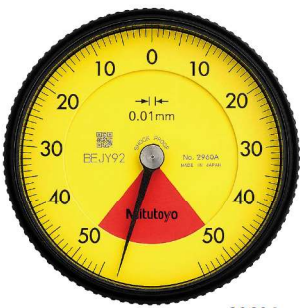
FEATURES

Metric					
Code No.					
w/lug	Flat-back				
2046A-80	2046AB-80	✓		✓	

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 levelling machine tool tables or inspection jigs, and for use in situations where standard dial indicators are difficult to read.
- Mitutoyo's unique shockproof mechanism provides excellent durability and shock resistance.
- Model **2990A-10** provides 0.001 mm graduation.



2960A



Holding bar

SPECIFICATIONS

Metric			<div><div></div> ISO/JIS type</div>						<div><div></div> ANSI/AGD type</div>	
Code No.	Graduation (mm)	Range (range/rev) (mm)	Maximum permissible error (MPE) (μm)						Dial reading	Measuring force (N)
			Indication error				Hysteresis	Repeatability		
			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

Inch										
Code No.	Graduation (in)	Range (range/rev) (in)	Accuracy (in)			Retrace	Repeatability (in)	Dial reading	Measuring force (N)	
			First 1 Rev/2.5 Rev/10 Rev							
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	

Note 1: Completed products inspection is performed in the vertical orientation (contact point downward) and the stated accuracy is guaranteed.
Note 2: The bezel clamp cannot be used.

DIMENSIONS

ISO/JIS Type

2960A

2990A-10

ANSI/AGD Type

2961A

2991A-10

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 07-63 to 07-68 for details of contact points.

Holding bar (optional)

Code 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 07-41 for details.