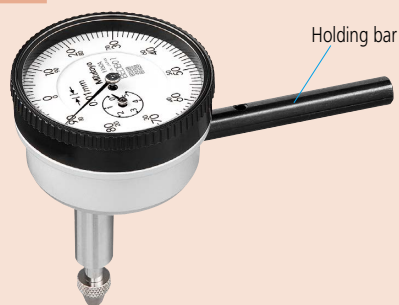




Dial Indicators



Holding bar

Back Plunger Type Dial Indicators SERIES 1

- 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.
- Model **1960A** and **1961A**, which uses Mitutoyo's proprietary shock-proofing mechanism, has excellent durability and shock resistance.

Holding bar (optional)

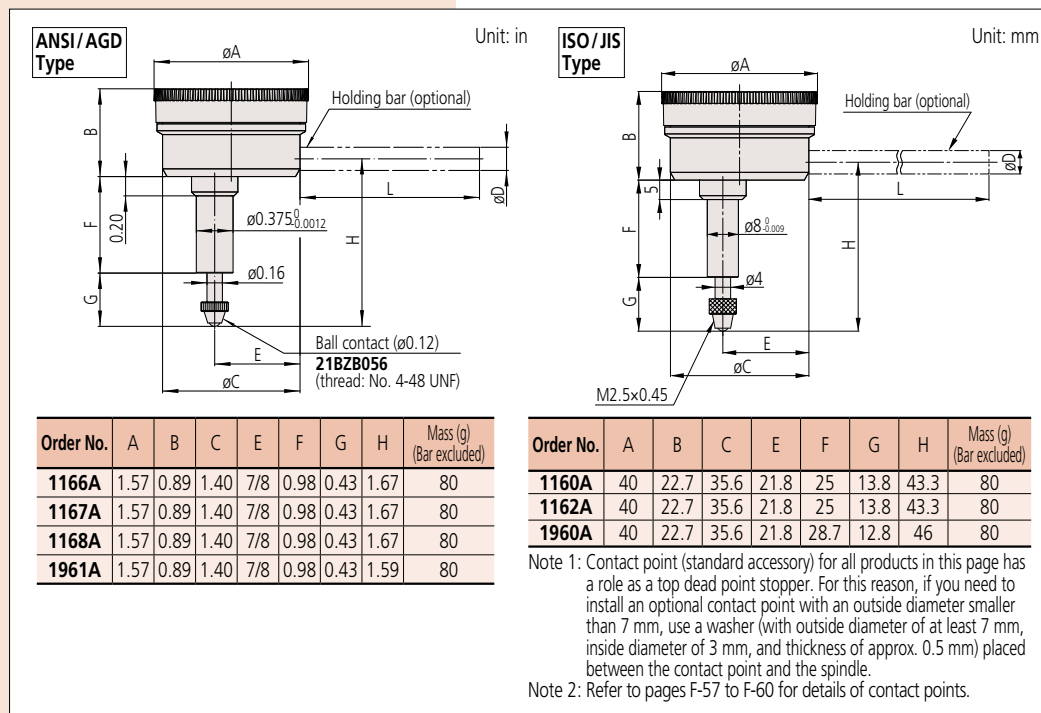
Order No.	øD (mm)	L (mm)
21AAA166	ø6	42
136567	ø6	81
124625	ø6.35	81
21AAA167	ø6.35	42
21AAA168	ø8	42
136568	ø8	81

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

Optional Accessory

- Limit hand (2 pcs.): **21AAB363**

DIMENSIONS



Continuous scale



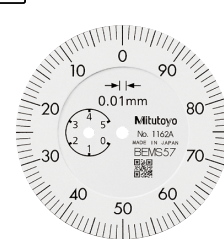
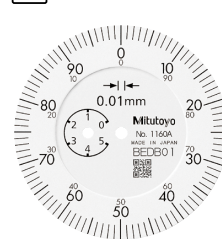
1160A

Graduation: 0.01 mm,
Measuring range: 5 mm

1160A



Reverse reading

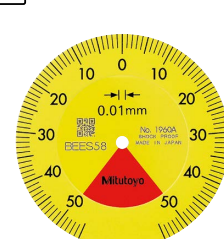


1162A

Graduation: 0.01 mm,
Measuring range: 5 mm

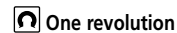


Balanced scale



1960A

Graduation: 0.01 mm,
Measuring range: 1 mm




FEATURES

Metric							
Order No.							
1960A		✓	✓	✓			✓
1160A	✓						✓
1162A					✓		✓


Inch							
Order No.							
1961A		✓	✓	✓			✓
1166A	✓						✓
1167A		✓					✓
1168A					✓		✓

SPECIFICATIONS

Metric										 ISO/JIS type	
Order 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					
1960A	0.01	1 (1.27)	8	—	—	14	4	3	50-0-50	1.4 or less	
1160A	0.01	5 (1)	8	12	14	16	4	3	±0-100	1.4 or less	
1162A	0.01	5 (1)	8	12	14	16	4	3	100-0	1.4 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.

Inch										 ANSI/AGD 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						
1961A	0.001	0.04 (0.05)	±0.001 / — / —		0.0002		±0.0002	20-0-20	1.4 or less		
1166A	0.001	0.2 (0.05)	±0.001/±0.001/±0.001		0.00033		±0.0002	±0-50	1.4 or less		
1167A	0.001	0.2 (0.05)	±0.001/±0.001/±0.001		0.00033		±0.0002	0-25-0	1.4 or less		
1168A	0.001	0.2 (0.05)	±0.001/±0.001/±0.001		0.00033		±0.0002	50-0	1.4 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.