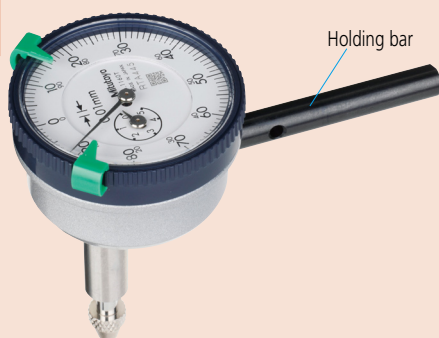




An inspection certificate is supplied as standard.
Refer to page X for details.

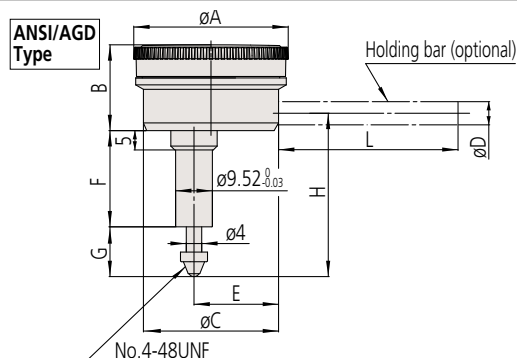


Holding bar (optional)

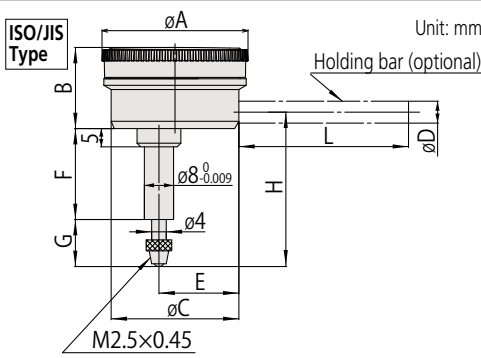
Order No.	øD	L
21AAA166	ø6mm	42mm
136567	ø6mm	81mm
124625	ø6.35mm	81mm
21AAA167	ø6.35mm	42mm
21AAA168	ø8mm	42mm
136568	ø8mm	81mm

* øD and L: detail shown in drawing below.

DIMENSIONS



Order No.	A	B	C	E	F	G	H
1166T	40	22.1	35.6	22.2	25	10.9	42
1167T	40	22.1	35.6	22.2	25	10.9	42
1168T	40	22.1	35.6	22.2	25	10.9	42
1961T	40	22.1	35.6	22.2	25	10.9	40



Order No.	A	B	C	E	F	G	H
1160T	40	22.1	35.6	22.2	25	13.8	43.3
1162T	40	22.1	35.6	22.2	25	13.8	43.3
1960T	40	22.1	35.6	22.2	28.7	12.8	46

Note 1: Contact point (standard accessory) for all products in this page has a role as a top dead point stopper. For this reason, if you need to install an optional contact point with an outside diameter smaller than 7mm, use a washer (with outside diameter of at least 7mm, inside diameter of 3mm, and thickness of approx. 0.5mm) placed between the contact point and the spindle.

Note 2: Dimensions of the inch (ANSI/AGD Type) dial indicator partly differ from those of the metric (ISO/JIS Type) indicator.

Note 3: Inch (ANSI/AGD Type) dial indicators are provided with a stem of 3/8" dia. and #4-48UNF thread mount for the contact point.

Back Plunger Type Dial Indicator SERIES 1

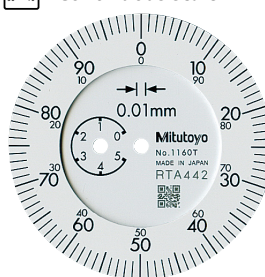
- Back plunger type dial gauges are suitable for mounting onto leveling machine tool tables or inspection jigs, and for use in situations where standard dial gauges are difficult to read.
- Model 1960T and 1961T, which uses Mitutoyo's proprietary shock-proofing mechanism, has excellent durability and shock resistance.



1160T



Continuous scale



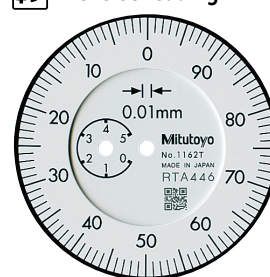
Graduation: 0.01mm,
Measuring range: 5mm

1160T

Back plunger



Reverse reading



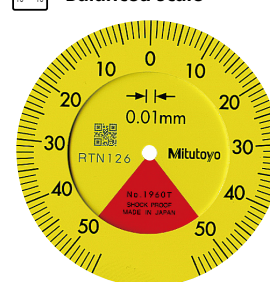
Graduation: 0.01mm,
Measuring range: 5mm

1162T

Back plunger



Balanced scale



Graduation: 0.01mm,
Measuring range: 1mm

1960T

One revolution

Shockproof

Back plunger

FEATURES

Metric

Order No.	Shockproof	Shockproof	Shockproof	Shockproof	Shockproof	Shockproof
1960T	✓	✓	—	—	—	—
1160T	—	—	—	—	—	—
1162T	—	—	✓	—	—	—

Inch

Order No.	Shockproof	Shockproof	Shockproof	Shockproof	Shockproof	Shockproof
1961T	✓	✓	—	—	—	—
1166T	—	—	—	—	—	—
1167T	—	—	—	—	—	—
1168T	—	—	✓	—	—	—

SPECIFICATIONS

Metric

Order No.	Graduation	Range (range/rev)	Accuracy				Repeatability	Dial reading	Measuring force
			Overall	Retrace	1/10 Rev	1 Rev			
1960T	0.01mm	1mm (1.27mm)	14μm	4μm	8μm	—	3μm	50-0-50	1.4N or less
1160T	0.01mm	5mm (1mm)	16μm	4μm	8μm	14μm	3μm	±0-100	1.4N or less
1162T	0.01mm	5mm (1mm)	16μm	4μm	8μm	14μm	3μm	100-0	1.4N or less

* Completed products inspection is performed in the vertical position (contact point downward) and the stated accuracy is guaranteed.

Inch

Order No.	Graduation	Range (range/rev)	Accuracy		Repeatability	Dial reading	Measuring force
			First 1 Rev / 2.5 Rev / 10 Rev	Retrace			
1961T	.001"	.04" (.05")	±.001" / — / —	.0002"	±.0002"	20-0-20	1.4N or less
1166T	.001"	.2" (.05")	±.001" / ±.001" / ±.001"	.00033"	±.0002"	±0-50	1.4N or less
1167T	.001"	.2" (.05")	±.001" / ±.001" / ±.001"	.00033"	±.0002"	0-25-0	1.4N or less
1168T	.001"	.2" (.05")	±.001" / ±.001" / ±.001"	.00033"	±.0002"	50-0	1.4N or less

* Completed products inspection is performed in the vertical position (contact point downward) and the stated accuracy is guaranteed.