

# Depth Gage

A standard measuring tool of industry

## Dial Depth Gage SERIES 7

- Optimal for hole, narrow groove and step measurement.



7211



7214



7222

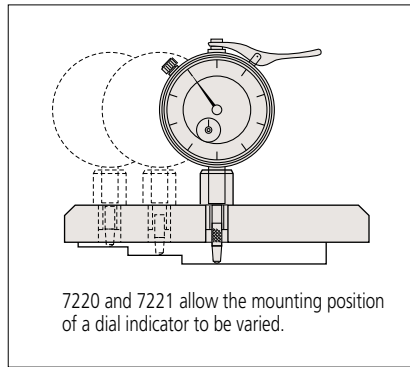


7224



7231

### Example of use



7220 and 7221 allow the mounting position of a dial indicator to be varied.

### Note 1

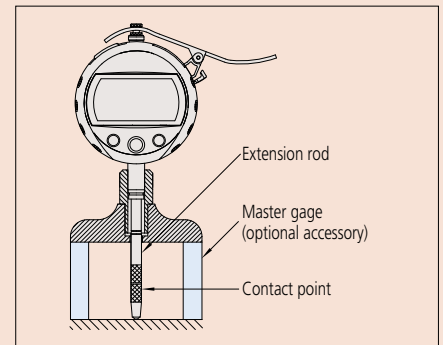
Caution should be exercised when exchanging a contact point of a Depth Gage (Dial/Digimatic Indicator):

- If a different size contact point is mounted, displacement of the contact point from the base contact surface will be changed and as a result, measurement range may not be maintained.
- A contact point cannot be mounted to a Depth Gage if its diameter is too large for the hole diameter of the base.
- Parallelism adjustment with the bottom face of the base is required when mounting a flat contact point such as the flat/needle or carbide-tipped contact point.

### Note 2

Caution should be exercised when using an extension rod:

- If the total length of the extension rod exceeds 110 mm (4.5 in) use the instrument in a vertical position (contact point downward).
- Use a master gage (such as Gauge blocks) to perform zero-setting when the extension rod is mounted. (Master gage is an optional accessory.)



### Note 3

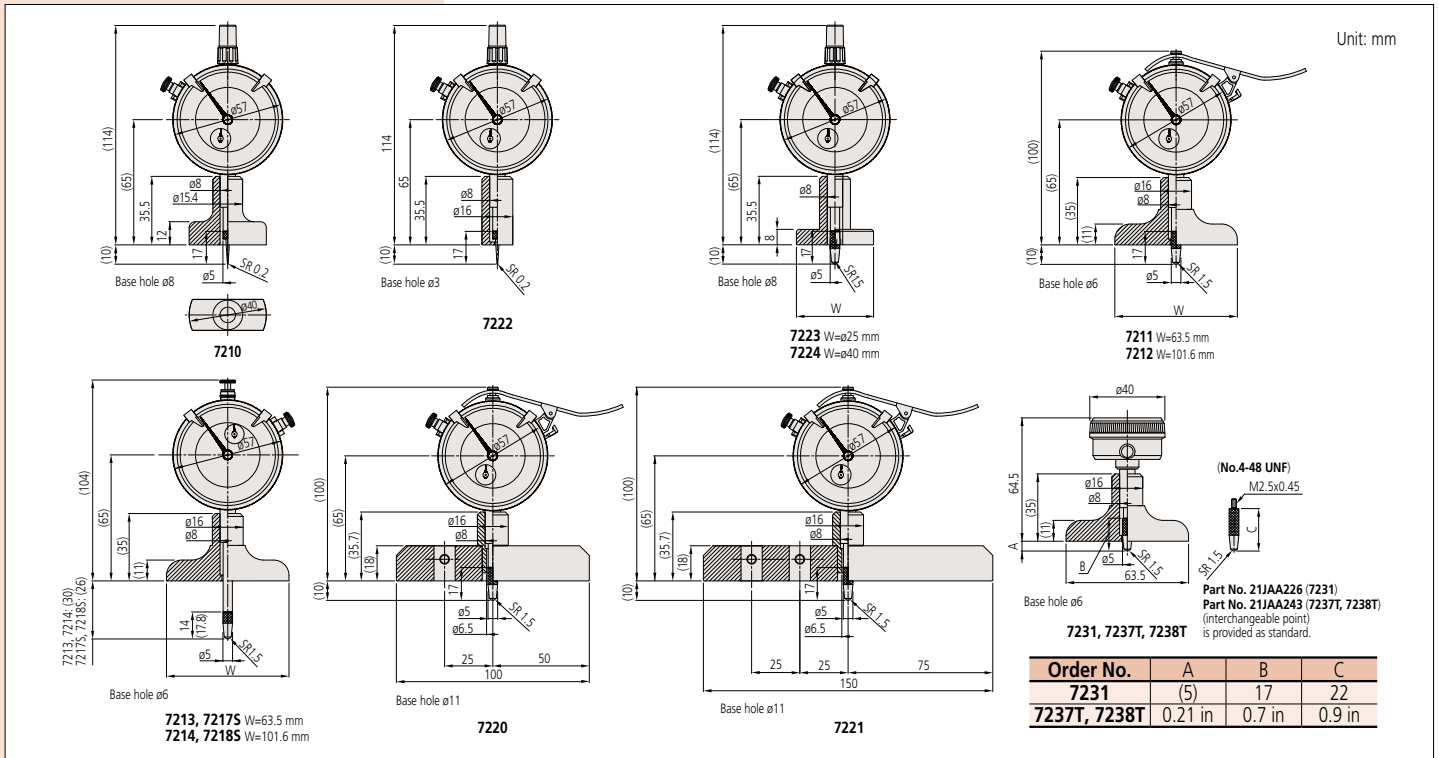
Caution should be exercised when indicators are used on a Depth Gage:

- When the indicator is exchanged and a longer extension rod is connected, the contact-point may deflect significantly with an adverse effect on measuring accuracy.
- Order No.543-400B / 543-402B for Depth Gage has a measuring force less than 1.5N.

Metric															
Order No.	Range	Graduation	Accuracy	Stroke	Measuring force	Base			Mounting position of a dial indicator	Contact point <sup>Note 1</sup>	Extension rod <sup>Note 2</sup>	Indicator <sup>Note 3</sup> (dial indicator)			
						W	T	Flatness							
7210	0 - 10 mm	0.01 mm	±15 μm	10 mm	1.4 N	40 mm	16 mm	5 μm	1	Provided with a needle point (137413)	—	2902SB for Depth Gage			
7211	63.5 mm					Provided with a carbide-tipped ball point (21JAA224)									
7212	101.6 mm					Provided with a carbide-tipped ball point (21JAA225)									
7213	63.5 mm					Provided with a carbide-tipped ball point (21JAA225)									
7214	0 - 210 mm		±30 μm	30 mm	2.5 N	101.6 mm	18 mm	2	3	Provided with a carbide-tipped ball point (21JAA224)	3 pcs. (30, 60, 90 mm)	2952SB for Depth Gage			
7220	100 mm		±15 μm	10 mm	1.4 N	150 mm				1	1	Provided with a needle point (137413)	5 pcs. (10, 20, 30, 30, 100 mm)	2902SB for Depth Gage	
7221	0 - 200 mm					10 mm						150 mm			Provided with a carbide-tipped ball point (21JAA224)
7222	0 - 10 mm					ø16 mm						1			1
7223	ø25 mm														
7224	ø40 mm														
7231	0 - 200 mm	5 mm	63.5 mm	16 mm	1	1	1	1	Provided with a carbide-tipped ball point (21JAA224: 17 mm)	5 pcs. (10, 20, 30, 30, 100 mm) Interchangeable contact point (21JAA226: 22 mm)	1162T for Depth Gage (Back plunger type)				

Inch															
Order No.	Range	Graduation	Accuracy	Stroke	Measuring force	Base			Mounting position of a dial indicator	Contact point <sup>Note 1</sup>	Extension rod <sup>Note 2</sup>	Indicator <sup>Note 3</sup> (dial indicator)			
						W	T	Flatness							
7217S	0 - 8 in	0.001 in	±0.002 in	1 in	2.5 N	2.5 in	0.63 in	0.0002 in	1	Carbide ball point (21JZA242)	3 pcs. (1 in, 2 in, 4 in)	2904SB for Depth Gage			
7218S						4 in				Provided with a carbide-tipped ball point (21JZA242: 0.7 in)					
7237T				2.5 in	4 in	1				1			1	1	1
7238T				4 in											

## DIMENSIONS



MeasurLink ENABLED  
Data Management Software by Mitutoyo

Products equipped with the measurement data output function can be connected to the measurement data network system MeasurLink (refer to page A-5 for details).

## ABSOLUTE Digimatic Depth Gage SERIES 547

MeasurLink ENABLED  
Data Management Software by Mitutoyo

ABSOLUTE™ (Refer to page X for details.)

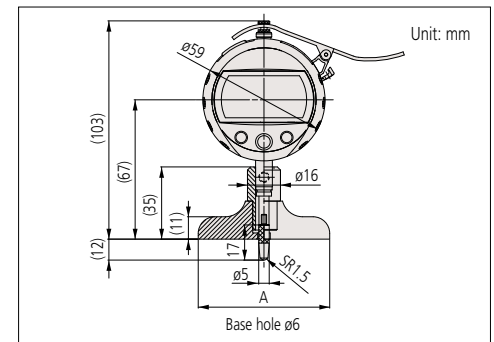
- Easy-to-read dial effectively prevents misreading.

- Allows integration into statistical process control and measurement systems for models with measurement data output connector. Refer to page A-3.



547-211

## DIMENSIONS



## SPECIFICATIONS

### Metric

Order No.	Range	Resolution	Stroke	Accuracy <sup>Note 4</sup>	Measuring force	Base			Contact point <sup>Note 1</sup>	Extension rod <sup>Note 2</sup>	Indicator <sup>Note 3</sup>
						W	T	flatness			
547-211	0 - 200 mm	0.01 mm	12.7 mm	$\pm 20 \mu\text{m}$	1.5 N	63.5 mm	16 mm	5 $\mu\text{m}$	Provided with a carbide-tipped ball point (No.21JAA224)	5 pcs. (10, 20, 30, 30, 100 mm)	543-400B <sup>Note 3</sup>
547-212						101.6 mm					
547-251		0.001 mm		$\pm 5 \mu\text{m}$		63.5 mm	2 $\mu\text{m}$	101.6 mm			
547-252										543-390B	

### Inch/Metric

Order No.	Range	Resolution	Stroke	Accuracy <sup>Note 4</sup>	Measuring force	Base			Contact point <sup>Note 1</sup>	Extension rod <sup>Note 2</sup>	Indicator <sup>Note 3</sup>
						W	T	flatness			
547-217S	0 - 8 in	0.0005 in/0.01 mm	0.5 in	$\pm 0.001$ in	1.5 N	2.5 in	0.63 in	0.0002 in	Provided with a carbide-tipped ball point (No.21JZA242)	4 pcs. (0.5 in, 1 in, 2 in, 4 in)	543-402B <sup>Note 3</sup>
547-218S						4 in					
547-257S		0.00005 in/0.001 mm		$\pm 0.0002$ in		2.5 in	0.00008 in				
547-258S						4 in					

Note1 to 3: Refer to corresponding notes on page D-69.

Note4: Excluding quantizing error of  $\pm 1$  count