

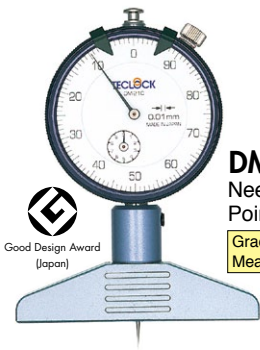
Depth Gauge

This is an exclusive instrument which measures steps and depth of work piece by hand. Setting "0" by sticking bottom face to measuring basics (zero point) and rotating bezel. (Bezel is fixed by clamp at that time.). Then, it reads with short hand and pointer how contact point is salient from that position. Analog and Digital models are available and they correspond to usage of shape of contact point and basic size. There are such standard models of stroke of 10mm, 20mm and 30mm and it can comparatively measure depth of 220mm to 240mm by connecting extension rods.

Dial Depth Gauge

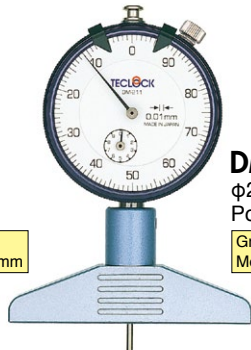
- Dial Depth Gauge can be used to measure depth and steps of work piece and coating thickness.
- 5-240mm range (with the supplied extension rods) are available for wide application.
- Special order is applicable for contact point and base.
- Low measuring force type is also available, which seldom hurts work piece.
- Lifting lever (Option) can be mounted.

Measuring Range:10mm



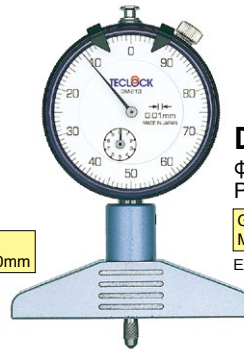
DM-210
Needle Contact Point

Graduation 0.01mm
Measuring Range 10mm



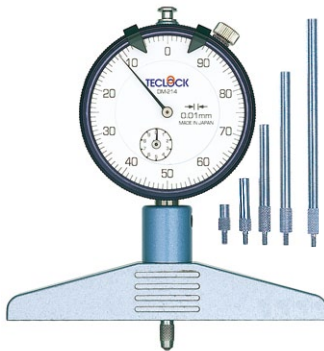
DM-211
φ2 Flat Contact Point

Graduation 0.01mm
Measuring Range 10mm



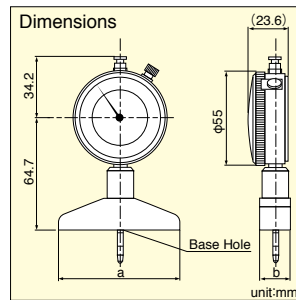
DM-213
φ2 Ball Contact Point

Graduation 0.01mm
Measuring Range 10mm
Extension rods options



DM-214
Possible depth measurement of up to 220mm

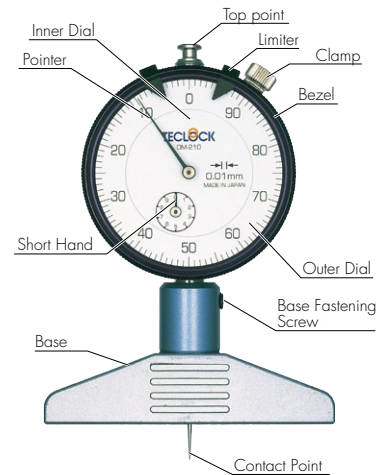
Graduation 0.01mm
Measuring Range 10mm
Indication Range 10mm
with 5-Extension rods



Dimensions Table

Model	Base Form a×b	Base Hole Diameter
DM-210	75×16	2.5
DM-211	75×16	2.5
DM-213	75×16	5.2
DM-214	100×16	5.2

unit:mm



Specifications ※Measuring Range () value is a range by using 5pcs extension rods.

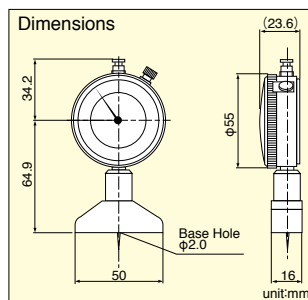
Model	Graduation (mm)	Measuring Range (mm)	Accuracy (μm)	Contact Point Form (mm)	Standard Contact Point	Measuring Force (N)	Weight (g)
DM-210	0.01	10	±12	Needle	ZS-523	1.4以下	240
DM-211	0.01	10	±12	φ2 Flat	ZS-530	1.4以下	240
DM-213	0.01	10	±12	φ3.2 Ball	ZS-034	1.4以下	240
DM-214	0.01	10(220)	±12	φ3.2 Ball	ZS-034	2.5以下	335

Measuring Range:5mm



DM-250
Small type

Graduation 0.01mm
Measuring Range 5mm



Specifications

Model	Graduation (mm)	Measuring Range (mm)	Accuracy (μm)	Contact Point Form (mm)	Standard Contact Point	Measuring Force (N)	Weight (g)
DM-250	0.01	5	±10	Needle	ZS-518	1.4 or less	230



Depth Gauge

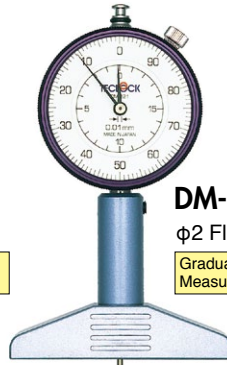
Measuring Range: 20mm / 30mm



DM-220 / 230

Needle Contact point

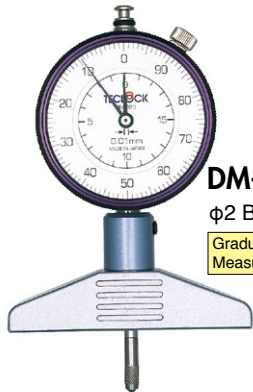
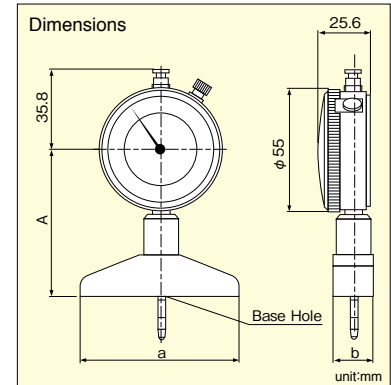
Graduation 0.01mm
Measuring Range 20mm/30mm



DM-221

φ2 Flat Contact Point

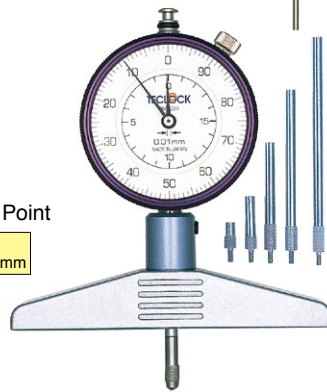
Graduation 0.01mm
Measuring Range 20mm



DM-223

φ2 Ball Contact Point

Graduation 0.01mm
Measuring Range 20mm



DM-224/233/234

Possible depth measurement of up to 230mm (DM-224) / 240mm (DM-233/234)

Graduation 0.01mm
Measuring Range 230mm/240mm
Indication Range 20mm/30mm

with 5-Extension rods

Dimensions Table

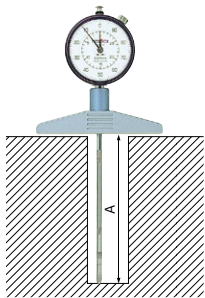
Model	A	Base Form a×b	Base Hole Diameter
DM-220	84.7	75×16	2.5
DM-221	84.7	75×16	2.5
DM-223	64.7	75×16	5.2
DM-224	64.7	100×16	5.2
DM-230	84.7	75×16	2.5
DM-233	64.7	75×16	5.2
DM-234	64.7	100×16	5.2

unit:mm

Specifications

※Measuring Range : () value is a range by using 5pcs extension rods.

Model	Graduation (mm)	Measuring Range (mm)	Accuracy (μm)	Contact Point Form (mm)	Standard Contact Point	Measuring Force (N)	Weight (g)
DM-220	0.01	20	±15	Needle	ZS-543	2.2以下	300
DM-221	0.01	20	±15	φ2 Flat	ZS-541	2.2以下	300
DM-223	0.01	20	±15	φ3.2 Ball	ZS-034	2.2以下	275
DM-224	0.01	20 (230)	±15	φ3.2 Ball	ZS-034	2.5以下	340
DM-230	0.01	30	±35	Needle	ZS-543	2.5以下	315
DM-233	0.01	30 (240)	±35	φ3.2 Ball	ZS-034	2.5以下	315
DM-234	0.01	30 (240)	±35	φ3.2 Ball	ZS-034	2.5以下	355



Depth Gauge with Extension Rods

When all of 5 extension rods of depth gauge with extension rods are connected, it can measure the dimension of deep concavity part of bottom. (Standard dimension set up with master gauge is necessary).

A dimension : Measuring range 10mm Depth Gauge : up to maximum 220mm
 Measuring range 20mm Depth Gauge : up to maximum 230mm
 Measuring range 30mm Depth Gauge : up to maximum 240mm

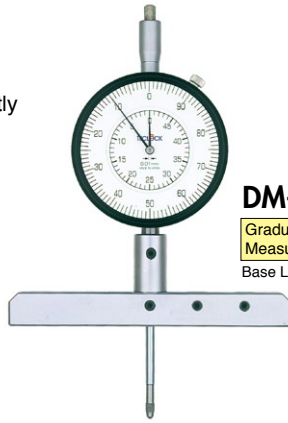


Measuring depth of concavity of work of which center is bored. The photo shows 2.03mm.

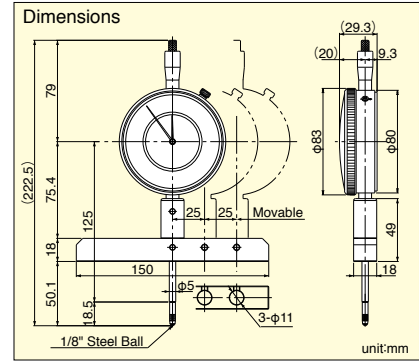


Measuring Range:50mm

- A large sized depth gauge measurable 0-50mm (actual dimension) depth directly without any extension rod.
- The dial part is a type movable by inserting it into one of 3 holes.



DM-295
 Graduation 0.01mm
 Measuring Range 50mm
 Base Length 150mm



Specifications

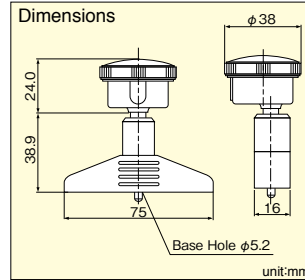
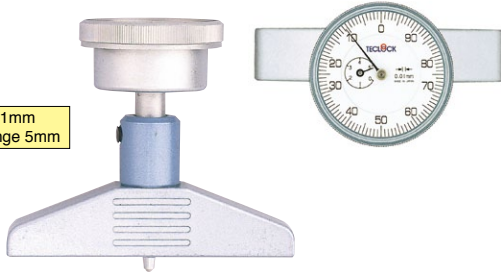
Model	Graduation (mm)	Measuring Range (mm)	Accuracy (μm)	Contact Point Form (mm)	Standard Contact Point	Measuring Force (N)	Weight (g)
DM-295	0.01	50	±50	φ3.2 Ball	ZS-116	2.5以下	750

Dial Depth Gauge (Special)

Back plunger type

DM-273

Graduation 0.01mm
 Measuring Range 5mm



Specifications

Model	Graduation (mm)	Measuring Range (mm)	Accuracy (μm)	Contact Point Form (mm)	Standard Contact Point	Measuring Force (N)	Weight (g)
DM-273	0.01	5	±10	φ3.2 Ball	ZS-105	1.4 or less	210

Round Base type

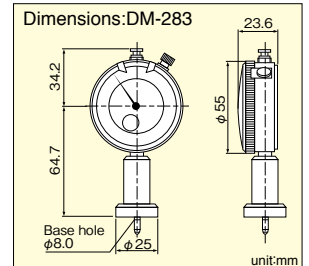
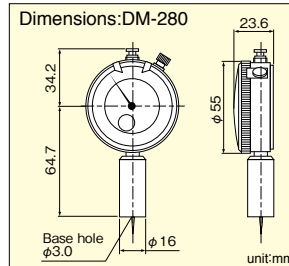
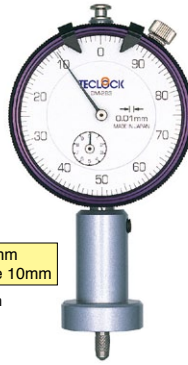
DM-280

Graduation 0.01mm
 Measuring Range 10mm
 Base form φ16mm



DM-283

Graduation 0.01mm
 Measuring Range 10mm
 Base form φ25mm



Specifications

Model	Graduation (mm)	Measuring Range (mm)	Accuracy (μm)	Contact Point Form (mm)	Standard Contact Point	Measuring Force (N)	Weight (g)
DM-280	0.01	10	±12	Needle	ZS-523	1.4 or less	175
DM-283	0.01	10	±12	φ3.2 Ball	ZS-034	1.4 or less	185



Depth Gauge

Measurement for printed circuit board



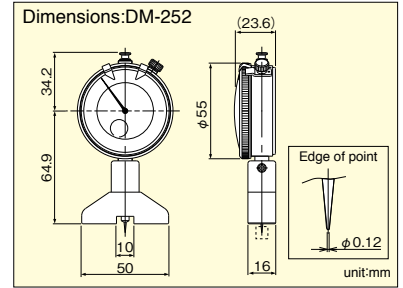
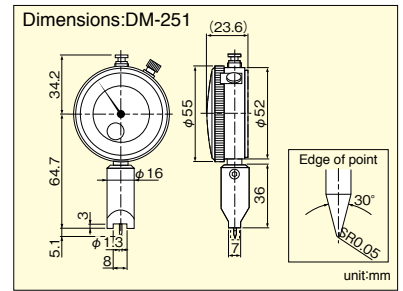
DM-251
Exclusive instrument to measure depth of V-groove of print circuit board.
Graduation 0.01mm
Measuring Range 5mm



DM-252
Convex-concave surface can be measured.
Graduation 0.01mm
Measuring Range Concave 5mm
Convex 4mm



V-Grooved depth measurement of Print circuit board by using DM-251.



Specifications

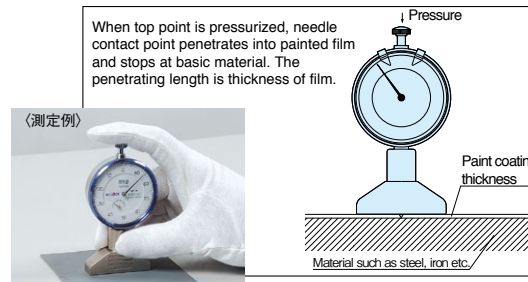
Model	Graduation (mm)	Measuring Range (mm)	Accuracy (μm)	Contact Point Form (mm)	Standard Contact Point	Measuring Force (N)	Weight (g)
DM-251	0.01	5	± 10	Special Needle	ZS-106	1.4 or less	165
DM-252	0.01	Concave 5mm Convex 4mm	± 10	Needle	ZS-595	1.4 or less	195

Coating Thickness Gauge

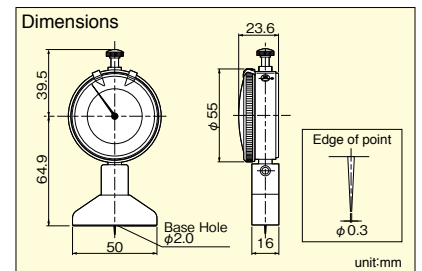
- Exclusive instrument to measure coating thickness of paint, coating materials and sealing materials.
- Handy type and operation is easy.



DM-264
Small-based handy type
Graduation 0.01mm
Measuring Range 5mm



Thickness measurement of painted film waterproof stuff (measuring by pressurization)



Specifications

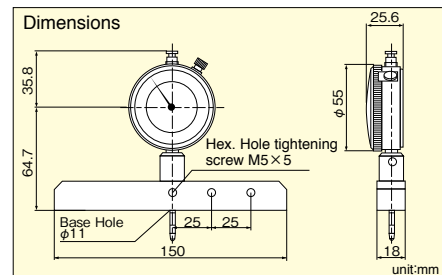
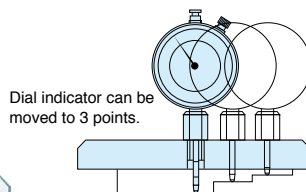
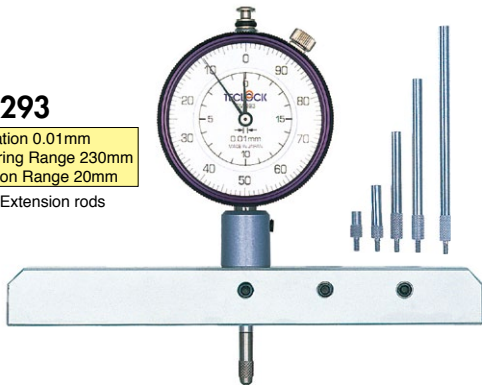
Model	Graduation (mm)	Measuring Range (mm)	Accuracy (μm)	Contact Point Form (mm)	Standard Contact Point	Measuring Force (N)	Weight (g)
DM-264	0.01	5	± 10	Needle	ZS-518	1.4 or less	230

Gauge Slide type

- Steps measurement can be easily made by moving the gauge to 3 mounting holes.

DM-293

Graduation 0.01mm
Measuring Range 230mm
Indication Range 20mm
With 5-Extension rods



Specifications

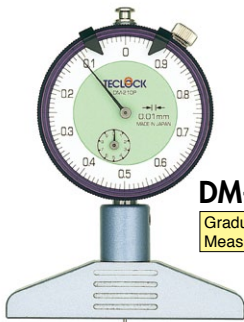
※Measuring Range : () value is a Range by using 5pcs extension rods.

Model	Graduation (mm)	Measuring Range (mm)	Accuracy (μm)	Contact Point Form (mm)	Standard Contact Point	Measuring Force (N)	Weight (g)
DM-293	0.01	20(230)	± 15	$\phi 3.2$ Ball	ZS-034	2.5 or less	510



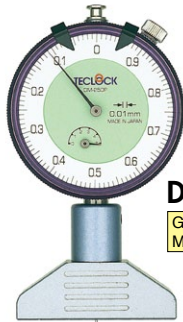
P Series (0.1mm type)

- This is direct reading specification of which graduation are 0.1-0.9mm.
- 1-10mm can be read by short hand and figure below can be read by pointer. It prevents misreading



DM-210P

Graduation 0.01mm
Measuring Range 10mm

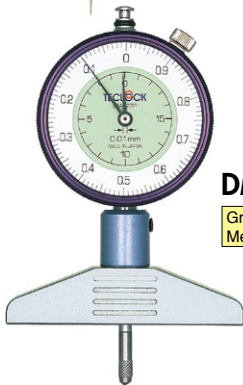


DM-250P

Graduation 0.01mm
Measuring Range 5mm

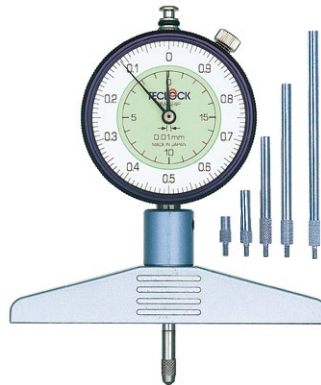


exp. 3.18mm of direct reading.



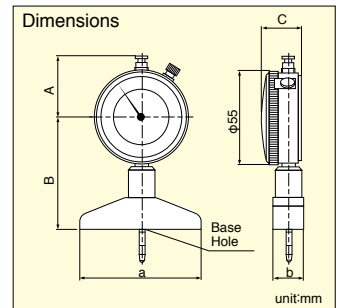
DM-223P

Graduation 0.01mm
Measuring Range 20mm



DM-224P

Graduation 0.01mm
Measuring Range 230mm
Indication Range 20mm
With 5-Extension rods



Dimension Table

Model	A	B	C	Base Form axb	Base Hole Diameter
DM-210P	34.2	64.7	23.6	75x16	2.5
DM-250P	34.2	64.9	23.6	50x16	2.0
DM-223P	35.8	64.7	25.6	75x16	5.2
DM-224P	35.8	64.7	25.6	100x16	5.2

unit:mm

Specifications ※Measuring Range : () value is a Range by using 5pcs extension rods.

Model	Graduation (mm)	Measuring Range (mm)	Accuracy (μm)	Contact Point Form (mm)	Standard Contact Point	Measuring Force (N)	Weight (g)
DM-210P	0.01	10	±12	Needle	ZS-523	1.4 or less	240
DM-250P	0.01	5	±10	Needle	ZS-518	1.4 or less	230
DM-223P	0.01	20	±15	φ3.2 Ball	ZS-034	2.2 or less	275
DM-224P	0.01	20 (230)	±15	φ3.2 Ball	ZS-034	2.5 or less	340



Conventional Digital Depth Gauge

- Digital Exclusive instrument to measure depth and steps of work piece.
- Low cost and conventional model of which preset function is deleted from standard digital depth gauges.

- Operation is equal to standard digital depth gauges, but it can not measure by installing extension rods. In case that measuring range is over 10mm, please use standard digital depth gauges.
- Printing out of measured data and statistics arithmetic operation can be implemented by connecting it to optional Digital mini-printer SD-763P shown on page 52.

0.01mm Conventional Digital Depth Gauge



DMD-210S2
Needle Contact Point
Resolution 0.01mm
Measuring Range 10mm



DMD-211S2
φ2 Flat Needle Contact Point
Resolution 0.01mm
Measuring Range 10mm



DMD-213S2
φ3.2 Steel Ball Contact Point
Resolution 0.01mm
Measuring Range 10mm



DMD-250S2
Needle Contact Point
Resolution 0.01mm
Measuring Range 5mm



DMD-252S2
φ3.2 Steel Ball Contact Point
Resolution 0.01mm
Measuring Range Concave 5mm
Convex 4mm

0.001mm Conventional Digital Depth Gauge



DMD-2100S2
Needle Contact Point
Resolution 0.001mm
Measuring Range 10mm



DMD-2110S2
φ2 Flat Needle Contact Point
Resolution 0.001mm
Measuring Range 10mm



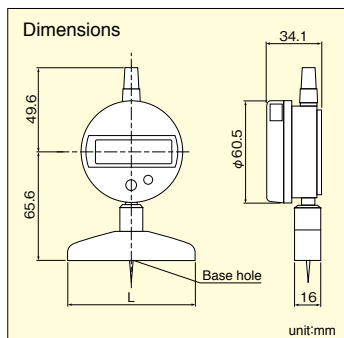
DMD-2130S2
φ3.2 Steel Ball Contact Point
Resolution 0.001mm
Measuring Range 10mm



DMD-2500S2
Needle Contact Point
Resolution 0.001mm
Measuring Range 5mm



DMD-2520S2
φ3.2 Steel Ball Contact Point
Resolution 0.001mm
Measuring Range Concave 5mm
Convex 4mm



Dimension Table

Model	Base Hole Diameter	L
DMD-210S2	φ2.5	75
DMD-211S2	φ2.5	75
DMD-213S2	φ5.2	75
DMD-250S2	φ2.0	50
DMD-252S2	φ8.0	50
DMD-2100S2	φ2.5	75
DMD-2110S2	φ2.5	75
DMD-2130S2	φ5.2	75
DMD-2500S2	φ2.0	50
DMD-2520S2	φ8.0	50

Specifications

Model	Resolution (mm)	Measuring Range (mm)	Accuracy* (μm)	Contact Point Form (or shape) (mm)	Standard Contact Point	Measuring Force (N)	Weight (g)
DMD-210S2	0.01	10	±20	Needle	ZS-523	2.0 or less	280
DMD-211S2	0.01	10	±20	φ2 Flat	ZS-530	2.0 or less	270
DMD-213S2	0.01	10	±20	φ3.2 Steel Ball	ZS-034	2.0 or less	270
DMD-250S2	0.01	5	±20	Needle	ZS-518	2.0 or less	205
DMD-252S2	0.01	Concave 5, Convex 4	±20	Needle	ZS-595	2.0 or less	200
DMD-2100S2	0.001	10	±5	Needle	ZS-523	2.0 or less	300
DMD-2110S2	0.001	10	±5	φ2 Flat	ZS-530	2.0 or less	300
DMD-2130S2	0.001	10	±5	φ3.2 Steel Ball	ZS-034	2.0 or less	300
DMD-2500S2	0.001	5	±5	Needle	ZS-518	2.0 or less	235
DMD-2520S2	0.001	Concave 5, Convex 4	±5	Needle	ZS-595	2.0 or less	230

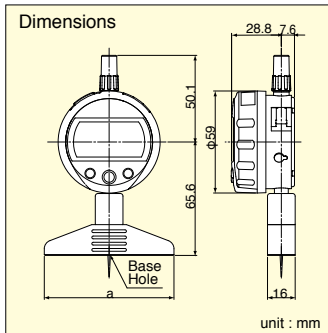
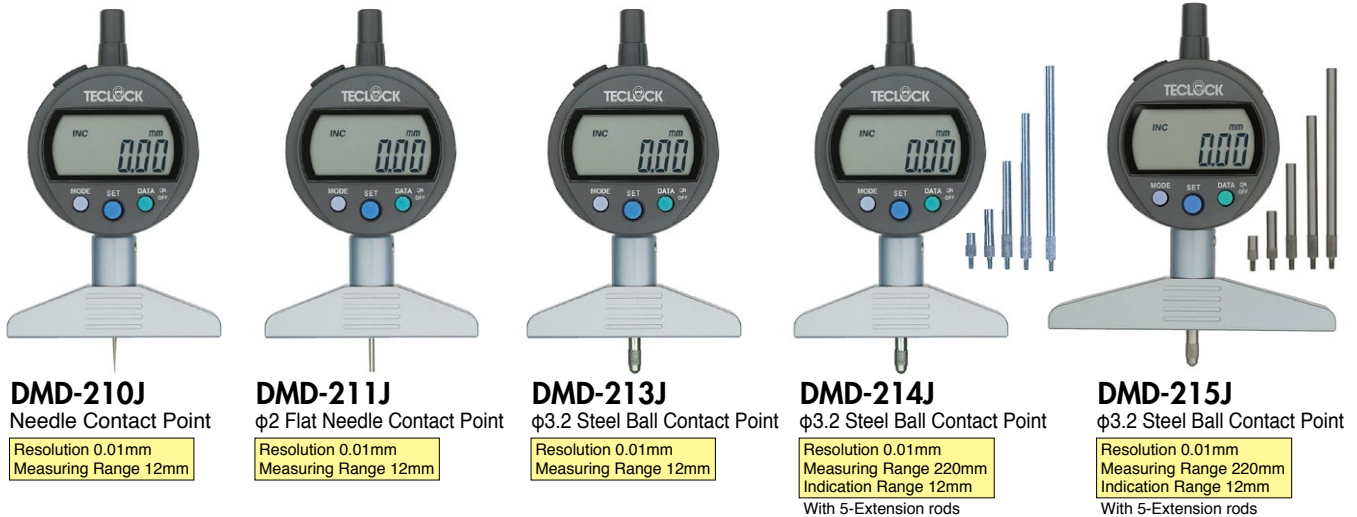
*The quantizing error function is not included.



Standard Digital Depth Gauge

- Digital Depth Gauge can be used for direct measuring depth and steps of work piece.
- Printing out of measured data and statistics arithmetic operation can be implemented by connecting it to optional Digital mini-printer SD-763P shown on page 52.
- Extension rods can be used by Preset function. (Expect DMD-210J, DMD-211J, DMD-240J, DMD-2100J, and DMD-240J).

0.01mm Standard Digital Depth Gauge



Dimensions

Model	Base form a×b	Base hole diameter
DMD-210J	75×16	φ2.5
DMD-211J	75×16	φ2.5
DMD-213J	75×16	φ5.2
DMD-214J	75×16	φ5.2
DMD-215J	100×16	φ5.2

unit : mm

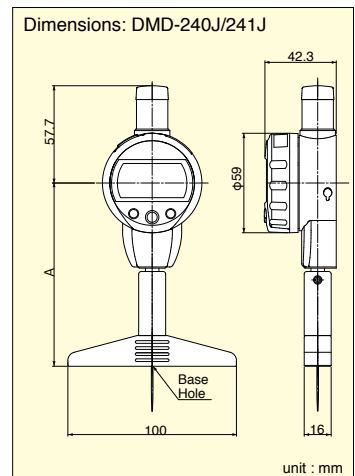


DMD-240J
Needle Contact Point

Resolution 0.01mm
Measuring Range 25.4mm

DMD-241J
φ3.2 Steel Ball Contact Point

Resolution 0.01mm
Measuring Range 25.4mm



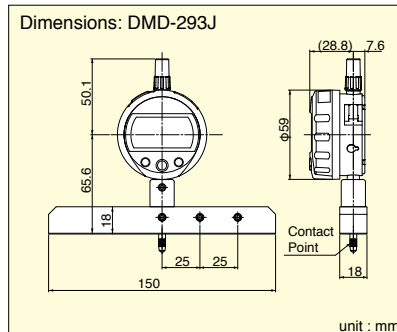
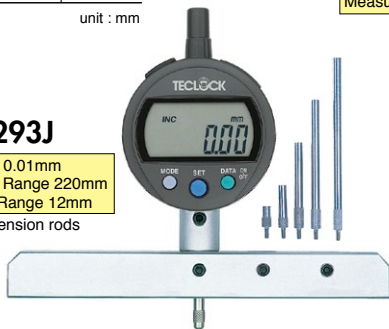
Dimensions: DMD-240J/241J

Model	A
DMD-240J	108.7
DMD-241J	88.7

unit : mm

DMD-293J

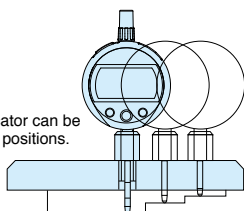
Resolution 0.01mm
Measuring Range 220mm
Indication Range 12mm
With 5-Extension rods



Dimensions: DMD-293J

unit : mm

Digital indicator can be moved to 3 positions.



Specifications

※Measuring Range : () value is a Range by using 5pcs extension rods.

Model	Resolution (mm)	Measuring Range (mm)	Accuracy* (μm)	Contact Point Form (or shape) (mm)	Standard Contact Point	Measuring Force (N)	Weight (g)
DMD-210J	0.01	12	±20	Needle	ZS-523	1.0 or less	310
DMD-211J	0.01	12	±20	φ2 Flat	ZS-530	1.0 or less	310
DMD-213J	0.01	12	±20	φ3.2 Steel Ball	ZS-034	1.0 or less	310
DMD-214J	0.01	12(220)※	±20	φ3.2 Steel Ball	ZS-034	2.3 or less	335
DMD-215J	0.01	12(220)※	±20	φ3.2 Steel Ball	ZS-034	2.3 or less	375
DMD-240J	0.01	25.4	±20	Needle	ZS-113	1.6 or less	390
DMD-241J	0.01	25.4	±20	φ3.2 Steel Ball	ZS-600	1.6 or less	370
DMD-293J	0.01	12(220)※	±20	φ3.2 Steel Ball	ZS-034	2.3 or less	545

*The quantizing error function is not included.



0.001mm Standard Digital Depth Gauge



DMD-2100J
Needle Contact Point
Resolution 0.001mm
Measuring Range 12mm



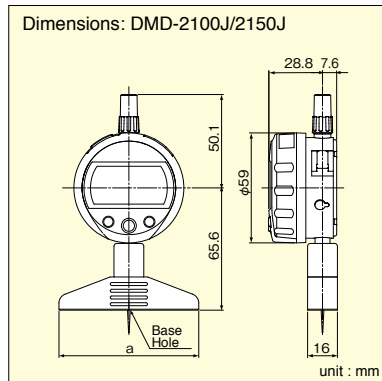
DMD-2150J
φ3.2 Steel Ball Contact Point
Resolution 0.001mm
Measuring Range 220mm
Indication Range 12mm
With 5-Extension rods



DMD-2400J
Needle contact point
Resolution 0.001mm
Measuring Range 25.4mm



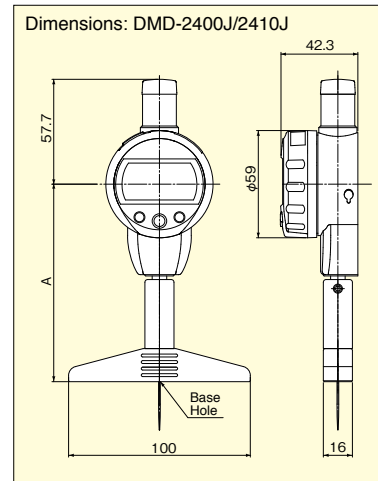
DMD-2410J
φ3.2 Steel Ball Contact Point
Resolution 0.001mm
Measuring Range 25.4mm



Dimensions: DMD-2100J/2150J

Model	Base Foam a×b	Base Hole Diameter
DMD-2100J	75×16	φ2.5
DMD-2150J	100×16	φ5.2

unit : mm



Dimensions: DMD-2400J/2410J

Dimension Table

Model	A
DMD-2400J	108.7
DMD-2410J	88.7

unit : mm

Specifications

※Measuring Range : () value is a Range by using 5pcs extension rods.

Model	Resolution (mm)	Measuring Range (mm)	Accuracy* (μm)	Contact Point Form (or shape) (mm)	Standard Contact Point	Measuring Force (N)	Weight (g)
DMD-2100J	0.001	12	±5	Needle	ZS-523	1.0 or less	310
DMD-2150J	0.001	12(220)※	±5	φ3.2 Steel Ball	ZS-034	2.3 or less	375
DMD-2400J	0.001	25.4	±5	Needle	ZS-113	1.6 or less	390
DMD-2410J	0.001	25.4	±5	φ3.2 Steel Ball	ZS-600	1.6 or less	370

*The quantizing error function is not included.

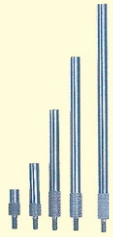


Parts & Accessories

Contact Point

ZS-523	ZS-518	ZS-543	ZS-541
Standard fitment DM-210 DM-210P DM-280 DMD-210J DMD-2100J DMD-210S2 DMD-2100S2	Standard fitment DM-250 DM-250P DM-264 DMD-250S2 DMD-2500S2	Standard fitment DM-220 DM-230	Standard fitment DM-221
ZS-105	ZS-034	ZS-530	ZS-595
Standard fitment DM-273	Standard fitment DM-213 DM-214 DM-223 DM-223P DM-224 DM-224P DM-233 DM-234 DM-283 DM-293 DMD-213J DMD-214J DMD-215J DMD-293J DMD-2150J DMD-213S2 DMD-2130S2	Standard fitment DM-211 DMD-211J DMD-211S2	Standard fitment DM-252 DMD-252J DMD-252S2 DMD-2520S2
		ZS-600	ZS-113
		Standard fitment DMD-241J DMD-2410J	Standard fitment DMD-240J DMD-2400J

Extension Rods



ZS-904
(5 types per set)

ZS-663,664,665,666,670

Code No.	L
ZS-670	10
ZS-663	20
ZS-664	40
ZS-665	60
ZS-666	80

Unit:mm

Standard fitment DM-214 DM-224 DM-224P
DM-233 DM-234 DM-293 DMD-214J
DMD-215J DMD-293J

Depth Gauge by Contact Point List

Model	Base hole diameter	Standard contact point	Mountable contact point	Model	Base hole diameter	Standard contact point	Mountable contact point	Model	Base hole diameter	Standard contact point	Mountable contact point
DM-210	φ2.5	ZS-523	ZS-527 ZS-528 ZS-530	DM-213	φ5.2	ZS-034	ZS-527 ZS-528 ZS-530 ZS-523 ZS-594	DM-251	φ5.2	ZS-106	—
DM-210P				DM-214				DM-252			
DMD-210S2				DM-223				DMD-252S2	φ8.0	ZS-595	—
DMD-210J				DM-224				DMD-2520S2			
DMD-2100S2				DM-233				DM-273	φ5.2	ZS-105	—
DMD-2100J				DM-234				DM-280			
DM-211	DM-223P	DM-283	φ8.0	ZS-034				ZS-527 ZS-528 ZS-530 ZS-523			
DMD-211J	DM-224P								φ2.0	ZS-518	—
DMD-211S2	DM-293										
DMD-2110S2	DMD-213S2								φ5.2	ZS-600	—
	DMD-213J										
	DMD-2130S2										
	DMD-214J										
	DMD-215J										
	DMD-2150J										
	DMD-293J										
	DM-250										
	DM-250P										
	DMD-250S2										
	DMD-2500S2										