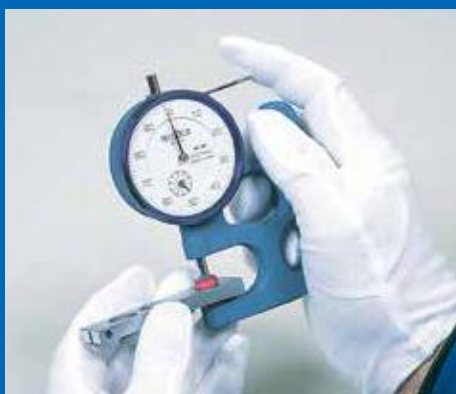


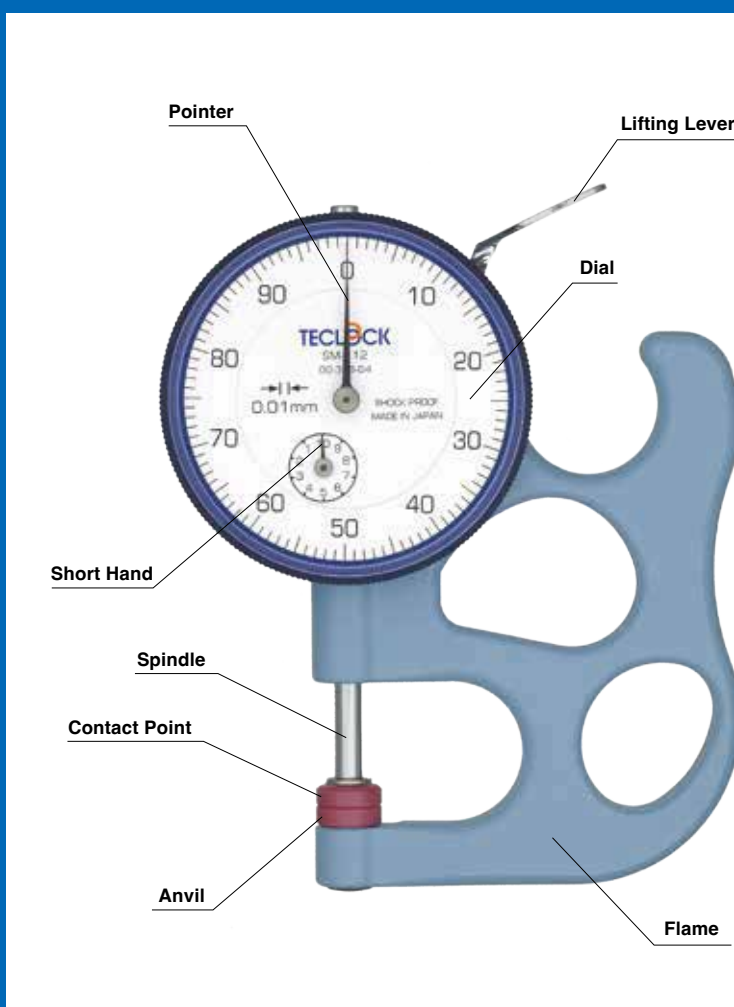
3 Thickness Gauge

High-precision measurement for papers, films and parts thickness

Dial Indicator is used by being fitted to jig etc., while thickness gauge is held with our hand. Holding work piece between stylus and anvil, read the value directly. Contact point moves to upward when lifting lever is pressed down, and contact point returns to “zero” when it is released. As operation is easy, it can measure for a short period compared with micrometer. There are 2 kinds of Dial 0.01mm , 0.001mm for both analog and digital. The stroke depends on size of work piece and a model is available to measure maximum thickness up to 50mm. This can be used for various thickness measurement such as paper, hair, rubber plate metal tube small molded components.



Measuring metal work piece. The photo shows 5.98mm.



Dial Thickness Gauge ----- 66~68
Dial Swift Gauge ----- 68
Dial Pipe Gauge 0.01mm Model ----- 69
Digital Pipe Gauge 0.01mm Model ----- 69
Conventional Digital Thickness Gauge ----- 70
Standard Digital Thickness Gauge ----- 71

Bluetooth Digital Thickness Gauge ----- 72-73
Constant Pressured Thickness Measuring Instrument --- 74-75
Bluetooth Digital Constant Pressured Thickness Gauge -- 76
Thickness Gauge Special Product List ---- 77
Parts & Accessories ----- 78

Dial Thickness Gauge

- Suitable for measuring thickness and diameter of metal, lens, rubber, plastic, paper, felt, hair and pearl etc. In actual dimension.
- Ceramic contact point and anvil feature are superior for anti-abrasion and dust. In addition, there are steel FE type and AT type which rarely adheres with adhesion tape.
- As to shape of contact point and anvil, there are standard type and other various kinds.



All SM series equips ceramic contact point and anvils.

SM-112 Standard type

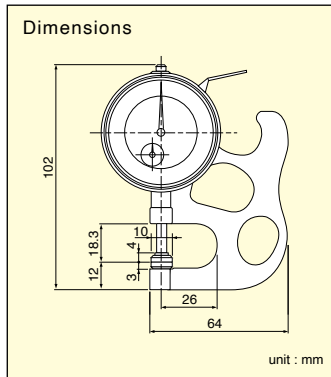
- Graduation 0.01mm
- Measuring Range 10mm

SM-112P
(Direct Reading Graduation)



1.17mm reading example

SM-112D
(Coaxial Revolution Pointer)



Specifications SM-112 Series

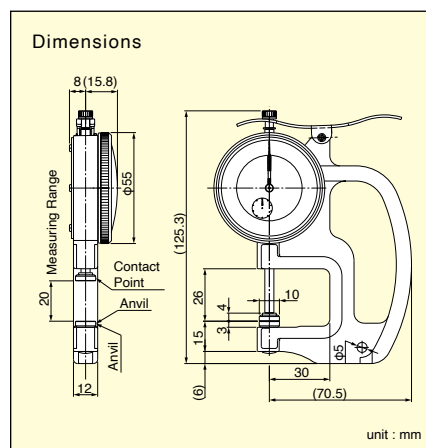
Model	Graduation (mm)	Measuring Range (mm)	Indication Error(μm)	Parallelism (μm)	Dial Reading	Measuring Force (N)	Contact Point Form (mm)	Anvil Form (mm)	Weight (g)	Suggested List Price
SM-112	0.01	10	±15	5	0-50-100	2.5 or less	φ 10 Flat	φ10 Flat	150	9,680 JPY
SM-112LS	0.01	10	±15	—	0-50-100	2.5 or less	φ3.2 Ball	φ10 Flat	150	10,340 JPY
SM-112LW	0.01	10	±15	—	0-50-100	2.5 or less	φ3.2 Ball	φ3.2 Ball	150	10,340 JPY
SM-112-3A	0.01	10	±15	5	0-50-100	2.5 or less	φ5 Flat	φ 5 Flat	150	10,670 JPY
SM-112-80g	0.01	10	±15	5	0-50-100	Stop Point Measuring Forced 0.8±0.05	φ10 Flat	φ10 Flat	150	13,090 JPY
SM-112P	0.01	10	±15	5	0-0.5-1	2.5 or less	φ10 Flat	φ10 Flat	150	9,680 JPY
SM-112FE	0.01	10	±15	5	0-50-100	2.5 or less	φ10 Flat	φ10 Flat	150	10,890 JPY
SM-112AT	0.01	10	±15	8	0-50-100	0.8 or less	φ10 Flat	φ10 Flat	150	14,190 JPY
SM-112D	0.01	10	±15	5	0-50-100	2.5 or less	φ10 Flat	φ10 Flat	155	11,880 JPY

LS, LW, 3A For more information please refer to P77.



SM-528 Measurement of up to 20mm thick

- Graduation 0.01mm
- Measuring Range 20mm
- Ceramic Contact Point and Anvil



Specifications SM-528 Series

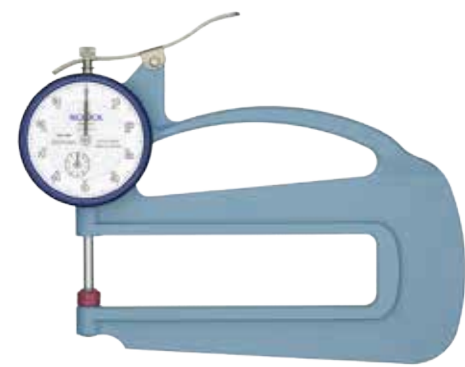
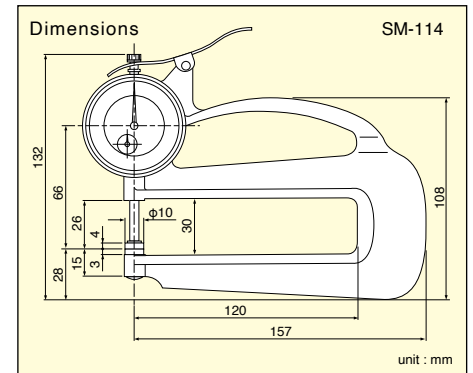
Model	Graduation (mm)	Measuring Range (mm)	Indication Error(μm)	Parallelism (μm)	Dial Reading	Measuring Force (N)	Contact Point Form (mm)	Anvil Form (mm)	Weight (g)	Suggested List Price
SM-528	0.01	20	±20	5	0-50-100	3.5 or less	φ 10 Flat	φ 10 Flat	180	13,530 JPY
SM-528LS	0.01	20	±20	—	0-50-100	3.5 or less	φ 3.2 Ball	φ 10 Flat	180	14,190 JPY
SM-528LW	0.01	20	±20	—	0-50-100	3.5 or less	φ 3.2 Ball	φ 3.2 Ball	180	14,190 JPY
SM-528-3A	0.01	20	±20	5	0-50-100	3.5 or less	φ 5 Flat	φ 5 Flat	180	14,630 JPY
SM-528-80g	0.01	20	±20	5	0-50-100	Stop Point Measuring Forced 0.8±0.05	φ10 Flat	φ10 Flat	180	17,710 JPY
SM-528FE	0.01	20	±20	5	0-50-100	3.5 or less	φ10 Flat	φ10 Flat	180	14,740 JPY

LS, LW, 3A For more information please refer to P77.



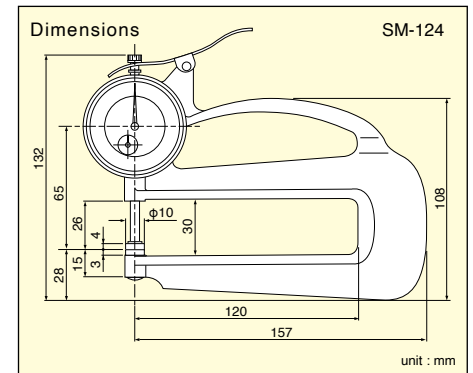
SM-114 Insertion Depth 120mm

- Graduation 0.01mm
- Measuring Range 10mm
- Ceramic Contact Point and Anvil



SM-124 Medium size Thickness Gauge

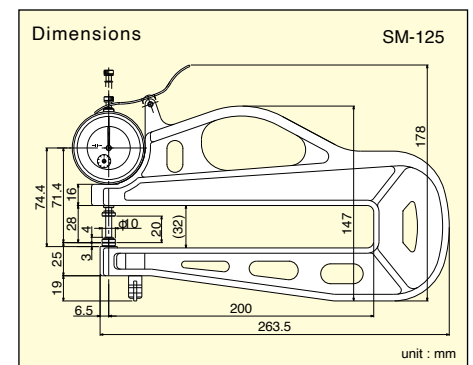
- Graduation 0.01mm
- Measuring Range 20mm
- Ceramic Contact Point and Anvil



This stand is standard accessories.

SM-125 Large size Thickness Gauge

- Graduation 0.01mm
- Measuring Range 20mm
- Ceramic Contact Point and Anvil with Stand



Specifications

SM-114 Series

Model	Graduation (mm)	Measuring Range (mm)	Indication Error(μm)	Parallelism (μm)	Dial Reading	Measuring Force (N)	Contact Point Form (mm)	Anvil Form (mm)	Weight (g)	Suggested List Price
SM-114	0.01	10	±15	5	0-50-100	2.5 or less	φ10 Flat	φ10 Flat	250	10,890 JPY
SM-114LS	0.01	10	±15	—	0-50-100	2.5 or less	φ3.2 Ball	φ10 Flat	250	12,980 JPY
SM-114LW	0.01	10	±15	—	0-50-100	2.5 or less	φ3.2 Ball	φ3.2 Ball	250	12,980 JPY
SM-114P	0.01	10	±15	5	0-0.5-1	2.5 or less	φ10 Flat	φ10 Flat	250	12,430 JPY

LS, LW, 3A For more information please refer to P77.

SM-124 Series

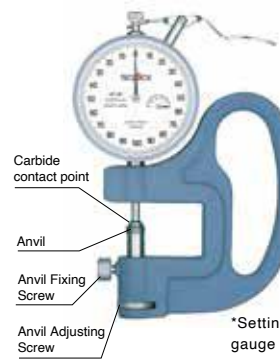
Model	Graduation (mm)	Measuring Range (mm)	Indication Error(μm)	Parallelism (μm)	Dial Reading	Measuring Force (N)	Contact Point Form (mm)	Anvil Form (mm)	Weight (g)	Suggested List Price
SM-124	0.01	20	±20	5	0-50-100	3.5 or less	φ10 Flat	φ10 Flat	250	15,510 JPY
SM-124LS	0.01	20	±20	—	0-50-100	3.5 or less	φ3.2 Ball	φ10 Flat	250	18,370 JPY
SM-124LW	0.01	20	±20	—	0-50-100	3.5 or less	φ3.2 Ball	φ3.2 Ball	250	18,370 JPY

LS, LW, 3A For more information please refer to P77.

SM-125 Series

Model	Graduation (mm)	Measuring Range (mm)	Indication Error(μm)	Parallelism (μm)	Dial Reading	Measuring Force (N)	Contact Point Form (mm)	Anvil Form (mm)	Weight (g)	Suggested List Price
SM-125	0.01	20	±20	5	0-50-100	3.5 or less	φ10 Flat	φ10 Flat	625	38,720 JPY
SM-125LS	0.01	20	±20	—	0-50-100	3.5 or less	φ3.2 Ball	φ10 Flat	625	40,700 JPY
SM-125LW	0.01	20	±20	—	0-50-100	3.5 or less	φ3.2 Ball	φ3.2 Ball	625	40,700 JPY

LS, LW, 3A For more information please refer to P77.



SM-1201
Symmetrical Dial
· Graduation 0.001mm
· Measuring Range 10mm
· Indication Range 1mm (Lifting Anvil)
· Contact Point, Anvil = Solid Carbide

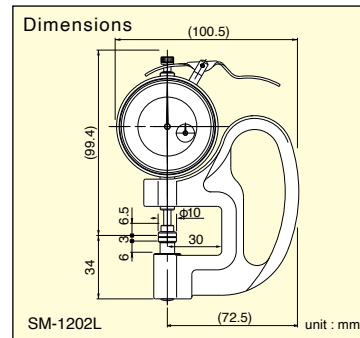
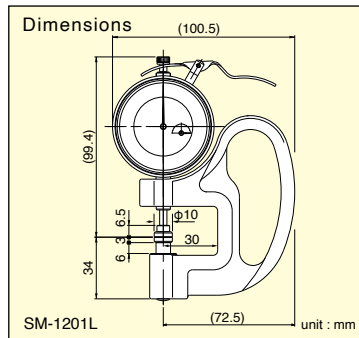
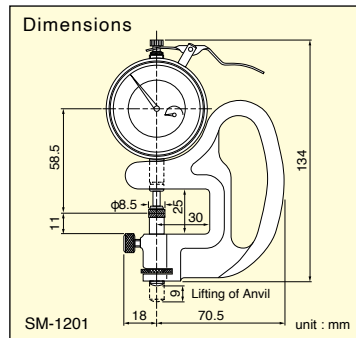
*Setting up standard point with block gauge is necessary to measure thickness 1mm and over.



SM-1201L
Continuous Dial
· Graduation 0.001mm
· Measuring Range 1mm
· Contact Point, Anvil = Ceramic



SM-1202L
· Graduation 0.001mm
· Measuring Range 2mm
· Contact Point, Anvil = Ceramic

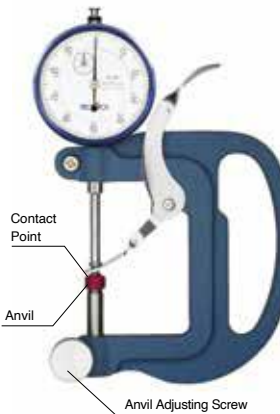


Specifications **SM-1201 Series**

Model	Graduation (mm)	Measuring Range (mm)	Indication Error(μm)	Parallelism (μm)	Dial Reading	Measuring Force (N)	Contact Point Form (mm)	Anvil Form (mm)	Weight (g)	Suggested List Price
SM-1201	0.001	10	±3	3	0-100-0	1.5 or less	φ8.5 Flat (Carbide)	φ8.5 Flat (Carbide)	440	37,730 JPY
SM-1201LS	0.001	10	±3	—	0-100-0	1.5 or less	φ3 Ball (Carbide)	φ8.5 Flat (Carbide)	440	42,020 JPY
SM-1201LW	0.001	10	±3	—	0-100-0	1.5 or less	φ3 Ball (Carbide)	φ3 Ball (Carbide)	440	42,020 JPY
SM-1201L	0.001	1(3)*	±3	3	0-100-200	1.5 or less	φ10 Flat (Ceramic)	φ10 Flat (Ceramic)	420	27,830 JPY
SM-1202L	0.001	2(2)*	±5	3	0-100-200	1.5 or less	φ10 Flat (Ceramic)	φ10 Flat (Ceramic)	420	30,250 JPY

* () is a free-stroke.

LS, LW, 3A For more information please refer to P77.



SM-130
By the lifting of the anvil, can be measured 0~50mm
· Graduation 0.01mm
· Measuring Range 50mm
· Indication Range 30mm (Lifting Anvil)

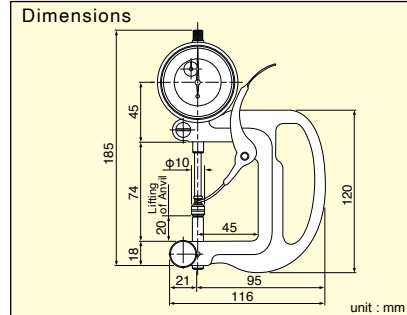
· Upward Shockproof Contact Point, Anvil = Ceramic

*Setting up standard point with block gauge is necessary to measure thickness 30mm and over.

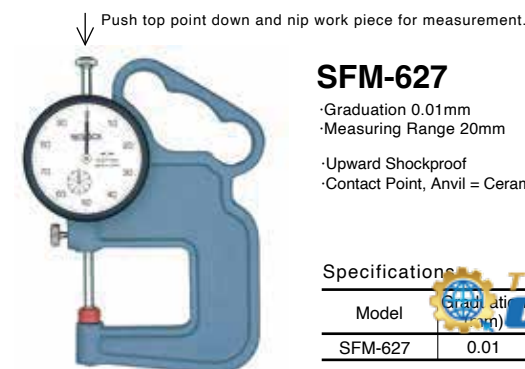
Specifications **SM-130 Series**

Model	Graduation (mm)	Measuring Range (mm)	Indication Error(μm)	Parallelism (μm)	Dial Reading	Measuring Force (N)	Contact Point Form (mm)	Anvil Form (mm)	Weight (g)	Suggested List Price
SM-130	0.01	50	±25	5	±0-50-100	2.2 or less	φ 10 Flat	φ 10 Flat	620	38,390 JPY
SM-130LS	0.01	50	±25	—	±0-50-100	2.2 or less	φ 3.2 Ball	φ 10 Flat	620	42,790 JPY
SM-130LW	0.01	50	±25	—	±0-50-100	2.2 or less	φ 3.2 Ball	φ 3.2 Ball	620	42,790 JPY

LS, LW, 3A For more information please refer to P77.



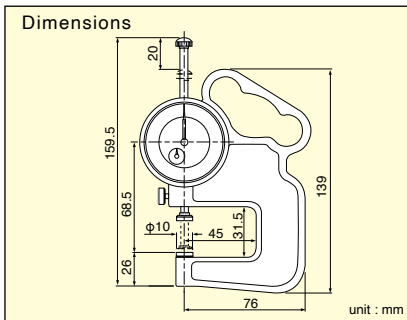
Dial Swift Gauge



SFM-627
· Graduation 0.01mm
· Measuring Range 20mm
· Upward Shockproof
· Contact Point, Anvil = Ceramic

Specifications

Model	Graduation (mm)	Measuring Range (mm)	Indication Error(μm)	Parallelism (μm)	Dial Reading	Contact Point Form(mm)	Anvil Form (mm)	Weight (g)	Suggested List Price
SFM-627	0.01	20	±20	5	0-50-100	φ10 Flat	φ10 Flat	240	23,760 JPY



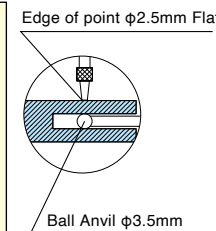
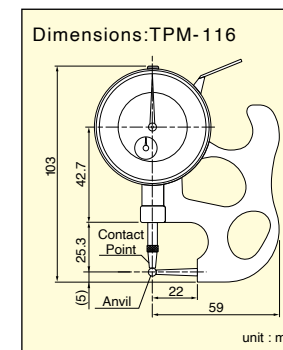
Dial Pipe Gauge



TPM-116

*Suitable for measuring thickness of pipe and curved plate etc. Radial thickness can be measured up to minimum diameter φ 3.5mm.

· Graduation 0.01mm
· Measuring Range 10mm
· Upward Shockproof Anvil fixed type



The special order if the following hole diameter φ3.5mm.



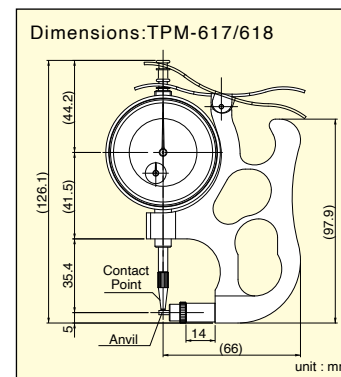
TPM-617

· Graduation 0.01mm
· Measuring Range 10mm
· Anvil replaceable type (φ0.5, φ1.0, φ2.0mm)



TPM-618

· Graduation 0.01mm
· Measuring Range 10mm
· Anvil replaceable type (option)



Relation between Anvil diameter and Work inserting depth

Anvil dia.	Depth	Anvil dia.	Depth
φ0.5	2	φ5.0	8
φ1.0	3	φ7.0	8
φ2.0	3	φ10.0	8

unit : mm

Specifications

Model	Graduation (mm)	Measuring Range (mm)	Indication Error(μm)	Parallelism (μm)	Dial Reading	Measuring Force (N)	Contact Point Form (mm)	Anvil Form (mm)	Weight (g)	Suggested List Price
TPM-116	0.01	10	±15	—	0-50-100	2.3 or less	φ2.5 Flat	φ3.5 Ball	145	10,340 JPY
TPM-617	0.01	10	±15	—	0-50-100	1.5 or less	φ1.6 Ball	φ0.5,1.0,2.0 replaceable	190	35,090 JPY
TPM-618	0.01	10	±15	—	0-50-100	1.5 or less	φ1.6 Ball	φ5.0 (φ7.0,10.0 replaceable)*	195	30,250 JPY

*Anvils of φ7 and φ10.0 are optional.

Digital Pipe Gauge



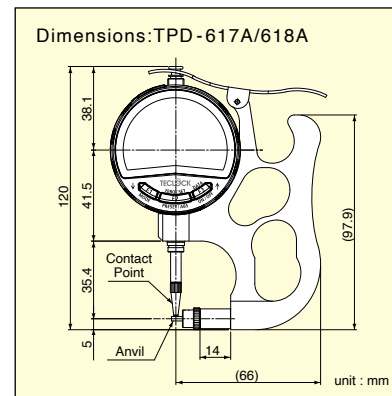
TPD-617A

· Resolution 0.01mm
· Measuring Range 12mm
· Anvil replaceable type



TPD-618A

· Resolution 0.01mm
· Measuring Range 12mm
· Anvil replaceable type (option)



Relation between Anvil diameter and Work inserting depth

Anvil dia.	Depth	Anvil dia.	Depth
φ0.5	2mm	φ5.0	8mm
φ1.0	3mm	φ7.0	8mm
φ2.0	3mm	φ10.0	8mm

unit : mm

Specifications

Model	Resolution (mm)	Measuring Range (mm)	Indication Error(μm)	Parallelism (μm)	Measuring Force(N)	Contact Point Form (mm)	Anvil Form (mm)	Weight (g)	Suggested List Price
TPD-617A	0.01	12	±20	—	1.5	φ1.6 Ball	φ5.0 (φ 7.0,10.0 replaceable)	255	59,290 JPY
TPD-618A	0.01	12	±20	—	1.5	φ1.6 Ball	φ5.0 (φ 7.0,10.0 replaceable)*	260	54,450 JPY

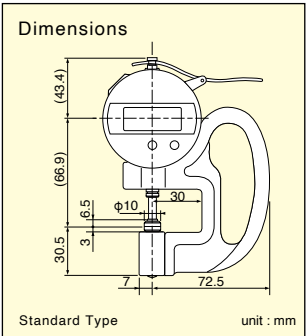
*Anvils of φ7 and φ10.0 are optional.

Conventional Digital Thickness Gauge

- Digital display for error-free reading
- Measurement force cannot be changed.Low measurement force is required, check a standard type.



SMD-540S2
Insertion Depth 30mm Model
 ·Resolution 0.01mm
 ·Measuring Range 12mm
 ·Ceramic Contact Point and Anvil



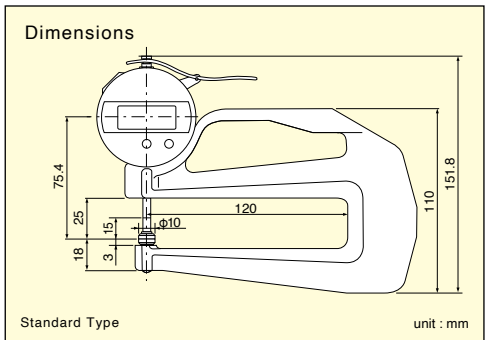
Specifications

Model	Resolution (mm)	Measuring Range(mm)	Indication Error(μm)	Parallelism (μm)	Measuring Force (N)	Contact Point Form(mm)	Anvil Form (mm)	Weight (g)	Suggested List Price
SMD-540S2	0.01	12	±20	5	2.0 or less	φ10 Flat	φ10 Flat	250	26,950 JPY
SMD-540S2-LS	0.01	12	±20	—	2.0 or less	φ3.2 Ball	φ10 Flat	250	30,030 JPY
SMD-540S2-LW	0.01	12	±20	—	2.0 or less	φ3.2 Ball	φ3.2 Ball	250	31,900 JPY
SMD-540S2-3A	0.01	12	±20	5	2.0 or less	φ5 Flat	φ5 Flat	250	33,440 JPY

LS, LW, 3A For more information, refer to P77.



SMD-550S2
Insertion Depth 120mm Model
 Resolution 0.01mm
 Measuring Range 12mm
 Ceramic Contact Point and Anvil



Specifications

Model	Resolution (mm)	Measuring Range(mm)	Indication Error(μm)	Parallelism (μm)	Measuring Force (N)	Contact Point Form(mm)	Anvil Form (mm)	Weight (g)	Suggested List Price
SMD-550S2	0.01	12	±20	5	2.0 or less	φ10 Flat	φ10 Flat	400	27,940 JPY
SMD-550S2-LS	0.01	12	±20	—	2.0 or less	φ3.2 Ball	φ10 Flat	400	31,020 JPY
SMD-550S2-LW	0.01	12	±20	—	2.0 or less	φ3.2 Ball	φ3.2 Ball	400	32,890 JPY
SMD-550S2-3A	0.01	12	±20	5	2.0 or less	φ5 Flat	φ5 Flat	400	34,320 JPY

LS, LW, 3A For more information, refer to P77.

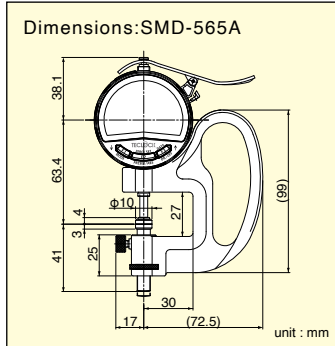


Standard Digital Thickness Gauge

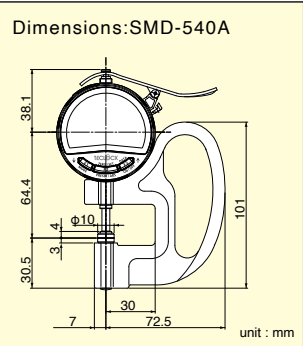
- 0.01mm and 0.001mm resolution are available.



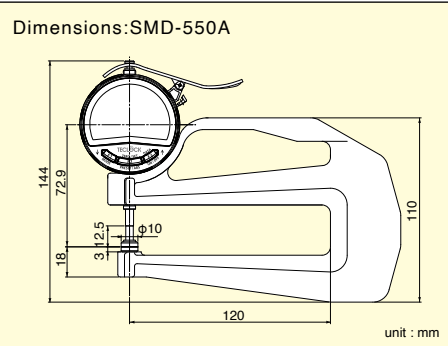
SMD-565A
By the lifting of the anvil, can be measured 0-15mm
 ·Resolution 0.001mm
 ·Measuring Range 15mm
 ·Indication Range 12mm (Lifting of anvil)
 ·Ceramic Contact Point and Anvil



SMD-540A
Insertion Depth 30mm Model
 ·Resolution 0.01mm
 ·Measuring Range 12mm
 ·Ceramic Contact Point and Anvil



SMD-550A
Insertion Depth 120mm Model
 ·Resolution 0.01mm
 ·Measuring Range 12mm
 ·Ceramic Contact Point and Anvil



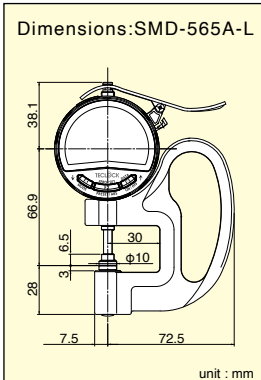
Specifications

Model	Resolution (mm)	Measuring Range (mm) () : Indicating Range*1	Indication Error(μm)	Parallelism (μm)	Measuring Force (N)	Contact Point Form / Anvil Form(mm)	Weight (g)	Suggested List Price
SMD-540A	0.01	12	±20	5	1.0 or less	φ10 Flat	290	41,800 JPY
SMD-550A	0.01	12	±20	5	1.0 or less	φ10 Flat	440	44,440 JPY
SMD-565A	0.001	15(12)	±3	3	1.5 or less	φ10 Flat	470	71,170 JPY

*1 Indicating value in () is a measuring range of digital sensor.

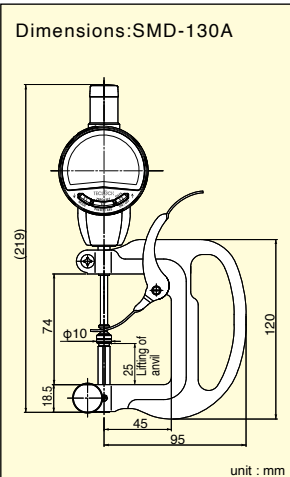
SMD-565A-L

- Conventional type without Anvil Adjustment.
- Resolution 0.001mm
- Measuring Range 12mm
- Ceramic Contact Point and Anvil



SMD-130A

- Long stroke 25mm
- Resolution 0.01mm
- Measuring Range 50mm (Lifting of anvil)
- Ceramic Contact Point and Anvil



Specifications

Model	Resolution (mm)	Measuring Range (mm) () : Indicating Range*1	Indication Error(μm)	Parallelism (μm)	Measuring Force(N)	Contact Point Form (mm)	Anvil Form (mm)	Weight (g)	Suggested List Price
SMD-565A-L	0.001	12	±20	5	1.5 or less	φ10 Flat	φ10 Flat	415	58,080 JPY
SMD-130A	0.01	50(25)	±20	5	2.0 or less	φ10 Flat	φ10 Flat	610	96,800 JPY

*1 Indicating value in () is a measuring range of digital sensor.

Bluetooth Digital Thickness Gauge NEW

Ultra Light Compact Series

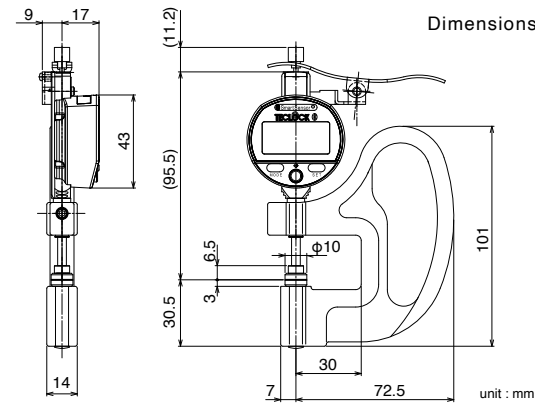
Features

- High precision measurement for papers, films and parts thickness.
- $\phi 45$ mm Mini-Indicator.
- IP67.
- One-touch data sending to PC by built-in Bluetooth.
- Data management by SmartMeasure® Lite (free).



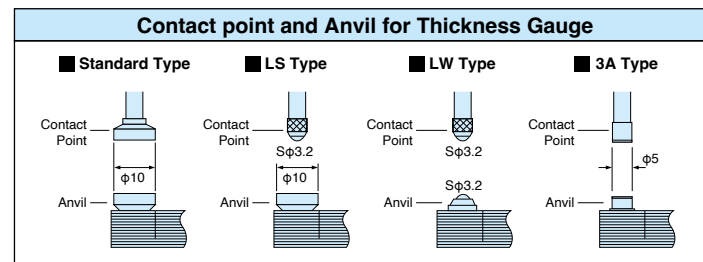
Ultra Light 176g

SSS-540



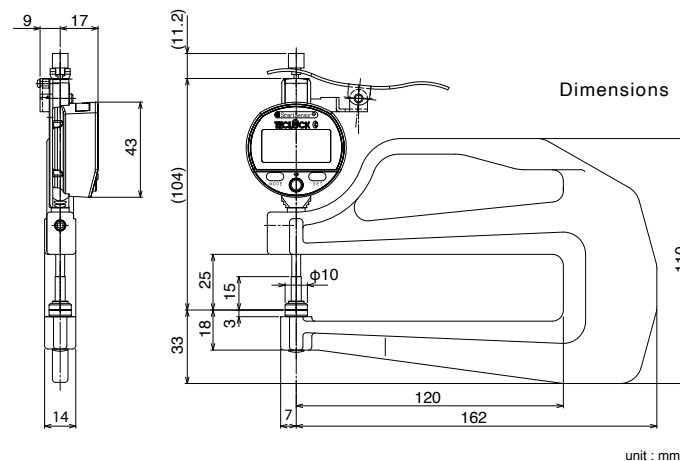
Specifications

Model	Resolution (mm)	Measuring Range(mm)	Indication Error(μ m)	Measuring Force(N)	Standard Contact Point(mm)	Anvil Form (mm)	Insertion Depth(mm)	Weight (g)	Suggested List Price
SSS-540	0.01	12	± 20	1.2 or less	$\phi 10$ Flat	$\phi 10$ Flat	30	176	83,600 JPY
SSS-540-LS	0.01	12	± 20	1.2 or less	$\phi 3.2$ Ball	$\phi 10$ Flat	30	176	83,600 JPY
SSS-540-LW	0.01	12	± 20	1.2 or less	$\phi 3.2$ Ball	$\phi 3.2$ Ball	30	176	83,600 JPY
SSS-540-3A	0.01	12	± 20	1.2 or less	$\phi 5$ Flat	$\phi 5$ Flat	30	176	83,600 JPY



Insertion Depth 120mm

SSS-550



Specifications

Model	Resolution (mm)	Measuring Range(mm)	Indication Error(μ m)	Measuring Force(N)	Standard Contact Point(mm)	Anvil Form(mm)	Insertion Depth(mm)	Weight (g)	Suggested List Price
SSS-550	0.01	12	± 20	1.2 or less	$\phi 10$ Flat	$\phi 10$ Flat	120	344	85,800 JPY
SSS-550-LS	0.01	12	± 20	1.2 or less	$\phi 3.2$ Ball	$\phi 10$ Flat	120	344	85,800 JPY
SSS-550-LW	0.01	12	± 20	1.2 or less	$\phi 3.2$ Ball	$\phi 3.2$ Ball	120	344	85,800 JPY
SSS-550-3A	0.01	12	± 20	1.2 or less	$\phi 5$ Flat	$\phi 5$ Flat	120	344	85,800 JPY



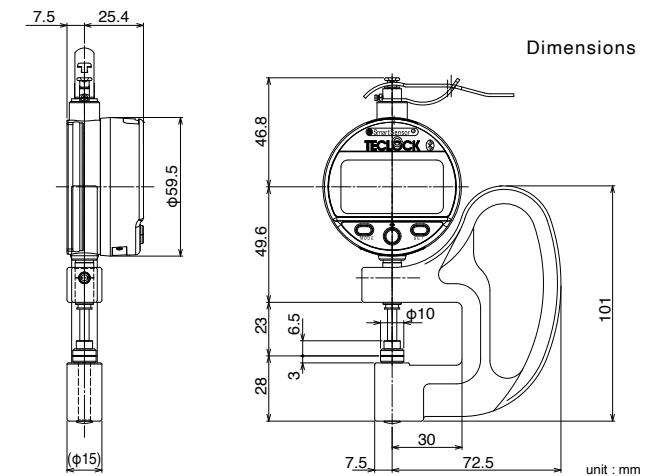
Standard Series

Features

- High precision measurement for papers, films and parts thickness.
- High resolution 1/1000mm.
- IP54.
- One-touch data sending to PC by built-in Bluetooth.
- Data management by SmartMeasure® Lite (free).



SSS-5650



Specifications

Model	Resolution (mm)	Measuring Range(mm)	Indication Error(μ m)	Measuring Force(N)	Standard Contact Point(mm)	Anvil Form (mm)	Insertion Depth(mm)	Weight (g)	Suggested List Price
SSS-5650	0.001	12	± 3	1.2 or less	$\phi 10$ Flat	$\phi 10$ Flat	30	380	97,900 JPY

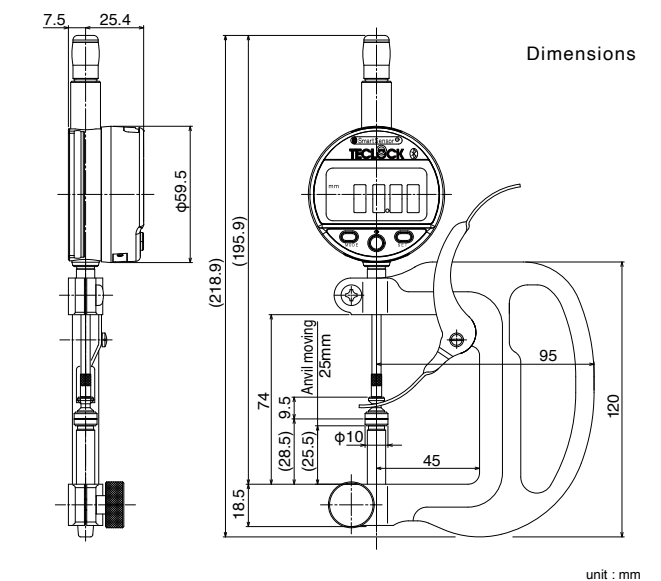
Long Stroke Model

Features

- High precision measurement for papers, films and parts thickness.
- Measuring Range 50mm , Indication Range 25mm(Lifting of anvil).
- IP54.
- One-touch data sending to PC by built-in Bluetooth.
- Data management by SmartMeasure® Lite (free).



SSS-130



Specifications

*Measuring Range : Indicating value in () is a measuring range of digital sensor.

Model	Resolution (mm)	Measuring Range(mm)	Indication Error(μ m)	Measuring Force(N)	Standard Contact Point(mm)	Anvil Form (mm)	Insertion Depth(mm)	Weight (g)	Suggested List Price
SSS-130	0.01	50(25)	± 20	1.2 or less	$\phi 10$ Flat	$\phi 10$ Flat	45	543	—

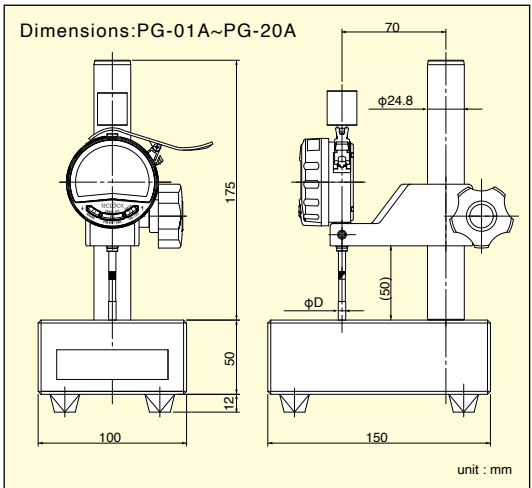
Constant Pressured Thickness Measuring Instrument

Thickness measuring method for tested piece for physical test such as rubber, heat plasticity Elastomer, plastic film, cloth, textile,leathers are ruled in detail by JIS or ISO.
PG/PF series are digital type thickness measuring instrument in compliance with these major standard.

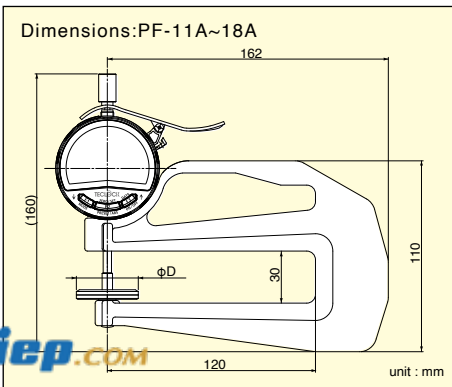
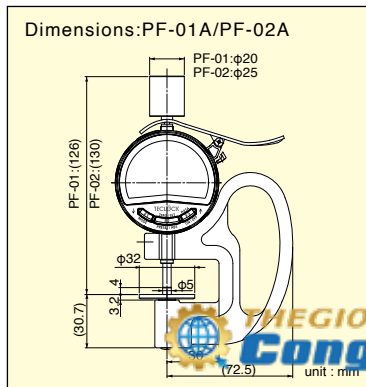
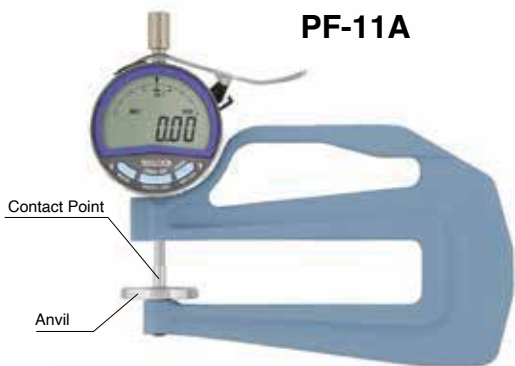
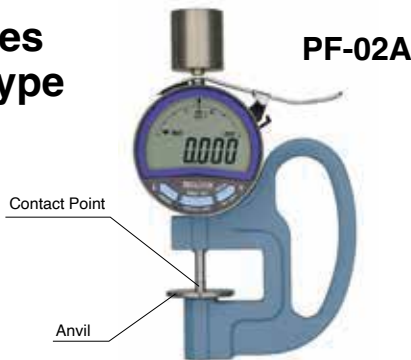
- Features**
 - Wide range of line-up complying with various standard of the field are available.
 - High accuracy digital type with weight type for all the versions realizing stable static load, which is not got by analog type utilizing gears or springs.
 - PG series uses micro-granite which is superior for abrasion resistance , chemical resistance , impact resistance in addition to high unstriated for measurable table. It can avoid scratches and stains for metal.
 - Stainless steel is used for contact point and anvil (excluding partial model). Acid resistance , alkali proof, water resistance are improved.
 - Power source is silver oxide batteries (SR-44) which is convenient to carry.
 - This makes treating statistics of measured data possible with connected to optional printer SD-763P.
 - Contact point and measuring pressure can be changed. (However, it is not equivalent to standard)
 - Please refer to page 25 for specifications of each model.

PG Series stand type

PG-20 is the thickness measuring instrument compliant with A Law for measuring thickness which is standardized in JIS K 6250 (ruled in physical test method general rule of rubber for vulcanized rubber and thermoplastic rubber.)
This is sheet block compatible type which can measure both thickness of test piece hardness IRHD below 35 and over 35 by this one unit.
Contact point is diameter 5mm and pressure can be changed by only attaching and detaching weights.



PF Series frame type



Specifications

Model		Reference Standard		Resolution (Mm)	Measuring Range (Mm)	Load (Measuring Force)	Contact Point φd (Mm)	Measured Pressure	Suggested List Price	
Stand-type	Frame-type	JIS	Measured Item						PG	PF
PG-01A	PF-01A	K6732-1996	Poly vinyl chloride films for agriculture	0.001	12	0.8N(80±5gf)	φ5		116,160 JPY	84,700 JPY
PG-02A	PF-02A	K6783-1994	Ethylene / vinyl acetate copolymer films for agriculture	0.001	12	1.22±0.14N (125±15gf)	φ5		116,160 JPY	84,700 JPY
		Z1702-1994	Polyethylene film for packaging			1226±147mN (125±15gf)				
		Z1709-1995	Heat shrinkable plastic films for packaging							
PG-11A	PF-11A	K6400-1-2004	Flexible polyurethane foam	0.01	12	0.363N(37gf)	φ35.7	0.363kPa(3.7gf/cm²)	105,270 JPY	70,180 JPY
PG-12A	PF-12A	K6402-1976	Flexible polyurethane foam for garments	0.01	12	0.785N(80gf)	φ5		105,270 JPY	70,180 JPY
		K6301-1995	Vulcanized rubber							
PG-13A	PF-13A	K6404-2-3-1999	Rubber or plastics coated fabrics	0.01	12	0.785N(80gf)	φ10	10±1kPa	105,270 JPY	70,180 JPY
		K6328-1999	Rubber coated fabrics					10±2kPa		
		K6250-2006	Rubber A method(less than 35 IRHD)							
PG-14A	PF-14A	L1086-2007	Fusible interlining fabrics (Nonwoven textile)	0.01	12	0.394N(40gf)	φ16	2kPa	105,270 JPY	70,180 JPY
PG-15A	PF-15A	L1086-2007	Fusible interlining fabrics (Ordinary textile)	0.01	12	2.35N(240gf)	φ11.3	23.6kPa	113,740 JPY	79,860 JPY
		L1096-1999	Woven fabrics (Ordinary textile)					23.5kPa(240gf/cm²)		
		L1018-1999	Knitted fabrics (Ordinary knit)					0.7kPa(7gf/cm²)		
PG-16A	PF-16A	L1086-2007	Fusible interlining fabrics (Ordinary knitting fabric)	0.01	12	0.343N(35gf)	φ25.2	0.7kPa	105,270 JPY	70,180 JPY
		L1096-1999	Woven fabrics (Crinose textile)					0.7kPa(7gf/cm²)		
PG-17A	PF-17A	K6505-1995	Man-made upper material of shoes	0.01	12	3.854±0.098N (393gf±10gf)	φ10	49.03±1.177kPa (500±12gf/cm²)	113,740 JPY	79,860 JPY
		K6550-1994	Leathers			3.85±0.1N(390gf±10gf)				
PG-18A	PF-18A	K6250-2006	Rubber A method (35 IRHD or more)	0.01	13	0.431N(44±10gf)	φ5	(35 IRHD and over) 22±5kPa (2.24±0.51gf/mm²)	105,270 JPY	70,180 JPY
PG-20A	—	K6250-2006	Rubber A method for both (less than 35 IRHD, 35 IRHD or more)	0.01	13	0.196 ± 0.038N (20±3.9gf)	φ5	(Less than 35 IRHD) 10±2kPa (1.02±0.20gf/mm²)	113,740 JPY	—
						0.431 ± 0.098N (44 ± 10gf)		(35 IRHD and over) 22±5kPa (2.24±0.51gf/mm²)		

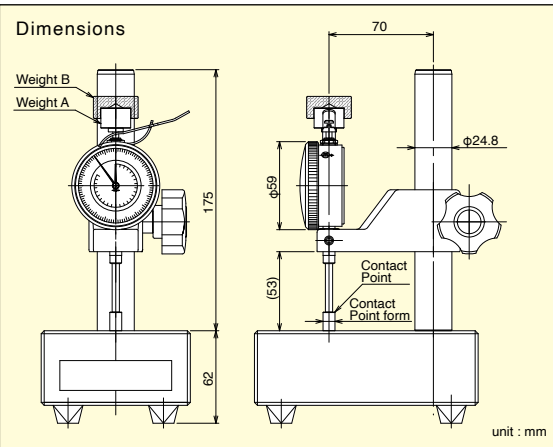
Aluminium alloy is used for material of contact point (including anvil) of PG-11A and PF-11A. Contact point for other model are all stainless steel.
PG-13 and PF-13 can be also used for IRHD below 35 of JIS K 6250 A law.

• PF series can be used by being fixed to stand (Option).



Constant pressured thickness measuring instrument of the plate-cylindrical shape test piece (JIS K 6250 method A)

Hardness 35 for IRHD below-or more of vulcanized rubber.



Specifications

Model	Less than 35 IRHD	35 IRHD and over	Graduatoun	Measuring Range	Contact Point Form	Suggested List Price
PGM-20-5	10±2kPa(100gf)	22±5kPa(240gf)	0.01mm	25mm	φ5mm	96,800 JPY
PGM-20-8	10±2kPa(100gf)	22±5kPa(240gf)	0.01mm	25mm	φ8mm	96,800 JPY

Bluetooth Digital Constant Pressured Thickness Gauge

NEW

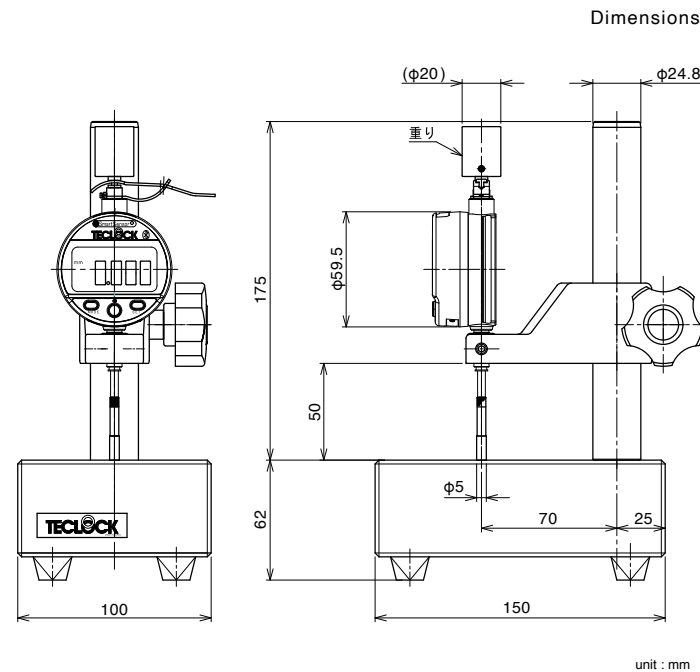
Standard Model

Features

- Wide range of line-up by JIS or ISO.
- High accuracy digital type with weight type for stable static load.
- Uses micro-granite which is superior for abrasion resistance, chemical resistance and impact resistance in addition to high unstriated.
- Stainless steel is used for Contact point and Anvil.
- One-touch data sending to PC by built-in Bluetooth.
- Data management by SmartMeasure® Lite (free).



SSPG-01



Specifications

Model	Reference Standard		Resolution (Mm)	Measuring Range (Mm)	Load (Measuring Force)	Contact Point Φd (Mm)	Measured Pressure	Suggested List Price
	JIS	Measured Item						
SSPG-01	K6732-1996	Poly vinyl chloride films for agriculture	0.001	12	0.8N(80±5gf)	φ5		146,300 JPY
SSPG-02	K6783-1994	Ethylene / vinyl acetate copolymer films for agriculture	0.001	12	1.22±0.14 (125±15gf)	φ5		146,300 JPY
	Z1702-1994	Polyethylene film for packaging			1226±147mN (125±15gf)			
	Z1709-1995	Heat shrinkable plastic films for packaging						
SSPG-11	K6400-1-2004	Flexible polyurethane foam	0.01	12	0.363N(37gf)	φ35.7	0.363kPa(3.7gf/cm²)	—
	K6402-1976	Flexible polyurethane foam for garments						
SSPG-12	K6301-1995	Vulcanized rubber	0.01	12	0.785N(80gf)	φ5		—
SSPG-13	K6404-2-3-1999	Rubber or plastics coated fabrics	0.01	12	0.785N(80gf)	φ10	10±1kPa	—
	K6328-1999	Rubber coated fabrics					10±2kPa	—
	K6250-2006	Rubber A method(less than 35 IRHD)						—
SSPG-14	L1086-2007	Fusible interlining fabrics (Nonwoven textile)	0.01	12	0.394N(40gf)	φ16	2kPa	—
SSPG-15	L1086-2007	Fusible interlining fabrics (Ordinary textile)	0.01	12	2.35N(240gf)	φ11.3	23.6kPa	—
	L1096-1999	Woven fabrics (Ordinary textile)					23.5kPa(240gf/cm²)	—
SSPG-16	L1018-1999	Knitted fabrics (Ordinary knit)	0.01	12	0.343N(35gf)	φ25.2	0.7kPa(7gf/cm²)	—
	L1086-2007	Fusible interlining fabrics (Ordinary knitting fabric)					0.7kPa	—
	L1096-1999	Woven fabrics (Crinose textile)					0.7kPa(7gf/cm²)	—
SSPG-17	K6505-1995	Man-made upper material of shoes	0.01	12	3.854±0.098N (393±10gf)	φ10	49.03±1.177kPa (500±12gf/cm²)	—
	K6550-1994	Leathers			3.85±0.1N (390±10gf)		—	
SSPG-18	K6250-2006	Rubber A method (35 IRHD or more)	0.01	13	0.431N(44±10gf)	φ5	(35 IRHD and over) 22±5kPa(2.24±0.51gf/mm²)	—

*) Product Weight = nearly 3.7 kg (Stand and indicator etc. weight) + weight for Load

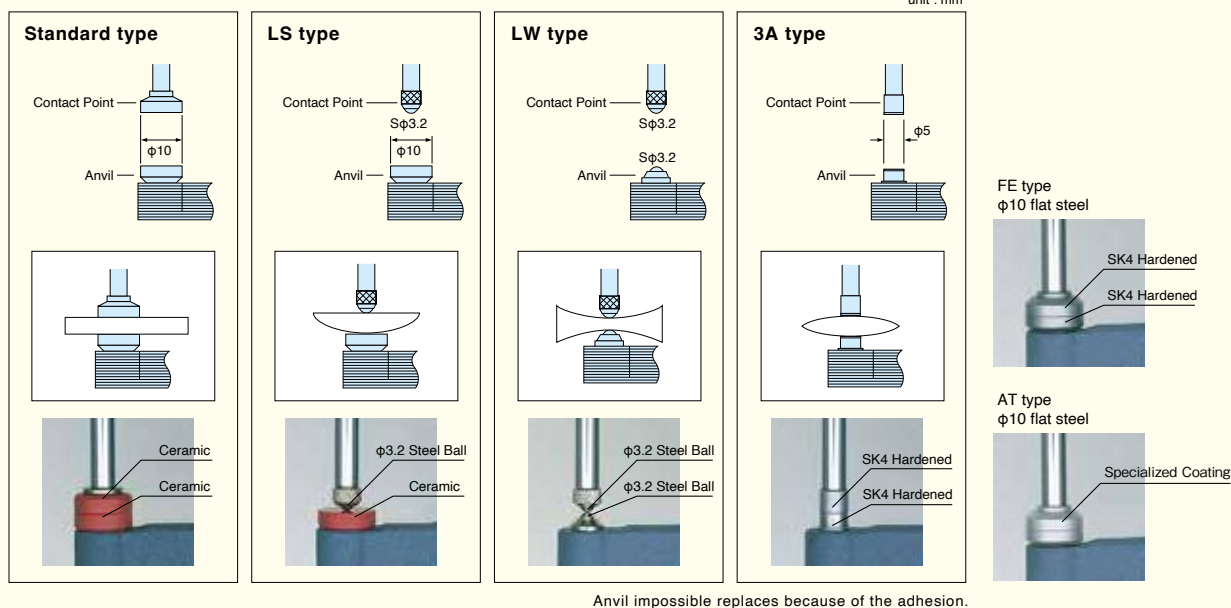
Thickness Gauge Special Product List

Type	Adaptation models	Graduation (mm)	Measuring Range(mm)	Contact Point (mm)	Anvil Form (mm)
LS type Contact point is spherical, the anvil is flat.	SM-112LS	0.01	10	φ3.2 Ball	φ10 Flat
	SM-528LS	0.01	20	φ3.2 Ball	φ10 Flat
	SM-114LS	0.01	10	φ3.2 Ball	φ10 Flat
	SM-124LS	0.01	20	φ3.2 Ball	φ10 Flat
	SM-130LS	0.01	50	φ3.2 Ball	φ10 Flat
	SMD-540S2-LS	0.01	12	φ3.2 Ball	φ10 Flat
LW type Contact point, anvil with spherical.	SMD-550S2-LS	0.01	12	φ3.2 Ball	φ10 Flat
	SM-112LW	0.01	10	φ3.2 Ball	φ3.2 Ball
	SM-528LW	0.01	20	φ3.2 Ball	φ3.2 Ball
	SM-114LW	0.01	10	φ3.2 Ball	φ3.2 Ball
	SM-124LW	0.01	20	φ3.2 Ball	φ3.2 Ball
	SM-130LW	0.01	50	φ3.2 Ball	φ3.2 Ball
3A type Upper and lower both φ5 flat.	SM-1201LW	0.001	10	φ3 Ball(Carbide)	φ3 Ball(Carbide)
	SMD-540S2-LW	0.01	12	φ3.2 Ball	φ3.2 Ball
	SMD-550S2-LW	0.01	12	φ3.2 Ball	φ3.2 Ball
	SM-112-3A	0.01	10	φ5 Flat	φ5 Flat
	SM-528-3A	0.01	20	φ5 Flat	φ5 Flat
	SMD-540S2-3A	0.01	12	φ5 Flat	φ5 Flat
NE needle type Upper and lower with needle type.	SMD-550S2-3A	0.01	12	φ5 Flat	φ5 Flat
	SM-112NE	0.01	10	φ2 Flat	φ2 Flat
	SM-528NE	0.01	20	φ2 Flat	φ2 Flat
	SM-114NE	0.01	10	φ2 Flat	φ2 Flat
BL blade type Upper and lower with blade type.	SMD-540S2-NE	0.01	12	φ2 Flat	φ2 Flat
	SMD-550S2-NE	0.01	12	φ2 Flat	φ2 Flat
	SM-112BL	0.01	7	t0.5/w4	t0.5/w4
	SM-528BL	0.01	17	t0.5/w4	t0.5/w4
	SM-114BL	0.01	7	t0.5/w4	t0.5/w4
	SMD-540S2-BL	0.01	10	t0.5/w4	t0.5/w4
KN blade type Upper and lower with blade type.	SMD-550S2-BL	0.01	10	t0.5/w4	t0.5/w4
	SM-112KN	0.01	7	t0.5/w4/30°	t0.5/w4/30°
	SM-528KN	0.01	17	t0.5/w4/30°	t0.5/w4/30°
	SM-114KN	0.01	7	t0.5/w4/30°	t0.5/w4/30°
	SMD-540S2-KN	0.01	10	t0.5/w4/30°	t0.5/w4/30°
	SMD-550S2-KN	0.01	10	t0.5/w4/30°	t0.5/w4/30°
LD flat disk type Upper and lower with a flat disk type.	SM-112LD	0.01	10	φ30	φ30
	SM-528LD	0.01	20	φ30	φ30
	SM-114LD	0.01	10	φ30	φ30
	SMD-540S2-LD	0.01	12	φ30	φ30
	SMD-550S2-LD	0.01	12	φ30	φ30

●SM is Analog Type, SMD is Digital type.

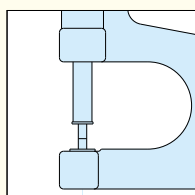
Parts & Accessories

Contact Point, Anvil of Symbol and Shapes



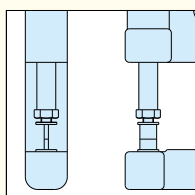
Special order product of Dial Thickness Gauge / Digital Thickness Gauge

1. Instruct dimension and shape of anvil and contact point by referring to the figure in the right and P77.
2. Instruct necessary measuring range.
3. In case that there is direction like blade type, instruct "parallel" or "right angle" based on graduation face as front face standard.
4. In case of requesting shape of anvil and contact point rather than figure in the right or change of measuring force, please contact our nearest branch for you.



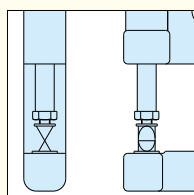
NE (needle) type

This is top and bottom needle type(cylinder).
Instruct diameter



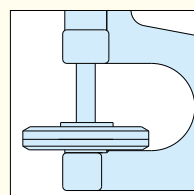
BL (blade) type

This is top and bottom blade type(blade). Instruct width and thickness.



KN (knife edge) type

This is top and bottom knife edge type. Instruct width and angle.



LD (large diameter flat) type

This is top and bottom disc type(cylinder).
Instruct diameter.