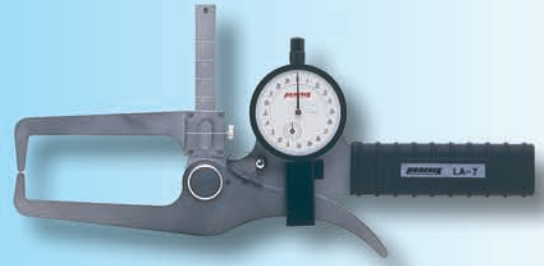


SECTION

7



Dial Caliper Gauges

- LA Series -Outside-
- LB Series -Inside-

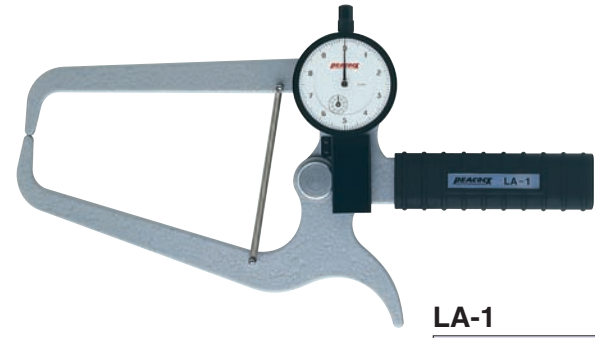
7

metrology

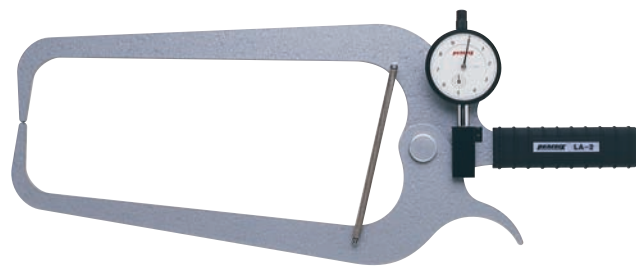
Dial Calipers

LA series (Outside measuring of ODs and thicknesses)

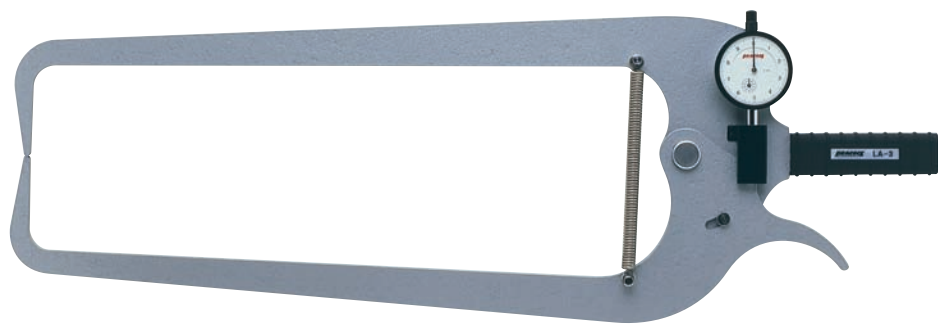
The dial caliper gauge show its great power in measurement of inside and outside sizes, wall thickness, groove width and hole diameters and any other shapes and sections that is not apparently accessible.



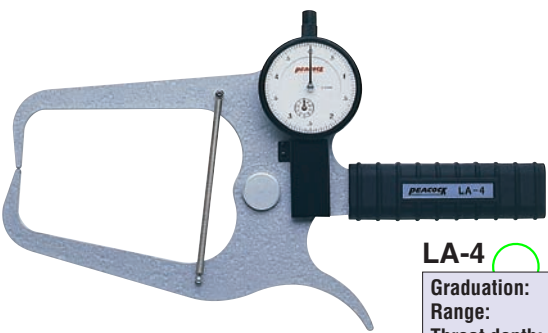
LA-1
Graduation: 0.1mm
Range: 0~80mm
Throat depth: 120mm



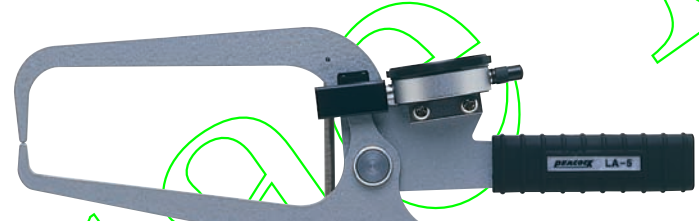
LA-2
Graduation: 0.1mm
Range: 0~80mm
Throat depth: 240mm



LA-3
Graduation: 0.1mm
Range: 0~80mm
Throat depth: 400mm



LA-4
Graduation: 0.05mm
Range: 0~50mm
Throat depth: 90mm



LA-5
Graduation: 0.05mm
Range: 0~50mm
Throat depth: 150mm



LA-6
Graduation: 0.01mm
Range: 0~10mm
Throat depth: 60mm

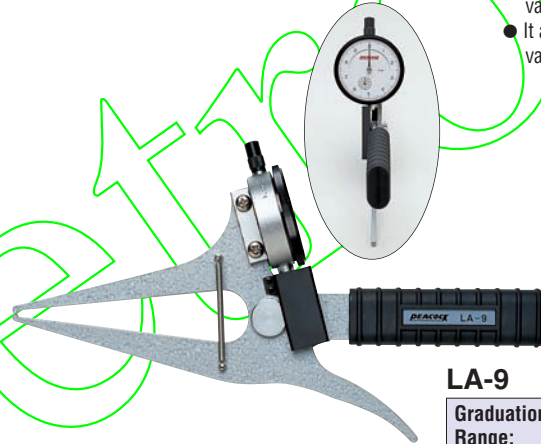


LA-8
Graduation: 0.1mm
Range: 0~80mm
Throat depth: 130mm



LA-7
Graduation: 0.01mm
Range: 0~60mm
Throat depth: 85mm

- Adjustable frame
- The LA-7 can measure an absolute value in a measuring range of 10 mm
- It allows measurement of comparative values in more than 10 mm

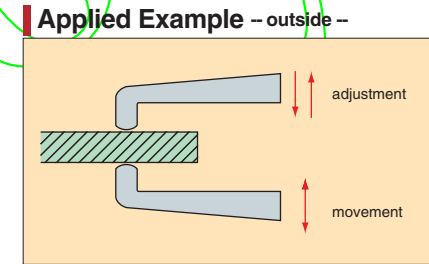


LA-9
Graduation: 0.1mm
Range: 0~30mm
Throat depth: 100mm



LA-10
Graduation: 0.01mm
Range: 0~20mm
Throat depth: 100mm

- The tip of the bottom frame \varnothing 10mm Flat Rocking Contact Point.



Note: Throat Depth is changed by Measuring Range.
Contact us more detailed information.

Ex. LA-13

Range	Throat Depth
0~ 50mm	235mm
0~ 60mm	125mm
0~ 80mm	102mm
0~100mm	91mm
0~130mm	86mm

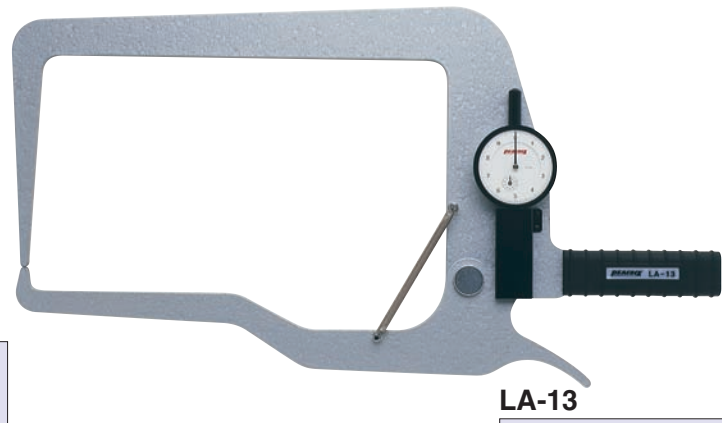
Specifications

Model	Graduation (mm)	Range (mm)	Indication error (mm)	Throat depth (mm)	Dimensions (mm)			
					H1	H2	H3	H4
LA-1	0.1	0~80	±0.2	120	25	40	25	40
LA-2	0.1	0~80	±0.2	240	48	57	48	57
LA-3	0.1	0~80	±0.2	400	60	60	58	79
LA-4	0.05	0~50	±0.15	90	30	40	30	40
LA-5	0.05	0~50	±0.15	150	38	57	15	21
LA-5S	0.05	0~10	±0.15	120	1.5	10	34	34
LA-6	0.01	0~10	±0.03	60	2.5	18	2.5	18
LA-7	0.01	0~60	±0.03	85	20	20	15	15
LA-8	0.1	0~80	±0.2	130	—	—	—	—
LA-9	0.1	0~30	±0.2	100	2	12	2	12
LA-10	0.01	0~20	±0.03	100	28	28	28	28

Dial Calipers



LA-11
Graduation: 0.1mm
Range: 0~50mm
Throat depth: 125mm



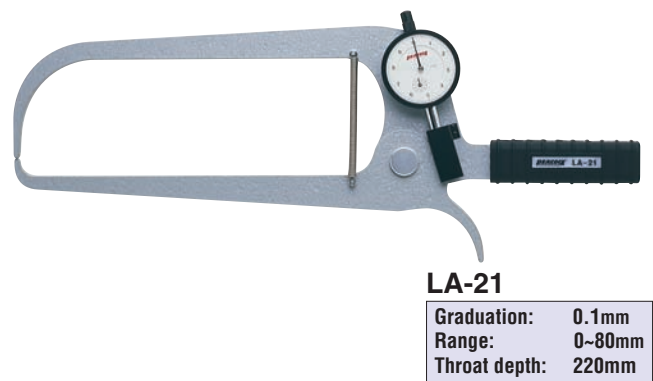
LA-13
Graduation: 0.1mm
Range: 0~130mm
※ Throat depth: 235mm
※ see page 101



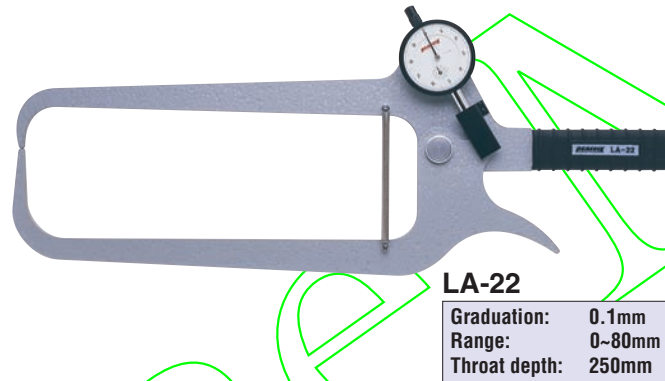
LA-14
Graduation: 0.01mm
Range: 100~150mm
Throat depth: 70mm
● LA-14 is for comparative measurement.



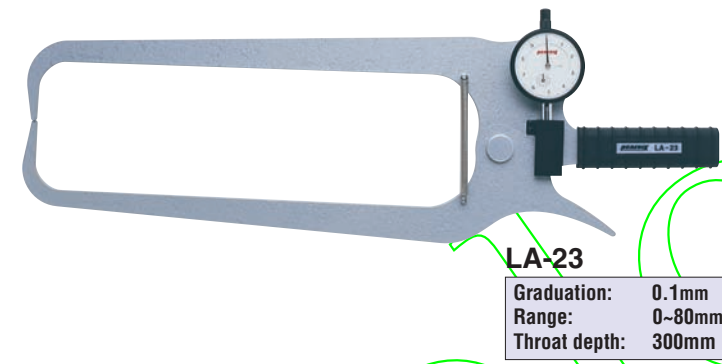
LA-20
Graduation: 0.1mm
Range: 0~80mm
Throat depth: 125mm



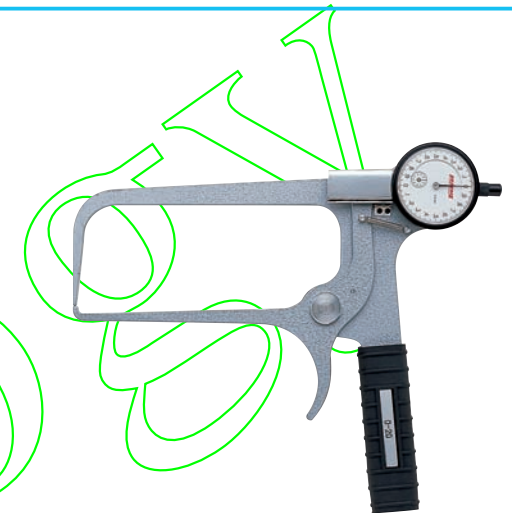
LA-21
Graduation: 0.1mm
Range: 0~80mm
Throat depth: 220mm



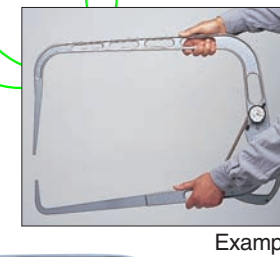
LA-22
Graduation: 0.1mm
Range: 0~80mm
Throat depth: 250mm



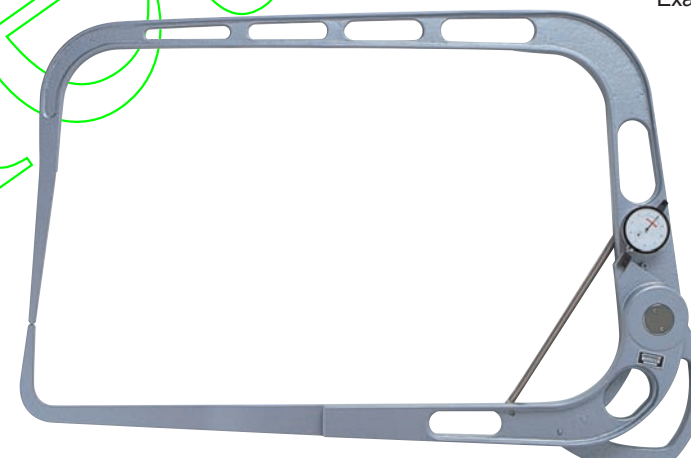
LA-23
Graduation: 0.1mm
Range: 0~80mm
Throat depth: 300mm



LA-31
Graduation: 0.01mm
Range: 0~20mm
Throat depth: 125mm

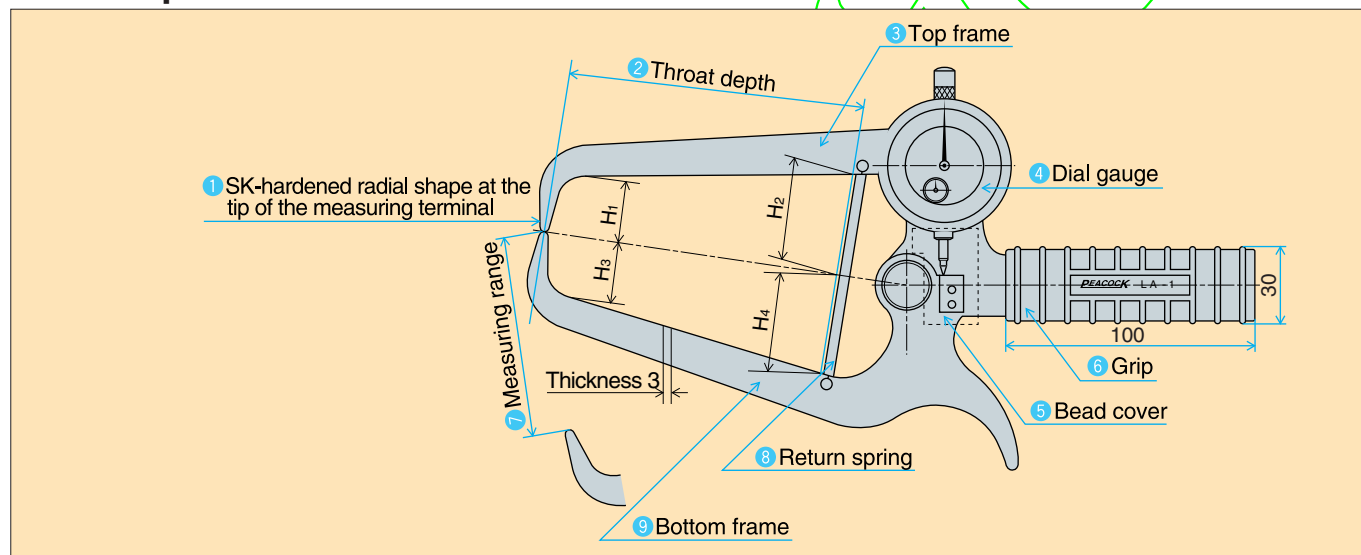


Example



LA-24
Graduation: 0.1mm
Range: 0~100mm
Throat depth: 600mm
● Max. opening frame 500mm

Name of parts



Note: Throat Depth is changed by Measuring Range.
Contact us more detailed information.

Ex. LA-13

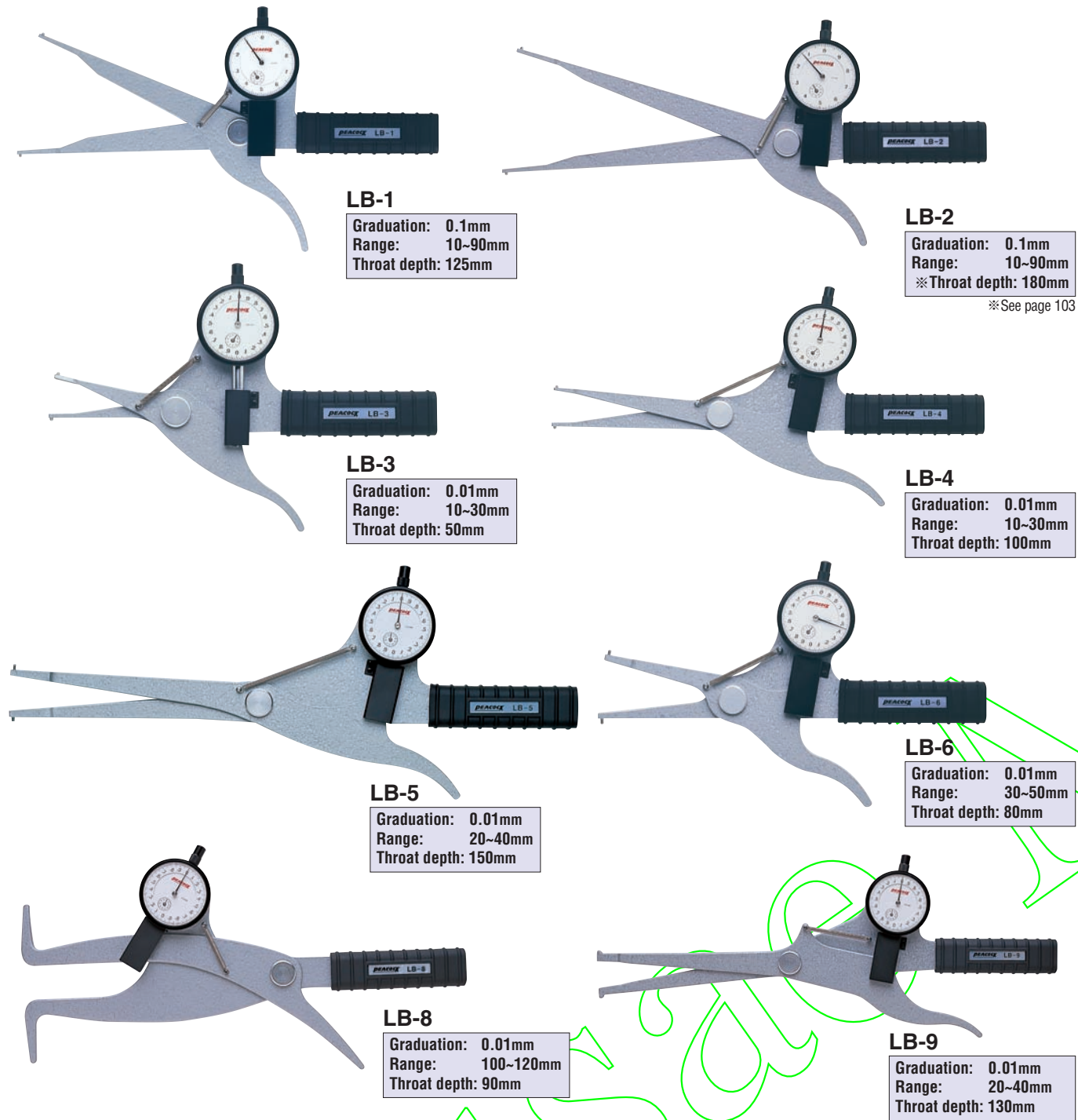
Range	Throat Depth
0~ 50mm	235mm
0~ 60mm	125mm
0~ 80mm	102mm
0~100mm	91mm
0~130mm	86mm

Specifications

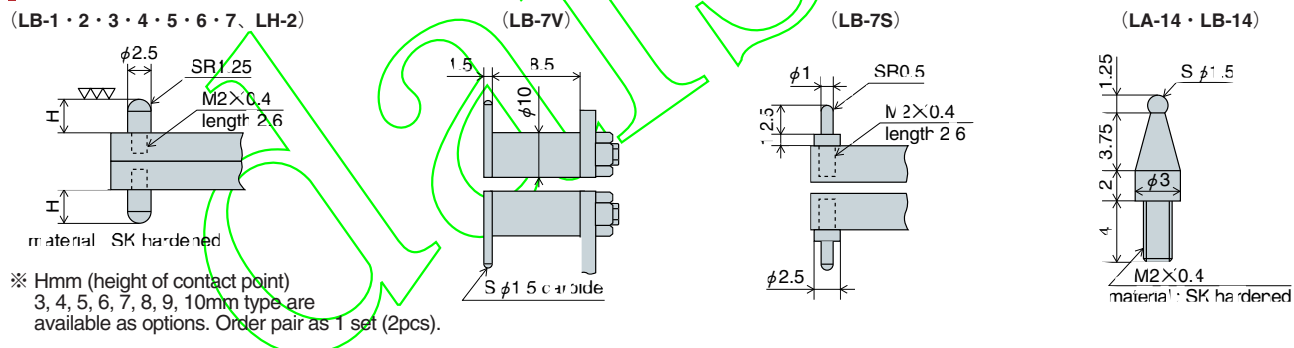
Model	Graduation (mm)	Range (mm)	Indication error (mm)	Throat depth (mm)	Dimensions (mm)			
					H1	H2	H3	H4
LA-11	0.1	0~50	±0.2	125	2	5.5	2	5.5
LA-13	0.1	0~130	±0.3	235	134	134	15	37
LA-14	0.01	100~150	±0.03	70	—	—	—	—
LA-20	0.1	0~80	±0.2	125	17	11	17	11
LA-21	0.1	0~80	±0.2	220	66	69	12	10
LA-22	0.1	0~80	±0.2	250	28	23	62	62
LA-23	0.1	0~80	±0.2	300	45	50	48	43
LA-24	0.1	0~100	±0.4	600	300	300	100	100
LA-31	0.01	0~20	±0.03	125	60	63	—	—

see page 100

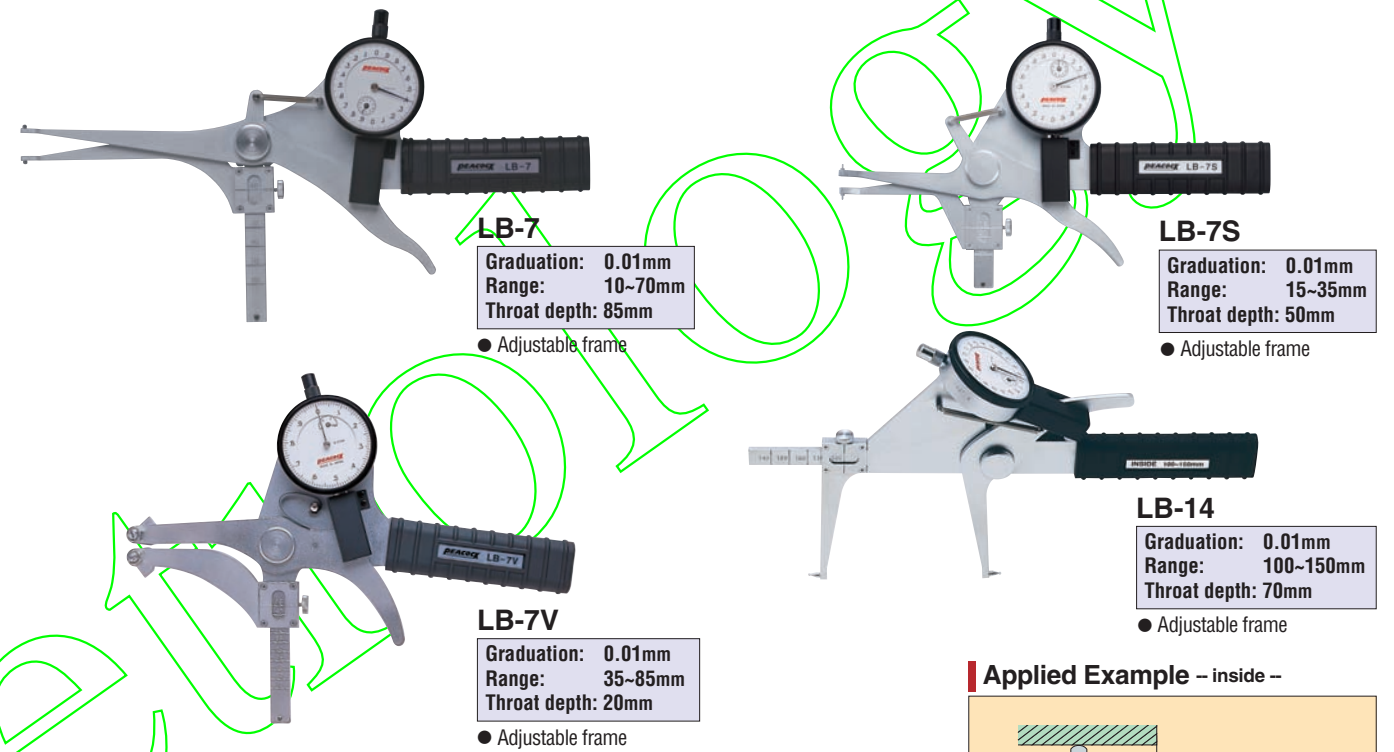
LB series (Inside measuring of ID and groove widths)



Dimensions for contact point



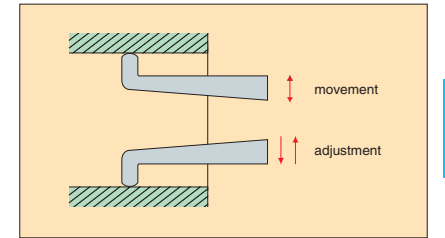
Adjustable type



Handy type



Applied Example - inside -



Note: Throat Depth is changed by Measuring Range. Contact us more detailed information.

Ex. LB-2

Range	Throat Depth
10mm	up to 20mm
15mm	up to 45mm
20mm	up to 70mm
30mm	up to 84mm
90mm	up to 180mm

Specifications

Model	Graduation (mm)	Range (mm)	Indication error (mm)	Throat depth (mm)	Height of contact point (mm)
LB-1	0.1	10~90	±0.2	125	2
LB-2	0.1	10~90	±0.2	180	2
LB-3	0.01	10~30	±0.03	50	2
LB-4	0.01	10~30	±0.03	100	2
LB-5	0.01	20~40	±0.03	150	4
LB-6	0.01	30~50	±0.03	80	4
LB-7	0.01	10~70	±0.03	85	2
LB-7S	0.01	15~35	±0.03	50	3.5
LB-7V	0.01	35~85	±0.03	20	6.5
LB-8	0.01	100~120	±0.03	90	30 (SK hardened, one unit with frame)
LB-9	0.01	20~40	±0.03	130	2 (SK hardened, one unit with frame)
LB-14	0.01	100~150	±0.03	70	7
※ LH-2	0.01	10~120	±0.03	50	2

※ For LH-2, the range of accuracy is 10 to 20mm. In case of 20mm or more, check the tolerance with Master Gauge.

"PEACOCK" Caliper Gauges are quite useful for such measurements of O.D. or I.D. thickness and diameter which appear so difficult to measure.

Examples

<p>● Outside measuring (LA) type</p> <p>● Inside measuring (LB) type</p>		<p>● Measuring thickness at the back end of a projecting workpiece LA-1~4 LA-13 LA-20~23</p>	<p>● Measuring thickness at the back end of a projecting workpiece ● Dial upward type LA-5 LA-5S</p>
<p>● Measuring thickness of a cup, hat or helmet LA type</p>	<p>● Measuring thickness or OD in a narrow, confined place LA type</p>	<p>● Measuring center OD of a boss LA-11</p>	<p>● Floating type: lower contact point has a flat 10mm diameter LA-10</p>
<p>● Measuring thickness by hurdling a projecting area LA type</p>	<p>● Measuring thickness by hurdling a projecting area LA-8</p>	<p>● Measuring thickness of a large workpiece or part. A: workpiece sizes up to 500mm are accessible (LA-24).</p>	<p>● Measuring thickness or OD in a narrow, confined place LA-9 LA-11</p>
<p>● Measuring ID or groove width LB-1~6</p>	<p>● Measuring ID of a very shallow hole A: approximately 2mm lip is sufficient (LB-7V)</p>	<p>● Measuring ID or an O-ring groove LB-1~6</p>	<p>● Measuring ID by straddling the center boss LB-7 LB-14</p>

Metrolabs